# GUIDE ON GENDER AND ENERGY FOR TRAINERS AND MANAGERS OF PUBLIC POLICIES AND PROJECTS

Ana Rojas – ENERGIA / Jackeline Siles - UICN

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**ENERGIA**
INTERNATIONAL NETWORK ON GENDER AND SUSTAINABLE ENERGY

**olade**
Organización Latinoamericana de Energía
Latin American Energy Organization
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**UICN**

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# Presentation

## PROLOGUE

Energy is an essential factor in everyday human life because we use energy in everything we do. However, basic tasks for our subsistence demand a great effort in terms of physical energy, for example, cooking and household heating. These tasks tend to fall on girls and women worldwide, which impacts negatively on their health and takes away time for other activities, such as education and income generation.

Energy also makes post-harvest processing methods, milling and heat treatments possible. Energy helps us to better communicate with other people, to mechanize production processes and to have access to better health, transport and education services and economic opportunities. Therefore, reliable access to and an efficient use of energy by women and men contribute to the economic development and the reduction of poverty.

Debates on energy generation sources and their responsible use have being increasing with time. For example, renewable energy and energy efficiency are more often than not considered a worldwide solution to problems such as climate change mitigation, due to their capacity to reduce greenhouse gas emissions; the desire to guarantee energy security at national level, and the efforts to achieve locally appropriate and sustainable development among the communities or neighborhoods of a region. These debates have an important social component, because they can support a more equitable development model, through which social gaps can be reduced and more social and economic growth opportunities generated. Since women and men interact in different manners with existing energy technologies and possess different levels of access, knowledge and affordability to modern sources of energy, it is necessary to include a gender approach in energy projects, institutions and policies in order to better answer women and men's interests, needs and realities.

This Guide on Gender and Energy for Trainers and Managers of Public Policies and Projects is a joint effort to support civil society organizations, women's groups, and government and non-governmental institutions involved in the Latin-American energy sector, to incorporate the energy perspective in their policies and projects. The research, compilation and preparation of this guide were organized and directed jointly by ENERGIA, the International Network on Gender and Sustainable Energy, and the International Union for the Conservation of Nature (IUCN) through its initiative "Women as leaders and agents of change in the energy sector", financed by Hivos and the Latin-American Organization of Energy (OLADE).

Our desire is for this guide to offer useful information to trainers, groups of women, governments, civil society organizations and private companies, to help them integrate a gender perspective in energy initiatives, whether policies, programs and/or institutional processes, with the aim of making gender mainstreaming a reality.

## ORGANIZATIONS

The International Network on Gender and Sustainable Energy, ENERGIA, is an international network with direct presence in 22 African and Asian countries. ENERGIA has been working in the energy sector since 1996 and focuses on how a further access to energy can improve the lives and revenues of women and men in developing countries. ENERGIA applies gender analysis to projects, programs and policies to ensure that the energy needs, roles, responsibilities and interests of women are taken into account.

The mission of IUCN is to influence, motivate and assist societies around the world to preserve the integrity and diversity of nature, and to ensure an equitable and ecologically sustainable use of any natural resource. Since 1998, IUCN has applied a gender equity and equality policy, by which it recognizes gender issue as an essential component in the sustainable conservation, management and use of natural resources. IUCN commits to integrate gender aspects into its work, and particularly recognizes the importance of gender equity in association with its energy programme.

In 2008, IUCN and ENERGIA established a collaboration agreement to integrate the complex links existing among gender, energy and environment. In 2013 the initiative "Women as leaders and agents of change in the energy sector" is implemented in four Central American countries, under the coordination of IUCN's Global Gender Office (GGO) with the support of ENERGIA. This initiative is possible thanks to the financial support of Hivos, the Humanistic Institute for Development Cooperation and seeks, among other things, to generate training materials that contribute to increasing the ability to integrate gender considerations in the Central American energy sector.

OLADE emerges within the context of the search of a new, fairer economic relationship between developed and developing countries, aiming at the commitment to solidarity with the defense of natural resources and the technical cooperation on comprehensive and sustainable development policies. The Lima Convention, the constituent instrument of the organization, is signed on November 2nd, 1973. A total of 27 countries from Latin America and the Caribbean have joined OLADE: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela, Barbados, Cuba, Granada, Guyana, Haiti, Jamaica, the Dominican Republic, Suriname, Trinidad and Tobago, Mexico, Belice, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama.

Since 2012, and within the framework of support for the Canadian Cooperation, OLADE undertakes the challenge of encouraging and promoting the incorporation of the gender equity to its Permanent Secretariat and the support to this process by member countries in the energy sector. OLADE, within the framework of its Gender Strategy, recognizes the importance of training and educating those who work with gender and energy issues in order to promote in an efficient manner the equality in policies, programs and the projects they are responsible for.

## ACKNOWLEDGEMENTS

# ABREVIATIONS

| | |
|---|---|
| **CIDA** | Canadian International Development Agency |
| **IEA** | International Energy Agency |
| **AMRU** | Programme of the Rural Women's Association of Uruguay, by its acronym in Spanish |
| **ASHDINQUI** | Hydroelectric Association of Comprehensive Development North of Quichè, Guatemala, by its acronym in Spanish |
| **ASOCHEL** | Chelense Hydroelectric Association, Guatemala, by its acronym in Spanish |
| **AIDB** | Inter-American Development Bank |
| **CEDAW** | Convention for the Elimination of Discrimination against Women |
| **CENTA** | National Centre for Agricultural and Forestry Technology, by its acronym in Spanish |
| **ECLAC** | Economic Commission for Latin America |
| **COP** | Conference of the Parties |
| **CRGGE** | Collaborative Research Group on Gender and Energy |
| **CSW** | Commission on the Status of Women |
| **DGIS** | Directorate-Generale for International Cooperation |
| **DNE** | National Office of Energy, Ministry of Industry, Energy and Mines of Uruguay, by its acronym in Spanish |
| **DRIG** | Rural Development and Gender Equity, gender strategy of PELNICA, by its acronym in Spanish |
| **EAD** | Energy Affairs Department |
| **ECOSOC** | United Nations Economic and Social Council |
| **ENATREL** | National Electric Transmission Company, by its acronym in Spanish |
| **ENERGIA** | ENERGIA, the International Network on Gender and Sustainable Energy |
| **COPD** | Chronic Obstructive Pulmonary Disease |
| **FLACSO** | Latin American Social Sciences Institute, by its acronym in Spanish |
| **SWOT** | Strenghts, Weaknesses, Opportunities, and Threats |
| **FUMDEC** | Women and Development Foundation, Nicaragua, by its acronym in Spanish |
| **FUNJIDES** | Foundation for Jinotegano Development, by its acronym in Spanish |
| **GCF** | Green Climate Fund |
| **GHG** | Greenhouse Gases |
| **LPG** | Liquified Petroleum Gas |
| **GRUN** | Government of Reconciliation and National Unity of Nicaragua, by its acronym in Spanish |
| **HDI** | Human Development Index |
| **IEE** | Intelligent Energy Europe (EU) |
| **INMUJERES** | Institute for Women, Mexico, by its acronym in Spanish |
| **INMujeres** | National Institute for Women, Uruguay, by its acronym in Spanish |
| **LAC** | Latin America and the Caribbean |
| **MEM** | Ministry of Energy and Mines of Nicaragua, by its acronym in Spanish |
| **MGAP** | Ministry of Livestock, Agriculture and Fisheries of Uruguay, by its acronym in Spanish |
| **MIDES** | Ministry of Social Development, by its acronym in Spanish |
| **MIEM** | Ministry of Industry, Energy and Mines of Uruguay, by its acronym in Spanish |
| **MSE** | Micro and small enterprises |
| **M&E** | Monitoring and Evaluation |
| **NAMA** | Nationally Appropriate Mitigation Action |
| **NAMBESP** | Namibia Biomass Energy Saving Project |
| **MDG** | Millenium Development Goals |
| **OECD** | Organization for Economic Cooperation and Development |
| **ILO** | International Labour Organization |
| **OLADE** | Latin American Energy Organization, by its acronym in Spanish |
| **NGO** | Non-governmental Organization |
| **UNO** | United Nations Organization |
| **UN WOMEN** | United Nations Entity for Gender Equality and Empowerment of Women |
| **EP** | Executive Power |
| **PELNICA** | Electrification Project of Nicaragua, by its acronym in Spanish |
| **ICESCR** | International Covenant on Economic, Social and Cultural Rights |
| **PIODNA** | National Plan for Equal Opportunities and Rights, by its acronym in Spanish |
| **UNDP** | United Nations Development Programme |
| **UNEP** | United Nations Environment Programme |
| **PLWHA** | People living with HIV/AIDS |
| **SDG** | Sustainable Development Goals |
| **SE4ALL** | Sustainable Energy for All |
| **SEGOB** | Secretariat of Interior's Civic Protection Unit, by its acronym in Spanish |
| **SEMARNAT** | Secretariat of Environment and Natural Resources of Mexico |
| **SICA** | Central American Integration System, by its acronym in Spanish |
| **SIDA** | Swedish International Development Cooperation Agency |
| **SREP** | Scaling-up Renewable Energy Programme |
| **ToR** | Term of Reference |
| **ICT** | Information and Communication Technologies |
| **UICN** | International Union for the Conservation of Nature |
| **UNCED** | United Nations Conference on Environment and Development |
| **UNFCCC** | United Nations Framework Convention on Climate Change |
| **UNIFEM** | United Nations Development Fund for Women |
| **UTE** | National Administration of Power Plants and Electrical Transmissions, by its acronym in Spanish |

# GLOSSARY OF GENDER CONCEPTS

**Affirmative actions:** are established by "a strategy destined to the equality of opportunities by measures that allow contrasting or correcting the discrimination result of social practices or systems. Their goal is to start concrete programs to provide women with concrete advantages". [1]

**Access by gender to resources, facilities, services, funds, benefits and decision-making:** relates to differences in rights and opportunities of men and women using these resources and making decisions, due to existing norms and values in a particular place and time. [2]

**Approach, strategy, framework or program with a gender perspective:** is that whose planning, programming and budget contributes to gender equality and the enforcement of women's rights (UNO Women). This process includes a change in gender rules, roles and access to resources, necessary in order to achieve the objectives.[3]

**Condition:** refers to living conditions, i.e., the life situation of people, specifically, their practical needs (access to public services, productive resources, and health and education opportunities, among others). [4]

**Gender analysis:** a theoretical-practical process that allows for a differentiated analysis of men and women's responsibilities, knowledge, access, use and control over resources, as well as problems and necessities, priorities and opportunities, in order to plan development in an equitable and efficient manner. Gender analysis necessarily implies the study of the manner in which societies function and are organized, in order to analyze social relations. This analysis must describe subordination structures existing between genders. Gender analysis must not limit itself to women's roles but it has to cover and compare the role of women versus men, and vice versa.[5]

**Gender gaps:** are the differences genders show with regards to opportunities, access, control and use of resources that allow them to guarantee their welfare and human development. Gender gaps are built on biological differences and are the historic result of discriminatory attitudes and practices, individual, social and institutional, which obstruct the enjoyment and an equal exercise of civic rights by both men and women. [6]

**Harassment:** behavior which aims to intimidate, persecute or force someone with requests or problems. It is generally a condemned practice which occurs in contexts with a social-permitting environment because there is no collective sanction against it. The most common types are: workplace harassment or mobbing, psychological harassment or bullying and sexual harassment.

**Discrimination:** is any distinction, exclusion or restriction based on sex which has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by women, irrespective of their marital status, human rights and fundamental freedoms in any political, economic, social, cultural, civil or any other sphere. [7]

**Division of labor:** is specific to every culture and has to do with the allocation of tasks and responsibilities of men and women at home and work, according to standards accepted within a society in a particular time and place. 8

**Empowerment of women:** process by which women gain increasing power and control over their lives. It involves awareness, self-confidence and extended opportunities and options. 9

**Gender-neutral approach, strategy, framework or program:** the human dimension is not considered relevant; therefore, gender is not included in any approach, strategy, framework or program. 10

**Gender-sensitive approach, strategy, framework or program:** discrimination and socio-cultural norms are understood and taken into consideration when recognizing the different rights, roles and responsibilities of men and women, and the relations between them. Policies, programs, financial and administrative activities, and organizational procedures should differentiate among abilities, necessities and priorities of men and women; guarantee their opinions and ideas are considered and valued, and take into consideration the differentiated impact that decisions may have on the lives of men and women, among others. 11

**Gendered control: over resources and decision-making processes;** it refers to the differences between the rights and power of men and women to decide over the use of resources, to receive benefits and to take part in decision-making processes, due to norms and values already existing in societies. 12

**Gender-transformative approach, strategy, framework or program:** process that seeks to transform unequal gender relations, to promote shared power, decision-making and control of resources and to encourage the empowerment of

women. 13

**Gender equity:** refers to fairness between men and women as regards access to the resources of society, including assets/goods, retributions and opportunities valued sociably. 14

**Gender:** refers to the roles, responsibilities, rights, relations and identities of men and women defined or attributed in a given context and society, and how these affect and influence each other. These roles, responsibilities, rights, relations and identities may change with time, between places and within places. 15

**Gender equality:** refers to equal rights, voice, responsibilities and opportunities for men and women in society, at work and at home. 16

**Gender perspective: means that:** 17
A difference is made between the needs and priorities of men and women;
Both men's and women's points of view are taken seriously;
Implications of the decisions on the situation of women with respect to men are taken into account: who will win and who will lose;
Measures are taken to address the inequalities or imbalances between men and women.

**Gender roles:** refer to how men and women should act, think and feel according to norms and traditions in a particular place and time.18

**Gender mainstreaming:** is the evaluation process of the implications that any planned action, policy or programme, in every area and at all levels, has on men and women. It is a strategy to make the needs and experiences of men and women become an integral part of the design, realization, monitoring and evaluation of policies, initiatives and programmes. Hence, gender mainstreaming guarantees that both men and women benefit equally from the development process or that, at least, inequality is not perpetuated.19

**Gender valuation of work:** refers to the social and economic values attached to the different tasks and responsibilities of men and women. 20

**Practical interests and needs:** are the result of material deprivation and the lack of basic needs related to survival:

shelter, food, water and housing, among others. 21

**Strategic interests and needs:** are those that allow women to better position themselves in society with respect to men. They include elements such as civic participation, the possibility to decide under democratic conditions, autonomy and solidarity, opportunities for training and education, inequality in decision-making, access to and decision over control and use of resources, cultural barriers for participation and consideration under equal conditions in the public and private fields.22

**Position:** refers to the social position and recognition, to the status given to women in relation to men (for example, inclusion in decision-making spaces at community level, equal pay for equal work, impediments to access training and education). 23

**Sex roles:** are the ones that belong to a specific sex due to biological factors, for example, giving birth.24

**Sex:** refers to the biological nature of being man or woman. The biological characteristics of men and women are universal and obvious. 25

**Socialization:** those psycho-social processes where the individual develops itself historically as a person and as a member of society. In this process, identity is acquired or built as part of the social group the individual belongs to, the individual is shaped as a person, with its own features and characteristics. 26

1    Barreiro (1996).
2    UNDP (2007b).
3    Adapted from Eckman, A. (2002) by United Nations International Research and Training Institute for the Advancement of Women (INSTRAW) and quoted by Quesada Aguilar, A. (2013a).
4    Alfaro, C. (1999).
5    CBD (s.f.).
6   FAO. Gender vocabulary. http://www.fao.org/docrep/x0220s/x0220s01.htm#P19_2773

7    CEDAW (1979).
8    UNDP (2007b).
9    CBD (s.f.).
10 CBD (2008).
11 Adapted from the definition of Quesada Aguilar, A. (2013b).
12 UNDP (2007b).

13 Adapted from Eckman, A. (2002) by United Nations International Research and Training Institute for the Advancement of Women (INSTRAW) and quoted by Quesada Aguilar, A. (2013a).
14 UNDP (2007b).
15 Idem.
16 Idem.
17 UNDP (2007b).
18 UNDP (2007b).
19 ECOSOC (1997).
20 UNDP (2007b).

21 Alfaro, C. (1999).
22 Idem.
23 Alfaro, C. (1999).
24 Idem.
25 Idem.
26 Alfaro, C. (1999).

# INTRODUCTION

Women and men use energy in different ways while performing their everyday activities. Most women in Latin American countries spend most of their days doing basic tasks without receiving the benefits modern technologies offer, and they depend on biomass to satisfy their basic needs. In this context, the future prosperity of girls and women is rather limited. They spend most of their time collecting and using less efficient energy sources. This, in turn, limits the access of girls to education and, consequently, to literacy; it narrows their opportunities to get involved in politics or any other type of social activity and prevents them to develop new skills or participate in income generating activities. Likewise, it is well known that the smoke generated by the use of biomass or non-efficient technologies has a negative impact on the health of girls and women.

Modern energy and energy efficient technologies have increasingly been promoted as a worldwide solution to the different energy related problems, including climate change mitigation. However, to achieve a universal access to modern energy it is necessary to question the traditional view of energy planning that starts from the simple provision of energy sources and the appropriate energy conversion, to include the social and economic circumstances of the groups the energy is supplied to, the target groups.

To have a clearer understanding of the needs of the target groups, it is essential to integrate gender considerations into the design, planning and implementation of energy policies and projects, which include renewable and non-renewable energy, and energy efficiency policies and projects. This is necessary because women and men play different roles both as users as well as managers of energy systems; thus, a gender-sensitive policy or project will equally benefit both women and men since it recognizes their differentiated energy needs. Besides, agencies and organizations involved in the energy sector must establish processes for institutionalizing gender approaches in their activities according to national policies on gender equality and the country's commitment to related international agreements. Finally, it is important to note that the integration of gender considerations tends to increase the efficiency of energy policies and projects where they have been included, since this process helps identify implementation barriers as well as possible benefits not considered before.

Unfortunately, practice has proven that the complete integration of women as participants in the policy design and as active actors in projects is still a challenge for energy planning. Frequently, women are a disadvantaged group whose energy needs are not solved adequately. Because of this, this guide tries to be a clear and practical contribution to incorporate the gender approach in projects, policies, institutions and organizations involved in the energy sector. This Guide on Gender and Energy for Trainers and Managers of Public Policies and Projects seeks to inform and coach both trainers and decision-makers and other relevant actors in the energy sector, both key agents, on the aspects to consider and the processes to conduct to advance towards gender equality through a better design, implementation and monitoring of policies, projects and institutions in this field. .

## Content of this guide

This guide is a compilation of materials and documents previously produced by other sources, and gathers the experience of organizations linked to the  gender and energy networks of Nicaragua, Honduras, El Salvador and Guatemala, OLADE's Virtual Energy and Gender Platform, some government agencies from the energy sectors of Nicaragua and Uruguay and the experience of energy experts from ENERGIA, the International Network on Gender and Sustainable Energy (www.energia.org), IUCN's Global Gender Office (www.generoyambiente.org) and OLADE (www.olade.org).

This guide is intended as a tool that allows different stakeholders involved in the energy sector understand the concepts referring to energy and gender, and the link existing between both of them, as well as the methodological steps and tools to incorporate the gender approach into institutions and organizations, the projects and policies they implement and use. This guide can also be used as training manual, and offers practical exercises so that facilitators can check knowledge transfer during training workshops.

This document is divided into four modules that cover different yet complimentary subjects. Each module is subdivided into units that further explore each subject:

**Module1:** Basic concepts on gender and energy

**Module2:** Integration of the gender approach in energy policies

**Module 3:** Institutionalization of the gender perspective in organizations and institutions

**Module4:** Integration of the gender approach in energy projects

This guide is directed to professionals, public officers and technical staff in the energy sector, as well as professionals working with gender issues who wish to extend their work to the energy sector. Every module includes short case studies, several of them from the Latin American and Caribbean region, as well as information boxes and tables. Examples of exercises are included at the end of each module for those who carry out workshops or processes with a gender mainstreaming approach. A bibliography is included as well and can be consulted to enlarge the issues dealt with in every module.

## Use of this guide for training purposes[27]

### 1. Before starting

It is important to have in mind the specific audience or target group. It is essential to define the target group since it will determine the type of information to be shared as well as the method to transmit it. For example, if you work close to women with a low literacy level or limited knowledge on energy issues, most probably you will have to devote some time to explaining the meaning of some terms. In this case a visual aid could be very effective. However, if the target audience includes a group of engineers in charge of finding energy solutions for a specific community, it would be important to start the training highlighting the gender and social aspects linked to the technological design and acceptance, as part of the interest to raise awareness among the professionals who will work from a gender perspective.

Once defined the target group, a diagnosis of training needs of participants should be made. This will allow a better understanding of the people and their needs; it will offer a framework for their knowledge and reveal the gaps common to the group. This information could be used to shape the training programme. It will also have a balance value in relation to the expectations of the audience and a predictive value of the possible challenges you may have to address as a facilitator.

Below is an example of a form used to assess the training needs of participants in a gender and energy workshop. In this case, the assessment questionnaire is attached to the participants {registration form, so that it will be possible to receive all the necessary information prior to the beginning of the workshop.

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27  This section and the steps referred to are based on  UICN, UNDP and GGCA, ENERGIA (2005°) and Rojas, A. et al.(2012).

**Example of registration and diagnosis form of training needs**

**REGISTRATION FORM**

Name of participant:                              Email address:

Position in the organization:                     Telephone:

Name of the organization:                         Country:

Have you ever participated in gender training? If so, please explain briefly its content.

Are you aware of the energy policies in your country? If so, please explain briefly.

Do you wish to address any specific subject related to gender inclusion in energy policies, institutions or projects in this sector? Please explain briefly your area of interest.

How do you expect to incorporate the newly acquired knowledge in an efficient way in your

## 2. How to design your own training programme using this guide

Use the result of training needs assessment as a starting point and identify the principal objectives you wish to achieve through the implementation of your training programme. For example, if you are interested in raising awareness of the existence of a link between gender and energy, you can focus mainly on Module 1 of this guide which concentrates on this subject. On the other hand, if the absence of gender equality indicators has been identified in a project, Modules 2 and 4 (on policies and projects) have the information and steps that can guide you to generate a group of indicators in a participatory manner. If your interest is to go deeply into energy policies with a gender approach, you should concentrate on the initial conceptual part and the module

on policies (Module 2). Finally, if you want to know the strengths of your institution or the steps necessary for your institution to conduct a gender mainstreaming process, we recommend paying particular attention to Module 3.

During the design phase, it is important to consider the temporary location and duration of the training programme. If you wish to ensure an optimum participation in the programme, you should identify the best moment to conduct the training. This may imply defining a schedule that everyone can comply with (morning, afternoon or evening). Besides, it may imply identifying a moment to conduct the training which does not coincide with local or religious celebrations, harvest, national or local policy events, or any other event that may limit attendance.

The duration of the training programme will be determined by the number and complexity of subjects to be dealt with. While planning, establish enough time for question-and-answer sessions, and interactive sessions. Have also in mind planning breaks during the training, so that participants will have the opportunity to think about and assimilate the information they have received. Remember, a tired person is not an active participant!

It is important to strengthen your training programme with a cohesive structure and guarantee that only subjects of relevance to the audience are presented. In this way you make sure participants have fully processed all the necessary information to grasp a subject before you introduce a new or more complex one. This will also help you to maintain the active participation of the audience that assists because, after all, they want to learn. And you know this because you have previously conducted an assessment of the needs and expectations of those attending the training!

**3. How to select your training method**

The training methods available are very varied. You will have to select the method that best presents your message and keeps the active engaegment of the audience. For example, conferences and reading materials can be very effective means to transfer knowledge.  Nevertheless, as regards getting the audience involved, group debates or exercises can be more convenient since they encourage a sense of belonging. Each participant understands the acquired knowledge through its personal experience and integrates it to its own life. These exercises can also facilitate information exchange among participants and influence the group's dynamics in a positive manner, to the extent that they promote a more personal interaction.

Alternate training methods in order to avoid repetition and tiredness of the audience due to the excessive use of a particular method (if there are too many master lectures) or dilution of the message (if only interactive methods are used and no time is devoted to assess whether the message

or the objectives of the exercise have been grasped). Besides, do not forget to incorporate dynamics that imply physical movement to increase the amount of energy levels of the participants in the workshop.

While preparing support material and conducting the workshop, remember you may find people in your audience that speak "different languages". This may be true both in relation to the use of dialects or native languages and the use of different regionalisms (if the group is made up of participants from different countries), or even the academic or professional background of your audience.

Remember that participants do not necessarily handle a uniform language with respect to terminology; try to simplify the concepts presented during the explanations as much as possible to reduce the level of confusion and guarantee understanding by every participant. Avoid the use of acronyms or abbreviations since they are themselves a different language and their use can inadvertently exclude the participants who are not familiarized with these technical terms. In the case where simultaneous interpretation is required, remember this may increase the time needed for every section of the workshop, and make sure that both you and the participants make their interventions in a slow manner in order to allow the interpreters do their job.

**The possibilities of training methods include:**

•Conferences given by facilitators (supported with PowerPoint presentations, projectors, flipcharts, or any other visual aid in accordance to every scenario and circumstance)

Reading material providing background information to the parts that need it and on subjects relevant for each case

Group debates

Presentations prepared and given by participants

Case studies, the cases included in this guide can be used if considered appropriate

Role-play simulations

Field visits

Guest speakers, whether experts or high-profile experts

Videos

If you choose a video presentation, make sure the equipment is adequate for projection, the video format and the projection system are compatible and a reliable access to electricity sources is available. It is advisable to watch the video before sharing it with the audience, in order to

guarantee the adequacy of its content (types of language, references or points of view that may not be well-received by the group). It is important that no participant feels excluded from the group by any of these reasons. This is an important consideration and one of the challenges of the training programme.

This guide offers examples of exercises, short tests, case studies and even references to videos that could be useful in your training programme. They are offered as suggestions, feel free to modify or adapt them, or even propose your own. While defining your training methods, always ask yourself: which is the best way to communicate with the target audience?

Another resource within the training programme you may consider using are the field visits. Field visits allow participants to experiment and observe in real life many of the things learnt during the workshop. Field visits may imply going to a nearby rural community or an informal periurban area and ask local women and men some of the questions included in this guide. If you plan a field visit, remember considering weather conditions, type of transport, accessibility to the location, time required for the journey, as well as security issues, before deciding whether it is appropriate to make the visit to the place chosen at the time scheduled.

A visit can also be made to an organization in order to learn about the institutionalization of its gender approach, or to a governmental organizatin in a country where changes have been made in energy policies or projects to include a gender perspective. Field visits offer opportunities for participants to understand how the energy needs of women and men differ, and how these can change and improve the design and implementation of energy policies and projects. These experiences are worth a thousand words!

**4. Learning from experience**

It is important to assess if your training workshop has achieved the main objectives and has answered in a satisfactory manner the needs of participants. This self-evaluation can help you introduce improvements in your training programme and/or replicate it in other groups, communities, neighborhoods or sectors. Consequently, it is important to include an assessment component both at the beginning and end.

There are numerous options to make evaluations; the choice of method will depend on the audience and its particular information needs. For example, if the purpose is to have an evaluation sheet for every participant, it would be beneficial to use an anonymous questionnaire. If the training programme is short and you are looking for a quick evaluation, it would be useful to ask every participant to write on a colored paper card a point he considered useful

and in another one something he did not like or he felt it needed to be improved. Then ask participants to stick their cards on the wall, placing "likes/benefits" on one side, and "possible improvements" on the other. Read all the comments to the audience and ask for additional feedback. This is an effective way to encourage debate.

The intention of this guide is to function as a dynamic and living document. We plan to update it regularly and we would like to enrich it with more regional experiences. This is why we would appreciate your feedback. Any comment on your experience using this module, the usefulness of the different sections, exercises and information, or any suggestion to include a point should be sent to energia@etcnl.nl y/o ana_v_rojas@hotmail.com; jackie.siles@iucn.org y genero@olade.org

# Module 1:

**Basic concepts
on gender and energy**

## MODULE 1:
## BASIC CONCEPTS ON GENDER AND ENERGY

### 1. How do gender and energy relate?

#### 1.1 Gender considerations on energy issues

Energy is an essential component of our everyday life. We need it for all our activities, from moving to cooking and manufacturing goods. Therefore, the type and amount of energy that we use depends on the activity or task we are doing in a specific moment.

Men and women have different social and cultural roles, which determine their needs and differentiated use of energy. This, in time, implies that men and women might need different energy solutions (technological, training and knowledge, financial opportunities) in order to overcome poverty and achieve a more egalitarian situation.

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**Basic concepts on gender**

**Gender:** this term refers to the roles, responsibilities and opportunities attributed to men and women by society, as well as to the social norms that rule the interaction between men and women. They are social constructs and, therefore, vary from society to society.

**Gender equality:** this term refers to the rights, responsibilities and opportunities that should be equal for men and women in a society and under a framework of respect of human rights.

**Gender equity:** equity recognizes there exist differences among people and that they hinder reaching a state of equality; this is why equality seeks to eliminate the differences or disadvantages existing for a single person or social group in the interest of reaching their equality in terms of rights and responsibilities.

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Gender issues in the energy sector reflect themselves as a subset of gender aspects in the development. Compared to men, women have a reduced access to productive assets, such as technology and land ownership, and also to services like financing and training or other extensions of knowledge. These inequalities persist in spite of the efforts to eliminate them. For example, millions of women still:

**Table 1. Gender and Development**

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**Receive lower salaries than men** The nominal wages of women are 17% lower than men's. Women constitute 66% of the world labour and produce 50% of the food, but they receive 10% of the global total income and own 1% of the property. In Latin America, women receive an income equivalent to 40% of men's and the land women own varies between 11% and 28% depending on which country they live in[28].

**They work hard for their families' subsistence** In sub-Saharan Africa women spend 40 billion hours a year to water collection, equivalent to one year worked by the total workforce of France[29].

**They have less control over income and goods** Women have fewer chances to own land than men and the women who do, tend to possess less than men[30]. In most regions of the world, women run 20% of farms[31].

**They have less access to education and healthcare** Ten million girls more than boys do not receive primary education. Women sum up two thirds of the 774 million of illiterate adults in the world, a number that has remained static for the past two decades[32].

**They are poorly represented in policy and decision-making** Globally, only 17% of the seats in national parliaments are occupied by women[33].

**They have a subordinate social position and they are subject to intimidation and violence** A study carried out in ten countries from different regions showed that between 15% and 71 % of women had experienced violence by an intimate partner in their lives, and nearly a third of women had reported violence against them in the past[34].

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28 UNICEF (2006).
29 PNUD (2006).
30 PNUD (2010).
31 PNUD (2010).
32 United Nations Organization (2010).
33 Ídem.
34 UNIFEM (s.f.,a).

It is important to say that the amount of energy consumption is strongly related to the economic growth, especially during the industrial age[35].   In fact, there is a strong connection between the energy consumption per capita and human development indicators, including life expectancy, literacy and school enrollment, considered within the Human Development Index (HDI). Therefore, the way energy is distributed and consumed can help eliminate or broaden gender gaps as regards the health conditions, education, welfare and productive activities of men and women.

The amount of women now living in energy poverty shows that energy policies and projects have not taken into account their particular situation. Generally, these energy policies and projects assume that energy issues are neutral respect to gender issues, that is, those initiatives will benefit both men and women in the same way; thus, they fail in the inclusive conceptualization of women as key actors in the design, use, distribution and maintenance of energy services and technologies. As energy initiatives do not observe the energy needs of women, they place women at a disadvantage as a group. The result of this belief can be pernicious and the needs of women may not be solved adequately.

#### Energy supply is not gender-neutral

Energy supply is not neutral to gender considerations because:

• Energy determines the efficiency and effectiveness of the activities performed and the quality of life of its users (men and women)

• Energy may be used in different ways and answers different needs

• Energy supply impacts men and women in different ways

• Energy can be a factor that helps empowering women and allows them to be more productive and independent

• The way energy is distributed and consumed can help eliminate or broaden gender gaps as regards the health conditions, education, welfare and productive activities of men and women

• The application of the gender approach may contribute to poverty reduction and the provision of means of livelihood for men, women, boys and girls.

• The application of the gender approach may contribute to increase the efficiency of an energy policy or project by using tools that detect possible barriers for implementation or identify  additional benefits that can be reached by the same energy initiative

Therefore, the gender approach should be incorporated to the formulation and implementation of energy policies, programmes and projects, in order for women to have a more active role, and their participation as energy suppliers and users be recognized. Nevertheless, this is not to say that men should be excluded. On the contrary, both men and women are important actors in the   generation, distribution, use and consumption of energy, and therefore the objective is to stimulate both of them so that they play an active role in the energy chain, so as to achieve a fairer level for the participation of men and women that achieves gender equity.

In short, **gender consideration are relevant in energy issues because:**

• Men and women play different roles within the energy system: women carry the heaviest load since they supply and use biomass energy to cook. This situation worsens due to fuel shortage and indoor pollution, as well as the negative impact on health and security.

• Women carry the invisible load of the human energy crisis, reflected in the time and effort dedicated to water collection and transport for the processing of poultry products. Women require modern and efficient sources of energy to improve their work and quality of life, both indoors and outdoors.

• Women have less access than men to land ownership, loans, training and extension services, necessary aspects to improve their access to energy services and consequently to livelihood and income generation.

• Men and women handle different types of knowledge and experiences respect to energy, whether through their traditional roles, their new, non-traditional ones (women heads of households) or progressively as professionals in the energy sector.
• Since women experience poverty differently than men, they may need different energy policies that help them overcome energy poverty: new energy technologies can have negative consequences – not intentional – on women.

## 1. 2 Energy poverty

The availability of energy varies within countries as well as among them. Energy shortages affect both men and women. Nevertheless, the actual impact of energy shortages on men and women depends on the different uses each gender gives to energy in their everyday lives. The International Energy Agency (IEA) defines energy poverty as the "incapacity to cook with modern cooking fuels and the absence of proper electric lighting to read or perform other productive activities at sunset."[36] However, other definitions enlarge the concept to include access to clean energy sources. Energy poverty has a great impact as regards the potential for development (or lack of it) of men and women, since access to energy is fundamental to improve the quality of life and imperative for economic development.[37]

### Energy poverty

Many are the people (men and women) that suffer from energy poverty in the world:[38]

2,600 million people, mostly in developing countries, still depend on traditional biomass to cook.

1,300 million people live without electric power, because it is not available or cannot be accessed

Figures for Latin America and the Caribbean, according to IEA, show that:[39]

Around 68 million people use biomass and other traditional fuels to cook.

Near 24 million people do not have access to electricity..

Meanwhile, the Latin American Energy Organization (OLADE) estimated that by 2010 the Central American population depending on wood for cooking was 20 million people.[40]

Energy poverty is strongly influenced by gender gaps: it is estimated that around 70% of the nearly 1,300 million people living in poverty are women, many of which live in female-headed households in rural areas. Since women have less access to resources and decision-making than their male counterparts, many poor female-headed households live in extreme energy poverty. This affects not only the energy supply but also other services in the household, like clean water provision.

The exhausting task, that demands a great effort and a huge amount of time that goes hand in hand with energy poverty,

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35 Gaye, A. (2007).

36 UNDP (2006).
37 World Economic Forum et al. (s.f.).
38 International Energy Agency (IEA) (2013).
39 Ídem. Data bases on access to electricity are available at the following IAE link: http://www.worldenergyoutlook.org/resources/energydevelopment/energyaccessdatabase/#d.en.8609
40 OLADE (2010).

is the result of a strong dependence on biomass and the load that falls disproportionately on women. Traditionally, in rural areas women are in charge of collecting wood and other biodegradable wastes to cook. The true rural energy crisis is the crisis of the worth of time for women: they work longer days than men, giving their energy to satisfy survival needs such as water and fuel gathering, food processing, transport, agriculture and small enterprises. According to the Food and Agriculture Organization (FAO) data, women spend between 8 and 11 hours gathering wood or biomass and water, while men spend just one or two.[41]    All these are activities not valued economically, and mostly invisible in energy information collection at national level and in workforce statistics.[42]

**Impact of energy poverty on women**

As a result of energy poverty, women::

• Spend a lot of time and effort to gather traditional fuels, a physically exhausting task that may take up from 2 to 20 hours or more per week[43].

• Are exposed, together with their sons and daughters and in households with poor ventilation, to smokes from inefficient heaters. These emissions are the cause of death of 1.45 million people a year. A death every 20 seconds defines indoor air pollution as the fourth cause of death in the developing world[44].

• Are daily exposed to the dangers related to  the gathering of biomass: bone fractures, repeated injuries by sprains, back disorders and abortions, risk of burns, diseases related to exposure to smoke, skin diseases due to the use of fuels, and gender violence, which includes sexual assault by men during the gathering of wood or other resources.

• Have difficulty in having access to real opportunities as businesswomen in the energy sector. Many income-generating activities performed by women in the informal sector - critical for the survival of the family- consume a lot of fuel and their viability is affected by the prices of energy and its availability. As a result of a limited access to productive assets, such as land ownership and technology, and to services, such as financing, training or other ways of acquiring knowledge, the participation of women in the market as operators in energy companies is more limited.

• Benefit only partially from energy interventions, because they are limited by other predominant factors that cancel the possibility to receive those benefits, such as lower education levels or restrictions of movement and access to information. Besides, women are poorly represented in decision making and in organizations in every level of the energy sector, and they lack a voice to make their needs

known and choose among the available energy options

## 1.3. Energy as a means to achieve gender equality

Energy is a means to achieve a service and, as previously mentioned, it can contribute to improve or worsen the standard of living and level of income of a person. This is an important distinction that leads us to consider energy as a mechanism capable of influencing changes at educational, social and economic levels that seek reaching equality among men and women. This motivation is extremely important since it leads to consider men and women not as passive receivers of energy services but as agents of change and, therefore, tends to involve them in the best possible way in improvements in their welfare, income generation and social participation.

Energy policies, programmes and projects with gender considerations may support these social transformations and above all promote the active participation of women as economic and social agents of change, respecting their position as subjects of law. Thus, in many developing countries companies run or owned by women represent a great proportion of the business activities.[45]   Most of these female entrepreneurs work in micro, small and medium-sized enterprises which are generally domestic initiatives that provide services to communities or neighborhoods (food production, among other things). Therefore, energy policies that support micro and small enterprises should take into account the particular situation of women and the type of enterprises they work in if it is to contribute to the economic and equitable growth at national level.

As regards energy consumption and generation, it is necessary to recognize that in spite of the differences respect to family decision-making, in most cases women are the ones that decide on the type of consumption in the household.[46] This is because of their major roles as domestic administrators. Besides, women tend to make more sustainable consumption decisions than men. According to information from the Organization for Economic Cooperation and Development (OECD) and other organizations, an increase of women's income generates a more sustainable consumption.  This is reflected in the energy sector where nearly half of the solar lighting systems are bought by women in developing countries.[47]

Although energy has not been included as one of the Millennium Development Goals (MDG), the independent report of the United Nations Millennium Project has identified energy, including electricity and fuels for safe

cooking, as an essential infrastructure service and part of the "means towards a productive life". According to the World Energy Outlook 2010, the United Nations MDG for extreme poverty eradication by 2015 will not be accomplished unless a substantial progress is made in improving the access to energy, given the millions of people at world level that still depend on traditional biomass to

cook and have no access to electricity.[48]

A continuación se presenta un recuadro que ejemplifica cómo el mejoramiento de los servicios energéticos puede apoyar los esfuerzos hacia la igualdad de género:

The box below shows how improving energy services can

**Table 2. Energy, gender and the Millennium Development Goals**

| MILLENNIUM DEVELOPMENT GOALS (MDG) | THE IMPORTANCE OF ENERGY TO REACH THE MDG |
|---|---|
| **Objective 1. Hunger and extreme poverty eradication** | • The saving of the time and effort spent in cooking, gathering fuel and food processing will reduce the calorie consumption and release time to do additional and less exhausting activities.<br>• The saving of time spent in sickness or taking care of sick children will reduce health costs and increase income capacities.<br>• The optimization of fuel efficiency and, therefore, a reduction in the amount of the fuel needed, will alleviate the constraints that limit the family budget in the cases where fuels need to be purchased.<br>• The perfection of home energy technologies and associated practices will create opportunities for income generation (with a direct application in agriculture, home industry, small domestic energy enterprise and more flexible and extensive working hours due to a better lighting in all cases).<br>• Access to electricity will provide a source of light for economic activities at night and a source of energy to operate sewing machines or refrigerators, for instance. |
| **Objective 2. Achieve universal primary education for children** | • A less consumption of time value spent on gathering fuel and taking care of a weak health, will give children more hours to go to school and do their homework.<br>• A better lighting will allow children to study without depending on the sunlight and endangering their eyesight. |
| **Objective 3. Promote gender equality and empower women** | • To alleviate the hard, exhausting, time-consuming task of gathering fuel and to reduce the hours dedicated to cooking will allow women to devote time to productive initiatives, education and childcare.<br>• To reduce the time and travel distances women need to go to gather fuel will let them have more hours for resting or other kind of productive activities, a right generally violated.<br>• To involve women in the energy decisions at home will promote gender equality, strengthen their self-esteem and prestige and change gender relations towards a greater equality.<br>• To have access to information through mass media and telecommunications.<br>• To be educated through Information and Communication Technologies (ICT).<br>• To control and have access to modern energy services.<br>• To give women a voice and participation in the energy sector.<br>• To employ women in the energy sector.<br>• To achieve the gender mainstreaming approach in the energy policies in countries. |

41 Cited by Larrea, S. (2013).
42 ENERGIA/DfID Collaborative Research Group on Gender and Energy (CRGGE) (2006).
43 PNUD (2007b).
44 OMS (2011).

45. In Uganda, 38% of small enterprises are owned by women; in Ruanda women own 60% of small enterprises, while in Laos 68% (UNIFEM, 2010).
46 European Institute for Gender Equality (2012).
47 Thorsen, K. et al. (2011).

48 IEA (2010).

| Objective 4. Reduce infant mortality | • Air pollution indoors contributes to respiratory diseases which represent a 20% of the 11 million deaths of children annually (OMS, 2002).<br>• Low-birthweights due to air pollution indoors.<br>• Biomass fuel gathering by women and girls expose them to health risks and limits their time dedicated to education.<br>• Access to nutritious and cooked food, domestic heating and boiled water, factors that contribute to a better health.<br>• Access to electricity that allows pumping and purification of drinking water.<br>• Use of cleaner energy technologies that prevent health risks such as burns and poisoning from kerosene. |
|---|---|
| Objective 5. Improve maternal health | • To ensure energy services for maternal care and cooling medicines, among others.<br>• To ensure to reduce excessive work load and heavy manual labor (for example, water, fuel and wood gathering) which affect the health and general welfare of a pregnant woman. |
| Objective 6. Combat HIV/AIDS, malaria and other diseases | • Promote healthy behaviors (for example, the cooking of food) to benefit people living with HIV/AIDS (PLWHA).<br>• To reduce the burden and exhausting work that the taking care of PLWHA imply for the members of a family.<br>• To improve the quality of the cares or health services by promoting the availability of vaccines and sterilization of equipment in clinics.<br>• To reduce the risk of infection by sexual assault against women and girls during the gathering of fuel, wood and water |
| Objective 7. Ensure environmental sustainability, safe drinking water supply and the improvement of life conditions of the inhabitants of a village, by: | • Reducing rates of deforestation as a result of a less dependence on biomass.<br>• Allowing the conservation or expansion of forest lands for the protection of ecosystems and the reduction of greenhouse gases (GHG).<br>• Achieving the availability of volumes of water and higher purity by energy technologies with low environmental impact.<br>• Optimizing access to energy for cooking and to electricity for men and women living in isolated or poorly supplied areas. |

Source: based on WHO (2006) and CRGGE (2006).

support the efforts towards gender equality:

MDG [49]

The impacts of the link among energy, gender and the MDG are shown in positive aspects such as saving time and a reduction in household costs, a greater school attendance by girls, women empowerment associated to greater possibilities of decision in work organization and access to massive media, improvement in rates of respiratory diseases, a better maternal health and a reduction of infant and maternal mortality, as well as lower rates of deforestation and GEI emissions.

## 1.4 Gender and efficiency in energy initiatives

Mainstreaming or the incorporation of gender considerations is important strategically for the success of the implementation of energy policies and projects themselves. Mainstreaming and the use for gender tools contribute to the possible challenges for the implementation of energy policies and projects and can help to increase the social and economic benefits of energy interventions. The reason is relatively simple: for an energy initiative to be effective, efficient and sustainable, it is necessary to have a global understanding of the different roles men and women play in energy resources management.[50] Therefore, the implementation of a participatory diagnosis with a gender approach contributes not only to analyze the differentiated needs of men and women as well as their attitudes and impressions on the introduction of new technologies and energy sources, their capacity of acquisition and their impressions on energy sources, but also it is possible to obtain a more realistic view of the context where an energy policy or project will be developed.

Gender analysis can also prove the need to involve women in choosing and maintaining energy equipment. Field studies have shown the need to train both men and women in the use, maintenance and repairing of energy technologies, reveling that they have a greater possibility of being in good conditions when women can maintain them, and implement technological innovations in situ that give a better response to the energy needs of men and women.[51] This information can be extremely relevant for the sustainability of projects centered in the distribution of energy equipment.

Likewise, case studies have shown that the social sustainability of energy projects increases when women are in charge of community or communication activities associated to the maintenance or transfer of them, since they are more engaged with the community they live in and the benefits generated by energy interventions, they are

more stable and have a greater direct contact with facilities and users.[52] However, it is also important to note that it is necessary to accompany the women involved in activities of energy projects or initiatives in order to minimize or avoid these new functions having a negative impact on the work burden women already have. They can be accompanied by gender-sensitivity activities, with the goal of achieving a fairer distribution of household chores.

The incorporation of the gender perspective can contribute to:

• Identify possible implementation problems, such as the lack of acceptance of a technology by men and women and ergonomic requirements a technology must have to facilitate its use by both sexes.

• Increase the social and economic impacts of the energy interventions, by identifying the social or economic activities relevant for men and women of the community or region where the policy or project will be implemented.

• Identify the roles or functions that men and women can perform in the chain production, as well as the parts they can play in decision making.

• Identify the ways to make affordable generated energy or the price of energy technologies that will be spread.

All these elements contribute to secure the efficiency of energy interventions, provided that the data disaggregated by sex, or even by socio-economic group, is included in its design, implementation and monitoring. Experience has shown that project developers are willing to invest in gender mainstreaming processes to secure the efficiency and sustainability of their initiatives.

49 Authors' note: the elements included in this column can be used as guides to establish gender-sensitive indicators for energy policies and projects. For more information on these issues, please refer to the sections on indicators and monitoring systems in modules 2 and 4 of this training guide.
50 UNDP (2007a).
51 ENERGIA (2011b) and UNDP (2007a).
52 Cecelski (2000) and ENERGIA (2011b).

## 2. Basic concepts on energy

### 2.1. What is energy?[53]

Everything we do involves energy, from breathing and eating (metabolic energy) to producing goods. Some types of energy make life simpler and more efficient. For example, a mill can be powered by electricity exempting men and women from the tedious and hard work of grinding corn or husking rice by hand. Kerosene lamps are brighter than candles; electric light is more suitable to see at night. LPG, a fossil fuel, offers a faster warming, its flame easily adjusts and is cleaner and healthier than biomass.[54]

**What is energy?**

• Energy is the capability of doing work. Energy is a physical concept that scientists use to explain certain processes that have common characteristics. We cannot see or feel the energy, but we can see or feel its consequences (for example, heat, light, sound or movement).

• Energy can take different forms, such as heat (thermal), light (radiant), movement (kinetic); electric power; chemical, nuclear and gravitational energy. All forms of energy can be classified into two categories:

• Stored energy, which includes potential energy.

• Kinetic energy, which implies movement.

For example, wood stores (potential) energy, energy which is conserved until the wood is consumed (kinetic) by the fire for cooking or heating.

*Modified by Rojas et al. (2012).*

The second important point is that energy **can be converted to other forms**. Electricity can be produced by burning natural gas in a power plant (chemical energy becomes electric power). Electricity can be turned into light (electromagnetic radiation). All these conversions need a devise or equipment, for example, a stove, a light bulb or a diesel oil engine.

### 2.2. Energy conversion and storage

Some of the devises used to convert energy use fuel (such as wood, LPG, diesel oil or coal). Fuels store chemical energy that is released when they are burnt. Fuels differ from one another in many ways, such as their physical form (gaseous, solid or liquid) and the amount of energy they store. For

example, 1 cm3 of wood has less energy than 1 cm3 of coal. There are other ways to store energy, for example, batteries and reservoirs.

When energy is converted from one form to another, not all of it ends up where we want: a part of it always ends as heat. Scientists, engineers, and local innovators try to make devises and equipment as efficient as possible, according to a logical environmental and economic sense. The conversion efficiency of equipment varies. A LPG heater converts nearly 60-70% of the chemical energy stored in it to caloric energy, while a wood stove converts to caloric energy between 12 and 30% of the chemical energy stored in the wood. However, these figures are true assuming the equipment is well maintained. A limited maintenance may diminish the efficiency and reduce the equipment lifetime.

**What is energy efficiency?[55]**

Energy efficiency is the amount of useful energy obtained from any kind of system. A perfectly energy-efficient machine would convert all the energy inverted into productive work. In real life, converting energy form one way to another always implies a loss of useful energy

*Source: US-IEA (s.f.).*

The saving of energy costs produced by an increase in the energy efficiency may raise the family income. For example, it has been shown that the greater the efficiency and the lower the cost of cooking stoves and fuels for lighting, the greater the savings in energy costs, which can be reduced between a 20 and 50 %.[56]

### 2.3. The energy chain[57]

Any form of energy has its origin in the environment. Energy analysts classify their natural sources as primary energy. Some of the natural sources of energy, such as biomass, can be used directly.

However, primary energy will often have to be converted several times in order to reach the consumers. It can be transformed into secondary energy for transport or transmission purposes, and finally ends its journey – as final energy or energy carrier – with the consumers. Then consumers fuel a device with the energy carrier to produce useful energy. This process of transforming primary energy into useful energy is called energy chain. Analysts in this field make use of energy chains to analyze energy losses.

Figure 1: graphic example of the energy chain[58]

58 ENERGIA (2008c).
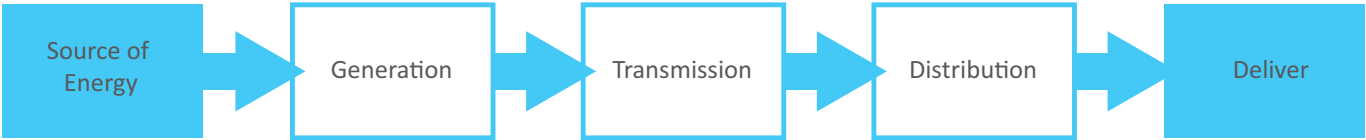


**Classification of energy sources**

There are other classifications for energy sources:

Energy can be classified in terms of the resource sustainability.

Most of primary sources of energy are renewable; in other words, they will not be depleted, contrary to fossil fuels (non-renewable) that will be depleted sometime in the future. Some renewable sources of energy are: biomass (if it is not used adequately, it may become non-renewable), solar energy, water, and wind.

Energy can be classified in terms of the familiarity of the use.

The sources of energy that have been long used as "traditional" or "conventional" are defined in opposition to new sources (nontraditional or non-conventional). Sometimes, it is the conversion technology that determines the classification rather than the resource itself. Manure can be considered a traditional source of energy if it is burnt directly, but if it is used for the production of biogas it is a digester, then it becomes a "nontraditional" source of energy. Terminology is rather ambiguous since it depends on the context.

Energy can be classified in terms of its commercialization.

Commercial energy always includes fossil fuels and some new and renewable sources. Biomass is traditionally classified as non-commercial; however, in many urban and some rural areas, biomass is a commercial source of energy.

*Source: Rojas et al. (2012).*

53 This module is based on ENERGIA (2008b).
54 ENERGIA (2005a).
55 US-EIA (s.f.).
56 Dutta, S. et al. (2005).
57 This section is based on ENERGIA (2008c).
58 ENERGIA (2008c).

## 2.4. The energy ladder[59]

Some sources of energy are unattractive and others, on the contrary, are very attractive. Energy analysts sometimes describe these fuels in the form of a pyramid. Less attractive fuels are in the base of the ladder and the most attractive ones are placed on top. The different steps of the ladder represent other intermediate fuels. Sometimes energy interventions intend to help users climb up a step in the ladder. The problem with the upward transition in the ladder towards more efficient sources of energy is that the more attractive the forms of energy, the more expensive the equipment necessary to use them.

Costs influence in the type of energy people use. Low income people are in the base of the ladder and use wood for cooking and even for lighting at night. Nevertheless, this behavior can be seen in higher steps of the ladder, where people more prosperous economically prefer using LPG instead of electricity for cooking since the former can be more flexible and economical
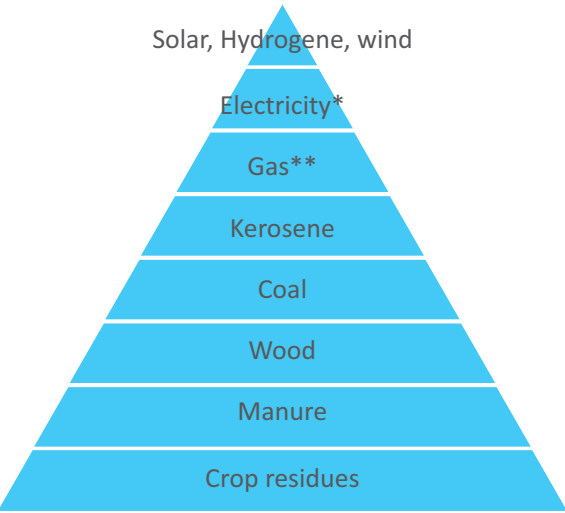


Figure 2: the energy ladder [60]

The energy ladder is a simplified form of reality. Frequently, people use more than one energy carrier for any work, depending on different factors such as availability and convenience. There seems to be no clear progression between increase of income and change of fuel from biomass to kerosene, to LPG and to electricity. Even more economically prosperous households keep kerosene lamps in case of power failures or wood stoves for cooking. Low income households may afford paying for electricity for lighting but still they continue cooking with biomass or kerosene. The energy decision is not just a matter of income.

59 This section is based on ENERGIA (2008c).
60 ENERGIA (2008c).

## 2.5. The metabolic energy and energy from biomass in the national energy planning [61]

Metabolic energy is seldom measured, only some institutions are concerned with trying to include it in statistics. In spite of this, metabolic energy is a very important aspect of the energy balance in people´s lives. Many of the tasks that require metabolic energy are physically demanding and can be repetitive, tedious and time-consuming (an exhausting work).

### What is metabolic energy?

Metabolic energy is the energy produced by our bodies and is derived from the food we eat. Metabolic energy is measured in terms of calories.

*Modified from: Rojas et al. (2012).*

Likewise, a typical report on the domestic energy situation in most developing countries directs nearly all its attention to the use and supply of commercial energy, a few pages to biomass and absolutely nothing to metabolic energy. On the contrary, it is usually recognized that most of the biomass is gathered by women, and that the work load this activity represents as well as the environmental consequences derived from it have a direct impact on women. When looking for solutions, reforestation or efficient stoves are usually the answer. However, domestic energy policies generally allocate a small percentage of their budgets to biomass-related energy projects.

### What is biomass?

Biomass is an organic material originated from a biological process, spontaneous or structured, and is used as a source of energy.[62]  Biomass is one of the oldest sources of energy and includes vegetable waste and residues, crops and trees.

## 2.6. What are energy services?[63]

An energy service is the application of useful energy to tasks requested by consumers at the end of the process that facilitates its use, according to human wellbeing. It includes benefits such as transport, lighting, and cooking and cooling of food.  Energy services can be supplied by different energy carriers; for example, cooking can be carried out thanks to

61 Idem.
62 Real Academia Española (2001).
63 This section is based on ENERGIA (2008c).

the use of fuels – wood, coal, gas - or electricity. From the users' perspective, the importance lies in the energy service, not in the source used to produce it.

### Energy service approach

In an energy service approach both the technical aspects of existing energy technologies as well as non-technical aspects, including affordability, reliability, and accessibility of those technologies are taken as basis to design initiatives in this field. Above all, the implication of the energy service approach in the provision of and access to energy results in the use of technology not from itself but based on an analysis of people's needs and priorities.

*Source: ENERGIA (2005c).*

The analysis from the energy services approach should originate from the perspective of people themselves, and not be exclusively subordinated to the opinion of energy policies suppliers and designers. This starting point is particularly important for women, who generally possess fewer goods than men and, therefore, when other aspects such as technology affordability are taken into account, can see their economic possibilities of accessing an energy service or technology better reflected.

## 3. Basic concepts on gender

### 3.1. What is gender?[64]

Given the complexity and confusion that many times are present and generate multiple visions and concepts, it is important to clarify the difference of gender as concept, approach and analysis category.

Gender is not the same as sex. Sex refers to the set of hereditary biological characteristics that organize individuals into two categories: man and woman.

The term "gender" refers to the roles, responsibilities and opportunities attributed by society which are associated with women and men, as well as the hidden power structures that govern the relationships between them. Gender is "in essence a term used to emphasize that the sexual inequality is not caused by the anatomic and physiological differences that characterize men and women, but rather by the unfair and unequal treatment given to them socially. In this sense, gender refers to the cultural, social, economic and political conditions that constitute the base of certain standards, values and patterns of behavior, related to the genders and the relations between them"[65].

64 This section is based on ENERGIA (2005a).
65 Riquer, F. (1993).

## 3.2. Roles of gender

The roles of gender are the part, function o representation a person plays within society, based on a system of values and customs that determine the type of activities men and women should develop. Gender roles shape our identity, to the extent that they determine how we are perceived, how we are expected to think and act as men and women. Now, the way men and women behave and assume their gender roles depends on the social gender norms that model those roles, as well as the accepted behavior standards shared by a specific society.

Both men and women have the possibility, to a certain extent, of negotiating their rights, benefits and obligations in relation to certain duties or tasks in the household and the community. Those negotiations also include decisions on the use of resources, such as the land, manpower and cash. In fact, they are not always harmonic agreements, due to the disagreements and rivalry that may arise over the resources.

Besides, it is important to remember that these negotiations do not usually take place among equals. In most societies, men have more decision-making power than women, more power to exercise control over their own lives, the resources and other members of the family. This balance of power between men and women defines the relations between genders. The consequences of

power differences operate in all levels of society: the household, the community and the organizational, national and international fields.

## 3.3. What is equality and what is equity?

The struggle for equality for reasons of gender, age or ethnic origin is the struggle for equal rights, based on human equivalence, that is, the acceptance that all human beings are equal and that this situation is not modified due to existing differences between these groups (whether by sex, ethnicity or physical characteristics). The principle of equality implies[66]:

**Equality of rights:** understood as equality before the law.

**Human equivalence:** men and women are equal in the sense that they possess the same human value.

**It admits biological and cultural differences:** it supposes the recognition and acceptance of the difference or diversity as regards biological and cultural constructs between men and women.
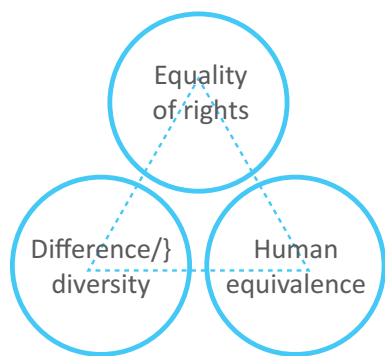
66 García Prince, E. (2008), p. 30.

Figure 3: Elements of equality[67]

Therefore, equality of rights is a concept that incorporates other concepts necessary to obtain equality, both in its theoretical and practical form. If we consider that equality between men and women means equality before the law (that is, the human equivalence of men and women, non-discrimination or the prohibition of sex discrimination and the acceptance of the diversity of the needs and interests of men and women), it is necessary to accept that equality admits differences.

Meanwhile, the ultimate goal of equity is to achieve equality, above existing differences, no matter the nature of those differences, which may create disadvantages for some people. Equity is present in the treatment given to the needs and interests of people who are different. Therefore, this treatment is based on the fair consideration of the needs and interests imposed by the existing difference, in a way that this differentiated treatment enables to make the equality of right possible and expressed in facts

.

### How is equity achieved?

Equity is achieved thanks to "the application of deliberate actions that correct disadvantages and eliminate the inequality originated in the differences, being differences of gender, age, ethnic origin or by any other factor that produces discriminatory effects in rights, benefits, obligations and opportunities, in men and women".

*Source: García Prince, E. (2008), p. 32.*

In real situations with big inequality it is not possible to achieve equality if equity policies are not implemented, what makes equity essential to achieve equality. Positive or affirmative actions are key instruments of equity to achieve equality.[68]

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67 Source: García Prince, E. (2008), p. 27
68 García Prince, E. (2008), p. 33.

### Concepts to remember on equality and equity

**Equality** is understood as equality before the law or equality of rights and implies the prohibition of discrimination or the existence of prerogatives or privileges.

**Formal or de jure equality** refers to what the legal norm expresses.

**Real, effective or substantive equality** is expressed in facts.

**Equity** is the fair treatment directed to achieve effective equality by the implementation of deliberate actions directed to correct and reward inequality and/or moderate and compensate disadvantages.

**Positive or affirmative actions** are deliberate actions that constitute the sense of fair treatment and are the instruments of equality policies.

**"Equality and equity are necessary since through equity equality is achieved".**

*Source: García Prince, E. (s.f.,1).*

## 3.4. The gender approach or perspective

The basis for the integration of perspectives and concerns related to gender equity is based on two important premises. First, the recognition that gender equality and equity are fundamental aspects of human rights and social justice; second, a growing awareness that equality (equal rights, opportunities and responsibilities for men and women) is a prerequisite for sustainable development and sustainable use of natural resources and, in particular, energy.

The gender approach is based on the gender theory and is a political, theoretical and methodological proposal that makes it possible to have an analytic view of reality beyond the traditional and absolute conception of the world and the relations in it. The approach considers in an explicit way the constructed social and cultural differences and the power relations existing between men and women within a context of concrete action. It also defines specific mechanisms to overcome and eradicate that determines the relations between men and women.

Gender mainstreaming is principally aimed at transforming the way public sector offices operate, including the energy sector offices, and especially the technical processes linked to the formulation and implementation of public policies.

It is a systematic integration process. It allows guaranteeing the incorporation of the gender perspective or approach to value the implication it has for men and women any action from the energy sector related to legislation, public policies, and administrative, economic and cultural activities in both public and private sector institutions.

### What does mainstreaming mean?

Gender mainstreaming is the evaluation process of the implications any action, policy or planned programme, in all areas and levels, has on men and women. It is a strategy to make all the needs and experiences of men and women an integral part in the design, implementation, monitoring and evaluation of policies, initiatives and programmes. In this way, gender mainstreaming ensures that men and women benefit equally from the development process or, at least, inequality does not persist.

*Source: ECOSOC (1997).*

## 3.5. Gender analysis and tools

In order to fully understand the gender implication in energy issues, it is important to have clear that the causes of gender differences present in them are born and find their correspondence in the underlying differences in the relations between men and women that characterized the society in question. Experts in gender make use of different strategies to analyze gender roles and relations.

Gender analysis refers to the reflective theoretical-practical exercise of a fact or circumstance, poses questions respect to men and women, about who does what, who owns what, who takes decisions on what and how, who wins and who losses due to a planned intervention, etc. gender analysis examines what is happening in the household and establishes links with the different levels of society at a larger scale.

Gender analysis, by definition, does not only contemplate the case of women, nor does it constitute a complaint on how or why women suffer more than men. Its main objective is to achieve a better understanding of the behavior of communities from the analytic perspective of the relations between men and women

### Practical and productive needs, and strategic interests

Another analytical approach considers gender roles have different labours appointed, where the different needs, including energy needs, have to be satisfied. These needs are usually divided into practices and strategies, always depending on local circumstances, influenced by variables such as the person's age and marital status. However, in the energy context, it is more beneficial to consider three groups of needs or interests: practical needs, productive needs and strategic interests. These are described below:

**Practical needs:** practical needs are necessary interventions to make the life of women simpler and more pleasant, but they do not defy the habitual roles or labors of women at home or in the society, nor their gender relations. In other words, they do not alter the traditional balance of power and authority between men and women. Those needs are mainly linked to the reproductive functions of women and to the administration activities of the household that secure the daily family survival.

**Productive needs:** productive needs are those that, if solved, allow women to produce and generate greater income. Cleaner forms of energy and new technologies could, for example, facilitate work in general and reduce the physical effort, time-consuming and exhausting, many women are exposed to. However, does the fulfillment of productive needs change gender relations within the household and in the community, neighborhood or sector? Some research established that the condition of women at home improves when she contributes to the family income. The answer is not universal.

**Strategic interests:** strategic interests are those interests linked to the change of social position of women that seek to achieve more equal footing for women respect to men, and their empowerment.

**The strategic interests** of women generally respond to problems or issues related to rules and social contracts, which tend to be biased at the expense of women. For example, in many societies, certain groups of women (widowers, divorcees, and abandoned wives) suffer from a complete economic deprivation as a result of their marital status, based on traditional or modern legal codes that allow male relatives to take away their property.

Other strategic interests of women could be the laws on inheritance and guarantee that daughters have equal rights, for example, as well as forbidding violence against women. In most countries those laws exist but they are not always enforced, respected or demanded.

### The triple role

One of the first attempts of gender analysis was based on the gender division of work. It divided the work of men and women into three main socio-economic areas: reproductive, productive and community. This framework is known as the triple-role framework.

Reproductive: it makes reference to all the labors assumed for the care and maintenance of the domestic unit and the people in it.

Productive: it makes reference to the work done in exchange for a payment in cash or in kind.

Community labors: it makes reference to the works done not for the individual familiar earning but for the wellbeing of the community or society. The community labors of women are often seen as an extension of their reproductive roles.

Gender analysis tools are used to organize the information in a systematic way, what is called gender analysis framework, that helps understanding the generic reality of a community, neighborhood or sector; or to value the possible impact of an intervention in men and women, such as an energy project. Gender analysis tools can be used in different ways. For example, to centre attention in gender inequality within a specific community or as an early warning system to identify potential gender problems that may arise from an energy community initiative this is set in. In the following modules a series of gender analysis tools and their application in the energy sector will be presented.

### What are the gender analysis tools?

Gender analysis tools are matrixes used to organize the information in a systematic manner, whether to diagnose the gender situation existing in a community or target group in particular or to evaluate the possible impact the intervention may have on men and women.

*Source: Rojas et al. (2011), p. 17.*

The following is a summary of a box with some of the most well-known and used tools in gender mainstreaming:[69]

| | |
|---|---|
| Diagnosis, planning and assessment with gender approach | The analysis of problems should consider the characteristics associated to gender (roles, sexual division of work, unequal power relations), as well as the needs and possibilities of both sexes. Therefore, information should always be gathered disaggregated by sex, to guarantee a precise knowledge of the gender situation and to design policies, programmes and projects in line with this reality. Likewise, the objectives of a programme or policy should be monitored using evaluation indicators with a gender approach. |
| Plans of Equality and Opportunities of Rights | The creation of a Plan of Equality implies the existence of political will, since it includes in its text the agreement on objectives, goals and indicators for evaluation. Besides, these plans involve different government institutions, in charge of taking actions that favor gender equality; therefore, they require a previous task of negotiation and institutional articulation. |
| Gender sensitive budgets[72] | Public budgets are considered technical, gender-neutral instruments. In practice, men and women need different services, therefore they benefit from them in different ways; in other words, different needs imply different allocations. Having a gender budget that identifies those gender differences gives the government the opportunity to re-address their policies and public expenditures to promote equity and equality. Likewise, a gender budget may facilitate policy monitoring and evaluation. For more information, the web page that UNWomen has created specifically for this subject is available at http://www.gender-budgets.org |

## 4. Additional sources of information

You can find more information on the subjects dealt with in this module in the following sources:

• ENERGIA (2005a). The Gender Face of Energy: A Training Manual. Module 1 (Training Manual, Module 1). Clancy, C. et al.

• ENERGIA (2005b). The Gender Face of Energy: Gender Tools for Energy Projects. Module 2 Clancy, C. et al.

• ENERGIA (2011b). Mainstreaming Gender in Energy Projects: A Practical Handbook. Cecelski, E. and Dutta, S. ENERGIA.

• Energy, Poverty and Gender Initiative (EnPoGen). Special Edition of ENERGIA News 2002, Vol. 5, No. 3.

• GNESD (2007). Reaching the Millennium Development Goals and beyond. Access to modern forms of energy as a prerequisite.

• IEA et al. (2010). Energy Poverty. How to make modern energy access universal?

• Larrea Castelo, S. (2013). Gender Equity Strategy of OLADE. Latin American Energy Organization

• Mohdam, V. (2005). The Feminization of Poverty and Women's Human Rights. SHS Papers in Women Studies/ Gender Research, No. 2. UNESCO.

• OMS (2006). Fuel for Life: Household energy and health.

• UNDP (2001). Generating Opportunities: Case studies on energy and women.

• UNDP (2007a). Gender Equity Approach for Sustainable Energy Initiatives

• UNDP (2007b). Gender Mainstreaming: a key driver of development in environment and development. Training Manual.

• UNDP (2007c). Will tomorrow be brighter than today? Addressing gender concerns in energy for poverty reduction in the Asia-Pacific Region.

• UNDP and ENERGIA (2004). Gender and Energy for Sustainable Development: a toolkit and resource guide.

• UNDP and the Millenium Development Goals, retrieved from:

http://www.un.org/millenniumgoals

• UICN, UNDP and GGCA (2009). Training Manual on Gender and Climate Change.

## 5. Practical exercises

The following exercises may be used to evaluate and reinforce knowledge among participants in the training workshop.

### Exercise 1: Debate on gender perceptions [71]

Share the following affirmations with participants in the workshop; ask them if they agree or disagree with them. This exercise offers an opportunity to debate gender roles and how they are internalized:

"Men are more logical and rational, women are more emotional".

"Women find it more difficult to work with numbers than men".

"A family really consists of a man, head of the household, a woman and the children".

"Men are far less sensitive than women: they are unaware of how people feel".

"Women are more responsible than men".

### Exercise 2: Raising awareness on our own gender perceptions [72]

Ask the group the following questions. This will give each participant the chance to reflect on gender roles and how these shape their perception of the world. Ask participants to share their examples and comment on their own opinions.

1. In your opinion, what is gender? Is gender and sex the same thing? Why?

2. Name two things you would like to do that are typically perceived by the culture you belong to as gender specific.

3. Name two things that you do not like doing but which are perceived as normal by the culture you belong to according to your gender.

4. Name two things that you would really wish to do but which would disgust the society if you did them because they "belong" to the other gender.

69 Based on Bonino, M. and Bidegain, N. and ENERGIA (2005c).

70 Hurtado, I. et al. (2010).

71 Based on ENERGIA (2008a).
72 Ídem.

A variant of this exercise is to ask the participants to draw on a piece of paper, individually, their concept of "what is gender?" Then, you can choose a number of interesting drawings and ask the artists to explain their drawings. This is a more interactive exercise.

## Exercise 3: Gender and energy [73]

Assess the group understanding of gender roles, by listing a number of (energy) technologies and ask participants if they contribute to resolve practical, productive or strategic needs. For example, show the group pictures of a light bulb, a radio, a heater, a lamp post, a telephone, a refrigerator or a cell phone. Then ask them if the light bulb contributes to a practical, productive or strategic need and why.

If necessary, divide a large group into smaller working groups and give them a list of the technologies mentioned. Then, compare the results obtained within the group and then among groups. Depending on the assumptions of each of them, the conclusions could be very different.

## Exercise 4: Energy poverty [74]

Begin this module asking participants what they understand by "energy poverty". This question will help you getting them involved in an early debate and evaluate their understanding of the term.

Simulate the debate by establishing the following affirmation and asking the following questions.

Make sure you have predicted enough time for debate:

Affirmation: "Energy poverty has been defined by UNDP as the "incapacity to cook with modern cooking fuels and the absence of a minimum essential of electric light to read or perform other productive and home activities at sunset".

Questions: do you agree with this affirmation? Can you provide other examples of energy poverty you have experienced or seen?

## Exercise 5: Short evaluation [75]

Prepare a short, simple test that motivates participants to evaluate their understanding of the main concepts they have just learned. One way to do it could be to associate specific terms to their definitions. For example, draw two columns on the blackboard or a piece of paper; in the first column write terms such as "energy", "carriers", "source", "fuel", "energy service"; in the second one include the definitions of those terms. Then, ask participants to match those terms to the definitions.

Participants can do this exercise individually or in groups and stimulate debate.

## Exercise 6: Buyers and sellers[76]

On different colored paper cards write one of these terms: "energy", "carriers", "source", "fuel",etc. then write each definitions on a different colored paper card. Divide participants in two groups: "terms" and "definitions". Each group should have a number of members equal to the number of cards available. Then, invite "terms" to be buyers, and "definitions" to be sellers. Invite each member of the group to "buy" and "sell" as a way to match cards. Every time a pair buys and sells, ask them to clap once. When each "buyer" and "seller" has found their match, ask all participants to share their terms and definitions to further stimulate debate.

## Exercise 7: Every-day examples [77]

Test participants' knowledge on energy services and ask them to share examples of how they can benefit from the use of energy and energy technologies in their everyday life.

A variant of this exercise is a role play of the "buyers" and "sellers" exercise described before. Ask "buyers" to write their energy needs on separate cards, for example, cooking, lighting, home heating, etc. Ask "sellers" to write on different cards the different types of energy and the different technologies. Include as many technological options as possible, in order to demonstrate that one need can be satisfied by multiple different technologies.

# Module 2:

## Integration of the gender approach in energy policies

73 Rojas, A.V. et al. (2012), p. 20.
74 Ídem, p. 29.

75 Ídem, p. 39.
76 Ídem.
77 Ídem.

## MODULE 2: GENDER AND ENERGY POLICIES

### 1. Gender equality and its recognition as a key role in public policies

#### 1.1. Reasons why public policies with gender equality should be implemented

Energy policies tend to be considered as purely technical actions, with little or no social content. However, this could not be further from the truth since energy is vital to support all human activities, from the most basic ones, such as cooking, to agricultural production, transport, provision of services and job creation. Energy interventions have the ability to support the development and welfare of a society, and through their design and implementation, to achieve a greater social and gender equity or, on the contrary, broaden and intensify already existing gaps within society and their economic and social groups.

Energy policies tend to be considered gender-neutral, which implies they are seen as beneficial for both women and men. However, women and men experience distribution of power over energy services in different ways, since the use of sources and technologies depend to a great extent on their roles and social conventions. The direct consequence of implementing energy policies without due integration of gender considerations is that important information for its design can be ignored, thus discriminating women or other vulnerable sectors of the population. For example, a policy that promotes low-cost power generation to support the industrial sector can discriminate the residential sector and the energy needs of the families, if these needs and their capacity to pay for energy services have not been taken into consideration in the design and implementation in a comprehensive manner. Likewise, an energy policy that promotes the use of electricity by micro and small enterprises may discriminate inadvertently women micro-entrepreneurs, since they traditionally work in the informal sector and concentrate their economic activities in cooking food or baking ceramics, and other services where electricity is not the most beneficial option.

Finally, States are to protect and seek equality among its citizens and to abolish different ways of discrimination on the basis of creed, race or gender. These obligations have been translated into international conventions and agreements as well as into legislation and regulations of each country. There is a number of important international treaties that urge States to carry out gender mainstreaming processes throughout their national policy as a recognition of the equality existing among women and men and the necessity to carry out actions that respect this equality. Energy policies, as long as they are national policy tools, are also governed by these international obligations and agreements. Thus they should be put into practice to guarantee a better access to and enjoyment of energy services

by women and men, as a means of reaching equality and reducing gender gaps.

Below are presented in greater detail the reasons why gender considerations should be included in energy policies, in such a way they become tools to reach equality.

#### 1.2. International regulation on gender equality

Although it can be argued that the search for equality among people dates back to the Enlightenment period, it is only from the middle of the XX century that specific discussions on equality among women and men are carried out, later reflected in binding international legal instruments for all those States that ratify them.

The progress of recognition of gender equality can be traced using those international instruments, and probably the most important one being the recognition of equality as a fundamental right, expressed in the Universal Declaration of Human Rights (1948), where the dignity and worth of the human person and the equality of rights of women and men are recognized.

The recognition of gender equality and the call for non-discrimination have been extended to later international agreements, including the International Covenant on Economic, Social and Cultural Rights (ICESCR), adopted by the General Assembly of the United Nations (UNO) in 1966 which entered into force in January, 1976. ICESCR not only recognizes economic, social and cultural rights, but also establishes mechanisms for their protection and guarantee. Article 2.2 affirms the recognition of rights "without discrimination on the basis of race, color, sex, language, religion, political or other opinion, national or social origin, economic status, birth or any other social condition". Likewise, Article 3 recognizes equality among men and women, which translates into the recognition of equal pay in Article 7, and the recognition of rights to health and education for women and men (articles 12-14).

Signing countries of the Universal Declaration of Human Rights and ICESCR affirm their willingness to promote social progress. Therefore, it is no wonder that many later international agreements that sought gender equality had a direct link to development, poverty eradication and quality-of-life issues. This is the case of the **Declaration on the Elimination of Discrimination against Women and the International Development Strategy for the Second United Nations Development Decade (1971-1980)**.

These international commitments were followed by the **Convention for the Elimination of Discrimination against Women (CEDAW)** in 1979, which recognizes women's equality of political, economic and social rights, including the right to education, employment and performance of economic activities. Therefore, signing States of CEDAW have the obligation to:

• **Enshrine gender equality in their national legislation,** abolish all discriminatory provisions in their laws and enact new provisions to protect discrimination against women.

• **Modify socio-cultural patterns of behavior** of men and women, with a view to eliminating prejudices and discriminatory customs **based on the idea of the inferiority or superiority of either sexes** or on stereotyped roles of men and women.

The Fourth World Conference on Women, known as the Beijing Conference, held in 1995 and organized by the UNO, concluded that women still have less possibilities and opportunities than men around the world. Unequal treatment among men and women, and their differentiated social and economic roles have led women to suffer higher levels of poverty than men in many countries. The findings of this conference resulted in the Beijing Platform for Action, adopted by 189 countries, where gender mainstreaming was identified both as a concept as well as a strategy to reach gender equality. Therefore, the Beijing Platform for Action became one of the greatest guidelines to address gender issues within the field of international cooperation for development. It defined strategic objectives to reduce barriers that hinder the "advancement of women", including: poverty, education and training, as well as their participation in the domestic economy and decision making.

The discussion on the right to equality among men and women, as well as the need to assess the impacts of the search for this equality, led to the definition of the following core ideas at the World Conference on Human Rights held in Vienna in 1993:[78]

• The human rights of women and girls are an inalienable and indivisible part of universal rights.

• Woman equality and her human rights are issues that must be integrated into all activities of the United Nations System and regional systems as well.

• All international treaty bodies must include the human rights of women and girls as part of human rights. States must inform on de jure and de facto situations of these rights.

### Commitments on gender equality in Latin America and the Caribbean

The Latin-American and Caribbean (LAC) region also has a number of international agreements that recognize gender equality and the universality and inalienability of human rights. Some of these agreements were approved within the framework of the Regional Conferences on Women in Latin America and the Caribbean, which are held every three years with the aim to identify the needs of women in the LAC region and to make

78 UNO (1966).

recommendations to achieve gender equality in the future. Hence, the Quito Consensus (2007) gathers a series of agreements on two fundamental issues: (i) the contribution of women to the economy and the social protection, especially in relation to unpaid work; and (ii) political participation and gender parity in decision-making processes at all levels.

On the other hand, the Brasilia Consensus (2010) recognizes the contributions of women to the economy and their participation in the decision-making processes, while facilitating their access to new technologies with a strong emphasis on the education of women at all stages of their lives, among other issues. Finally, the Santo Domingo Consensus (2013) was based on the relation between economic autonomy and the rights of women, especially in the framework of digital economy; this is why the Consensus establishes a number of measures related to the role of TIC in gender equality and women autonomy in its different dimensions.

These international agreements provide the framework for signing countries to commit to seek gender equality, leading to the creation of institutions and legislation at national level for the implementation and attainment of these objectives. Ministries or Departments of Women are responsible for ensuring that national and local governments act in accordance with the above-described instruments and carry out mainstreaming processes at governmental level, not an easy task since it has to be carried out in all economic and social sectors.

The creation of Gender Focal Points within a political institution is an additional way to ensure that it complies with its gender equality commitments. This is how there is a person or group of people in charge of implementing gender mainstreaming in institutional actions and policies.

### 1.2. Equality policies and gender approach

The main purpose of equality public policies is the "definition of principles, rules and objectives that guide public actions to achieve gender equality". Therefore, they represent decisions of State authorities to address existing differences, taking into account practical needs and strategic interests emerged as a consequence of the social and cultural position of the woman. Equality public policies can be expressed as equality laws or other government policy instruments such as plans, programs, regulations, etc.

Equality policies represent a step forward before "gender-blind" or "gender-neutral" public policies, that is to say, those which do not include principles or actions that consider the needs and interests of women and men in a differentiated

manner. Gender equality policies can be defined as the set of principles, rules and objectives explicitly stated and passed by the State, aimed at attaining de jure and de facto equality of women and men.

Equality policies have developed a gender approach, whose objective is the interpretation and visibility of inequalities of women and men so that public policies have a transformative effect in gender relations. This is why, while applying a gender approach, it is necessary to know which the gender gaps are (differences in treatment or in situation) that may negatively affect the exercise of rights and human development. Likewise, it is necessary to remember that gender approach not only refers to the rights of women since it also includes those of men. Meanwhile, gender sensitivity is to be seen as the ability to perceive gender differences and issues or considerations that express inequalities, with the aim of incorporating them in strategies and actions.

If gender mainstreaming in public policies represents a real and complete insertion of gender perspective in all phases of public policies (design, formulation, adoption and implementation), it must be admitted that all public policies are equality policies, no matter the sector concerned . This is why mainstreaming calls for the full implementation of the equality principle in public policies. They should then be shaped following an internal logic that seeks the achievement of complete equality (de jure and de facto).

### Equality policies lead to gender mainstreaming in all public policies

Gender mainstreaming must be incorporated in all structural, procedural and operative aspects of public entities administration: design, monitoring and assessment. It should be added both to the contents of policy instruments and to the structure, proceedings and direct and indirect actors of organizations in charge of its implementation.

*Source: García Prince, E. (s.f., 1), p. 3.*

Equality policies coherence increases when other sector regulations – such as education, health, environment, energy, etc. – develop the equality principle in accordance with the constitutional principle or the equality law (if exists), and this is the legal basis of gender mainstreaming. Hence, it is important that equality laws establish principles, concepts and terms in a clear and unequivocal manner which will allow achieving gender equality coherently. They will also establish mechanisms and responsibilities for the equality policy implementation avoiding the "evaporation" of equality policies, understood this concept as those policies whose formulations are not implemented.

The following box shows how a coherent framework of equality policies can be designed, Uruguay will be taken as an example.

### Equality policy framework in Uruguay

The Uruguayan state has ratified a number of international COMMITMENTS on gender equality, including the CEDAW, the International Covenant on Economic, Social and Cultural Rights, and the Inter-American Convention to Prevent, Punish and Eradicate violence Against Women. These are binding instruments of international law, i.e., compliance is mandatory for ratifying states. Likewise, the Uruguayan state is committed to implement platforms for action of different UN conferences, such as the Fourth World Conference on Women and the International Conference on Population and Development.

Under this framework of international commitments the law on equal rights and equal opportunities is approved in 2007. This equality law entrusts the implementation of the National Plan of Equal Opportunities and Rights, which contains specific measures to comply with gender equality commitments adopted at international level.

These national regulations should be known and recognized when planning and implementing gender policies at ministerial and departmental level; its accomplishments and implementation obstacles incorporated into country reports delivered before UN human rights bodies as well as in gender equality reports prepared by the National Coordinating Council for Public Gender Equality Policies based on ministerial reports presented annually before the General Assembly on 8th March.

*Based on: Bonino, M. and Bidegain, N. (2011) and González, R. (2014).*

Affirmative or positive actions are an essential mechanism to achieve substantive equality and represent a way to fight gender-relations derived inequalities:

• Positive discrimination policies, opportunities are equated among people by giving more to those who have less. For example, a specific training course on political participation given to female council members and city councilwomen in Montevideo at the beginning of the decentralization process since they were less experienced than men to work in the public space.

• Affirmative actions, are temporary measures that favor a particular disadvantaged group to suppress or prevent discrimination or to compensate disadvantages derived from existing structures, conducts and attitudes. When aimed at gender equality, they seek closing the gap among men and women respect to access to development, participation and equality opportunities in enjoying benefits.[79]

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79 García Prince, E. (2008), p. 35.

### Examples of affirmative actions as part of a gender policy

| Policy | Action or program directed to women and men | Affirmative action |
|---|---|---|
| Policy to increase political participation of women and men in City Councils. | Training workshop to improve negotiating skills of women and men. | Workshops for women on the female participation difficulties in positions of power and strategy identification to overcome these barriers. |
| Policy to strengthen micro-enterprises | Credit and training programs for small enterprises teaching gender-associated difficulties at work | Credit and training programs for women heads of households and entrepreneurs teaching gender-associated difficulties at work |

Based on: Bonino, M. and Bidegain, N. (2011), pp. 59-60..

Another example of these policies is the quota policies, which seek a greater proportion of women at political or labor representation. In general, these quotas should be temporary until equal opportunities are real for both sexes.

#### Nicaragua and the search for equality at work

Law 648 on Gender Equality of Nicaragua calls for labor equality, that is to say, achieving a composition of 50% women 50% men at different economic sectors at national level. The National Electric Transmission Company (ENATREL) reports that 50% of leading positions are occupied by women; although this is a positive indicator, it should be said that there is still a long way to go since these are not key positions in financial resource management.

This parity among women and men as regards the number of ENATREL officers has not been reached yet at the technical and field sectors of the state company. However, the commitment of ENATREL to reach the 50-50 goal has generated an institutional policy to fill new vacancies with women as a first option.

Source: Gutiérrez, I. (2013).

### 1.3. Gender mainstreaming

As mentioned in the previous module, gender mainstreaming means that the gender approach should permeate all government policies and institutions. Likewise, gender mainstreaming argues that "neutral" policies do not exist; rather, they affect women and men differently, therefore, they should promote equality of opportunities and results and not harm women. Different impacts on women and men not only refer to policies and programs but also to the institutional regulatory and organizational structure. Therefore, gender approach should be integrated to all instruments of public policy, including:

• Institutional rules and regulations

• Studies, information and diagnosis systems

• Communication and training activities

#### What is understood by gender mainstreaming?

To include the gender equality perspective in a systematic manner in all stages of policy and all levels of government. That is, to analyze the implications policies have for men and women with the aim of not only

mitigating the negative impact on either gender but also reversing inequality-generating conditions.

It is a technical process because it implies making diagnosis, analyzing policy alternatives and their impacts. But it is also a political process since injustices are identified and actions taken to reverse inequalities and promote the full exercise of human rights.

It is an internal process within the institution, that implies promoting a human resource policy at municipality level that ensures equal opportunities among officers and a pro-equality organizational culture. It is at the same time an external process since it should permeate all areas and services provided by municipalities to the people.

Source: Bonino, M. and Bidegain, N. (2011), p. 25.

Although there are different proposals on the minimum elements or requirements for gender mainstreaming, we have decided to focus on four fundamental ones essential to conduct this process in a coherent manner. These elements are:[80]

• Political will: understood as a true promotion of gender equality and equity by political hierarchies.

• Financial, material and human resources: reckoning it is necessary to allocate staff for these actions, as well as economic content and specific material development for each situation.

• Human resources training and awareness-raising: to secure not only the comprehension of this approach rationale but also the effective implementation of the necessary activities to reach gender equality.

• Civil society participation: to identify proposals and receive feedback on the relevance of gender initiatives to be launched and to secure accountability by the government or implementing agencies.

### 2. Defining an energy policy with gender equality

#### 2.1. Multidimensional character of energy policies

Energy policies are ruled and put into practice in the same way that other public policies are. This implies that they are the product of a political system by which resources (human, energy and financial) are used strategically to address national energy problems. National energy policies are often seen as a purely technical issue mostly centered in energy generation or distribution, with little or no social content.

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80 CEPAL (2007).

However, energy policy has a dual function: on one hand, it is to satisfy society needs; on the other, it has to contribute to government macroeconomic objectives such as economic growth or security. Therefore, energy policy has a multidimensional character as any other sector policy. This implies that energy policy has political, environmental, economic and social elements. Each of these elements has gender dimensions that should be taken into account while designing and implementing a gender equality energy policy.

#### The multidimensional character of the energy policy

**Political aspect**: it focuses on the organization of energy services use, production, provision and distribution.

**Economic aspect**: it is related to financial resources and their allocation.

**Environmental aspects**: energy sustainability is reflected in environmental issues. Besides, an energy policy that incorporates both environmental and gender issues will be capable of contributing to the environmental improvement while benefiting men and women as well.

**Social aspects**: they are focused in the triple role of women (reproductive, productive and communal); through their incorporation a social inequities reduction could be sought.

Source: ENERGIA (2005c), pp. 71-73.

The political aspects of energy policies are related to how energy services use, supply and distribution is prioritized and used. One of the tasks of governments is to reconcile the conflict and convergence of social interests as part of the political processes. This means that an energy policy should take all these factors into account, including women empowerment.

The economic aspects of an energy policy include the allocation of financial resources for its implementation. Financial compensations are necessary to promote gender-considerations integration goals; in this way /thus, pricing mechanisms and financial instruments should be analyzed in relation to their different impacts on and benefits for women and men. Therefore, the budget a Ministry of Energy assigns to gender integration in its activities and proposals becomes a key instrument of implementation.

The energy policy sustainability is closely related to environmental considerations. Since the 80's increasing attention is paid to sustainable energy forms, like solar or wind, in contrast to fossil sources. The use of renewable energy sources can also help to answer the need to reduce environmental impacts on the health of benefited populations.

In many cases men and women can suffer from health problems related to the energy chain (from generation to supply and use) since they relate differently to its various stages. Likewise, an energy policy that includes environmental considerations can contribute to local and global environmental improvement. For example, the use of sustainable energy sources like biogas can reduce the negative impact on women's health produced by the smokes from wood stoves. As women manage household energy, their health will benefit from this environmental change. In turn, the use of biogas stoves has a positive impact as regards GHG emissions since they transform methane gas, one of the most powerful GHG, into carbon dioxide.

Energy efficiency promotion also contributes to environmental improvement. For example, efficient coal stoves can reduce expenses on energy services by producing financial savings for men and women since less fuel is needed. They can also reduce pressure on forests by reducing natural coal demand.

An energy policy that integrates gender considerations has a social aspect since it has the capacity to redress inequities, including those gender-related. If women are empowered, this phenomenon can lead to social-relations transformation within a country. When gender considerations are integrated into an energy policy, gender gaps are to be explicitly recognized. Therefore, the triple role women play in society (reproductive, productive and communal or strategic) should be integrated into energy policies.

However, decision-makers are not always aware of this triple role of women and tend to focus only on their reproductive needs. Hence, the productive role of women is not always recognized despite their contribution to the family income. Consequently, the energy needs of women, specially their dependence on caloric processes for their economic activities, are not reflected in energy policies.

Finally, women participation in communal activities can be fostered by reducing the time dedicated to domestic chores, for example, by using more efficient cooking technologies; also, by increasing their sense of security through street lighting that facilitates their mobility and assistance to evening meetings.

## 2.2. International commitments specifically relevant to energy policies with gender equality

Access to modern energy is essential to secure development and can deepen gender inequalities. Energy is a means to reach services and is therefore a recurring subject in international fora that rule economic and development discussions. Recently, these international development commitments have started interiorizing gender equality and equity issues if not in their main documents at least in their structures and terms.

One of these international instruments is the United Nations Conference on Environment and Development (UNCED), which called the international community to achieve a consensus on the need for sustainable development to reach a balance among economic growth, social equity and environmental protection. The extension of development benefits to all people, women and men, is fundamental to achieve the social-equity objectives of sustainable development.

UNCED objectives were the input for the United Nations Millennium Declaration, where signing countries commit to reducing extreme poverty levels through the MDG by 2015. Although access to energy is not one of MDG principles, it cannot be denied that actions within the energy sector maintain, increase or restrict equal participation opportunities among women and men in sustainable development models. This is why energy and the energy sector are being considered in discussions on Sustainable Development Goals (SDG) that will replace the MDG after 2015.

Another extremely relevant international commitment for the energy sector is the United Nations Framework Convention on Climate Change (UNFCCC). The energy sector (including transport) is one of the main contributors to GHG emissions due to its dependence on fossil fuels. Discussions and commitments on emissions reduction (mitigation) through investment in cleaner and more efficient energy sources and technologies, both at developing and developed-countries level, permeate the creation of energy public policies and commitments, and international financing mechanisms.

In the last seven years efforts have been made to secure that UNFCCC and its instruments are aligned with the search for equality among women and men. This process has succeeded in the creation of financing mechanisms for mitigation programs and policies that require national governments to adopt a gender approach in its activities design and implementation. These funds include the Scaling up Renewable Energy Program (SREP), administered by the World Bank, and the Green Climate Fund (GCF) made up directly of the UNFCCC. Likewise, it is expected that discussions at UNFCCC on the need of gender mainstreaming national policies permeates the creation of the National Appropriate Mitigation Actions (NAMA), as it has been the case with Mexico, which has committed to gender mainstreaming in all its climate policy.

Besides, we would like to mention the UN Secretary-General initiative Sustainable Energy for All (SE4ALL) because of the impact it may have on national energy policies development. Its goal is to secure universal access to modern energy services by 2030, and to duplicate the energy-efficiency improvement rate and the amount of renewable energy in the energy matrix. This initiative recognizes energy can contribute to poverty reduction and seeks presenting coherent solutions by connecting to

four development goals: health, water, food and women. Regional action plans are being discussed at global level and gender considerations have been included, at least in the Africa Action Plan. For the LAC region the process is promoted by the International Development Bank (IDB). The plan was being discussed while this guide was being written; it is hoped that the appropriate and necessary gender considerations for the region are identified to develop a realistic plan that can secure the universal access to modern forms of energy since some of them have already been included in the draft document.

## 2. 3. Defining an energy policy with gender equality

An energy policy with gender equality takes into account the social relations of women and men, as well as their differentiated energy needs in order to foster individual possibilities and eliminate inequalities through a transformative process. Therefore, it can be said that energy policies with gender equality are those which have inserted the gender perspective in all their phases, including design, formulation, adoption and monitoring; becoming not only an energy policy but a gender equality policy as well.

### Examples of Latin-American initiatives and commitments on gender and energy

Climate policies with a gender approach have also been developed at regional level, such as the Regional Central-American Climate Change Strategy, where gender equality and multiculturalism have been defined as transverse issues. Therefore, solidarity and governability policies, gender equity and equality and social justice should be coherent with regional and national policies on climate change, and women should be recognized as important players in mitigation.

Although the 2020 Central-American Sustainable Energy Strategy of 2007 has not the specific objective of searching and obtaining equality among women and men, it is also true that this regional policy has important elements that can help reduce gender gaps relating energy access. Thus, the regional policy calls to increase access to energy by lowest-income population; this is only possible by identifying the difficulties of female and male-headed households and by giving concrete answers to their particular poverty situations. Likewise, the strategy seeks reducing 10% wood consumption, which is directly linked to the reproductive roles (cooking and feeding) of women. The same is true about the reduction goal of 12% of energy use in the residential sector and the 35% of energy used for cooling also in the residential sector. These actions should be direct to both men and women, and to understand their behavior in the responsible use of energy as well as their financial needs and restrictions to access to energy that are more efficient.

Likewise, the objective of OLADE Gender Equity Strategy is "to contribute to an energy sector that answers country needs related to equality gap reduction among men and women in the access and control of energy resources necessary for their sustainable development and livelihoods". OLADE has identified four components through which it will carry out its strategy. (i) Obtaining a high-level political commitment in the energy sector, (ii) gender mainstreaming, (iii) research and knowledge generation and (iv) strategic partnerships creation. The work of OLADE focuses on the provision of direct support to national energy institutions in the LAC region; therefore, it can provide specific technical advice to those institutions in charge of developing national energy policies.

As it has been mentioned before, gender mainstreaming has different methods, approaches and tools that allow the incorporation of gender considerations in public sector policies, programs and projects. A common element of these methodological tools is the need for sex-disaggregated statistics or data. They are the basis of any energy policy with gender equality, because they allow identifying the different energy conditions and needs of women and men related to their traditional roles, in a given region or country.

As summarized by Huyer y Westholm (2001):[81]

### No data no visibility; no visibility no interest.

Taking as a reference the elements mentioned by Bonino and Bidegain, to have success in gender-mainstreaming a policy and then adapting it to the energy sector, there are at least four elements in the sector to take into account: (i) political will, (ii) financial, material and human resources, (iii) human resources training and awareness-raising and (iv)civil society participation. These elements will be analyzed below.

81 CEPAL (2010).

### 2.3.1. Political will

As we have seen, the existence of gender equity legislation is directly linked to a country's political commitment to obtain a true gender mainstreaming by changing their promises into actions. In such a way that signature and ratification of international conventions on gender equity can also play an important role in securing the political commitment of a country. The energy sector is also regulated by specific international commitments, where the gender approach has been incorporated. Therefore, the search for equality among women and men should be sufficient ground to secure the existence of a political will that guarantees the incorporation of gender approach in all public policies, including energy policies.

This political commitment translates into the existence of gender equality legislation, which creates the basis for all ministries and public sectors to be in line with the search for equality. Thus, the existence of a national gender policy, plan or agenda is a good sign of the political commitment to reach equality and non-discrimination. Another element to highlight is the existence of women offices or mechanisms in the country which can carry out the gender mainstreaming process at national level.

These elements, which are part of the political will needed for gender mainstreaming, can be introduced in the energy policies context in different ways, for example:

A nascent political commitment in Latin America towards gender mainstreaming in ministries of energy

Source: Larrea Castelo, S. (2013).

OLADE conducted a survey among its 27 member countries on gender mainstreaming progress at national level. From the 13 countries which answered, five mentioned having a gender policy or strategy in their energy body, showing their will to carry out a gender mainstreaming process in public policies. These countries are:

• Guyana (Guyana Energy Agency)
• Jamaica (Ministry of Science, Tecnology, Energy and Mines)
• Mexico (Energy Secretariat)
• Nicaragua (Ministry of Energy and Mines )
• Uruguay (Ministry of Industry, Energy and Mines)

From these countries, three have reported having gender-trained staff (Mexico, Nicaragua and Uruguay)

• Through the recognition in National Gender Agendas of the role women play as managers and participants in energy chains at national level

• Through the inclusion in the National Gender Agendas of specific objectives to be reached by public energy policies, such as: (i) reducing dependence on traditional fuels (biomass) for household cooking and heating, increasing the connection to the electricity grid of female-headed households; (ii) supporting micro and small enterprises giving special attention to activities traditionally performed by women, (iii) giving priority to energy supply and generation for the domestic sector.

• Identifying governmental offices and organizations in charge of developing and coordinating gender mainstreaming activities in the energy sector.

However, the existence of international commitments and national gender structures is not always enough to secure the existence of a political will that translates those commitments into clear mandates that rule energy policies.

This is why, apart from having a gender mechanism at national level, it is also necessary to identify additional motivations that help convince decision makers of the necessity to integrate gender considerations into the energy policy, while they commit themselves to seeking equality. ENERGIA has identified at least three motivations that capture decision-makers' attention: welfare, efficiency and fight of poverty.

**Motivating elements for the inclusion of gender considerations in an energy policy**

**Wellbeing**: the reduction of daily work load is the main objective in the search for the wellbeing of men and women. For example, using efficient stoves to reduce the need to gather wood and, as a consequence, the time spent in this activity. This approach does not seek changing the traditional roles of men and women; rather, it offers new opportunities or improvements for both of them.

**Efficiency**: being aware that men and women have different perspectives, needs and restrictions may lead interventions by a project or policy to adjust further to the needs of people benefited by their activities, increasing their impacts. Understanding energy differences of men and women, as well as their role in a given society, may lead to identify possible project or policy implementation barriers. Both elements will have as a consequence the project or policy being more successful in scope.

**Fight of poverty**: the purpose of poverty reduction or fight is to secure that low-income women and men could increase their productivity to have higher incomes and overcome their economic difficulties.

*Source: ENERGIA (2005c), pp. 95-96.*

More than one motivation can exist within a government, ministry or office, and the union of them can motivate the gender mainstreaming process in energy policies. For example, the government may have an agenda for poverty eradication while it furthers wellbeing and seeks efficiency in its energy policies.

Likewise, it is important for decision makers to be aware of their motivations. In a gender mainstreaming process these motivations should translate into specific objectives in the energy policies texts since they will guide implementation programs and projects.

### 2.3.2. Financial, material and human resources

Institutional support is essential for a government to generate energy policies with gender equity in accordance with its political commitments; it should also have the ability to implement them and establish a monitoring and assessment process that secures their execution. Institutional support may either come from within the government, for example, through the Ministry of Women, Gender Focal Points inside Ministries of Energy, or from the civil society, for example, through NGO that work with gender and energy issues.

To be able to implement this institutional commitment, it should be accompanied by an economic or financial commitment capable of securing enough economic resource allocation so that gender sensitive policies are fully implemented and financial constraints do not limit their execution. In other words, the financial resource is necessary to secure there will be enough material and human resources to design, implement and monitor energy policies with gender equality.

A way to secure there will be enough financial support is through a gender budget. In principle, public social and infrastructure budgets are considered gender neutral. In practice, men and women are benefited in different manners by them. Therefore, having a gender budget that identifies the impacts of various budget items on the benefits generated for men and women gives the government the opportunity to redirect its policies and public expenditure to promote gender equity. Likewise, a gender budget can facilitate policy monitoring and assessment.

Mexico: its climate change policy and gender mainstreaming

Basado en: Castillo Camarena, M. (2013 y Gobierno de México (2013).

Mexico is working to develop a legal framework to address climate change, including national mitigation activities. Mexico hosted the 16 COP of UNFCCC at Cancun, December 2010. As part of the activities related to COP, the Secretariat of Environment and Natural Resources (SEMARNAT, for its acronym in Spanish), the Civil Protection Unit of the secretariat of Interior (SEGOB by its acronym in Spanish), the Institute of Women (INMUJERES), the United Nations Program for Development (UNPD), the Heinrich Böll Fund and the Gender and Environment Network established a Local Work Agenda to monitor the Mexican Statement on Gender and Climate Change.

This is how the Framework Law on Climate change (2012) is created, whose Article 71 recognizes the need to incorporate gender considerations while developing local programs. This concept was reinforced by the Climate Change National Strategy (2013) with the inclusion of gender considerations in its action-line.

This national regulation on climate change has as one of its main objectives the reduction on fossil fuel dependence and the achievement of 30% clean energy sources generation. Given the framework of equity expressed in these national instruments it is expected that the programs destined to reach these goals, which involve the energy sector, also comply with the call for the search for gender equity.

Likewise, Mexican climate policies recognize the need to identify and incorporate gender considerations in their implementation; they even propose to monitor with a gender approach the budget for climate change activities, including energy-sector related mitigation activities.

### 2.3.3. Awareness-raising and training of human resources

When asked about the benefits their initiatives have for women and men, decision makers from the energy sector tend to think they are the same for both of them, at least respect to addressing their practical needs. In other words, they consider their energy policies are gender neutral since it is assumed that technology answers have little or no differentiated social impact. However, reality shows that energy planning does not include gender considerations, since it does not recognize the energy needs of men and women are different.

The best way to secure that the contribution of women to energy use and supply, as well as the impact traditional role division has on this contribution (for example, related to services such as cooking, income generation, electrification, etc.), is taken into account in energy policies is through training and awareness-raising of decision makers, from the highest-ranking level to the technical equipment staff that implement them.

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Nicaragua and the bet on the awareness-raising process

Source: Gutiérrez, I. (2013).

The National Electric Transmission Company of Nicaragua (ENATREL by its acronym in Spanish) is the government institution in charge of implementing energy policies through electricity generation projects, extension of the grid and establishment of small hydropower plants. ENATREL has incorporated training and awareness-raising modules both among its officials and other energy sector actors, including town authorities, as one of the instruments to carry out gender equality through its energy interventions. As a consequence, certain local governments have asked ENATREL to support their efforts in the elaboration of Gender Town Policies, and the institutional capacity of these towns has increased.

According to Irma Gutiérrez, gender expert at ENATREL, although resisted by participants at the beginning, this training has had good results to the point that technical staff report voluntarily gender inequities faced daily in the field, and they translate them in new ways to carry out their family and work activities.

In some communities, after the gender sensitizing process there has been a change in certain traditional roles. For example, women have been trained to work at construction sites, traditionally a male activity, while some men have joined traditionally-female activities such as floriculture.

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Investment on the human capital of energy institutions will generate a technical and professional critical mass capable of identifying gender inequities existing in a country, and the link they have to energy access, generation, distribution and use. Likewise, sensitizing efforts may generate the political and institutional recognition that women also have the right to develop professionally in the energy sector, even occupying leadership positions.

In this section it is necessary to recognize the low number of graduated women qualified enough to have a professional career in the energy sector. For example, the number of women with an academic degree on science and engineering (which will qualify them for jobs in the energy sector) is low in many countries. This is why it is necessary to stimulate their participation through institutional quota policies, training courses for women wanting to increase their leadership abilities, as well as institutional support policies for mothers and fathers who have to conduct field visits to energy projects, among others. Besides, a national energy policy may impulse a school, technical and university curriculums revision in order to engage a greater number of women willing to study science and technology and later work in the energy sector.

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**Data collected at Latin-American level on female and male participation in the energy sector.**

From the survey conducted by OLADE on the progress on gender mainstreaming in the energy sector, it is concluded that in Uruguay, Mexico and Nicaragua cases gender policy has had an impact on the distribution of political and strategic-decision posts[82]:

• In Uruguay, one woman occupies a political post (National Directorate Advisor) and four women have strategic posts (coordinators), versus one man in a political-decision post (Director National) and another one in a strategic decision one (coordinator).

• In Nicaragua, there is one man in a political-decision post (Minister) and one in a strategic –decision one (Secretary General), while there is one woman in as political decision post (Vice minister).

• In Mexico, there are 289 men in political and strategic-decision posts, versus 252 women in the same sectors.

The survey identified other interesting data regarding men and women participation in the energy sector. For example, in the Dominican Republic the number of men (59) and women (61) working in the administrative sector is fairly even, even though the country does not have a gender policy or strategy in the sector. This situation is repeated as well respect to decision making, with seven women and eight men in decision posts. .

Source: Larrea Castelo, S. (2013).

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82 CEPAL (2013).

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The existence of gender experts in energy institutions may lead to the development and use of gender methodologies; actors in a process of energy policy formulation gather and use sex-disaggregated data in a systematic manner. This information reveals possible gender inequities regarding energy policies objectives or results, which can be modified or improved by policy developers based on the information they possess. The use of a gender analysis or approach helps sensitizing on gender considerations while generating tools that help monitoring the process, securing greater equity in energy access, use and efficiency.

### 2.3.4. Civil society participation

The participation of women and men, as users of energy services, should be recognized and considered in all stages of the energy policy formulation. The reason is very simple: the creation of formal participation spaces does not necessarily translates into an active participation of women since they not always have the opportunity to express freely within their communities, neighborhoods, sectors or institutions. The direct gathering of women and men interventions in a community or region is therefore essential to secure that energy policies are in line with the reality and needs of rural or urban communities where they are implemented.

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**Integrated energy planning**

Integrated energy planning focuses mainly on users' demands (energy demand), which increases the probabilities for gender considerations to be integrated. This is a fundamental difference with a supply-based approach, which takes as a starting point the energy generation capacity but not necessarily the users. The integrated energy planning is based on a participative process and implies the participation of different key actors in the policy formulation process, including the beneficiaries. A participative process encouraged by the government should, therefore, involve communities, neighborhoods, development and civil society organizations through which the needs and voices of men and women can be identified in a specific manner. To determine which actors should participate in the planning process, it is necessary to analyze possible participants. .

Source: ENERGIA (2005c).

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Women are universally under-represented in decision-making bodies at national and local level. This is particularly true for the energy sector, since their participation in energy issues is marginal due to a series of social, cultural and educational circumstances. Not only it is possible for women to feel inhibited to talk or express their needs in public due to cultural reasons, but also they tend to see "energy" as a male issue: a technical and dangerous subject they do not feel equipped to talk about.

This is joined by the fact that the majority of decision makers in the energy sector are men. Energy institutions and organizations are generally run by men, especially in professional posts. Something similar happens in public and private organizations and the civil society as well (NGO which work with the energy issue).

Men generally occupy most leadership positions in the industry and large-scale agriculture. These sectors are important energy consumers. Women are likely to work in small-scale agriculture and the informal economic sector. As a consequence of this distribution of work, fora where energy needs are discussed and identified, as well as the possible solutions to this deficit, inadvertently tend to have a male bias, or to concentrate on subjects relevant to them. For example, the need to have irrigation farm pumps (a "male" subject) may interest policy developers, while the need to have easy access to drinking water (a "female" subject) can be postponed if it is not seen by decision makers. Likewise, prioritizing generation and supply for the industrial sector (mostly represented by men) may shadow the need of a reliable or less expensive energy supply for the residential sector (regarded as a mostly-female field). A participative approach may help solve women's lack of participation and therefore identify their priority needs or economic activities in a way that they are identified and considered in energy policies.

### 2.4. Elements to incorporate to energy policies with gender equality

Energy policies with gender equity are those which answer the different energy needs of women and men through their formulation, as well as the programs and projects developed to implement them. As noted earlier, most energy policies do not include gender considerations because they are perceived as gender neutral.

This line of thought makes energy policies likely to omit dealing with extremely important issues to reach gender equality such as:

• metabolic energy

• dependence on biomass for cooking and heating

• women access to and control over the benefits of energy, independently of its generation source (renewable or non- renewable)

• participation of women and men in energy policies creation and definition

Human beings use energy in everything we do. This energy is called metabolic energy and is generated by our bodies thank to the food we eat. Many of the tasks performed using metabolic energy are physically demanding and can be repetitive, boring and time-consuming. Therefore, one of the objectives of energy policies could be to alleviate this work burden and improve the quality of life of people, by giving them technologies that use other energy sources than metabolic

energy. For example, by relieving tasks such as ploughing the land for sowing (traditionally considered male) or grinding grain (traditionally considered female).[83]

Energy occurs in different forms such as natural gas, kerosene, liquefied gas, electricity, as well as solid fuels (wood, coal, agricultural residues, among others) and liquids (diesel or oil). Some energy sources are more appealing than others, being the first ones generally more expensive to obtain than the latter. Therefore, cost determines which energy source people use.

This is the reason why still around 2,500 million people depend on traditional fuels (biomass) for their more basic needs (cooking and heating) since they can obtain them freely. That is to say, access to traditional fuels is not necessarily obtained through a monetary exchange, but it does imply a great physical effort (metabolic energy use) related to its gathering. According to data from FAO, women spend large amounts of time, between 8 and 11 hours daily, to gather basic resources like wood and drinking water, while men spend only between 1 and 2 hours daily to similar tasks. This dependence on biomass translates into an unreasonable burden on women who, because of their traditional roles, are the ones who spend the most time and energy gathering these sources of energy.

It is evident that both biomass and metabolic energy are a basic source of energy used by lower-income sectors and that its use mostly affects low-income women and girls. Therefore, if you want to have the full picture of energy needs of all social groups and to develop an energy policy with gender equity, it is necessary to include in the analysis the tasks these forms of energy require with the aim of solving those needs. However, despite the importance of these energy sources, few are the Ministries of Energy that include biomass in their official statistics and information on metabolic energy seems to be totally ignored.

Apart from dealing with issues that cover the basic energy needs of women and men that live in poverty and extreme poverty, policies in this sector should also consider other elements related to the needs and access to energy sources by both sexes. The access to the form of energy people want is determined by three elements: availability, affordability and security, and all of them have gender components relevant to energy policies.

### Elements that determine access to energy sources

**Availability**: availability considers the form and quantity of energy sources available to be used. Users want enough quantities of energy in the desired form (energy service) and reliable. Users want to trust energy services so they can continue with their activities. Therefore, women and men should be capable of choosing the energy services that best adapt to their criteria and needs; this implies that policies should guarantee the existence of an ample variety of energy services available.

83 García Prince, E. (s.f., 1), p. 1.

**Affordability**: affordability considers energy costs, which are not limited to fuels but also include grid connection costs, as well as household appliances and service-supplier technologies costs.

**By definition**, poor women and men have irregular economic incomes and multiple financial needs to answer. Their choices are limited by what they can afford and by the moments when they can spend. In order to be effective, pricing policies should reflect the reality of income levels and patterns and money flows of households. Expensive services (high prices) limit in an abrupt manner the options low-income people have to use the energy source they want or need.

Security: the issue of security reflects the dangers women and men are exposed to at different moments of the energy chain. For example, physical and sexual abuse women are exposed to while they gather wood, burns they suffer due to the use of flammable liquids or the risk those working with high-voltage wires run. Therefore, it is understandable that having access to secure sources of energy is preferred over those considered dangerous.

Source: ENERGIA (2005c), p. 75.

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These elements (availability, affordability and security) are interrelated. For example, access to a good-quality lighting system can be the result of the availability and affordability of electric lighting. This in turn has an impact on the security of men and women by reducing the need to use kerosene lamps as a light source. It is necessary to integrate those elements to energy policies to achieve greater effectiveness and generate greater benefits for women and men.

If the experiences of other sectors, like forestry or health, are taken into account it is possible to conclude that if a participative approach is integrated in the creation of energy policies, these could reflect adequately the different needs of women and men. However, it should be recognized it is no usual to use participative approaches in energy planning since these processes are likely to be designed in a paternalistic or "top-down" manner, from which professionals are the ones to value the energy needs of different sectors at national level.

If energy policies were designed in a participative manner, it would also be necessary to recognize that the creation of participative spaces should be accompanied by a strengthening of negotiation skills of women, as well as by a sensitizing of men that will allow women to express their interests and needs freely. In this way the effective participation of women could be secured and their contributions considered when an energy policy is designed.

The table below shows the gender considerations of some of the most relevant policy issues in the energy sector.

**Table 4. Gender consideration in energy policies**

| RELEVANT ISSUES | GENDER CONSIDERATIONS |
|---|---|
| **Energy sources used by poor sectors** Which are the energy sources more used by poor women and men? Which is the end use given to these energy sources? | As mentioned before, women and men have different energy needs, and due to their socio-economic condition they are likely to use traditional (biomass), inefficient (candles), dangerous (kerosene) sources, or even their own metabolic energy to meet their basic needs such as cooking, heating, lighting, food processing, etc. Knowing which energy sources are most used and which needs they address may lead to the design of public policies that include specific objectives to alleviate and improve the living conditions of the poorest sectors in a country. |
| **Investment decisions** Which sectors receive what type of support? | The policy determines which energy sectors receive attention and support. For example, a large-scale extension of the electric grid without considering the need for support (whether with reduced tariffs connection or other means) to secure the connection of low-income households, may leave aside female-headed households, which in general are the poorest ones. Likewise, through an energy policy with gender equity it is possible to boost the development of local energy generation initiatives, which imply the identification of the services required by women and men and solve those needs. At the same time, the new energy access generates new jobs for women and men locally (manufacturers, distributors, repairing technicians, or through the creation of new economic activities such as hair salons, internet cafes, etc.) |
| **Energy access and availability** | Availability may affect women and men in different manners (for example, blackouts during cooking may imply a greater work for women). Likewise, energy access elements (cost, physical distribution, new technologies, etc.) may offer greater benefits to men than to women. Access is also affected by the choice of technologies by energy policies, having a differentiated impact on women and men. For example, the use of non-standardized valves and regulators in LPG cylinders may complicate obtaining the correct cylinder, therefore leading to a gas shortage needed for cooking. |
| **Tariffs and prices** Are these tariff structures favorable for low-income groups? Who has the financial capacity and decision-making power in the household to decide whether tariffs can be afforded and energy access prices paid? | Specific tariffs and social tariffs can influence or facilitate access to energy sources by different population groups. These tariffs can be designed to pay special attention to women heads of households, who make up a high proportion of extreme-poverty population. This is why it is advisable to know which are the possibilities and economic flows of the most vulnerable social groups in order to answer their needs. Gender differences on income access and control in the household influence decision-making related to connection fares or prices of certain energy sources or technologies. Due to social hierarchies, women not necessarily have control over family income — although they may have contributed financially — and decision-making on the use and investment of this family income falls on men heads of households. This may lead to situations where women may not invest in a specific technology (such as LPG stoves, water-heating solar systems, biogas plants, etc.), although they may consider it necessary, without the consent of the man in charge of the household. |

| | |
|---|---|
| **Infrastructure construction**<br><br>Who benefits from infrastructure? Who does not? | Energy policies may promote large-scale projects, in such a way that they increase gender equity because of their social impact and the work opportunities they create. To achieve this, the energy policy and its project should answer questions like these:<br>• Is it known how the relocation of populations affects men and women?<br>• Do men and women benefit from the economic compensations received as a consequence of the relocation? How can a fairer benefit be guaranteed?<br>• Do women benefit from the increase of economic activities generated by the energy Project?<br>• Are the economic activities of women and men and their possible alternatives considered in training and coaching programs to identify new work sources?<br>• Is the connection of low-income households near the energy project contemplated as part of the social benefits? |
| **Communal participation strategies**<br>Does the energy policy incorporate or recognize participative methodologies for planning, strategy design, programs and projects necessary for its implementation? | This process should secure the effective participation of women in decision making. To achieve this, it is necessary to take into account gender inequities based on educational and cultural traditions, and answer them through the participative process, for example, though basic training modules for women and men on energy issues. Also, organizing debates in focal groups where women can express themselves freely; giving courses on negotiation techniques to increase the self-confidence and self-esteem of women; or even guarantee as a government mandate that women's needs are reflected in conclusions and decisions taken as a consequence of these participative processes. |
| **Human resources planning**<br>Do the energy policy and sector recognize the specific contribution of women to the energy policy creation and implementation process? | Energy policies can promote processes through which women's contribution to the energy policy creation process increases. Likewise, an energy policy with gender equity can help to create technical education programs or support non-traditional economic activities related to the use of modern energies directed to women, who traditionally do not look for work or training opportunities in that sector. Finally, energy policy may lead to the creation of personnel strategies (recruiting, promotion and access to training) in government institutions in the sector to increase the number of women contributing to the creation and implementation process of energy policies. |
| **Environmental aspects**<br>Who is exposed to what kind of risks or dangers? | Given the sexual division of work, by which household chores fall mainly on women, it is understandable that they are the most vulnerable to environmental problems related to domestic-use energy, such as smoke and burns while cooking as well as the use of kerosene lamps. On the other hand, men are likely to be exposed to environmental risks while working in the energy sector (work in power plants, exposure to dangerous chemical substances, etc.) |
| **Financing**<br>Who has access to financing or credit? | The lack of goods that can be used as loan guarantee limits the access to financial resources and as a result, the opportunity to advance in the energy pyramids or have funds to use productively diminishes. |

*Based on: ENERGIA (2005c), pp. 14-15.*

In Latin America very complete and interesting processes are under way to achieve gender mainstreaming in energy policies. Uruguay is an example, a country which has recognized energy access as a human right and has developed an institutional energy policy and structure that integrates essential concepts to reach gender equity through sector policies. The box below shows the most important implications and features of the gender mainstreaming process in the Uruguayan energy sector.

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### The 2008-2030 Energy Policy of Uruguay: example of an energy policy with gender equity

Based on: DNE (2005), Gonzáles, R. (2014).

The 2008-2030 Energy Policy of Uruguay was approved by the Council of Ministers of Uruguay in 2008, ratified by the Government and endorsed by the Multiparty Energy Commission in 2010. One of its most outstanding characteristics is the recognition of the multidimensional character of energy, so it integrates economic, technical, environmental, political, ethical and social considerations. Its central objective is to "satisfy all national energy needs, at appropriate costs for all social sectors that ensure competitiveness to the country, promoting healthy energy-consuming habits, ensuring the energy independence of the country under a regional integration framework, through sustainable policies both from the economic and environmental point of view, using the energy policy as an instrument to develop productive capacities and promote social integration."[84].

The Uruguayan energy policy is based on four strategic axes: Institutional, Energy Supply, Energy Demand and Social axe. As far as we are concerned, this last component is the most relevant since energy access is recognized as a human right in it; that is, it affirms that everyone has the right to access modern sources of energy, so the State has the obligation to facilitate and ensure the protection of that right. The main objective of this axe is to "promote the adequate energy access for all social sectors, in a secure and affordable manner, using the energy policy as a powerful tool to promote social integration and improve the quality of our democracy"[85].

The main points of the Social Axe can be summarized as follows:

o   Guarantee adequate energy access (security and price) by all social sectors and all geographic locations
o   Use the energy variable as an instrument of social integration
o   Guarantee adequate information to all actors.

In order to achieve the social integration goal, it is necessary to seek information on disadvantaged and vulnerable people and groups in such a way that, apart from designing specific energy programs, the energy vision is integrated to the global social policy which takes into account the characteristics of these particular groups. Women are likely to be in disadvantaged and vulnerable social situations to a greater extent than men. Gender statistics analysis done as part of the creation and implementation process of energy programs confirms that this is also true for women in Uruguay.

Considering the mandate of the policy to secure energy access as a universal right, a number of programs have been created to reduce social vulnerability and gender inequities in this process. These programs take into account the socio-economic characteristics and the existing gender inequities among women and men from target populations when designing implementation activities and their later assessment, and this information is essential in the selection of social energy programs supported through the National Office of Energy (DNE).

These are some of the social energy programs:

• **Uruguay** grows with you: this program is coordinated by the presidency of the Republic through the Planning

84 García Prince, E. (2008), p. 44.
85 Idem.

and Budget Office and is being prioritized in 2014 to regularize the access of most vulnerable households to basic services. The program seeks to secure and guarantee the adequate development of boys and girls from pregnancy up to the age of three, belonging to households with vulnerable socio-economic situations, mostly female headed. The program has four central components of family accompaniment and close work, socio-educative sanitary universal actions, generation of knowledge and institutional capacity building. The purpose is to strengthen family capacities to develop good up-bringing practices through the work with households, so health, nutrition and child-development conditions are improved. Besides, the program seeks to further the energy access regularization, safe and efficient energy use awareness and accident prevention linked to energy sources and transmitters use. Finally, "olla bruja" workshops are carried out to support the nutrition component.

- **Services Basket:** the National Administration of Power Plants and Electrical Transmissions (UTE, by its acronym in Spanish), the state power company, started in 1993 an income-loss reduction plan, losses owed to irregular connections in social-vulnerable areas, trying different technical solutions. Although the energy access was achieved, the problem was to make it sustainable for the population since they returned to the initial irregularity and exclusion situation for not being able to afford electricity costs, and finally connecting illegally to the grid. Since 2005 bilateral agreements with the Ministry of Social Development (MIDES, by its acronym in Spanish) have been initiated to identify the low-income population in order to design a social tariff in accordance with their possibilities, starting from a basic-consumption theoretical design. Although this social tariff was well-received by the population, it was not sustained either since there were regularity and security problems associated to exclusion logics of the population and consumption levels significantly higher than the national average and households with similar socio-economic levels, associated to consuming patterns and less-efficient home appliances. As a consequence, the Services Basket Program is created, that emphasizes education in three aspects: (i) safe access and energy efficiency terms working them with neighbors; (ii) everything related to rights and duties of the citizen, since problems have been spotted in the management of the sustainability or regularity in the access at family level (do errands, pay a bill, ask for the reading of a meter, etc.) and (iii) substitution of equipment and sources for certain uses, cooking and heating in particular (in general these needs were covered with inefficient, second-hand appliances). The Services Basket promotes access to modern energy sources through subsidized electric and LPG tariffs. Besides, access to secure and efficient equipment (stoves and cookers) is financed and the insecure or inefficient ones are withdrawn, in case they are part of subsidized households. The withdrawn equipment is destroyed and recycled.

- **Irregular settlements:** the support to irregular settlements is an initiative in cooperation with UTE in the non-technical losses reduction plan (understood as losses consequence of irregular connections) in households where there is no intervention of national and departmental housing instances nor is planned for the next five years, and would fall off the scope of the extension of the Service Basket Program. If the assessment of those settlements is positive, the initiative establishes a series of support measures, including: (i) the creation of special electric tariffs; (ii) delivery of security and lighting equipment; and (iii) communal work under the framework of the program Uruguay Grows with You. Likewise, solutions are being analyzed in terms of thermal insulation and water heating for personal care, as part of the support given to the families of these irregular settlements.

- **Rural electrification:** the target population has been identified and prioritized, to have universal access from departmental diagnosis. This program is in its initial implementation stage and a baseline is planned to be installed for rural populations with no access to electricity. A sampling is also being planned to measure the socio-economic impacts generated by rural electrification works for the first 2014 quarterly. It is possible that the rural electrification programs includes not only specific plans for decentralized electric solutions but also other activities that improve energy access and efficiency in the beneficiary families, introducing cooking technologies ("olla bruja", solar ovens) o achieving a more efficient use of wood.

- **Pilot stand-alone systems:** the actions of this program are based on the diagnosis of energy needs, consumption and use by women and men in a community and it is used to achieve technology transfer and appropriation as well as the efficient use of resources. Besides, it seeks the inclusion of complementary technologies in accordance to the target population characteristics and uses.

Finally, the implementation actions of the energy policy have resonance in other areas and political actions. This is how Uruguay is promoting the recognition of the universal access to energy as one of the Sustainable Development Goals (Post 2015 Agenda). Likewise, the country is promoting knowledge creation and recognition as regards the links existing among energy access, gender and social vulnerability, and is organizing a Seminar on the Social Right to Energy (2014) and a national mapping on gender and energy productive experiences that inform and guide the implementation of present and future energy projects.

## 3. Tools to achieve gender equality in energy policies

In order to achieve gender mainstreaming in public policies a series of tools have been designed. Below there is a selection of the tools used to identify gender gaps in the areas governed by public policies.

### 3.1. Tool 1: Basic questions to ask to make a gender analysis in public policies

Analyzing common points existing among the different gender-gap analysis tools in public policies, it is possible to identify a series of basic questions capable of guiding the gender analysis process. Below there is a list of these basic questions:.

**Key questions to conduct an analysis with gender approach in public policies**

- **Who is the public policy directed to?**

  o Which populations will be benefited? In this way the people benefited are visualized and it is avoided seeing the interventions falling on resources and not on people.

  o What percentage/number of women and men make up this group of beneficiaries? In this way the information of beneficiaries is sex-disaggregated and therefore the appropriate measures can be taken to guarantee more efficiency and equity in the management.

- **What different needs do women and men have?** This can be associated to the roles (traditional or not) of women and men. For example, in Montevideo it was studied the movement of people using public transport. The study showed that women travel longer distances to different places while men travel in straight lines. This information was used to design a public transport system more adequate to these different needs.

- **What different impacts is the public policy likely to have on women and men?** These can favor equality, maintain or increase inequalities.

- **How does the public policy or program contribute to fight inequality?** It is necessary to ask this question to effectively eliminate inequality. For example, a support program for productive businesses to train men and women can be used to empower women if a module is included where women can analyze their difficulties to participate, coordinate, look after children, work and spend their income freely.

*Based on: Bonino, M. and Bidegain, N. (2011), pp. 31-34.*

### 3.2. Tool 2: Gender audit for the energy sector (ENERGIA methodology)

The program TIE-ENERGIA was the first to develop and implement gender audits in energy policies. This program was carried out in Botswana, Kenya and Senegal with the technical support of ENERGIA, and took as a starting point the methodology of the International Labor Organization (ILO) and of Caroline Mosser. These experiences were later replicated in the Philippines, India, Nigeria, Ghana and Lesotho, and some of the factors analyzed could be amplified, such as the gender estimates and the methodology developed by ENERGIA consolidated.

Although the term "audit" is used for this methodology, it is necessary to make clear that this is not a post assessment of national energy institutions or policies. On the contrary, this methodology is a tool to identify and analyze the factors that hinder or prevent the efforts to secure a gender mainstreaming process in energy policies; promoting a planning, budget and organizational capacity analysis of ministries to implement gender mainstreaming strategies, and the link among gender, energy and the national objective of poverty reduction.

This methodology identifies specific ways in which gender considerations are taken or not into account, while they bring to light more important gender gaps that exist in the national energy policy implementation or formulation. This analysis and the adoption of the conclusions and thoughts derived from it have been possible thanks to the gender audits boosted, supported and implemented from within the ministries of energy; facilitating self-reflection moments for these institutions and their policies.

The approach proposed for gender audits is participative, guided by a team of national experts preferably inserted in the same ministry of energy and other relevant ministries (of planning and of women, for example), accompanied by international female experts on gender and energy policies. Validation workshops are conducted to promote consensus and appropriation of the audits' findings within the respective ministries, and at the same time to provide a platform for discussion of recommendations and to agree on future actions (including goals and specific schedules) necessary to mainstream gender considerations in the energy sector. The final reports of these gender audits are considered semi-official documents and have been ratified by the highest administrative authority in charge of the energy issue (Minister, Director).

The methodology of gender audits proposed by ENERGIA recognizes a series of necessary conditions for gender mainstreaming, which reproduce in greater detail the ones mentioned previously. Below there is a summary of the necessary conditions to conduct a gender audit at energy policy level:

According to the experience of ENERGIA, it is necessary to have the following elements before and during the gender mainstreaming process in energy policies:

**1. Legislation on gender equity and political commitment:** a legal framework that promotes gender equity must exist. For this specific case political commitment indicators are considered:

- The existence of a national gender policy

- A country that signs international gender equity commitments

**2. Sensitization and incidence:** it is essential to know the different energy needs of men and women as basis to improve energy policies (to have sensitization in gender issues). Besides, it is convenient to know which are the needs and interests of the target group to develop adequate documents and material (influence).

**3. Gathering and use of sex-disaggregated information:** for the gender mainstreaming process it is essential to identify who uses what type of energy, how and what for. This information is the basis to identify needs, alternatives, formulate effective programs, monitor and assess the progress.

**4. Institutional support:** this is a fundamental aspect to reach a compromise within the institution and to secure that activities with gender approach are carried out. This institutional support may occur through:

- Existing gender government bodies (ministry of women)

- Civil society organizations

- Financial resources allocation

**5. Introduce and/or use the gender Budget:** this component helps identifying the different impacts public revenues and expenditures have on men and women and

it allows re-directing public policies and expenditures to promote gender equity.

**6. Increase the participation of women in the energy sector:** women represent a low percentage of decision makers in the energy sector and its work force; besides, they are seldom consulted about energy policies. It has also been clear that in order to achieve an active participation of women it is necessary to provide support.

**7. Gender institutionalization in ministries of energy:** an institutional analysis should be made in order to know whether there is this sensitization or capacity at ministerial level, which is necessary to conduct a gender mainstreaming process. The assessment spots strengths, weaknesses and looks for the establishment of institutional agreements.

**8. Include gender roles and needs in energy policies:** this can occur through the recognition in the energy policy text of: the role women play in energy use and supply, the different practical and strategic needs existing among men and women, the different answers and mechanisms of women and men to face a crisis and finally solve them in a differentiated manner.

**9. Implementation, monitoring and assessment:** the gender-sensitive policy should translate into realistic activities, and these activities should be monitored and assessed to avoid the "evaporation" of these commitments. The gathering and use of sex-disaggregated information may foster energy policy modifications and should be gathered according to specific and clear terms of reference.

*Source: ENERGIA (2010).*

ENERGIA also recognizes that the mainstreaming process should answer different elements and requirements by the actors who conduct it; therefore, it cannot be linear. In this way, the stages in which the gender audit develops tend to overlap, generating moments of interaction and feedback in the analysis process. The following flowchart shows the different steps of a gender audit, accompanied by the key questions and points that guide its implementation.

**Table 5. Methodology of ENERGIA for gender audits in energy policies**

| STAGES | Examples Of Guiding Questions For Each Analysis Stage | POSIBLE TOOLS TO USE |
|---|---|---|
| STAGE 1 | **Background check** <br> What do we know about the gender situation in the country? <br> What do we know about the energy situation in the country? | Bibliographical review. <br> Gender analysis on the national energy situation |
| STAGE 2 | **Energy policy check** <br> Which are the gender considerations in the energy policy (content, cycle, actors, statistics, programs, etc.)? | Bibliographical review. <br> Interviews with informants or key actors. <br> Gender analysis. |
| STAGE 3 | **Gender budget** <br> How are the needs of women and men settled through the national energy budget? | Use of gender analysis for Budget (different methodologies available) |
| STAGE 4 | **Gender organisational analysis** <br> Which capacities should the ministry of energy have to conduct a gender mainstreaming process? <br> What type of capacities do gender institutions have to support or contribute to with gender mainstreaming in the energy sector? | Self-evaluation questionnaires. <br> Target group discussions. <br> Interviews with key actors. <br> Gender statistical analysis |
| STAGE 6 | **Pre-validation** <br> It can be carried out through a SWOT analysis (strengths, opportunities, weaknesses, threats) for the gender mainstreaming process in the energy sector. | Participatory workshop. <br> SWOT analysis |
| STAGE 7 | **Gender and energy action plans** <br><br> Through these plans an agreement should be reached on objectives, results, impacts, activities, managers and indicators of the gender mainstreaming process. A Gender Action Plan should also include the financial component that will support the activities to be held within its frame action framework. | Gender Action Plan |
| STAGE 8 | **Validation and dissemination** <br> Appropriation and endorsement of the Gender Action Plan by the ministry of energy and energy-sector key actors. | Multi-sector workshop. <br> Ratification of final report by the Minister or highest authority in the energy sector. |

*source: ENERGIA (2010).*

Although this box does not intend to describe in detail the way the different gender audits have been carried out, it does intend to provide a series of guidelines. Some guides are included below to carry out the diagnosis phases (stages 1 and 2); likewise, it is presented a list of the questions that can be shared with key interviewees during the diagnosis phase (stage 5). Those who are interested in deepening the institutional analysis issue (stage 4) can consult Module 3 of this Guide, which is entirely dedicated to the subject.

Stage 3, gender budget, is an extensive subject treated thoroughly by a series of independent manuals. Those who are interested in this tool can refer to the UNWOMEN training manuals. Finally, stages 5 to 8 gather consultation stages, whether through interviews or participative workshops. Given the great number of methodological tools available to do these exercises, it has been decided not to mention them in this section.

Stage 1, background check, aims at achieving a generalized knowledge of the most relevant gender and energy issues. In most countries these issues are identified in national, regional or international reports, so this check ends up being a bibliographical review, using sources that include::

- Web search using key words such as country + gender + energy.

- National policy documents on poverty, gender and energy.

- Government reports, such as census, and reports on MDG.

- Interviews with national experts, representatives from the government and projects that help identify documents and relevant issues for this research

- Project-identification reports and documents created by regional or international development banks (for the region, the World Bank or the International Development Bank, IDB), which can be retrieved from their web sites.

- Reports of political organizations or regional research centers, such as OLADE, FLACSO, etc.

The structure of background check reports is generally made up by three parts: an introduction, where the country whose policy is being analyzed is briefly introduced, the gender audit process that will be conducted and the people and resources involved in the process, etc.; a second part dedicated to the revision and development of gender considerations where the most relevant considerations for the country are exposed, and a third part where the most important energy issues are revised. The following box presents the summary of the possible contents of this background check report:.

**Structure of a background check report : ENERGIA**

**1. Introducction:** name, geographical and demographic data of the country; way in which this background check is related to the gender audit; who conducts the revision, with what resources and when it is carried out, etc. .

**2. Revision of gender issues and considerations at national level:** it is hoped that this section covers issues such as:

• The gender situation: this aspect is analyzed according to UNO gender indicators, with the aim of revealing the different conditions and inequities among women and men in issues such as: demographic characteristics, gender perspective in economic activities in the informal and formal sectors of the national economy, per capita GDP, Human Development Index and Gender Development Index, as well as a gender perspective in sectors such as education, health, water and sanity, agriculture and access to property, environment and social roles, culture and politics.

• Gender and poverty: in this section it is defined who make up the low-income sectors of the country in question, the differentiated manners women and men experience poverty and the gender perspective on political answers to poverty reduction and the achievement of equality.

• Gender and governability: the actions that legitimize gender mainstreaming activities in the energy policy are described, including the inventory of binding, gender-equity mandates and commitments at international level, national instruments, and the instruments, proceedings and indicators used by the government to identify progress towards gender equity.

• Gender organizations: the different institutions and institutional agreements to provide and implement gender equity at national level are described briefly, and so are institutional mandates, priorities, tools and financing available, etc.

• Gender representation in decision making: this section should reveal quality, sex-disaggregated information on the representation of posts in decision-making organisms at public sector, civil society, academy level as well as the number of female engineers, graduated from technical colleges, etc.

• Sex-disaggregated statistics: if possible, sex-disaggregated information should be gathered on energy and services access that show a change in gender relations.

• Best practices: "best practices" are described in gender mainstreaming processes and/or in the work of women carried out by ministries, sectors, donors or programs within the country (preferably) or in the region.

• Communications with gender approach: this section describes the information on gender issues available to the public in general, including mass media.

• Migration according to gender: this section analyses the impact migration from rural areas to urban ones may have on the energy needs of women and men living in rural, urban and peri-urban areas.

**3. Energy issues revision:** this section covers the following subjects:

• National energy sector: the situation of the national energy sector is described, including sector tendencies such as: energy production/matrix, supply and demand by sector, energy services access and affordability.

• Energy policy: energy policy content and context are described, political statements made, measures and priorities identified to carry out these priorities, as well as their respective implementation plans.

• Energy institutions and implementation: a list is elaborated of key actors and institutions involved in energy policy implementation, as well as a description of the role they play in energy policy implementation, including large-scale programs and the ones responsible for its implementation.

• Energy Budget: the Budget managed by the ministry of energy is described, both for five-year plans and recurrent budgets (used for valid operations and programs) as well.

• Target "beneficiaries": it is explained or defined who make up the target beneficiaries group of the energy policy.

• Monitoring and assessment: it is described the way energy policy results and used quality and quantity indicators are monitored; also, the way this information is used to adjust or revise energy policy development at national level.

• Influence of stakeholders (key actors): power relations among different stakeholders of the energy sector are presented.

• Energy statistics: the statistics used to design the draft project of the national energy policy, the people who use this information and how and who gathers it are presented.

• Energy policy creation process: a brief description of the process, both formal and informal, carried out to develop a national energy policy is given. It is also included, if possible, dates when certain stages of this process are conducted identifying key actors that are or will be involved in this process and in which stage of the process they will be involved;  it is also identified who decides what people will be involved, if public hearings will be held, etc.

• Employment in the energy sector: employment information in the energy sector is presented, including factors that affect different levels and types of employment in energy sub-sectors.

• Energy subsidies and tariffs: subsidies tendencies and energy tariffs established by the government over the years are analyzed.

• Energy companies' ownership: information on the energy companies' ownership is given.

• International context: by international context is understood the most relevant international actors in the national energy sector as well as the mechanisms they use to support it. It can also include the way some international processes influence in the sector, for example, the UNFCCC, the ODM, etc.

**4. Conclusions:** the most important findings that resulted from this bibliographical review process are revealed.

*Modified from: ENERGIA (2010).*

The energy policy check is the second stage of the gender audit and consists of two sub-sections or activities: the check with gender approach of key documents of the energy policy, and the check with gender approach of relevant national energy programs. The check with a gender approach of key documents of the energy policy can be conducted as a quick assessment; and the following questions can be used as a guide:

**Matrix for a quick assessment of energy policies with gender approach**

Who uses this document and what for?

| ENERGY SUBJECT | Check list of gender questions |
|---|---|
| **In general** | Identify how many times these key words are mentioned in hte document: gender, women, men, women empowerment, gender mainstreaming, gender equity ot equality, female-headed households, male participation, female participation, economic activities of women, economic activities of men |
| **Vision and political goals** | Is gender equality or women empowerment included as one of the political goals in this document? Do political goals contribute to the correction of gender imbalances by identifying practical needs and/or strategic interests of women and men? |
| **Political context** | Is gender dimension pointed out as part of the background when the problems the energy policy wants to solve are described? Does the justification mention national or international commitments towards gender equality? Are arguments for gender mainstreaming included in the energy policy as part of the justification? |
| **Supply and demand** | Are gender considerations incorporated into the energy matrix or production and in the energy demand or consumption by sector? Has the information in these subjects been analyzed identifying how gender differences can affect the fulfillment of political goals? How does the energy policy combine energy needs with gender needs, in such a way that gender inequities are answered respect to energy services access, availability and affordability? |
| **Target groups** | Are target beneficiary people identified by their sex, ethnic group, age or socio-economic status? |
| **Political measures** | Do political measures consider the differentiated potential benefit/impact on women and men by increasing energy services access and affordability?, especially in: <br>• Energy grid extensión <br>• Promotion of renewable energies and decentralized power generation systems <br>• Increase of kerosene and LPG availability <br>• Sustainable use of biomass and biomass-based technologies <br>• Increase of gas and oil extraction and distribution <br>Has the potential negative impact of measures been considered (for example, the possible increase of the work load of women or the social isolation of men?) Do implementation modalities reflect gender roles integration and the productive and reproductive needs and strategic interests? Do implementation modalities reflect differentiated measures to empower women? |
| **Policy creation process** | Was a public consultation with women and men (as beneficiaries/consumers) carried out during the energy policy formulation? If this is the case, exemplify the methods used, and the number and moment of these consultations. Which were the strengths and weaknesses of the methods employed? How were the results of these consultations used in the planning process and in the implementation strategies formulation? Were gender experts involved in the energy policy formulation? Were gender issues included in the agenda or during the discussion of the energy policy definition or at any other moment of its creation process? Explain the context in which gender issues were considered and the importance they had. Were there any people or specific institutions that stood for the inclusion of gender considerations during the energy formulation process? If this is the case, at what level did this support occur? |
| **Energy statistics, information and indicators** | Were the analysis of sex-disaggergated information and gender statistics used in the policy formulation? Are sex-disaggregated information and gender statistics systematically used and gathered in the activities planning and report? Which are the possibilities and challenges to gather and analyze sex-disaggregated information and gender statistics in the energy sector? |
| **Implementation organizations** | Do implementation organizations have the capacity and the resources to work with a gender mainstreaming strategy? Which is the attitude of key actors when a policy with gender equality is to be implemented? Was advice received or any participation by women or gender experts' organizations or networks in the energy policy implementation? |
| **Monitoring and assessment** | Do monitoring or assessment indicators with gender approach exist (for example, to verify the progress and measure differentiated impacts on women and men)? Do indicators measure the gender aspects of each energy policy objective? Are sex-disaggregated indicators used to monitor and assess the energy policy? Do these indicators measure the way the energy policy contributes to achieve national and international gender equality commitments? |
| **International, regional and national context** | While establishing priorities, does the energy policy take into account or as a basis international commitments on gender equality ratified by the country? Does the energy policy take into account or as a basis regional conventions on gender equality? Does the energy policy take as basis gender equality national policies or reinforces them? |
| **International partners** | Do international key actors from the energy sector consider gender equality or women empowerment as one of their priorities? Is gender mainstreaming included as part of their development cooperation objectives in the energy sector? How do these international actors influence the gender mainstreaming process in the energy sector? What type of mechanisms or resources do they have to support gender mainstreaming in the energy sector? |
| **Budget** | Are gender equality objectives reflected in ordinary and extraordinary budgets? Is a budget analysis included in energy-policy implementation reports? Is the budget report format transparent and sex-disaggregated according to activities or areas of work? Do separate or specific budget allocations exist for women or gender mainstreaming (for example, training)? Is the ministry of energy staff encouraged to allocate specific funds for gender mainstreaming in technical cooperation projects? |
| **Communication strategy** | Is the gender perspective included in the communication strategy developed to spread the energy policy existence, progress and results? Do women and experts' organizations have a role to play in these public spheres? |
| **Employment** | What factors affect the different work types and levels for women and men in the different energy sub-sectors, both at formal and informal level? |
| **Financing mechanisms** | How have gender considerations been considered in subsidies, taxes, tariffs and other financing mechanisms of the energy sector? Are there any incentives that support micro or small enterprises and those in the informal sector? |

*Source: ENERGIA (2010).*

To conduct a check with gender approach of national energy programs, we suggest looking at Module 4 on projects of this Guide, which offers a detailed description of the different gender components relevant for energy programs and projects. The matrix below can be used to obtain a quick gender assessment of energy programs or projects.

**Project assessment matrix**

This matrix uses 19 gender indicators used to measure the gender equality promotion as part of an energy project. The matrix can be answered using "Yes", "No" or NA not applicable.

| No. | Gender assessment matrix in a program or project | | YES | NO | N/A |
|---|---|---|---|---|---|
| 1 | Gender in context | The gender dimension is included in an explicit manner in the background. | | | |
| 2 | Gender objectives | Gender objectives promote in an explicit manner gender equality and the needs of women and men | | | |
| 3 | Gender indicators | Projects indicators measure gender considerations included in the objectives | | | |
| 4 | Gender participation | The program guarantees the active participation of women and men in the project identification, design, implementation, monitoring and assessment. | | | |
| 5 | Women empowerment | The activities directed to benefit women are carried out and solve the practical and strategic needs of women. The program supports women participation in decision-making. | | | |
| 6 | Gender experts and knowledge | The working team includes staff capable of conducting the gender mainstreaming strategy | | | |
| 7 | Sex-disaggregated information | The program gathers, analyzes and uses sex-disaggregated information in a systematic manner in the planning and reporting. | | | |
| 8 | Gender impacts | The program considers the differentiated impacts of the interventions on women and men | | | |
| 9 | Gender budget | The program allocates budget resources to gender activities. | | | |
| 10 | Capacities creation | The program provides gender trainings, tools and resources to its staff and to the implementing organizations to increase their gender analysis capacity. | | | |
| 11 | Gender results | The program guarantees the results benefit women, men, girls and boys. | | | |
| 12 | Gender implementation | The program activities recognize and rectify gender inequalities in service, resources and decision-making access. | | | |
| 13 | Beneficiaries groups | The program guarantees gender balance within the beneficiaries group | | | |
| 14 | Gender balance | The program guarantees gender balance between the Project staff and the supporting team. | | | |

| No. | Gender assessment matrix in a program or project | | YES | NO | N/A |
|---|---|---|---|---|---|
| 15 | Partners selection and gender balance | The program partners include experts or organizations that can support gender mainstreaming. | | | |
| 16 | Gender monitoring and assessment | The monitoring and assessment plan uses indicators with gender approach to reveal gender differences in the results and impacts of the program | | | |
| 17 | Gender differencies | The program does not unify all women and all men in one single group, as if they were homogeneous groups or categories. | | | |
| 18 | Gender report | The program guarantees that reports reflect gender considerations using sex-disaggregated information and identifying gender gaps as well as success in a disaggregated manner. | | | |
| 19 | Gender baseline | The base line identifies the priorities of women and men in terms of livelihood improvement and determines how program interventions may help achieve these goals | | | |

*Source: ENERGIA (2010), pp. 25-26.*

As indicated at the beginning of this section, the gender audit also requires key actors identification within both the energy sector as well as gender bodies at national level. Their contributions are extremely valuable to understand in a better way the political and national context where the audit is carried out. The matrix below shows possible questions for both type of actors, designed to capture the manner in which they see gender considerations within the energy sector and other actors' capacities to support the gender mainstreaming process.

**Table 6. Guide of questions for interviews with key actors**

| ACTORS FROM THE ENERGY SECTOR | ACTORS FROM GENDER BODIES |
|---|---|
| • How does the work of your organization relate to the energy sector? | • What role does your organization play in the implementation of national or international gender equality commitments? How does this role link to the national energy policy design or implementation? |
| • What do you know or understand about priority gender considerations in the energy sector? | |
| • Does your organization consider gender equality and women empowerment a priority goal to achieve its objectives? Why? | • How is the staff in your organization sensitized or trained on the national energy policy objectives and priorities? Does your organization consider they reflect the priority gender considerations for the energy sector? If this is not the case, can you define these priorities? |
| • What type of activities and services does your organization implement in order to secure that the energy needs and concerns of women and men are answered? Provide examples. | |

| ACTORS FROM THE ENERGY SECTOR | ACTORS FROM GENDER BODIES |
|---|---|
| • Provide examples of the impacts the programs implemented by your organization have on energy services affordability, access, control and security for women and men. | • Does your organization consider energy services affordability, security, access and control by women and men a priority goal to achieve their own gender objectives? Why? |
| • Does your organization gather or employ disaggregated information in its activities planning, monitoring or reporting? | • What has your organization done to share information with energy institutions on important developments in the gender sector? |
| • What type of technical capacities, experiences and resources are available at your organization to work in gender mainstreaming? | • How has your organization supported the capacities creation so that energy institutions can work on the gender theme? |
| • Does your organization interact actively with national gender institutions or women organizations, or the Ministry of Women directly? What is the nature of this relationship? | • Does your organization allocate financial resources to gender mainstreaming activities in the energy sector? Provide examples. |
| • Does your organization allocate financial resources to gender mainstreaming activities such as staff training or the inclusion of women empowerment activities within its programs? | • How does your organization support the gathering and use of sex-disaggregated energy information by energy institutions? |
| • Has there been any type of information or activity by the ministry of energy telling your organization about the importance of answering gender considerations in its activities? | • Has your organization been able to present sex-disaggregated information that supports policy planning or development in the energy sector? |
| • In your opinion, does the ministry of energy consider equality and women empowerment a priority goal? | • Has your organization taken part in the development of the existing energy policy, or in the draft being discussed? Explain how. |
| • In your opinion, which are the main difficulties for gender mainstreaming in energy policy programs and objectives? | • Do the research, incidence and publicity documents generated by your organization contain information on energy issues from a gender perspective? |
| • In your opinion, which are the main opportunities or points of entry to include gender considerations in energy policy programs and objectives? | • In your opinion, which are the major difficulties to integrate gender considerations into objectives and programs of the national energy policy? |
| • Can you provide examples of what you consider innovations or good practices regarding gender sensitivity in the energy sector? | • In your opinion, which are the main entry points or opportunities to incorporate gender considerations to the objectives and programs of the energy policy? |
| • What type of support do you consider your organization needs in order to support gender mainstreaming in its activities? | • Can you provide examples of what you consider innovations or good practices of gender mainstreaming in the energy sector? |

*Source: ENERGIA (2010).*

## 3.3. Tool 3: Assessment of the gender situation in the energy sector

Below there is a summary of a series of gender assessment tools that could be adapted to be used in the energy sector. It is worth mentioning that none of them has been designed for its use in the energy sector; however, in Module 2 of ENERGIA Training Guide, their possible adaptation for their use in this sector is suggested. Although most of these tools are used for project analysis, it is mentioned below if it is possible or difficult to adapt them to the assessment of energy policies

### 3.3.1. Data bases disaggregated by sex[86]

One of the major problems faced when trying to introduce or verify the gender issues situation in energy planning is the lack of databases that can reflect the gender situation in the energy sector. Most of these databases are built with information at household level, so specific data that provide more information on differences in energy use or distribution among the people living in the household is not incorporated. This is why it is recommended to check always gender official data of the country compiled by women's institutions as a first step so that existing energy databases can be complemented later.

For gender considerations to be considered seriously in the energy policies creation, Implementation, monitoring and verification, it is necessary to adapt existing databases to incorporate a more specific analysis level and not limit themselves to the household unit as a referent. Hence, standardized formats that gather used information in urban, peri-urban and rural areas should be developed, not only to guarantee that this type of information is always taken into account, but also to allow comparisons and drawing lessons learned from situations in different regions or communities of a country.

### Sex-disaggregated energy databases

The type of information likely to be included in a systematic manner in energy databases can include:

**From the demand point of view:**

• Energy sources use (fuels) disaggregated by household type: female headed, male headed; land owners, non-land owners; female occupation, male occupation; etc.

• Person responsible for providing the energy source (in general women are the ones in charge of gathering wood, while men are responsible for paying for kerosene or electricity). Apart from the person in charge, other information can be compiled such as: time spent by this person (woman/man) to supply for the energy source per day/week or family budget for the acquisition of the energy source (as well as the person who decides on the family budget)

• Gender preferences and "willingness to pay" for different energy sources.

**From the distribution point of view:**

• Access to different sources of energy, by sex.

• Sex-disaggregated perceptions on energy sources shortage.

*Source: ENERGIA (2005b), p. 130.*

The gathering of sex-disaggregated information on energy use and attitudes towards energy sources can help understand the problems of the target groups in a better way. At the same time, it can turn into a stronger and more convincing argument to call the attention of politicians and decision-makers on the necessity to carry out energy polices with gender equality.

### 3.3.2. Force-field Analysis[87]

Force-field analysis appears at the end of the 40's and is based on the hypothesis that a specific situation arises as a result of a number of forces (or factors) in balance, some of which restrain, resist or block the change, while others boost, facilitate or promote it. So if a situation wants to be changed, the forces that regulate it and the influence they have on it should be assessed in order to design a strategy that minimizes those forces that restrict the change or increases those that boost it.

The first step of this analysis is to identify the problem or situation to be changed, as well as the situation to achieve (goal) once the problem is solved. A list of the forces (people, money, time, religious beliefs, etc.) that restrict or boost the change should be drawn. The second step is to enumerate a series of actions that can reduce or eliminate the most important restrictions, as well as the steps that can be taken to solve the problem and identify existing resources to help achieve the desired objective. This process is repeated with change-promoting forces and the search of measures that fortify them. Later on strategies are assessed and implementation stages developed for those that are accepted. It is necessary to run a regular review of the situation since forces may vary and therefore require the design of new strategies.

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86 Bonino, M. and Bidegain, N. (2011), p. 21.

87 Based on Bonino, M. and Bidegain, N. (2011), in turn, based on Valdés, T. (2006).

**Applying force-field analysis to energy planning**

It is necessary to recognize that in the energy sector there are different organizations involved in the planning, with different mandates, political positions and internal cultures, so their potential to adopt new approaches varies. The force-field analysis methodology has been implemented by organizations and institutions (for example, Oxfam) that search introducing a planning method with gender approach and can be used by members of organizations that work jointly to achieve a particular goal. Therefore, it can be an interesting tool for those institutions that intend to set

• What type of restrictions limit the incorporation of gender approach within your organization? List them and order them from the strongest to the weakest.

• What type of promoting forces (strengths and opportunities) is there in your organization that may support the introduction of the gender approach?

• What type of activities may be conducted in a realistic way in the near future to reduce or eliminate opposing forces to the gender incorporation?

• Which actions can be carried out to increase and rely on the promoting forces of gender mainstreaming?

**Force-field analysis worksheet**

| | |
|---|---|
| 1. The problem | |
| 2.a. Present situation | 2.b. Desired Situation |
| 3. Restrictive Forces | 4. Driving forces |
| 5. Actions to eliminate or rduce restrictions | 6. Actions to increase driving forces |
| 7.a. Steps Required By Change-Driving Forces | |
| 7.b. Necessary resources | |

| 8. Steps | How? | When? |
|---|---|---|

*Source: ENERGIA (2005b), p. 122.*

up or strengthen a national-level mechanism that supports gender mainstreaming in the energy sector.

The force-field analysis can be applied to the project cycle in its formulation and implementation stages. It can also be applied to the analysis of sociocultural problems, like searching the increase of women participation in a determined activity, or the solution of physical problems of a project. The diagram below shows how the force-field analysis can be used in an electrification project.

The force-field analysis is a tool used by organizations or institutions that are probably involved in program or projects implementation as a way to understand the barriers that can appear while introducing the gender approach in their planning. It is better if this analysis is carried out by members of organizations working together, and it consists at least of four questions:

**The force-field analysis as a tool for the energy sector**

The box below exemplifies strengths and constraints of using the force-field analysis in energy planning:

| STRENGTHS | CONSTRAINTS |
|---|---|
| • It presents a framework for complex problems analysis that involve different actors | • The problem should be identified prior to the analysis, which can be difficult in practice |
| • It is a tool that faces the institutional aspects of gender | |
| • It can be used together with other gender tools | |
| • It is goal oriented | |

*Source: ENERGIA (2005b), p. 123.*

**Force-field analysis diagram**

**Problem:**
Less than 5% of female-headed households in recently-electrified areas have asked for their connection to the grid

**Goal:**
the ministry of energy seeks increasing the number of female-headed households connected to the grid to 40% in the coming two years.
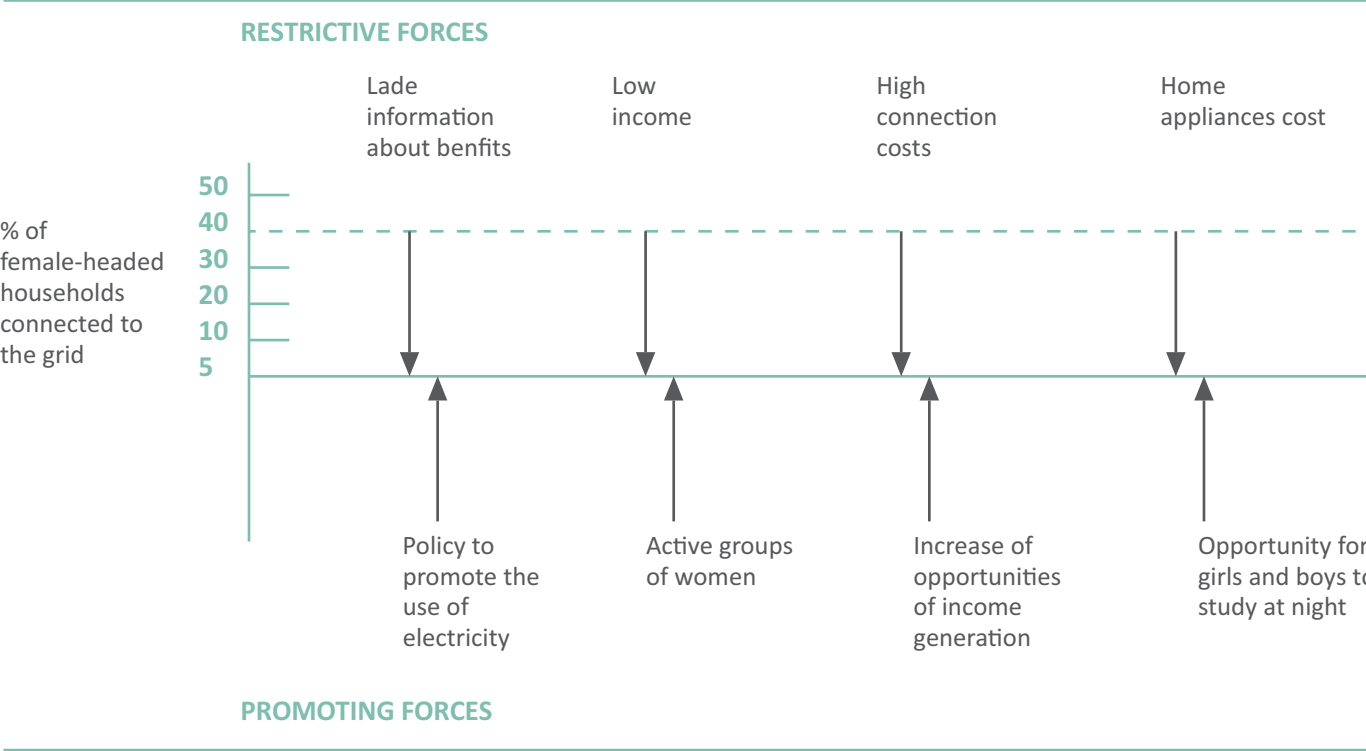


*Modified from: ENERGIA (2005b), p. 123.*

**3.4. Tool 4: Identification of gender objectives in energy policies[88]**

Gender objectives can be subdivided into different categories according to their driving reasons. If we concentrate on the energy policy beneficiaries, we can conclude that there are at least three gender objectives that can be achieved: well-being (reducing work load and improving health), productivity (income generation) and empowerment, equity or equality (although these terms are not synonyms, these objectives can be achieved through an increase of participation, decision-making and self-esteem). That is, each of these objectives seeks repairing the possible energy needs of women and men according to their triple role (as mentioned in Module 1, refers to reproductive and productive needs and strategic interests). A fourth objective can be added, since gender mainstreaming can generate benefits regarding organizational efficiency, which in turn would imply more successful energy policy results.

**3.4.1. Matrix for identification of gender objectives**

It is necessary to recognize that each energy sector actor has its own gender objectives to include in the energy policy. To reduce the possibility of conflict among actors, as well as to clarify concepts and definitions on these objectives and their consequences for the energy policy, it is proposed to formulate them through a participative method in order to reach consensus.

The proposed tool to define these objectives is presented below as a table that identifies gender objectives of relevant energy sector actors. The result of the table can be used to examine whether an energy policy should be modified, and if so, in what way to favor a greater amount of gender objectives while helping identify the most powerful actors in terms of their influence in energy policy creation. If this matrix is sued with a mixed group of actors, the tool can identify gender priorities and objectives of the energy policy.

88 Bonino, M. and Bidegain, N. (2011), pp. 22-23.

**Matrix for gender objectives identification**

| Actors | Gender objectives | | | |
|---|---|---|---|---|
| | EMPOWERMENT | PRODUCTIVITY | WELLBEING | EFFICIENCY |
| 1. | | | | |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |
| Etc. | | | | |

*Source: ENERGIA (2005c), p. 63.*

The box below is an example where different gender objectives can be sees, according to different actors involved in the energy sector.

**Example: Matrix for gender objectives identification**

| Actors: | Gender objectives | | | |
|---|---|---|---|---|
| | EMPOWERMENT | PRODUCTIVITY | WELLBEING | EFFICIENCY |
| 1. Minsitry of energy | | Support micro and small enterprises production, acknowledging that many of them are female headed. | | Increase low-income household coverage, paying special attention to female-headed ones. |
| 2. Ministry of Women | Enable women to contribute in decision-making in the energy sector. | Increase the participation women of in national economic sectors. | Improve the health of women and reduce their work load. | |
| 3. ESCOs | | | | Increase their service coverage and good use of installed equipment (training). |
| 4. Women in poverty | | Increase their income, using efficient technologies or accessing new labor opportunities. | Reduce domestic work load. Improve family health. | |
| 5. Donors | Women contribute to decision-making in the energy sector. Increase of women's self-confidence as a result of their participation in users' committees. | | | |

### 3.4.2. Gender Needs Analysis[89]

Gender needs analysis is designed to assess possible impacts of proposed projects and to determine whether they would help achieving basic or strategic needs of women. Most of energy projects concentrate on practical needs (they offer technologies that make life simpler and more comfortable); however, the way they are implemented can help achieving strategic goals. This tools guarantees those impacts are explicit.

The proceeding is quite simple and implies asking a pair of questions:

1. How and to what extent are the practical needs of women and men taken into account through the program or project activities?

2. How and to what extent are the strategic needs of the community in general, and of women in particular, taken into account by the program or project activities?

89 Idem, pp. 63-65.

**Matrix of gender needs analysis**

| | Which practical needs will be solved by the Project? | | Which strategic needs will be solved by the Project? | |
|---|---|---|---|---|
| | MEN | WOMEN | MEN | WOMEN |
| As a result of the technology to be introduced | | | | |
| As a result of the involvement in the Project planning | | | | |
| As a result of management of the technology once it is installed | | | | |

*source: ENERGIA (2005b), p. 127.*

The example below shows a matrix of gender needs analysis completed for a rural electrification project.

**Example of a matrix of gender needs analysis completed**

|  | Which practical needs will be solved by the Project? | | Which strategic needs will be solved by the Project? | |
|---|---|---|---|---|
|  | MEN | WOMEN | MEN | WOMEN |
| As a result of the technology to be introduced | Reproductive: having access to lighting in working places and at home. Productive: having the possibility of using electric tools to make work activities more efficient. | Reproductive: having access to lighting in working places and at home; possibility of using home appliances to alleviate domestic work | Access to communication media, such as radio, television or telephone. | Access to communication media, such as radio, television or telephone |
| As a result of the involvement in the Project planning | Productive: identification of electricity to secure pumping of water for agricultural use; creation of new jobs for electricians | Reproductive: identification of electricity to secure pumping of water for agricultural use. Productive: Identification of new economic activities (such as beauty salons, internet cafes, training as electricians, appliances seller, etc. | Active participation in project and community meetings increases self-esteem | Active participation in project and community meetings increases self-esteem |
| As a result of management of the technology once it is installed | Productive: increase in productivity and greater income-generating capacity. | Reproductive: reduction of time spent in domestic work; possibility of having more leisure/resting time; accident reduction (thanks to a better lighting). Productive: possibility of getting involved in non-traditional economic activities. | Possibility of studying at night (men and boys). Greater safety and crime reduction thanks to improved visibility. | Increase in formal or informal education of women through communication media or development of education programs for adult women. Possibility of continuing studying at night (women and girls). Greater security at nighttime and crime reduction thanks to a better lighting. |

**Applying the Gender Needs Analysis to energy planning**

The use of a tool such as the Gender Needs Analysis immediately raises the question of which type of needs must be covered by the energy project or policy. This is an assessment tool (not merely descriptive like the previous ones) since while it establishes certain needs to be covered, it defines objectives; at the same time it allows for a project to be "measured" (assessed) using as a parameter the measure in which these needs have been satisfied.

Most of small-scale projects have a practical approach: they are designed mainly to solve practical needs (improved stoves to save wood and reduce gathering time; biogas to reduce wood consumption, improve health and produce bio fertilizers; machined mills to reduce the work load of cooking, etc.). However, energy can also provide solutions for strategic needs. Electricity can allow women (and men) to start new productive

activities and earn greater o more stable incomes; bring new services to communities and neighborhoods, allowing for an economic growth, or enable imparting evening literacy lessons.

Therefore, this analysis should be applied considering which are the practical and strategic needs of a group or community of beneficiaries according to their gender, social class, etc. The exercise to determine in a holistic manner the real needs of people is important. Though it would be ideal to conduct this exercise in the field, the division between practical and strategic needs is introduced in the project planning process. Therefore, deciding which of these needs will be fostered through the initiative becomes a subjective act by the planner. Using this method forces the person who plans to be explicit when identifying those needs and this is indeed a great step.

**The Gender Needs Analysis As A Tool For The Energy Sector**

The box below exemplifies the strengths and constraints of using the gender needs analysis in the energy sector

| STRENGTHS | WEAKNESSES |
|---|---|
| • This method clearly presents the objectives an energy project wants to achieve, as well as those it will not in terms of the benefits for women.<br>• It assesses, not describe.<br>• It can be used both for assessing policies and programs and projects as well | • It uses categories not necessarily understood by local communities ("practical" or "strategic" needs) so it can pose some difficulties to use in the field.<br>• It does not explicitly identify barriers or determiners, so it should be used together with other methods |

*Source: ENERGIA (2005b), p. 128.*

**3.5 Tool 5: Indicators and tools for monitoring in public policies** [90]

As mentioned in the section on assessment tools, many of them can be used to conduct checking activities in the acquisition of gender objectives of energy policies, programs or projects. The following additional tools help identifying gender indicators for energy policies, as well as generating checking systems in accordance with the gender approach. (database).

We would like to highlight in this section the need to incorporate

these tools and, above all, checking indicators in monitoring and assessment systems scheduled by energy policies, otherwise they can be no longer used or the tools independently developed not implemented by professional teams in charge of checking the scope of these policies. This is why independent checking protocols will not be proposed, instead, guides for indicators identification that may be included or that modify existing indicators in monitoring systems created by energy policies.

**3.5.1. Matrix for indicator identification for gender objectives** [91]

The table of gender objectives identifications can be modified in such a way that can be used to analyze the content of the existing energy policy and to verify its impacts success. In order to measure the progress and scope of gender objectives it is necessary to use indicators, which can measure aspects like who really benefits from the energy policy or which are their impacts in the lives of women and men. Therefore, the first step of this exercise is the identification of gender objectives to be achieved. The second step is the identification of proper indicators for each gender objective. And the third one is the identification of key actor/s whose objectives are being achieved through the energy policy.

The following table specifies gender objectives that benefit women, instead of women and men, for simplification reasons, since later on an example of a worked matrix is provided. Besides, since this modules focus on gender mainstreaming in energy policies, the emphasis is on women being the direct beneficiaries of the energy policy.

**3.5.2. List of indicators for gender considerations necessary in an energy policy**

_____
90 Based on Bonino, M. and Bidegain, N. (2011).

_____
91 These concepts are explained in detail in section 3, module 1 of this Guide.

**Gender indicators for an energy policy**

| Gender indicators | | | |
|---|---|---|---|
| **Gender objectives** | Step 1: who does this objective belong to? | Step 2: expected results or impacts | Step 3: selected indicators |
| Wellbeing of women |  |  |  |
|  |  |  |  |
| Productivity of women |  |  |  |
|  |  |  |  |
| Empowerment of women |  |  |  |
|  |  |  |  |
| Organizational effciency |  |  |  |
|  |  |  |  |

*source: ENERGIA (2005c), p. 65*

## Example of Gender indicators for an energy policy

**Gender indicators**

| Gender objectives | Step 1: who does this objective belong to? | Step 2: expected results or impacts | Step 3: selected indicators |
|---|---|---|---|
| Wellbeing of women | Low-income women | Reduction of the work load of women. | Time spent gathering water and wood. |
| | | Improvement of the health of women | Number of women that suffer from respiratory diseases and backaches |
| Productivity of women | Donors. Female-headed households | Women increase their income. | Estimated income. |
| | Low-income women | Female-headed enterprises use cleaner and more efficient energy technologies | Number of female enterprises that use improved stoves. Number of female enterprises that use LPG stoves. Number of female enterprises that use electric stoves. |
| Empowerment of women | Donors Professional women that work in the energy sector | Women contribute to decision making in the energy sector | Number of women in decision-making key positions in the ministry of energy and ESCOs. |
| | Donors | Women increase their self-confidence through their participation in energy committees. | Number of issues brought up by women at meetings of energy committees. |
| | Donors | Communication with the outside world, enlarge their knowledge | Women show new knowledge because of their use of communication media. |
| Organizational effciency | Ministry of energy | Increase in the access to modern sources of energy by low-income households. Increase in the access to modern sources of energy by low-income, female-headed households. | Number of electric connections in low-income households. Number of electric connections in low-income, female-headed households. |

*source: ENERGIA (2005c), p. 65.*

In section 2.4 of this module a list is presented with the different gender considerations to be included in an energy policy if this is intended to also work as a means to achieve gender equality. The mentioned list follows below, including other indicators that guide its verification.

## Gender considerations in energy policies: possible indicators

| RELEVANT ISSUES | SUGGESTED GENDER INDICATORS |
|---|---|
| **Energy sources used by low-income sectors** | • Reduction of the time women and men /girls and boys spend gathering traditional fuels. <br> • Reduction of family budget destined to fuel purchase due to the use of efficient technologies (wood, kerosene, etc.) <br> • Reduction of the time women and men spend gathering water. <br> • Reduction of the time women and men spend cooking. <br> • Reduction of the time women and men spend performing agricultural works and processes. |
| **Investment decisions** | • Percentage of the ministry of energy's Budget destined to financing priority energy interventions for women. <br> • Number of programs that integrate gender considerations into their activities. <br> • Budget percentage destined to gender training and sensitizing. |
| **Energy access and avilability** | • Número de hogares con jefatura femenina/masculina con acceso a tecnologías de cocción modernas. <br> • Number of female/male-headed households with access to modern cooking technologies. <br> • Number of female/male-headed households that report interruptions in the supply of domestic fuel/ energy sources (biomass, LPG, etc.) <br> • Number of female/male headed households connected to the grid <br> • Number of female/male headed households that report electricity supply interruptions |
| **Tariffs and price** | • Número de hogares con jefatura femenina/masculina apoyados con tarifas subsidiadas o a través de otros mecanismos de apoyo a las personas pobres y vulnerables cuando aumentan los costos energéticos. <br> • Number of female/male headed households supported with subsidized tariffs or through other support mechanisms to vulnerable and poor people when energy costs increase. <br> • Increase of the number of female/male headed households capable of paying for electric tariffs <br> • Number of female/male-headed households that are capable of affording sources of energy uninterruptedly. <br> • Increase of the number of low-income, female/male-headed households that can use more efficient equipment. <br> •Percentage of women and men that adopt efficient, energy-saving technologies |
| **Infraestructure construction** | • Number of women and men that work in the energy infrastructure construction. <br> • Number of women and men whose economic activity has started or increased as a direct result of the provision of services during the creation period of energy infrastructure (accommodation, food, transport, etc.) <br> • Number of women and men displaced by the infrastructure project who have received training and compensation and have established an alternative means of livelihood after the infrastructure facility construction. <br> • Increase in the connection to the grid of female/male-headed households placed nearby the energy infrastructure. <br> • Percentage of women and men who are aware of mitigation risks and measures relative to human trafficking, venereal diseases and HIV/AIDS in the project area |

| RELEVANT ISSUES | RELEVANT ISSUES |
|---|---|
| **Community participation strategy** | • Number or percentage of women and men involved in energy policy debates at communal level.<br>• Number or percentage of women and men in users boards.<br>• Number of ideas presented by women in debated or users boards.<br>• Percentage of ideas presented by women which are being followed in debates or users boards. |
| **Human resources planning** | • Number or percentage of women that occupy decision-making posts at strategic levels.<br>• Number or percentage of professional women (engineers, physicists, chemists, etc.) that work in the energy sector.<br>• Number of women that work in energy administration instances at national and communal level. |
| **Environmental** | • Number of women and men that take part in reforestation and Wood sustainable-use programs.<br>• Number of women and men that benefit from the trade of Emissions Reduction Certificates |
| **Financing** | • Number of female-male-headed households that receive financial support for their electric connection.<br>• Number of women/men that receive financial support for the purchase of home appliances or other modern energy technologies. |
| *The following points or indicators have been added* | |
| **Support to economic activities** | • Number of women that participate in new economic activities.<br>• Increase of food production for sale.<br>• Saving in the amount of necessary supplies for food sale.<br>• Increase of the number of female entrepreneurs in the energy sector (these activities may include energy technology vendors, internet cafes, etc.)<br>• Number of female electricians.<br>• Increase of the type and quality of services provided by female entrepreneurs thanks to the Access to new electric technologies (laundering, hair salons, dressmaking, etc.) |
| **Institutional capacity** | • Existence of a gender focal point in the ministry of energy<br>• Existence of a collaboration agreement with the ministry of women<br>• Number of gender experts that work in the ministry of energy<br>• Number or percentage of people that work in the ministry of energy who have been trained in gender issues |

*Based on: ESMAP (2013) and ENERGIA (2011b).*

## 4. Sources suplementarias de información

Usted puede encontrar más información sobre los temas abarcados por este módulo en las siguientes Sources:

• Bonino, M. and Bidegain, N. (2011). Gender mainstreaming in departmental and municipal public sources: a contribution to equality among men and women. FORTE, OPP and CIGCI project. Montevideo

• Clancy, J. (2009). Late Developers: Gender Mainstreaming in the Energy Sector. UKDSA Annual Conference, Colerain, 2-4 September 2009.

• ENERGIA (2005b). Module 2: Gender Tools for Energy Projects. The Gender Face of Energy: A Training Manual. Prepared by Elizabeth Cecelski and Soma Dutta for ENERGIA.

• ENERGIA (2005c). Module 3: Engendering Energy Policy. The Gender Face of Energy: A Training Manual. Prepared by Elizabeth Cecelski and Soma Dutta for ENERGIA.

• ENERGIA (2008). Turning Information into Empowerment: Strengthening Gender and Energy Networking in Africa. Leusden, the Netherlands.

• ENERGIA (2011b). Mainstreaming Gender in Energy Projects: A Practical Handbook. Prepared by Elizabeth Cecelski and Soma Dutta for ENERGIA.

• ILO (OIT) (2007). A Manual for Gender Audit Facilitators: The ILO participatory gender audit methodology. Ginevra.

• Levy, C. (1999). The Process of Institutionalising Gender in Policy and Planning: The "Web" of Institutionalisation. Working Paper No. 74. Development Planning Unit, University College London, Great Britain.

• March, C. et al. (1999). A Guide to Gender Analysis-Frameworks. Oxfam UK. Oxford, Great Britain.

• Mosser, C. (2005). An Introduction to Gender Audit Methodology: Its design and implementation in DFID Malawi. Overseas Development Institute. London.

• Sengendo, M. (2008). A Summary of the Gender Audit of Energy Policies and Programs in Botswana, Kenya and Senegal. Leusden, the Netherlands, ENERGIA.

• William, S. et al. (1994). The Oxfam Gender Training Manual. Oxfam UK. Oxford, Great Britain.

## 5. Practical exercises

The following exercises can be used to assess and reinforce the knowledge of the training workshop participants..

### Exercise 1:

### Equality: group debate[92]

Before beginning with the presentation or discussion of the module on energy policies and gender equality some concepts and terms should be debated with participants, as well as their perception of existing equality among women and men both in reality and in the legal framework of the country they live in. This discussion can be started asking a pair of simple questions, ten or fifteen minutes can be spent as an introduction to the discussions in this module.

The facilitator can ask participants these questions to generate discussion:

1. Are men and women considered equal by the legal system of your country?

2. Are men and women considered equal in the traditional system of your country? If this is not the case, how are men and women treated differently?

### Exercises 2:

### Linking gender and energy policies

To run the training workshop on gender and energy policies it is necessary to have a clear view of the energy policies of the country where it is conducted. A series of questions can be used to guide the discussion of these policies and the most relevant gender considerations for the context under analysis.

It is advisable to divide groups of no more than eight participants. The questions to be discussed can be handed out in a piece of paper or shown on the blackboard so that participants can refer to them during debates. Each group should appoint one person to inform on the analysis conclusions in the plenary. The participants' answers can be gathered in flipcharts. This exercise should take 60 minutes.

Guiding questions could include the following ones.

92 Larrea Castelo, S. (2013). p. 44.

1. Which are the energy priorities at national level?

2. Which are the energy priorities of women in your country?

3. How can we make women and groups of women participate actively and effectively in policy analysis?

4. How to improve access to energy resources/technologies by women in our country?

5. Which gender objectives do you consider should be priorities in existing energy policies?

**Exercies 3:**

**Identifying elements that can be included in an energy policy with gender equality[93]**

As it has been seen in this training module, there are basic issues related to the different energy needs of women and men, which are translated into different energy services and sources to address reproductive and productive needs and strategic interests of both sexes.

The following questions can be shared with the group of participants to encourage the discussion and identification of gender considerations that could or should be included in energy policies.

1. Why do you think ministries of energy do not include metabolic energy in their official statistics?

2. Do you think metabolic energy should be included in an energy policy with gender equality? Why?

3. Can you share examples of energy needs of women different to those related to energy domestic needs?

4. What do men need or use energy for? How are these needs different to those of women?

5. Which is the difference in your country in terms of energy access and control? Do these circumstances place women in a disadvantaged situation respect to men?

6. Do you think that the development of women in your country should imply working for the search of equality and empowerment of women? How do you think this could be carried out in the energy sector?

**Exercise 4:**

**Evaluating the existence of an enabling environment for gender mainstreaming in the energy policy**

The following matrix can be used to assess if the necessary conditions exist to conduct a gender mainstreaming process in the energy policy. In this way workshop participants can identify both the elements that facilitate this process as well as the possible limits or barriers for gender mainstreaming.

This exercise can be done individually or in groups, depending on the number of participants. Results should be shared with the group in the plenary, and room should be made to discuss outstanding aspects of those presentations (for example, if there are discrepancies in the score presented by one group or another, if there is new information or not considered by all participants, etc.)

Enabling environment for gender mainstreaming in the energy policy.

This exercise may need at least 30 minutes for discussion (if in groups) and another 30 minutes to present or discuss results in the plenary.

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**Enabling environment for gender mainstreaming in the energy policy**

| ELEMENT TO ANALYZE | 1 | 2 | 3 | 4 | 5 | EXPLAIN YOUR ANSWER |
|---|---|---|---|---|---|---|
| 1. Legislation on gender equity and political commitment | | | | | | |
| 2. Sensitizing and incidence | | | | | | |
| 3. Sex-disaggregated information gathering and use | | | | | | |
| 4. Gender institutional support | | | | | | |
| 5. Gender-disaggregated Budget | | | | | | |
| 6. Increase participation of women in energy sector | | | | | | |
| 7. Gender mainstreaming in ministry of energy | | | | | | |
| 8. Inclusion of energy roles and needs by gender | | | | | | |
| 9.Implementation, monitoring and assessment | | | | | | |

Score: 1 non-existent; 5 abundant

**Exercise 5:**

**Identifying elements of an energy policy with gender equality[94]**

This exercise was originally designed to be carried out as a bibliographical study and to include the interview of key staff of the Ministry of energy. It was also planned to gather information obtained through workshops with the aim of identifying in a participative manner the different elements that have been or can be integrated into energy policies so they incorporate gender considerations. Since it is possible that the training workshop is carried out as part of an assessment or gender mainstreaming process in the energy sector, this exercise could be included or adapted in a training workshop or its content illustrate different elements that can integrate an energy policy with gender equality.

The original steps to carry out this exercise include::

Step 1: identify the macro political objectives of the government

Step 2: identify the general categories of gender and energy considerations that should be answered.

Step 3: complete the matrix with political instruments and measures.

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93 Cited by Clancy, J. (2009).

94 Larrea Castelo, S. (2013).

**Matrix Of An Energy Policy With Gender Equality**

| Dimensions / Issues | Political aspects | Economic aspects | Environmental sustainability | Social equity and empowerment |
|---|---|---|---|---|
| Availability | | | | |
| Affordability | | | | |
| Security | | | | |

**Example of a worked matrix of an energy policy with gender equality**

ACCESS

| Dimensions / Issues | Political aspects | Economic aspects | Environmental sustainability | Social equity and empowerment |
|---|---|---|---|---|
| Availability | Instruments that support the supply of different energy options for the domestic and informal sector such as biomass, LPG, biogas, etc | Mechanisms to encourage providers to enter the domestic-energy supply market; for example, through the training of women and men to create and manage local ESCOs. | Promotion of clean energy sources; for example, through incentives to supply household with modern biomass sources. | Distribution and egalitarian access to energy services; for example, women are capable of influencing politics by enabling them to have access to high decision-making posts in the energy sector through vocational training. |
| Affordability | Mechanisms to reflect income and cash flow of women in fuel costs; for example, establishing requisites for LPG distributors to offer different-sized cylinders (and therefore prices) more in line with their economic capacities. | The pricing policy reflects income and cash flow of women; for example, in tariffs and paying methods. | Mechanisms stimulate the change towards renewable energy sources and technologies, for example, women have access to enough credit to purchase domestic solar systems | Increase of purchasing power through cost reduction in the energy bill at household level, and informal or small business -sector level. |

**Example of a worked matrix of an energy policy with gender equality**

ACCESS

| Dimensions / Issues | Political aspects | Economic aspects | Environmental sustainability | Social equity and empowerment |
|---|---|---|---|---|
| Security | Security regulations applied to work-saving home equipment (home appliances). | Pricing policies stimulate the change towards more secure energy sources and technologies; for example, change kerosene by LPG or biogas for cooking. | It promotes non-polluting technologies; for example, through information campaigns on the benefits of efficient-burning stoves. | The increase in the personal wellbeing and security are considered; for example, increasing street lighting to give more security to passers-by and to allow women to have evening activities. |

### Exercise 6: Identifying and creating indicators[95]

Indicators are necessary to measure the degree of success of any activity, in this particular case, energy policies. In this exercise, participants are asked to classify individually a list of indicators into qualitative or quantitative. Then, they are asked to read a fictitious case study and to develop a series of indicators to measure the specific results of the case in question. This second exercise can be carried out in small groups (2 or 3 participants per group) and takes around 30 minutes, followed by a discussion of the answers in the plenary.

_____
95 ENERGIA (2005c), p. 22.

Classify the following indicators into qualitative or quantitative:

Read the following summary of an energy program that, although its main objective is to benefit women, also generates opportunities for men..

The ministry of energy has decided to create a rural energy program to generate energy alternatives different to the use of biomass for women in rural areas. The aim is to improve the health of women and to reduce their work load by increasing the access to alternative sources. The program will deal with

| INDICATOR | TYPE |
|---|---|
| Number of connections to an electric grid | _____ |
| Women feel electricity has benefited their lives | _____ |
| Number of power blackouts | _____ |
| The kerosene supply has improved | _____ |
| Number of women that use LPG for cooking | _____ |
| Existence of an energy sector policy for domestic energy | _____ |
| Percentage of work done by men | _____ |

issues both at policy and implementation levels. At policy level, it is necessary to assess if all the necessary instruments exist to facilitate access to alternative sources of energy. One of the most important mechanisms to improve the access will be the establishment of local ESCOS. Another gender objective is to increase women empowerment by supporting them to become energy entrepreneurs. The government unit to support small businesses will conduct training courses for entrepreneurs or to manage local ESCOs with no previous experience in the field. Besides, it is expected that women can enjoy the increase of energy availability and start their own

productive activities in their free time, although the program will not conduct support interventions to these results.

The ministry of energy needs to develop some indicators to use in the monitoring of its program, which should measure the four following variables. Please use the list and develop a mix of quantitative and qualitative indicators presenting a maximum of three indicators per variable

| VARIABLE | INDICATOR |
|---|---|
| Political support for an energy policy with gender equality | 1. _____ <br> 2. _____ <br> 3. _____ |
| Institutional support for the business venture with gender approach | 1. _____ <br> 2. _____ <br> 3. _____ |
| Gender considerations at implementation level: local ESCOs | 1. _____ <br> 2. _____ <br> 3. _____ |
| Gender considerations at implementation level: users | 1. _____ <br> 2. _____ <br> 3. _____ |

# Module 3:

## Institutionalization of the gender perspective in organizations and institutions

# MODULE 3: GENDER IN ORGANIZATIONS AND INSTITUTIONS

## 1. The importance of including a gender perspective in the organizational culture

The institutions and organizations related to the energy sector and to the implementation of renewable energy projects should define which capacities or needs they have in their agendas to promote gender equality. Institutions, as social-order mechanisms, look for the wellbeing of society as a whole. On the other hand, organizations are social entities with a defined mission with strategic policies or principles and specialized functions that produce goods and services to satisfy a community's needs. Both of them reproduce the roles of men and women, keep gender gaps and contribute, in this way, to maintaining inequalities when a gender approach has not been mainstreamed.

### Which is the difference between institution and organization?

Institutions represent the set of guidelines, rules or standards –formal and informal – that show or define the social perceptions people have about their own needs and roles and those of others; while organizations are the ones that administer these guidelines, rules or standards and answer to these needs.

*Source: North, D. (1990).*

Institutions and organizations contribute to perpetuating gender inequalities through their own culture. Organizational culture is the set of values, beliefs, conducts and standards shared by people in an organization, which tells them what to do and how to distinguish between right and wrong. Each organization establishes, keeps and transforms its organizational culture, which is framed and permeated by the culture of the society in which it is inserted.

In Latin America the existing patriarchal culture has promoted inequality among men and women through socialization processes. These differences become apparent in the unequal use of power. Taken to the institutional field, women have fewer opportunities of holding management positions or of working professionally in "technical" fields such as engineering or chemistry, so their possibilities of participating in energy

institutions are reduced. As the study conducted by OLADE shows, few are the women who have achieved an important participation at institutional level in the energy sector, where only three countries show progress in the distribution of strategic decision posts. [1]

### Patriarchy

Patriarchy is a power structure, a way of domination whose paradigm is man. It is based on the supremacy of men and what is masculine, on the inferiority of women and what is female. It is also a domination system of men over other men, and of alienation among women. Our world is dominated by men. In it, women, in different degrees, are expropriated and subdued to oppression in a predetermined manner. In this order men are backed as owners and world leaders – in any social order -, they exercise control and dominance over women and children, and they are allowed to expropriate their creations and material and symbolic goods. The resulting world is asymmetric, unequal, alienated, male-oriented, misogynistic and homophobic in character. In it, the subject is not only the man but also the patriarch.

*Source: Lagarde, M. (1994).*

It is important to understand that inequalities among women and men are cultural and they should and must be modified. Gender mainstreaming in institutions and organizations linked to the energy sector is a process that allows for the creation of a reference framework with political, managerial and human support. This is fundamental for the success of an institutional deconstruction and construction process that seeks equality among people. The aim of this process is the creation of a fair culture that values and recognizes the role and contribution of men and women to the construction of societies. This culture should also guide the efforts so that in all actions and interaction spaces an equal-opportunity criteria prevails and a fair distribution of resources and benefits is achieved.

The incorporation of the gender perspective in the institutional culture may contribute to:

• Correct inequalities among women and men and reduce gender gaps.

• Maximize the impacts energy projects have on women and children.

• Contribute to the incorporation of a greater number of women to the energy sector, businesses, business ventures, projects or programs and enable women to occupy decision-making posts.

• Take advantage of the potential both men and women have and avoid discrimination against people.

• Promote a better working environment within the organization and fairer one among the staff.

• Train officers to answer gender concerns and opportunities.

• Sensitize the staff on the disadvantages women face to facilitate the creation of policies and programs in the energy sector that answer the differentiated needs and interests of women and men.

## 2. How to institutionalize the gender perspective?

Different strategies can mainstream the gender approach and can be adapted to the particular conditions of each institution and organization. These can help see the spheres of influence where this process can be started. For example, Levy (1999) shows in her "web of Institutionalization" model at least 13 linked entry points; it is necessary that all of them are activated so gender equity and equality can be a regular part of the practice of institutions and organizations in the long term (Fig. 4). With the aim of promoting equity and equality, there are particular techniques and associated actions for each of the 13 elements. In the process of change that the gender institutionalization requires the underlying power relations in these elements should be taken into account as well as the opportunities and resistance that can be found.
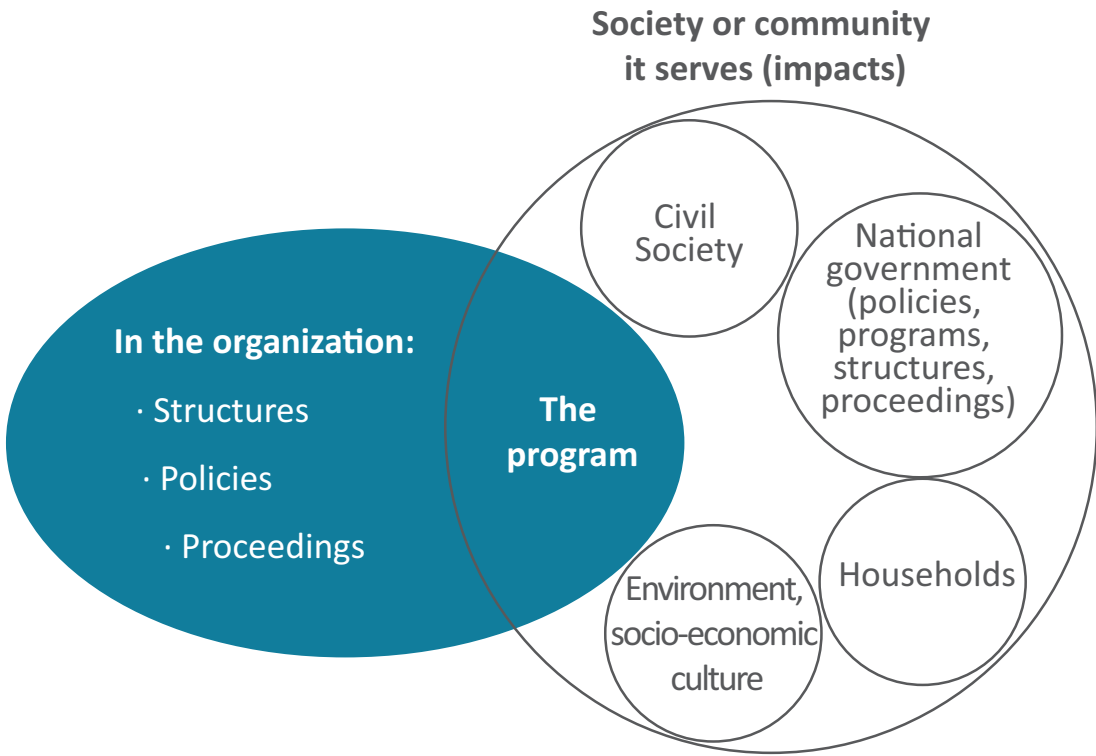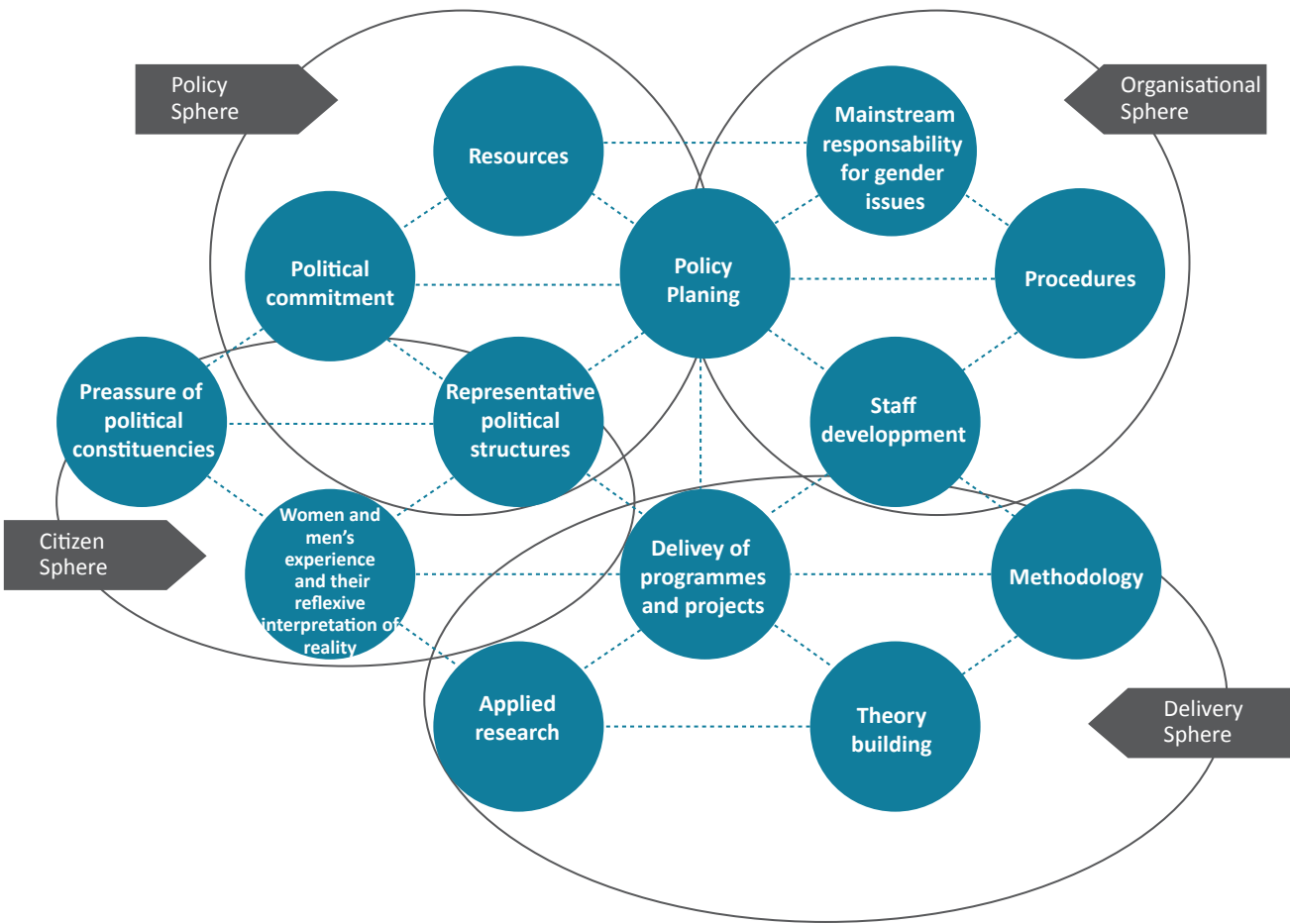




The institutionalization of a gender approach in organizations is a systemic process that needs to make changes. This process has many stages and initially the organization should establish the need to change attitudes, values and conducts that have prevailed. Later on capacities should be developed in order to define new attitudes, values and conducts that generate a fairer and more egalitarian environment. Finally, normative, cultural and structural measures are established to maintain the change in the organization.

These are some of the required steps to conduct the institutionalization process:.

• Organizational assessment

• Elaboration of a gender institutional policy

• Creation of an action plan for the institutional policy

• Establishment of a gender-sensitive working environment.

## 3. Institutional assessment

The gender institutionalization process may have different triggers, these include sensitizing processes, gender equity training or legislation that establishes the need to institutionalize the gender perspective in the sector. As it has been shown in the previous module, many countries have signed the Beijing Platform for Action from the Fourth World Conference on Women, which calls for integration of the gender perspective in government plans, programs and projects. These and other international commitments may lead to the creation of equity polices at national level that promote gender institutionalization process both in private and public sectors.

Any organization or institution willing to start the institutionalization process of a gender approach should first conduct a self-assessment evaluation. Such an assessment will inform the degree to which gender approaches are institutionalized (structures, practices and people) and provide inputs for defining gender gaps, action areas and staff training needs, and a baseline to measure progress on the gender institutionalization process, among other things.

The self-assessment is crucial for learning about the possibilities and problems of each institution or organization. Existing tools to conduct a gender institutional assessments include:

- Informative sessions and interviews with the staff
- Self-assessment questionnaires
- Gender balance analysis within the institution.
- Strengths, opportunities, weaknesses and threats analysis during a participative workshop.
- Gender budget.

When there is a need for collecting information for assessing e the institutions or organizations, the decision on which tool or methodology to use is determined by factors such as: the aspects and questions to answer, time and funds available, and the capacity of the group or team in charge of the process. Therefore, the use of one or the combination of different institutional analysis tools will depend on these factors.

### Institutional analysis findings

Four Central American organizations devoted to energy issues conducted a quick institutional assessment as part of a practical exercises done during the Regional Workshop on Gender and Energy Training in Central America, organized by IUCN, OLADE, and ENERGIA in March 2013. The findings of this institutional analysis are listed below:

| ELEMENTS ASSESSED | MAIN RESULTS |
| --- | --- |
| Gender balance and experience | • There is gender balance in the organization's membership.<br>• There are no gender experts or women organizations involved.<br>• Only one member of an organization has taken part in gender equality training.<br>• Technical staff usually values the gender approach, but has not a clear idea of concepts and is not capable of giving examples of activities in its work where the approach is applied. |
| Sex-disaggregated information | • Activities planning and monitoring do not gather information on participation and impact on women and men and their action strategy does not adjust to the differentiated conditions both present. |
| Defining what gender means | • En las instituciones se define el rol de las mujeres desde la perspectiva de beneficiarias: las mujeres son beneficiarias de cocinas mejoradas.<br>• Se incentiva poco a las mujeres para que desempeñen nuevos roles en la toma de decisiones, manejo, producción y mercadeo de cocinas. |

*Source: ENERGIA, OLADE and UICN (2013).*

### 3.1. Analysis using the institutional web

As it has already been mentioned in this guide, the gender analysis methodologies proposed by Levy are well-known globally. In table 1 and following the model of the gender institutional web approach, a list of areas to be examined is presented, as well as the tools and sources of information which can be consulted to conduct an institutional analysis.

### Table 7. Areas of research for gender self-assessment

| RESEARCH AREAS | POSSIBLE QUESTIONS TO LOOK FOR THE NECESSARY INFORMATION | TOOL OR METHODOLOGY TO USE |
| --- | --- | --- |
| Political sphere | • Is there a gender policy?<br>• Is there a policy implementation plan?<br>• What role does equality promotion play in institutional policies?<br>• In which institutional policies has gender equality been incorporated?<br>• What percentage of organizational budget is marked for actions that promote gender equality?<br>• What is the organization power-structure like?<br>• Which is the gender balance in decision-making posts or structures, at professional level? And at the level of field-project working staff?<br>• In which spaces and levels is the gender issue dealt with? By whom? | • National regulation on gender and energy equality<br>• In-depth interview with management, administrative and field staff.<br>• Individual questionnaire<br>• Workshop with staff<br>• Work with focal group |
| Implementation sphere | • Is there a person or group of persons acting as gender focal point in the organization?<br>• Is there gender criteria established to elaborate project proposals?<br>• Are gender equality and social equity included specifically in the strategic planning, proceedings, standards, management and policies of staff, salaries and rules?<br>• How is gender equality respected in institutional practice and management?<br>• Do women and men in the organization have the necessary skills; technical means, information and materials, and access to training, among other things, to incorporate gender issues in their work?<br>• Are women and men in the organization motivated? Do they assume a personal commitment in relation to gender equality?<br>• How does the organization understand personal development for both women and men?<br>• Do communication products show stereotypes and face gender as a topic? | • Action plans and work.<br>• In-depth interview with management, administrative and field staff.<br>• Individual questionnaire<br>• Workshop with staff<br>• Work with focus group |

| RESEARCH AREAS | POSSIBLE QUESTIONS TO LOOK FOR THE NECESSARY INFORMATION | TOOL OR METHODOLOGY TO USE |
|---|---|---|
| Implementation sphere | • Is the application of gender-sensitive working methodologies promoted? <br> • Is there sex-disaggregated information? Are there gender indicators? <br> • Is knowledge generated on how to incorporate the gender approach in programs and projects? <br> • Is equal participation of women and men promoted in programs and projects? <br> • Are experiences systematized taking gender equality as an axis? | • Use of a check list to verify the inclusion of the gender approach in the project cycle (justification, beneficiary groups, objectives, goals, activities, indicators, proposed risks, monitoring and assessment, communication, alliances). <br> • Rapid participatory assessments. <br> • In-depth interview with management, administrative and field staff. <br> • Individual questionnaire <br> • Workshop with staff <br> • Work with focal group |
| Social sphere | • Does the organization have alliances with the entities that apply a gender approach? <br> • Does the organization promote women empowerment and gender sensitization on men? <br> • Are there networks of women organizations or groups created by the institution? <br> • Do women and men linked to the organization carry out advocacy actions to promote gender equality? <br> • Are there people outside the organization who provide gender sensitive influence to the organization's work? | • Interviews with beneficiary groups or allied associations. <br> • In-depth interview with management, administrative and field staff. <br> • Individual questionnaire <br> • Workshop with staff <br> • Work with focal group |

## 3.2. SWOT analysis

Another available and useful tool to assess the inclusion of the gender dimension in an organization or institution in the energy sector is SWOT analysis. The SWOT exercise should be conducted with a group from the organization staff and management. This tool can be modified so it identifies the links between gender issues and the aspects belonging to each category. The articulation of the gender approach can be achieved analyzing categories in the following manner:

**Strengths:**

which are the internal aspects of the organization or institution that have proven effective to work using a gender approach? These aspects can include project activities, programs, policies, work methodologies, establishment of gender indicators and experts on the subject.

**Opportunities:**

which are the external aspects that can help overcome weaknesses and capitalize or increase strengths?

**Weaknesses**

which are the internal aspects of the organization or institution that have not been effective or have prevented the application of the gender approach?

**Threats:**

which are the external factors or conditions that can reduce the range of opportunities for change?

### SWOT as institutional analysis tool by OLADE

OLADE ran a SWOT analysis of the organization and the Latin American and the Caribbean energy sector. Through this exercise inputs were obtained to identify components, results, activities, goals and indicators necessary to measure changes, on the basis of key elements of gender analysis, and the gender gaps identified with respect to participation, access to and control over energy resources by women. In the process it was analyzed which actions could be useful to overcome threats and weaknesses.

| INTERNAL | STRENGTHS **+** | WEAKNESSES **-** |
|---|---|---|
| | OLADE has a gender advisor. <br><br> There are some manuals on the subject. Some projects include the link between the gender and energy issue. <br> There is a government policy and a report on the gender situation. <br> There is a high degree of commitment in OLADE to support gender equality. <br> Some international agencies and cooperatives support the gender issue. <br> OLADE has communication systems to support the work. | Limited trained staff in the region. <br> In general ministries of energy do not have gender budget. <br> There are no statistic indicators that link gender and energy in the region. <br> There are few examples in the region of gender approach implementation. <br> It is a new subject with low priority for some sectors. <br> It is a traditionally male-dominated sector. <br> There is opposition in some countries since energy issues are considered a merely technical matter. |

| INTERNAL | STRENGTHS **+** | WEAKNESSES **-** |
|---|---|---|
| | There are gender equality laws or favorable regulations in some countries that require the gender mainstreaming in all sectors, including all spheres of the energy sector. <br> Countries like Uruguay, where advancements have been made and there are experiences to share. <br> Openness and interest of several countries of the region. <br> Some technical entities or organizations of civil society in the sub-regions that have worked on gender equality linked specifically to renewable energy. | The countries' economic crisis may affect the internal budget to support the gender mainstreaming approach in the energy sector. <br> Frequent changes in government staff. |

**ALTERNATIVES**

| STRENGTHS/ OPPORTUNITES | · Organize and share successful experiences. <br> · Achieve the political commitment of energy ministries and sectors with the aim of linking gender and energy. <br> · Technical advice to countries which are interested in working with a gender approach. <br> · Creation of networks of experts and link them to people and institutions identified in each region. |
|---|---|
| WEAKNESSES/ OPPORTUNITES | · Train staff in the sector so they develop skills and capacities to incorporate the gender approach. <br> · Share experiences on the application of a gender approach in sub-regions with the aim of learning from each other. |
| STRENGTHS/ THREATS | · Establish regional networks of people with the aim of supporting the institutionalization of a gender approach in countries, to avoid dependence on only one person in each ministry. |
| WEAKNESSES/ THREATS | · Manage project funds well. <br> · Seek other external supports for "strategic activities". |

*Source: Larrea, S. (2012).*

## 3.3. Self-assessment questionnaire

As part of the institutionalization process of gender considerations, an institutional self-assessment should be done because it can help understand existing perceptions on the gender approach and its mainstreaming. Although there are different ways to carry out a self-assessment, it is included in this section an example of a questionnaire designed to identify information in energy-sector organizations, so that the gathered data can be used as input for group discussions at institutional level. The questionnaire includes four categories of questions:

• Operative questions and technical capacity (including the commitment by the institution's management)

• Organizational issues and institutional culture

• Forward planning

• Open questions

An example of the questionnaire is presented below. It makes reference to the existence of a gender policy in the energy-sector institution, so It should be modified if it is used in an organization that lacks this kind of policies.

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**Self-assessment institutional questionnaire: exemplification**

In order to complete the questionnaire in the correct manner, it is necessary to ask the person responding to choose only the most appropriate answer for each question.

**Self-assessment questionnaire**

**Operative questions and technical capacity**

1. Do you understand what gender mainstreaming means in the energy sector?
- 3. Completely
- 2. Adequately
- 1. Inadequately
- 0. Not entirely

2. Do you know the gender mainstreaming strategy of your institution?
- 3. Completely
- 2. Adequately
- 1. Inadequately
- 0. Not entirely

3. Do international, regional or national gender commitments influence your work?
- 3. Completely
- 2. Adequately
- 1. Inadequately
- 0. Not entirely

4. In your opinion, in what degree does your institution include gender mainstreaming in its policies and programs?
- 3. Completely
- 2. Adequately
- 1. Inadequately
- 0. Not entirely

5. How well do you think your institution implements the gender considerations included in its policies and programs?
- 3. Completely
- 2. Adequately
- 1. Inadequately
- 0. Not entirely

6. How many of the documents that constitute the gender mainstreaming strategy of your institution have you read?
- 3. All Of Them
- 2. Most Of Them
- 1. Some Of Them
- 0. None Of Them

7. How much have you being involved in gender mainstreaming activities of your institution?
- 3. Completely
- 2. Adequately
- 1. Inadequately
- 0. Not entirely

8. Does the institution offer enough opportunities (capacities building, workshops, technical support, documentation) to strengthen your knowledge on gender considerations in your profession or technical area?
- 3. Completely
- 2. Adequately
- 1. Inadequately
- 0. Not entirely

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9. Do you think there are tools or techniques available to conduct the gender mainstreaming process in your work?
- 3. Completely
- 2. Adequately
- 1. Inadequately
- 0. Not entirely

10. How capable is your institution of providing enough practical information on the use of the necessary instruments to carry out a gender analysis?
- 3. Completely
- 2. Adequately
- 1. Inadequately
- 0. Not entirely

11. How capable are you of introducing gender considerations in the different design and implementation stages of programs and projects?
- 3. Completely
- 2. Adequately
- 1. Inadequately
- 0. Not entirely

12. Do you think it is important to incorporate gender results in reporting procedures of your program or project?
- 3. Very important
- 2. Important
- 1. Not very important
- 0. It is not important

13. How often do you integrate gender considerations in an explicit manner in your work?
- 3. Always
- 2. Often
- 1. Sometimes
- 0. Never

14. Do you use sex-disaggregated information in an explicit manner in your work?
- 3. Always
- 2. Often
- 1. Sometimes
- 0. Never

15. Is the equality of gender mainstreaming monitored in mid-term, annual, biannual performance reports or other implementation reports?
- 3. Always
- 2. Often
- 1. Sometimes
- 0. Never

16. How often do you maintain conversations on gender policy with organizations that serve as projects counterparts?
- 3. Always
- 2. Often
- 1. Sometimes
- 0. Never

17. Do you use external experts for gender issues (gender consultants, technical support, etc.)?
- 3. Always
- 2. Often
- 1. Sometimes
- 0. Never

**Organizational questions and institutional culture**

1. Does your organization have an active policy that seek gender equality and respects diversity in aspects such as decision-making, conduct, work ethic, information, etc.? If this is the case, how would you rank its effectiveness?
- 3. Excellent
- 2. Adequate
- 1. Inadequate
- 0. Not having that policy

2. Does the organization do enough to discourage expressions of inequality and gender stereotypes?
- 3. More tan enough
- 2. Enough
- 1. Not enough
- 0. Does nothing

3. How much attention does the institution pay to secure respectful relations among women and men on the workplace?
- 3. Not much
- 2. Some
- 1. Not enough
- 0. Not pay attention

4. How many activities have you performed to identify gender gaps or problems in the energy sector?

- ○ 3. Many
- ○ 2. Few
- ○ 1. Very few
- ○ 0. None

5. Were you informed during the selection process (recruiting, interview, etc.) that gender mainstreaming is an important strategy for the institution?

- ○ 3. Completely
- ○ 2. Adequately
- ○ 1. Inadequately
- ○ 0. Not entirely

6. Are the results of gender mainstreaming used as indicators in your job performance assessment?

- ○ 3. Always
- ○ 2. Often
- ○ 1. Sometimes
- ○ 0. Never

### Forward planning

1. Do you think it would be useful to establish a gender work group within the institution?

- ○ 3. Yes, very useful
- ○ 2. Yes, a little useful
- ○ 1. Not very useful
- ○ 0. Not useful at all

2. Do you think it would be useful to establish a gender focal point within the institution?

- ○ 3. Yes, very useful
- ○ 2. Yes, a little useful
- ○ 1. Not very useful
- ○ 0. Not useful at all

3. Do you think it is important to adopt a goal of at least 30% female technical staff?

- ○ 3. Very important
- ○ 2. Important
- ○ 1. Not very important
- ○ 0. It is not important

### Open questions

1. If you answer to the last three questions is yes or very important, please explain why.

2. Are there any other gender considerations at work level (proceedings, conduct, infrastructure, etc.) that you consider worth mentioning in this assessment? Please explain:

3. Do you think capacity building on gender mainstreaming is useful? Please explain and specify the type of requisites you would like to have in this kind of training:

*This is an anonymous survey; however, we would appreciate if you could choose one of the following categories:*

Sex:     Woman ○     Man ○

Post:     Plant employee: ○     Management ○     Consultant/Advisor: ○

*Modified from: ENERGIA (2010).*

Exercise 4 of this Module entitled "Rapid institutional assessment matrix" has been designed to analyze an institution during a participatory workshop. The table identifies elements that will inform the institutional capacity to be part of a gender mainstreaming process, which include::

- Institutional mandate
- Institutional capacity and sensitivity
- Responsibilities and transparency
- Rules and procedures
- Effectivity and effectiveness

## 4. 4.  Institutional gender policy

Once the self-assessment is done and the link established between the institution action field and the gender perspective, many organizations decide to strategically elaborate a gender equity and equality policy, and even they propose affirmative action measures for its enforcement.

### What is a gender equity and equality institutional policy?

A gender equity and equality policy is a set of guiding, ethical principles, with measures and actions structured in a logical, systematic and continuous manner. The objective is to promote gender equality among people, promote more equal relations, personal growth and in general build new powers that promote more democratic and inclusive social relations.

It is important that the gender equality policy is translated into a document that shows the intention and commitment of the organization. A policy statement has the following characteristics:

- It is not a long document; generally 3 to 10-pages long.

- The intention and commitment of the institution to incorporate gender equality is shown.

- It is accompanied by an action plan with results and indicators, from which specific action plans can be drawn by department or subjects.

- The policy statement should be legalized according to the proceeding established by each institution.

- The thematic relation of the institution the gender equality approach is shown, in the case of institutions, it should be legalized.

*Source: Aguilar, L. et al. (1999).*

To elaborate an institutional gender policy, staff from different levels of the institution should participate, and both external and internal work spheres should be included. The elaboration of such policy will require economic resources, gender-sensitive staff and time.

### Process to elaborate an institutional policy

The elaboration and adoption of a policy requires:

- The capacity of the organization to identify and understand the gender dynamics operating in it and the collective will to carry out a sustained learning process.

- The identification, at the beginning, of the problem and its scope, for example: why are relations among women and men unequal within the organization and to what extent is this so?, what type of gender relations are molding institutional values, and the objectives and policies the organization promotes?

- The establishment of mechanisms that guarantee a collective learning, with communication channels and means adequate to this end, by sensitization and training processes.

- The need to change felt by a group of men and women from the staff, in such a way that equity as a guiding objective becomes an institutional one.

- The staff sensitization is key so that these people are interested in the subject and deal with it with communities, neighborhoods or sectors where they work.

- Establishment of deadlines. Although it is true that the equity building process takes years, organizations should have concrete deadlines in

order to fulfill each step. What wants to be achieved, when and how should have been identified precisely so that new goals can be identified.

*Adapted from: Blanco and Rodríguez (2003).*

The guide below is presented to elaborate the content of a gender equality policy statement.

**Guide for the elaboration of a policy statement**

**What aspects does the policy statement have?**

• An introduction with a brief summary of the policy and its intentionality.

• Title of the declaration.

• Long-term mission or objective of the institution (raison d'être)

• Theoretical basis where the institution recognizes:

- Its mandate based on international declarations and covenants (for example, Earth Summit –Agenda 21, IV World Conference on Women) or national laws linked to gender equity and equality promotion.

- What is understood by gender?

-The relation among gender equity, natural resources and energy in particular, expressed in the use, management, access and conservation of these resources.

- The relation between gender equity and equality as human rights.

• Management of equal opportunities within the institution or organization (which decides whether it will be part of the declaration).

• Integration of gender equality in the institution or organization

• Brief explanation of how the integration will be carried out (methodology).

• Entry points or priorities (if the institution or organization considers it pertinent).

*Adapted from: Aguilar, L. et al. (1999).*

The establishment of a gender equality policy will have implications in the internal and external spheres of organizations and institutions. This module references in more detail the internal component. Meanwhile, Module 4 presents four actions, strategies, indicators and other aspects related to energy project implementation from a gender perspective, which are directly linked to the external projection of the organization or institution.

Below a short case study is presented on the gender policy design of a Nicaraguan development organization called La Cuculmeca, which promotes energy access in communities where it works.

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**Rights-based gender and generational policy of La Cuculmeca**

Source: Nereyda González Soto,
Director of Knowledge Management

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La Cuculmeca is a member organization of the Gender and Energy Network of Nicaragua. It's Rights-based Gender and Generational Policy was approved in 2010. For its implementation a medium-term-application strategy was elaborated and its actions are included in its Annual Operational Plan which is assessed and adjusted on a yearly basis and where energy access related actions are promoted taking into account what the policy establishes as its strategy.

In its policy, La Cuculmeca establishes what it understands by gender and generational approach: a way to face life that enables visualizing, changing and improving the situation, position, capacities, resources, opportunities and between women and men according to their stages in life, which societies historically build on the basis of specific gender and generational aspects.

The general objective of the policy is for La Cuculmeca to help women and men of different ages to recognize and value each other, and to integrate fairly in Human Sustainable Development processes. The political commitment of the institution with gender, generational and rights-based approaches means these are reflected in its strategic and institutional regulatory framework, in the institutional budget, in human resources management, in the commitment and coherent conduct of the

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The general objective of the policy is for La Cuculmeca to help women and men of different ages to recognize and value each other, and to integrate fairly in Human Sustainable Development processes. The political commitment of the institution with gender, generational and rights-based approaches means these are reflected in its strategic and institutional regulatory framework, in the institutional budget, in human resources management, in the commitment and coherent conduct of the staff, in training and sensitizing strategies, and in the incorporation of gender approach in the project cycle they implement.
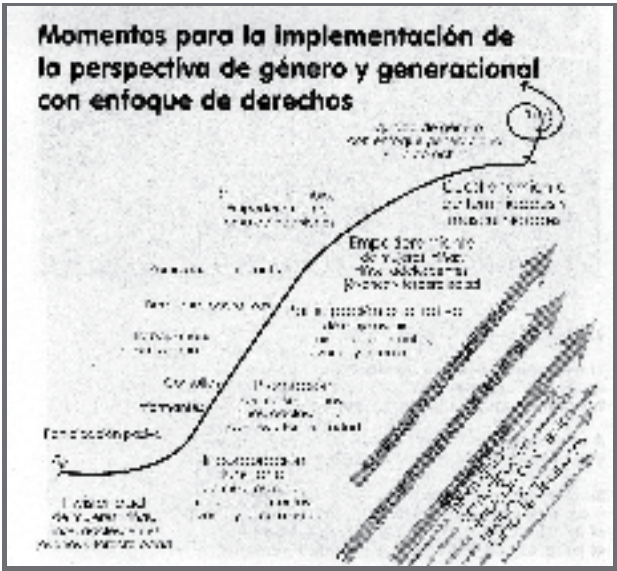


The following drawing shows the different implementation stages of the rights-based, gender and generational perspective with rights approach that La Cuculmena has outlined.

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## 5. Action plan of the institutional gender policy

With the aim of making the policy operational, it is necessary for the institution or organization to draw an action plan. Theoretical and base positions expressed in the policy are retaken in this plan. An input to be taken into consideration when developing the action plan is the results of the exercise on the institution's weaknesses and strengths with regards to mainstreaming a gender approach. These elements give a picture of the present situation in the institution.

The plan elaboration process first identifies which is the desirable future, and to do so the following questions are asked: where does the institution or organization wants to arrive in terms of gender? What would the institution or organization be like if gender equality is incorporated in a cross-cutting manner? From the answers to these questions people participating in the plan elaboration establish steps to follow, which can guide them in the achievement the desirable future. The following figure shows what has been previously explained:
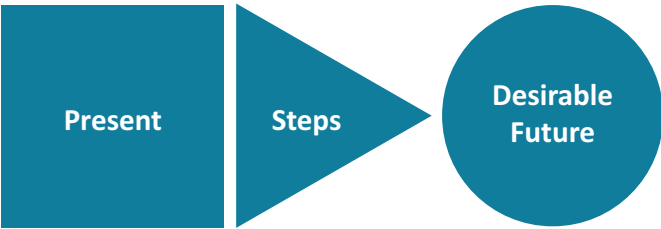


Figure 6: Action plan elaboration process of a gender institutional policy

The action plan is a strategy to achieve what the policy outlines. The plan has objectives, which are taken from the steps established in the process mentioned before, then short, medium and long-term activities and goals are established as well as the appropriate indicators. As appropriate, the plan activities can be resumed by departments, units or subjects to perform more concrete actions included in annual work plans.

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**Guide to elaborate an action plan**

**Which aspects should an action plan contain?**

An action plan should at least have the following content::

• An introduction, which includes:

o The mission and vision of the institution

o The origin of the action plan

o How it fits within the history of the institution.

• Theoretical basis (taken from the policy)

o Its mandate result of Rio, Beijing, and

United Nations Framework Convention on Climate Change or national laws.

o   What is understood by gender?

o   The relation among gender equality, natural resources and energy in particular, expressed in the use, management, access and conservation of these resources.

o   The relation between gender equity and equality as human rights.

• Manner in which the action plan will be developed.

• Long-term objectives and specific objectives.

• Strategy to achieve the objectives:

o   Express the situation that leads to that objective.

o   Activities, goals and specific products by objective.

o   Indicators that show progress towards the achievement of gender equality.

o   Assessment and sex-disaggregated monitoring system.

• Structure of entities in charge of implementing and monitoring the action plan:

o   Gender unit or gender action group

o   Person in charge.

o   Role of women offices in the country (in the case of institutions).

o   Institutional changes required for plan implementation.

• Necessary resources::

o   What does the institution provide?

o   What is required in terms of external support (financial, human, material, methodological, training, strategic alliances with other gender experts institutions, among others)?

*Adapted from: Aguilar, L. et at. (1999).*

One of the most important elements for institutionalizing the gender approach is the existence of a focal point or, even better, a gender unit at institutional level. This person or persons are part of the energy institution staff and their responsibilities include guiding the gender mainstreaming process, supporting management and staff in general to implement the gender approach in their daily work, and contributing to monitor progress and report on gender mainstreaming activities. These and other responsibilities of the focal point or gender unit, as well as its mandate and specific raison d'être, should be clearly expressed in the Terms of Reference (ToR) developed for those posts. Likewise, the work time devoted to these tasks (for example, full time, half time, etc.) can also be expressed in those ToR.[96]

### Gender focal point profile

It is ideal that the person functioning as gender focal point, or those part of the gender unit, have experience in running those mainstreaming processes. However, it is not always possible to find such a person within an organization. If this is the case, the person appointed as focal point should have the opportunity to be trained and develop professionally through its post as focal point while receiving support and advice from a gender specialist.

*Based on: ENERGIA (2011a).*

The focal point or gender unit should report their activities directly to the institution's management and above all have the support of management. This last point is crucial; without the explicit and tangible support of the institutional management, it is very difficult for a gender institutionalization process to be successful since it requires the identification of human and financial resources. But above all, it calls for a change in the institutional culture that can only be carried out through a coherent process, backed up by all institutional levels, or otherwise with measures for management to enforce the new mandates and proceedings.

The following box shows the mandate and possibilities of a Gender Unit, in this particular case in the Ministry of Energy and Mines of Nicaragua.

The formulation of affirmative actions is a mechanism that also allows for the materialization of politics into actions. Affirmative actions present a variety of options

96 Cited by Larrea Castelo, S. (2012).

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### Ministry of Energy and Mines of Nicaragua – Gender Unit:
**institutionalizing the gender approach in Government Institutions, especially in the energy and mines sectors**

Source: María Gabriela Chavarría,
Responsible for the Gender Unit,
Ministry of Energy and Mines of Nicaragua.

The Gender Unit of the Ministry of Energy and Mines of Nicaragua (MEM) is created in 2013 answering the requirements of the Citizen Power model that the Government of Reconciliation and National Unity (GRUN for its acronym in Spanish) promotes since 2007. This model is person-centered and has as a main axe the economic development to overcome poverty; it also contributes to the construction of positive conditions and the elimination of obstacles so that equality among men and women is effective and real.

The unit is created as the responsible instance for coordinating, advising and assessing the implementation of a gender approach in each of its areas, through the promotion, education and awareness-raising of women and men, that allow for new human relations based on equality, equity and justice. There are strategic guidelines that support the creation of Gender Units within Government institutions. The following are some of these guidelines:

• The Political Constitution of Nicaragua
• The Human Development National Plan
• The Government Gender Policy
• Legal basis

o Act No. 648 "Equal Rights and Opportunities Act"
o Act No. 612 "Reform Act and Addition to Law 290, Executive Power Organization, Competence and Proceedings Act."
o Act No. 779 "Comprehensive Act Against Violence towards Women"
o Act 476 "Civil Service and Administrative career Act"
o Act 40 and 261 "Municipality Act" (promotes 50-50).

• GRUN programs and projects (Usura Cero, Hambre Cero, Plan Techo y Bono Productivo-Alimenticio)
• Gender Units Organizational Manual.

Some of the functions the Gender Unit has to perform are::

1. Guarantee the gender equality approach is incorporated throughout the design, formulation and development process of policies, programs and plans of the institution.
2. Support the elaboration of gender indicators and instruments that can be used for the control and registry of sex-disaggregated information, policies, plans and programs with gender practices, which can help in decision making.
3. Provide methodological and technical assistance for the application of gender practices in national planning processes.
4. People working in the Gender Unit should oversee the development of training processes directed to the ministerial staff on different themes, with the aim of strengthening their capacities for the empowerment and defense of their rights, oriented to human development and social wellbeing.
5. Accompany the different areas and directions of the institution to implement an inclusive language in all documents and publications, studies and research, monitoring and assessment of gender practices.
6. Organize and conduct activities such as fora, meetings, celebration of commemorative dates and participation in national and international events such as conferences, workshops, fora, meetings and debates related to gender

The person in charge of the Gender Unit will perform some of the following priority actions to start the gender approach institutionalization process in the MEM:

• Check the institutional mission and vision in order to guarantee the inclusion of the gender approach in them.
• Boost the policy elaboration and planning process in the energy and mines sector that guarantee the gender mainstreaming process in the ministry.

• Foster sensitivity and updating of executive positions so that they support and facilitate the application of gender practices in different ministerial areas.
• Secure the gender approach in Posts Classification and Human Resources Management System.
• Modify functions, proceedings and regulations so that they contain an inclusive language.
• Elaborate sex-disaggregated statistics and gender indicators that describe the ministerial staff and are related to the energy and mines sector.
• Design and implement a gender training program for the ministerial staff.
• Promote communication and dissemination without discriminatory language.

From the initial work of the Gender Unit it has been noticed that the gender approach is mainstreamed through: the gender analysis as a methodological tool for assessments and the national context, the use of affirmative actions when necessary to reduce gender gaps, request the ministry of finance for budget allocation to finance actions for equity and equality promotion among women and men, and finally the gender policies elaboration within the energy and mines sector

The MEM Gender Unit will have a Gender Commission which will function as a consulting, proposing and exchange body, to support, advice and accompany that Unit in the institutionalization and mainstreaming process of gender practices in the Ministry. Some of the functions this commission performs are:

1. Contribute to the design and implementation of the sensitization and training program on gender practices at institutional level.
2. Support the person within the Gender Unit responsible for assessing the labor conditions of the people working in the institutions and ensuring their equal opportunities and rights.
3. Define together with the person responsible for the Gender Unit the gender indicators and the plans, programs and projects that will be monitored in the budget formulation process and show the gender expenditure at institutional level.
4. Guarantee the inclusion of gender practices in policies, rules, proceedings and regulations of the Ministry.
5. Support the person responsible for the Gender Unit in monitoring gender practices implemented at national level.
6. Review and provide feedback on technical and financial reports presented by the Gender Unit.

## Equal Rights and Opportunities Commission of the Ministry of Industry, Energy and Mines of Uruguay

Source: Gonzáles, R. (2014).

The search for gender equality in Uruguay has promoted the creation of the Equal Rights and Opportunities Commission of the Ministry of Industry, Energy and Mines of Uruguay (MIEM), in charge of coordinating gender mainstreaming activities in the institution, as part of MIEM activities under the Equal Rights and Opportunities National Plan (PIODNA for its acronym in Spanish). Some of the specific actions MIEM has to conduct as part of the first PIODNA are:

• Development of measures to achieve full participation of women in politics.
• Development of capacities for equality and non-discrimination of all civil servants.
• Development of measures that integrate gender mainstreaming in public administration actions.
• Development of institutional mechanisms for equality and non-discrimination.
• Development of measures that contribute to a fair distribution of family responsibilities.
• Development of measures that broaden and strengthen active work policies for women.
• Development of measures to eradicate sexual harassment at work.
• Development of measures to effectively reduce vertical and horizontal segmentation in the work market.
• Development of measures that promote equal opportunities in urban and rural family production.
• Development of measures to increase women participation in innovation processes.

such as training, preferential treatment measures, quotas, incentives and promotion of a friendly organizational culture for women with more democratic and fair relations.

### Affirmative actions

These actions constitute a strategy destined to achieve equal opportunities, through measures that allow contrasting or correcting those discriminatory situations or gender gaps resulted from social practices or systems. These measures can be adjusted to the reality of organizations, institutions and their projects.

These affirmative actions require the effective support of the energy institution management in order to be accomplished. In some cases, neither the management nor the rest of the staff understands how important it is to secure the institutionalization of the gender approach and they even do not consider it as their own. This is why, apart from the affirmative actions, it is also advisable to include specific objectives or goals for management support and the staff performance, that may be accompanied with incentives that recognize the change towards a performance with greater gender sensitivity. These instruments are crucial for creating a framework that enables gender sensitization and capacity building in an organization and can include the quantitative assessment of the increase (or not) of gender-sensitive activities, as well as the results produced by the management and the staff.

The following matrix exemplifies the way in which a gender action plan can be created at institutional level. It was elaborated taking into account different experiences and known cases by the authors of this guide.

**Institutional Action Plan: Example**

| OBJECTIVE | PRODUCT | ACTIVITIES [127] | EXPECTED RESULT | INDICATORS | MEANS OF VERIFICATION | BUDGET [128] |
|---|---|---|---|---|---|---|
| Existence of an entity responsible for gender mainstreaming at institutional level. | Gender unit (depending on the size and resources of the organization a focal point instead of a gender unit can be considered) | • Define ToR for the Gender Unit. • Identify the budget content destined to finance the activities of the Gender Unit. • Hire experts to work in the Gender Unit. • Develop an action plan for the gender unit. • Gender training for institution staff | A Gender Unit that has the necessary human and financial resources to secure the mainstreaming process at institutional level | • Approved ToR. • Approved budget. • Hired Gender Unit staff. • Written action plan. • Number or percentage of women and men trained on gender concepts. | • ToR • Budget • Contracts with the Gender Unit staff. •Action Plan. •Gender workshop reports that include lists of participants | |
| Recruiting policies and human resources management with gender equality | Human resources unit with gender sensitivity. | • Development of recruiting ads and ToRs with gender sensitivity. • Development of a performance incentives system for with gender sensibility. | A working environment with greater gender sensitivity with equal opportunities for the professional growth of women and men. | •Increase the number of women recruited. •Number of women and men that receive incentives for their gender-sensitive performance. •Number of women and men working with flexible hours. | • Institutional form. • Incentives register •Working hours register. •List of staff being trained. •Register of complaints of sexual harassment. | |

**Institutional Action Plan: Example**

| OBJECTIVE | PRODUCT | ACTIVITIES | EXPECTED RESULT | INDICATORS | MEANS OF VERIFICATION | BUDGET |
|---|---|---|---|---|---|---|
| | | • Revision of work hours to enable greater flexibility and to secure no penalties for those using flexible schedule systems. • Identification of affirmative actions (for example, support or prioritization for trainings). • Develop and secure fulfillment of rules against sexual harassment. | | | | |
| Existence of institutional policies and communications with gender sensitivity. | Communications unit | •Gender-sensitive, internal and external communication text. • Guideline on communication manners without sex, race, ethnic discrimination. | Inclusive communication culture, respectful and gender sensitive | • Increase in the number of gender-sensitive written communications. • Increase in the level of respect of interpersonal communications proposals that include gender approach. | • Internal communications text. • External communications text. • Comments by women and men working in the institution. | |
| Energy projects with gender sensitivity. | Energy projects unit. | • Energy projects proposals include gender sensitivity. • Revision of implementation methodologies to secure women and men inclusion during the project cycle. | Energy projects that directly contribute to gender equality and assist the differentiated energy needs of beneficiary women and men. | •Number of written proposals that include gender approach. • Number of women and men participating in project activities | Text of written proposals. • Project activities reports. • Project documents, including the monitoring plan. | |

**Institutional Action Plan: Example**

| OBJECTIVE | PRODUCT | ACTIVITIES | EXPECTED RESULT | INDICATORS | MEANS OF VERIFICATION | BUDGET |
|---|---|---|---|---|---|---|
| | | • Baseline, monitoring and checking activities performed taking into account specific needs of women and men benefited by the energy project.<br><br>• Working group includes women and men trained on gender considerations. | | • Number of indicators for baseline and monitoring with gender approach.<br><br>• Number of trained women and men that make up the working team | • Project staff ist | |

## 6. Gender-sensitive working environment

As it has been previously mentioned, the gender approach institutionalization in an organization or institution has internal effects. The policy implementation will call for appropriate technical, economic and human resources so that the political commitment becomes true. Internally, aspects such as organizational structure, the role of management/leadership, communication channels and human resources management also have to be channeled.

The institutional assessment is an instrument to obtain resources linked to structural, methodological aspects (schedule, placement of gender responsibility, performance standards and proceedings, formal communication mechanisms, among others), working methods, management and human resources styles that can guide on which aspects to prioritize, improve or boost to generate a working environment where both women and men are benefited. It is necessary to recognize that some internal changes should be made in a more accelerated manner with the aim of making progress in the gender action plan. However, other changes will require some more time.

Some illustrative examples of strategies used to promote a gender-sensitive working climate include:

• Establishment of transparent communication channels and spaces where the staff can express their worries, complaints, and disagreements or discuss how power is exercised in working relations.

• Promote and encourage management styles based on communication, fair relations development and respect for the different working methods that characterize men and women.

• Establish a gender unit and build a gender action group made up of men and women from every area of the organization or institutions that backs and collaborates with the person in charge of the unit.

• Establish mechanisms to ease the tensions between the reproductive and productive functions the staff have. The wellbeing of people is consistent with their working life. Actual professional performance requirements and demands may become an inequality factor for women. Some mechanisms include the establishment of daycare centers, economic subsidies for day cares, workday matching school hours, telecommuting, activities where the exercise of responsible parenthood is strengthened, maternity and paternity leave policies, flexible working hours for staff with family responsibilities (attention of sick or terminally-ill) or provision of appropriate means that answer the gender needs of the staff (separate toilets for men and women, breastfeeding areas, among others)

• Commitment to promote a gender sensitive behavior. Promotion of a non-sexist, non-discriminatory and non-androcentric language, whether in written, oral or visual form.

• Incorporation of the gender perspective in staff-hiring mechanisms, promotion and incentives that help to keep the balance among women and men. For example, establishing quotas so that women work in the organization in order to increase the parity of men and women, consider gender aspects in job interviews, posts descriptions and performance assessments, staff induction processes that include revealing gender equality policies, sexual harassment, maternity and breastfeeding regulations, or even devote time to develop capacities in tools application directed to equity and equality promotion among women and men at work.

• Equitable wage policies that promote equality and transparency criteria.

• Establish mechanisms to eliminate bullying, sexual harassment and discrimination practices in organizations or institutions.

• Train and educate staff to develop their attitudinal and technical abilities to incorporate the gender perspective into their work.

• Secure health and security of staff by giving access to health services, providing secure transport for women, limiting the trips of pregnant or breastfeeding women so that they can do what they need, taking safety measures both for men and women in dangerous areas (violence, drug trafficking).

### What is a gender-sensitive working environment?

As a result of a series of interviews made to Central American representatives the following elements have been identified as contributing to the creation of a gender-sensitive working environment:

• "Women and men do not make practical or sexist jokes about the opposite sex."

• "People in positions of authority treat others with respect."

• "Women's and Mother's Day Celebrations are attended by male partners.

• "Men and women always participate in the staff selection for workshops or seminars promoted by the human resources office."

• "In the health area, specific needs of both men and women are answered by the institution."

• "The existence of spaces where people have the opportunity to express themselves, share ideas, submit proposals, etc. confident they will be heard with no prejudice."

• "Women occupy strategic posts in the organization and are involved in decision-making processes."

• "Sensitization processes in "masculinities "are carried out taking into account that the majority of the staff is made up by men."

• "Campaigns on the importance of gender equality and against violence towards women among the staff are promoted via posters, internal e-mails, booklets, etc."

• The Internal Work Regulations establish the prohibition of harassment, disrespect and/or discrimination to either sex."

• "Train union leadership on the defense of the demand claims relative to gender issues."

• "Effective organizational mechanisms are implemented tending to incorporate the promotion of equal opportunities among women and men as a permanent and strategic line and not complementary and/or secondary, of the union policy: a Women and Gender Secretariat was created."

• "Through leadership courses women have raised their self-esteem and how their economic and productive capacity to society, and created a space as actors in the working environment."

• "In training workshops on equal opportunities men and women are involved in the construction and dissemination of stoves. This is how we have had volunteers at student and community level and made up working groups 50% women and 50% men."

• "Give women the opportunity of working posts usually destined to men, that is, a greater inclusion of women in this kind of activities. For example, there was one woman in charge of the production and manufacture of improved stoves. Besides, a woman is also in charge of the marketing area.".

*Source: comments of participants attending gender and energy networks in Nicaragua, El Salvador, Honduras and Guatemala during 2013..*

Finally, it is necessary to highlight the importance the management and human resources department, together with the gender unit and its support group, have in the implementation of internal changes. Without this kind of support, it is not possible to achieve a true internalization of the objectives and an implementation of the activities identified in the gender action plan.

### Gender equality in Itaipu Binacional Company.
Source: Guarezi, M.H. (2012).

The Itaipu Binacional hydroelectric generation compan[y] is responsible for the 19% of energy consumed by Braz[il] and 77% by Paraguay. It has a work force of 3,395 peopl[e] between Brazilians and Paraguayans. In 2003 an interna[l] process began to make Itaipu Binacional a company wit[h] high standards on social and environmental responsibilit[y]. Major results achieved through the gender mainstreamin[g] in the company include:

• Visualization of women and their tasks in the company which has implied a change in the organiza-tional culture.
• Increase in the number of women in management posts, going from less than 10% in 2002 to nearly 19% a decade later.
• Extension of maternity leave to six months.
• Day-care centers for employees.
• Promotion strategies, giving women training to strengthen their professional possibilities.
• Establishment of social clauses and incentives for the company's suppliers.
• Increase the number of women in traditionally male-dominated functions.
• The Director of the company is convinced of the importance of gender sensitivity and is a speaker for the women in the board of directors.
• Expansion of the policy for the foundations financia-lly supported by Itaipu.
• Involvement of the company in the strengthening o[f] the National Plan of Policies for Women of the Feder[al] Government including campaigns for stopping violence against women, the creation of "Casa Abrigo" for women in life-risk conditions, support prevention campaigns against domestic violence, and the support women-empowerment and job creation initiatives.

## 7. Gender indicators in institutional assessment

The progress of institutionalizing a gender approach should be measured; therefore it is necessary to establish indicators and goals to measure this progress during the action plan. These are called capacity assessment indicators since they show the capacities an organizational gaps and generate the baseline for institutional capacities. Likewise, the institutionalization process helps to develop activities that can be included in the Gender Action Plan to resolve the gaps detected. It is necessary to develop the right indicators and that they answer the particular situation of the organization or institution, to follow up the process of developing gender capacities.

Some of the following indicators are used in the measurement of institutional capacities for gender mainstreaming in energy projects.

**Indicators to measure the institutional capacity for gender mainstreaming in energy projects:**

• Existence of a framework and project strategies with gender approach.

• Sex-disaggregated planning and monitoring system in operation.

• Experiences reflected in the type of counterparts involved, field teams, proceedings used by the project team and existence of a gender focal point.

• Gender balance in energy project work team: executive, administrative, technical, professional and field team.

• Capacity creation in the team and counterparts regrading work methodologies with gender approach.

• Support by the administration and existence of performance incentives in gender issues.

• Existence of a gender-sensitive work environment.

*Source: ENERGIA (2011b), p. 84.*

## 8. Additional sources of information

More information on the subjects dealt with in this module can be found in the following sources::
• Aguilar, L. et al. (1999). La ineludible corriente. Políticas de equidad de género en el sector ambiental mesoamericano. 1ª. ed. Costa Rica.

• Blanco, L. and Rodríguez, G. (2003). Candil en la calle…. luz en la casa. Hacia una gestión y gerencia con equidad. 1a. ed. San José.

• ENERGIA (2011a). Institutionalizing Gender Mainstreaming Processes in Energy Organizations. Technical Brief. ENERGIA.

• ENERGIA (2011b). Mainstreaming gender in energy projects. A practical handbook. ENERGIA International Network on Gender and Sustainable Energy. Cecelski, E. and Dutta, ENERGIA.

• Instituto Nacional de las Mujeres (2009). Programa de Cultura Institucional. México.

• Mary, C. (2009). Guía: Institucionalización del enfoque de género. Cuenca.

• Meijer, S., Lindo, P. and Siú, I. (2010). Haciendo realidad la equidad en las organizaciones: guía metodológica. 2 ed., ProPemce.

## 9. Practical exercises

The following exercises can be used to re-in force the knowledge among participants in the training workshop..

### Exercise 1: Institutional assessment

Divide participants into groups. Each group should select an organization or institution which works with energy issues. The person selected from the institution has to tell other participants in the group what her/his institution is like on gender aspects such as:

• Internal policies
• Strategic plan (objectives, activities, budgets, etc.)
• Existence of a gender focal point
• Staff training
• Gender networks and counterparts
• Publications
• Monitoring and reports
• Institutional culture

Later on, according to the information received, each group conducts a SWOT analysis of the selected institution to know the gender mainstreaming status..

### Exercise 2: Interview to institutional staff

This is a group exercise. Ask each group to split up so that two participants conduct a group interview to officers in an organization or institution linked to the energy sector. The other participants select an organization or institution to put together a focus group. Before the interview, the initial group should define the interview objective so that interviewers can translate it to the focal group to be interviewed. The following can be a proposal interview:

**Interview guide for organizational or institutional staff**
Explain to the person the interview objective

NAME:_____   ORGANIZATION: _____
WOMEN ○   MAN ○   UNIT-DEPARTMENT: _____
GENDER TRAINING:   WORK AREA: _____
NO   ○
YES   ○   DATE _____   TYPE: _____

**Political sphere**
Which are the main entry points and opportunities to address gender issues in your organization?

Does your organization have a gender policy?

Does the organization have a budget to finance gender-responsive actions?

How many women are there in decision-making posts in your organization?

**Organizational sphere**
Which are the main challenges to integrate the gender approach in your organization? Is there a person or group as gender focal point?

Are gender equality and equity included explicitly in strategic planning, proceedings, rules, management and staff policies, wages or operating regulations?

Do women and men have access to skills training or development to incorporate the gender approach in their job?

**Implementation sphere**
Is there a successful experience in your organization incorporating the gender approach?

How do you measure the impact of the organization's work in the life of men and women?

How is equal participation of women and men promoted in your organization in programs or projects?

Which participatory and gender responsive methodologies does your organization use?

**Civic sphere**
How many institutions does your organization have strategic alliances with?

Which ones have been successful experience your organization has to empower women?

Has your organization taken part in the creation or strengthening of women networks? Does your organization participate in any policy incidence process that promotes equality among women and men?

## Exercise 3: Analysis of the organizational culture [97]

In order to identify and analyze the aspects of the organizational culture that promote or obstract the accomplishment of the gender equality mission, and to identify new values among the various organization levels and sectors, an instrument called "Hofstede Onion" is used.

**Step 1**: in a plenary show the group that the "Hofstede Onion" shows how the institutional culture can be described through:
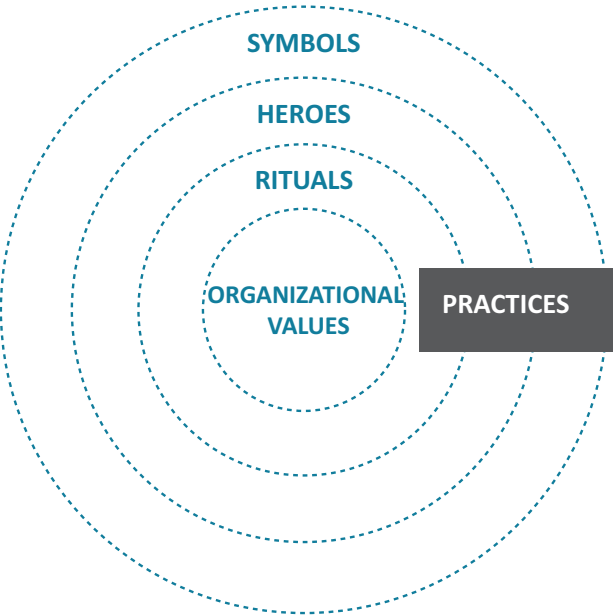


**SYMBOLS:** images, words or objects with meaning to people in the organization. They are evident, for example, in the size and appearance of the building, in the furniture and office equipment at different levels, staff distribution, their way of dressing, kind of vehicles and even in the mission statement logo..

**"HEROES", "HEROINES" and "VILLAINS":** they are real or imaginary people that represent or personify the organization. They are figures recognized by the staff which serve as models, because they are either respected or perceived as failures.

**RITUALS:** collective activities, spontaneous or planned, shared everyday by the staff; the way they greet each other and who they greet, if personal issues are addressed, how meetings, celebrations, anniversaries, farewells are organized, etc.

**ORGANIZATIONAL VALUES:** fundamental principles, rules and beliefs are the base of practices that determine what is considered really important and desirable and what is not valued. It is necessary to discern between desired and integrated values. Desired values are those that people say are important for the organization, whether they are practiced or not. Integrated values are true values: the heart of the organizational culture. There can be a big

gap between desired values and integrated values, and this happens specifically in gender issues where politically-perfect rhetoric can be found but not a real intention to fully integrate gender in the organizational culture.

**Step 2:** write four flipcharts with the following terms: symbols, heroes, rituals and values. Then, ask the group to identify which words, images or activities they identify with their organization for each of the terms. This exercise gives input so that participants start describing the organization and whether women and men are equally respected.

**Step 3:** using colored cards, the group writes down strengths and weaknesses of the organizational culture to promote gender equality.

**Step 4:** finally, ask the group which aspects of the organizational culture they would like to change and how many people think about it. Afterwards ask how can the necessary changes for obtaining an organizational culture that promotes gender equity and equality be achieved. You can use a matrix similar to the one below to organize the information.

| Strengths | Weaknesses | Suggestions of changes |
|---|---|---|

## Exercise 4: Matrix with an example of a rapid institutional assessment[98]

Although it is true that an institutional assessment cannot be done rapidly, it is possible to design exercises that gather key information in a quick manner. The following exercise can be done during a training or introductory workshop to the gender mainstreaming process and is designed to assess the perceptions participants have respect to their organization. This exercise needs 90 minutes.

The facilitator will divide participants into working subgroups according to the organization where they work or the type of activity they perform within the energy project (for example, staff from the implementing organization in one group, staff from the counterpart organization in another, local government representatives in a third one, etc.). In the case that all participants come from the same institution, it is possible to give a section of the matrix to each one, so that the institutional analysis is conducted in a more specific manner and using five working groups.

| Institutional aspect or dimension | Level of satisfaction | | |
|---|---|---|---|
| **1. Institutional mandate** | Satisfactory | Partially | Not satisfactory |
| The institution has a written mandate, an official commitment towards gender equity and women empowerment. | | | |
| The mandate clearly specifies the mission or gender objectives: what is pursued | | | |
| The gender institutional mandate is included in publications, documents, etc. of the organization. | | | |
| If this mandate has not being included, you have the intention for gender equality to be included as an institutional mandate? | | | |
| **2. Institutional capacity and sensibility** | Satisfactory | Partially | Not satisfactory |
| The institutions fieldwork team is aware of gender considerations. | | | |
| The institution has an appropriate knowledge of gender issues. | | | |
| The institution has a gender expert or hires one occasionally. | | | |
| The institution organizes trainings and learning and discussion moments with the staff to assess the situation and improve their capacities. | | | |
| The institution facilitates additional learning while sharing new methodologies and lessons learned. | | | |
| The institution gathers field information and keeps a sex-disaggregated database. | | | |
| The institution has a field team well trained as extension workers capable of effective communication with women and men. | | | |
| The institution analyses information in a sex-disaggregated manner and shares conclusions and information with key actors. | | | |
| The institution has financial and budget resources to conduct gender mainstreaming. | | | |
| In the case adequate financing exists, the institution is willing to invest in additional gender activities. | | | |

97 ENERGIA (2005c), p. 23.

98 Skutsch, M. (1998).

Each participant will receive the following institutional assessment matrix (whether complete or divided) that s/he should fill in individually and anonymously, crossing the corresponding box.

| Institutional aspect or dimension | Level of satisfaction | | |
|---|---|---|---|
| **3. Responsibilities and transparency** | **Satisfactory** | **Partially** | **Not satisfactory** |
| The institution presents reports on a regular basis and distributes them to key actors. | | | |
| The institution reports on the differentiated performance and impacts of project activities on women and men. | | | |
| The institution carries out surveys to assess e satisfaction of women and men and shares the results of that assessment with them. | | | |
| The institution releases annual reports that include gender achievements and presents sex-disaggregated results. | | | |
| The institution seeks reaching a good reputation in its gender mainstreaming capacities. | | | |
| The institution allows free access to learning and information sources. | | | |
| **4. Rules and proceedings** | **Satisfactory** | **Partially** | **Not satisfactory** |
| The institution has a guide that includes the work description and responsibilities for different team members. | | | |
| The institution grants maternity and breastfeeding leaves to female workers. | | | |
| The institution has pay scales that do not discriminate against women or men for all the activities they perform. | | | |
| The institution follows equality principles in a coherent manner. | | | |
| The institution continually monitors service quality through communication. | | | |
| **5. Effectiveness and efficiency** | **Satisfactory** | **Partially** | **Not satisfactory** |
| The institution assesses the needs of women and men as a basis for designing its program activities. | | | |
| The institution gathers information on activities and prepares relevant reports on its achievements according to an assessment and monitoring system with gender approach (sex-disaggregated reports). | | | |
| The institution working hours are designed, implemented and assessed from a gender perspective. | | | |
| The institution carries out gender-related public activities | | | |
| The institution uses different communication means to reach different key actors. | | | |

Once participants have filled in their matrix individually, the group can continue to unify their answers. Example::

| 1. Institutional mandate | Satisfactory | Partially | Not satisfactory | Total per line |
|---|---|---|---|---|
| The institution has a written mandate, an official commitment towards gender equity and women empowerment. | 3 | 2 | 1 | 6 |
| The mandate clearly specifies the mission or gender objectives: what is pursued | 1 | 2 | 4 | 6 |
| The gender institutional mandate is included in publications, documents, etc. of the organization. | 2 | 3 | 1 | 6 |
| Total by column | 6 | 7 | 6 | 18 |

Once answers have been tabulated, the work group can discuss their impressions on the information obtained and these can be shared with the plenary to generate greater debate and obtain feedback from all participants.

# Module 4:

**Integration of the gender approach
in energy projects**

## MODULE 4: INCORPORATION OF THE GENDER APPROACH IN ENERGY PROJECTS

### 1. Why is it necessary to incorporate a gender approach in energy projects?

Access to energy sources and technologies is essential to achieve economic growth and poverty eradication. Women and men have different social and productive roles; therefore, their energy needs are different as well. Likewise, it is usual to consider energy technologies as a "male issue" since they are perceived as dangerous or "complicated", which in turn makes women have fewer knowledge of them and their applications or even feel they are not qualified to comment on their energy and technology needs or interests.

#### Women and energy projects

Women are an important target group of energy projects because:

- Energy interests of women are frequently ignored.

- Well-meaning energy projects could, involuntarily, increase the already heavy work of women if their particular situation has not been considered.

- Few women are involved in energy planning or are capable of stating their own needs.

*Source: Rojas et al. (2012).*

Gender mainstreaming in energy projects can contribute to:

- Increase the effectiveness and efficiency of an energy project, identifying a priori possible implementation problems.

- Identify ways to make affordable generated energy or the price of energy technologies that are to be spread.

- Increase social and economic impacts of energy interventions.

- Identify the roles and functions women and men can perform in the value chain, and decision making as well.

- Identify energy technologies and sources more adequate for the locality where works will be done.

- Involve women and men in the identification of technological innovations to adapt energy technologies.

#### Why integrate a gender approach in energy projects?

In short, gender is mainstreamed in energy projects to:

- Assess the importance the project would have for women and men (diagnostic).

- Have an agreement on what the project intends to achieve from a gender perspective (gender objectives and strategies)

- Design activities to achieve those objectives.

- Build consensus among different actors on the methodology to use.

- Develop a gender-sensitive monitoring strategy.

**… so that both women and men can benefit from projects and reduce or eliminate inequities.**

*Source: ENERGIA (2011b).*

### 2. Recommendations for mainstreaming gender in a project.

The key of gender mainstreaming in an energy project is quite simple: one should constantly ask oneself the following questions: which are the energy needs of women and men? How does my project activity impact/benefit/damage the lives of women and men? It is essential to continuously ask about the different impacts and benefits the energy project may have on women and men, and how women in particular can increase their productively as part of this initiative.

Therefore, in order to secure gender mainstreaming in energy projects it is necessary that the answers to these questions are considered throughout the entire project cycle, from its design and preparation to its monitoring and assessment. Although this may seem obvious, many energy projects incorporate gender or equity objectives without identifying the necessary activities or indicators to secure its objective fulfillment. For example, if a rural electrification project is intended to equally improve household energy access but lacks activities to secure female-headed households benefit in the same way male-headed ones do, most probably this problem will not be followed up or solved.[99]

99 DNE (2005) (our underlining)

## 2.1. Developing an energy project proposal with a gender approach

Ideally gender mainstreaming should be carried out before the project starts, that is, from the proposal writing. The proposal text should solve gender questions and reflect the corresponding information in: project background and rationale, key-actors identification, implementation strategy and activities, as well as resources allocation and schedule.[100]

[100] Our underlining

A proposal with gender approach should answer the following questions through its structure:

A gender sensitive energy project proposal should be developed in a participative manner, taking into account the cultural and socio-economic needs of the women and men to be benefited or affected by that intervention. In Section 3.5 of this module (interviews with key actors) a series of participative and information-gathering techniques are described, which can be very important to

**Table 8. Guiding questions to write a gender-responsive proposal**

| PROPOSAL SECTION | QUESTIONS ON GENDER CONSIDERATIONS |
|---|---|
| **Background** (description on the context where the energy project is located) | Which is the historical situation and socio-cultural context where the project will be carried out? Which are the effects or impacts these situations have on women and men? |
| | Which are the life conditions and services and goods production of women and men in the project implementation area? Which is the sexual division of work? |
| | Which is the access, use and control of resources by women and men? Which are the needs and demands set by women and men respect to the energy project? |
| | Which are the means and possibilities to secure women's participation in decision making instances? |
| | Which are the capacities of the implementing organization or its counterparts to conduct the gender mainstreaming process? |
| **Justification** (rationale description and analysis of the problem to be solved) | Which is the gender equity policy the organization wishes to apply in the solution of the problem or energy deficiency? |
| | Which are the gender situations the energy project wishes to change and therefore which are the priorities of women and men it will support? |
| | Which are the spaces women had not had access to that the project will open up for them? |
| **Participating groups and individuals** (men and women that will participate in the Project) | Which is the target group? How many people are men and how many women and what percentage do they represent from the target group? |
| | Will specific activities with women and men be conducted during the project? Which is the expected impact of the application of these differentiated activities on existing social relations? |
| | Which groups of women are disadvantaged and how will they be strengthened through the energy project activities (in general they are women heads of households, widows, women belonging to a different caste or race, etc.) |
| **Project formulation:** • **Mission** (long-term development objective) | Which is the ideal gender equity situation wished to be achieved through the energy project? |
| | Which are the problems of women and men the energy project will have an impact on? |

| PROPOSAL SECTION | QUESTIONS ON GENDER CONSIDERATIONS |
|---|---|
| **Participating groups and individuals** (men and women that will participate in the Project) | Which is the target group? How many people are men and how many women and what percentage do they represent from the target group? |
| | Will specific activities with women and men be conducted during the project? Which is the expected impact of the application of these differentiated activities on existing social relations? |
| | Which groups of women are disadvantaged and how will they be strengthened through the energy project activities (in general they are women heads of households, widows, women belonging to a different caste or race, etc.) |
| **Project formulation:** • **Mission** (long-term development objective) | Which is the ideal gender equity situation wished to be achieved through the energy project? |
| | Which are the problems of women and men the energy project will have an impact on? |
| • **General objective** (changes expected to achieve with the project) | Which changes towards equity will the project achieve as regards improvement in energy access in relation to decision-making by women and men? |
| | Which is the percentage or number of women and men on which these changes will be produced? |
| • **Specific objectives** (products whose achievements the project can guarantee) | Which are the expected changes in the relations among men and women through the search of equity? |
| | Which are the necessary conditions to secure women empowerment (greater access, control, power and decision making)? |
| | Which actions can help stop poverty levels in women and men? How can the project/energy services support the income increase of women and men in the project action area? |
| | How can the managerial staff and participating groups and people be involved in the energy project in order to achieve a good understanding of the different approaches necessary to reach women and men? |
| | How can participation spaces be created or supported to secure the effective participation of women in decision-making instances? |
| • **Implementation strategies** (necessary conditions for project implementation | How are gender considerations integrated into the methodology, administrative models and technical capacities during the project implementation? |
| | Has the gender approach been integrated into the description of staff activities, responsibilities and tasks, as well as the project counterparts? |
| | Are there enough technical and budgetary resources available to conduct gender mainstreaming activities? |

| PROPOSAL SECTION | QUESTIONS ON GENDER CONSIDERATIONS |
|---|---|
| | Are selected tools (technologies, times, meeting venues, messages and their manner of transmission, etc.) convenient and appropriate for women? |
| | Is there a gender focal point dedicated exclusively to implement and supervise gender activities implementation during the project? Has the staff been trained and sensitized in gender issues? |
| • **Indicators** (verification of results) | Have the barriers that limit fair participation of women and men been overcome? |
| | Have gender relations been transformed according to what the project objectives and mission establish? |
| | Which has been the progress as regards the adoption of gender mainstreaming process by the implementing organization? |
| • **Activities** (steps necessary to achieve the objectives) | Have the project activities been designed in such a way that they promote access, use and control of resources, services and benefits fairly among women and men? |
| | Is the number of women and men taking part in the project and the type of activities they will participate in indicated? |
| | Are spaces created for men and women to participate on equal terms? Is the participation of women supported in non-traditional areas? |
| | Are gender awareness raising activities incorporated? |
| | Are activities dedicated to the identification and support of productive activities where women and men participate incorporated in the project? |
| | Is increase in income generation supported by the improved access to energy access by women and men? Are activities for reducing expenditures related to energy sources or access by women and men taken into account? |
| | Are implementation methodologies that facilitate involvement of women and men in project activities used? |
| | Are spaces created to reinforce gender equity at institutional level? |
| • **Resources and schedule** (includes human, financing and equipment resources necessary to implement the project, as well as the time it will take) | Is female and male staff distributed fairly in all project areas? |
| | Are gender criteria incorporated in the selection of staff? |
| | Are technical advisors, directors and extension workers gender sensitive? |
| | Is the necessary budget allocated to guarantee the implementation of gender activities? |

*Based on: Aguilar, L. and REDNA Nicaragua (1998).*

generate the necessary data to conduct the energy project with a gender approach. Likewise, the gender analysis steps described in section 3 of this module (preparatory phase) can give more details on how to identify the relevant information for justification and identification of the project mission, objectives and activities.

A case study is presented below where gender considerations have been integrated from the moment of the design of a rural electrification project. This case study gives the opportunity to identify elements that will be developed later on in this section, such as institutional support, work with women and men from benefiting communities and neighborhoods, identification of gender objectives and their correlation with gender indicators appropriate to the specific project.

## 2.2. Incorporating gender considerations in an existing energy project

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### PELNICA: Gender mainstreaming in an electrification Project.

Source: Irma Gutiérrez, gender specialist, PELNICA.

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The Electrification Project of Nicaragua (PELNICA, for its acronym in Spanish) is part of the project portfolio of the Ministry of Energy and Mines (MEM) implemented by the National Electric Transmission Company (ENATREL, for its acronym in Spanish). In July 2009, PELNICA started the construction of electric distribution networks in the departments of Nueva Segovia, Madriz, Estelí, Jinotega, Matagalpa, León and Chinandega, with the aim of contributing to economic development and a better quality of life for women and men. The project seeks to ensure the electrification of rural homes and residential sectors located in 659 communities, in an operational and economically sustainable manner, as well as satisfying the energy needs of the women living in these communities.

MEM and ENATREL addressed their gender mainstreaming commitment from the project proposal stage, adopting the gender policies of the National Unity and Reconciliation Government (GRUN) and the Canadian Cooperation as their own. The specific targets to work with women and men within PELNICA include:

• Secure gender and socio-economic equality in the access to resources to start micro or small enterprises.
• Secure the access and participation of women and men benefiting from energy infrastructure to tools, financing, etc. that PELNICA guarantees through its Rural Development Strategy (taken as business development) and Gender Equality.
• During grid construction, additional income is secured for women and men through the work they perform in temporary contracts.
• Increase the percentage of posts held by women in community councils and decision-making bodies of their communities.

PELNICA conducted a baseline study at the beginning of the project which showed that the majority of community and department population where the project focuses is made up of women. Likewise, it was found that: the majority of the population has very limited economic resources, almost 15% of women are illiterate, only 21% of women are land owners, and communities in general have little access to health services, no access to credit and a null level of association. It was also identified that these departments and communities suffer from severe environmental damage.

At present there is a large database disaggregated by sex, head of household, age, type of energy used for lighting purposes before having access to electricity, etc. Based on these results new activities and objectives for the project were elaborated, including the selection of communities to be served by the Rural Development and Gender Equity Strategy (DRIG for its acronym in Spanish). Other activities include the creation and strengthening of a synergic network to take advantage of the resources of other institutions that could complement the technical work of DRIG in such a way that resources are maximized and efforts minimized; municipalities coordinate this initiative and are the ones that will continue the work of PELNICA.

To carry out these objectives, PELNICA has the institutional support of MEM and ENATREL, and developed a DRIG so that women and men can use energy in a productive manner through the creation of micro and small enterprises financed by the project. The team in charge of implementing this strategy is entirely composed by gender experts and seeks gender balance among its members. The DRIG is made up by:

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

• A gender equality specialist (woman)

• A business development specialist (man)

• Three social workers (one woman and two men)

Besides, PELNICA has looked for counterparts with gender knowledge at implementation level. This is how a great number of its counterparts are the secretariats for women in municipalities, which support training issues and have been given material, financial and technical support to elaborate their gender municipal policies.

PELNICA also works with NGOs such as Women and Development Foundation (FUMDEC for its acronym in Spanish), Foundation for Jinotegano Development (FUNJIDES for its acronym in Spanish), Global Village and La Cuculmeca, among others.

PELNICA, uses a series of tools and methodologies for addressing gender sensitization with the target group at community level. These include: role play, reflexive analysis, sessions with games and dances, group work, exhibits, plenaries, videos, etc. Its methodological

starting point is popular education, which seeks teaching "learn to learn" (knowledge, proceedings, attitudes) and understand the learning as a comprehensive communication process, apart from developing expression and comprehension capacities as basis of all learning, promote decision-making and develop a critical attitude. As regards the productive use of energy, DRIG works in business development services.

As a result of the synergy within the same project, changes in businesses are seen. For example, men are working in floriculture, a traditional female activity. Energy is used to heat and light different types of flowers at night so that they can grow and develop better. Another example is women's participation in mud-bricks making in Yalagüina, where electricity is used to power thee machines, a task previously performed manually by men, apart from lighting in order to start working earlier.

Regarding the extent of DRIG and the productive use of electricity, PELNICA has the following indicators related to economic empowerment:

| Expected result | Indicator |
|---|---|
| At least 50 business plans for starting up or strengthening small enterprises financed for their implementation, favoring a greater number of women. | Number of business plans with gender approach financed (detailed by sex and amount for men and women) |
| At least 50% of resources available for financing, allocated to small supported businesses led and/or integrated by women. | Percentage of the total amount of available resources for financing, allocated to selected small businesses led and/or integrated by women. |

Some of the changes promoted by the activities of PELNICA include:
• Training women to work in power lines installation, activity previously performed by men.
• Role change as a consequence of gender sensitizing processes.
• Action implementation of gender municipal policies done in municipalities.
• Greater participation of women in community associations such as Family, Community and Life Cabinets where they assume roles as leaders.
• Women are more willing to acquire more knowledge and participate in more training to improve their abilities and skills to become leaders.
• Greater number of women that go to municipalities to process different types of project for their communities, such as drinking water now that energy is available, evening schools now that they can study at night, etc.
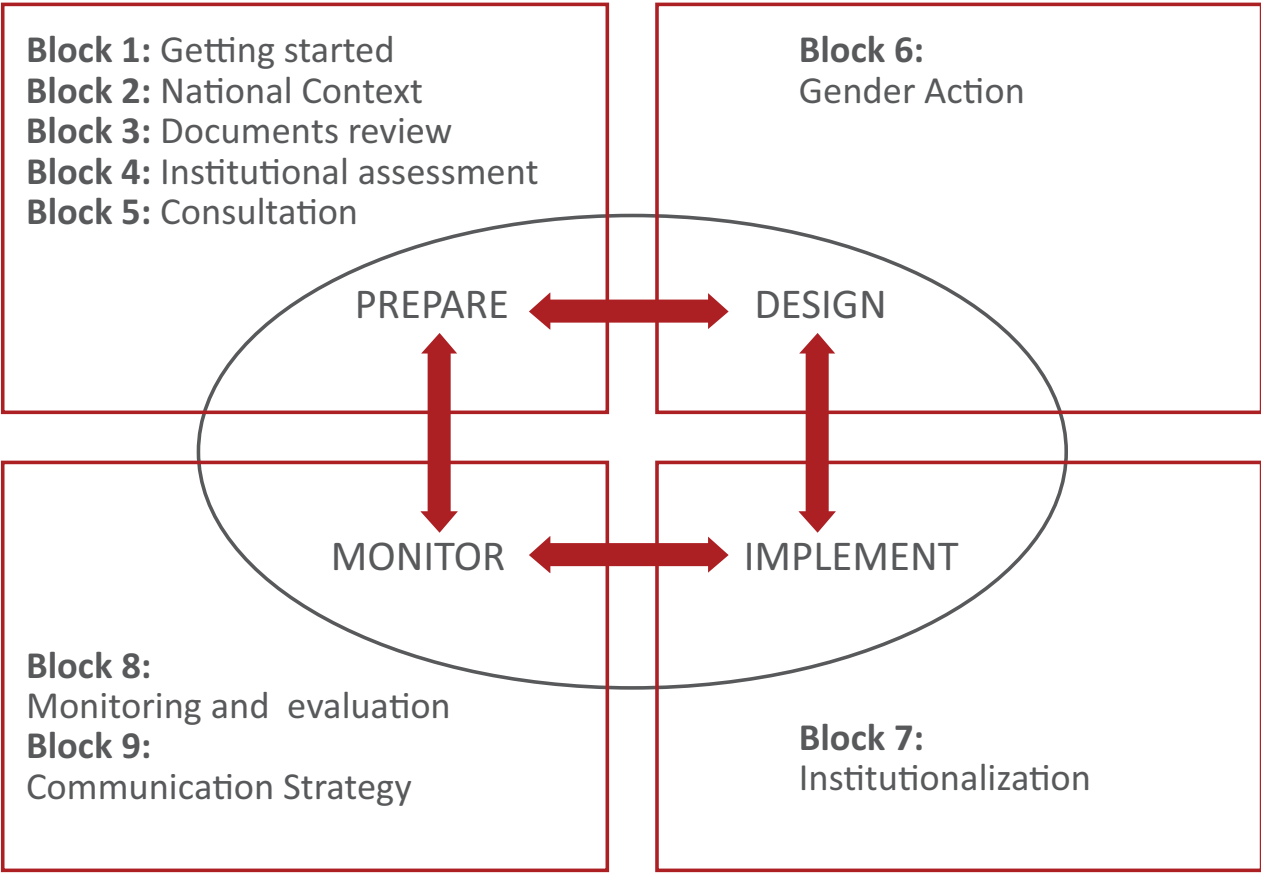
The projects ends in 2014 and according to the mid-term assessment carried out on in October 2012, the project results exceeded at that time the initial goal by approximate 10% in all indicators. This includes the number of households connected to the grid, number of beneficiaries, number of gender workshops run in 44 communities, number of women and men that expressed satisfaction for changes in their communities, number of women heads of households with access to the service, etc.

Although it is ideal for a project to incorporate the gender approach from the beginning, it is necessary to say that it is possible to mainstream gender in already existing energy projects, whether in their preparatory or implementation stages. ENERGIA has developed an analysis and gender mainstreaming methodology that allows those who implement energy projects to identify gender gaps and corrective measures during implementation. That methodology will be developed further in following sections.

Figure 7. Gender mainstreaming in the Project cycle.[101]



The questions presented in each step of the project cycle can be taken up and incorporated into the proposal development of the energy project.

## 2.3. Incorporating gender considerations in large-scale energy projects

Although, gender mainstreaming in energy projects has generated its strongest empirical evidence in small-scale projects, mostly community-based and renewable-technology centered, the truth is that large-scale projects also incorporate gender gaps. The methodology described below can be used to carry out the gender mainstreaming process in these projects. Besides, much can be learned from experiences gathered in infrastructure projects where benefits have been noticed such as: increase of staff dedicated to the construction and maintenance operations, gain from differentiated capacities and abilities of women and men, and a greater social project acceptance through better compensation systems and distribution of benefits generated by the large-scale energy project.[102]

The following box summarizes some of the most important gender considerations in the field of large-scale energy projects.

101 "Olla bruja" (witch pot literally) is a technique developed in Uruguay to help households in irregular settlements to better cook their meals. It is designed to function through short heat-exposure periods, necessary to heat its interior; after that, it is removed from the heating source but the food inside continues its cooking due to the pre-heating technique. This instrument helps reducing the amount of wood and other energy sources used in cooking. Besides, different workshops are carried out where recipes are shared and instructions to use the pot given.

102 The subsidy percentage is calculated individually for each family, in accordance to their particular economic situation. In the case of LPG, this subsidy can go up to 75% of purchase price and is designed to cover the use of twelve tanks/cylinders of 13kg annually per household (six for cooking with a bimonthly charge, and six for heating distributed between May and August to cover the winter season).

### Gender considerations in large scale projects

**Impacts of energy resources extraction process or energy infrastructure construction**

Extraction of materials and construction of energy infrastructure generally entail expropriation, displacement and community relocation processes, which should be compensated for their losses by the company In charge of infrastructure works. In general, these compensations are based on the reckoning of property rights and the loss of livelihoods. However, women not necessarily have access to the real estate owning a reduced percentage of property rights. Likewise, women work in informal economy sectors so their subsistence activities are not necessarily recorded in the collection of displaced work opportunities. Finally, it is necessary to recognize that if compensation is given to the head of the household, this does not automatically imply that economic benefits will be fairly distributed within the household. Therefore, a large-scale energy project should take into account gender considerations in the design of compensation plans, in such a way that at least: (i) it secures the distribution of economic compensation among the women and men of a household; (ii) it takes into account the needs of women and men while developing a training process to establish alternative subsistence means.

Besides, these extraction and construction processes imply the arrival of work brigades which can have a great impact in social composition and relations of neighbor communities. Energy companies are to invest in the training and sensitization of their work forces in health and social responsibilities issues such as: transmission of HIV/AIDS and sexually transmitted diseases, responsible fatherhood and prevention of violence against women.

**Impacts on energy distribution**

Large-scale energy projects generate a great amount of energy and benefits, not necessarily enjoyed by the women and men living in nearby communities. These benefits can be related to the participation in the work force or to the access to the energy being generated or distributed.

Therefore, a large-scale energy project should at least: (i) oversee the manner in which energy is distributed, including how women and men in a village receive and are connected to the energy service (security, access, affordability); (ii) promote the increase of the number of women and men from nearby communities working in the energy company or help their incorporation in the provision of services (for example, food, accommodation, transport, etc.) for the project officials.

*Based on: ESMAP (2013).*

## 3. Preparatory phase[103]

Before beginning with the gender mainstreaming process, it is essential to understand both the context where the energy process develops as well as the potential benefits of conducting this process, and above all, to identify the strengths and possible problems the organization may face during implementation phase. Therefore, at least five different activities should be carried out to gather information and sensitize those in charge of conducting the mainstreaming process; these include:

• Introductory workshop and presentation of the mainstreaming process

• Understanding of the national context

• Project documentation review

• Institutional analysis

• Consultations with key stakeholders

### 3.1. Introductory workshop: presentation of the project before the organization

An organization or institution wishing to incorporate gender considerations into its energy projects needs to secure its staff's understanding of the importance this process has, the possible approaches to be used and of good practices and lessons learned of similar processes. So it is recommended to start the process with an introductory workshop which will allow the staff to:

• Learn about gender mainstreaming

• Identify staff perceptions, including possible setbacks and opportunities

• Identify possible counterparts that should be involved later on in the process

• Understand the different steps to be followed and support the process from the beginning

• Assess and debate previous strategies to promote gender equity

103 This program was financed by: Intelligent Energy Europe (IEE) of the European Union. The final report of the program is available at: http://www.energia.org/fileadmin/files/media/pubs/tie_publication_lowres.pdf

Example Agenda for an Introductory Workshop on Gender Mainstreaming

**DAY 1**

| | |
|---|---|
| 08:00-08:30 | Registration of participants |
| 08:30-10:15 | Project background (5 min) (Name of implementing institution) and gender mainstreaming (commitments and goals to achieve) |
| | Agenda and workshop objectives (10 min, including questions) |
| | Presenttion of the energy project |
| 09:30-10:15 | Presentation of basic concepts on gender, energy and environment (45 min) |
| 10:15-10:45 | Coffee break |
| 10:45-11:15 | General framework of gender mainstreaming (introduction to the four stages of preparation, design, implementation and monitoring; presentation followed by a questions and answers section) |
| 11:15-12:00 | Preparation: gender considerations mapping in energy projects (presentation and exercises in work groups) |
| 12:00-13:00 | Lunch |
| 13:00-14:30 | Preparation: institutional analysis |
| 14.30-15:30 | Preparation: information gathering in communities |
| 15:30-16:00 | Coffee break |
| 16:00-17:30 | Preparation: information gathering in communities |

**DAY 2: Field work**

Participants are divided into groups and each one has a series of specific questions for gathering information. Each group should decide which tools to use (for example, resource map used by men and women/activities profile/seasonal calendar/debates in focal groups)

**DAY 3**

| | |
|---|---|
| 08:30-10:00 | Interpreting information and survey planning (presentation by the groups on field work findings) |
| 10:00-11:00 | Planning: deciding on gender objectives and activities |
| 11:00-11:30 | Coffee break |
| 11:30-13:00 | Developing a monitoring system: introduction to indicators with gender approach (20 min for personation followed by group work) |
| 13:00-14:00 | Lunch |
| 14:00-16:00 | Finishing the Gender Action Plan (group work) |
| 16:00-17:00 | Presentation of Gender Action Plans by each energy project (includes coffee break) |
| 17:00-18:00 | Closure of workshop (includes steps to follow) |

• Pay attention to gender from initial decision-making process stages until implementation and assessment.

At least, all people from the team to conduct the gender mainstreaming process should be present in the introductory workshop, as well as other staff members involved in the energy project implementation and management. It is during this workshop that the staff may start debating on the reasons why it is important to incorporate gender considerations into energy projects, as well as possible gender objectives to achieve within the energy project and sector. This is essential since different gender objectives may exist in different energy projects, and the selection of an objective leads to specific activities identification that can be included later on in a Gender Action Plan.

## Why look for gender equity in energy projects and programs?

Social justice: women have a limited control over production goods and this puts them in disadvantaged position in terms of their capacities and development opportunities. For example: women represent up to 70% of the poor in rural areas, have access to just 10% of world profits and only hold 1% of property worldwide.

To obtain more efficient projects and programs: women are responsible for nearly all aspects related to domestic energy systems, especially in rural areas. Involving them in energy projects leads to a better distribution of benefits, identification of users and their needs, understanding of the project context and therefore performing a more sustainable energy intervention.

To generate economic growth: women play an important role in subsistence strategies in poor households worldwide. Energy services may enable women's economic and social empower, simplifying their productive and income generation activities or allowing for better mobility and access to information.

To empower women: women empowerment is central to human development. Human development, as an enhancer of people's development options cannot take place if the options of half of the world inhabitants are limited.

*Source: ENERGIA (2011b), pp. 12-13.*

## 3.2. Understanding of the national context: Assessment of the energy and gender situation in the country

La principal razón para llevar a cabo un análisis del contexto nacional es identificar cuáles son las mayores consideraciones de género específicas del país y el subsector energético al que pertenece el proyecto. Por lo tanto, para poder dar una guía a los desarrolladores del proyecto sobre los posibles retos y oportunidades para integrar las consideraciones de género, el estudio del contexto nacional debe dar respuesta a preguntas tales como las siguientes:

• **Which is the context (national policy/ organizational policy/donor requisites) that frames the energy project?** In other words, which are the rules that determine the objectives and mandates under which the project is developed?

• **Which are the gender and energy considerations or inequalities at national level the project should consider for its implementation?** For example, literacy levels, traditional roles of men and women, sex-disaggregated population composition (rural/peri-urban), connectivity rates in female and male-headed households, type of economic activities men and women typically perform; access level to other services such as drinking water, health, etc.

• **Which are the actual – and potential-counterparts the project may have as gender allies?** Which resources (literature/similar experiences/local or national experts) can be used for the gender mainstreaming process? In this way support sources are sought, whether didactic or through local experts that can support the energy project developers.

• **Which are the existing experiences and opportunities in the energy sub-sector for gender mainstreaming?** This question should give indications to those who will develop the project for identification of their own objectives and activities with gender approach, as well as the possible challenges or difficulties to expect when the process is designed.

The national context analysis can be done by a gender expert, preferably a person outside the project. The analysis should take into account the contributions of the project staff to capture the gender reality in the field or locality where the initiative will be conducted. Besides, it is important to highlight that most countries have gender, energy and development situation studies at national level. It is advisable to identify these sources in advance in order to save time for the study research and writing.

## Sources of reference to identify gender, energy and development data

Possible sources to consult during the performance of a national context study can include:

• Web search using key words; for example, country+gender+energy.

• National policy documents on poverty, gender and energy.

• National reports, such as censuses or reports on the MDG.

• Interviews with experts, project staff and government representatives to identify documents and key topics.

• Reports and documents generated by regional banks, such as IADB or the World Bank, and regional institutions such as UNDP, UNEP, ECOSOC, SICA or FLACSO in Latin America.

• Data base of publications from organizations that work in these themes, such as ENERGIA, IUCN, or OLADE.

• Sub regional energy planning documents, such as the 2020 Central America Sustainable Energy Strategy, Gender Equity and Equality Central American Policy (PRIEG for its acronyms in Spanish), the Gender and Energy Strategy of OLADE, the South American Energy Treaty, etc.

*Modified from ENERGIA (2011b), p. 17.*

It is necessary to highlight that mandates and experiences on gender and energy in the country may legitimize or allow for points of entry for gender mainstreaming in the energy project. Those experiences and political or technical support must be gathered in a short, concise document presented before the energy project staff during the introductory workshop (previous section) as input for thorough discussions. .

## How is a national context report structured?

Here is a guide on the possible structure and content of a national context report:

**a.Introduction:** including information on who and how the revision was carried out, the type of resources consulted, period when it was carried out and the way in which this revision fits in the gender mainstreaming process.

**b. Situation of women and men in the country**: covering data on gender and poverty, female and male-headed households, different roles of men and women in informal economic domestic/agricultural activities, differences among men and women as regards MDG (literacy level, access to water and sanitation systems, workloads, access to property, political participation, etc.)

**c.Gender institutional and political framework**: including national and international mandates adopted by the national government, as well as energy policies or plans that have references in their texts to women, gender, equality or poverty alleviation.

**d. Gender and energy situation in the country/region**: identification of energy issues, policies and institutions more relevant to the project sub-sector; as well as specific gender aspects of the project technology or area (access to non-traditional technologies, energy for domestic use, access to electricity, productive uses of energy, etc.)

**e. Present and potential counterparts:** policy and practice mapping with gender approach of project counterparts (identification of their sensibility to the subject); identification of good practices or lessons learned in similar projects that work with men and women (either in energy subjects or other sectors such as agriculture, water resources management, etc.), possible additional counterparts, etc.

**f. Possible entry points for gender and energy challenges:** the information gathered will provide ideas on possible activities and perspectives for working with gender approaches, as well as the identification of possible challenges or issues that need more discussion. These may include:

• Questions that require more information, for example, through enquiries or interaction with the communities where the project will be developed.

• Immediate actions, not controversial that can be implemented at low cost, for example: including the

gender approach in baselines/mid-term assessment surveys already included as activities in the energy project.

• Possible ideas on activities or objectives to incorporate in the project Gender Action Plan to be developed later.

*Source: ENERGIA (2011b).*

## 3.3. Project document review: understanding the starting point of the gender situation within the energy project

Since in many cases gender mainstreaming occurs while the project has already started, or at least has been planned, the project specific position as regards gender should be understood. For example, the proposal wording may have specific references to "women" or "gender" but lack specific activities to implement those statements. In some other cases the project may not have a single reference to gender because it considers gender issues are "inherent" to the communities or households worked with and, therefore, it does not consider necessary to specify them in the text. This may inadvertently lead to not identifying the specificities within each of the units mentioned.

**Which documents should be revised during this stage and what for?**

• **Project documents, logical framework and annual plans:** it helps identifying how gender has been dealt with in the project, its objectives and implementation activities.

• **Institutional gender policies:** it allows analyzing the organization's awareness or vision in terms of gender equity through the existence of internal policies in the organization or agreements on the subject with other organizations.

• **Progress reports:** it allows understanding the type of information gathered in field visits, annual reports, etc.

• **Implementation documents:** operational manuals, publications, monitoring and evaluation guidelines indicate how gender sensitivity is communicated internally (operational manuals) and externally (publications) to the project and the implementing organization.

The project's documents are revised in order to answer questions such as the following:

• **What is the project's intention from the gender equity perspective?** In other words, which can be the gender objectives of the specific project?

• **How has the project integrated gender considerations in practice, according to the project reports?** This question helps identifying if information is reported on gender activities or if there is sex-disaggregated information gathering in field-visits or progress reports

• **Which are the premises or expectations the project has on men and women?** This question explores the interest men and women may have in the project, their degree of participation in decision making but also the different benefits they can obtain from its activities.

• **How is the gender approach reflected in implementation documents, as formats of field-visit reports or regular-progress reports?** In this way it is possible to identify if there is a systematic and coherent manner of gathering sex-disaggregated data related to the project activities.

• **Which gender activities can facilitate the fulfillment of the project objectives?** This is a reflection on existing activities but also the possibility to identify additional activities or identify affirmative actions in order to secure that both men and women can benefit from the energy project.

• **Is it possible to identify entry points for implementing gender activities?** For example, is the target group well defined or is it necessary to revise its composition to disaggregated it according to the project's needs?, do existing indicators guarantee sex-disaggregated information gathering or should they be checked?, are there any risks that had not been considered as regards men and women participation or the means used to involve them in the project implementation?, do the project premises adjust to the local reality or should they be modified to reflect in a more accurate manner the situation of men and women in the community?, do implementing counterparts have enough sensitivity to carry out gender activities or is it necessary to train them/identify organizations or experts that address gaps in gender knowledge?, is there a monitoring and assessment system that addresses the gender approach planned by the project?, does the budget contemplate specific items to conduct gender-sensitive activities? Is there the necessary staff, including women integrating a field team, to perform the planned activities, and are these people adequately sensitized in terms of gender equity?

## 3.4. Institutional analysis: evaluating the capacity of the energy project for mainstreaming gender

The main objective of the institutional assessment is to be sure about the technical capacity and the gender sensitivity existing in the implementing organization of the energy project. That capacity may accelerate or delay the implementation of a project with gender approach since it is not the same thing to start it within an organization whose staff and management are committed to gender equity than to start it in one lacking that institutional capacity or culture. Identifying institutional challenges and allies inside and outside the organization helps having a realistic view of the possibilities and difficulties the energy project presents as regards gender mainstreaming.

The institutional assessment issue is relevant for working both in projects as well as at national energy policy level. Therefore, it is dealt with separately in Module 3.

**Table 9. Check list for gender assessment in projects**

| PROJECT DOCUMENT | GENDER INDICATOR TO BE LOOKED FOR IN THE DOCUMENT |
| --- | --- |
| Background and rationale | Are gender considerations contemplated or mentioned in the energy intervention background? Are there convincing arguments in the rationale to conduct the gender mainstreaming or search for gender equity? Is information included on the different needs assessment of women and men in relation to the project as part of the social analysis? |
| Mission (ambition) | Are the needs of women and men reflected in the project mission? Does the project mission contribute to reducing or correcting inequities among men and women by solving the practical needs of both of them? Is the objective to change institutions that perpetuate gender inequities? |
| Objectives | Do intervention objectives take into account the needs of both women and men? |
| Target groups | Which should be the gender balance within the target group of beneficiaries? |
| Activities | Are measures incorporated to secure the inclusion and participation of women in the project planning and implementation? Are women and men involved in planned activities? Are additional activities carried out to secure the gender approach is conducted in an explicit manner (for example, gender trainings, additional research)? |
| Indicators | Have indicators been developed to measure the project progress towards each of its objectives? Is it possible to measure gender considerations for each objective using existing indicators? Have goals been established to secure the participation of women and men? |
| Counterparts | Who will conduct the planned intervention? Do these counterparts have the necessary knowledge to conduct the gender mainstreaming process? Will both women and men participate in the project implementation? |
| Monitoring and assessment | Is a gender perspective included in the M&E strategy. Has the M&E matrix been sex-disaggregated (baseline, monitoring, impact assessment) according to requirements to report project activities? Will both technical (content) as well as organizational (process) aspects of the intervention be examined? |

| PROJECT DOCUMENT | GENDER INDICATOR TO BE LOOKED FOR IN THE DOCUMENT |
|---|---|
| **Risks** | Has the general outlook of gender roles and relations within society been considered as possible risk (for example, stereotypes or structural barriers that prevent full participation of either sex)? Has been considered the negative impact of the intervention (for example, possible increase of the work of women or the social isolation of men)? |
| **Budget** | Have items to carry out trainings on gender or to involve a gender expert been incorporated within the budget? Are there any budget items dedicated exclusively to gender activities? |
| **Communication strategy** | Is a gender perspective included in the communication strategy of the project existence, progress and results to the public in general? |

*Source: ENERGIA (2011b), pp. 22-23.*

## 3.5. Consultations with key stakeholders: understanding the gender and energy situation in the field

It is advisable that both design as well as implementation of energy initiatives is carried out in a participatory manner; this is especially important in the case of gender mainstreaming in these type of projects. Key stakeholders of energy projects traditionally include energy and energy technologies consumers, producers and distributors as well as decision makers. However, all of them are also men and women with different energy needs and interests and with different possibilities of decision-making participation, so these considerations should be integrated into the project if an effective answer is to be provided to these groups of key stakeholders.

The enquiry with key actors has therefore the general objective of identifying and considering the different energy needs of women and men. It also contributes to:

• Document the baseline situation the project wants to improve, in order to monitor the corresponding progress afterwards.

• Gather information on the way women and men perceive the energy intervention, the desired characteristics in energy technologies or sources and the strategies that could or could not work to involve them in the project planning.

• Generate information on gender sensitive field-data gathering techniques more suitable to identify the situation baseline the project wants to modify, to maximize benefits and the participation of women and men.

The inquiries with key stakeholders should answer at least three key research questions:

• **Is it necessary to gather additional information?** This question allows identifying whether the project has all the required information on the needs, activities and expectations of beneficiary women and men of the initiative or if it is necessary to enlarge it.

• **Which is the situation to be improved by the project?** This question allows identifying baseline for gender indicators to be used for monitoring gender performance.

• **Is the project realistic as regards its possible effects?** The project objectives and strategies must be realistic and take into account the benefits and costs (positive or negative) the project will have on women and men.

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### Gender participatory assessment: improved stoves in El Salvador

*Source: UNDP (2007a).*

The Armenia-type improved stoves project was implemented by the National Center for Agricultural and Forestry Technology (CENTA for its acronym in Spanish) in Santa Rosa Seca, El Salvador. The problem of wood shortage was identified in this project through a rural participatory assessment process of the micro river basin. A general information gathering stage was conducted as part of it before starting the discussion and planning process, which revealed who was responsible for firewood gathering, the main species used, the location of the open stove in the household, the time spent gathering firewood as well as the number of families or people per household benefited, among other things. These data was obtained through visits to the families and interviews to potential project beneficiaries.

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It is possible to gather field information using gender analysis tools. However, experience has shown that traditional gender analysis tools should be adapted for its use in energy projects. The reason is simple: these analysis tools do not provide any guide on the direction wanted for the energy development with gender approach, do not include energy use nor indicate how energy services can be used to achieve gender objectives. At the end of this section an annex is presented with some gender analysis tools and ideas on how to use the information gathered for energy projects.

The selection of information-gathering tools as well as the size of samples to gather should be determined by: (i) the pre-selected research question and (ii) the existence of resources, time and capacity of the field team. The following considerations can help the team to take a decision on the best tool:

• **Surveys:** they are necessary to gather reliable and detailed information of households to be benefited.

• **Discussion in target groups:** may be useful to discuss the participation of women in local councils, understand the perception men and women have on energy technologies or complete an activity matrix.

• **Value-chain analysis:** may be used to analyze gender consideration or opportunities in groups of goods or service producers.

**Table 10. Examples of research questions that may be answered through field work**

| Baseline and future monitoring system | **Stakeholders:** Which are the different target groups of my project (users, producers and energy distributors; medium, small and micro-entrepreneurs; decision makers)? Which of them are men and which are women? |
|---|---|
| | **Baseline:** Which indicators are to be measured? Is it possible to disaggregate indicators by sex or is it necessary to identify additional indicators? |
| **Project planning** | **Project activities:** How will the intervention be perceived by men and by women? Which characteristics do men and women want in the technology offered by the project? Which practical strategies can help involving men and women? Which is the possibility or potential of increasing work and income of women as operators, sellers, producers or technicians in energy? |
| | **Project effectivity:** Which are the impacts of an energy technology in particular for the development of men and women? How can energy technology be promoted in a more effective manner to reach and interest both men and women? How can more women be integrated as operators, producers, installers or energy technicians? How can women's capacity be increased to participate in an effective manner in project activities, especially in management and decision-making? |

*Modified from: ENERGIA (2011b), pp. 37, 39 and 40.*

• **Participatory rural assessment:** these methods can be particularly useful since they emphasize local knowledge and allow women and men to conduct their own assessment, analysis and planning. Besides, they provide the opportunity to receive simultaneous feedback on the project effectivity. This tool requires counting with experienced facilitators.

In spite the need to choose among various tools, it is necessary to highlight the need to conduct socio-economic surveys or similar information gathering as an inevitable rule since these tools reflect the specific needs of women and men while providing a guide on the required strategies to improve the roles and benefits the project may offer. If a survey is not planned to be conducted while gender mainstreaming activities are carried out, other options are available, such as:

• Implementation of a special field study on gender

• A rapid field study to gather preliminary information while a more detailed data collection could be included as part of the Gender Action Plan of the project.

The use of participatory methodologies is imperative for collecting the views and thoughts of future beneficiaries of an energy project. However, it is also necessary to recognize that the use of these methodologies does not necessarily guarantee that the information or opinions of women are gathered since they can be limited in their real participation by the existence either of cultural or social rules which do not allow them to speak freely or state their views in public,

or of education constraints (technical language, illiteracy) or even linguistic ones. Therefore, to secure that both women and men participate effectively in discussions and decision making it is necessary to know and understand the obstacles women face so that ways to overcome them are designed.

There is a series of good practices for conducting field work with gender approach and cultural sensibility that should be taken into account before carrying out the field study. These include:[104]

• **Appropriate field-team composition:** there should be gender balance to secure the communication among women and men from the community; team members should speak the language and be acquainted with cultural rules from the place.

• **Field-team members with appropriate knowledge:** they should be trained on gender- data collection and have knowledge on basic gender-analytical tools.

• **Local leaders or contacts support search:** it is advisable to get in touch with community leaders as well as government offices, projects, researchers and NGOs that are working with women in the area, and to present the gender equity work as a priority for the energy project.

• **Interviews with all key stakeholders:** interview groups of women and men separately, whether

104 The ILO methodology has been recently compiled in the ILO document (2007).

### Table 11. Possible tools for information gathering with gender approach

| FIELD WORK WITH GENDER APPROACH | ADVANTAGES | DISADVANTAGES |
|---|---|---|
| 1. Incorporate gender questions in surveys and field work already planned | It integrates gender analysis tools to planned activities within the project. A lot of information can be gathered at a low cost by sex-disaggregating it. | They do not always coincide with the moment the gender study is carried out in the energy project. Modifications can also be necessary such as additional questions modules, activity matrix, etc. |
| 2. Interviews or workshops with the field team. | The field team staff has the opportunity to conduct a gender analysis based on their previous knowledge of the locality and the field situation. | The field team may not have enough knowledge of the field situation or not understand the different target groups, so it is possible that additional information gathering could be necessary after the workshop. |
| 3. Independent baseline study on gender and energy. | It generates detailed information on the gender and energy situation of the community using gender analytical tools. | It may require many additional resources (time, staff, extra field visits, etc.) and it is not integrated into the original project activities. |

| FIELD WORK WITH GENDER APPROACH | ADVANTAGES | DISADVANTAGES |
|---|---|---|
| 4. Participatory rapid assessment methods | It may be effective in the collection of reliable information on gender issues. Many energy project members have experience using these methods. | The quick participative assessment requires experience in order to be conducted adequately. In general this method should be adapted so it captures the gender analysis in an appropriate manner. |
| 4.1. Time-use study, for example: activities profile. | It is a visual method; therefore it generates interest from participants. | The group may need 2 or 3 hours to understand what is required from them and can be difficult to be handled with large groups. |
| 4.2. Focal group discussions with target groups (men/women). | Perceptions can be analyzed using rapid participatory assessment methods in a short time. It is a good way to understand the most important gender and energy considerations in a short time. | It does not generate quantitative or even representative information that can be used for baseline indicators. It can take 1 or 2 hours and it is difficult to handle with large groups. |
| 4.3. Maps such as the resources map. | It generates a clear visual image of participants, beneficiaries and the challenges they face. | Three or four hours are necessary to carry it out. |

*Source: ENERGIA (2011b), pp. 42-43.*

during group meetings, home visits (men and women interviewed separately) or as entrepreneurs.

• **Women meetings held in places and time convenient for them:** whether at localities where it is socially and culturally allowed for all people to come and go freely; at traditionally women-occupied places such as kitchens, schools, health clinics; at the household or surrounding areas where women can talk privately; when women have time to participate..

The information gathered in these different areas should contribute to identify the activities and objectives to be included in the Gender Action Plan of the project, by answering questions such as:

• Which is the existing situation in the target group? Which influence does this situation have on the project goals and objectives?

• Which are the challenges (cultural, social, economic, educational, etc.) to be faced to achieve the project objectives?

• How can the project overcome these challenges?

### Increasing women's participation in Guatemala.

Source: UNDP (2007a).

Fundacion Solar carried out a micro-enterprise development project through renewable energy in the Quiché region in Guatemala. This organization implemented a series of activities to reduce communications constraints with the people from the project communities, which included literacy, cultural and practical constraints that negatively influenced women's participation. Some of the measures taken included:

• The field team was made up of one woman and one man from the area, who spoke the local language (Ixil). This facilitated communication with women since most of them did not speak Spanish.

• During training and elections different colored cards with drawings were used to facilitate illiterate people's participation.

• Some practical measures were considered when community meetings were established to favor women's participation, including the meeting time and venue so that both were appropriate for women. Meetings were announced using both the information distribution channels used by women as well as the local language.

• How will the energy intervention affect/benefit women and men in the community? How can the energy project "plant" opportunities for change towards gender equity?

### Field information: what is necessary to collect

When the field work is finished, the energy project should have a good idea of the gender situation in at least five relevant areas for project objectives and activities::

- Gender division of labor
- Access to and control over resources and benefits
- Value chain with gender approach
- Participation and decision making.
- Different perspectives of men and women on the needs, priorities, challenges and opportunities the project presents.

## 4. Design phase[105]

### 4.1. Gender Action Plan: setting goals, activities and gender indicators

The Gender Action Plan is the document that gathers both the project gender objectives as well as the activities to be done to achieve them, taking as a starting point the information collected during the preparation phase (section 3 of this Guide). The Gender Action Plan is a document that should adapt to the nature of the organization and the energy project it will be applied to. For some organizations this document may be long, while for some others it could be enough to have a legal framework at hand that details gender mainstreaming efforts.

Although the Gender Action Plan is an independent document, there are elements that should be integrated into other relevant documents, such as the energy project logical framework, annual or biannual workplans and the project budget, to secure enough economic support to implement activities with a gender approach. The monitoring and assessment framework of the gender action plan should be integrated into the general project monitoring plan and fulfill the same report requirements as the rest of the energy project elements.

### Minimum elements for a Gender Action Plan

105 Moser, C. (2005).

The Gender Action Plan should answer the needs of an organization or specific energy project and, therefore, there is not a unique format. However, any Gender Action Plan should have at least the following elements:

- Gender Action Plan rationale

- Logical framework of the gender mainstreaming project identifying: objectives, activities and gender indicators, which should modify or be added to the logical framework of the energy project or to its operations plan.

- Necessary actions for the Gender Action Plan institutionalization in the project or organization/institution.

- Indicators and monitoring plan for the expected results, as well as the way in which they will be tracked.

- Implementation schedule and budget.

*Source: ENERGIA (2011b), p. 60.*

### 4.2. Participatory development of a Gender Action Plan

The production of a Gender Action Plan is carried out through a process where people in charge of the gender mainstreaming process present their findings and collected information to the rest of the people who work in the energy project, so that they can get feedback as comments or recommendations. Likewise, this participatory process guarantees that the rest of the energy project staff, as well as those in the organization's management, understand and commit themselves to securing the gender activities performance, making the Gender Action Plan more realistic and effective.

### Why is it necessary to share information with the energy project team or the organization's management?

EIt is necessary to keep a fluid contact with the energy organization's management to secure enough administrative support (financial, planning and budget) to carry out the gender mainstreaming process.

Contact with the energy project team staff secures the gender equity and the project approach concept

has been understood by these people; it also helps to check whether it is an idea or vision that has been taken on board and therefore measures the possibilities of whether or not this gender approach can be put into practice.

*Source: ENERGIA (2011b), p. 49.*

The Gender Action Plan should be carried out in a participatory manner so an orientation workshop can be organized for project members and organization managers where different themes can be discussed, such as: objectives establishment, results, activities, indicators and quotas that will make up the logical framework of the Gender Action Plan. In some cases, this planning workshop can be accompanied or enriched by treating other questions, for example: training in gender-sensitive tools, project activities analysis through a gender approach, identification of good practices implemented by the project to involve men and women in its activities, etc. This type of discussions will help the energy project staff to have a wider view of existing gender considerations and possibilities at work and it will enrich the discussion and elaboration of the Gender Action Plan.

The Gender Action Plan draft should be shared with other key stakeholders from the energy project, whether within or outside the organization. This process may include members from other energy projects, the organization advisory panel, organizational counterparts, members from the communities or neighborhoods where the energy project will be implemented. Focal groups should be used in communities and neighborhoods when the Gender Action Plan is shared, and at least one meeting should be held with the women from the locality to secure their participation and the gathering of their input on the subject. These meetings with the communities and neighbors also give the chance to discuss possible roles and responsibilities of women and men in decision-making entities and reach an agreement on the roles they will perform in the project activities. Likewise, it can be presented as a platform to compare the feasibility of planned activities with the community and build consensus on priorities or steps to follow with the energy project.

Finally, the Gender Action Plan should be approved by the body that presides the activities of the implementing organization, like the board of directors or the advisory board. This approval provides the Gender Action Plan with greater legitimacy and authority both at internal and external level in the organization.

### 4.3. Defining gender objectives

The gender objectives of the energy project are those goals wished to be achieved regarding equity and equality. These objectives can be found in the project either explicitly or implicitly, so some of the analysis moments previously mentioned should be used so that the energy project staff can identify them.

The practical and productive needs, or the gender strategic interests identified during the preparatory phase can be used as a starting point to identify the gender objectives in the energy project:

- **Improve the wellbeing and reduce poverty levels of the target group:** this is a basic level of ambition and is related to the increase in the energy access to satisfy the users' basic needs. Cooking technologies is an example, where women are traditionally the main users. In the case of an increase in access to electricity or transport means women are also important users. The questions that can help identifying the gender objective in this case can include: do women feel comfortable with the characteristics of the technology/access/transport means provided? Is it financially affordable for women? How easy is it to operate? Does it allow for a reduction in women's work load? Are women able to undertake small repairs to the system?

- **Improve the livelihood of women and men:** this is s more ambitious goal and is related to capacity building or provision of support to the business sector. At this point it is important to highlight that women entrepreneurs are generally found in micro or small enterprises and even in many cases they work in informal sectors of the economy. Besides, it is possible that they have fewer resources for their activities since they have a reduced access to land ownership as well as to credit, information or training resources. Besides, they cannot see themselves as energy entrepreneurs due to existing social patterns. Other cultural elements that can hinder their success include a low self-esteem and in some cases mobility restrictions outside their homes. Therefore, a project with gender approach must question which are the barriers women encounter as entrepreneurs and design activities that help them overcome those challenges or identify counterparts that can solve them.

- **Empowerment and transformation of the roles of women:** an energy project may have as a goal to incorporate women in non-traditional roles directly linked to implementation activities of the project itself; for example, as trainers, builders, franchise owners or providers of energy-technologies repairing services. The establishment of participation quotas in decision-making bodies such as energy local

committees is also under this category. It is necessary to highlight that strategic objectives are those that can require a greater investment as regards time and community and neighborhood sensitization since they are likely to break cultural patterns and, therefore, they are the type of objectives more likely to generate rejection **at the beginning of a project.**

• **Secure the project effectiveness and sustainability:** this objective is closely linked to objectives of success of those who develop the energy project. Gender mainstreaming may lead to the identification of possible challenges for the project implementation, and therefore help design strategies to sell a greater number of improved stoves, install a greater number of domestic solar systems, increase the percentage of poor households connection, etc. If this is the case, experience has shown that energy project developers are willing to invest a greater amount of financial resources to secure a greater efficiency and sustainability of their initiatives**.**

The majority of energy projects seek achieving many gender objectives at the same time. In section 8 of this Module (practical exercises) an exercise has been included to exemplify how gender objectives can be identified in a participatory manner in these projects.

**Remember that the gender objectives of the energy project should be:**

• Mutually agreed by the people from the energy project team

• Relevant to the energy project

• Answering the needs, priorities and ambitions of urban and rural communities and beneficiary households.

• Realistic in terms of the capacities of the project and its counterparts and key actors.

• Affordable within the social and cultural context where it develops, and with the necessary time and resources for its implementation.

• Generating concrete results (that should be measurable/possible to be followed).

*Source: ENERGIA (2011b), p. 51.*

If necessary, the energy project work team can make use of different tools or information to select their own gender objectives. For example, the gender-baseline field work is a great source of information, but also gender objectives or mandates of the project counterpart (like local governments, ministries, donors, or other organizations) can be used as a guide of the gender objectives to be reached. Finally, gender objectives examples identified by other energy projects can be used. Gender objective examples are presented below, used by energy projects supported by ENERGIA in their gender mainstreaming processes in Africa and Asia.

**Examples of objectives for gender mainstreaming in energy projects**

| TYPE OF PROJECT OR ORGANIZATION | OBJECTIVES |
|---|---|
| **Government energy organization** | Gender mainstreaming in policies, energy programs and projects of the institution. |
| | Become a first-class energy provider at world level free of inequities and discrimination. |
| | Improve quality of life of women and men through the improvement of access to more efficient and affordable energy services |
| **Rural electrification project** | Promote gender equity and women empowerment through the improvement of access to modern energy services and their participation in the value chain. |
| | Provide solar power to houses in the community looking for parity among the number of male-headed and female-headed households. |
| **Renewable energy project** | Contribute to the development of women and men in Quiché communities through the elimination of organizational, technical and financial barriers for renewable energy promotion. |
| | Promote gender equity and empower women through communal renewable energy systems. |
| | Improve access and reduce gender gaps among men and women in energy-sector interventions through the application of small hydropower and biofuels at community level |
| **Improved stoves project** | Adopt a technological proposal adequate to the needs of women, especially time-saving in cooking. |
| | Reduce the time spent in firewood collection. |
| | Improve health, particularly of girls and women, and the life conditions of families. |
| **Biogas project** | Integrate elements of awareness and attention to specific gender-considerations in all aspects and levels of the Biogas Domestic Program. |
| **Income generation using energy technologies** | Ensure women appropriate solar energy technology for fruit dehydration. |
| | Establish a micro-enterprise that employs a group of women for fruit and aromatic plants dehydration. |
| | Train and support small entrepreneurs for the manufacturing and selling of improved stoves. |
| | Generate income for women directly participating in the experience. |
| | Credit network creation to buy improved stoves whose loan package takes into account the financial capacities of women and men. |

*Based on: UNDP (2007a) and ENERGIA (2011b). p. 52.*

The case study below shows how using women empowerment as an objective can constitute the basis to develop a rural electrification project.

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### Solar engineers:
### Women empowerment through access to electricity in San Juan Cotzal, Quiché, Guatemala

Sources: Mario Hernández,
Executive-Director of Semilla de Sol, and Semilla de Sol (2013).

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The population of San Juan Cotzal Municipality is a poverty-stricken community in Guatemala. Its inhabitants suffered notably during the internal armed conflict and counter-insurgent policy in the 80's, which meant that from 1960 until 1996 violent repression occurred during all presidential regimes, whether civil or military. After the signing of Peace Agreements, the socio-economic movement of the municipality has grown in an accelerated manner.

However, despite this growth, access to modern energy sources is still irregular, electricity is scarce so the community depends on traditional alternatives such as candles, kerosene and ocote (resin from ayacahuite pine) lamps for their lighting. This area is not only economically depressed but also existing cultural patterns keep women in their traditional roles, with little participation in decision making or local development initiatives.

It is in this context that Semilla de Sol has begun a process for supporting rural women's empowerment, creating spaces for reflection to stimulate their participation. The specific objective of this project is to "consolidate a self-sustainable model of solar-energy-services provision with the economic empowerment and leadership of women."

The actual project consists of supporting women from the communities within the municipality to be trained as technicians specialized in domestic solar systems -solar engineers. The results of this project include:

- Two rural women trained as electric technicians and empowered.

- One hundred solar photovoltaic lighting systems installed.

- A communal workshop for repairs service in operation.

• A payment administration system implemented to ensure the sustainability of payment systems for the solar engineers.

Selected women came from San Juan Cotzal municipality and the participation profile stated they should be adults, representing the segment of women with fewer self-improvement opportunities and with fewer problems for taking care of young children. Besides, the definition of this profile was looking for candidates rooted in the community, which would reduce their chances of migrating to other localities once they had been trained and had acquired the technical skills as solar engineers or "barefoot engineers".

The selection process in San Juan Cotzal municipality identified three female candidates to participate in the training as "barefooted engineers". However, social pressure and her husband's rejection made one of the candidates decline the opportunity to participate in the project. The other two women could attend the training; one of them was supported by her husband from the beginning even when the community pressed her to abandon the training. The second woman was a widow and had no one to look after her children during the training months, so the project provided her family with the economic support for their livelihood during their mother's absence.

At present these two engineers are capable of installing, maintaining and repairing domestic photovoltaic systems. A five-year plan has been defined through which solar engineers will provide their services to the communities of Xeputul I and II and Tzibanay. This will allow them to strengthen their technical skills and have a sustainable administration of a communal solar lighting micro-enterprise.

The Project has also had an additional effect for the communities where the solar engineers work. New communication services have been provided (telephone, internet, television, radio, etc.) as well as e-learning, health care, leisure activities among others. The better electric service provision is expected to provide opportunities for productive and business processes that improve life conditions of the community. All thanks to the training of two women as solar engineers!

This project has united international cooperation efforts through Barefoot College, ITEC Program of the Government of the Republic of India, private initiative through Enel Green Power company and the Guatemalan NGO Rijatz'ul Q'ij (Semilla de Sol).

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[136] The term "barefoot engineers" derives from the name of the institute where these women were trained: the Barefoot College, located in Tilonia, India. Women travel to this institute and stay there for six months to receive their technical education.

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## 4.4. Defining gender activities and results

A commonly identified problem in energy projects is that there is no relation among the gender objectives they may achieve (its gender objective), its activities and the planned results (gender strategy) and the indicators established to follow up its implementation. Therefore, once the project gender approach has been identified (objective), the project strategy must define how to achieve those goals.

The gender analysis tools presented in the previous section (preparatory phase) can help understand the socio-economic situation of the locality where the project will be implemented and use to analyze existing activities from a gender perspective.

The following table can help identify activities and possible results using gender analytical tools.

**Table 12. Using gender analysis tools to identify possible activities and results of an energy project**

| Gender analysis tools (used in field work, interviews or participative workshops to gather information) | Questions to generate a brainstorm on the results and activities with gender approach |
| --- | --- |
| Labor division by sex: which are the tasks women perform (and girls) and which are the tasks performed by men (and boys)? | • Which impact does the labor division by sex have on the implementation of the energy project objectives? <br><br> • As regards the project interventions, do they reinforce the work division by sex existing in the locality or do they seek changing it? <br><br> • What can the energy project do to consider the barriers or challenges the labor division by sex generates? |
| Access to and control of resources and benefits related to energy services and the project in question: <br><br> • Which resources do men have access to? What about women? <br><br> • Which resources do men have control of? What about women? | • How can the energy project contribute for women to have a better access to resources? And to have greater control on those resources? <br><br> • How can the energy project take into account restrictions to Access to and control of resources? <br><br> • Which benefit do both men and women receive as a result of the Energy Project interventions? How can these benefits be increased? |
| Participation in activities, decision making and project management: what type and degree of participation do women and men have in the energy project activities? | • How is the opinion of men and women gathered with regards to the design characteristics and the expected benefits of the energy project? <br><br> • Both for men and women: who is the person with a greater possibility of taking decisions on the different energy options? Who will be involved in the maintenance or repairing of energy technologies and what type of training is necessary for this? Who controls certain important resources like the family budget? Who has the will and ability to contribute with physical labor, material or money for the project? <br><br> • How can the participation of women and men be promoted in a better manner in the project decision-making processes and organisms? <br><br> • How can the energy projects overcome obstacles that hinder or discourage the participation of women? |

Source: ENERGIA (2011b), p. 54.

It is very likely that people integrating the energy project team have also tried to implement the gender approach in their activities, projects or previous situations. That experience should be documented since it can help define activities or results that could be achieved with the energy project. Likewise, the problems identified during the field work provide a basis to design actions that fight or help overcome those barriers.

Finally, it is possible to use the experience other energy projects have had in gender results and activities identification to gather information on the activities viable for the project under analysis. The following boxes provide examples of objectives, expected results and activities with gender approach in two energy projects.

### Possible objectives, expected results and activities with gender approach in biogas projects

| GENDER OBJECTIVE | EXPECTED RESULTS | EXAMPLES OF ACTIVITIES WITH GENDER APPROACH |
|---|---|---|
| Improve the quality of life of women and men using biogas plants | • Reduce women's drudgery due to firewood collection . <br><br> • Reduce air pollution in internal spaces and kitchen areas <br><br> • Reduce firewood consumption | • Stimulate those who design gas stoves to incorporate characteristics more attractive to women (for example, easy to clean and maintain, with multiple burners or having a biogas-lighting option). <br><br> • Gather Information on the characteristics women want or look for in cooking technologies (stoves or fireplaces) as part of the project development research. <br><br> • Gather information through the baseline on the type of fuel used in the locality, sizes and characteristics wanted in stoves, target group purchase power (men and women), etc. <br><br> • Create local services centers and train local builders to guarantee the existence of spare parts. <br><br> • Secure women's participation in biogas-users training courses organized in venues and times convenient for them. |
| Improve subsistence means of women using biogas plants. | • Increase income of women and men <br><br> • Increase the number of female entrepreneurs. | • Encourage women to become builders or biogas entrepreneurs: <br><br> Provide women with safe places when they travel to other communities to build biogas plants. <br><br> Encourage groups of women to work in the construction of biogas plants <br> Hire women to promote and incentivate the work done (for example, by giving them an incentive for each client identified) <br><br> Give loans to female entrepreneurs (for example, through loans with collateral group guarantees, convenient payment deadlines and mechanisms, micro-collection systems for deposits) <br><br> • Relate the biogas program to income-generating activities in such a way that the time saved from domestic work could be devoted to those economic initiatives. |

| GENDER OBJECTIVE | EXPECTED RESULTS | EXAMPLES OF ACTIVITIES WITH GENDER APPROACH |
|---|---|---|
| Promote gender equality and women empowerment (MDG3) | • Increase educational level of girls <br><br> • Women perform personal-growth activities <br><br> • Improve family health | • Create or encourage literacy programs for adult women <br><br> • Give incentives to mothers or fathers of girls who stop helping their mothers in wood gathering and increase their school attendance (for example, free books, school uniforms once the girl has completed the school year, etc.) <br><br> • Secure female representation in management and decision-making committees, and give these women the necessary support so that they can develop the necessary capacities to perform their roles in an appropriate manner. |

*Source: ENERGIA and Hivos (2010), p. 56.*

### Possible objectives, expected results and activities with gender approach in rural electrification projects

| GENDER OBJECTIVE | EXPECTED RESULTS | EXAMPLES OF ACTIVITIES WITH GENDER APPROACH |
|---|---|---|
| Increase the number of connections in rural electrification projects inside and outside the electric grid | • Greater percentage of connections and access level for women in rural areas | • Marketing directed to men and women <br><br> • Education of women in health and electricity-safety aspects <br><br> • Loans directed to men and women for the purchase of home appliances or to cover the costs of home electrical wiring <br><br> • Training of women and men in domestic solar systems maintenance |
| Strengthen gender equity and equality in private and public-sector power companies | • Increase the number of trained women <br><br> • Increase the number of women managing energy franchises <br><br> • Men and women with gender sensitization <br><br> • Increase income-generation opportunities for women | • Selection criteria with gender approach <br><br> • Training manuals that integrate the gender approach <br><br> • Support and mentoring programs for women-owned franchises <br><br> • Pilot programs for women's capacity building in community energy micro-enterprises (for example, battery charging using solar panels) <br><br> • Community workshops to help women establish and register microenterprises. |

*Source: ENERGIA (2009).*

## 4.5. Energy and gender indicators in projects

The identification of indicators with gender approach depends on the analysis of existing conditions in the locality and on the understanding of the different roles women and men have in urban and rural communities where the energy project will be developed. Therefore, these gender indicators should be identified in a participatory manner in such a way that they can both reflect specific information of the project monitoring and assessment context and ensure the feasibility of achieving its main goals. This identification can be incorporated into the field work and consultation activities with key actors.

In general, energy projects have indicators related to their development goals. However, these indicators and the information gathered for its analysis are not always sex-disaggregated or gather the different experiences of women and men in the field. In these cases it should be checked if these indicators can be sex-disaggregated and revised; for

example, instead of using the indicator "number of people trained on solar-panel maintenance", "number of men and women trained on solar-panel maintenance" could be used.

Likewise, a rural energy project can assess performance in terms of distributed technology or the degree of connectivity reached by a locality since the greater the number of installed equipment, the more successful the project. However, if gender indicators are used, the gathered information will register how many men in relation to how many women are benefited by the project, relevant information for project whose objective is equal energy access.

The following box shows how a gender approach can be given to existing indicators in energy projects:

### Including gender considerations in indicators

| INDICATOR | INDICATOR WITH GENDER APPROACH |
|---|---|
| Number of households connected to the grid | Number of female-headed households connected to the grid. |
| | Number of male-headed households connected to the grid. |
| Number of solar panels installed | Number of solar panels installed in female-headed households |
| | Number of solar panels installed in male-headed households |
| | Number of households with solar panels in use where women were trained on their maintenance. |
| | Number of households with solar panels in use where men were trained on their maintenance. |

The analysis can also show how many of these distributed technologies are in good condition and working when women have been trained in their maintenance, in contrast to those where only men have been trained. This information is relevant for the project's sustainability.

When indicators identification or development is under consideration, one should wonder which is the gender situation the energy project wanted to change. The following box has a series of questions that can be used as a guide for that purpose.

### Table 13. Guiding questions for identification of indicators with gender approach

| | |
|---|---|
| **Access to information** | Do men and women have equal access to information on the energy services/technologies to be disseminated by the project? |
| **Decision making at planning stages** | Are women and men capable of making decisions during the project planning and design? |
| **Building and maintenance** | How are building and operation tasks of energy services distributed among men and women? Who performs skilled labor and unskilled labor? |
| **Training and payment** | Do men and women have equal opportunities to be trained and receive paid work in the energy project or other benefits generated by it? |
| **Productive uses** | Can men and women use energy to develop small-scale economic activities or to do the housework? Which is the importance of this energy availability and the distribution of its benefits? Do men and women have equal access to loans, information and training? |
| **Ownership and decision making** | Do men and women have ownership rights over natural resources / real estates or other type of rights that allow them to make decisions on energy services implementation? |
| **Benefits** | Which are the practical and strategic benefits of the energy services and the participation process of men and women, according to the perceptions of both groups? How are benefits related to the costs received by men and women? |
| **Policy and strategy** | What type of gender policies are there in the energy sector and agencies? Are these policies put in practice in staff recruiting, internal proceedings, trainings, collaboration among staff members, and are these policies supported by the organization's authorities? |

*Source: ENERGIA (2011b), p. 80.*

### 4.5.1. Challenges when linking projects objectives with activities and indicators

It is necessary to join gender objectives identification in the energy project both to the development of specific activities that contribute to this goal and to the design or identification of the respective gender indicator. This is a common problem, since it is usual to find there is no relation between what the project may achieve in terms of gender equity (its gender objective) and the results or activities planned in the gender mainstreaming process.

The box below intends to give an idea of how to correlate gender activities and objectives with gender-sensitive indicators.[106]

106 These activities were carried out during the IV ENERGIA Implementation Phase, financed by the International cooperation

| Gender objective | Expected result | Gender activities | Gender indicators |
|---|---|---|---|
| Increase the number of connections in a rural electrification project | Increase in the connectivity rate and access levels of women in rural areas | Marketing activities directed to men and women | Number of women and men who know about the rural electrification project |
| | | Education for women on health and safety features of electricity | Number of women trained in health and safety features of electricity |
| | | Establishment of credit lines for household appliances and electric wiring purchase directed to men and women in the community. | Number of women and men that have applied and received credits for household wiring /appliances purchase |
| | | Training of men and women in energy technology maintenance (solar panels, mini-hydro systems, etc.) | Number of women and men trained on energy technologies maintenance (like solar panels, etc.) |

### 4.5.2. Different types of indicators[107]

Indicators design and its effective follow-up enable the project to contrast the activities it performs, to improve its performance as a consequence, and to identify corrective

departments of Sweden and the Netherlands (SIDA and DGIS, respectively). The gender audit reports supported by ENERGIA are available at: http://www.energia.org/what-we-do/policy-influencing/gender-audits
107 Hurtado, I. et al. (2010). For more information go to the web page of UNWOMEN dedicated to gender Para mayor información, visitar la página de ONUMUJERES dedicada a los presupuestos de género: http://www.gender-budgets.org

measures, lessons learned and impacts. This is possible through the monitoring of the project progress, its results and impacts. Likewise, indicators can be quantitative (that is, they can be calculated in numbers or quantities, like the number of women and men that have been trained, percentage of women in decision-making posts) or qualitative goals (which can measure the percentage of men and women who know about a certain project or have an opinion of a certain energy technology).

#### Table 14. Gender indicators: examples for energy projects

| TYPE OF INDICATOR | EXAMPLE OF INDICATOR |
|---|---|
| Reproductive need | • Number of women that have improved/biogas stoves |
| | • Time saved by women in water collection as a consequence of the use of the community pumping system with solar panels. |
| Practical needs | • Women trained as electricians. |
| | • Women and men trained as energy entrepreneurs |
| Strategic interests | • Number of women with access to and control over the use of solar panel systems for domestic electrification. |
| | • Number of women with access to financial services |

| TYPE OF INDICATOR | EXAMPLE OF INDICATOR |
|---|---|
| Quantitative indicators | • Number of government representatives that take part in a gender training |
| | • Percentage of women and men that receive training on loan applications |
| Qualitative indicators | • Fair participation of women and men in decision-making processes |
| | • Increase in the access to and control over resources by women and men /fairer access to and control over resources by women and men |
| | • Women empowerment (increase of confidence, self-esteem) |

#### Table 15. Examples of progress indicators

| Type of project | Gender consideration | Gender activity | Gender indicator |
|---|---|---|---|
| Renewable energy | Information and training in energy technologies is generally focused on reaching men as a target group | Include women in training and recruiting activities in renewable energy projects | Number of women and men trained in the use and maintenance of renewable energies. |
| Energy efficiency | The lack of knowledge on options or effects prevent men and women from adopting energy-saving technologies | Media campaigns designed to reach different groups of users or consumers including groups of women. | Increase in the number of women and men aware of the existence of technological options or more efficient energy technologies. |

| Type of project | Gender consideration | Gender activity | Gender indicator |
|---|---|---|---|
| **Large-scale energy infrastructure: generation and distribution** | The effects of relocation, displacement, loss of livelihoods, work creation and distribution of benefits generated by a large-scale infrastructure project may be unequal among men and women. | Train women to perform work related to the construction and operation of the energy infrastructure project<br><br>Ensure that the relocation process includes women in the consultation and assessment process of people affected by the project; that women and men are compensated for their losses (even using a compensation system for husbands and wives) and provide them with training in alternative livelihood options. | Number of women and men working in activities directly related to the energy infrastructure project<br><br>Number of women and men displaced who have received training, compensation and/or have been able to establish livelihood activities after the construction of the infrastructure project. |

Progress monitoring in energy projects requires to follow up the different inputs/contributions (which generally include staff, trainings, team) or performance (such as activities done, services provided for the project in order to achieve its final goal). These process monitoring indicators should be identified at initial stages of the project planning and should be linked to concrete gender goals since the baseline for those indicators should be gathered during the initial field study.[108]

The following matrix presents examples of progress indicators.

The indicators that measure results and impacts seek to understand the changes made in the lives and mostly in the social and economic wellbeing of women and men in the locality where the energy project is implemented. It is difficult to measure accurately the impact since many factors can influence the change in their wellbeing. Therefore, a series of controlled and large studies to be able to reach a concrete conclusion on the impacts of a specific project should be conducted. Wellbeing impacts can measure:

• The baseline as regards energy access and use

• The reduction of (the hours of) drudgery

• Improvements in health, social or economic empowerment

108  ENERGIA (2005b).

**Table 16: Examples of results or impacts indicators**

| | |
|---|---|
| **Information baseline on energy access and use** | • Per capita energy consumption of women and men<br><br>• Percentage of non-commercial energy used by women and men<br><br>• Purposes for which men and women use energy<br><br>• Time spent and efforts done by women and men to supply energy for their activities<br><br>• Amounts paid for energy by women and men |
| **Reduction of drudgery** | • Relative risks suffered by women and men, such as being exposed to open-fire smokes used for cooking and residential heating.<br><br>• Reduction of time and work necessary to perform domestic activities by women<br><br>• Reduction of time or money spent by women and men to secure the energy supply (firewood, coal, diesel, kerosene)<br><br>• Increase in the use of home appliances to reduce the domestic work load<br><br>• Quantity of time spent by women compared to men to rest, relax or train themselves |
| **Health improvement** | • Reduction of the number or percentages of women and girls who consult for respiratory or visual problems.<br><br>• Increase of access to drinking water and sanitation |
| **Economic empowerment** | • Increase and diversification of income and/or greater productivity for women and men<br><br>• Increase in time availability for women to engage in income-generating activities<br><br>• Increase of food production for sale and domestic consumption<br><br>• Number or percentage of women and men involved in energy-sector related jobs or trainings<br><br>• Income generated by women-owned small and medium-enterprises |
| **Social empowerment** | • Increase of girls' and boys' participation in primary or secondary education<br><br>• Increase of educational levels of girls and boys<br><br>• Increase of participation of women in decision making on energy issues at world level<br><br>• Number or percentage of women and men involved in energy policy dialogues |
| **Energy sustainability** | • Number or percentage of women and men who use energy-efficient technologies<br><br>• Number or percentage of women and men trained to use alternative or renewable energies<br><br>• Increase of men and women's awareness on energy technologies options |

*Source: ENERGIA (2011c), Resource 8.1.*

• Energy sustainability through a gender approach.

The matrix presented below has examples of possible results and impacts indicators of an energy project with gender approach:

## 5. Implementation phase: Institutionalizing gender mainstreaming in the organization[109]

The main aim of the gender mainstreaming institutionalization process is to establish an appropriate framework within the institution to perform activities and projects with gender approach, and secure in this way the institutional commitment with the accomplishment of objectives and expected results through energy projects. The institutionalization process includes the adoption of a gender organizational policy and vision that establishes clear gender commitments and results in their projects, as well as commitments for the capacity creation within the organization on gender mainstreaming.

This theme is developed in Module 3. However, we would like to highlight in this section that the institutionalization process should pay attention to the following elements:

### Key elements for gender mainstreaming institutionalization

**1. Integrate gender considerations in the project framework:** this work implies that the organization adopts a gender policy or vision that guides the energy project activities; apart from incorporating gender considerations in its logical framework and planning documents, training manuals and publications, and above all establish a monitoring and assessment system that gathers sex-disaggregated information.

**2. Ensure human resources and capacities are available to conduct the mainstreaming process:** this analysis stage leads to understand if the necessary staff is available to implement the gender mainstreaming process. Besides, a gender focal point should be set into place so that there is at least one person (or team of people) in charge of training and gender awareness

109  Free translation and adaptation from ENERGIA (2005b), p.130, whose section is based on the proposal of W. Hulscher, former FAO advisor.

activities. That figure should be supported by the Management Board so that their recommendations have the political and institutional weight necessary to secure their implementation.

Other important elements include the identification of organizational counterparts with experience in gender analysis that could support the process; the search for gender balance within the organization staff and the existence of administrative support and incentives to secure the implementation of activities with gender approach.

Finally, the budget component should not be overlooked since the organization will commit part of its financial resources to the implementation of the gender activities previously mentioned.

**3. Capacity building of staff and key actors of the process:** this is one of the most requested actions by energy project staff when developing the Gender Action Plan and it makes clear the need to adequately understand the gender analysis tools as well as the context where the project is developed.

**4. Gender-sensitive working environment:** policies aimed at making the working environment more adequate to and respectful of the needs of men and women can be essential to encourage them to join the team of the energy project or the institution. Likewise, certain institutional policies can help women to participle in a more secure and comfortable manner in the work they perform, whether within (by working in mixed groups at the office) or outside the premises (field work).

**5. Indicators for capacity assessment:** it is necessary to develop adequate indicators that answer the needs and particular situation of the organization, and that enable following internal changes and the increase of institutional capacities necessary to conduct the gender mainstreaming.

Institutionalizing the gender mainstreaming process is key for the implementation of the Gender Action Plan since there are many instances where an excellent gender analysis report is shelved, without any implementation, due to the lack of institutional commitment or capacity to implement its recommendations.

## 6. Monitoring phase[110]

### 6.1. Monitoring and evaluation: following up progress and performance in gender issues

Monitoring or activities follow-up is an integral part of the project cycle. It starts with the identification and definition of indicators for objectives, results and project activities included in the logical framework, and should be continued during all the implementation phase (section 4.5). On the other hand, the assessment is done periodically, usually in the mid-term and at the end of the project.

Both the monitoring as well as the assessment should incorporate measurable objectives and indicators with gender approach within the project logical framework. The following boxes present examples of gender indicators in energy projects.

110  Free translation and adaptation from ENERGIA (2005b), pp. 121-124.

### Sex-disaggregating indicators in a biofuels project::

• Women and men are included in studies and surveys (monitoring baseline and assessment)

• Report on the number of women and men trained, benefited, etc.

• Participation goals for women: in decision-making entities, jatropha crops, ownership of enterprises, jatropha planting, maintenance and preparation

• Number of women and men in the production chain

• Women and men that use and maintain energy facilities

• Training on gender issues prepared by the project team

• Raising awareness among key actors on the importance of gender mainstreaming

• Access to information (raise awareness) among women and men farmers on the benefits of jatropha.

*Source: ENERGIA (2011b), p. 81.*

### Quantitative Indicators used in biogas programs

| EXPECTED RESULTS | EXAMPLES OF GOALS TO ACHIEVE (QUANTITATIVE INDICATORS) |
|---|---|
| **Reach women through the biogas program** | • Number of contracts with private construction companies to train both women and men<br>• 50% of participants in users training events are women<br>• 20% of biogas plant owners are women<br>• At least 90% of biogas users, both women and men, are capable of operating biogas plants |
| **Integrate women in activities related to the biogas supply** | • At least 60% of private companies have recruiting and employment policies beneficial for women<br>• At least 10% of builders are women<br>• Women represent at least 50% of workers in national biogas development programs<br>• At least 50% of local developers are women<br>• At least 33% of energy committees members are women |
| **Increase the income of women** | • Number of women and men linked to other existing opportunities to improve their wellbeing, income or benefits, as well as other programs<br>• Number of women and men who are trained in vet, business services |

*Source: ENERGIA (2011b), p. 81.*

Although the monitoring and assessment process is carried out after the Gender Action Plan development, it is crucial that this process had been documented within the action plan. Therefore, the monitoring plan integrated into the Gender Action Plan should include a plan on how and when the collection of information corresponding to program indicators will be conducted (for example, through annual surveys, field-visit reports, annual/biannual progress reports, etc.), who is responsible for collecting and analyzing the information and how these results will be communicated and assessed with the project management and/or organization (for example, through periodical evaluations, revision sessions, etc.)

Generally, monitoring activities are conducted by the same energy project team as part of the activities and responsibilities it performs according to the project logical framework while assessments can be conducted by external expert teams.

### Monitoring and assessment with gender approach

The monitoring and assessment process can be conducted with a gender approach if many measures are considered, such as:

- Include as a requisite in the ToR that the monitoring and assessment team has experience working on gender and at least includes a gender-expert as a member.

- Consider training or awareness raising of the monitoring team on gender considerations, including the use of specific techniques and tools to collect information from women and girls

- All information gathered should at least be sex-disaggregated

- Ensure a representative number of women is covered when field information is gathered

- Measure and report using indicators with gender approach in users surveys and progress reports.

*Source: ENERGIA (2011b).*

## 6.2. Communication strategies: involving all key actors effectively in the gender mainstreaming process

An energy project with gender approach must develop a communication strategy that ensures reaching relevant actors for the process as well as the communication of the appropriate message to the right people through the adequate communication media for those effects. The effectiveness of these messages will influence the process and results of the gender mainstreaming efforts and will improve their chances to replicate them.

It is important that key actors appreciate the project efforts through appropriate communications both in its content and the time when they are released.

### The communication strategy should answer the following questions:

- Which are the different target groups the project needs to communicate with and which are the information needs with respect to gender mainstreaming those groups have?

- What is the project trying to do with this communication? Which are the communication's objectives?

- Which strategy can be used to achieve those communication objectives?

- Which are the most appropriate communication means and tools to use? Does the message to be communicated consider literacy/education levels or average language use of target groups?

*Source: ENERGIA (2011b), p. 87.*

The communication strategy development has at least two stages: the first one is the identification of target groups for the dissemination of information, and the second is the establishing of the purpose or reason of the communication. Both points can be explored during the preparation phase. Some common objectives for communication strategies include:

- Ensure that all key actors understand and take over the gender mainstreaming process

- Share new experiences with key actors

- Ensure the accountability of all actors involved

- Communicate with actors external to the project which will determine the gender approach replicability potential.

The following matrix exemplifies information needs of certain target groups for communication strategies:

Once the target groups and communication objectives have been identified some of the following strategies can be used:

**Table 17. Target groups and their information needs**

| TARGET GROUP | INFORMATION NEEDS |
|---|---|
| Governing body or project management | • They need to know about the approach in general to identify and answer gender considerations<br>• They need to be up-dated on the results and impacts related to the project efficiency (this information should be supplied in such a way that can be also shared with people outside the organization including project donors or investors)<br>• They need to follow up and monitor the progress of the project |
| Project team | • They need to understand how gender mainstreaming strategies are applied, which specific activities have been planned, which are the individual responsibilities and roles |
| Project beneficiaries | • They need to understand what is gender mainstreaming; its benefits and which are the roles and responsibilities of its counterparts or key actors.<br>• They need to have a clear understanding of what they may expect from the project (how women and men will benefit), which are their roles and responsibilities and how they can participate (including decision making, contributions to activities design, etc.) |
| Decision-makers and/or donors | • They need to see visible and measurable impacts achieved through the use of gender methodologies or strategies in the project they support/finance; how this approach can contribute to the improvement of the general project performance, and how to adapt the gender strategy of the gender mainstreaming while other projects are stimulated to adopt this gender approach |
| Organization working on developing themes (other projects, research and academic institutes, etc.) | • Good practices and lessons learned during the gender mainstreaming process applicable to the energy sector, of relevance to other key actors.<br>• Concrete tools and approaches to integrate gender considerations in the project cycles. |

*Source: ENERGIA (2011b), p. 88.*

• Develop arguments based on real and concrete facts directly related to the objectives of the energy project

• Consult and involve team members, governing body, decision makers and counterparts in the Gender Action Plan development and its communication strategy

• Trainings in gender sensitizing themes for energy project developers and decision makers.

• Involve gender- allied individuals and organizations in advocacy activities, communications, networks and resource mobilization.

**What should not be forgotten when a communication strategy is developed:**

• Have a clear idea of "how much" should be communicated: too much or too little information can be detrimental for the project

• Messages should be tailor-made for each target group and the information presented in a clear and simple manner

• Communication with rural and urban communities is essential for the project success, and it should concentrate on the ambitions of men and women (and not on the objectives of the project)

• It is important the communication not be "threatening" when messages are communicated to men

• Messages presented to men are different to those presented to women since their topics of interest or ambitions are likely to be different.

• Women and men have access to different means of communication (radio, television, newspapers or newsletters) and can have different literacy levels. Likewise, communication materials should be distributed in localities frequently visited by women and female communicators hired. .

*Source: ENERGIA (2011b), p. 92.*

A strategy is presented below to involve young women and men in the identification of relevant communication elements for communities in relation to the actions of renewable energy projects in Guatemala. One of the most important aspects of this case is the attention given to the cultural relevance of the communications, as well as the gender balance among project participants.

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### Community reporters program: communicating the perspective of rural communities about renewable energy projects

Source: Mario Hernádez,
Executive-Director of Semilla de Sol (2014) and Semilla de Sol (s.f.).

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The Community Reporters Program represents an effort of the Asociacion de Desarrollo Rijat´zul Q'ij (Semilla de Sol) to improve communications of actions of their renewable energy projects through the integration of the rural communities' perspective participating in them. The initiative is carried out in the Ixil region, municipalities of Chajul and Nebaj, of the Quiché Department in Guatemala. This region's population is mostly indigenous belonging to the Maya Ixil ethnic group, and most of its inhabitants live in poverty or extreme poverty.

The communication project is coordinated by two community based organizations: the Hydroelectric Association of Comprehensive Development North of Quichè (ASHDINQUI for its acronym in Spanish) and the Chelense Hydroelectric Association (ASOCHEL for its acronym in Spanish) and it is implemented by young people from the area (five women and three men). The selection of reporters took into account: their ages (up to 30), sex (a parity of 50% women and 50% men was sought), educational profile (read and write in Spanish), abilities to learn computing systems, educational level (at least primary school finished), residence (live in the communities where ASHDINQUI and ASOCHEL are based) and institutional support (candidates should be selected by the governing board of the two community organizations).

Once the selection process was completed, a group of women and men was established to gather experiences and perspectives from the point of view of the communities participating on the rural energy projects supported by Semilla de Sol in the Batzchocola, Chel and Ixtupil micro-basins. These reporters will communicate community experiences at local, national and international level using different means, such as: in-person presentations, photo features, written and radiographic news articles (means of communications with deepest penetration in Ixil) and on-line featured articles.

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A core element of this project is the attention given to the cultural belonging during selection and through the training process since one of the project's objective is to recover ancestral knowledge and practices, and to carry out activities according to the culture of benefited populations. So reporters receive support to apply to their work principles such as: time in the Mayan world view, critical explanation of life, cultural identity strengthening and community engagement. Likewise, it is worth mentioning the effort made to make up a team with gender equality, which guarantees the necessary human capital to come closer to women and men in benefited communities according to local traditions and customs.

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## 7. Additional sources of information

More information on the subjects dealt with in this module can be found in the following sources:

• Aguilar, L and REDNA (1998). Module 1. Lo que comienza bien termina mejor: Elaboración de propuestas con enfoque de Género. Hacia la Equidad Series. UICN.

•   ENERGIA (2005a). Module 1: Concepts in Gender and Energy. The Gender Face of Energy: A Training Manual. Prepared by Clancy, J. et al. for ENERGIA.

•   ENERGIA (2005b). Module 2: Gender Tools for Energy Projects. The Gender Face of Energy: A Training Manual. Prepared by Clancy, J. et al. for ENERGIA.

•   ENERGIA (2007d). Module 5: Engendering Energy Project Proposal Development: Capacity Building of Energy NGOs. Gender Tools for Energy Projects. The Gender Face of Energy: A Training Manual. ENERGIA.

•   ENERGIA and Hivos (2010). A guide on Gender Mainstreaming in the African Biogas Partnership Programme. ENERGIA.

•   ENERGIA (2011b). Mainstreaming gender in energy projects: A practical handbook. ENERGIA.

•   ENERGIA (2011c). Mainstreaming gender in energy projects: Toolkit. Prepared by Elizabeth Cecelski and Soma Dutta for ENERGIA.

•   Escalante, A. et al. (1999). Módulo 6. Ojos que no ven… corazones que sienten: Indicadores de Equidad. Hacia La Equidad Series. UICN.

•   ESMAP (2013). Integrating Gender Considerations into Energy Operations. Knowledge Series 014/13. World Bank Group.

•   UNDP and ENERGIA (2004). Gender and Energy for Sustainable Development: A toolkit and resource guide. New York.

•   UNDP (2007). Gender Mainstreaming: A Key Driver of Development in Environment & Energy. Energy and Environment Practice: Gender Mainstreaming Guidance Series. Sustainable Energy Services. Training Manual.

•   Rojas, A.V. et al. (2012). Guide on renewable energy technologies for women in rural and informal urban areas. UICN and ENERGIA. Costa Rica.

## 8.  Practical exercises

A series of exercises is presented in this section to identify gender objectives, activities and indicators which correspond to the sections of the Gender Action Plan, Monitoring and Evaluation and Communication. Exercises of Module 1 could be revised to identify exercises that help in the gender sensitizing theme, corresponding to the Preparatory Phase. Module 3, related to institutional analysis, has specific exercises to develop that theme.

### Exercise 1: Identifying gender objectives[111]

It is possible to use a simple assessment exercise to make known the concept of gender objectives while allowing members of an energy project to analyze and prioritize gender objectives, whether explicit or implicit, that guide their project. This analysis may be included as part of a capacity-creation exercise previous to the formulation of the Gender Action Plan. This exercise takes an hour approximately.

**Exercise on gender objectives in the project:**

The facilitator makes a short presentation of the gender objectives that traditionally guide the energy project work, whether explicit or implicit:

• Improve the quality of life, through the reduction of drudgery, such as water or wood gathering, agricultural work, or health conditions improvement.

• Increase the productivity and/or income of women, by securing them a (better) energy access in order to help them work in a more efficient way or by giving them new opportunities for income generation.

• Promote gender equity and women empowerment,

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111   Free translation and adaptation from the gender objectives identification methodology  included in Unit 3, Module 3,  ENERGIA Training (2005c), p. 63.

creating spaces for their participation in activities and decision making, from which they are generally excluded.

• Ensure the project efficiency and sustainability, for if the needs of women and men are not adequately comprehended, the project interventions may be wrongly designed and fail as a consequence.

Once these four categories of objectives with gender approach have been explained, the facilitator distributes the grid presented below to each participant and asks them the following question:

Participants should not only identify objectives but also

**Which of these gender objectives can be identified in its project component?**

**GRID:**

| Project component | Improve quality of life | Increase productivity or income of women | Promote gender equity and women empowerment | Ensure the Project efficiency and sustainability |
|---|---|---|---|---|
| **Component A** | | | | |
| **Component B** | | | | |

prioritize them. For this second task 10 points are given to each participant, who has to distribute those points according to the importance each identified objective has for its component of the energy project.

This exercise can be done individually and anonymously or in groups if participants so desire. After finishing the exercise, a series of volunteers (or the facilitator) can tabulate results separately. The results can then be shared with the group for its analysis.

This is an example of how a matrix of objectives and prioritization that gathers the different participants' view looks like .

**GRID:**

| Project component | Improve quality of life | Increase productivity or income of women | Promote gender equity and women empowerment | Ensure the Project efficiency and sustainability | TOTAL |
|---|---|---|---|---|---|
| **A. Decentralized rural electrification** | 4 | 3 | 2 | 1 | 10 |
| | 8 | 1 | 0 | 1 | 10 |
| | 3 | 3 | 2 | 2 | 10 |
| | 2 | 1 | 5 | 3 | 10 |
| | 3 | 1 | 2 | 4 | 10 |
| | 4 | 3 | 1 | 2 | 10 |
| **Total A** | 24 | 12 | 12 | 13 | 60 |
| **B. Improved stoves** | 3 | 3 | 2 | 2 | 10 |
| | 5 | 2 | 1 | 2 | 10 |
| | 4 | 2 | 1 | 3 | 10 |
| | 5 | 2 | 1 | 2 | 10 |
| | 4 | 4 | 1 | 1 | 10 |
| | 5 | 3 | 1 | 1 | 10 |
| **Total B** | 26 | 16 | 7 | 10 | 60 |
| **TOTAL PROJECT** | 50 | 28 | 19 | 23 | 120 |
| | (41,66%) | (23,33%) | (15,83%) | (19,17%) | (100%) |

**Exercise 2: Quick gender analysis in projects**

It is possible to develop an exercise for a quick gender analysis of an energy project using the matrix presented in section 3.3 of this Module. The exercise requires participants to know in depth an energy project in particular, either because they work directly in it or a case study was presented to them that provides enough evidence of the context where that initiative develops.

Once checked that participants are familiarized with the case to be analyzed, distribute the matrix below. Ask participants to discuss in groups the questions on the right column. Consider that this exercise may require an important amount of time if you want to revise in detail the text of the documents on the left column. Remember to ask group members to share their conclusion in a plenary.

| Project document | Gender indicator to look for in the document |
|---|---|
| Background and rationale | Are gender consideration outlined or mentioned in the energy intervention background? Are there convincing arguments in the rationale to conduct the gender consideration mainstreaming or to search for gender equity? Is information included on the analysis of the different needs of women and men in relation to the project as part of the social analysis? |
| Mission (ambition) | Are the needs of women and men reflected in the project mission? Does the project mission contribute to reducing or correcting inequities among men and women by solving the practical needs of both of them? Is it an objective to transform institutions that perpetuate gender inequities? |
| Objectives | Do intervention objectives take into consideration the needs of both women as well as men? |
| Target groups | Which should be the gender balance within the target group of beneficiaries? |
| Activities | Are measures incorporated to secure the inclusion and participation of women in the project implementation and planning? Are men and women involved in the activities planned? Are additional activities conducted to secure the gender approach is implemented in an explicit manner (for example, trainings on gender, additional research)? |
| Indicators | Have indicators been developed to measure the project's progress towards each of its objectives? Is it possible to measure gender considerations for each objective using existing indicators? Are indicators disaggregated by sex? Have goals been established to secure extensively the participation of men and women? |
| Counterparts | Who will conduct the planned intervention? Do these counterparts have the necessary knowledge to conduct the gender mainstreaming process? Do both women and men participate in the project implementation? |
| Monitoring and evaluation | Is a gender perspective included in the M&E strategy? Has the M&E matrix been sex-disaggregated (baseline, monitoring, impact assessment) according to the requisites to report project activities? Will both technical (content) as well as organizational (process) aspects of the intervention be examined? |
| Risks | Has the general outlook of gender roles and relations within society (for example, stereotypes or structural barriers that prevent fully participation of either sex) been considered as possible risk? Has the potential negative impact of the intervention been considered (for example, possible increase of labor for women or social isolation of men)? |
| Budget | Have items been incorporated in the budget to carry out gender trainings or involve a gender expert? Are there budget items dedicated exclusively to activities with gender approach? |
| Communication strategy | Is a gender perspective included in the communication strategy of the existence, progress and results of the project to the public in general? |

*Source: ENERGIA (2011c), Recurso 8.1.*

The exercise can be done in sub-groups, giving a series of documents to each one. By doing it this way, the team will be able to cover a greater amount of documents in less time and the exercise can be a more interesting methodology if all workshop participants belong to the same energy project.

## Exercise 3: Gender indicators

One of the concerns of those participating in a gender workshop is the identification of indicators. This is an activity that cannot be done in an isolated manner since it requires a number of previous elements in order to identify the adequate indicators for the specific project carried out.

The facilitator must ensure that each participant has all the necessary information on a specific energy project. This may consist of one or more case studies or the project under analysis during the workshop. Once it has been checked that all participants have enough elements of analysis, the facilitator will distribute the following grid:

Although this is a simple matrix, the group will need some time to discuss the type of indicators they can and wish to monitor. It is advisable to spend 60 minutes in this discussion. The conclusion of the group work can be shared with the plenary after the analysis.

| Gender mission or objective | What is wished to be achieved in the project in terms of gender? |
|---|---|
| Activities | What activities are proposed to achieve the objective identified previously? |
| Indicators and monitoring plan | Which are the relevant goals and indicators to measure the expected results? Who is the person in charge of gathering this information? How much and by what means can information on gender indicators be gathered? |

The following grid can also help to identify indicators of an energy project following the methodology already described:

**Guide questions to identify indicators with gender approach:**

| | |
|---|---|
| Access to information | Do men and women have equal access to information on energy services/technologies to be spread by the project? |
| Decision making in the planning stages | Are women and men capable of making decisions during project planning and design? |
| Construction and maintenance | How are energy-services construction and operation activities distributed among men and women? Who does the skilled and non-skilled work? |
| Training and payment | Do men and women have equal opportunities to be trained and paid in the energy project or other benefits generated by this? |
| Productive uses | Can men and women use the energy to develop small-scale economic activities or to bear domestic work? Which is the importance of this energy availability and the distribution of its benefits? Do men and women have equal access to loans, information and training? |
| Ownership and decision making | Do men and women have the right to own natural resources/property or other type of rights that allow them to make decision on the energy services implementation? |

| Benefits | Which are the practical and strategic benefits of energy services and participation process of men and women according to the perceptions of both groups? How do the benefits relate to the costs received by men and women? |
| --- | --- |
| Policy and strategy | What type of gender policies are there in the energy sector and energy agencies? Are these policies put into practice in the recruiting of staff, internal proceedings, trainings, collaboration among staff members, and are they supported by the organization authorities? |

## Annex: Gender Analysis Tools to gather information in communities[112]

### Tool 1: work-division-by-sex matrix

**It helps to understand::**

• How an energy intervention can reduce the work load and increase the productivity and income of both men and women as well.

• How work is organized within the households and the communities, as well as the type of paid and unpaid work that women and men perform.

**Information gathering:**

• Matrix presentation or picture representation of activities performed by women and men in their daily tasks (table 1)

• Based on focal group discussions, observations or representative surveys.

**Variations::**

The daily-activities routine and the seasonal-activities schedule are two possible variations of the work-division-by-sex matrix.

• **Seasonal activities Schedule:** this Schedule documents the activities of women and men according to the season or months of the year. It is useful to plan activities taking into account the seasons/months when women and men are relatively free of their works so they can have greater chances to participate in sensitizing campaigns, training on the technology use, maintenance and repairing, etc.

• **Daily-activities routine:** it can be useful to identify relative workloads among different groups of the community, and to decide which the target groups of the project are. Comparisons among daily-activities routines make evident who works longer hours; who concentrates in a smaller number of activities and who has to perform a greater number; how much time is devoted to productive, domestic, communal, leisure activities, etc. Mapping the daily itinerary of a woman generates the baseline information on the time spent in wood gathering since, for example, a biogas project may have as a goal the reduction of time spent in this activity. It can also help to decide the time and place to perform activities where women are expected to participate in.

112  Free translation and adaptation from ENERGIA (2005b), pp. 126-128.

**Gathered-information analysis::**

• How can a new energy technology change the existing work-division by sex? Should women or men, or both of them, be trained and receive promotion activities of these technologies?

• Which are the gender implications of the existing work division by sex for the project and its activities? Are there any cultural, social or time considerations that can limit or affect the project activities? How

### Table 1. Work división by sex

| Activity | Female contribution percentage | Total amount of time at domestic level (hours/week) | Contribution of women (hours/week) |
| --- | --- | --- | --- |
| Water gathering | 91 | 10,3 | 9,3 |
| Laundry | 89 | 1,3 | 1,1 |
| Wood gathering | 91 | 4,5 | 4,1 |
| Cattle feed (fodder) | 39 | 7,7 | 3,0 |
| Water trough | 39 | 6,9 | 2,3 |
| Local markets | 63 | 15,0 | 9,5 |
| Regional markets | 61 | 0,3 | 0,2 |

can these be overcome by the project activities?

• Does the existing work division by sex offer opportunities to involve both men and women in the Project activities? How will the project activities make the works of women and men less arduous and more productive? Can the project activities settle in a better manner the practical needs of women?

• Can the Project through its activities promote a fairer work division by sex within communities answering the strategic needs of women?

### Tool 2: Access to and control over resources and benefitss

**It helps to understand:**

Which resources do women and men have access to and/or control over?

• Productive resources: land, equipment, work, cash/credit, skills and opportunities to generate income

• Political resources: organizations, leadership, education, information, experience in the public field, self-confidence/high self-esteem, credibility

• Time

• Knowledge/training

Which benefits from these resources do women and men receive??

- Basic needs covered
- Income generation
- Property ownership
- Education and training
- Political power

**Information gathering:**

• An Access and Control Table presents resources and benefits and an analysis of the Access and control for each of them by women and men in a matrix. Applied to energy projects, this matrix can be sued to identify the resources needed to ensure that both women and men benefit from the new technologies and to make evident how an energy technology can change existing access and control patterns.

• A Communal Resource Map, drawn to represent a series of natural and physical resources in a community, it is useful to learn about the Access to and control over resources. Mapping the community generates information of, for example, the place where cattle concentrates, location and size of states, farmlands or livestock lands, distance to wood-gathering places and the existence or availability of services.

**Generated information:**

• Which are the implications of the present access to and control over resources and benefits for the Project activities and objectives? Are there any cultural, social or any other considerations that may limit the project activities? How can they be overcome in the project activities?

• Does the access and control table offer opportunities to involve women and men in project activities? How can project activities contribute to increase the access to and control over resources by women and increase their benefits?

• Does the project tend to reinforce existing access and control patterns over resources and benefits by women and men or, on the contrary, does it challenge those patterns? Can the project, through its activities, plant "a seed of change" that promotes a fairer access to and control over resources and benefits in target households and communities in such a way that it satisfies in a better manner the strategic interests of women?

**Tool 3: gender analysis in the value chain**

For Project involved in sustainable energy markets promotion, gender analysis of the value chain can be a valuable tool in order to understand the work division by sex in the supply chain and the access to and control over resources and benefits that workers have, both women as well as men, in the energy production. A value chain with gender approach is a system of factors and actions which include different phases where different actors (men and women) perform certain production processes, added value and marketing, whose final result is achieved through combined actions and efforts.

The gender analysis of the value chain can be used in energy projects with components that support the production or marketing of its products or technologies. In each phase of the process (design, commodities acquisition, intermediate investments or contributions, production, distribution and retail sales, and end consumer support through supply networks) costs and benefits, restrictions and opportunities are analyzed for the women and men who work as technicians, workers, managers, company owners and marketing agents. The conclusions drawn from this analysis may be used in the design of activities with gender approach within energy projects.

Table 2 exemplifies activities developed to generate information on actors participation in the production chain of improved stoves, and a gender analysis of interventions based on the work percentage and paid given to women and men.

**Table 2. Using the value chain analysis as a gender analysis tool in an improved-stoves project**

| Production activity | Actors and specific activities | Gender analysis | Gender intervention |
|---|---|---|---|
| Mining, preparation and production. | Land owners | • Land owners are mostly men (nearly 90%) since the lands are inherited by sons upon their fathers' deaths.<br><br>• Gender inequities in the time and work done | 1. Payment increase<br><br>2. Rating of work according to the work load. |
| | Clay extractors | • Women are mostly involved in clay extraction; the pay for a work-day is low and men are better paid than women; inefficient tools are used for clay extraction; hard working conditions (it is difficult to come in and go out of extraction wells) | 3. Introduction of appropriate technologies |
| | Carriers | • Women carry clay to the roads (80% women, 20% men). More information is necessary on the distance traveled and the load weight.<br><br>• Problem from the gender perspective: carrying clay on their backs may cause health problems | 4. Training in the necessary skills to perform activities that women can also carry out. |
| | Clay drivers | • 100% men<br><br>• Technology used: own carrying Technologies; they are hired to take the clay from extraction mines to factories<br><br>• Income for the clay owner: 4,000 Ugandan shillings for each truck loaded with 7 tons<br><br>• Income for the driver: 3,000 Ugandan shillings | 5. Improve transport through the use of appropriate technologies |

| Production activity | Actors and specific activities | Gender analysis | Gender intervention |
|---|---|---|---|
| | Clay combustion chamber producers | • Classification: 70% women, 30% men | 6. Train and support women so that they can drive. |
| | | • Men receive 200 Ugandan shillings and women 150; with a difference on the number of hours worked (inequity of hours for women). | 7. Increase payment encouraging performance and promoting an egalitarian pay for women and men |
| | Clay mixing and moistering | • Women perform 100% of work | |
| | | • Income of women is 150 Ugandan shillings | Define and plan a gender intervention based in information gathering |
| | Stoves smoothing, repairing and drying. | It is necessary to investigate who carries out this work, its intensity and how much is paid for this job | Define and plan a gender intervention based in information gathering |
| Burning | Load the stoves, gather Wood, set the fire on, unload the stoves | It is necessary to investigate who carries out this work, its intensity and how much is paid for this job | |

## Tool 4: participation and decision making

**It helps to understand::**

How women and men participate in decision making at home and in the community, as well as in Project activities, from employment and income generation to decision making and Project management..

**Generated information::**

• Which are the consequences of existing participation levels for the project decision making? Is there any restriction for the participation of women in decision making in the project activities? How can it be overcome?

• How can the Project ensure that both women and men effectively participate in decision making and activates such as training and employment?

• Does the Project tend to reinforce or challenge the existing situation as regards decision making by women and men? Can the project plant, through its activities, "a seed of change" which promotes a fairer participation among men and women?

**Examples:**

1. An assessment of the participation of women and men in the Biogas Program in Laos showed that men were the ones that attended more training for users, in spite that primary users of biogas plants were women. Many women pointed out that they have to share operation and maintenance activities of biogas plants in spite of not having been trained for these activities. They face difficulties especially when men are outside the household, due either to working or social reasons. In the Savannakhet province this is a serious problem since men migrate to Thailand looking for jobs. A great number of men also cross the river Mekong daily for working reasons, which makes it difficult to contact them in case the plants need repairing or maintenance.

2. A format for differentiated decision-making analysis within electricity committees was included in the gender revision of the Rural Electrification Board of Bangladesh, done by ENERGIA (Table 3). This table starts with the least possible degree of participation by women and poor sectors of the communities to be benefited by an energy project, gradually advancing to achieve levels of equal participation among sexes and economic sectors of a same population. This table can help to identify the degree of participation existing among men and

women (before the project implementation), as well as the potential progress the project can achieve within the benefited communities (subsequent assessment to the project implementation).

**Table 3. Decision-making analysis format applied to Electricity Boards in Rural Electric Cooperatives in Bangladesh**

| Participation of women in Local Electricity Committees | Participation of poor sectors in Local Electricity Committees |
|---|---|
| There are no women in local electricity committees, not even on paper | There are no members of poor sectors of the community at the local electricity committee, not even on paper |
| Women are members of local electricity committees, but they do not participate regularly in management meetings | Members of poor sectors integrate local electricity committees, but they do not participate regularly in management meetings. |
| Women are members of local electricity committees and are present at management meetings, but they do not participate in decision making. | Members of poor sectors integrate local electricity committees and are present at management meetings, but they do not participate in decision making. |
| Women are members of local electricity committees, are present at management meetings and participate in decision making on equal basis with men. | Members from poor sectors integrate local electricity boards, are present at management meetings and participate in decision making on equal basis with wealthy community members. |
| Men and women participate in high-level management meetings (for example, at district or regional level) and share decision making. | The rich and the poor participate in high-level management meetings (for example, at district or regional level) and share decision making |

## Tool 5: Needs, priorities, challenges and perspectives.

**It helps to understand:**

The perceptions of women and men on the problems they face or the benefits they want to get from a technology, and how needs and priorities vary according to different groups, including women and men.

**Information gathering:**

Organize two different focal groups: one of women and another one of men. Make sure there is a mix of different socio-economic groups in each of them. Ask participants what they think of the themes discussed and ask them to document their own discussion.

**Information analysis:**

• Which are the different problems identified by women and men? Which problems arise from the work division

by sex or from inequities to resource access?

• Which characteristics do women and men want the technology the project offers to have? Which are the benefits sought for by women and men?

**Example:**

Different perceptions by women and men as regards improved stoves, taken from an exercise done by the Namibia Biomass Energy Saving Project (NAMBESP).

NAMBESP conducted sensitization campaigns, stoves tests, stove-producer trainings on production and management skills, support to existing production sites, conducted marketing studies and identified producers and distributors of potential and existing stoves. Tables 4 and 5 show a summary of focal-group discussions with women and men in two of five metallic-stoves production centers (Okahao and Onkani), and a production workshop of solar stoves (Valombola Vocational Training Center) using self-assessment tools..

**Table 4. Improvements to stoves suggested by female and male clients: need assessment in a participative manner, Namibia.**

| Men | Women |
|---|---|
| Have a grill on top (to barbecue meat) | Handles for a better portability/mobility. |
| | Wire-reinforced handles for a better stability to remove grits |
| | Stoves capable of heating two pots at the same time, since one ordinary meal is made up of grits and vegetables or meat. |
| | Bigger stoves in order to brew beer |
| | Discontinue Mbwangu-style stoves due to their Little durability and stability |

**Table 5. Benefits perceived by women and men owners of Tsotso stoves, Focal Groups, Okahao**

| Men | Women |
|---|---|
| Portability, in order to take them to the field where cattle graze | They can be placed on bricks in order to cook during the raining season |
| Quick cooking, used to prepare their own coffee in the morning | Portability, they can be taken to the field in harvest time, or inside the house when it is very windy or sunny |
| Fewer smoke (only men mentioned this characteristic; may be they notice the smoke reduction because women are more used to it) | Fire can be unattended and it does not put out. |
| It is less probable that the wind carries part of the fire and burns the house | It saves cooking time. |
| It saves time men need to gather wood | It saves fuel (in households where Wood is used for cooking) |
| It saves money | It saves money |

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