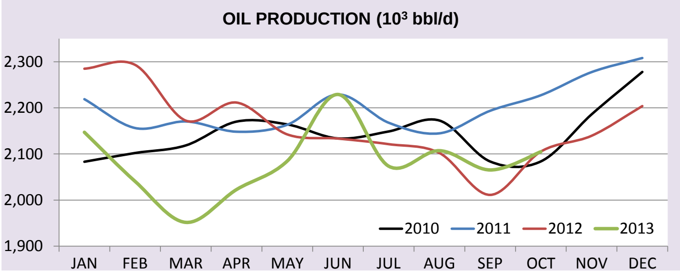

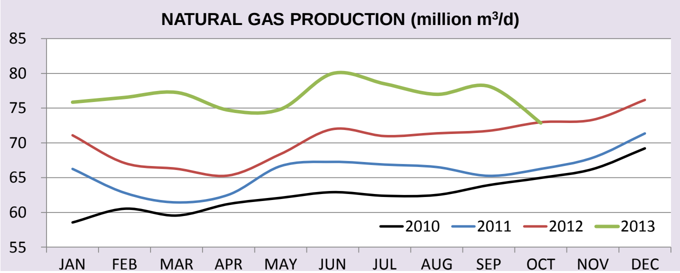

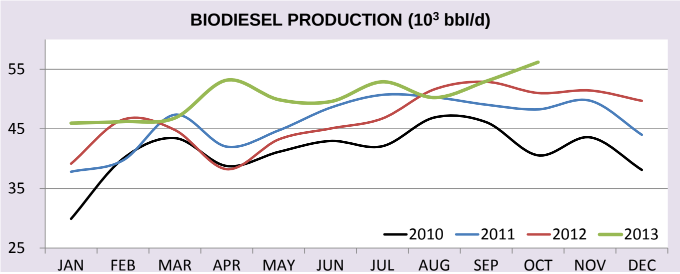

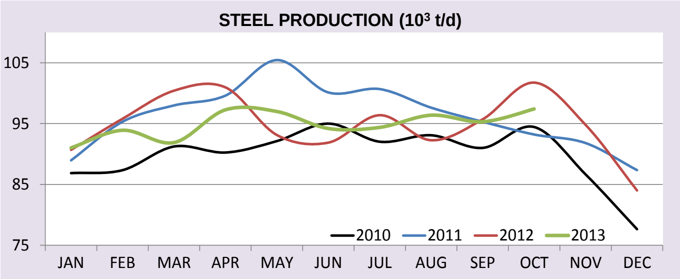

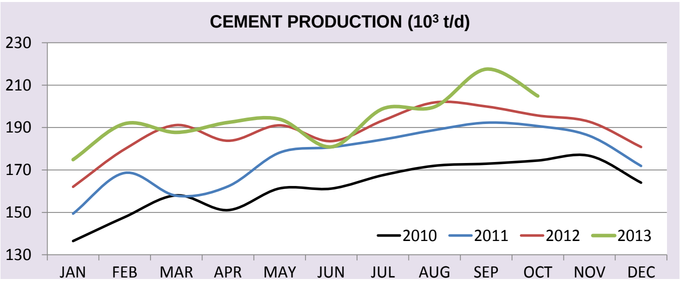

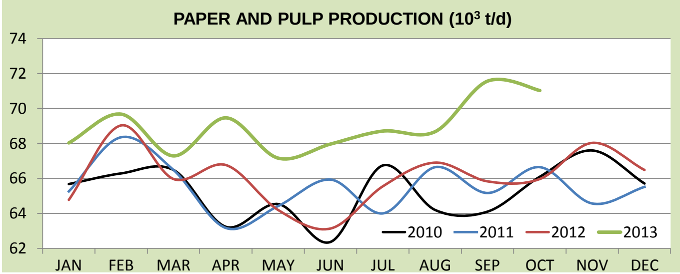

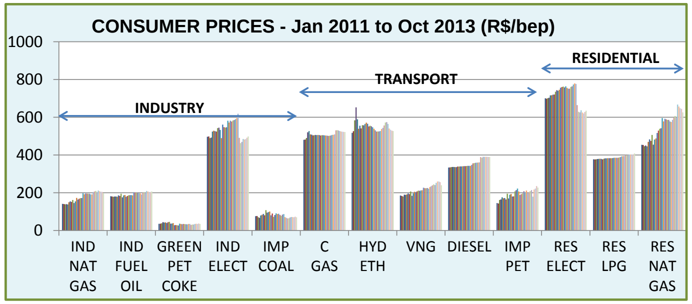

Note: For a better visualization, the minimum scale of the graphs was raised to the level close to the lowest value of the curves.

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.

toe (ton of oil equivalent) = 10 Gcal (Gigacaloria). The firewood releases 3,100 cal / g, or 3.1 Gcal / t when combustion. The gasoline releases 10.4 Gcal / t. The ratio between the indicator of wood and oil, resulting in 0.31 toe / t, a factor that converts tons of firewood to toe. The factor of gasoline was 1.04 toe / t. This criterion enables the sum of all forms of energy on standard "toe".

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Monthly Energy Bulletin

Reference Month: October 2013

Domestic Energy Supply – DES

The economic and energy indicators of October 2013 maintains the annual energy demand trends, observed until the previous month. The hydro generation persists with weak performance, which should result in an increase of almost 5 million toe in thermal losses of thermoelectric plants. The 6.4% growth until this month, in residential electricity consumption and 5.8% in the Otto cycle fuels consumption, show that domestic demand for goods and services remains strong. Under these conditions, the growth rate of DES (*) until this month was estimated at 4.7% over the same period in 2012.

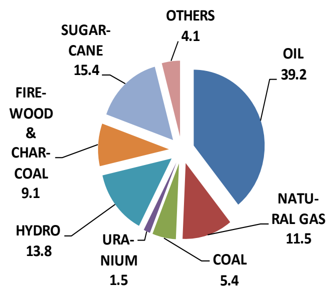
Total energy demand in 2013 can grows up between 3.5% and 4.5%

For the full year of 2013, the DES growth estimations are within 3.5% and 4.5%. The premises are supported on restrictions for a larger hydro generation, on the maintenance of weak performance of commodities and on the good performances of sugarcane products, natural gas and oil products.

According to the information available at the elaboration of this bulletin, the growth rate of DES for 2013 was estimated at 4.3% (the same as the previous edition), being about 1.7% due to the increase in thermal losses in thermoelectric generation.

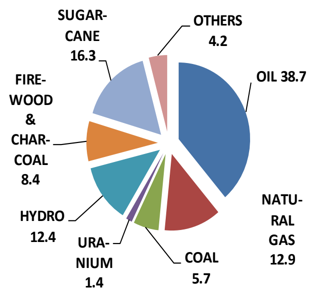
Renewable sources may step back slightly in the 2013 energy matrix. An above average behavior of sugarcane products should be neutralized by lower performances of the firewood and hydro generation uses.

DES 2012 (%)



283.6 million toe
42.4% renewables

DES (Trend for 2013)



295.7 million toe
41.3% renewables

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

Highlights up to October 2013

Steel production recoils more than 1%.

Steel production declined 4.3% in October 2013 over the same month in 2012, and year to date, shows a decrease of 1.1% (-0.6% up to September). Iron ore exports grew by 2.1% in October and 5.4% in the year (5.9% until September). The pellet exports continue to decline, with reductions of 10.3% in the year (-9.7% until September).

Oil production is stable

The oil production, of 2,105 thousand barrels per day in October, is equal to the same month of 2012. The accumulated production in the year is - 3.5% (-3,8% until September).

Hydro supply retreats 8%

The hydropower supply decreased 8.1% until October, with Itaipu import staying 0.7% below the level of 2012 (Paraguayan share). Under these conditions, the national hydro generation declined by 9% in the year-to-date (10% until September).

Oil products demand cools down

The apparent consumption of oil products increased by 1.6% in October over the same period of 2012 (1.5% in September) and 3.5% in the year-to-date (3.7% up to September). Diesel consumption, with a rate of 5.4% in October, maintains significant rate in the year of 7.3%. Gasoline C increased 2.3% in October, and has a positive rate of 2.3% in the year - automotive ethanol consumption grew 24.6% until October. The total demand of natural gas grew 21.4%, having on thermal generation an increase of 98.7%, and a decline in industrial consumption of 2.4%.

Energy use in Otto cycle transport (gasoline + ethanol + gas), remains high, with a rate of 5.8% in the year, but does not repeat the last year rate, of 8.3%.

Electricity consumption remains the same

Electricity consumption (excluding captive self-producer) grew 4.0% in October. In the year, the accumulated rate is 3.3%. Industrial consumption grew 1.4% in October and presents positive rate of 0.2% accumulated in the year (the first accumulated positive rate of the year). The consumption of commercial and residential sectors accumulate positive rates of 5.6% and 6.4% respectively.

Electricity tariffs recoil

The Brazilian electricity average tariff of the residential sector fell 14.6% in the year, the commercial fell 12.6% and the industrial fell 12.3%.

Biodiesel production remains high

Biodiesel production grew 10.1% in October, and 9.7 in the year. In 2012, the rate was 1.7%.

Cement production grew 4.7% in October, over the same month of 2012. In the year, the growth is 3.2% (the same as the previous edition). Pulp production grew by 10.2% in October (11.1% in September), with 6.6% in the year-to-date.

Main Figures

SPECIFICATION	OCTOBER						
	IN THE MONTH			ACCUMULATED IN THE YEAR			
	2013	2012	%13/12	2013	2012	%13/12	%2013
OIL							
PRODUCTION - with Shale Oil and NGL(10^3 b/d)	2,105	2,105	0.0	2,083	2,157	-3.5	-
IMPORTS AVERAGE PRICE (US$/bbl FOB)	100	117	-14.6	112	118	-5.3	-
OIL PRODUCTS							
TOTAL CONSUMPTION (10^3 b/day)	2,857	2,811	1.6	2,664	2,576	3.5	100.0
hereof: DIESEL with biodiesel - (10^3 b/day)	1,161	1,102	5.4	1,043	972	7.3	37.2
hereof: GASOLINE C (10^3 b/day)	738	722	2.3	683	667	2.3	20.5
CONSUMER PRICE - DIESEL (R$/l)	2.33	2.15	8.7	2.31	2.07	11.4	-
CONSUMER PRICE - GASOLINE C (R$/l)	2.84	2.73	4.0	2.85	2.73	4.1	-
CONSUMER PRICE - LPG (R$/13 kg)	42.3	39.6	6.9	41.0	39.2	4.6	-
NATURAL GAS							
PRODUCTION (10^6 m^3/day)	72.9	73.0	-0.1	76.6	69.7	9.8	-
IMPORTS (10^6 m^3/day)	46.2	47.2	-2.2	46.7	34.4	35.8	-
NON-UTILIZED AND REINJECTION (10^6 m^3/day)	15.3	13.5	13.6	13.6	13.8	-1.3	-
AVAILABILITY FOR CONSUMPTION (10^6 m^3/day)	103.8	106.8	-2.8	109.6	90.3	21.4	100.0
INDUSTRIAL CONSUMPTION (10^6 m^3/day)	41.5	42.8	-3.1	41.0	42.0	-2.4	37.4
POWER GENERATION CONS. (10^6 m^3/day)	30.0	37.5	-20.0	39.3	19.8	98.7	35.9
INDUSTRIAL PRICE SP(*) (US$/MMBtu) - consumption range of 20,000 m^3/day	15.9	17.0	-6.3	17.0	16.9	0.6	-
MOTOR PRICE SP (US$/MMBtu)	19.1	19.7	-3.2	20.5	19.8	3.1	-
RESIDENTIAL PRICE SP (US$/MMBtu)	50.0	51.3	-2.5	51.9	52.0	-0.1	-
ELECTRICITY							
NATIONAL INTERCONNECTED SYSTEM	64,494	61,887	4.2	62,477	60,357	3.5	100.0
LOAD - SOUTHEAST/MID-WEST (MWavg)	38,685	38,598	0.2	37,742	37,143	1.6	60.4
LOAD - SOUTH (MWavg)	10,683	10,081	6.0	10,540	10,161	3.7	16.9
LOAD - NORTHEAST (MWavg)	9,939	9,045	9.9	9,648	8,920	8.2	15.4
LOAD - NORTH (MWavg)	5,187	4,164	24.6	4,548	4,133	10.0	7.3
TOTAL CONSUMPTION (TWh) (**)	39.4	37.8	4.4	384.2	371.7	3.3	100.0
RESIDENTIAL (TWh)	10.5	9.8	7.6	103.5	97.3	6.4	26.9
INDUSTRIAL (TWh)	15.8	15.6	1.4	153.4	153.2	0.2	39.9
COMMERCIAL (TWh)	7.1	6.6	7.3	68.7	65.1	5.6	17.9
OTHER SECTORS (TWh)	6.1	5.9	3.5	58.5	56.2	4.1	15.2
PLANTS ENTRY INTO OPERATING (MW)	819	104	685.8	5,361	2,657	101.8	-
RESIDENTIAL PRICE (R$/MWh)	388	463	-16.3	393	460	-14.6	-
COMMERCIAL PRICE (R$/MWh)	377	435	-13.3	373	427	-12.6	-
INDUSTRIAL PRICE (R$/MWh)	304	355	-14.3	302	345	-12.3	-
ETHANOL AND BIODIESEL							
BIODIESEL PRODUCTION (10^3 b/d)	56	51	10.1	50	46	9.7	-
MOTOR ETHANOL CONSUMPTION (10^3 b/d)	440	394	11.8	403	324	24.6	-
ETHANOL EXPORTS (10^3 b/d)	68	100	-31.5	55	47	16.5	-
HYDRATED ETHANOL PRICE (R$/l)	1.93	1.89	2.1	1.97	1.95	1.1	-
COAL							
ELECTRICITY GENERATION (MWavg)	1,711	1,091	56.9	1,562	853	83.0	-
IMPORT PRICE (US$ FOB/t)	125.1	175.0	-28.5	135.6	183.2	-26.0	-
NUCLEAR ENERGY							
ELECTRICITY GENERATION - (GWh)	1,467	1,477	-0.7	12,607	13,219	-4.6	-
INDUSTRIAL SECTORS							
STEEL PRODUCTION (10^3 t/day)	96	102	-5.6	95	96	-1.2	-
ALUMINIUM PRODUCTION (10^3 t/day)	3.4	3.9	-12.5	3.6	4.0	-8.5	-
IRON ORE EXPORTS (10^3 t/day)	925	906	2.1	753	714	5.4	-
PELLETS EXPORTS (10^3 t/day)	123	147	-15.8	121	135	-10.3	-
CEMENT PRODUCTION (10^3 t/day)	205	196	4.7	194	188	3.2	-
PAPER PRODUCTION (10^3 t/day)	28.9	27.8	4.2	28.4	27.7	2.2	-
PULP PRODUCTION (10^3 t/day)	42.1	38.2	10.2	40.6	38.1	6.6	-
SUGAR PRODUCTION (10^3 t/daY)	150	200	-24.9	100	105	-5.0	-
SUGAR EXPORTS (10^3 t/day)	85	127	-33.3	73	62	16.8	-

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

(**) The classic self-production is not included (does not use the public grid).