MONTHLY ENERGY BULLETIN BRAZIL



MINISTRY OF MINES AND ENERGY - MME
SECRETARIAT OF ENERGY PLANNING AND DEVELOPMENT - SPE
DEPARTMENT OF INFORMATION AND STUDIES ON ENERGY - DIE

MARCH 2021

REFERENCE MONTH

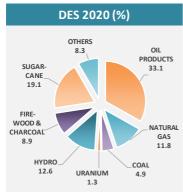
DOMESTIC ENERGY SUPPLY

Several March 2021 indicators indicate a good recovery in the economy over March 2020: increases of 35% in cement sales, 15.5% in diesel consumption, 11.5% in industrial electricity consumption, 6.1% in residential electricity consumption and 4.9% in energy consumption of light vehicles. In the year accumulated over the same previous period the COVID-19 pandemic continued to affect some indicators: decreases of 38% in aviation

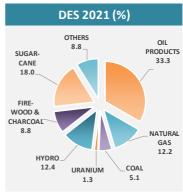
kerosene, 4.4% in commercial electricity and 3.1% in energy consumption of light vehicles.

For the Domestic Energy Supply – DES¹ up to March, an increase of 2.4% was estimated, but for the whole of 2021 the estimate is that it will increase between 3 and 4%. With the current information, the indicator was estimated at 3.4% (3.5% in the previous edition).

INCREASE IN TOTAL ENERGY DEMAND IS ESTIMATED AT 3 4% IN 2021

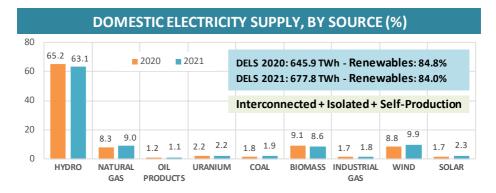


287.6 million toe - 48.4% renewables



297.3 million toe - 47.4% renewables

For the 2021's Domestic Electricity Supply (DELS)² an increase of 4 to 5% is expected. With the current information, the indicator was estimated at 4.9% (the same as the previous). The share of renewables should be between 83 and 85%.



HIGHLIGHTS IN MARCH 2021

Oil production recoils

Oil production recoiled 4.4% in March 2021, compared to the same month in 2020, and accumulated a decrease of 7.5% in the year (-9.1% up to February). Natural gas production grew 3.6% in March and has accumulated an increase of 1.0% in the year (-0.5% until February).

Mining and metallurgy in high

Steel production grew 4.4% over March 2020 and accumulated an increase of 8.2% in the year (9.1% up to February). Iron ore exports grew 38.3% in the month, accumulating an increase of 19.4% in the year (11.7% until February). Pellets exports are down 2.3% in the year (+3% up to February).

Hydraulic supply downward

The hydraulic energy supply shows a decrease of 5.2% in the accumulated result for the year (-7.0% up to February). The supply from Itaipu is -6.7% in the year accumulated (-5.2% until February).

Oil derivatives in recovery

Apparent consumption of oil products grew 7.0% in March (excluding ethanol and biodiesel), and has already accumulated an increase of 0.8% in the year (-0.5% until February). Diesel consumption (biodiesel included) rose 15.5% in the month (5.8% in the year) and gasoline C grew 4.5% in the month (-1.0% in the year). Automotive ethanol consumption increased by 4.9% in the month, but still accumulates a low of 2.7% in the year. The total demand for natural gas accumulates an increase of 6.7% in the year, with electricity generation expanding by 65.5% in the month and 26.1% in the year.

The Otto's cycle (gasoline, ethanol and natural gas) light vehicles energy consumption accumulates -3.1% in the year (12 months: -9.3% in 2020, 4.5% in 2019, -1.2% in 2018, +1.7% in 2017, -1.1% in 2016 and +6.2% in 2014).

Electricity consumption rises

Electricity consumption, without self-producers, grew 6.1% over March 2020, and accumulates an increase of 3.5% in the year (2.2% until February). Still in the year, residential consumption rose 5.0%, industrial consumption grew 8.1% and commercial consumption still shows a decline of 4.4% (-10.6% in the entire year of 2020).

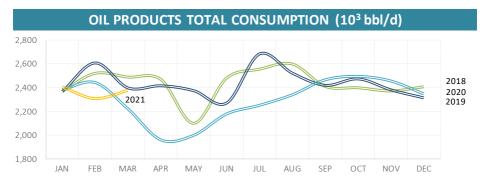
Biodiesel production rises

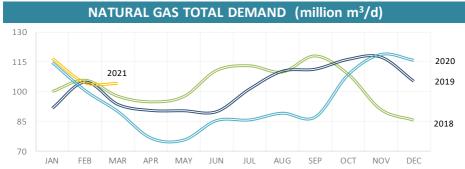
Biodiesel production grew 16.3% over the same month in 2020, and accumulates an increase of 11.1% in the year. The annual rate has been over 9% for the past four years. Pulp production is estimated to increase by 2% in the yearly accumulate (+43% from 2013 to 2020). Cement consumption accumulates an increase of 21.9% in the year (10% in the twelve months of 2020).

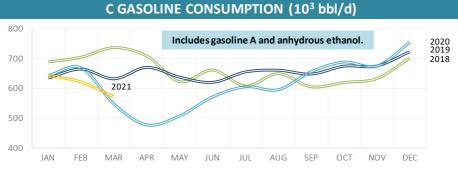
Electricity tariffs rise

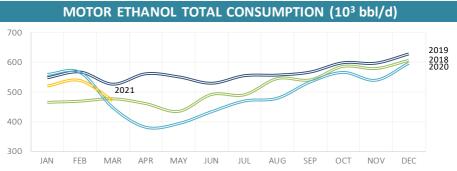
The national average tariff for residential electricity accumulates 4.6% high in the year (-3.1% in 2020, 8.0% in 2019 and 12.6% in 2018). Commercial tariff accumulates 6.8% high (-1.6% in 2020, 7.4% in 2019 and 12.4% in 2018) and industrial, 8.8% high (-0.3% in 2020, 5.7% in 2019 and 13.4% in 2018).

DIL PRODUCTION - with Shale Oil and NGL(10³ b/d) 2,939 3,073 -4.4 2,911 3,147 -7.5		MARC	CH _					
National	CDECIFICATION	IN THE MONTH		ACCUMULATED IN THE YEAR				
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IMPORTS AVERAGE PRICE (US\$/bbl FOB) 61	OIL							
DIL PRODUCTS	PRODUCTION - with Shale Oil and NGL(10 ³ b/d)	2,939	3,073	-4.4	2,911	3,147	-7.5	-
TOTAL CONSUMPTION (10° b/day) hereof: DIESEL with biodiesel - (10° b/day) horeof: DIESEL with biodiesel - (10°		61	61	-0.1	60	64	-6.6	-
hereof: DIESEL with biodiesel - (10° b/day) 1.163 1.007 15.5 1.055 997 5.8 42.4 hereof: GASOLINE C (10° b/day) 5.72 547 4.5 612 618 -1.0 20.7 CONSUMER PRICE - DIESEL (RS/I) 4.25 3.57 19.0 3.97 3.69 7.4 -	OIL PRODUCTS							
Neroir GASQUINE C (10 ¹⁵ bylday)	TOTAL CONSUMPTION (10 ³ b/day)	2,377	2,222	7.0	2,364	2,346	0.8	100.0
CONSUMER PRICE - DIESEL (R\$/II)		1,163	1,007	15.5	1,055	997		
CONSUMER PRICE - LPG (RS/13 kg) 83.2 69.9 18.9 79.9 69.9 14.4 - NATURAL CAS PRODUCTION (106 m3/day) 126.1 121.7 3.6 131.2 129.9 1.0 - IMPORTS (106 m7/day) NON-UTILIZED AND REINJECTION (106 m7/day) NOTH STATE AND REINJECTION (106 m7/day) NON-UTILIZED AND REINJECTION (106 m7/day) NOTH STATE AND REINJECTION (106 m7/day) NOTH PRICE SP (USS/MMBtu) 12.6 16.7 -24.3 12.7 18.4 -30.6 - RESIDENTIAL PRICE SP (USS/MMBtu) 12.6 16.7 -24.3 12.7 18.4 -30.6 - RESIDENTIAL PRICE SP (USS/MMBtu) 30.2 36.1 -16.5 30.7 40.0 -23.3 - REISTICK THE RICE SP (USS/MMBtu) 30.2 36.1 -16.5 30.7 40.0 -23.3 - RESIDENTIAL PRICE SP (USS/MMBtu) 30.2 36.1 -16.5 30.7 40.0 -23.3 - RESIDENTIAL PRICE SP (USS/MMBtu) 30.2 36.1 -16.5 30.7 40.0 -23.3 - RESIDENTIAL PRICE SP (USS/MMBtu) 30.2 36.1 -16.5 30.7 40.0 -23.3 - RESIDENTIAL RICE SP (USS/MMBtu) 30.2 36.1 -16.5 30.7 40.0 -23.3 - RESIDENTIAL RICE SP (USS/MMBtu) 30.2 36.1 -16.5 30.7 40.0 -23.3 - RESIDENTIAL RICE SP (USS/MMBtu) RESIDENTIAL RICE SP (USS/MBtu) RESIDENTIAL RICE SP (USS/MBtu) RESIDENTIAL RICE (RS/MWh) RESIDENTIAL RICE (RS/MWh) RESIDENTIAL RICE (RS/MWh) RESIDENTIAL RICE (RS/MWh) RESIDENTIAL RICE (RS/M	, ,							20.7
CONSUMER PRICE - LPG (R\$/13 kg)	` ','							-
NATURAL GAS								-
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IMPORTS (106 m²/day)	NATURAL GAS							
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INDUSTRIAL CONSUMPTION (106 m²/day)								-
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MOTOR PRICE SP (US\$/MMBtu)		10.5	13.0	-19.7	11.6	14.3	-19.3	-
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SOUTHEAST/MIDWEST POWER LOAD (MWavg)		74.004						400.0
SOUTH POWER LOAD (MWavg) 12,931 12,341 4.8 12,969 12,704 2.1 18.1								
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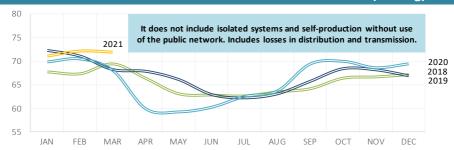


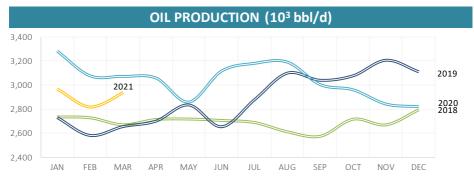


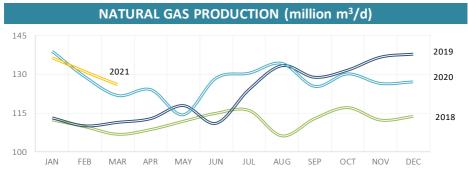


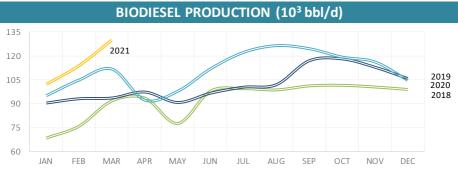


NATIONAL INTERCONNECTED SYSTEM POWER LOAD (GWavg)

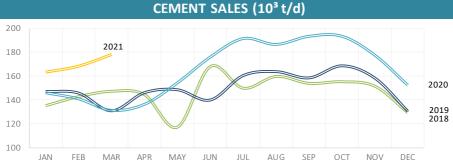


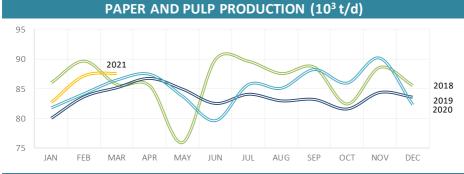


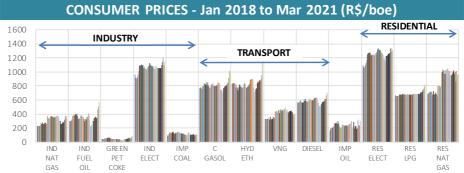












Note: For a better visualization, the minimum scale of the graphs was raised to the level close to the lowest value of the curves.

METHODOLOGICAL NOTES

The purpose of this bulletin is to follow up a set of energy and non-energy variables that provide a reasonable estimate of the behavior both monthly as cumulative of the total energy demand in Brazil.

Total demand of natural gas = domestic production (+) import (-) unused (-) reinjection.

¹Domestic Energy Supply (DES), or Brazilian Energy Demand, represents the energy necessary to move the economy of a country or region over a period of time. Includes final energy consumption in the residential sector and in the other economic sectors, includes losses in transmission and distribution, losses on power transformation and the own consumption of the energy sector.

² 2020 data from DES and DELS reflect the results of the 2021 Brazilian Energy Balance cycle, concluded by the Energy Research Company, with a partnership between SPE/MME and energy sector companies and agencies.

MINISTÉRIO DE MINAS E ENERGIA



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