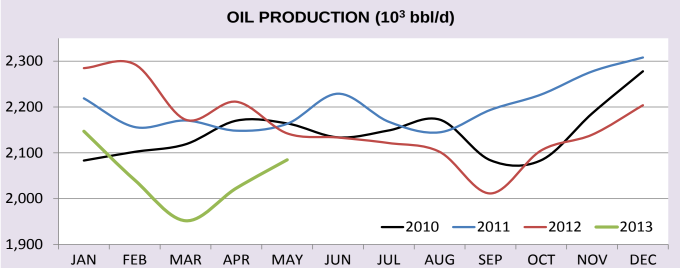
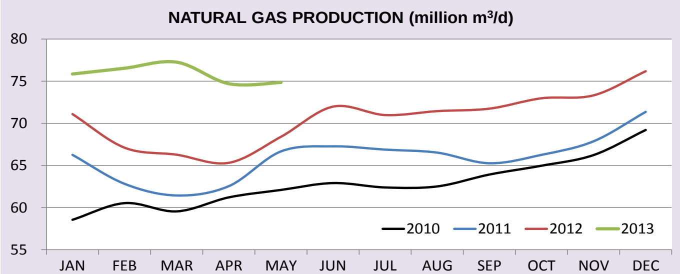
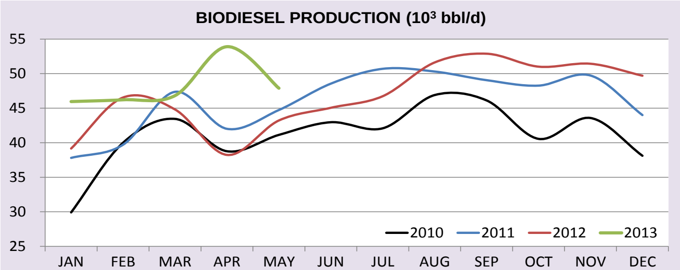
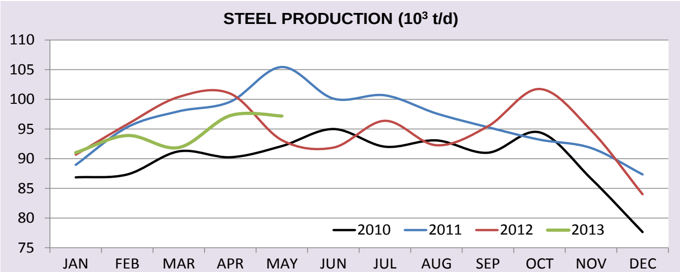
Monthly Energy Bulletin

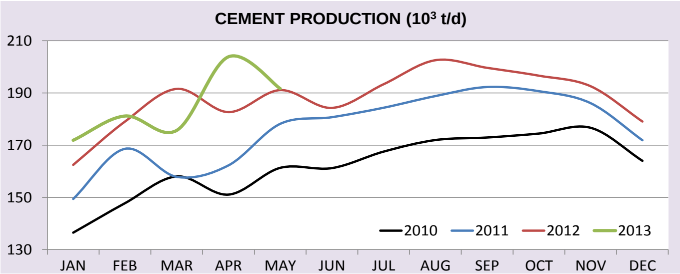
Reference Month: May 2013

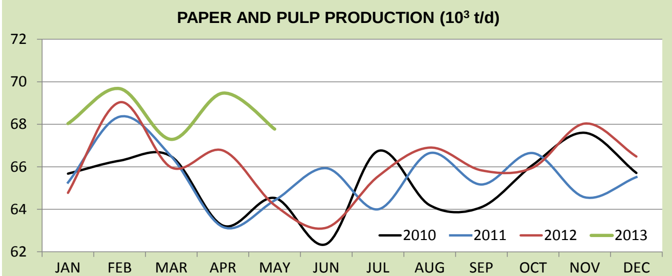


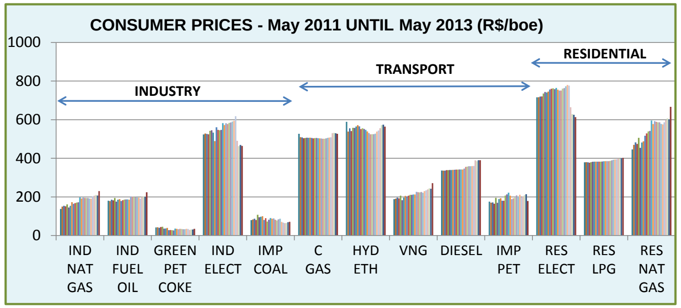












Note: For best viewing, the minimum scale of the graphs was raised to the level close to the lowest value of the curves.

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 products 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.

N3E
Office of Strategic Energy Studies / SPE/MME
www,mme,gov,br / ben@mme,gov,br
(55 61) 2032-5299 and 2032-5226

Total Primary Energy Supply

The energy indicators of May/2013 did not alter the trend of poor performance of the national economy, particularly in the industrial sector. In fact, the national industrial has been affected by the weak international demand for export commodities. In domestic demand, the transport activity of the Otto cycle remains well below the growth recorded in 2012. In Domestic Energy Supply (DES) (*), the decrease in hydroelectric generation, still pronounced in May, still requiring completion by thermal generation, which increase the thermal losses of energy. Under these conditions, the growth rate of the DES until the month was estimated at 5.4% over the same period in 2012.

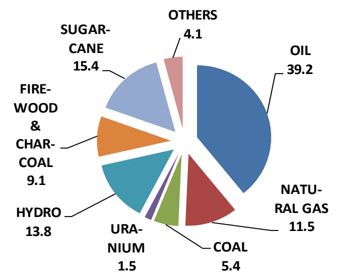
Total energy demand in 2013 can grow up between 3% and 4%

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, maintenance of the poor performance of commodities and good performance of sugarcane products. 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.

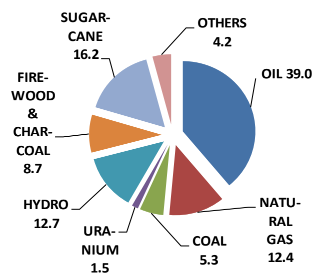
Renewable sources retreat slightly in the energy matrix of 2013. An above average behavior of sugarcane products should be neutralized by lower performances of the firewood use and the hydro generation.

DES 2012 (%)



283.6 million toe
42.4% renewables

DES (Trend for 2013)



293.8 million toe
41.8% renewables

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

Highlights until May 2013

Steel production retreats close to 2%

Steel production grew by 4.4% in May 2013, but shows a decrease of 2.0% over the year. Exports of iron ore rose 2.8% in May and 2.1% in the year. The pellet exports continue to decline, with declines of 6.6% in May and 11.3% in the year.

Hydro supply retreats 11%

The hydro energy supply fell to 11.3 untill May, with an increase of 0.8% of the Itaipu imports (Paraguayan side). In such conditions, the national hydro generation decreased by 12.5% until this month over the same period in 2012.

Dynamics of oil products recedes

The apparent consumption of oil products grew only 0.8% in May (5.7% in April) and 4.0% in the aggregate of the year (4.9% up to April). The consumption of diesel, with 5.3% in May (16.2% in April), still retains significant rate in the year of 9.9%. Gasoline C had zero growth in May, and in the year is with a positive rate of 4% - automotive ethanol consumption grew by 12.4% in May. The total demand of natural gas increased 28.6% in May, driven by an increase of 148% in thermal generation.

The Energy use in the transport cycle OTTO (gasoline + ethanol + gas) keeps more moderate rate compared to the rate in 2012. In the year the increase is 4.5%, against 8.3% recorded in 2012.

Electricity consumption rises near 2%

Electricity consumption (excluding captive self-producer) rose 3.9% in May. In the year the accumulated rate is 2.4%. Industrial consumption accumulates negative rate of 1.6% (-2.2% up to April), and the commercial and residential sectors accumulate positive rates of 6.2% and 5.3% respectively.

Electricity tariffs retreat

The average Brazilian power tariff of the residential sector fell 13.0% in the year. The commercial tariff down 11.7%, and the industrial tariff fell 10.0% in the year.

Biodiesel production rises near 14%

Biodiesel production increased 10.8% in May and 13.6% in the year. In the year 2012 the rate was 1.7%.

Cement production grew by only 0.3% in May (11.6% in April). Year, growth is 1.8%.

Pulp production had good growth in May, from 8.0%, with 4.5% growth in the year.

Main Figures

SPECIFIED	MAY MONTH 2013	MAY MONTH 2012	MAY MONTH % 13/12	ACCUMULATED YEAR 2013	ACCUMULATED YEAR 2012	ACCUMULATED YEAR % 13/12	%2013
OIL							
PRODUCTION - with Shale Oil and NGL(10^3 b/d)	2,085	2,142	-2.7	2,050	2,220	-7.7	-
IMPORTS AVERAGE PRICE (US$/bbl FOB)	96	126	-23.4	114	125	-8.8	-
OIL PRODUCTS							
TOTAL CONSUMPTION (10^3 b/day)	2,555	2,536	0.8	2,593	2,493	4.0	**100.0**
hereof: DIESEL with biodiesel - (10^3 b/day)	978	928	5.3	987	898	9.9	36.1
hereof: GASOLINE C (10^3 b/day)	638	638	0.0	674	648	4.0	20.8
CONSUMER PRICE - DIESEL (R$/l)	2.33	2.05	14.1	2.29	2.04	12.1	-
CONSUMER PRICE - GASOLINE C (R$/l)	2.86	2.74	4.6	2.85	2.74	4.2	-
CONSUMER PRICE - LPG (R$/13 kg)	40.9	39.2	4.4	40.6	39.0	4.0	-
NATURAL GAS							
PRODUCTION (10^6 m^3/day)	74.9	68.4	9.4	75.8	67.7	12.1	-
IMPORTS (10^6 m^3/day)	54.2	42.3	28.3	48.9	33.1	47.7	-
NON-UTILIZED AND REINJECTION (10^6 m^3/day)	12.5	13.8	-9.5	13.1	14.0	-6.4	-
AVAILABILITY FOR CONSUMPTION (10^6 m^3/day)	116.5	96.8	20.4	111.6	86.8	28.6	**100.0**
INDUSTRIAL CONSUMPTION (10^6 m^3/day)	41.1	41.1	0.1	39.8	41.5	-4.2	35.6
POWER GENERATION CONS. (10^6 m^3/day)	44.5	24.0	85.9	42.4	17.1	148.0	38.0
INDUSTRIAL PRICE PS (US$/MMBtu) - consumption range of 20,000 m^3/day	19.2	17.4	10.3	18.7	16.9	10.8	-
MOTOR PRICE PS (US$/MMBtu)	22.6	18.7	21.1	21.9	20.2	8.2	-
RESIDENTIAL PRICE PS (US$/MMBtu)	55.6	52.4	6.1	54.2	52.7	2.8	-
ELECTRICITY							
NATIONAL INTERCONNECTED SYSTEM	60,283	58,422	3.2	62,504	61,117	2.3	**100.0**
LOAD - SOUTHEAST/MID-WEST (MWavg)	36,330	35,420	2.6	37,851	37,497	0.9	60.6
LOAD - SOUTH (MWavg)	10,216	9,868	3.5	10,622	10,437	1.8	17.0
LOAD - NORTHEAST (MWavg)	9,452	8,953	5.6	9,817	9,001	9.1	15.7
LOAD - NORTH (MWavg)	4,285	4,181	2.5	4,214	4,183	0.8	6.7
TOTAL CONSUMPTION (TWh) (*)	38.4	36.9	3.9	191.5	187.0	2.4	**100.0**
RESIDENTIAL (TWh)	10.2	9.5	7.4	52.3	49.2	6.2	27.3
INDUSTRIAL (TWh)	15.6	15.5	0.6	75.2	76.4	-1.6	39.2
COMMERCIAL (TWh)	6.8	6.4	6.2	35.2	33.4	5.3	18.4
OTHER SECTORS (TWh)	5.7	5.5	4.4	28.9	27.9	3.5	15.1
PLANTS ENTRY INTO OPERATING (MW)	595	631	-5.8	3,191	1,251	155.1	-
RESIDENTIAL PRICE (R$/MWh)	372	463	-19.8	401	461	-13.0	-
COMMERCIAL PRICE (R$/MWh)	345	434	-20.4	371	420	-11.7	-
INDUSTRIAL PRICE (R$/MWh)	282	353	-20.2	304	337	-10.0	-
ETHANOL AND BIODIESEL							
BIODIESEL PRODUCTION (10^3 b/d)	48	43	10.8	48	42	13.6	-
MOTOR ETHANOL CONSUMPTION (10^3 b/d)	365	324	12.4	354	305	15.9	-
ETHANOL EXPORTS (10^3 b/d)	29	30	-5.4	37	19	93.6	-
HYDRATED ETHANOL PRICE (R$/l)	2.03	1.97	3.2	2.02	1.99	1.4	-
COAL							
ELECTRICITY GENERATION (MWavg)	1,493	730	104.5	1,404	727	93.2	-
IMPORT PRICE (US$ FOB/t)	141.7	190.4	-25.6	141.0	191.9	-26.5	-
NUCLEAR ENERGY							
ELECTRICITY GENERATION - (GWh)	1,354	1,477	-8.3	5,761	5,967	-3.4	-
INDUSTRIAL SECTORS							
STEEL PRODUCTION (10^3 t/day)	97	93	4.4	94	96	-2.0	-
ALUMINIUM PRODUCTION (10^3 t/day)	3.6	4.0	-10.4	3.7	4.0	-7.2	-
IRON ORE EXPORTS (10^3 t/day)	756	735	2.8	658	645	2.1	-
PELLETS EXPORTS (10^3 t/day)	121	129	-6.6	118	133	-11.3	-
CEMENT PRODUCTION (10^3 t/day)	192	191	0.3	185	181	1.8	-
PAPER PRODUCTION (10^3 t/day)	28.0	27.4	2.4	28.3	27.7	2.1	-
PULP PRODUCTION (10^3 t/day)	39.8	36.8	8.0	40.1	38.4	4.5	-
SUGAR PRODUCTION (10^3 t/daY)	169	96	76.1	48	34	44.0	-
SUGAR EXPORTS (10^3 t/day)	61	56	9.6	61	38	58.7	-

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