
Revista Energética



Energy Magazine

Año 17
número 3
sept. - dic. 1993

Year 17
number 3
Sep. - Dec. 1993



Tema: OLADE: 20 años de impulso a la integración energética de América Latina y El Caribe

Topic: OLADE: 20 Years Promoting the Energy Integration of Latin America and the Caribbean



Grandes Interrogantes del Desarrollo Energético: América Latina y El Caribe

Gabriel Sánchez Sierra*

PRESENTACION

El análisis de los requerimientos energéticos del desarrollo plantea grandes interrogantes

Los países de América Latina y el Caribe enfrentan una difícil problemática con relación al desarrollo económico y social. Para superar las grandes carencias que afectan a amplias capas de su población, como producto del subdesarrollo y el atraso, se necesita recuperar el crecimiento económico de manera rápida y sostenida. Ello implicará mayores niveles de abastecimiento y consumo de energía y, aunque se dispone de una dotación adecuada de recursos energéticos, se requiere de un considerable volumen de recursos financieros para atender, de manera simultánea, el desarrollo del sector energético, las imperiosas necesidades que se enfrentan en el campo social y la protección del medio ambiente. Del análisis de ésta problemática surgen las siguientes interrogantes:

1. *¿Es posible lograr un desarrollo que permita satisfacer los mayores consumos de energía que requieren la recuperación económica y el mejoramiento de la atención de las necesidades sociales, sin provocar un grave deterioro del ambiente en los países de América Latina y el Caribe?*

2. *¿Se pueden financiar las inversiones que habrá que realizar en el sector energético para estar en capacidad de atender la demanda futura de energía de los países de la región?*
3. *¿Son los esquemas que se están implementando para la regulación de las actividades en el sector eléctrico los más adecuados para promover un sólido desarrollo de ese sector?*
4. *¿Existen las condiciones para imprimir un mayor dinamismo al proceso de integración energética regional?*

INTRODUCCION

Los países de América Latina y el Caribe tendrán que realizar un esfuerzo profundo y decidido para poder superar el deterioro económico y social provocado por la "década perdida"

En los países de América Latina y el Caribe durante varias décadas de crecimiento, y aunque la pobreza persistía, para una proporción creciente de la población resultó posible acceder a un mejor empleo, al agua potable, a la educación y a servicios médicos de algún tipo, en un proceso en el que fue común que los hijos aspiraran a una vida mejor que la de sus padres. Durante los ochenta esta perspectiva se perdió:

crecieron el desempleo y el subempleo, se amplió el sector informal de la economía, se deterioraron los indicadores sociales y se careció de bienes y servicios considerados hasta antes como de acceso común. De acuerdo con la CEPAL, hacia fines de los años ochenta había cerca de 183 millones de personas pobres en los países de América Latina y el Caribe: 71 millones más que en 1970. Así, aún si se encaminan los esfuerzos en la dirección correcta no será fácil remontar el retroceso experimentado en el bienestar colectivo como resultado de la "década perdida"

La recuperación del crecimiento económico y social para transformar la economía y reducir la desigualdad social debe constituir la mayor prioridad de la región

La superación del estado de pobreza en que se encuentran grandes grupos de la población sólo será posible si se retoma el crecimiento económico de manera sostenida y en el marco de una estrategia orientada a reducir la desigualdad de las oportunidades por la vía del acceso al empleo productivo y a más amplios y mejores niveles de bienestar social. Para aquilar la magnitud del esfuerzo que tendrá que realizarse debe considerarse que, también de acuerdo con la CEPAL, serán necesarios cerca de 20 años de

* Secretario Ejecutivo, OLADE

crecimiento sostenido para recuperar los niveles de bienestar que se habían alcanzado en el decenio de los sesenta.

La recuperación del crecimiento económico implicará una mayor demanda de energía

La reanudación del crecimiento, requisito indispensable para promover la transformación del aparato productivo y elevar las condiciones de vida de la población, necesariamente supondrá un más elevado consumo de energía, ya que la evolución de la matriz energética regional está condicionada fuertemente por la evolución del entorno económico y social. El importante crecimiento que tuvo el consumo de energía durante los setenta (5% en promedio anual) evidencia la forma como el sector energético acompañó a la evolución económica general en esos años; mientras que en el decenio de los ochenta, como consecuencia del estancamiento económico, el consumo energético exhibió un crecimiento promedio de sólo 1.6%.

El estancamiento económico y social de la década de los ochenta agravó la situación de infraconsumo energético de la región

Los consumos per cápita de energías como el petróleo, el gas natural o la electricidad se encuentran en general por debajo de los promedios mundiales y muy alejados de los niveles de los países industrializados, a pesar de que éstos han mejorado sensiblemente su eficiencia en el uso de la energía. El consumo final de energía per cápita cayó durante los ochenta desde 5.7 a 5.5 barriles equivalentes de petróleo por habitante, recuperándose en 1990 a niveles de 5.9. Como consecuencia de la falta de dinamismo económico y de la obsolescencia, subutilización y baja eficiencia de los equipos en los sectores industrial, de transporte y residencial, la eficiencia energética se estancó desde los

ochentas en un nivel de 2.9 barriles equivalentes de petróleo por US\$ 1.000 de producto interno bruto.

Un proyecto que pretenda alcanzar la transformación productiva con equidad social y sustentabilidad ambiental requerirá de un uso más eficiente de los recursos naturales, particularmente de los energéticos

Si bien es cierto que la superación de los bajos niveles de consumo de energía constituye un requisito para atender las necesidades de un aparato productivo más eficiente y competitivo, en las condiciones actuales resulta necesario hacerlo dentro de un esquema de mayor eficiencia, que considere los efectos sobre el ambiente y las necesidades de las futuras generaciones. Afortunadamente la región dispone, entre sus activos de mayor importancia para el desarrollo, de una proporción significativa de las diferentes fuentes de energía: en términos comparativos mundiales, cuenta con el 12.3% de las reservas de petróleo, del 5.7% de las existencias de gas natural, del 2.3 % de las existencias de carbón y del 22% del potencial hidroeléctrico. Sin embargo, para desarrollar estos recursos energéticos se requiere también de tener acceso al capital y a la tecnología.

GRANDES INTERROGANTES

1. ¿ES POSIBLE LOGRAR UN DESARROLLO QUE PERMITA SATISFACER LOS MAYORES CONSUMOS DE ENERGIA QUE REQUIEREN LA RECUPERACION ECONOMICA Y EL MEJORAMIENTO DE LA ATENCION DE LAS NECESIDADES SOCIALES, SIN PROVOCAR UN GRAVE DETERIORO DEL AMBIENTE EN LOS PAISES DE AMERICA LATINA Y EL CARIBE?

Después de cerca de un decenio de diversos intentos de ajuste y

estabilización económica, los procesos de reforma estructural están promoviendo una nueva estrategia de desarrollo a través de la reducción del tamaño del Estado y de su participación directa en las actividades económicas, las que están siendo sustituidas por las fuerzas del mercado y de la iniciativa privada. Esta estrategia, presume que el interés público estará mejor servido por el apoyo indirecto que puede brindar el Estado a las actividades productivas a través de la desregulación, la privatización, la liberalización comercial y la creación de un entorno de competencia, que a través de su intervención directa en las actividades productivas.

"América está bien; los americanos, están mal", concluye la CEPAL

De acuerdo al último informe de la CEPAL, durante 1993 la región parece estar logrando su tercer año consecutivo de expansión moderada, lo que podría significar que ya habría tocado fondo y estaría comenzando a recuperarse. En el recuento económico se destacan los esfuerzos realizados durante lo que va de la década en materia de control inflacionario y austeridad del gasto público, así como el incremento significativo de los flujos de capitales privados hacia los países de la región, hechos que explicarían la modesta expansión aún ante la "brecha externa" producida por la continua caída de los precios de las exportaciones regionales y el deteriorado panorama económico internacional.

CEPAL destaca que, aunque la afluencia de recursos financieros está operando como motor reactivador de la economía, está lejos aún de restablecer las tasas de inversión que existían previamente a la crisis, y que la estabilidad fiscal se está logrando gracias a la obtención de ingresos públicos con medidas agotables (como

determinación de la intervención subsidiaria que, de ser el caso, deba realizar el Estado.

En materia de regulación existen modelos generales, cuya concreción en esquemas específicos depende del contexto económico, político y social de cada país. De acuerdo a dichos modelos, en los mercados competitivos el Estado debe asegurar el funcionamiento eficiente, liberándolos de prácticas anticompetitivas y desempeñar una función normativa y fiscalizadora, estableciendo los patrones técnicos, económicos y ambientales que optimicen el desempeño de las empresas que intervienen en la producción y el suministro de energía. Dado que las fuerzas del mercado no actúan en el caso de los monopolios, el Estado debe establecer, por medio de la regulación, las condiciones apropiadas para el funcionamiento eficiente de los sistemas.

En el subsector eléctrico el marco regulatorio define la estructura económica y las reglas del juego para el desarrollo de las distintas actividades y establece las normas para el desempeño de los agentes económicos

El sistema regulatorio -el marco regulatorio legal y el esquema institucional que permite materializarlo en la práctica- es el elemento fundamental para brindar a productores y consumidores las señales correctas para un funcionamiento eficiente del mercado, fomentando la competencia donde ello es posible y conveniente, y actuando como sustituto de las fuerzas del mercado en los casos donde la estructura económica óptima es monopólica. La existencia del organismo regulatorio es clave para el desenvolvimiento empresarial del negocio eléctrico, ya que regula no solo los aspectos de orden

técnico-operacional, sino también el crítico régimen tarifario, a la vez que supervisa los resultados operativos y financieros de los agentes económicos que desarrollan las actividades.

Recientemente, ante los profundos problemas que enfrenta el sector eléctrico, han cobrado relevancia las corrientes de pensamiento económico que plantean esquemas alternativos para su desarrollo con base en la introducción de las fuerzas del mercado. El funcionamiento de un mercado mayorista competitivo, donde se compra y se vende energía entre productores, distribuidores y grandes consumidores requiere, como elemento clave para su funcionamiento, del libre acceso a los sistemas de transmisión, para lo cual se necesita desintegrar verticalmente al sector. Aunque un esquema competitivo de este tipo brinda un entorno apropiado para promover la participación privada y a pesar de derivar de enfoques teóricamente válidos, la dimensión de la mayoría de los sistemas eléctricos de la región, la ausencia de un poder regulatorio efectivo y el reducido tamaño de los mercados de capitales establecen diferencias que hacen viable la privatización total sólo en pocos casos.

La desregulación parcial y la privatización del subsector pueden generar impactos tanto a nivel social como en la seguridad del abastecimiento, que requerirían de la intervención directa o indirecta del Estado. En función de la rentabilidad económica, podrían aplicarse tarifas que demandarían algún tipo de subsidio y sería probable que se descuidara el abastecimiento de áreas de baja densidad de población. Además, en la medida en que los marcos regulatorios otorgaran más libertad a las fuerzas del mercado para las decisiones de

inversión futura, sería posible que se presentaran problemas con el abastecimiento, tanto en generación como en líneas de transmisión y distribución, al estar atomizada o descentralizada la toma de decisiones.

Existe un amplio espacio para la participación del sector privado en el negocio eléctrico

En la mayoría de los países de América Latina y el Caribe existen posibilidades de desconcentrar parcialmente la propiedad de los sistemas eléctricos y otorgar un espacio más amplio a la participación de la iniciativa privada. Por ello, puede esperarse que el caso más general hacia el que evolucionen los sistemas eléctricos de la región con el proceso actualmente en marcha, sea el de los sistemas regulados abiertos a la participación privada tanto en la construcción y operación de plantas e instalaciones como en la generación y distribución de la energía eléctrica. Ello requerirá, además de la eliminación de una serie de restricciones ya señaladas, de un marco regulatorio que instituya reglas del juego claras y estables y de un entorno económico general favorable para la participación de los particulares.

El Estado tiene una función fundamental que desempeñar a través de la regulación y, en los países de América Latina y el Caribe, el organismo regulatorio del sector eléctrico es, en general, débil o inexistente

El origen de muchos de los problemas que muestran actualmente las empresas del sector eléctrico de América Latina y el Caribe podría atribuirse a deficiencias de tipo regulatorio. Los esquemas de regulación (entendida ésta como concepto económico) que se desarrollaron en varios países de la región no fueron los más adecuados, además de que, en

general, el poder regulatorio real fue prácticamente inexistente. Como ejemplo de esos problemas se puede citar el manejo de las tarifas, las que estuvieron alejadas de los niveles de eficiencia económica por responder a sistemas regulatorios basados en tasas de retorno, o la elevada injerencia política en los asuntos relacionados con la operación de las empresas, que fue facilitada por la inexistencia de organismos responsables de la regulación.

Para regular de manera eficiente se requiere del entorno político y del marco legal apropiados y, además, de los órganos idóneos para aplicar las normas regulatorias en la práctica. Los órganos de regulación, para cumplir sus tareas de una manera eficiente con la sociedad, deben ser políticamente independientes, altamente especializados técnicamente y financieramente autónomos. El mejor marco legal y reglamentario puede ser insuficiente si la autoridad que debe aplicar la regulación no tiene la suficiente independencia, autonomía y capacidad técnica; ya que son éstos organismos los que deberán garantizar el logro de los beneficios esperados en materia de calidad, cobertura y eficiencia del servicio, adoptando los instrumentos de control necesarios para proteger los intereses de los usuarios, y de la comunidad en general, frente a los intereses de las empresas responsables de los servicios, sean éstas privadas, públicas o mixtas.

Así, aunque con el proceso de reestructuración en marcha, la participación del capital privado ciertamente podrá realizar una importante contribución para la solución de muchos de los principales problemas que actualmente muestra el sector (insuficiente inversión, altos sobrecostos operativos, falta de mantenimiento

adecuado, elevados niveles de pérdidas e inadecuada incorporación del adelanto tecnológico, entre otros), éste presentará una nueva situación en la que muchas de las empresas operarán sobre criterios orientados a la maximización de los beneficios y, sobre esa base, adoptarán decisiones de inversión de grandes repercusiones económicas y sociales que no necesariamente coincidirán con los intereses de la sociedad.

Por ello, como parte del nuevo esquema organizativo del sector se requiere de un organismo de regulación fuerte, que esté en capacidad de realizar la fiscalización y la gestión del mercado eléctrico y que defina, tomando en consideración a los intereses de la comunidad, cuestiones tales como la política tarifaria, las necesidades de la cobertura del servicio, la utilización adecuada de los recursos energéticos y la preservación del medio ambiente. Dado que en la región no existe una gran experiencia en materia de regulación del servicio eléctrico, el Estado deberá realizar un serio esfuerzo para subsanar esta enorme deficiencia e implementar, de acuerdo al contexto económico y sociopolítico, los marcos regulatorios apropiados para promover la eficiencia económica y energética del servicio, así como garantizar que los organismos responsables de la regulación se integren con personal técnicamente capacitado y con niveles de remuneración y estabilidad laboral apropiados para asegurar el adecuado desempeño de sus funciones.

En este sentido, y considerando que la formación de cuadros especializados en la materia constituirá un tema de fundamental importancia, resulta prioritaria la realización de programas de asistencia técnica orientados a la formación y capacitación de los recursos humanos y a la

difusión de las experiencias regionales e internacionales en materia de regulación eléctrica, los que podrían aprovechar la capacidad financiera y técnica de instituciones como el BID, el Banco Mundial y OLADE.

4. ¿EXISTEN LAS CONDICIONES PARA IMPRIMIR UN MAYOR DINAMISMO AL PROCESO DE INTEGRACION ENERGETICA REGIONAL?

Hay un ideal de integración global que acompaña a los gobiernos de los países de América Latina y el Caribe desde hace muchas décadas, que no avanzó más rápido por sus propias deficiencias: careció de una agenda pequeña, concisa y coherente; de marco general y dirección unificada y nunca tuvo metas concretas en torno a las cuales organizar sus esfuerzos. Durante mucho tiempo el proyecto de integración se impulsó con voluntarismo político y no sobre la base de los intereses mutuos, la conveniencia conjunta y los beneficios compartidos, y, aunque los gobiernos siempre mantuvieron en su agenda el tema de la integración regional, éste generalmente nunca constituyó un elemento que, de manera permanente o integral, formara parte de las estrategias de desarrollo nacionales.

Hay un cambio de orientación en los esfuerzos de integración que refleja las transformaciones del escenario internacional

Los programas de reforma económica actualmente en marcha están contribuyendo a abrir y liberalizar las economías y a crear un amplio espacio para el libre comercio de bienes y servicios a nivel intraregional. Aunque éstas acciones están ayudando a que los países empiecen a recuperar el crecimiento, la precariedad de la evolución económica internacional, los rasgos de inestabilidad y exclusión que

la caracterizan y la incertidumbre sobre su evolución futura, limitan sus resultados. Los cambios que se promueven en las economías de la región forman parte de una nueva estrategia de desarrollo que pretende dar respuesta a los transformaciones experimentadas en el escenarios económico y geopolítico internacional; en ella, los esfuerzos de integración regional deberán constituir un elemento de fundamental importancia.

Este resurgimiento de la integración regional, por otra parte coincidió, y se vio alentado, con una nueva política norteamericana denominada como la "Iniciativa para las Américas". A pesar de los cuestionamientos que se pueden hacer a esta iniciativa y del estancamiento en que parece encontrarse es importante señalar que, por vez primera, los Estados Unidos han estimulado y apoyado los esfuerzos de integración del sur del hemisferio. Ello abre un espacio que permite pensar en nuevas y más amplias posibilidades para las relaciones interregionales, en las que los esfuerzos de integración también podrían cumplir una importante función.

En materia de cooperación energética, América Latina y el Caribe, además de un gran potencial y de lo que se ha hecho hasta ahora, tiene todavía un largo trecho por recorrer

El sector de la energía puede constituir un elemento fundamental del proceso de integración regional. La evolución del sector energético fue muy dinámica durante los años sesenta y los setenta, a fin de atender las demandas derivadas de los procesos de industrialización y urbanización. Posteriormente, con la debilitación del crecimiento y el estancamiento eco-

nómico, el sector perdió ese dinamismo e incluso enfrentó algunas restricciones que, de no ser resueltas, pueden obstaculizar la recuperación del crecimiento económico.

A nivel regional, en el campo energético existen múltiples ejemplos de proyectos conjuntos realizados en los últimos veinte años que comprueban la existencia de un potencial importante de cooperación económica: alrededor de la cuarta parte de la potencia instalada en centrales hidroeléctricas proviene de proyectos binacionales; los sistemas de América Central se encuentran hoy interconectada en gran parte, igual que los de Colombia y Venezuela; en el área hidrocarburífera existen también casos concretos de esfuerzos de cooperación económica, como el Acuerdo de San José, que han beneficiado de manera importante a las partes involucradas. Los avances realizados, aunque importantes, muestran que aún hay un largo trecho por recorrer en el camino de la cooperación regional, cuyo potencial debe ser aprovechado dentro de una concepción realista y pragmática, en base a los beneficios que las partes involucradas puedan derivar del mismo.

Un mayor grado de autoabastecimiento energético contribuye a fortalecer la seguridad colectiva de la región

La Guerra de Irak volvió a poner de manifiesto la inestabilidad latente del mercado petrolero mundial y los riesgos implícitos de mantener la seguridad del abastecimiento en ciertas áreas del mundo. Aunque en este sentido América Latina y el Caribe se encuentra en una situación favorable, no escapa totalmente de los efectos negativos derivados de estas situaciones, debido a la fuerte incidencia del petróleo en el

balance energético regional y sobre su sector externo.

La región se encuentra en una buena posición para encarar los retos que enfrenta su desarrollo: dispone de abundantes recursos naturales que pueden utilizarse con fines energéticos y cuenta con una rica y muy valiosa experiencia en materia de cooperación regional. Para elevar colectivamente el grado de seguridad de sus abastecimientos energéticos, los países de América Latina y el Caribe deberán realizar un gran esfuerzo en el campo de la eficiencia energética, desarrollar mercados regionales y subregionales en aquellas fuentes de energía que pueden constituir alternativas frente al petróleo (como gas natural, carbón mineral y electricidad) y, en el caso de éste, incrementar el suministro intraregional sobre una base competitiva y de mutua conveniencia. Un mayor comercio intraregional de petróleo elevaría la capacidad de autoabastecimiento de la región sin desmedro de su condición de exportadora neta. La rápida penetración del gas natural en el consumo final de energía de las dos últimas décadas muestra la existencia de mercados importantes que podrían ser ampliados y dinamizados mediante el desarrollo de una amplia red de gasoductos. Las interconexiones eléctricas pueden contribuir significativamente al logro de una mayor eficiencia económica en este servicio, reduciendo los requerimientos de inversión y los costos de operación, mientras aumentan la confiabilidad del suministro. Debe promoverse una ampliación significativa del comercio del carbón mineral, fomentando su mayor utilización en los esquemas de generación termoeléctrica, así como en diversas aplicaciones industriales.

En el escenario internacional se está dando un movimiento hacia la conformación de macroespacios económicos, del cual la región no podrá permanecer al margen

Los ajustes económicos de los ochenta y los programas de reforma económica en marcha, aunque a un elevado costo social, están consiguiendo desmontar las principales barreras al crecimiento y la integración de los países de la región. Las políticas de privatización, liberalización, apertura y reforma del estado que se están aplicando en los países de América Latina y el Caribe parecieran apuntar a la consolidación de un amplio espacio para el libre comercio regional de bienes y servicios y para una cierta coordinación de las políticas económicas que puedan servir de base para la integración de las economías y los

mercados. Al mismo tiempo, y aunque todavía constituya un fenómeno mayormente inédito, en el escenario internacional se configura una tendencia hacia la multipolaridad económica a través de la conformación de grandes bloques. El proceso de integración de los países de la región deberá dotar a éstos de la capacidad para competir en ese nuevo entorno; de otra forma, América Latina y el Caribe correrá el riesgo de convertirse en una región marginal.

Aunque existen algunos elementos objetivos que también podrían fundamentar el desarrollo de una mayor complementariedad en el sector energético a nivel hemisférico, llama la atención que los países de América Latina y el Caribe no dispongan de un planteamiento colectivo a ese respecto.

Dado que solo los proyectos que ofrecen beneficios mutuos hacen posible la convergencia de intereses, cualquier planteamiento que se realice en este sentido deberá formar parte de un proyecto con un alcance mucho más amplio, que rebase el ámbito del sector energético e involucre una serie de elementos de carácter comercial, financiero y tecnológico, entre otros. Las posibilidades de desarrollo de la región para el próximo siglo, así como las condiciones y oportunidades económicas y sociales que podrá ofrecer a su población, dependerán en buena medida del análisis de las posibilidades y de las respuestas que desde ahora se empiecen a ofrecer a las cuestiones relativas a la integración, tanto a nivel regional como hemisférico. ☈

Major Energy Development Issues: Latin America and the Caribbean

Gabriel Sánchez-Sierra*

PRESENTATION

A review of the energy requirements of development gives rise to major questions

The countries of Latin America and the Caribbean are facing complex social and economic development problems that are difficult to resolve. In order to tackle the huge deficiencies that are affecting large groups of their population as a result of underdevelopment and lags, a rapid and steady recovery of economic growth is required. This will entail higher energy supply and consumption. Although the countries are endowed with sufficient energy resources, a considerable volume of financial resources is required to deal with energy sector development, urgent social needs, and environmental protection. The following questions have emerged from a close analysis of these problems:

1. *Is it possible to achieve a development that will meet the demands for higher energy consumption required to promote economic recovery and respond to social needs without severely deteriorating the environment in the countries of Latin America and the Caribbean?*
2. *Can the investments that will have to be made in the energy sector to meet the future demand for energy in the Region's countries be financed?*

3. *Are the schemes that are being applied to regulate the electric power sector's activities the most appropriate for promoting the sound development of this sector?*
4. *Are there appropriate conditions to instill greater impetus into the Region's energy integration process?*

INTRODUCTION

The countries of Latin America and the Caribbean will have to make a determined effort to overcome the economic and social deterioration that is a legacy of the "lost decade"

In the countries of Latin America and the Caribbean, during various decades of growth, although poverty persisted, for a growing share of the population it was possible to gain access to better jobs, clean water supply, education, and some type of medical service, as part of a process in which children could aspire to better living conditions than those of their parents. During the eighties, however, this prospect was no longer feasible: both unemployment and underemployment grew, the informal sector of the economy increased, social indicators deteriorated, and goods and services that were previously viewed as common public assets were lacking. According the Economic Commission for Latin America and the Caribbean (ECLAC), in the late eighties there were about 183 million poor in the

countries of Latin America and the Caribbean, that is, 71 million more than in 1970. Thus, even if efforts are channelled in the right direction, it will be very difficult to revert the setbacks experienced in collective welfare as a result of the "lost decade".

Recovery of economic and social growth in order to transform the economy and reduce social inequities should be the Region's major priority

Eradicating the poverty of large segments of the population will only be possible by means of steady economic growth and a strategy geared to reducing the inequalities in opportunities through access to productive employment and higher and better levels of social welfare. To appreciate the magnitude of the efforts needed for this recovery, according to ECLAC, close to 20 years of steady growth will be required to recover the social welfare levels that had been attained in the seventies.

Recovery of economic growth will imply a higher demand for energy

An upsurge of growth, an indispensable requirement for transforming productive facilities and enhancing the living conditions of the population, will necessarily entail a higher consumption of energy, since

* Executive Secretary, OLADE

the evolution of the Region's energy matrix is closely linked to the evolution of its economic and social environment. The considerable growth in energy consumption during the seventies (annual average of 5%) indicates how the energy sector matched the general economic evolution of those years, whereas in the eighties, as a result of economic stagnation, energy consumption displayed an average growth of only 1.6%.

The economic and social sluggishness of the eighties aggravated the Region's low energy consumption

The per capita consumption of energy products such as oil, natural gas, or electricity as a rule are below world averages and far removed from the levels of industrialized countries, even though the latter have substantially improved their energy efficiency. During the eighties, the per capita end-use consumption of energy fell from 5.7 to 5.5 barrels of oil equivalent per inhabitant; this index recovered somewhat in 1990, to 5.9. As a result of economic sluggishness, obsolescence, underutilization, and low efficiency of equipment in the industrial, transportation, and residential sectors, energy efficiency stagnated during the eighties at 2.9 barrels of oil equivalent per US\$1,000 of gross domestic product.

A proposal aimed at achieving productive transformation with social equity and environmental sustainability will require a more efficient use of natural resources, especially energy resources

Although overcoming low energy consumption is a requisite to meet the needs of a more efficient and competitive infrastructure, under current conditions this has to be done by applying schemes for higher efficiency that keep in mind environmental impacts and the needs of future generations. Fortunately, the Region has available,

among its most important development assets, a large share of different energy sources. In terms of world resources, it has 12.3% of the world's oil reserves, 5.7% of its natural gas, 2.3% of coal assets, and 22% of hydropower potential. Nevertheless, in order to develop these energy resources, it needs access to capital and technology.

MAJOR QUESTIONS

1. IS IT POSSIBLE TO ACHIEVE A DEVELOPMENT THAT WILL MEET THE DEMANDS FOR HIGHER ENERGY CONSUMPTION REQUIRED TO PROMOTE ECONOMIC RECOVERY AND RESPOND TO SOCIAL NEEDS WITHOUT SEVERELY DETERIORATING THE ENVIRONMENT IN THE COUNTRIES OF LATIN AMERICA AND THE CARIBBEAN?

After close to a dozen different economic adjustment and stabilization schemes, structural reform processes are adopting a new development strategy that includes curtailing the size of the State and its direct involvement in economic activities, which are being substituted by market forces and private initiatives. This strategy assumes that public interest will be better served by the indirect support provided by the State to productive activities through deregulation, privatization, trade liberalization, and the creation of a competitive environment than through direct intervention in productive activities.

"South America is okay; South Americans are in bad shape," concludes ECLAC

According to the last ECLAC report, during 1993, the Region seems to have achieved its third consecutive year of moderate expansion, which could mean that it has hit rock bottom and has no other way to go but up. An economic overview emphasizes the efforts made during the decade in terms of inflation control and austerity mea-

sures for public spending, as well as the considerable increase in private capital flows toward the Region's countries, which would explain the modest expansion despite the "external gap" stemming from the steady fall of regional export prices and the deteriorating international economic situation.

ECLAC underscores that, although the influx of financial resources is acting as a driving force behind the economy, it is far from reestablishing the investment rates that existed prior to the crisis. Moreover, fiscal stability is being achieved as a result of public revenues stemming from temporary measures (such as emergency tax levies and the privatization of state enterprises) and by unsustainable spending cuts, especially in the social sector. Thus, according to ECLAC, this adjustment threatens to become endemic and to lead to marked social lags that could paradoxically promote both modernization of the economy and deeper poverty, at the same time.

Environmental protection should not be viewed as a constraint for increasing energy consumption in the Region's countries

The environmental problems faced by the countries of Latin America and the Caribbean are very different from those of industrialized countries, since they are a manifestation of underdevelopment and poverty, rather than activities directly linked to industrial production and the use of energy, considered to be the major causes of environmental deterioration.

Industrialized countries are concerned about global environmental problems, especially the greenhouse effect and depletion of the ozone layer, which are largely attributable to the high consumption of fossil fuels. Their stances on these problems have involved proposals to levy taxes on the consumption of fossil fuels, which seem to be more a solution to fiscal prob-

lems, the appropriation of earnings from natural resources, and energy demand management, rather than environmental protection.

In the countries of Latin America and the Caribbean, the major environmental problems are closely linked to the lack of development and the need to improve the quality of living of the population. According to the United Nations Environment Programme (UNEP), among the Region's major environmental problems, only pollution is directly linked to energy production and consumption and its impacts are localized and easy to control.

Environmental protection is becoming a priority issue for the North-South agenda

Some industrialized countries have voiced their fear that the developing countries may use environmental issues as negotiating weapons. They have even gone so far as to coin the term "ecological blackmail". At the same time, they wish to demand from the developing countries compliance with a series of environmental protection measures that could become a severe constraint for achieving economic growth and improving living conditions. In turn, the developing countries maintain that, inasmuch as the application of misguided energy policies has been the main cause of global warming and climate change, it is necessary to emphasize the world's energy consumption imbalances, whereby certain regions, especially the industrialized countries, have provoked far greater damage to the planet's environmental equilibrium than others.

In order to better utilize energy resources in accordance with a scheme based on sustainable development, the Region's countries will have to develop supply structures and energy uses that are both efficient and environmentally sound. This implies the development

and/or adaptation of technologies that enable the clean and efficient use of fossil resources, as well as the development of renewable resources. Nevertheless, the Region does not have the technology available, which has been essentially developed in the industrialized countries and is handled according to strictly commercial terms.

A more liberal international economic environment for growth and a concrete agenda to achieve sustainable development must be established

Thus, a viable sustainable development strategy, either for the Region or the world, is not possible as long as more than half the population lives in conditions of extreme poverty. International solidarity and the concertation of actions are the only rational alternative to successfully cope with environmental problems. Without solidarity, without wider cooperation and the modification of attitudes and behaviors on the part of the industrialized world that negatively affect the developing world, the efforts that are being made in the latter will be ineffective and deeply curtailed.

The efforts made by the Region to overcome their development lags and to combat poverty require a more propitious environment. Although the international scenario seems to be moving toward a global state, its evolution is taking place without much precision, characterized by conflicts, and continues to be one of the major constraints for growth. It is not feasible to expect developing countries to resolve their pressing problems with the current prices and markets for their export-oriented raw materials. Likewise, it will not be possible to meet the huge investment requirements of energy development or deal with environmental problems without suitable international cooperation in terms of financing flows and technology transfer from the industrialized world.

Although the international community is fully aware of these problems, until now it has not adopted a response that would help to resolve them. The growing concern over environmental issues that seems to be developing in the nineties should materialize in concrete commitments through a common agenda, in which the developing countries commit themselves to an environmental performance different from what the industrialized countries have displayed up to now, and in which the latter countries mobilize financial and technological resources under concessionary conditions required for this purpose and contribute to creating and maintaining an international environment that promotes the economic growth of developing countries.

Regarding this, a central question which should be resolved over the not-too-long term is a definition of the type of development that the international community is willing to promote. A more suitable development model seems to require recognition that there are more benefits to be drawn from ensuring the long-term sustainability of natural resources than from their inadequate exploitation over the short term. Nevertheless, in practice, a series of seemingly misdirected actions that do not match the rhetoric of cooperation for sustainable development is apparent.

For example, directly related to the energy sector, the highly fiscal approach that is being applied by the industrialized countries to oil consumption, although it may be helping to resolve fiscal problems, is certainly contributing to the containment of demand growth and the international prices of crude oil. This policy, which does not properly take into account the profound negative repercussions it has on the economies of oil-exporting developing countries, does not seem to be promoting the future security of oil

supply or energy substitution or environmental protection in the developing world.

2. CAN THE INVESTMENTS THAT WILL HAVE TO BE MADE IN THE ENERGY SECTOR TO MEET THE FUTURE DEMAND FOR ENERGY IN THE REGION'S COUNTRIES BE FINANCED?

If the electric power sector continues its current economic and energy performance trends and if average GDP growth estimates of slightly under 3% for the year 2000 are correct, the average growth of demand for electricity will be on the order of 4.5% during the period. To meet this demand an additional installed capacity on the order of 62 GW, equal to almost 40% of the total capacity that the Region's countries have built up to now, will be required.

The investments estimated for developing the Region's oil industry are also enormous, in view of the exploration and development activities that are needed to maintain reserves at the same level as current ones and the investments needed in the refining capacity and other oil installations and facilities to cope with projected export and domestic consumption growth goals.

Projections of supply and equipment needed to meet the energy demand of the next two decades indicate total investment requirements of over US\$320 billion for the period 1990-2000 and close to US\$450 billion for the first decade of the 21st century. For electric power installations to keep pace with the growth of demand, the power sector would need an annual average investment of close to US\$19 billion. The investment resources required by the hydrocarbons sector, especially the oil subsector, would amount on average to about US\$18 billion per year.

Even with current prices, there are alternatives for financing oil sector investments

In the hydrocarbons subsector, especially with respect to the large oil-exporting countries, although state enterprises have somewhat improved their performance with the adoption of more suitable managerial, fiscal, and pricing policies, profits continue to be largely determined by international oil prices. This situation has led them to adopt various actions to find the financial resources needed to materialize their investment programs, among which the issuance of bonds, indebtedness, the setting up of joint ventures, and the opening up of certain areas and/or activities to private capital. As a result of long periods of low oil prices on the international market, in the rest of the Region's countries it is evident that it is impossible to continue financing the oil subsector's expansion on the basis of the activities' own surpluses. This has led to attempts to develop the necessary activities by means of market liberalization and opening up to private-sector initiatives, even though at varying degrees and under various modalities.

Private banks have always been reluctant to participate in the financing of projects in the upstream segment of the oil industry. This is understandable since, in general, these projects (especially the exploratory ones) are high-risk and require long maturity periods. The large transnational companies have always been able to overcome this constraint by self-financing their exploratory activities; it is hoped that this policy will continue in the future.

In contrast to the above, bank money has always been available for financing non-risk projects, with high rates of return, and short repayment periods. Even some banks have directly intervened in international swap-type operations and have received tangible

oil from their clients. Nevertheless, although there is an excess of liquidity, U.S. banks are not willing to finance energy projects abroad, since this entails wider spreads, shorter periods, and more rigorous criteria for rating the borrowers than those currently used for this type of loan, which could eventually become a bottleneck for the industry. Other financing mechanisms that are increasingly being used are the issuance of bonds, direct investment, the sale of shares, and privatization of state oil companies.

Thus, in the oil sector there does not seem to be a severe financing problem, although the persistence of low levels of international oil prices has generated a growing rivalry between the seekers of capital for upstream activities. This has led to increasingly favorable conditions for the entry of capital and technology from private investors. For downstream activities, with assured profitability and acceptable risk levels, there is always the possibility of gaining access to direct loans from multilateral banks or suppliers. There are also various modalities for capturing financial resources and various mechanisms for investment or co-investment with the private sector.

There will be serious difficulties for financing future investments of the electric power sector

Although the power sector made substantial headway over the last two decades, its recent evolution indicates obvious symptoms of sluggishness and a critical financial situation. A series of problems, closely linked to the lack of sound business management, low energy efficiency, and economic, institutional, and environmental issues, have led to difficulties not only for the adequate delivery of services but also for the continued development of the sector, which is even more important.

On the basis of an analysis of the different alternatives, it has been estimated that financing of the investment required by the sector, through the internal generation of funds with average tariffs, current managerial schemes, and customer contributions, will lead to a deficit on the order of US\$13 billion. Likewise, a strategy that only considers the application of tariffs based on long-run marginal costs and cost reductions will not be sufficient either, in view of the heavy debt burden, although it would reduce the deficit to about US\$4.7 billion.

Thus, solution to the sector's investment financing problem requires a combined set of options that should be implemented integrally using a strategy that, in addition to considering economic efficiency, adopts actions for energy conservation, promotes electric power interconnections, fosters the broader participation of private capital, and seeks financing alternatives. Nevertheless, although these estimates assume economic efficiency (such as the setting of tariffs at marginal costs and the curtailment of costs), the adoption of measures to upgrade thermal facilities and reduce power losses, the promotion of energy conservation and power interconnections, and the active participation of the private sector and multilateral banks to finance the sector, it will still have an investment deficit on the order of US\$1.6 billion per year until the year 2000.

There are many opportunities for private-sector participation, which could make an important contribution

In the electric power sector, there is a great deal of room for the participation of private-sector initiatives. This does not necessarily imply, however, the total privatization of assets that are now in the hands of the State. Although the characteristics and scope of private sector actions will depend on the specific situation of each

case, this could help to bring a major contribution of capital and technology in virtually all the sector's activities. Likewise, the incorporation of some of the advantages characteristic of private-sector management, such as more rapid decision-making and the application of managerial practices geared toward greater efficiency in the use of human, technical, economic, and financial resources, will undoubtedly be highly beneficial for the sector's activities. Nevertheless, the following considerations should be kept in mind: the private sector will only take part in the sector if it finds a suitable environment, and the creation of a suitable environment implies the adoption of a wide range of political, macroeconomic, and even utility-level decisions.

When financing possibilities from traditional sources for the sector run out, the Region's power utilities will have to effectively act as companies in order to gain access to capital markets and explore the possibility of mobilizing financial resources that can be provided by the wide range of currently available options and modalities. Nevertheless, to do this, severe constraints stemming from the sector's own policies, the lack of regulatory agencies, the limited development of bond markets, or the low ratings of some countries as financing recipients, among others, will have to be surmounted.

Once the constraints linked to the performance itself of power utilities are overcome, it would be important to promote private-sector participation in the power sector, since it will be difficult to find investors that are willing to risk their capital in enterprises that do not have minimum financial, operational, and services performance standards or periodical and acceptable financial statements, and that have an unstable and unsound financial background and structure. The low

levels of efficiency displayed by the sector's companies are also highly relevant under these circumstances. A broad ongoing effort is required to improve the economic and energy efficiency levels of the power utilities, since, in addition to ensuring minimum-cost and environmentally sound supplies, this is the most economical way to contribute to partially relieving the financial deficit that has been forecast for the sector. Nevertheless, until now there is no sign that these actions or in-depth measures are being consistently adopted to achieve these objectives in the Region's countries.

3. ARE THE SCHEMES THAT ARE BEING APPLIED TO REGULATE THE ELECTRIC POWER SECTOR'S ACTIVITIES THE MOST APPROPRIATE FOR PROMOTING THE SOUND DEVELOPMENT OF THIS SECTOR?

As part of the far-reaching economic reforms that the Region's governments are committed to implement, the energy sector is being thoroughly restructured; this process also entails, although at different intensities, a revision of the State's role and new opportunities for private-sector participation. The search for greater efficiency is leading to the deregulation of markets, which can be highly competitive, and to the introduction of regulatory changes in those areas where there are monopolies, whether natural or legally protected.

Despite this, the State will have to continue performing a series of functions that are inherent to it, regardless of prevailing political or economic schemes, such as indicative planning, regulation of monopolies, and supervision of competitive market operations. In some cases, for different reasons, it will also have to continue to act as company owner, a role that should be differentiated from its other functions and should be performed under conditions

of economic efficiency and autonomous and accountable management.

It is important to maintain a global energy planning system that orients the investment decisions of the economic agents (public and/or private) operating in the sector, in order to ensure the efficient supply of energy requirements of the economic and social system, the development of the sector's potential for developing other areas of the economy, the environmentally sound use of natural resources, and the determination of the subsidiary intervention of the State, if necessary.

As for regulatory matters, there are general models whose application in specific schemes depends on the economic, political, and social context of each country. According to these models, in competitive markets, the State should ensure the efficient functioning of competitive markets, freeing them from anticompetitive practices, and should play a standardizing and supervisory role, establishing technical, economic, and environmental norms that optimize the performance of the enterprises that intervene in energy production and supply. Since market forces do not prevail in the case of monopolies, the State should establish, by means of regulation, the appropriate conditions for the efficient functioning of the systems.

In the electric power subsector, the regulatory framework defines the economic structure and the rules of the game for developing the various activities and establishes the standards for the performance of the economic agents

The regulatory system (the legal regulatory framework and the institutional scheme that enables to implement it in practice) is the basic element for providing producers and consumers with the right signals for efficient market functioning, fostering competi-

tion where this is possible and advisable and acting as a substitute for market forces in those cases where the optimal economic structure is monopolistic. The existence of a regulatory agency is a key element for a business approach to electricity services, since it regulates not only technical and operational aspects, but also the tariff-setting scheme, and supervises as well the operational and financial results of the economic agents that develop these activities.

Recently, as part of the profound changes being encountered by the power sector, economic approaches proposing alternative development schemes based on market forces have acquired greater relevance. A competitive bulk market where energy is sold and purchased between producers, distributors, and large consumers requires, as a key element for its functioning, free access to transmission systems; to achieve this the sector must be vertically disintegrated. Although a competitive scheme of this type provides an appropriate environment for promoting private participation and despite theoretically valid approaches, the size of most of the Region's power systems, the lack of an effective regulatory power, and the small size of capital markets determine differences that make total privatization feasible in only a few cases.

Partial deregulation and privatization of the subsector may generate social impacts or supply security questions that may require direct or indirect intervention by the State. Regarding economic returns, tariffs may be applied that might demand some kind of state subsidy; moreover, it is quite likely that the supply to low-population areas will be neglected unless the State intervenes. In addition, to the extent that regulatory frameworks provide more freedom to market forces for future investment

decisions, supply problems might arise both in generation and transmission and distribution lines if decision making is atomized or decentralized.

There are broad opportunities for private-sector participation in the electric power business

In most Latin American and Caribbean countries, there are possibilities of partially deconcentrating the ownership of power systems and granting more room for the participation of private initiatives. To do this, it may be expected that the most widespread situation toward which the Region's electric power system is evolving, according to the current process, will be regulated systems open to private-sector participation both for the construction and operation of plants and facilities and the generation and distribution of electric power. This will require, in addition to the elimination of a series of constraints referred to above, a regulatory framework that establishes clear and stable rules of the game and a favorable general economic environment for the participation of individuals.

The State has an essential role to play in regulation; in the countries of Latin America and the Caribbean, the regulatory agency for the power sector is, as a rule, weak or nonexistent

The origin of many of the problems currently displayed by the power utilities of Latin America and the Caribbean can be attributed to regulatory deficiencies. The regulatory schemes (understood as an economic concept) that were developed in various countries of the Region are far from being the most suitable. In addition, as rule, real regulatory power is virtually nonexistent. As an example of these problems, tariff management should be mentioned: tariffs are far removed from economic efficiency, since they respond to regulatory systems based on return rates or the wide-ranging

political intrusiveness in matters strictly related to the utilities' operations, which is facilitated by the lack of accountable regulatory agencies.

In order to efficiently perform regulatory duties, an appropriate political and legal environment is required, in addition to suitable entities to apply regulatory norms in practice. The regulatory entities, in order to efficiently fulfill their duties for society, should be politically independent, highly technically specialized, and financially autonomous. Even the best legal and regulatory framework may be insufficient if the authority in charge of implementing it is not sufficiently independent, autonomous, and technically capable. These are the entities that should ensure the benefits that are expected from them in terms of quality, coverage, and efficiency of services, with the adoption of monitoring instruments to protect the interests of the users and the community in general, also bearing in mind the interests of the utilities in charge of delivering the services, whether public, private, or mixed.

Thus, even with the current restructuring process, the involvement of private capital can certainly make a significant contribution to resolving many of the sector's major problems (insufficient investment, high operating cost overruns, lack of adequate maintenance, high levels of losses, and the inadequate incorporation of technological breakthroughs, among others). The sector will thus be characterized by a new situation, in which many of the utilities will be operating according to criteria geared to maximizing benefits. As a result, they may make investment decisions that will exert considerable economic and social repercussions that do not necessarily coincide with the interests of society.

Because of this, the new organizational scheme for the sector

will require a strong regulatory entity capable of supervising and managing the electric power market and defining issues such as tariff-setting policies, service coverage needs, suitable use of energy resources, and environmental conservation, bearing in mind the interests of the community. Since in the Region there is not much experience in electric power service regulation, the State should deploy considerable efforts to fill this huge gap and to implement, in keeping with the economic and sociopolitical context, the appropriate regulatory frameworks for promoting economic and energy efficiency in service delivery. The State should also ensure that the entities in charge of regulation are comprised of technically skilled staff with appropriate salaries and job stability to ensure the proper performance of their duties.

Regarding this, since training of specialized staff in this area will become a highly important issue, one of the priorities in this field is the provision of technical assistance programs aimed at training human resources and disseminating regional and international experiences on the subject of electric power regulation, which could take advantage of the financial and technical capacity of institutions such as the Inter-American Development Bank (IDB), the World Bank, and the Latin American Energy Organization (OLADE).

4. ARE THERE APPROPRIATE CONDITIONS TO INSTILL GREATER IMPETUS INTO THE REGION'S ENERGY INTEGRATION PROCESS?

There is an overall integration ideal that has been part of the governments of the countries of Latin America and the Caribbean for many decades and which has not made much headway because of its own flaws: the lack of a brief, concise, and coherent agenda, a unified general framework or direction, and concrete goals to focus its

efforts. For a long time, the integration objective was driven by voluntary political will, rather than on the basis of binding mutual interests, joint advisability, and shared interests. Although governments have always maintained the topic of regional integration on their agendas, it generally never became an ongoing and integral part of national development strategies.

Integration efforts have changed course, reflecting transformations on the international stage

Current economic reform programs are contributing to opening up and liberalizing the economy and creating room for the free intra-regional trade of goods and services. Although these actions are helping the countries to begin recovery, the precariousness of the international economic situation, certain signs of instability and exclusion that characterize this situation, and the uncertainty over its future evolution limit their impact. The changes promoted in the Region's economy are part of a new development strategy which intends to respond to the transformations experienced in the international economic and geopolitical scenarios. In this strategy, regional integration efforts should become a key element.

The upsurge of regional integration has also coincided with, and has been fostered by, the new U.S. policy called the Initiative for the Americas. Despite the queries raised about this initiative and its apparent lack of impetus, it is important to indicate that the United States has, for the first time, stimulated and supported the integration efforts of the southern part of the hemisphere. This opens up a space that provides wide opportunities for inter-regional relations, in which integration efforts can also play an important role.

In terms of energy cooperation, Latin America and the Caribbean, in addition to its considerable potential and what has been achieved to date, still has a long way to go

The energy sector can become a key element for regional integration. The sector's evolution was very dynamic in the sixties and seventies, to meet the demands stemming from industrialization and urbanization. Afterwards, as a result of declining growth and economic sluggishness, the sector lost this impetus and even had to cope with certain constraints, which may well obstruct the chances for economic recovery if they are not properly dealt with.

At the regional level, in the energy field there are many examples of joint projects over the last 20 years, ratifying the substantial potential for economic cooperation: about one fourth of the entire installed capacity of hydropower stations comes from binational projects; a large part of the power systems of Central America, as well as those of Colombia and Venezuela, are now interconnected; in the area of hydrocarbons, there are also concrete cases of economic cooperation efforts, such as the San José Accord, which has provided considerable benefits to the parties involved. The progress that has been made, although it may be significant, also indicates that there is still a long way to go on the path toward regional cooperation, whose potential should be tapped on the basis of a realistic and pragmatic approach and the benefits that the parties involved can gain from it.

A higher degree of energy self-reliance contributes to strengthening the Region's collective security

The Iraq war once again dramatized the latent instability of the world's oil market and the implicit risk of concentrating supply security in certain areas of the world. Although, regard-

ing this, Latin America and the Caribbean is now in a favorable situation, the Region is not exempt from the negative impacts stemming from these conflicts, because of the wide-ranging incidence of oil in the Region's energy balance and on its external sector.

The Region is now well placed to take up the challenges being faced by its development goals. It has an abundance of natural resources that can be used for energy purposes and also has a wealth of highly valuable experience in regional cooperation. In order to collectively upgrade the security of its energy supplies, the countries of Latin America and the Caribbean should make a decisive effort to achieve greater energy efficiency, developing regional and subregional markets for those energy sources that can be alternatives to oil (such as natural gas, coal, and electricity) and, regarding the latter, increasing intra-regional supplies according to competitive and mutually beneficial terms. Greater intra-regional oil trade would enhance the Region's self-supply capacity without diminishing its position as a net oil exporter. The rapid penetration of natural gas in final energy consumption over the last two decades indicates that there are large markets that can be developed and promoted by installing an extensive network of gas pipelines. Electric power interconnections can also contribute substantially to achieving greater economic efficiency in this public service, thus reducing investment requirements and operating costs, while improving supply reliability. Coal trade should also be enlarged, and the use of coal should be extended to thermoelectric generation schemes, as well as various industrial applications.

On the international stage, there is a shift toward the configuration of economic macro-spaces, and the Region cannot remain on the sidelines of such configurations

The economic adjustments of

the eighties and current economic reform programs are beginning to remove the major barriers to growth and integration of the Region's countries, although to the detriment of the social sector. The policies of privatization, liberalization, opening up, and reform of the State that are being applied in the countries of Latin America and the Caribbean seem to point toward the consolidation of a broad space for the free regional trade of goods and services and for a certain coordination of economic policies that could serve as the groundwork for integrating economies and markets. At the same time, although it is as yet not widespread, there is a trend toward economic multipolarity through the configuration of large blocs. The integration of the Region's countries should provide them with the capacity to compete in this new environment. Otherwise, Latin America and the Caribbean runs the risk of becoming a marginal region.

Although there are several objective elements that could also be basis for the development of greater complementariness in the hemisphere's energy sector, it is noteworthy that the countries of Latin America and the Caribbean do not have a collective stance on this issue. Since only those projects that provide mutual benefits can facilitate converging interests, any proposal aimed at achieving integration should become part of a project with a much wider scope, one that goes beyond the energy sector and involves a series of commercial, financial, and technological factors, among others. The Region's development prospects for the coming century, as well as the economic and social conditions and opportunities that it can provide to its population, will largely depend on the analysis of the possibilities and responses that are beginning to be given to integration issues, in both the Region and the Western hemisphere as a whole.