

Monthly Energy Bulletin

Reference Month: April 2013

Total Primary Energy Supply

The energy indicators of April 2013 signal the maintenance of poor economic performance. The industrial sector is the most affected, in particular the export of commodities (steel, aluminum pellets, among others). In domestic demand, the transport activity of the Otto cycle has stabilized after slowing in recent months. In Domestic Energy Supply (DES) (*), the maintenance of low hydro generation still requires supplementation by thermal generation, which generates higher energy demand due to the strong increase in thermal losses. Thus, the growth rate of DES up to April was estimated at 5.9% over the same period of 2012.

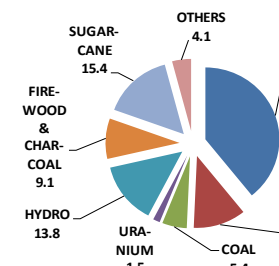
Total energy demand in 2013 can grow up between 3% and 4%

For the full year 2013, the estimates for the DES growth are in the range of 3% to 4%. The assumptions are based on restrictions largest hydroelectric generation, the stabilization energy use in light vehicles and maintenance of the poor performance of commodities. The effect of thermal losses of energy in the DES is attenuated at the end of the year, whereas at the end of 2012 thermal generation was already much required.

Based on information available at the elaboration date of this bulletin, the growth rate of the DES for 2013 was estimated at 3.6%. Still continue some uncertainties, demanding to be made new revisions of this indicator in each edition of this bulletin.

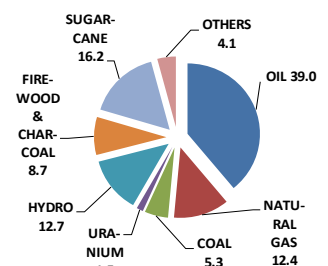
Renewable retreat slightly in the energy matrix of 2013. An above average behavior of sugarcane products should be neutralized by lower performances of the firewood use and the hydro generation.

DES 2012 (%)

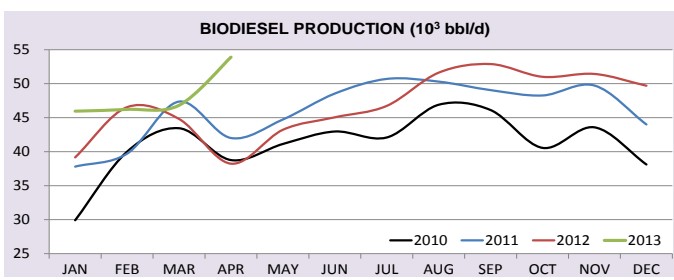
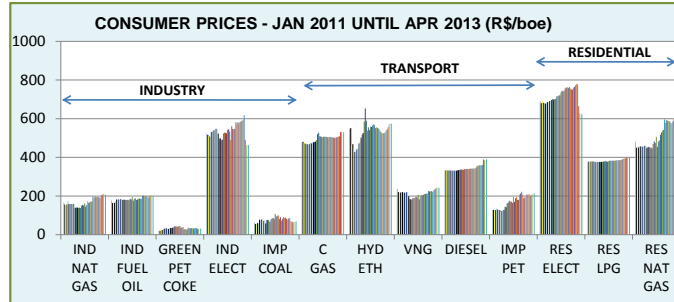
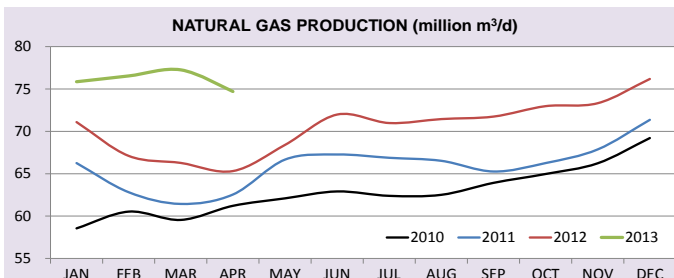
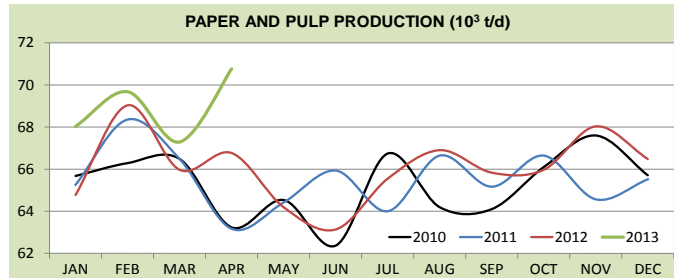
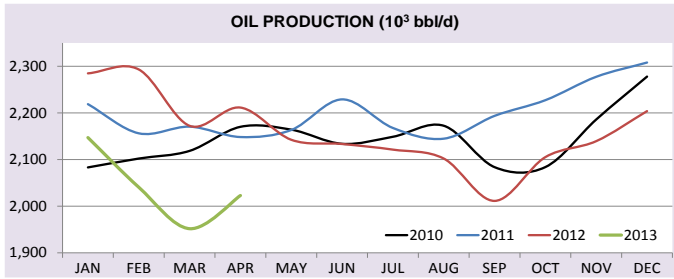


283.6 million toe
42.4% renewables

DES (Trend for 2013)



293.8 million toe
41.8% renewables



Note: For best viewing, the minimum scale of the graphs was raised to the level close to the lowest value of the curves.

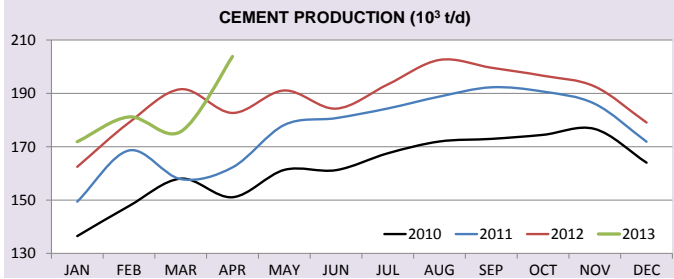
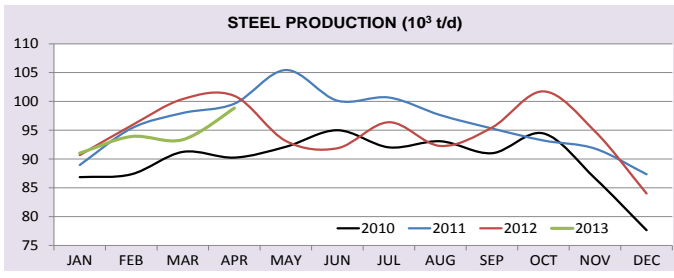
Notas Metodológicas

The purpose of this bulletin is to follow up a set of energy and non-energy variables capable of allowing a reasonable estimate of the monthly and cumulative behavior of 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 consumption.

(*) The Brazilian energy demand, or Domestic Energy Supply (DES), 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.



Highlights until April 2013

Steel production retreats close to 3%

Steel production declined 2.1% in April 2013 and 2.8% accumulated in the year. Exports of iron ore fell 9.1% in April and increased 1.9% in the year. The pellet exports continue to fall, with a reduction of 6.3% in April and 12.4% in the year.

Hydro supply retreats 12%

The hydro energy supply fell to 12% until April, with an increase of 3% of the Itaipu imports (Paraguayan side). In such conditions, the national hydro generation decreased by 14% until this month over the same period in 2012.

Consumption of oil products is recovered

The apparent consumption of oil products increased by 5.7% in April and 4.9% in the aggregate of the year (4.6% up to March). The diesel consumption, with a rate of 16.2% in April, maintains the strong increase verified in March (11.2% in the year). Gasoline C grew 7.0% in April (1.4% in March), with a rate of 4.2% accumulated in the year. The total demand for natural gas increased by 31.1% until this month, driven by an increase of 173% in thermal generation.

The use of transport energy in the Otto Cycle (gasoline + ethanol + natural gas) had a slight recuperation, with growth of 4.4% accumulated in the year (3.9% up to March). In 2012, the average increase was 8.3%.

Electricity consumption rises near 2%

Electricity consumption (excluding captive self-producer) rose 1.1% in April. In the year the accumulated rate is 2.1%. Industrial consumption accumulates negative rate of 2.2% and the commercial and residential sectors accumulate positive rates of 5.9% and 5.1% respectively.

Electricity tariffs retreat

The average Brazilian power tariff of the residential sector fell 17.7% in April and 11.3% in the year. The commercial tariff down 15.6% in April and 9.4% in the year. The industrial tariff fell 15.2% in April and 7.5% in the year.

Biodiesel production rises above 14%

Biodiesel production had a strong rise in April, with a rate of 41% (8.5% in March). In this year the accumulated rate is 14.4%, and it was situated in 1.7% in 2012.

Cement production shows recuperation, with a positive rate of 11.6% in April (2.3% in the year), versus a reduction of 8.3% in

March. Pulp production maintains positive growth rate, standing at 3.9% until April 2013.

Main Figures

SPECIFIED	APRIL			ACCUMULATED YEAR			
	2013	2012	% 13/12	2013	2012	% 13/12	% 2013
OIL							
PRODUCTION - with Shale Oil and NGL(10 ³ b/d)	2,023	2,211	-8.5	2,041	2,240	-8.9	-
IMPORTS AVERAGE PRICE (US\$/bbl FOB)	122	129	-5.3	120	127	-5.6	-
OIL PRODUCTS							
TOTAL CONSUMPTION (10 ³ b/day)	2,726	2,579	5.7	2,603	2,481	4.9	100.0
hereof: DIESEL with biodiesel - (10 ³ b/day)	1,060	912	16.2	989	890	11.2	36.1
hereof: GASOLINE C (10 ³ b/day)	693	647	7.0	678	651	4.2	20.8
CONSUMER PRICE - DIESEL (R\$/l)	2.33	2.05	14.0	2.28	2.04	11.6	-
CONSUMER PRICE - GASOLINE C (R\$/l)	2.88	2.74	4.9	2.85	2.74	4.1	-
CONSUMER PRICE - LPG (R\$/13 kg)	40.7	39.0	4.4	40.5	39.0	3.9	-
NATURAL GAS							
PRODUCTION (10 ⁶ m ³ /day)	74.7	65.3	14.4	76.1	67.5	12.8	-
IMPORTS (10 ⁶ m ³ /day)	45.0	38.8	16.0	47.5	30.7	54.6	-
NON-UTILIZED AND REINJECTION (10 ⁶ m ³ /day)	13.0	12.5	3.8	13.2	14.0	-5.6	-
AVAILABILITY FOR CONSUMPTION (10 ⁶ m ³ /day)	106.7	91.6	16.5	110.3	84.2	31.1	100.0
INDUSTRIAL CONSUMPTION (10 ⁶ m ³ /day)	41.3	41.0	0.6	39.4	41.6	-5.2	35.7
POWER GENERATION CONS. (10 ⁶ m ³ /day)	38.6	25.9	49.5	41.8	15.3	173.1	37.9
INDUSTRIAL PRICE PS (US\$/MMBtu) - consumption range of 20,000 m ³ /day	18.4	16.2	14.1	18.5	16.4	12.8	-
MOTOR PRICE PS (US\$/MMBtu)	21.5	19.8	8.8	21.6	20.2	6.8	-
RESIDENTIAL PRICE PS (US\$/MMBtu)	53.4	50.9	5.0	53.6	51.8	3.6	-
ELECTRICITY							
NATIONAL INTERCONNECTED SYSTEM	61,977	61,034	1.5	63,060	61,791	2.1	100.0
LOAD - SOUTHEAST/MID-WEST (MWavg)	37,073	37,706	-1.7	38,231	38,016	0.6	60.6
LOAD - SOUTH (MWavg)	10,560	9,976	5.9	10,724	10,579	1.4	17.0
LOAD - NORTHEAST (MWavg)	10,027	9,092	10.3	9,909	9,013	9.9	15.7
LOAD - NORTH (MWavg)	4,317	4,260	1.3	4,197	4,183	0.3	6.7
TOTAL CONSUMPTION (TWh) (*)	38.6	38.2	1.1	153.2	150.1	2.1	100.0
RESIDENTIAL (TWh)	10.3	9.9	3.8	42.0	39.7	5.9	27.4
INDUSTRIAL (TWh)	15.5	15.7	-1.0	59.6	61.0	-2.2	38.9
COMMERCIAL (TWh)	7.0	6.9	2.5	28.4	27.0	5.1	18.5
OTHER SECTORS (TWh)	5.7	5.7	0.5	23.2	22.4	3.3	15.1
PLANTS ENTRY INTO OPERATING (MW)	382	123	209.9	2,596	620	318.9	-
RESIDENTIAL PRICE (R\$/MWh)	378	460	-17.7	408	460	-11.3	-
COMMERCIAL PRICE (R\$/MWh)	353	418	-15.6	378	417	-9.4	-
INDUSTRIAL PRICE (R\$/MWh)	281	332	-15.2	309	334	-7.5	-
ETHANOL AND BIODIESEL							
BIODIESEL PRODUCTION (10 ³ b/d)	54	38	41.0	48	42	14.4	-
MOTOR ETHANOL CONSUMPTION (10 ³ b/d)	330	299	10.2	353	300	17.5	-
ETHANOL EXPORTS (10 ³ b/d)	22	14	60.1	39	16	142.0	-
HYDRATED ETHANOL PRICE (R\$/l)	2.06	1.99	4.0	2.02	2.00	1.0	-
COAL							
ELECTRICITY GENERATION (MWavg)	1,327	735	80.6	1,382	726	90.4	-
IMPORT PRICE (US\$/t)	146.1	183.7	-20.5	192.3	192.3	0.0	-
NUCLEAR ENERGY							
ELECTRICITY GENERATION - (GWh)	1,176	1,407	-16.4	4,407	4,490	-1.9	-
INDUSTRIAL SECTORS							
STEEL PRODUCTION (10 ³ t/day)	99	101	-2.1	94	97	-2.8	-
ALUMINIUM PRODUCTION (10 ³ t/day)	3.7	4.1	-9.1	3.8	4.0	-6.4	-
IRON ORE EXPORTS (10 ³ t/day)	645	709	-9.1	633	621	1.9	-
PELLETS EXPORTS (10 ³ t/day)	133	142	-6.3	117	134	-12.4	-
CEMENT PRODUCTION (10 ³ t/day)	204	183	11.6	183	179	2.3	-
PAPER PRODUCTION (10 ³ t/day)	29.4	28.0	5.0	28.6	27.8	2.8	-
PULP PRODUCTION (10 ³ t/day)	41.4	38.8	6.7	40.3	38.8	3.9	-
SUGAR PRODUCTION (10 ³ t/day)	22	19	18.5	17	18	-1.0	-
SUGAR EXPORTS (10 ³ t/day)	43	18	137.5	61	34	79.4	-

(*) Classic Self Producers not included. (not use public network)

