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

REFERENCE MONTH
JUNE
2020

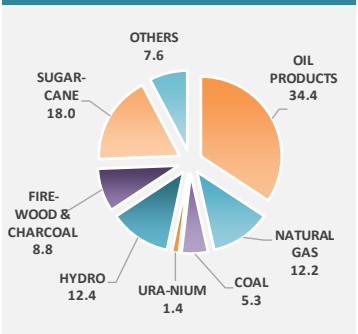
DOMESTIC ENERGY SUPPLY

Current news of a greater grain harvest and improvements in some economic indicators change the previous forecast of a 3.4% decline in total energy demand (or OIE *) to a 2.8% decrease. The prediction of greater hydraulic generation, with a reduction in thermal losses, also contributes to the fact.

The OIE in June is estimated to have decreased 5.1%, compared to 7.4% in May and 14.3% in April (over the same months of 2019). In the accumulated result for the year, OIE reached its peak of decline in June (-4.8%), as expected, and should undergo a slow recovery and end the year with a decrease of 2.8%. The volume of energy will be 6.4% lower than in 2014 (record volume).

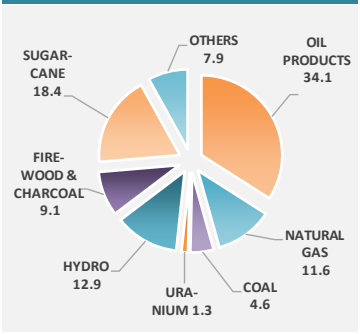
2020 TOTAL ENERGY DEMAND MAY RECOIL 2.8%

DES 2019 (%)



294.0 million toe - 46.1% renewables

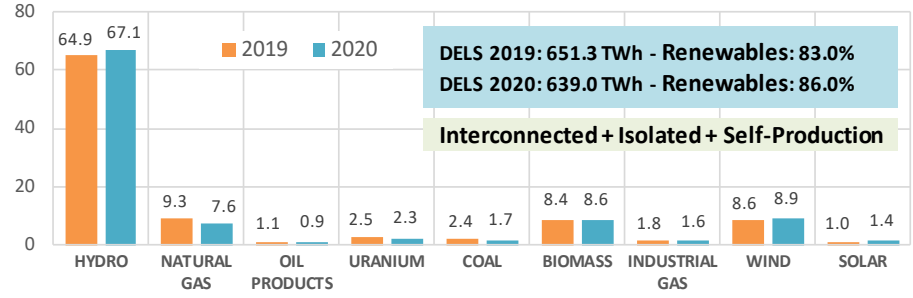
DES 2020 (%)



285.7 million toe - 47.8% renewables

For the Internal Electricity Supply (OIEE) ** of 2020, a drop of 1.9% is expected (-3.0% in the previous bulletin). The proportion of renewables rises slightly and is expected to be above 85% (seasonal sources less affected by the pandemic).

DOMESTIC ELECTRICITY SUPPLY, BY SOURCE (%)



HIGHLIGHTS IN JUNE 2020

Oil production on the rise

Oil production grew 17.4% in June 2020, compared to June 2019, accumulating an increase of 14.2% in the year. The production of natural gas accumulated an increase of 11.7% in the year. These indicators will provide Brazil's energy surplus above 10% in 2020.

Mining and metallurgy is down

Steel production accumulates 17.8% down in the year. Iron ore exports accumulate 8.9% down and pellets, 40% down.

Hydraulic supply downwards

The supply of hydraulic energy accumulated a drop of 6.5% in the year (5.2% up to April), and that of Itaipu, down 7.3% (8.2% up to April).

Oil derivatives recede less

Apparent consumption of oil products fell 4% in June, compared to the same month of 2019 (-15.7% in May), and accumulated a drop of 7.4% in the year (excluding ethanol and biodiesel). Diesel consumption (including biodiesel) has fallen by 3.8%, and gasoline by 11.6%. Automotive ethanol consumption fell 15.5% in the year. The total demand for natural gas is down 3.0% in the year, and it still maintains a positive rate of 10.2% in electricity generation, but in industry there is a 10% decrease.

Energy consumption in light vehicles, of the Otto cycle (gasoline, ethanol and natural gas), accumulated a decrease of 13.3% in the year, the same until May. 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 in down

Electricity consumption – without self-producers – accumulates a 4.0% drop in the year. Commercial consumption accumulated a decrease of 9.7% and residential consumption, 1.1% high. The industrial decreased 5.6% in the year.

Biodiesel production grows back

Biodiesel production increased by 15.5% in June, and accumulates an increase of 8.7% in the year. The rates for the previous three years were positive in double digits.

Pulp production accumulated an increase of 2.5% in the year (-6.0% in 2019, +7.1% in 2018, +3.8% in 2017, +7.8% in 2016, +8.5% in 2015 and +9.2% in 2014). Cement consumption grew 25% over June 2019, and accumulates an increase above 3% in the year.

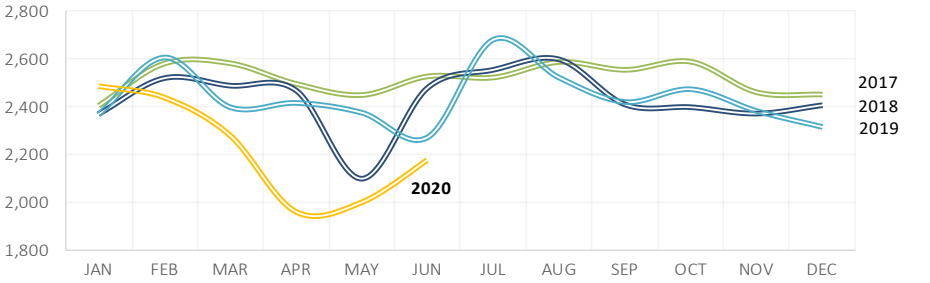
Electricity tariffs recoil

The national average tariff for residential electricity decreased 4.1% in June (8.0% in 2019, 12.6% in 2018, stable in 2017 and 5.8% in 2016). Commercial fell 2.3% (7.4% in 2019, 12.4% in 2018, 0.7% in 2017 and 5.7% in 2016), and industrial increased 0.9% (5.7% in 2019, 13.4% in 2018, 1.2% in 2017 and 3.6% in 2016).

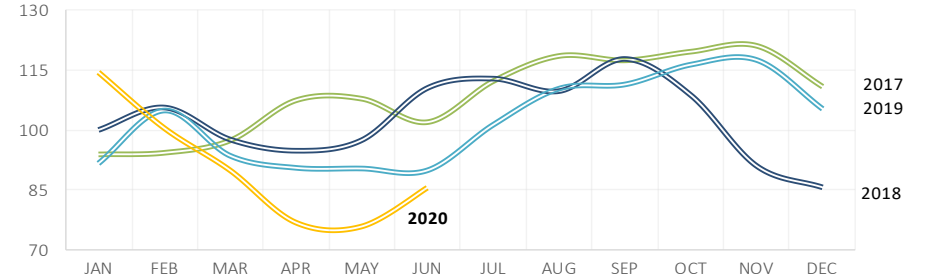
SPECIFICATION	JUNE						
	IN THE MONTH			ACCUMULATED IN THE YEAR			
	2020	2019	%20/19	2020	2019	%20/19	%
OIL							
PRODUCTION - with Shale Oil and NGL(10^3 b/d)	3,117	2,654	17.4	3,078	2,695	14.2	-
IMPORTS AVERAGE PRICE (US$/bbl FOB)	47	72	-34.6	0	69	-100.0	-
OIL PRODUCTS							
TOTAL CONSUMPTION (10^3 b/day)	2,179	2,271	-4.0	2,224	2,402	-7.4	100.0
hereof: DIESEL with biodiesel - (10^3 b/day)	1,038	1,029	0.9	974	1,013	-3.8	41.6
hereof: GASOLINE C (10^3 b/day)	571	620	-7.9	568	642	-11.6	20.4
CONSUMER PRICE - DIESEL (R$/l)	3.06	3.61	-15.1	3.41	3.54	-3.7	-
CONSUMER PRICE - GASOLINE C (R$/l)	3.96	4.47	-11.3	4.24	4.37	-3.0	-
CONSUMER PRICE - LPG (R$/13 kg)	69.6	69.2	0.5	69.8	69.2	0.8	-
NATURAL GAS							
PRODUCTION (106 m3/day)	128.5	111.2	15.6	126.0	112.9	11.7	-
IMPORTS (106 m^3/day)	14.8	22.0	-32.6	20.8	23.2	-10.4	-
NON-UTILIZED AND REINJECTION (106 m^3/day)	57.8	43.3	33.6	56.3	42.8	31.7	-
AVAILABILITY FOR CONSUMPTION (106 m^3/day)	85.5	89.9	-4.9	90.5	93.3	-3.0	100.0
INDUSTRIAL CONSUMPTION (106 m^3/day)	34.6	37.8	-8.5	33.8	37.6	-10.0	37.4
POWER GENERATION CONS. (106 m^3/day)	18.1	18.0	0.9	22.8	20.7	10.2	25.2
INDUSTRIAL PRICE SP(*) (US$/MMBtu) - consumption range of 20,000 m^3/day	10.4	16.5	-36.8	12.8	15.2	-16.2	-
MOTOR PRICE SP (US$/MMBtu)	15.1	21.2	-28.9	16.6	19.6	-15.5	-
RESIDENTIAL PRICE SP (US$/MMBtu)	33.0	46.1	-28.3	36.2	37.5	-3.3	-
ELECTRICITY							
NATIONAL INTERCONNECTED SYSTEM	60,175	62,916	-4.4	64,550	68,020	-5.1	100.0
SOUTHEAST/MIDWEST POWER LOAD (MWavg)	34,690	36,554	-5.1	37,200	39,708	-6.3	57.6
SOUTH POWER LOAD (MWavg)	10,467	10,659	-1.8	11,515	11,796	-2.4	17.8
NORTHEAST POWER LOAD (MWavg)	9,594	10,185	-5.8	10,444	11,008	-5.1	16.2
NORTH POWER LOAD (MWavg)	5,424	5,518	-1.7	5,391	5,508	-2.1	8.4
TOTAL CONSUMPTION (TWh) (**)	36.4	38.3	-4.9	232.4	242.0	-4.0	100.0
RESIDENTIAL	11.0	10.9	1.5	72.9	72.1	1.1	31.4
INDUSTRIAL	12.7	13.9	-8.0	78.4	83.1	-5.6	33.8
COMMERCIAL	6.4	7.1	-10.0	42.5	47.1	-9.7	18.3
OTHER SECTORS	6.2	6.5	-3.5	38.6	39.7	-2.9	16.6
PLANTS ENTRY INTO OPERATING (MW)	133	1,006	-86.8	3,054	3,320	-8.0	-
RESIDENTIAL PRICE (R$/MWh)	725	756	-4.1	742	756	-1.8	-
COMMERCIAL PRICE (R$/MWh)	665	681	-2.3	671	672	-0.2	-
INDUSTRIAL PRICE (R$/MWh)	650	644	0.9	648	639	1.4	-
ETHANOL AND BIODIESEL							
BIODIESEL PRODUCTION (10^3 b/d)	112	97	15.5	102	94	8.7	-
MOTOR ETHANOL CONSUMPTION (10^3 b/d)	434	530	-18.1	462	547	-15.5	-
ETHANOL EXPORTS (10^3 b/d)	60	36	67.3	28	23	23.5	-
HYDRATED ETHANOL PRICE (R$/l)	2.66	2.82	-5.6	2.94	2.89	1.7	-
COAL							
ELECTRICITY GENERATION (MWavg)	848	743	14.2	1,075	1,064	1.1	-
IMPORT PRICE (US$ FOB/t)	101.8	139.8	-27.1	98.0	151.3	-35.2	-
NUCLEAR ENERGY							
ELECTRICITY GENERATION - (GWh)	1,037	1,427	-27.3	7,266	7,309	-0.6	-
INDUSTRIAL SECTORS							
STEEL PRODUCTION (10^3 t/day)	71	94	-23.8	78	95	-17.8	-
ALUMINIUM PRODUCTION (10^3 t/day)	1.6	1.6	-3.8	1.7	1.6	5.6	-
IRON ORE EXPORTS (10^3 t/day)	973	941	3.5	756	830	-8.9	-
PELLETS EXPORTS (10^3 t/day)	27	39	-30.5	41	67	-39.2	-
PAPER PRODUCTION (10^3 t/day)	25.8	29.3	-11.8	27.7	28.6	-3.1	-
PULP PRODUCTION (10^3 t/day)	54.5	53.2	2.5	56.6	55.2	2.5	-
SUGAR PRODUCTION (10^3 t/daY)	155	121	27.8	76	53	43.3	-
SUGAR EXPORTS (10^3 t/day)	97	51	90.9	65	43	51.2	-

(*) SP is the acronym of the state of São Paulo. (**) The traditional self-producers (consumers that do not use public grid) is not included.

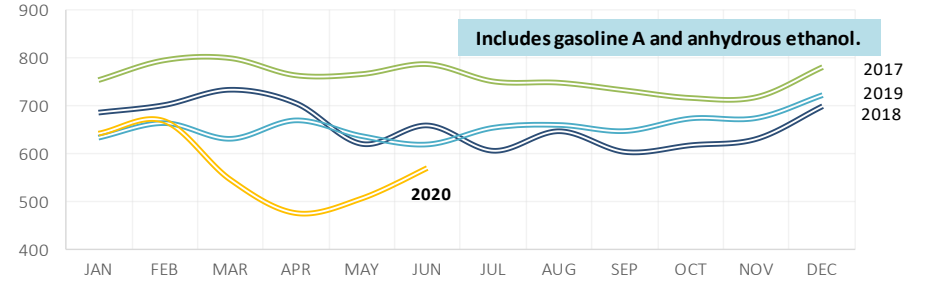
OIL PRODUCTS TOTAL CONSUMPTION (10^3 bbl/d)



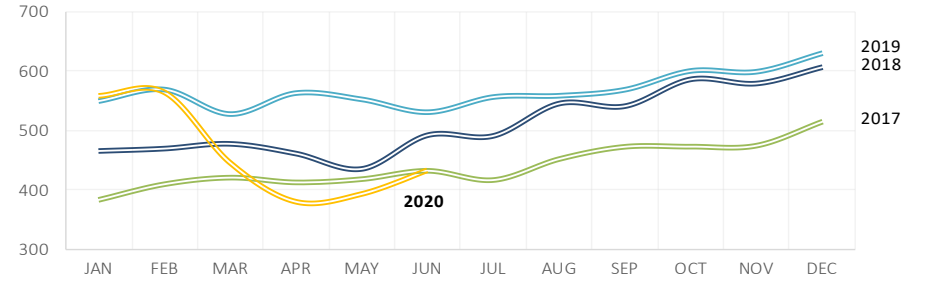
NATURAL GAS TOTAL DEMAND (million m^3/d)



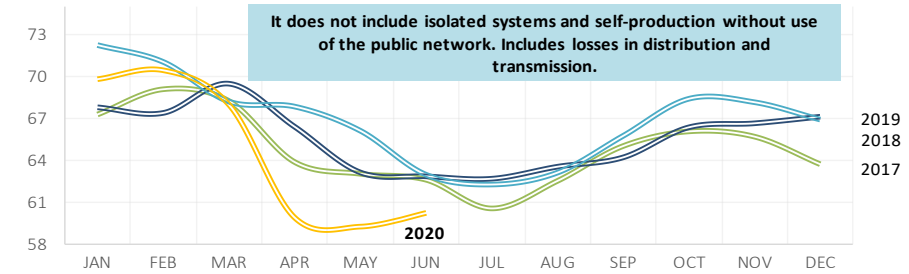
C GASOLINE CONSUMPTION (10^3 bbl/d)



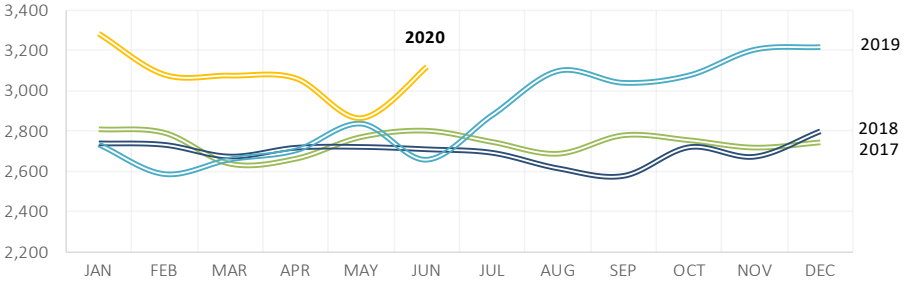
MOTOR ETHANOL TOTAL CONSUMPTION (10^3 bbl/d)



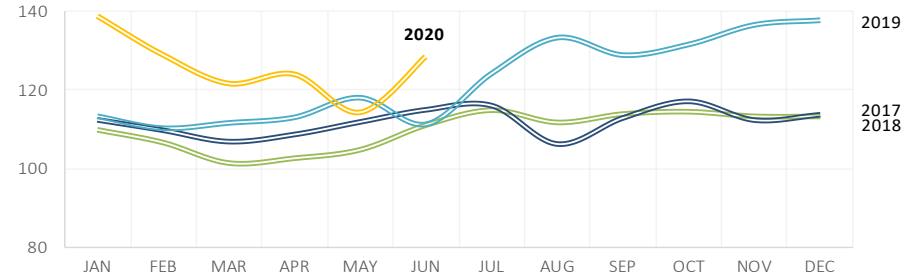
NATIONAL INTERCONNECTED SYSTEM POWER LOAD (GWavg)



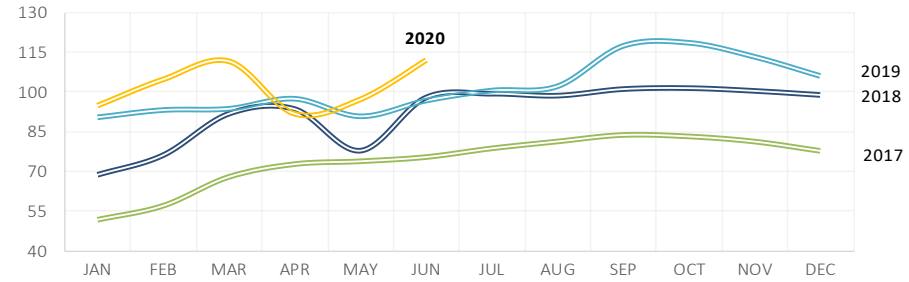
OIL PRODUCTION (10^3 bbl/d)



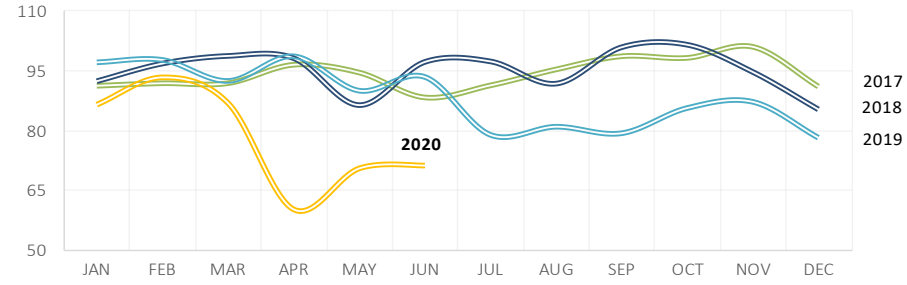
NATURAL GAS PRODUCTION (million m^3/d)



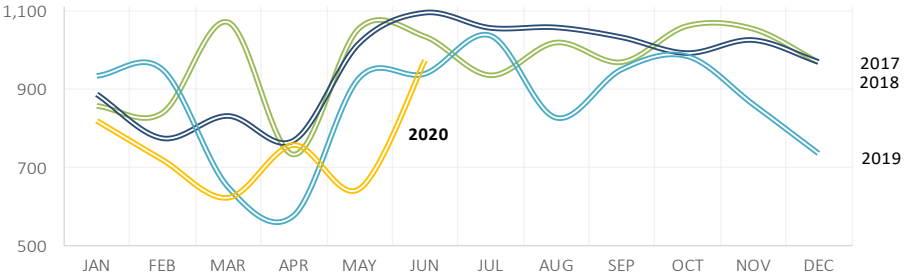
BIODIESEL PRODUCTION (10^3 bbl/d)



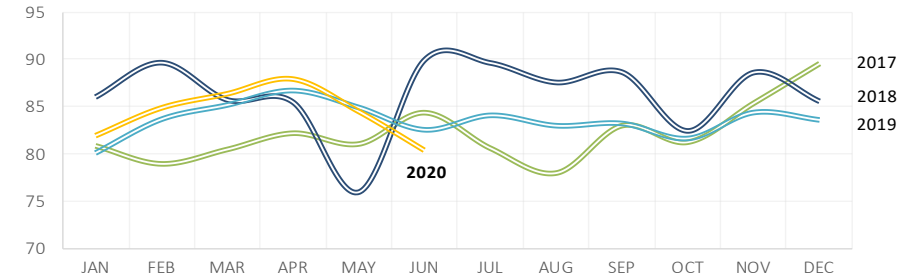
STEEL PRODUCTION (10^3 t/d)



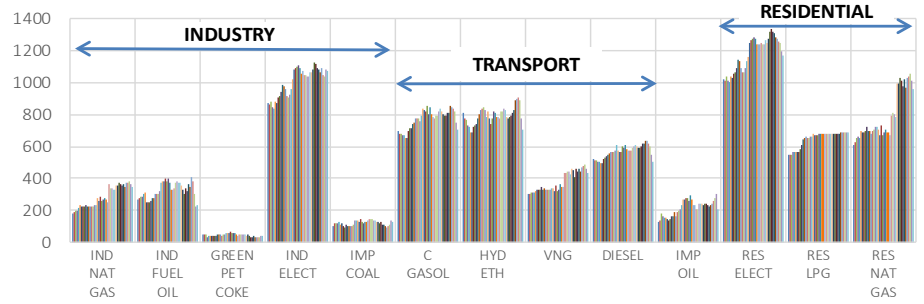
IRON ORE EXPORTS (10^3 t/d)



PAPER AND PULP PRODUCTION (10^3 t/d)



CONSUMER PRICES - Jan 2017 to Jun 2020 (R$/boe)



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.

[1] 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.

[2] 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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