# 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

DECEMBER 2020

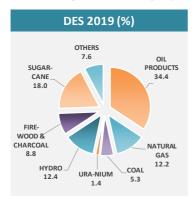
REFERENCE MONTH

### DOMESTIC ENERGY SUPPLY

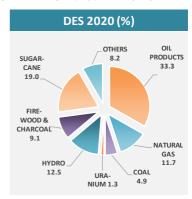
The completion of data on sugar and alcohol sector for the 2020 calendar year increased sugar production and mitigated the drop in ethanol production, which improved the indicator of the 2020 domestic supply (DES¹), now with a 2.1% retreat projection, compared to the previous estimate of -3.5%. Even so, the DES will remain more than 5% below the amount of 2014 (historical record).

In 2020, the social isolation resulting from COVID 19 resulted in an increase of 4.4% in residential consumption of electricity and 3.5% in cooking gas consumption, and strong decreases in commercial consumption of electricity (-10, 6%), light vehicle energy (-9.4%), and aviation kerosene consumption (-50.3%). It is worth mentioning the 10% increase in cement consumption, where one of the reasons was the governmental emergency aid.

#### **TOTAL ENERGY DEMAND SHRINKS 2.1% IN 2020**

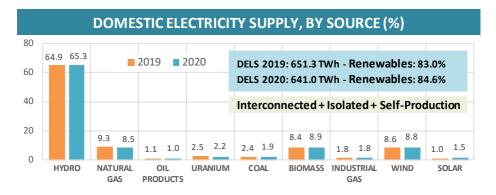


294.0 million toe - 46.1% renewables



287.8 million toe - 48.2% renewables

For the 2020's Domestic Electricity Supply (DELS)<sup>2</sup> is expected a decrease of 1.6%. As well as in DES, renewables share slightly rises and should stay near 85% (seasonal sources little affected by the pandemic).



### **HIGHLIGHTS IN DECEMBER 2020**

#### Rise in oil production in 2020

Oil production fell 12.3% in December 2020 compared to December 2019, but ended the year with a 5.1% increase. The production of natural gas ended with an increase of 4.0%. In 2020, Brazil should have an energy surplus above 10%.

#### Metallurgy recoil in 2020

Steel production closed 2020 with a 5.7% fall (-12% up to August). Ore exports closed up with a 2.9% rise (-7.3% up to July), and pellets with 38.9% down.

#### Hydraulic supply reduces in 2020

The hydraulic energy supply was down 1% in the year (-6.5% up to June) and Itaipu's stayed at -5.9% (-8.2% up to April).

#### Oil derivatives shrinks in 2020

Apparent consumption of oil products ended the year with a decrease of 5.2%, excluding bioenergy (-8.6% up to August). Diesel consumption (including biodiesel) dropped 0.7% and gasoline consumption dropped 6.4%. Automotive ethanol consumption ended the year down 12.2%. Total natural gas demand declined by 6.1% in the year, mainly due to a 9.7% decline in power generation and a 2.6% reduction in industry.

The Otto's cycle (gasoline, ethanol and natural gas) light vehicles energy consumption accumulate a decrease of 9.4% in the year (record of -13.3 until June). In previous years the rates were: 4.5% in 2019, -1.2% in 2018, 1.7% in 2017, -1.1% in 2016 and 6.2% in 2014.

#### Electricity consumption falls in 2020

Electricity consumption without self-producers dropped 1.7% in the year (-4% up to July). Commercial consumption ended the year with -10.6% and the industrial consumption with -1.1%. The residential consumption was 4.4% high.

### Increasing in Biodiesel production in 2020

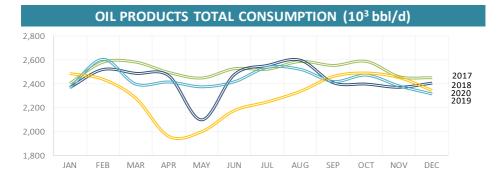
Biodiesel production fell by 1.3% in December but closed the year with a 8.4% increase (12.8% up to August). The rates of the previous three years were positive in double digits.

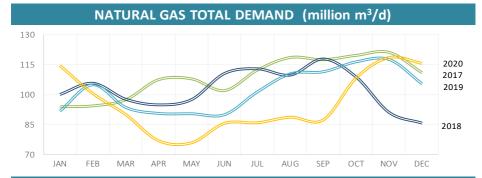
Cement consumption grew 16% over December 2019, ending the year with a 10% increase. Pulp production rose 5.0% in the year (-6.0% in 2019, and positive of 7.1% in 2018, 3.8% in 2017, 7.8% in 2016, 8.5 % in 2015 and 9.2% in 2014).

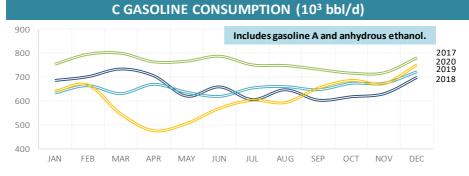
# Electricity tariffs recoil

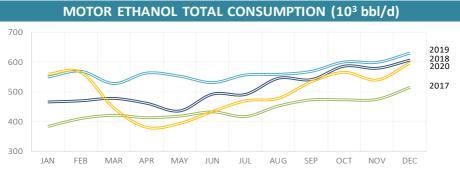
The national average tariff for residential electricity ended 2020 with a reduction of 2.6% (8.0% in 2019, 12.6% in 2018, stable in 2017 and 5.8% in 2016). Commercial tariff fell 2.1% (7.4% in 2019, 12.4% in 2018, 0.7% in 2017 and 5.7% in 2016) and industrial rose 0.1% (5.7% in 2019, 13.4% in 2018, 1.2% in 2017 and 3.6% in 2016).

SPECIFICATION		DECEM	BER					
OIL				TH	ACCL	JMULATE	D IN THE Y	'EAR
RODUCTION - with Shale Oil and NGL(10° b/d)   2,822   3,216   -12.3   3,040   2,891   5.1   IMPORTS AVERAGE PRICE (USS/bbHPOB)   43   66   -34.5   52   67   -22.3   1.0   IMPORTS AVERAGE PRICE (USS/bbHPOB)   2,347   2,341   1.4   2,308   2,434   -5.2   100.0   INFODUCTS   100   1	SPECIFICATION							
IMPORTS AVERAGE PRICE (US\$/bbl FOB)	OIL							
TOTAL CONSUMPTION (10° b/day)	PRODUCTION - with Shale Oil and NGL(10 <sup>3</sup> b/d)	2,822	3,216	-12.3	3,040	2,891	5.1	-
TOTAL CONSUMPTION (10° b/day) hereof: DIESEL with biodiesel - (10° b/day) hereof: DIESEL with biodiesel - (10° b/day) hereof: DIESEL with biodiesel - (10° b/day) 154 1723 183 184 183 181 183 183 183 183 183 183 183 183	IMPORTS AVERAGE PRICE (US\$/bbl FOB)	43	66	-34.5	52	67	-22.3	-
hereof: DIESEL with biodiesel - (10³ b/day)   997   920   8.4   1,035   1,042   -0.7   42.6   hereof: GASOLINE C (10² b/day)   754   723   4.3   6.15   658   6.4   21.3   hereof: GASOLINE C (10.7 b/day)   754   723   4.3   3.3   3.3   3.3   3.3   3.5   4.5   CONSUMER PRICE - DIESEL (18/1)   3.68   3.81   -3.3   3.43   3.59   -4.5   CONSUMER PRICE - LPG (18/5/13 kg)   74.8   69.9   7.0   70.8   69.1   2.4   DECONSUMER PRICE - LPG (18/5/13 kg)   74.8   69.9   7.0   70.8   69.1   2.4   DECONSUMER PRICE - LPG (18/5/13 kg)   74.8   69.9   7.0   70.8   69.1   2.4   DECONSUMER PRICE - LPG (18/5/13 kg)   74.8   69.9   7.0   70.8   DECONSUMER PRICE - LPG (18/5/13 kg)   74.8   69.9   7.0   70.8   DECONSUMER PRICE - LPG (18/5/13 kg)   74.8   69.9   7.0   70.8   DECONSUMER PRICE - LPG (18/5/13 kg)   74.8   69.9   7.0   70.8   DECONSUMER PRICE - LPG (18/5/13 kg)   74.8   69.9   7.0   70.8   DECONSUMER PRICE - LPG (18/5/13 kg)   74.8   69.9   7.0   70.8   DECONSUMER PRICE - LPG (18/5/14 kg)   74.8   69.9   7.0   70.8   DECONSUMER PRICE - LPG (18/5/14 kg)   75.5	OIL PRODUCTS							
Detect GASCUINE C (10 <sup>1</sup> by/day)	TOTAL CONSUMPTION (10 <sup>3</sup> b/day)	2,347	2,314	1.4	2,308	2,434	-5.2	100.0
CONSUMER PRICE - DIESEL (R\$/II)	hereof: DIESEL with biodiesel - (10 <sup>3</sup> b/day)	997	920	8.4	1,035	1,042	-0.7	42.6
CONSUMER PRICE - CASOLINE C (R\$/I)	hereof: GASOLINE C (10 <sup>3</sup> b/day)	754	723	4.3	615	658	-6.4	21.3
CONSUMER PRICE - LPG (R\$/13 kg)	CONSUMER PRICE - DIESEL (R\$/I)	3.68	3.81	-3.3	3.43	3.59	-4.5	-
PRODUCTION (106 m3/day)	CONSUMER PRICE - GASOLINE C (R\$/I)	4.48	4.62	-3.0	4.29	4.39	-2.3	-
PRODUCTION (106 m3/day)	CONSUMER PRICE - LPG (R\$/13 kg)	74.8	69.9	7.0	70.8	69.1	2.4	-
IMPORTS (106 m²/day)	NATURAL GAS							
NON-UTILIZED AND REINIECTION (106 m³/day)   118.6   117.5   1.0   95.6   101.9   -6.1   100.0	PRODUCTION (106 m3/day)	126.4	136.6	-7.5	127.5	122.5	4.0	-
AVAILABILITY FOR CONSUMPTION (106 m²/day) 118.6 117.5 1.0 95.6 101.9 -6.1 100.0 INDUSTRIAL CONSUMPTION (106 m²/day) 39.6 36.8 7.8 36.0 37.0 -2.6 37.6 POWER GENERATION CONS. (106 m²/day) 45.1 43.2 4.4 26.2 29.0 -9.7 27.4 INDUSTRIAL PRICE SP (19 (US\$/MMBtu) - consumption range of 20,000 m²/day MOTOR PRICE SP (US\$/MMBtu) 14.2 19.3 -26.4 15.3 19.5 -21.5 - RESIDENTIAL PRICE SP (US\$/MMBtu) 32.5 42.8 -24.1 34.2 40.7 -15.9 - ELECTRICITY  NATIONAL INTERCONNECTED SYSTEM 69,364 66,861 3.7 65,874 66,866 -1.5 100.0 SOUTHEAST/MIDWEST POWER LOAD (MWavg) 39,655 37,693 5.2 37,998 38,769 -2.0 57.7 SOUTH POWER LOAD (MWavg) 11,585 11,668 -0.7 10,717 10,964 -2.3 16.3 NORTH POWER LOAD (MWavg) 15,845 5,620 4.0 5,616 5,572 0.8 8.5 TOTAL CONSUMPTION (TWh) (**) 41.9 40.6 3.1 473.9 482.1 -1.7 100.0 RESIDENTIAL 13.3 12.2 9.2 148.2 141.9 4.4 31.3 INDUSTRIAL 13.4 INDUSTRIAL 14.6 13.4 8.5 165.6 167.4 -1.1 34.9 COMMERCIAL (TME) (COMMERCIAL PRICE (RS/MWh) 791 416 90.2 4,865 6,560 -2.5 4 - RESIDENTIAL PRICE (RS/MWh) 795 779 2.1 754 774 -2.6 - 7.1 100.0 TATE (COMMERCIAL PRICE (RS/MWh) 795 779 2.1 754 774 -2.6 - 7.5 10.0 17.7 INDUSTRIAL PRICE (RS/MWh) 795 779 2.1 754 774 -2.6 - 7.5 10.0 17.7 INDUSTRIAL PRICE (RS/MWh) 795 779 2.1 754 774 -2.6 - 7.5 10.0 17.4 INDUSTRIAL PRICE (RS/MWh) 795 779 2.1 754 774 -2.6 - 7.2 - 7.2 INDUSTRIAL PRICE (RS/MWh) 795 779 2.1 754 774 -2.6 - 7.2 INDUSTRIAL PRICE (RS/MWh) 795 779 2.1 754 774 -2.6 - 7.2 INDUSTRIAL PRICE (RS/MWh) 795 779 2.1 754 774 -2.6 - 7.2 INDUSTRIAL PRICE (RS/MWh) 795 779 2.1 754 774 -2.6 - 7.2 INDUSTRIAL PRICE (RS/MWh) 795 779 2.1 754 774 -2.6 - 7.0 INDUSTRIAL PRICE (RS/MWh) 795 779 2.1 754 774 -2.6 - 7.0 INDUSTRIAL PRICE (RS/MWh) 795 779 2.1 754 774 74.0 INDUSTRIAL PRICE (RS/MWh) 795 779 2.1 754 774 74.0 INDUSTRIAL PRICE (RS/MWh) 795 779 2.1 754 774 74.0 INDUSTRIAL PRICE (RS/MWh) 795 779 2.1 754 754 754 754 754 - 7.0 INDUSTRIAL PRICE (RS/MWh) 796 669 -5.2 497 566 1.2 2 - FITANOL AND BIODIESEL PRODUCTION (10³ b/d) 49 41 17.4 45 34 31.1 - 7.5 6.0 INDUSTRIAL SECTORS 79.1 107.9 -2.6 89.8 13.6 1.3 3.0		50.5	36.7	37.5	26.3	26.9	-2.3	-
INDUSTRIAL CONSUMPTION (106 m²/day)   39.6   36.8   7.8   36.0   37.0   -2.6   37.6   POWER GENERATION CONS. (106 m²/day)   45.1   43.2   4.4   26.2   29.0   -9.7   77.4   77.4   77.5   77.	NON-UTILIZED AND REINJECTION (106 m³/day)	58.2	55.8	4.3	58.1	47.6	22.2	-
POWER GENERATION CONS. (106 m²/day)	AVAILABILITY FOR CONSUMPTION (106 m³/day)	118.6	117.5	1.0	95.6	101.9	-6.1	100.0
INDUSTRIAL PRICE SP(*) (US\$/MMBtu) - consumption range of 20,000 m³day	INDUSTRIAL CONSUMPTION (106 m³/day)	39.6	36.8	7.8	36.0	37.0	-2.6	37.6
tion range of 20,000 m²/day  MOTOR PRICE SP (US\$/MMBtu)  14.2  19.3  -26.4  15.3  19.5  -21.5  -21.5  -22.5  -22.5  -22.5  -22.5  -22.6  ELECTRICITY  NATIONAL INTERCONNECTED SYSTEM  SOUTHEAST/MIDWEST POWER LOAD (MWavg)  SOUTHEAST/MIDWEST POWER LOAD (MWavg)  12,279  11,880  3.4  11,543  11,561  -0.2  17.5  NORTHEAST POWER LOAD (MWavg)  11,279  11,880  3.4  11,543  11,561  -0.2  17.5  NORTHEAST POWER LOAD (MWavg)  5,845  5,620  4.0  5,616  5,572  0.8  8.5  TOTAL CONSUMPTION (TWh) (**)  41.9  40.6  3.1  473.9  482.1  -1.7  100.0  RESIDENTIAL  13.3  12.2  9.2  148.2  141.9  4.4  13.3  INDUSTRIAL  14.6  13.4  8.5  16.56  167.4  -1.1  34.9  COMMERCIAL  0.7  OTHER SECTORS  6.5  7.0  -6.0  77.7  80.6  -3.5  16.4  PLANTS ENTRY INTO OPERATING (MW)  791  416  90.2  4,896  6,560  -25.4  -35  16.4  PLANTS ENTRY INTO OPERATING (MW)  791  416  90.2  4,896  6,560  -25.4  -35  INDUSTRIAL PRICE (R\$/MWh)  686  694  -1.2  675  690  -2.1  -31  INDUSTRIAL PRICE (R\$/MWh)  686  694  -1.2  675  690  -2.1  -34  -34  -34  -34  -34  -34  -34  -3	POWER GENERATION CONS. (106 m³/day)	45.1	43.2	4.4	26.2	29.0	-9.7	27.4
MOTOR PRICE SP (US\$/MMBtu)   14.2   19.3   -26.4   15.3   19.5   -21.5   - RESIDENTIAL PRICE SP (US\$/MMBtu)   32.5   42.8   -24.1   34.2   40.7   -15.9	INDUSTRIAL PRICE SP(*) (US\$/MMBtu) - consump-	9.6	15.3	-37.1	11.1	15.5	-28.3	-
RESIDENTIAL PRICE SP (US\$/MMBtu)  32.5 42.8 -24.1 34.2 40.7 -15.9								
NATIONAL INTERCONNECTED SYSTEM   69,364   66,861   3.7   65,874   66,866   -1.5   100.0	MOTOR PRICE SP (US\$/MMBtu)	14.2	19.3	-26.4	15.3	19.5	-21.5	-
NATIONAL INTERCONNECTED SYSTEM SOUTHEAST/MIDWEST POWER LOAD (MWavg) 39,655 37,693 5.2 37,998 38,769 -2.0 57.7 SOUTH POWER LOAD (MWavg) 11,289 11,880 3.4 11,543 11,561 -0.2 17.5 NORTHEAST POWER LOAD (MWavg) 11,585 11,668 -0.7 10,717 10,964 -2.3 16.3 NORTH POWER LOAD (MWavg) 5,845 5,620 4.0 5,616 5,572 0.8 8.5 TOTAL CONSUMPTION (TWh) (**) 41,9 40,6 3.1 473,9 482.1 -1.7 100.0 RESIDENTIAL 13.3 12.2 9.2 148.2 141.9 4.4 31.3 INDUSTRIAL 14,6 13.4 8.5 165,6 167,4 -1.1 34.9 COMMERCIAL 7.5 8.1 -7.5 82.4 92.2 -10.6 17.4 OTHER SECTORS 6.5 7.0 -6.0 07.7 80.6 -3.5 16.4 PLANTS ENTRY INTO OPERATING (MW) 791 416 90.2 4,896 6,560 -25.4 - RESIDENTIAL PRICE (R\$/Mwh) 795 779 2.1 T54 774 -2.6 -2.1 INDUSTRIAL PRICE (R\$/Mwh) 686 694 -1.2 675 690 -2.1 - INDUSTRIAL PRICE (R\$/Mwh) 674 646 4.3 652 651 0.1 - ETHANOL AND BIODIESEL BIODIESEL BIODIESEL PRODUCTION (10³ b/d) MOTOR ETHANOL CONSUMPTION (10³ b/d) 49 41 17,4 45 34 31.1 - HYDRATED ETHANOL PRICE (R\$/I) 3.18 3.21 -0.9 2.96 2.91 1.7 COAL  ELECTRICITY GENERATION (MWavg) 2,391 1,772 34.9 1,237 1,544 -19.9 -1 INDUSTRIAL SECTORS  STEEL PRODUCTION (10³ t/day) 1.9 1,9 1,9 1,0 1,9 1,9 1,9 1,0 1,9 1,9 1,9 1,0 1,9 1,9 1,9 1,9 1,9 1,9 1,9 1,9 1,9 1,9	RESIDENTIAL PRICE SP (US\$/MMBtu)	32.5	42.8	-24.1	34.2	40.7	-15.9	-
SOUTHEAST/MIDWEST POWER LOAD (MWavg) 39,655 37,693 5.2 37,998 38,769 -2.0 57.7 SOUTH POWER LOAD (MWavg) 12,279 11,880 3.4 11,543 11,561 -0.2 17.5 NORTHEAST POWER LOAD (MWavg) 11,585 11,668 -0.7 10,717 10,964 -2.3 16.3 NORTH POWER LOAD (MWavg) 5,845 5,620 4.0 5,616 5,572 0.8 8.5 TOTAL CONSUMPTION (TWh) (**) 41.9 40.6 3.1 473.9 482.1 -1.7 100.0 RESIDENTIAL 13.3 12.2 9.2 148.2 141.9 4.4 31.3 INDUSTRIAL 14.6 13.4 8.5 165.6 161.4 -1.1 34.9 COMMERCIAL 7.5 8.1 -7.5 82.4 92.2 -10.6 17.4 OTHER SECTORS 6.5 7.0 -6.0 77.7 80.6 -3.5 16.4 PLANTS ENTRY INTO OPERATING (MW) 791 416 90.2 4,896 6,560 -25.4 - RESIDENTIAL PRICE (R\$/MWh) 795 779 2.1 75.4 774 -2.6 -25.4 INDUSTRIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 -1 INDUSTRIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 -1 INDUSTRIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 -2 INDUSTRIAL PRICE (R\$/MWh) 687 64 646 4.3 652 651 0.1 -2 ITHANOL AND BIODIESEL BIODIESEL PRODUCTION (10³ b/d) 49 41 17.4 45 34 31.1 -4 HYDRATED ETHANOL EXPORTS (10³ b/d) 49 41 17.4 45 34 31.1 -4 HYDRATED ETHANOL PRICE (R\$/I) 3.18 3.21 -0.9 2.96 2.91 1.7 -COAL ETHANOL EXPORTS (10³ b/d) 49 41 17.4 45 34 31.1 -4 HYDRATED ETHANOL PRICE (R\$/I) 3.18 3.21 -0.9 2.96 2.91 1.7 -COAL ETHANOL EXPORTS (10³ b/d) 49 41 17.4 45 34 31.1 -4 HYDRATED ETHANOL PRICE (R\$/I) 3.18 3.21 -0.9 2.96 2.91 1.7 -COAL ETHANOL EXPORTS (10³ b/d) 49 41 17.4 45 34 31.1 -4 HYDRATED ETHANOL PRICE (R\$/II) 79.1 107.9 -26.6 89.8 136.1 -34.0 -1 INDUSTRIAL SECTORS  STEEL PRODUCTION (10³ b/day) 79 78 1.5 83 88 -5.7 -1 INDUSTRIAL SECTORS  STEEL PRODUCTION (10³ b/day) 1.9 1.9 0.0 1.9 1.8 4.4 -1 ROBUSTRIAL SECTORS  STEEL PRODUCTION (10³ b/day) 1.9 1.9 0.0 1.9 1.8 4.4 -1 ROBUSTRIAL SECTORS  STEEL PRODUCTION (10³ b/day) 1.9 1.9 0.0 1.9 1.8 4.4 -1 ROBUSTRIAL SECTORS  STEEL PRODUCTION (10³ b/day) 1.027 738 39.3 891 866 2.9 -1 ROBUSTRIAL SECTORS  STEEL PRODUCTION (10³ b/day) 1.027 738 39.3 891 866 2.9 -1 ROBUSTRIAL SECTORS  STEEL PRODUCTION (10³ b/day) 1.027 738 39.3 891 866 2.9 -1 ROBUSTRIAL SECTORS  STEEL PRODUCTION (10³ b/day) 1.027 738 39.3 891 866 2.9 -	ELECTRICITY							
SOUTHEAST/MIDWEST POWER LOAD (MWavg) 39,655 37,693 5.2 37,998 38,769 -2.0 57.7 SOUTH POWER LOAD (MWavg) 12,279 11,880 3.4 11,543 11,561 -0.2 17.5 NORTHEAST POWER LOAD (MWavg) 11,585 11,668 -0.7 10,717 10,964 -2.3 16.3 NORTH POWER LOAD (MWavg) 5,845 5,620 4.0 5,616 5,572 0.8 8.5 TOTAL CONSUMPTION (TWh) (**) 41.9 40.6 3.1 473.9 482.1 -1.7 100.0 RESIDENTIAL 13.3 12.2 9.2 148.2 141.9 4.4 31.3 INDUSTRIAL 14.6 13.4 8.5 165.6 167.4 -1.1 34.9 COMMERCIAL 7.5 8.1 -7.5 82.4 92.2 -10.6 17.4 COMMERCIAL 7.5 8.1 -7.5 82.4 92.2 -10.6 17.4 OTHER SECTORS 6.5 7.0 6.0 77.7 80.6 -3.5 16.4 PLANTS ENTRY INTO OPERATING (MW) 791 416 90.2 4,896 6,560 -25.4 - RESIDENTIAL PRICE (R\$/MWh) 795 779 2.1 754 774 -2.6 - COMMERCIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 - INDUSTRIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 - INDUSTRIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 - INDUSTRIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 - INDUSTRIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 - INDUSTRIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 - INDUSTRIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 - INDUSTRIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 - INDUSTRIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 - INDUSTRIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 - INDUSTRIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 - INDUSTRIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 - INDUSTRIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 - INDUSTRIAL SECTORS 694 -1.2 675 690 -2.1 - INDUSTRIAL SECTORS 695 -1.2 695 695 -1.2 695 695 695 695 695 695 695 695 695 695	NATIONAL INTERCONNECTED SYSTEM	69,364	66,861	3.7	65,874	66,866	-1.5	100.0
SOUTH POWER LOAD (MWavg)   12,279   11,880   3.4   11,543   11,561   -0.2   17.5	SOUTHEAST/MIDWEST POWER LOAD (MWavg)			5.2				57.7
NORTH POWER LOAD (MWavg)   5,845   5,620   4.0   5,616   5,572   0.8   8.5	SOUTH POWER LOAD (MWavg)	12,279	11,880	3.4	11,543	11,561	-0.2	17.5
TOTAL CONSUMPTION (TWh) (**)  RESIDENTIAL  13.3  12.2  9.2  148.2  141.9  4.4  31.3  INDUSTRIAL  14.6  13.4  8.5  165.6  167.4  -1.1  34.9  COMMERCIAL  7.5  8.1  -7.5  8.1  -7.5  8.2.4  92.2  -10.6  17.4  OTHER SECTORS  6.5  7.0  -6.0  77.7  80.6  -3.5  16.4  PLANTS ENTRY INTO OPERATING (MW)  791  416  90.2  4,896  6,560  -25.4  -RESIDENTIAL PRICE (R\$/MWh)  795  779  2.1  754  774  -2.6  -  COMMERCIAL PRICE (R\$/MWh)  686  694  -1.2  675  690  -2.1  -  INDUSTRIAL PRICE (R\$/MWh)  674  646  4.3  652  651  0.1  -  ETHANOL AND BIODIESEL  BIODIESEL PRODUCTION (10³ b/d)  49  41  17.4  45  34  31.1  -  HYDRATED ETHANOL CONSUMPTION (10³ b/d)  49  41  17.4  45  34  31.1  -  HYDRATED ETHANOL PRICE (R\$/I)  TORAL  ELECTRICITY GENERATION (MWavg)  2,391  1,772  34.9  1,237  1,544  -19.9  -  IMPORT PRICE (US\$ FOB/t)  79.1  107.9  -26.6  89.8  136.1  -34.0  -  NUCLEAR ENERGY  ELECTRICITY GENERATION - (GWh)  1,379  1,479  -6.8  14,053  16,128  -12.9  -  INDUSTRIAL SECTORS  STEEL PRODUCTION (10³ t/day)  1,9  1,9  0,0  1,9  1,8  4,4  -1  RON ORE EXPORTS (10³ t/day)  1,027  738  39.3  891  866  2.9  -  PELLETS EXPORTS (10³ t/day)  1,027  738  39.3  891  866  2.9  -  PELLETS EXPORTS (10³ t/day)  1,027  738  39.3  891  866  2.9  -  PELLETS EXPORTS (10³ t/day)  1,027  738  39.3  891  866  2.9  -  PELLETS EXPORTS (10³ t/day)  1,027  738  39.3  891  866  2.9  -  PELLETS EXPORTS (10³ t/day)  1,027  738  39.3  891  866  2.9  -  PELLETS EXPORTS (10³ t/day)  1,027  738  39.3  891  866  2.9  -  PELLETS EXPORTS (10³ t/day)  55.4  53.9  2.7  57.4  57.4  57.4  57.4  57.5  50.6  -  COMBRETION (10³ t/day)  55.4  53.9  2.7  57.4  57.4  57.4  57.4  57.6  -  57.6  -  57.7  57.4  57.6  -  57.7  57.4  57.7  57.6  -  38.7  57.7  57.4  57.7	NORTHEAST POWER LOAD (MWavg)	11,585	11,668	-0.7	10,717	10,964	-2.3	16.3
RESIDENTIAL INDUSTRIAL INDUSTRIAL 13.3 12.2 9.2 148.2 141.9 4.4 31.3 INDUSTRIAL 14.6 13.4 8.5 165.6 167.4 -1.1 34.9 COMMERCIAL 7.5 8.1 -7.5 82.4 92.2 -10.6 17.4 OTHER SECTORS 6.5 7.0 -6.0 77.7 80.6 -3.5 16.4 PLANTS ENTRY INTO OPERATING (MW) 791 416 90.2 4,896 6,560 -25.4 - RESIDENTIAL PRICE (R\$/MWh) 795 779 2.1 754 774 -2.6 - COMMERCIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 - INDUSTRIAL PRICE (R\$/MWh) 674 646 4.3 652 651 0.1 - INDUSTRIAL PRICE (R\$/MWh) 674 646 4.3 652 651 0.1 -  ETHANOL AND BIODIESEL BIODIESEL PRODUCTION (10³ b/d) 105 106 -1.3 110 102 8.4 - MOTOR ETHANOL CONSUMPTION (10³ b/d) 596 629 -5.2 497 566 -12.2 - ETHANOL EXPORTS (10³ b/d) 49 41 17.4 45 34 31.1 - HYDRATED ETHANOL PRICE (R\$/I) 3.18 3.21 -0.9 2.96 2.91 1.7 -  COAL ELECTRICITY GENERATION (MWavg) 2.391 1,772 34.9 1,237 1,544 -19.9 - IMPORT PRICE (US\$ FOB/t) 79.1 107.9 -26.6 89.8 136.1 -34.0 -  NUCLEAR ENERGY ELECTRICITY GENERATION - (GWh) 1,379 1,479 -6.8 14,053 16,128 -12.9 - INDUSTRIAL SECTORS  STEEL PRODUCTION (10³ t/day) 79 78 1.5 83 88 -5.7 - ALUMINIUM PRODUCTION (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELLETS EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELLETS EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELLETS EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELLETS EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELLETS EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELLETS EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELLETS EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELLETS EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELLETS EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELLETS EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELLETS EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELLETS EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELLETS EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELLETS EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PERLETS EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PERLETS EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PERLETS EXPORTS (10	NORTH POWER LOAD (MWavg)	5,845	5,620	4.0	5,616	5,572	0.8	8.5
INDUSTRIAL   14.6   13.4   8.5   165.6   167.4   -1.1   34.9   COMMERCIAL   7.5   8.1   -7.5   82.4   92.2   -10.6   17.4   OTHER SECTORS   6.5   7.0   -6.0   77.7   80.6   -3.5   16.4   PLANTS ENTRY INTO OPERATING (MW)   791   416   90.2   4,896   6,560   -25.4   -8   -1.2   -1.5   -1.	TOTAL CONSUMPTION (TWh) (**)	41.9	40.6	3.1	473.9	482.1	-1.7	100.0
COMMERCIAL OTHER SECTORS 6.5 7.0 -6.0 77.7 80.6 -3.5 16.4 PLANTS ENTRY INTO OPERATING (MW) 791 416 90.2 4,896 6,560 -25.4 - RESIDENTIAL PRICE (R\$/MWh) 795 779 2.1 754 774 -2.6 - COMMERCIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 - INDUSTRIAL PRICE (R\$/MWh) 674 646 4.3 652 651 0.1 -  ETHANOL AND BIODIESEL  BIODIESEL PRODUCTION (10³ b/d) 105 106 -1.3 110 102 8.4 - MOTOR ETHANOL CONSUMPTION (10³ b/d) 596 629 -5.2 497 566 -12.2 - ETHANOL EXPORTS (10³ b/d) 49 41 17.4 45 34 31.1 - HYDRATED ETHANOL PRICE (R\$/I) 3.18 3.21 -0.9 2.96 2.91 1.7 -  COAL  ELECTRICITY GENERATION (MWavg) 2,391 1,772 34.9 1,237 1,544 -19.9 - IMPORT PRICE (US\$ FOB/t) 79.1 107.9 -26.6 89.8 136.1 -34.0 -  NUCLEAR ENERGY  ELECTRICITY GENERATION - (GWh) 1,379 1,479 -6.8 14,053 16,128 -12.9 -  INDUSTRIAL SECTORS  STEEL PRODUCTION (10³ t/day) 79 78 1.5 83 88 -5.7 -  ALUMINIUM PRODUCTION (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELECTS (20° t/day) 1,027 738 39.3 891 866 2.9 -  PELECTS (20° t/day) 1,027 738 39.3 891 866 2.9 -  PELECTS (20° t/day) 1,027 738 39.3 891 866 2.9 -  PELECTE SEPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELECTE SEPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELECTE SEPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELECTE SEPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELECTE SEPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELECTE SEPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELECTE SEPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELECTE SEPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELECTE SEPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELECTE SEPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELECTE SEPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELECTE SEPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELECTE SEPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELECTE SEPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELECTE SEPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELECTE SEPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELECTE SEPORTS (10° t/day) 1,027 738 39.3 891 866 2.9 -  PELECTE	RESIDENTIAL	13.3	12.2	9.2	148.2	141.9	4.4	31.3
OTHER SECTORS  6.5 7.0 -6.0 77.7 80.6 -3.5 16.4 PLANTS ENTRY INTO OPERATING (MW)  791 416 90.2 4,896 6,560 -25.4 - RESIDENTIAL PRICE (R\$/MWh)  795 779 2.1 754 774 -2.6 - COMMERCIAL PRICE (R\$/MWh)  686 694 -1.2 675 690 -2.1 - INDUSTRIAL PRICE (R\$/MWh)  674 646 4.3 652 651 0.1 -  FTHANOL AND BIODIESEL  BIODIESEL PRODUCTION (10³ b/d)  MOTOR ETHANOL CONSUMPTION (10³ b/d)  596 629 -5.2 497 566 -12.2 - ETHANOL EXPORTS (10³ b/d)  49 41 17.4 45 34 31.1 - HYDRATED ETHANOL PRICE (R\$/I)  3.18 3.21 -0.9 2.96 2.91 1.7 -  COAL  ELECTRICITY GENERATION (MWavg)  2,391 1,772 34.9 1,237 1,544 -19.9 - IMPORT PRICE (US\$ FOB/t)  79.1 107.9 -26.6 89.8 136.1 -34.0 -  NUCLEAR ENERGY  ELECTRICITY GENERATION - (GWh)  1,379 1,479 -6.8 14,053 16,128 -12.9 -  INDUSTRIAL SECTORS  STEEL PRODUCTION (10³ t/day)  79 78 1.5 83 88 -5.7 -  ALUMINIUM PRODUCTION (10³ t/day)  1,027 738 39.3 891 866 2.9 -  PELLETS EXPORTS (10³ t/day)  41 68 -40.0 41 68 -38.9 -  PAPER PRODUCTION (10³ t/day)  55.4 53.9 2.7 57.4 54.7 5.0 -  SUGAR PRODUCTION (10³ t/day)  88 18 107.8 113 80 41.3 -  SUGAR EXPORTS (10³ t/day)  96 46 107.3 87 49 76.4	INDUSTRIAL	14.6	13.4	8.5	165.6	167.4	-1.1	34.9
PLANTS ENTRY INTO OPERATING (MW) 791 416 90.2 4,896 6,560 -25.4 - RESIDENTIAL PRICE (R\$/MWh) 795 779 2.1 754 774 -2.6 - COMMERCIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 - INDUSTRIAL PRICE (R\$/MWh) 674 646 4.3 652 651 0.1 - ETHANOL AND BIODIESEL  BIODIESEL PRODUCTION (10³ b/d) MOTOR ETHANOL CONSUMPTION (10³ b/d) 596 629 -5.2 497 566 -12.2 - ETHANOL EXPORTS (10³ b/d) 49 41 17.4 45 34 31.1 - HYDRATED ETHANOL PRICE (R\$/I) 3.18 3.21 -0.9 2.96 2.91 1.7 - COAL  ELECTRICITY GENERATION (MWavg) 2,391 1,772 34.9 1,237 1,544 -19.9 - IMPORT PRICE (US\$ FOB/t) 79.1 107.9 -26.6 89.8 136.1 -34.0 - NUCLEAR ENERGY  ELECTRICITY GENERATION -(GWh) 1,379 1,479 -6.8 14,053 16,128 -12.9 - INDUSTRIAL SECTORS  STEEL PRODUCTION (10³ t/day) 1,027 738 39.3 891 866 2.9 - PELLETS EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 - PELLETS EXPORTS (10³ t/day) 41 68 -40.0 41 68 -38.9 - PAPER PRODUCTION (10³ t/day) 55.4 53.9 2.7 57.4 54.7 5.0 - SUGAR PRODUCTION (10³ t/day) 55.4 53.9 2.7 57.4 54.7 5.0 - SUGAR PRODUCTION (10³ t/day) 38 18 107.8 113 80 41.3 - SUGAR EXPORTS (10³ t/day) 96 46 107.3 87 49 76.4	COMMERCIAL	7.5	8.1	-7.5	82.4	92.2	-10.6	17.4
RESIDENTIAL PRICE (R\$/MWh) 795 779 2.1 754 774 -2.6 - COMMERCIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 - INDUSTRIAL PRICE (R\$/MWh) 674 646 4.3 652 651 0.1 - ETHANOL AND BIODIESEL  BIODIESEL PRODUCTION (10³ b/d) 105 106 -1.3 110 102 8.4 - MOTOR ETHANOL CONSUMPTION (10³ b/d) 596 629 -5.2 497 566 -12.2 - ETHANOL EXPORTS (10³ b/d) 49 41 17.4 45 34 31.1 - HYDRATED ETHANOL PRICE (R\$/I) 3.18 3.21 -0.9 2.96 2.91 1.7 - COAL  ELECTRICITY GENERATION (MWavg) 2,391 1,772 34.9 1,237 1,544 -19.9 - IMPORT PRICE (US\$ FOB/t) 79.1 107.9 -26.6 89.8 136.1 -34.0 - NUCLEAR ENERGY  ELECTRICITY GENERATION - (GWh) 1,379 1,479 -6.8 14,053 16,128 -12.9 - INDUSTRIAL SECTORS  STEEL PRODUCTION (10³ t/day) 79 78 1.5 83 88 -5.7 - ALUMINIUM PRODUCTION (10³ t/day) 1.9 1.9 0.0 1.9 1.8 4.4 - IRON ORE EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 - PELLETS EXPORTS (10³ t/day) 41 68 -40.0 41 68 -38.9 - PAPER PRODUCTION (10³ t/day) 27.0 29.7 -9.1 27.8 28.9 -3.6 - PULP PRODUCTION (10³ t/day) 55.4 53.9 2.7 57.4 54.7 5.0 - SUGAR PRODUCTION (10³ t/day) 38 18 107.8 113 80 41.3 - SUGAR EXPORTS (10³ t/day) 96 46 107.3 87 49 76.4	OTHER SECTORS	6.5	7.0	-6.0	77.7	80.6	-3.5	16.4
COMMERCIAL PRICE (R\$/MWh) 686 694 -1.2 675 690 -2.1 - INDUSTRIAL PRICE (R\$/MWh) 674 646 4.3 652 651 0.1 - ETHANOL AND BIODIESEL  BIODIESEL PRODUCTION (10³ b/d) 105 106 -1.3 110 102 8.4 - MOTOR ETHANOL CONSUMPTION (10³ b/d) 596 629 -5.2 497 566 -12.2 - ETHANOL EXPORTS (10³ b/d) 49 41 17.4 45 34 31.1 - HYDRATED ETHANOL PRICE (R\$/I) 3.18 3.21 -0.9 2.96 2.91 1.7 - COAL  ELECTRICITY GENERATION (MWavg) 2,391 1,772 34.9 1,237 1,544 -19.9 - IMPORT PRICE (US\$ FOB/t) 79.1 107.9 -26.6 89.8 136.1 -34.0 - NUCLEAR ENERGY  ELECTRICITY GENERATION - (GWh) 1,379 1,479 -6.8 14,053 16,128 -12.9 - INDUSTRIAL SECTORS  STEEL PRODUCTION (10³ t/day) 79 78 1.5 83 88 -5.7 - ALUMINIUM PRODUCTION (10³ t/day) 1.9 1.9 0.0 1.9 1.8 4.4 - IRON ORE EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 - PELLETS EXPORTS (10³ t/day) 41 68 -40.0 41 68 -38.9 - PAPER PRODUCTION (10³ t/day) 27.0 29.7 -9.1 27.8 28.9 -3.6 - PULP PRODUCTION (10³ t/day) 55.4 53.9 2.7 57.4 54.7 5.0 - SUGAR PRODUCTION (10³ t/day) 38 18 107.8 113 80 41.3 - SUGAR EXPORTS (10³ t/day) 38 18 107.8 113 80 41.3 -	PLANTS ENTRY INTO OPERATING (MW)	791	416	90.2	4,896	6,560	-25.4	-
INDUSTRIAL PRICE (R\$/MWh)   674   646   4.3   652   651   0.1	RESIDENTIAL PRICE (R\$/MWh)	795	779	2.1	754	774	-2.6	-
BIODIESEL PRODUCTION (10³ b/d)   105   106   -1.3   110   102   8.4   -1.4   107.00   107.0	COMMERCIAL PRICE (R\$/MWh)	686	694	-1.2	675	690	-2.1	-
BIODIESEL PRODUCTION (10³ b/d) 105 106 -1.3 110 102 8.4 - MOTOR ETHANOL CONSUMPTION (10³ b/d) 596 629 -5.2 497 566 -12.2 - ETHANOL EXPORTS (10³ b/d) 49 41 17.4 45 34 31.1 - HYDRATED ETHANOL PRICE (R\$/I) 3.18 3.21 -0.9 2.96 2.91 1.7 -  COAL  ELECTRICITY GENERATION (MWavg) 2,391 1,772 34.9 1,237 1,544 -19.9 - IMPORT PRICE (US\$ FOB/t) 79.1 107.9 -26.6 89.8 136.1 -34.0 -  NUCLEAR ENERGY  ELECTRICITY GENERATION - (GWh) 1,379 1,479 -6.8 14,053 16,128 -12.9 - INDUSTRIAL SECTORS  STEEL PRODUCTION (10³ t/day) 79 78 1.5 83 88 -5.7 - ALUMINIUM PRODUCTION (10³ t/day) 1.9 1.9 0.0 1.9 1.8 4.4 - IRON ORE EXPORTS (10³ t/day) 41 68 -40.0 41 68 -38.9 - PELLETS EXPORTS (10³ t/day) 27.0 29.7 -9.1 27.8 28.9 -3.6 - PULP PRODUCTION (10³ t/day) 38 18 107.8 113 80 41.3 - SUGAR EXPORTS (10³ t/day) 38 18 107.8 113 80 41.3 - SUGAR EXPORTS (10³ t/day) 96 46 107.3 87 49 76.4	INDUSTRIAL PRICE (R\$/MWh)	674	646	4.3	652	651	0.1	-
MOTOR ETHANOL CONSUMPTION (10³ b/d)         596         629         -5.2         497         566         -12.2         -ETHANOL EXPORTS (10³ b/d)         49         41         17.4         45         34         31.1         -ATTAIN (10³ b/d)         49         41         17.4         45         34         31.1         -ATTAIN (10³ b/d)         31.8         3.21         -0.9         2.96         2.91         1.7         -COAL           ELECTRICITY GENERATION (MWavg)         2,391         1,772         34.9         1,237         1,544         -19.9         -19           IMPORT PRICE (US\$ FOB/t)         79.1         107.9         -26.6         89.8         136.1         -34.0         -34.0           NUCLEAR ENERGY           ELECTRICITY GENERATION - (GWh)         1,379         1,479         -6.8         14,053         16,128         -12.9         -1           INDUSTRIAL SECTORS           STEEL PRODUCTION (10³ t/day)         79         78         1.5         83         88         -5.7         -5           ALUMINIUM PRODUCTION (10³ t/day)         1.9         1.9         0.0         1.9         1.8         4.4         -1           IRODUCTION	ETHANOL AND BIODIESEL							
ETHANOL EXPORTS (10³ b/d) 49 41 17.4 45 34 31.1 - HYDRATED ETHANOL PRICE (R\$/I) 3.18 3.21 -0.9 2.96 2.91 1.7 -  COAL  ELECTRICITY GENERATION (MWavg) 2,391 1,772 34.9 1,237 1,544 -19.9 - IMPORT PRICE (US\$ FOB/t) 79.1 107.9 -26.6 89.8 136.1 -34.0 -  NUCLEAR ENERGY  ELECTRICITY GENERATION - (GWh) 1,379 1,479 -6.8 14,053 16,128 -12.9 - INDUSTRIAL SECTORS  STEEL PRODUCTION (10³ t/day) 79 78 1.5 83 88 -5.7 -  ALUMINIUM PRODUCTION (10³ t/day) 1.9 1.9 0.0 1.9 1.8 4.4 - IRON ORE EXPORTS (10³ t/day) 1,027 738 39.3 891 866 2.9 -  PELLETS EXPORTS (10³ t/day) 41 68 -40.0 41 68 -38.9 -  PAPER PRODUCTION (10³ t/day) 27.0 29.7 -9.1 27.8 28.9 -3.6 -  PULP PRODUCTION (10³ t/day) 55.4 53.9 2.7 57.4 54.7 5.0 -  SUGAR PRODUCTION (10³ t/day) 38 18 107.8 113 80 41.3 -  SUGAR EXPORTS (10³ t/day) 96 46 107.3 87 49 76.4	BIODIESEL PRODUCTION (103 b/d)	105	106	-1.3	110	102	8.4	-
HYDRATED ETHANOL PRICE (R\$/I)   3.18   3.21   -0.9   2.96   2.91   1.7   - COAL	MOTOR ETHANOL CONSUMPTION (10 <sup>3</sup> b/d)	596	629	-5.2	497	566	-12.2	-
COAL           ELECTRICITY GENERATION (MWavg)         2,391         1,772         34.9         1,237         1,544         -19.9         -           IMPORT PRICE (US\$ FOB/t)         79.1         107.9         -26.6         89.8         136.1         -34.0         -           NUCLEAR ENERGY           ELECTRICITY GENERATION - (GWh)         1,379         1,479         -6.8         14,053         16,128         -12.9         -           INDUSTRIAL SECTORS           STEEL PRODUCTION (10³ t/day)         79         78         1.5         83         88         -5.7         -           ALUMINIUM PRODUCTION (10³ t/day)         1.9         1.9         0.0         1.9         1.8         4.4         -           IRON ORE EXPORTS (10³ t/day)         1,027         738         39.3         891         866         2.9         -           PELLETS EXPORTS (10³ t/day)         41         68         -40.0         41         68         -38.9         -           PAPER PRODUCTION (10³ t/day)         27.0         29.7         -9.1         27.8         28.9         -3.6         -           PULP PRODUCTION (10³ t/day)         55.4         53.9         2.7         57.4 <td>ETHANOL EXPORTS (10<sup>3</sup> b/d)</td> <td>49</td> <td>41</td> <td>17.4</td> <td>45</td> <td>34</td> <td>31.1</td> <td>-</td>	ETHANOL EXPORTS (10 <sup>3</sup> b/d)	49	41	17.4	45	34	31.1	-
COAL           ELECTRICITY GENERATION (MWavg)         2,391         1,772         34.9         1,237         1,544         -19.9         -           IMPORT PRICE (US\$ FOB/t)         79.1         107.9         -26.6         89.8         136.1         -34.0         -           NUCLEAR ENERGY           ELECTRICITY GENERATION - (GWh)         1,379         1,479         -6.8         14,053         16,128         -12.9         -           INDUSTRIAL SECTORS           STEEL PRODUCTION (10³ t/day)         79         78         1.5         83         88         -5.7         -           ALUMINIUM PRODUCTION (10³ t/day)         1.9         1.9         0.0         1.9         1.8         4.4         -           IRON ORE EXPORTS (10³ t/day)         1,027         738         39.3         891         866         2.9         -           PELLETS EXPORTS (10³ t/day)         41         68         -40.0         41         68         -38.9         -           PAPER PRODUCTION (10³ t/day)         27.0         29.7         -9.1         27.8         28.9         -3.6         -           PULP PRODUCTION (10³ t/day)         55.4         53.9         2.7         57.4 <td>HYDRATED ETHANOL PRICE (R\$/I)</td> <td>3.18</td> <td>3.21</td> <td>-0.9</td> <td>2.96</td> <td>2.91</td> <td>1.7</td> <td>-</td>	HYDRATED ETHANOL PRICE (R\$/I)	3.18	3.21	-0.9	2.96	2.91	1.7	-
IMPORT PRICE (US\$ FOB/t)   79.1   107.9   -26.6   89.8   136.1   -34.0   - NUCLEAR ENERGY								
IMPORT PRICE (US\$ FOB/t)   79.1   107.9   -26.6   89.8   136.1   -34.0   - NUCLEAR ENERGY	ELECTRICITY GENERATION (MWavg)	2.391	1.772	34.9	1.237	1.544	-19.9	-
NUCLEAR ENERGY           ELECTRICITY GENERATION - (GWh)         1,379         1,479         -6.8         14,053         16,128         -12.9         -           INDUSTRIAL SECTORS           STEEL PRODUCTION (10³ t/day)         79         78         1.5         83         88         -5.7         -           ALUMINIUM PRODUCTION (10³ t/day)         1.9         1.9         0.0         1.9         1.8         4.4         -           IRON ORE EXPORTS (10³ t/day)         1,027         738         39.3         891         866         2.9         -           PELLETS EXPORTS (10³ t/day)         41         68         -40.0         41         68         -38.9         -           PAPER PRODUCTION (10³ t/day)         27.0         29.7         -9.1         27.8         28.9         -3.6         -           PULP PRODUCTION (10³ t/day)         55.4         53.9         2.7         57.4         54.7         5.0         -           SUGAR PRODUCTION (10³ t/day)         38         18         107.8         113         80         41.3         -           SUGAR EXPORTS (10³ t/day)         96         46         107.3         87         49         76.4         -	,			-26.6				-
STEEL PRODUCTION (10³ t/day)   79   78   1.5   83   88   -5.7   -5								
STEEL PRODUCTION (10³ t/day)   79   78   1.5   83   88   -5.7   -5	ELECTRICITY GENERATION - (GWh)	1.379	1.479	-6.8	14.053	16.128	-12.9	-
STEEL PRODUCTION (10³ t/day)       79       78       1.5       83       88       -5.7       -         ALUMINIUM PRODUCTION (10³ t/day)       1.9       1.9       0.0       1.9       1.8       4.4       -         IRON ORE EXPORTS (10³ t/day)       1,027       738       39.3       891       866       2.9       -         PELLETS EXPORTS (10³ t/day)       41       68       -40.0       41       68       -38.9       -         PAPER PRODUCTION (10³ t/day)       27.0       29.7       -9.1       27.8       28.9       -3.6       -         PULP PRODUCTION (10³ t/day)       55.4       53.9       2.7       57.4       54.7       5.0       -         SUGAR PRODUCTION (10³ t/day)       38       18       107.8       113       80       41.3       -         SUGAR EXPORTS (10³ t/day)       96       46       107.3       87       49       76.4       -			,		,			
ALUMINIUM PRODUCTION (10³ t/day)  1.9  1.9  1.9  0.0  1.9  1.8  4.4		79	78	15	83	88	-5.7	_
IRON ORE EXPORTS (10³ t/day)   1,027   738   39.3   891   866   2.9   - PELLETS EXPORTS (10³ t/day)   41   68   -40.0   41   68   -38.9   - PAPER PRODUCTION (10³ t/day)   27.0   29.7   -9.1   27.8   28.9   -3.6   - PULP PRODUCTION (10³ t/day)   55.4   53.9   2.7   57.4   54.7   5.0   - SUGAR PRODUCTION (10³ t/day)   38   18   107.8   113   80   41.3   - SUGAR EXPORTS (10³ t/day)   96   46   107.3   87   49   76.4   -								-
PELLETS EXPORTS (10³ t/day)     41     68     -40.0     41     68     -38.9     -       PAPER PRODUCTION (10³ t/day)     27.0     29.7     -9.1     27.8     28.9     -3.6     -       PULP PRODUCTION (10³ t/day)     55.4     53.9     2.7     57.4     54.7     5.0     -       SUGAR PRODUCTION (10³ t/day)     38     18     107.8     113     80     41.3     -       SUGAR EXPORTS (10³ t/day)     96     46     107.3     87     49     76.4     -								_
PAPER PRODUCTION (10³ t/day) 27.0 29.7 -9.1 27.8 28.9 -3.6 - PULP PRODUCTION (10³ t/day) 55.4 53.9 2.7 57.4 54.7 5.0 - SUGAR PRODUCTION (10³ t/day) 38 18 107.8 113 80 41.3 - SUGAR EXPORTS (10³ t/day) 96 46 107.3 87 49 76.4 -								
PULP PRODUCTION (10³ t/day)     55.4     53.9     2.7     57.4     54.7     5.0     -       SUGAR PRODUCTION (10³ t/day)     38     18     107.8     113     80     41.3     -       SUGAR EXPORTS (10³ t/day)     96     46     107.3     87     49     76.4     -	, , , , , , , , , , , , , , , , , , , ,							_
SUGAR PRODUCTION (10³ t/day)     38     18     107.8     113     80     41.3     -       SUGAR EXPORTS (10³ t/day)     96     46     107.3     87     49     76.4     -	` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '							_
SUGAR EXPORTS (10 <sup>3</sup> t/day) 96 46 107.3 87 49 76.4 -	` ' ''							_
, , , , ,								-
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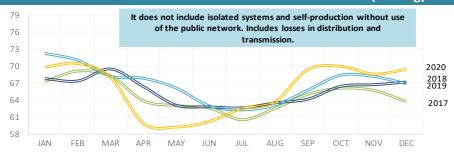


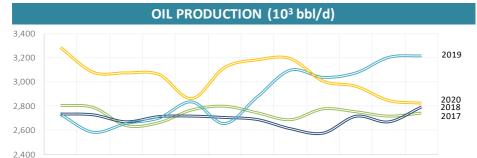






#### NATIONAL INTERCONNECTED SYSTEM POWER LOAD (GWavg)





JUN

JUL

JAN

FEB

MAR

APR

MAY

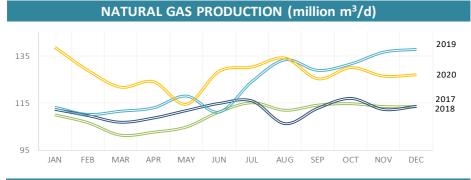
SEP

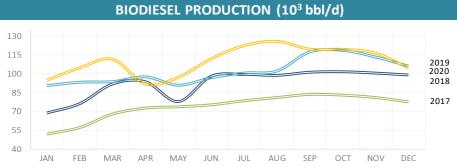
OCT

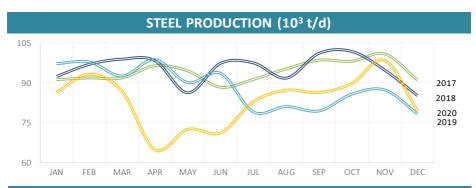
NOV

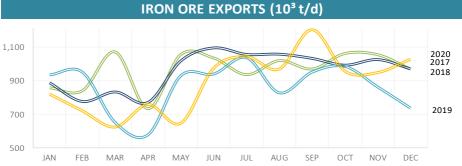
DEC

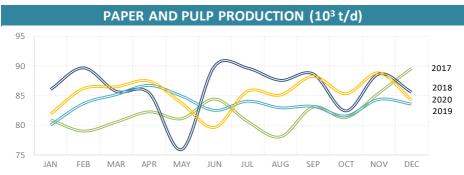
AUG













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.

<sup>1</sup> Domestic 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.

<sup>2</sup> 2019 data from DEL and DELS reflect the final results of the National Energy Balance (BEB), cycle 2020, concluded in May by the Energy Research Company (EPE), in partnership with MME and its companies and agencies.

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