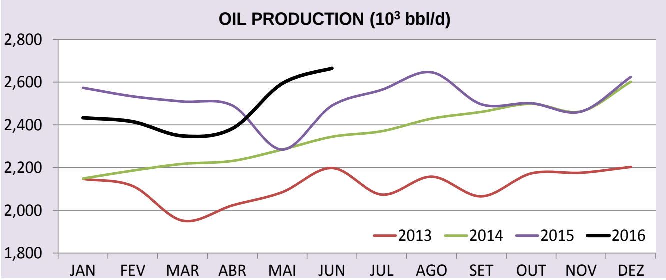

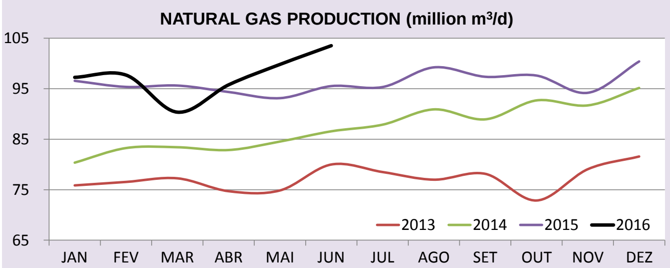

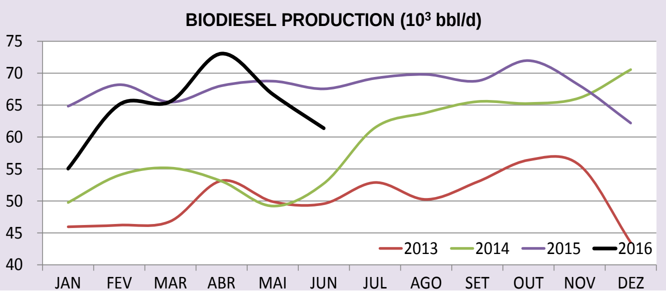

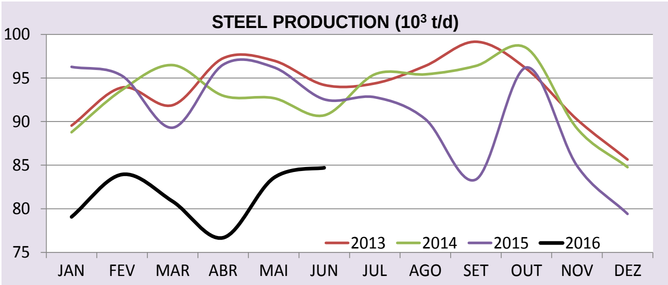

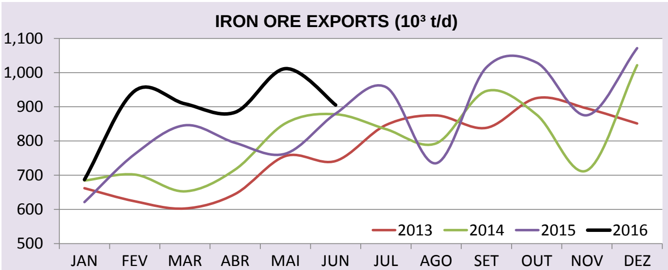

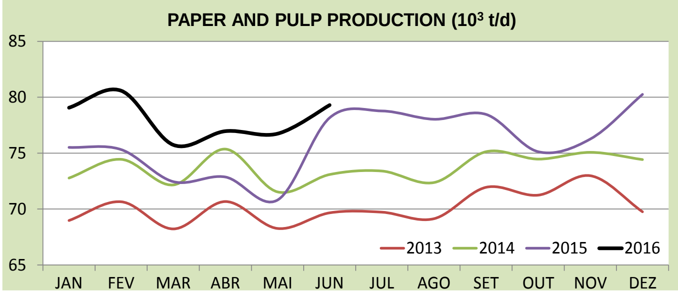

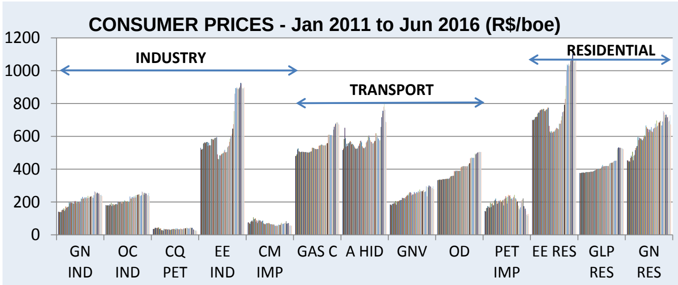

Note: For a better visualization, the minimum scale of the graphs was raised to the level close to the lowest value of the curves.

Methodological Remarks

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 is equal to domestic production (+) import (-) unused (-) reinjection.

Apparent consumption of oil derivatives is equal distributors' sales (+) Petrobras' own consumption (including refinery gas) (+) Petrobras' direct sales. The monthly data published in the press and on the ANP website do not consider the own consumption and direct sales of Petrobras, whose volume is about 20% of the total oil products consumption.

(*) **Domestic Energy Supply (DES), or Total Energy Demand**, includes final energy consumption in the residential sector and in the other economic sectors, includes losses in transmission and distribution, and losses on power transformation. 2015 data reflect the **2016 cycle** of the **National Energy Balance**, elaborated in May by the Energy Research Company (EPE), with the support of MME and its institutions.

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Monthly Energy Bulletin - Brazil

Reference Month: June 2016

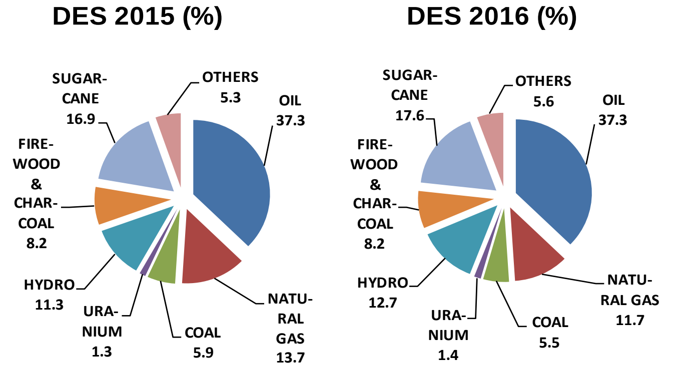
Domestic Energy Supply

The industrial production and energy consumption indicators of June 2016 attenuate recessionary outlooks of the previous report, despite the persistent low performances of household consumption, services and much of durable goods.

The Domestic Energy Supply (DES)* estimated by this month shows a recoil of 2.8% over the same period of 2015. There are still sharp decreases on the oil and natural gas demands, as well as on the metallurgy products production.

For the full year 2016, the estimated rate for the DES is in the range of -1.5 to -2.5%. At the date of this report, the estimated rate was -1.8% (-2.0% in the previous bulletin)..

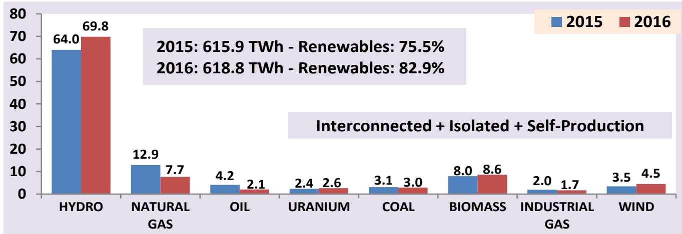
Total energy demand in 2016 June may recede between 1.5 and 2.5%



299.2 million toe | **293.7 million toe**
41.2% renewables | **43.6% renewables**

The Domestic Electricity Supply (DELS) in 2016 was estimated at 618.8 TWh, showing an increase of 0.5% over 2015 (-0.5% in the previous bulletin). Renewable sources should increase participation, due to good performance of hydro, wind and biomass generations.

Domestic Electricity Supply, by Source (%)



MME
MINISTRY OF MINES AND ENERGY - MME
SECRETARIAT OF ENERGY PLANNING AND DEVELOPMENT
OFFICE OF STRATEGIC ENERGY STUDIES

Highlights of June 2016

Oil production grows

The oil production of June 2016 rose 7.0% over June 2015, but accumulates -0.2% in the year (-1.7% up to May). The natural gas production grows 8.4% in June and accumulates 2.4% positive in the year.

Steel production is falling

Steel production fell 8.5% in June over the same month of 2015, accumulating a drop of 14.1% in the year. Iron ore exports are positive in 14.5% in the year. In contrast, pellets exports accumulate fall of 43.6%.

Hydraulic supply on the up

The hydraulic energy supply rose 15.2% in June, over the same month of 2015, having Itaipu an increase of 31.8% (Paraguayan part). In the year, the national hydro generation is 9.9% positive (9.0 to May and 7.7% to April).

Drop in Oil Products consumption cools

The apparent consumption of petroleum products fell 6.2% in June, accumulating recoil of 3.9% in the year (-3.4% in May). The diesel fell 2.3% and C gasoline increased by 0.9% in the month. In the year, the diesel indicator is -2.7% (-4.0% in May and -3.2% in April), and the C gasoline is positive at 1.7% (1.9 to May). The total demand for natural gas shows decrease of 18.3% in the year, with strong influence on the recoil of 39.8% in thermoelectric consumption.

The consumption in the Otto cycle transport (gasoline, ethanol and natural gas) accumulates a recoil of 1.1% in the year, being -0.9% to May, 0.8% in 2015 and 6.2% in 2014.

Electricity consumption stable

Electricity consumption (excluding captive self-producer) was stable in June (0.5% in May and -1.7% in March) and, in the year, accumulates a fall of 1.9% (-2.2 to May and -4.2% to March). The industry showed the greatest reduction in June: 3.4% (-3.7% in May). Residential consumption grew 0.8% in the year (-0.2% to April), and commercial consumption, -1.5% (-1.4% to May).

The fact of the Interconnected System load be 0.6% positive in the year indicates that the drop in electricity consumption is influenced by the increase in commercial losses, which is explained by the Brazilian economic recession.

Biodiesel production fall again

Biodiesel production recoiled 9.1% in June and accumulates -4.0% in the year to date (-3.0 to May and -6.5 to March). In 2015, the rate was 15% positive.

The pulp production continues with high performance, showing an increase of 2.6% in June and 8.5% in the year to date. Throughout 2015, the expansion was 8.5%, and 9.2% in 2014.

Electricity rates falling down

The national average residential electricity tariff accumulates a rise of 15.1% in the year, the commercial tariff, 15.9% and the industrial tariff, 14.8%.

Basic data of 2015 and 2016

SPECIFICATION	JUNE – IN THE MONTH 2016	2015	%16/15	ACCUMULATED IN THE YEAR 2016	2015	%16/15	%2015
OIL							
PRODUCTION - with Shale Oil and NGL(10^3 b/d)	2,665	2,490	7.0	2,473	2,479	-0.2	-
IMPORTS AVERAGE PRICE (US$/bbl FOB)	46	64	-28.7	41	68	-38.6	-
OIL PRODUCTS							
TOTAL CONSUMPTION (10^3 b/day)	2,508	2,673	-6.2	2,459	2,558	-3.9	**100.0**
hereof: DIESEL with biodiesel - (10^3 b/day)	1,021	1,045	-2.3	971	998	-2.7	37.5
hereof: GASOLINE C (10^3 b/day)	707	700	0.9	722	710	1.7	23.5
CONSUMER PRICE - DIESEL (R$/l)	3.02	2.81	7.4	3.02	2.77	8.9	-
CONSUMER PRICE - GASOLINE C (R$/l)	3.65	3.30	10.5	3.68	3.26	12.8	-
CONSUMER PRICE - LPG (R$/13 kg)	53.1	45.9	15.7	53.5	45.4	17.9	-
NATURAL GAS							
PRODUCTION (10^6 m^3/day)	103.5	95.5	8.4	97.4	95.1	2.4	-
IMPORTS (10^6 m^3/day)	30.0	51.0	-41.0	35.6	53.0	-32.7	-
NON-UTILIZED AND REINJECTION (10^6 m^3/day)	35.4	26.6	33.1	33.2	25.8	28.5	-
AVAILABILITY FOR CONSUMPTION (10^6 m^3/day)	98.2	119.9	-18.1	99.8	122.2	-18.3	**100.0**
INDUSTRIAL CONSUMPTION (10^6 m^3/day)	44.2	45.8	-3.6	40.9	44.6	-8.4	40.9
POWER GENERATION CONS. (10^6 m^3/day)	23.9	46.6	-48.6	29.2	48.6	-39.8	29.3
INDUSTRIAL PRICE SP(*) (US$/MMBtu) - consumption range of 20,000 m^3/day	13.1	14.4	-9.1	12.6	14.1	-10.7	-
MOTOR PRICE SP (US$/MMBtu)	15.5	15.8	-2.1	14.9	16.1	-7.0	-
RESIDENTIAL PRICE SP (US$/MMBtu)	37.3	41.0	-9.1	36.4	41.2	-11.7	-
ELECTRICITY							
NATIONAL INTERCONNECTED SYSTEM	62,847	59,871	5.0	65,109	64,708	0.6	**100.0**
SOUTHEAST/MIDWEST POWER LOAD (MWavg)	35,755	36,967	-3.3	37,839	37,902	-0.2	58.1
SOUTH POWER LOAD (MWavg)	11,524	10,253	12.4	11,515	11,257	2.3	17.7
NORTHEAST POWER LOAD (MWavg)	10,247	10,068	1.8	10,442	10,429	0.1	16.0
NORTH POWER LOAD (MWavg)	5,322	5,160	3.1	5,312	5,120	3.8	8.2
TOTAL CONSUMPTION (TWh) (**)	37.2	37.2	0.0	231.5	235.9	-1.9	**100.0**
RESIDENTIAL	10.6	10.2	3.4	67.7	67.2	0.8	29.3
INDUSTRIAL	13.7	14.1	-3.4	81.0	85.8	-5.6	35.0
COMMERCIAL	6.8	7.0	-1.8	45.6	46.2	-1.5	19.7
OTHER SECTORS	6.1	5.9	4.6	37.2	36.7	1.3	16.1
PLANTS ENTRY INTO OPERATING (MW)	506	554	-8.6	3,807	2,986	27.5	-
RESIDENTIAL PRICE (R$/MWh)	648	626	3.5	652	566	15.1	-
COMMERCIAL PRICE (R$/MWh)	580	560	3.6	583	503	15.9	-
INDUSTRIAL PRICE (R$/MWh)	545	542	0.6	548	478	14.8	-
ETHANOL AND BIODIESEL							
BIODIESEL PRODUCTION (10^3 b/d)	61	68	-9.1	64	67	-4.0	-
MOTOR ETHANOL CONSUMPTION (10^3 b/d)	469	500	-6.2	449	466	-3.6	-
ETHANOL EXPORTS (10^3 b/d)	54	19	181.4	37	19	99.3	-
HYDRATED ETHANOL PRICE (R$/l)	2.47	2.11	16.8	2.64	2.16	22.3	-
COAL							
ELECTRICITY GENERATION (MWavg)	2,204	1,988	10.8	1,989	2,073	-4.1	-
IMPORT PRICE (US$ FOB/t)	74.5	94.8	-21.4	70.7	95.6	-26.0	-
NUCLEAR ENERGY							
ELECTRICITY GENERATION - (GWh)	1,249	984	27.0	8,537	7,455	14.5	-
INDUSTRIAL SECTORS							
STEEL PRODUCTION (10^3 t/day)	85	93	-8.5	81	95	-14.1	-
ALUMINIUM PRODUCTION (10^3 t/day)	2.2	2.0	6.4	2.1	2.2	-2.3	-
IRON ORE EXPORTS (10^3 t/day)	905	880	2.9	890	777	14.5	-
PELLETS EXPORTS (10^3 t/day)	62	187	-66.9	84	150	-43.6	-
PAPER PRODUCTION (10^3 t/day)	29.1	29.2	-0.5	28.3	28.3	0.0	-
PULP PRODUCTION (10^3 t/day)	50.2	49.0	2.6	49.7	45.8	8.5	-
SUGAR PRODUCTION (10^3 t/daY)	129	139	-7.2	67	56	19.3	-
SUGAR EXPORTS (10^3 t/day)	67	67	0.6	65	59	9.5	-

(*) SP is the acronym of the state of São Paulo.

(**) The traditional self-producers (consumers that do not use public grid) is not included.