

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 (-) 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.

(**) The Cycle 2014 National Energy Balance, initiated by the Energy Research Company (EPE), will define the final data until April 2013.

Monthly Energy Bulletin - Brazil

Reference Month: January 2014

Domestic Energy Supply – DES

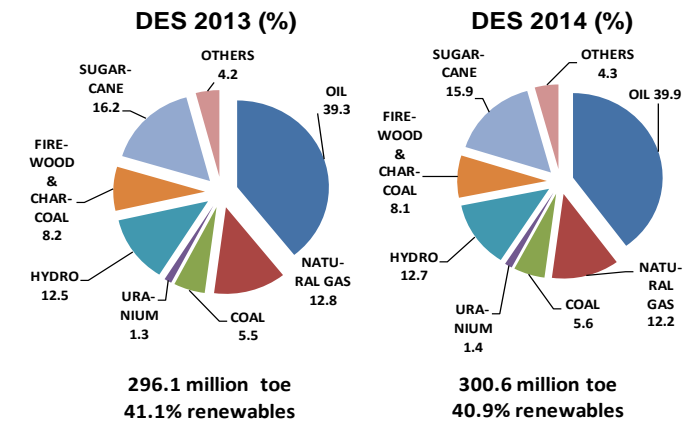
2014 has started with the maintenance of low performance of some export products, such as steel, aluminum and sugar, for example. On the issue of social welfare, energy consumption in private transport and in the dwellings shows high growth rates, repeating the dynamics of 2013. In energy supply, the recovery from hydroelectricity and nuclear energy over January in the previous year attenuated the demand for natural gas and oil in thermal generation. In terms of cane products, there is a forecast of lower performance in 2014. Under these conditions, the growth rate of Domestic Energy Supply (DES) (*) (**) in the month was estimated at 2.4% over the same month of 2013.

Total energy demand in 2014 can grow between 1.5% and 2.5%

For the full year 2014, the estimates for the DES growth are in the range of 1.5% to 2.5%. The premises are based on the relative recovery of hydroelectricity – which reduces energy losses in thermal power-generation, in the poor performance of the sugarcane sector and in the commodities stability.

Based on the available information at the date of this report, the DES's growth rate for 2014 was estimated at 1.5%. Given the uncertainties in the early months of each year in each new bulletin energy forecasts are reviewed and based on the information of that time.

Renewable sources should maintain participation in the 2014 DES matrix. The predicted increases for hydro and wind generation, and the production of biodiesel, should be nullified by smaller performances of sugarcane and firewood products.



Highlights in January 2014

Steel production recoils

Compared to the same month of 2013, steel production decreased 1.4%. Iron ore exports increased by 3.4% (3.6% for the whole year of 2013), and pellets exports grew 17.3%, opposing with a decrease of 8.8% in the whole year of 2013.

Hydro offer on the rise

The hydraulic energy supply increased by 14.5% in January, taking in the imports of Itaipu a stable participation. In those circumstances, the national hydro generation grew 16% in the month, over January 2013.

Oil products consumption grows little

The apparent consumption of petroleum products had a little growth in January 2014 (2.0%), as a result mainly of the 1.9% decline of diesel, caused by a slowdown in thermoelectric use. Gasoline C, with growth of 7.2%, shows a recovery in automotive use (2.7% in the whole year of 2013). The total demand for natural gas decreased 9.6%, influenced by the recoil of 29% in thermal generation, totally contrary to the situation in January 2013.

The performance of energy use in the Otto Cycle transportation (gasoline, ethanol and natural gas) continues to astonish, with an increase of 7.5% in January 2014. The average increase was 5.8% in 2013 and 7.6% in 2012.

Electricity consumption grows about 5%

Electricity consumption (excluding captive self-producer) grew 4.9% in January 2014 (3.5% in the whole year of 2013), influenced by the high rates of residential (7.9%) and commercial (7.5%) sectors. Industrial consumption remains low, with a rate of only 1.0% (0.6% in the whole year 2013).

Biodiesel production grows near 8%

Biodiesel production increased 7.6% in January. In 2013, the rate was 7.3%.

Electricity tariffs recede

In January, the national average residential electricity tariff fell 15.7%, the commercial tariff fell 11.6% and industrial tariff retreated 16.8%.

The cement production starts the year with a high growth rate, of 20.8% (3.1% in the whole year of 2013). Pulp production continues to maintain good performance: 5.2% in January 2014 (7.4% in the whole year of 2013).

Basic data of 2013 and 2014.

SPECIFICATION	JANUARY						
	IN THE MONTH			ACCUMULATED IN THE YEAR			
	2014	2013	%14/13	2014	2013	%14/13	%2014
OIL							
PRODUCTION - with Shale Oil and NGL(10 ³ b/d)	2,149	2,147	0.1	2,149	2,147	0.1	-
IMPORTS AVERAGE PRICE (US\$/bbl FOB)	111	114	-2.7	111	114	-2.7	-
OIL PRODUCTS							
TOTAL CONSUMPTION (10 ³ b/day)	2,563	2,513	2.0	2,563	2,513	2.0	100.0
hereof: DIESEL with biodiesel - (10 ³ b/day)	922	940	-1.9	922	940	-1.9	34.2
hereof: GASOLINE C (10 ³ b/day)	728	678	7.2	728	678	7.2	22.7
CONSUMER PRICE - DIESEL (R\$/l)	2.49	2.16	15.3	2.49	2.16	15.3	-
CONSUMER PRICE - GASOLINE C (R\$/l)	2.96	2.76	7.0	2.96	2.76	7.0	-
CONSUMER PRICE - LPG (R\$/13 kg)	42.5	40.2	5.8	42.5	40.2	5.8	-
NATURAL GAS							
PRODUCTION (10 ⁶ m ³ /day)	80.4	75.9	5.9	80.4	75.9	5.9	-
IMPORTS (10 ⁶ m ³ /day)	38.4	48.3	-20.6	38.4	48.3	-20.6	-
NON-UTILIZED AND REINJECTION (10 ⁶ m ³ /day)	18.5	13.4	38.4	18.5	13.4	38.4	-
AVAILABILITY FOR CONSUMPTION (10 ⁶ m ³ /day)	100.2	110.8	-9.6	100.2	110.8	-9.6	100.0
INDUSTRIAL CONSUMPTION (10 ⁶ m ³ /day)	40.6	38.7	4.9	40.6	38.7	4.9	40.5
POWER GENERATION CONS. (10 ⁶ m ³ /day)	29.9	42.0	-28.8	29.9	42.0	-28.8	29.8
INDUSTRIAL PRICE SP(*) (US\$/MMBtu) - consumption range of 20,000 m ³ /day	15.3	18.1	-15.4	15.3	18.1	-15.4	-
MOTOR PRICE SP (US\$/MMBtu)	18.8	20.9	-10.1	18.8	20.9	-10.1	-
RESIDENTIAL PRICE SP (US\$/MMBtu)	48.3	52.3	-7.7	48.3	52.3	-7.7	-
ELECTRICITY							
NATIONAL INTERCONNECTED SYSTEM	68,828	62,418	10.3	68,828	62,418	10.3	100.0
SOUTHEAST/MIDWEST POWER LOAD (MWavg)	41,375	37,927	9.1	41,375	37,927	9.1	60.1
SOUTH POWER LOAD (MWavg)	12,080	10,766	12.2	12,080	10,766	12.2	17.6
NORTHEAST POWER LOAD (MWavg)	10,101	9,694	4.2	10,101	9,694	4.2	14.7
NORTH POWER LOAD (MWavg)	5,272	4,031	30.8	5,272	4,031	30.8	7.7
TOTAL CONSUMPTION (TWh) (**)	40.3	38.4	4.9	40.3	38.4	4.9	100.0
RESIDENTIAL	11.8	10.9	7.9	11.8	10.9	7.9	29.3
INDUSTRIAL	14.5	14.3	1.0	14.5	14.3	1.0	36.0
COMMERCIAL	7.7	7.2	7.5	7.7	7.2	7.5	19.2
OTHER SECTORS	6.2	5.9	5.7	6.2	5.9	5.7	15.5
PLANTS ENTRY INTO OPERATING (MW)	120	695	-82.7	120	695	-82.7	-
RESIDENTIAL PRICE (R\$/MWh)	397	471	-15.7	397	471	-15.7	-
COMMERCIAL PRICE (R\$/MWh)	349	395	-11.6	349	395	-11.6	-
INDUSTRIAL PRICE (R\$/MWh)	312	375	-16.8	312	375	-16.8	-
ETHANOL AND BIODIESEL							
BIODIESEL PRODUCTION (10 ³ b/d)	49	46	7.6	49	46	7.6	-
MOTOR ETHANOL CONSUMPTION (10 ³ b/d)	433	379	14.3	433	379	14.3	-
ETHANOL EXPORTS (10 ³ b/d)	39	71	-45.1	39	71	-45.1	-
HYDRATED ETHANOL PRICE (R\$/l)	2.05	1.96	4.7	2.05	1.96	4.7	-
COAL							
ELECTRICITY GENERATION (MWavg)	1,866	1,429	30.6	1,866	1,429	30.6	-
IMPORT PRICE (US\$ FOB/t)	112.6	142.5	-21.0	112.6	142.5	-21.0	-
NUCLEAR ENERGY							
ELECTRICITY GENERATION - (GWh)	1,464	1,043	40.4	1,464	1,043	40.4	-
INDUSTRIAL SECTORS							
STEEL PRODUCTION (10 ³ t/day)	88	90	-1.4	88	90	-1.4	-
ALUMINIUM PRODUCTION (10 ³ t/day)	3.4	3.7	-9.3	3.4	3.7	-9.3	-
IRON ORE EXPORTS (10 ³ t/day)	684	662	3.4	684	662	3.4	-
PELLETS EXPORTS (10 ³ t/day)	113	96	17.3	113	96	17.3	-
CEMENT PRODUCTION (10 ³ t/day)	211	175	20.8	211	175	20.8	-
PAPER PRODUCTION (10 ³ t/day)	28.2	28.2	0.1	28.2	28.2	0.1	-
PULP PRODUCTION (10 ³ t/day)	42.5	40.5	5.2	42.5	40.5	5.2	-
SUGAR PRODUCTION (10 ³ t/day)	21	22	-4.7	21	22	-4.7	-
SUGAR EXPORTS (10 ³ t/day)	69	74	-6.9	69	74	-6.9	-

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

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

