

Note: For a better visualization, the graphs minimum scale 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.

"Tonne of oil equivalent" (toe) = 10 Gigacalorias (Gcal), is the standard unit used to consolidate power data. Firewood releases 3,100 cal / g, or 3.1 Gcal / t, when the combustion. The ratio of firewood indicator and oil indicator results in 0.31 toe / t, a factor that converts tons of firewood to toe. The same goes for the other combustives.

Monthly Energy Bulletin - Brazil

Reference Month: August 2014

Domestic Energy Supply

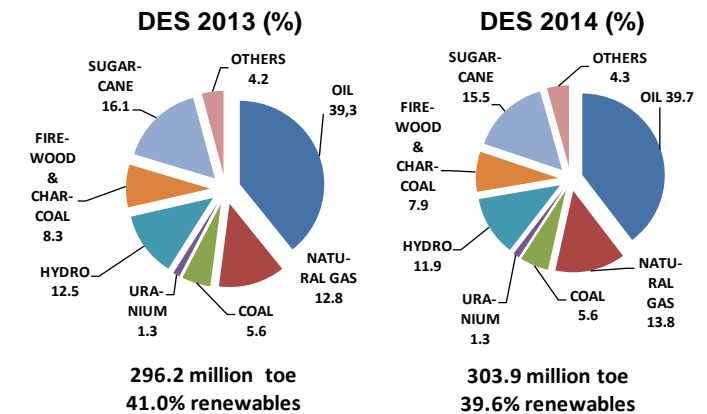
The August indicators do not change the trends observed until the past month, of weak performances of some export products, such as steel, aluminum, pellets and sugar. In the aspect of population welfare, persists the good energy performance on individual transport (slowing down), residential and commercial electricity. In terms of energy supply, continues the decline of hydroelectric generation, which increases the thermal generation and their losses. For the sugar cane products, the forecast of a lower performance in 2014 persists. So, up to August, the available data shows a growth rate of 2.8% on the Domestic Energy Supply (DES) (*), over the same period of 2013.

Total energy demand in 2014 can grow between 2.5% and 3.5%

For the full year 2014, the estimates for the DES growth are in the range of 2.5% to 3.5% (the same as the previous month). The reasons are: a) reduction of hydraulic generation and increase in thermal generation and their losses; b) poor performance of sugar-alcohol sector and commodities and; c) good performances of the Otto cycle transportation, electricity and cellulose.

Based on the available information at the date of this report, the DES's growth rate for 2014 was estimated at 2.6% (2.9% in the previous bulletin).

Renewable energy sources should maintain its participation near to 40% in the 2014 DES Matrix, but below of 2013 indicator. Wind generation, biodiesel production and biomass use in the upward cellulose production do not outweigh the negative effects of hydro generation, cane products and residential sector firewood.



Highlights until August 2014

Oil and Gas Production is upwards

Oil production increased 12.6% in August (over the same month in 2013) and 8.8% in the year (including shale oil). The natural gas production increased 18.1% in August and 10.6% in the year.

Steel production still downwards

Until August, steel production retreated 1.4% (the same until July), the aluminum production retreated 23.1% (reductions of 21% until July and 18.5% until June), iron ore exports grew 6.1% (3.6% in 2013), and pellets exports retreated 5.4% in the year (reduction of 8.8% in 2013).

Hydro supply is declining

The hydraulic energy supply fell 13.8% over the same month of 2013, and reduced 2.8% over the previous month. In the year to date, the rate retreated 2.1%, the second negative rate in the year (1.1% positive rate until June).

Oil Products consumption reducing

The apparent consumption of petroleum products increased by 1.1% in August over the same month of 2013, and increased 4.5% in the year date (5.1% until July and 5.5% until June). Diesel oil increased 3.6% in August and in the year date, the rate is 1.2%. Gasoline C grew by 4% in August and 11.1% in the year (2.7% in 2013). The total natural gas demand grew 21.4% in July, and 8% in the year (6.2% until July).

The energy use in the Otto Cycle transport (gasoline, ethanol and natural gas) remains high, but slowing down, with a cumulative growth of 6.4% in the year. In 2013, the average increase was 6.1%, and 8.7% in 2012.

Electricity consumption is cooling down

Electricity consumption (excluding captive self-producer) recoil 0.2% in August – the first monthly negative rate in the year. In the year, the rate was 2.7% (3.2% until July and 3.7% until June), just below the 3.5% rate of entire 2013. In August, residential consumption grew 2.2% and commercial sector, 6.1%. Industrial consumption reduced at an expressive rate of 5.1% (-7% in July and -4.9% in June), and accumulates -2.8% in the year. The reduction of 23% in the annual aluminum production explains part of the low industrial performance.

Biodiesel production in high

Biodiesel production grew up 27% in July, and 10.5% in the year date. In 2013 the rate was 7.4%.

Electricity tariffs for high

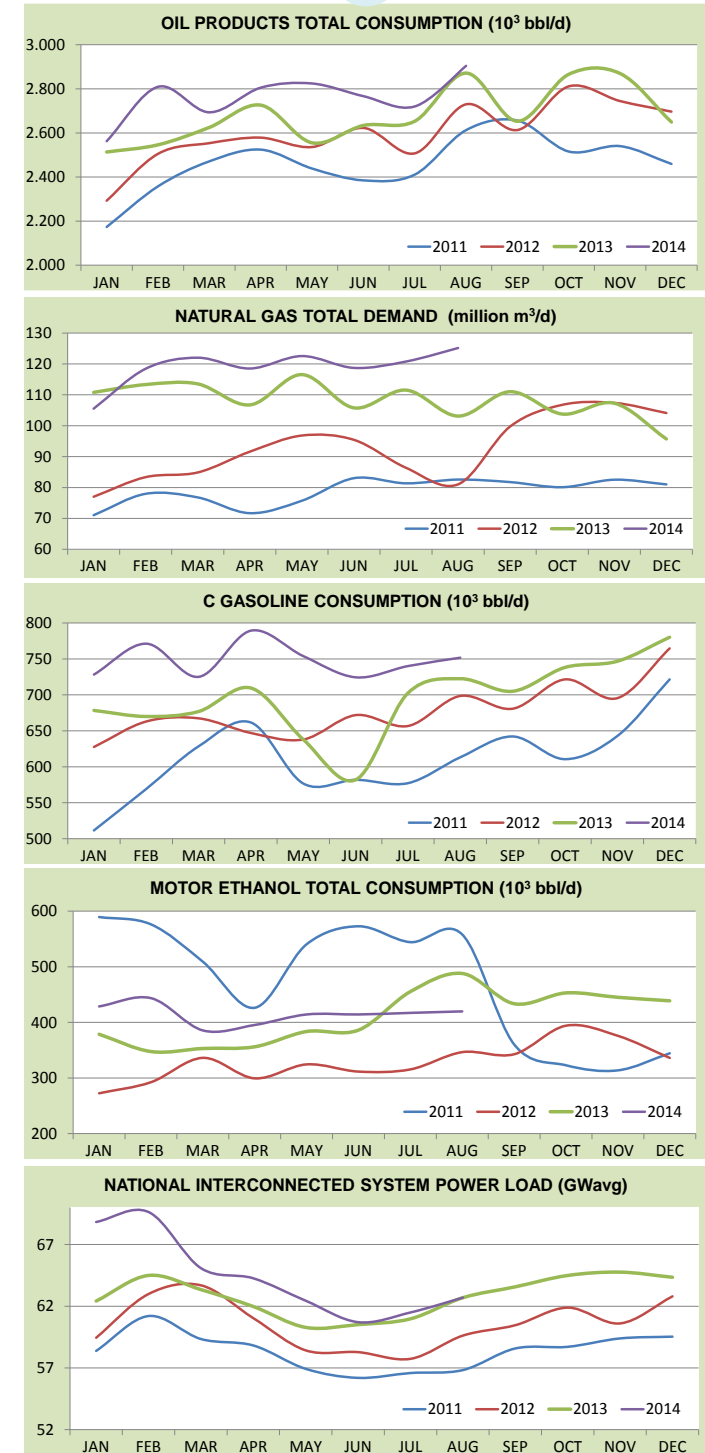
The national average residential electricity tariff accumulates a rise of 2% in the year to date. The commercial tariff accumulates 4% high, and the industrial, 6% high (previous months data were changed, due to ANEEL revisions and to the equity in aggregating sectoral tariffs).

Basic Data

SPECIFICATION	AUGUST							
	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)	2.429	2.157	12,6	2.268	2.085	8,8	-	
IMPORTS AVERAGE PRICE (US\$/bbl FOB)	118	113	4,4	114	113	1,2	-	
OIL PRODUCTS								
TOTAL CONSUMPTION (10 ³ b/day)	2.904	2.871	1,1	2.760	2.641	4,5	100,0	
hereof: DIESEL with biodiesel - (10 ³ b/day)	1.136	1.096	3,6	1.033	1.020	1,2	35,5	
hereof: GASOLINE C (10 ³ b/day)	752	723	4,0	748	673	11,1	21,7	
CONSUMER PRICE - DIESEL (R\$/l)	2,50	2,33	7,3	2,50	2,31	8,3	-	
CONSUMER PRICE - GASOLINE C (R\$/l)	2,96	2,84	4,4	2,97	2,85	4,2	-	
CONSUMER PRICE - LPG (R\$/13 kg)	42,6	41,0	4,1	42,6	40,7	4,7	-	
NATURAL GAS								
PRODUCTION (10 ⁶ m ³ /day)	90,9	77,0	18,1	85,0	76,8	10,6	-	
IMPORTS (10 ⁶ m ³ /day)	54,1	40,1	34,9	53,5	46,7	14,6	-	
NON-UTILIZED AND REINJECTION (10 ⁶ m ³ /day)	19,9	14,0	42,0	19,5	13,3	46,1	-	
AVAILABILITY FOR CONSUMPTION (10 ⁶ m ³ /day)	125,2	103,1	21,4	119,0	110,2	8,0	100,0	
INDUSTRIAL CONSUMPTION (10 ⁶ m ³ /day)	43,8	41,8	5,0	43,1	40,9	5,5	36,2	
POWER GENERATION CONS. (10 ⁶ m ³ /day)	51,4	38,4	33,8	46,9	40,9	14,6	39,4	
INDUSTRIAL PRICE SP(*) (US\$/MMBtu) - consumption range of 20,000 m ³ /day	18,1	15,3	18,0	17,9	17,3	3,5	-	
MOTOR PRICE SP (US\$/MMBtu)	20,6	19,2	7,5	20,2	20,8	-3,0	-	
RESIDENTIAL PRICE SP (US\$/MMBtu)	52,0	48,3	7,5	50,7	52,4	-3,2	-	
ELECTRICITY								
NATIONAL INTERCONNECTED SYSTEM	62.700	62.692	0,0	64.396	62.088	3,7	100,0	
SOUTHEAST/MIDWEST POWER LOAD (MWavg)	37.029	37.776	-2,0	38.544	37.561	2,6	59,9	
SOUTH POWER LOAD (MWavg)	10.853	10.430	4,1	11.089	10.538	5,2	17,2	
NORTHEAST POWER LOAD (MWavg)	9.645	9.262	4,1	9.773	9.609	1,7	15,2	
NORTH POWER LOAD (MWavg)	5.173	5.224	-1,0	4.959	4.381	13,2	7,7	
TOTAL CONSUMPTION (TWh) (**)	38,6	38,7	-0,2	314,4	306,0	2,7	100,0	
RESIDENTIAL	10,5	10,3	2,2	88,0	82,7	6,4	28,0	
INDUSTRIAL	15,1	15,9	-5,1	118,7	122,1	-2,8	37,8	
COMMERCIAL	7,0	6,6	6,1	59,3	54,9	8,0	18,9	
OTHER SECTORS	6,0	5,9	1,7	48,4	46,4	4,4	15,4	
PLANTS ENTRY INTO OPERATING (MW)	423	231	82,9	4.662	4.151	12,3	-	
RESIDENTIAL PRICE (R\$/MWh)	413	382	8,2	402	394	2,0	-	
COMMERCIAL PRICE (R\$/MWh)	365	336	8,7	353	339	4,0	-	
INDUSTRIAL PRICE (R\$/MWh)	332	298	11,4	317	299	6,0	-	
ETHANOL AND BIODIESEL								
BIODIESEL PRODUCTION (10 ³ b/d)	64	50	27,0	55	49	10,5	-	
MOTOR ETHANOL CONSUMPTION (10 ³ b/d)	420	488	-14,0	415	394	5,1	-	
ETHANOL EXPORTS (10 ³ b/d)	16	99	-84,0	25	52	-52,4	-	
HYDRATED ETHANOL PRICE (R\$/l)	2,03	1,90	6,9	2,09	1,98	5,5	-	
COAL								
ELECTRICITY GENERATION (MWavg)	1.897	1.768	7,3	2.001	1.523	31,4	-	
IMPORT PRICE (US\$ FOB/t)	101,2	130,5	-22,5	109,9	137,3	-19,9	-	
NUCLEAR ENERGY								
ELECTRICITY GENERATION - (GWh)	629	1.356	-53,6	9.518	9.777	-2,7	-	
INDUSTRIAL SECTORS								
STEEL PRODUCTION (10 ³ t/day)	95	96	-1,4	93	94	-1,4	-	
ALUMINIUM PRODUCTION (10 ³ t/day)	2,2	3,6	-37,6	2,8	3,7	-23,1	-	
IRON ORE EXPORTS (10 ³ t/day)	793	875	-9,3	764	720	6,1	-	
PELLETS EXPORTS (10 ³ t/day)	64	130	-51,0	118	125	-5,4	-	
CEMENT PRODUCTION (10 ³ t/day)	185	208	-11,2	191	189	0,7	-	
PAPER PRODUCTION (10 ³ t/day)	28,3	28,3	0,0	28,6	28,4	0,5	-	
PULP PRODUCTION (10 ³ t/day)	45,2	40,5	11,6	43,8	40,6	7,9	-	
SUGAR PRODUCTION (10 ³ t/day)	189	195	-3,0	93	87	5,9	-	
SUGAR EXPORTS (10 ³ t/day)	74	106	-30,1	61	70	-12,3	-	

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

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



JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC