

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 = domestic production (+) import (-) unused (-) reinjection.

Apparent consumption of oil derivatives = 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, is the energy required to move the economy of a country or region, and 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.

(**) 2014 data reflect the 2015 cycle of the National Energy Balance, completed in June by the Energy Research Company (EPE), with the support of MME and its institutions.

Monthly Energy Bulletin - Brazil

Reference Month: July 2015

Domestic Energy Supply – DES

2015 began with the expectation that the total energy demand in Brazil could have a future expansion of 2% over the next twelve months. Nowadays, expectations are already very different, indicating that there June be a decline in energy demand during the year. The vectors of this tendency inversion are the continuous high in: interest rates, inflation, unemployment and administered prices.

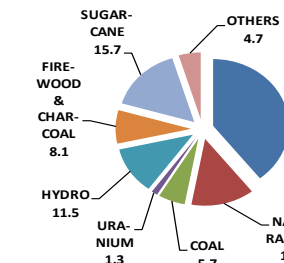
Economic and energetic indicators until July indicates that **Domestic Energy Supply (DES) (*) (**)** increased by 0.3%.

DES June recoil in 2015

For the full year 2015, the DES evolution rate may stand between -1 and 0%. A good performance of some commodities and a stronger retraction in domestic energy demand associated with the population welfare are expected. Renewable sources should maintain their participation near 40% in the DES matrix of 2015.

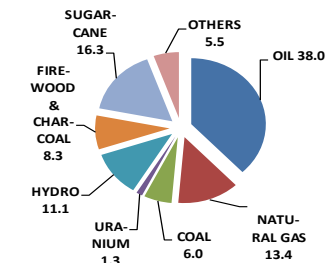
Until the elaboration date of this report, the estimated DES's rate for 2015 was -0.4% (-0.3% until June).

DES 2014 (%)



305.6 million toe
39.4% renewables

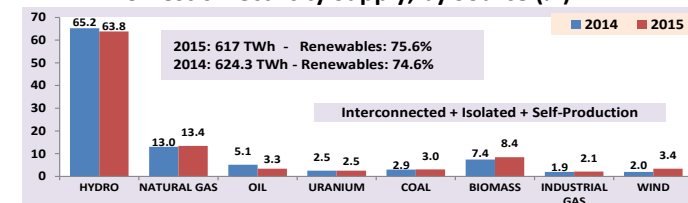
DES 2015 (%)



304.3 million toe
40.6% renewables

The **Domestic Electricity Supply** was estimated at 617 TWh for 2015(**), with a decrease of 1.2% over 2014. Until September 25 the National Interconnected System (SIN) load was 1.0% negative.

Domestic Electricity Supply, by Source (%)



Highlights of July 2015

Oil and Gas production on the up

In July 2015, oil production grew by 8.2% and natural gas, 8.5%. Year to date, the rates are 10.5% and 13.1%, respectively.

Recovery of minerals exports

Steel production increased by 2.8% in July, compared to the same month of 2014 and accumulated a 1.2% growth in the year (1.9% until June). Iron ore exports rose 14.7% in the month and have accumulated a positive rate of 5.7% in the year. Pellets exports recoiled 18.7% in July, but in the year the rate is 17.6% positive.

Mild Hydraulic Recovery

The hydro power supply declined 3.3% in July (-6.6% in June). Itaipu generation increased by 6.8% in July. Up this month, the hydraulic supply is -5.9% (-6.3% until June).

Oil products consumption low

The oil products apparent consumption recoiled 1.6% in July and in the year it accumulates a decrease of 3.3%. The C gasoline retreated 6.3% in July (-3.3% in June and -12.2% in May) and diesel oil decreased 3.7%. During the year, the rates are **negative**, 5.3% for gasoline and 2.6% for diesel.

The gas consumption decreased by 5.6% in July and accumulates a 2.5% growth in the year (3.9% until June). Electricity generation sales recoiled over 17% in July.

The energy consumption of the Otto cycle transport (gasoline, ethanol and natural gas), in gasoline equivalent, accumulates 1.8% in the year, much lower than the expressive rate (7.4%) recorded in the same period of 2014.

Electricity consumption declining

Electricity consumption (excluding captive self-production) recoiled by 2.7% in July (-1.3% in June and -1.9% in May), accumulating -1.1% in the year. Industrial consumption, with a negative rate of 2.5% in July, accumulates a recoil of 3.7% in the year. The industrial sector is in large part affected by strong decline in aluminum production, which is energy-intensive. Residential consumption, with a recoil of 4.5% in July, accumulates a negative rate of 0.2% in the year. The commercial sector accumulates 1.4% in the year (1.8% until June).

Biodiesel production still high

Biodiesel production stood at 68 kbbl/day in July, with an expressive high of 10.0% over the same month of 2014. In the year, it accumulates an increase of 21.3%.

Electricity rates continues in high

In the year to date, the national average residential electricity tariff increased 42.2%, the commercial tariff grew 45.0%, and the industrial, 53.0%.

Basic data of 2014 and 2015

SPECIFICATION	JULY		ACCUMULATED IN THE YEAR				
	2015	2014	%15/14	2015	2014	%15/14	%2015
OIL							
PRODUCTION - with Shale Oil and NGL(10 ³ b/d)	2,564	2,370	8.2	2,492	2,255	10.5	-
IMPORTS AVERAGE PRICE (US\$/bbl FOB)	66	114	-42.0	62	114	-45.2	-
OIL PRODUCTS							
TOTAL CONSUMPTION (10 ³ b/day)	2,676	2,720	-1.6	2,647	2,739	-3.3	100.0
hereof: DIESEL with biodiesel - (10 ³ b/day)	1,064	1,105	-3.7	1,032	1,059	-2.6	37.0
hereof: GASOLINE C (10 ³ b/day)	694	740	-6.3	707	747	-5.3	21.4
CONSUMER PRICE - DIESEL (R\$/l)	2.81	2.50	12.2	2.78	2.50	11.2	-
CONSUMER PRICE - GASOLINE C (R\$/l)	3.30	2.96	11.5	3.27	2.97	10.0	-
CONSUMER PRICE - LPG (R\$/13 kg)	46.0	42.7	7.7	45.5	42.6	6.7	-
NATURAL GAS							
PRODUCTION (10 ⁶ m ³ /day)	95.3	87.9	8.5	95.1	84.1	13.1	-
IMPORTS (10 ⁶ m ³ /day)	46.5	52.0	-10.5	52.2	53.4	-2.3	-
NON-UTILIZED AND REINJECTION (10 ⁶ m ³ /day)	27.8	19.1	46.1	26.3	19.4	35.1	-
AVAILABILITY FOR CONSUMPTION (10 ⁶ m ³ /day)	114.0	120.8	-5.6	121.0	118.1	2.5	100.0
INDUSTRIAL CONSUMPTION (10 ⁶ m ³ /day)	44.0	43.6	0.9	43.5	43.0	1.0	35.9
POWER GENERATION CONS. (10 ⁶ m ³ /day)	39.8	48.5	-17.9	47.3	46.2	2.4	39.1
INDUSTRIAL PRICE SP(*) (US\$/MMBtu) - consumption range of 20,000 m ³ /day	14.5	18.0	-19.9	13.9	17.6	-21.1	-
MOTOR PRICE SP (US\$/MMBtu)	16.0	20.9	-23.6	15.8	20.1	-21.6	-
RESIDENTIAL PRICE SP (US\$/MMBtu)	41.4	53.0	-21.9	40.5	50.5	-19.9	-
ELECTRICITY							
NATIONAL INTERCONNECTED SYSTEM	60,083	61,496	-2.3	62,274	62,994	-1.1	100.0
SOUTHEAST/MIDWEST POWER LOAD (MWavg)	34,798	36,672	-5.1	37,459	38,761	-3.4	60.2
SOUTH POWER LOAD (MWavg)	10,443	10,613	-1.6	11,140	11,123	0.2	17.9
NORTHEAST POWER LOAD (MWavg)	9,744	9,169	6.3	10,331	9,792	5.5	16.6
NORTH POWER LOAD (MWavg)	5,098	5,042	1.1	5,117	5,205	-1.7	8.2
TOTAL CONSUMPTION (TWh) (**)	36.8	37.8	-2.7	272.7	275.8	-1.1	100.0
RESIDENTIAL	10.1	10.6	-4.5	77.3	77.4	-0.2	28.3
INDUSTRIAL	14.1	14.4	-2.5	99.8	103.7	-3.7	36.6
COMMERCIAL	6.8	6.8	-0.8	53.0	52.3	1.4	19.4
OTHER SECTORS	5.8	5.9	-1.8	42.5	42.4	0.3	15.6
PLANTS ENTRY INTO OPERATING (MW)	561	763	-26.5	3,546	4,239	-16.3	-
RESIDENTIAL PRICE (R\$/MWh)	617	411	50.2	569	400	42.2	-
COMMERCIAL PRICE (R\$/MWh)	556	363	53.1	509	351	45.0	-
INDUSTRIAL PRICE (R\$/MWh)	535	329	62.7	483	316	53.0	-
ETHANOL AND BIODIESEL							
BIODIESEL PRODUCTION (10 ³ b/d)	68	61	10.0	65	54	21.3	-
MOTOR ETHANOL CONSUMPTION (10 ³ b/d)	487	417	16.8	469	414	13.3	-
ETHANOL EXPORTS (10 ³ b/d)	43	18	135.3	22	26	-13.6	-
HYDRATED ETHANOL PRICE (R\$/l)	2.08	2.04	1.9	2.15	2.10	2.1	-
COAL							
ELECTRICITY GENERATION (MWavg)	2,111	1,819	16.0	2,078	2,016	3.1	-
IMPORT PRICE (US\$/t)	87.2	107.8	-19.1	94.4	111.1	-15.0	-
NUCLEAR ENERGY							
ELECTRICITY GENERATION - (GWh)	1,358	929	46.2	8,813	8,909	-1.1	-
INDUSTRIAL SECTORS							
STEEL PRODUCTION (10 ³ t/day)	93	95	-2.8	94	93	1.2	-
ALUMINIUM PRODUCTION (10 ³ t/day)	2.0	2.3	-9.8	2.2	2.9	-25.6	-
IRON ORE EXPORTS (10 ³ t/day)	958	835	14.7	803	760	5.7	-
PELLETS EXPORTS (10 ³ t/day)	139	171	-18.7	148	126	17.6	-
PAPER PRODUCTION (10 ³ t/day)	28.4	28.4	-0.2	28.3	28.6	-1.0	-
PULP PRODUCTION (10 ³ t/day)	49.2	41.3	19.0	46.0	41.0	12.2	-
SUGAR PRODUCTION (10 ³ t/day)	127	157	-19.4	67	79	-15.9	-
SUGAR EXPORTS (10 ³ t/day)	76	80	-5.5	62	59	3.8	-

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

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

