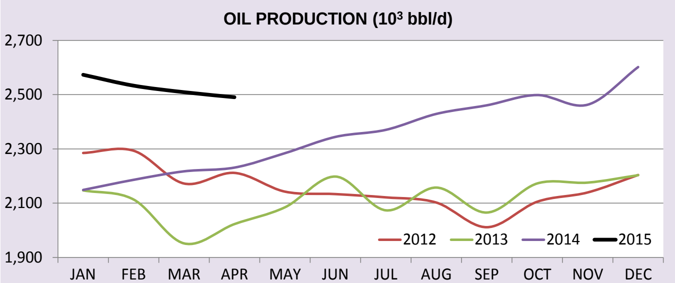

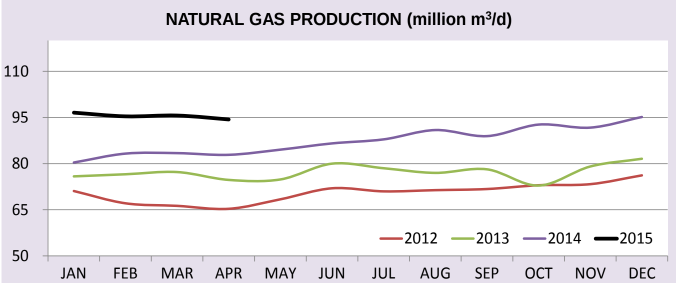

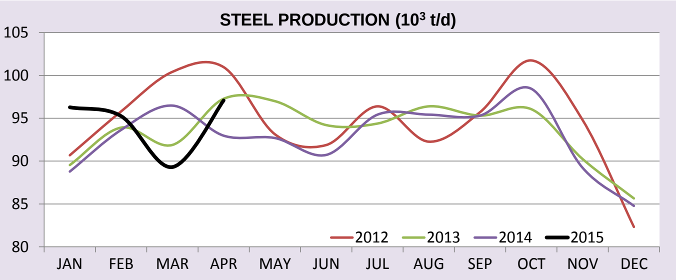

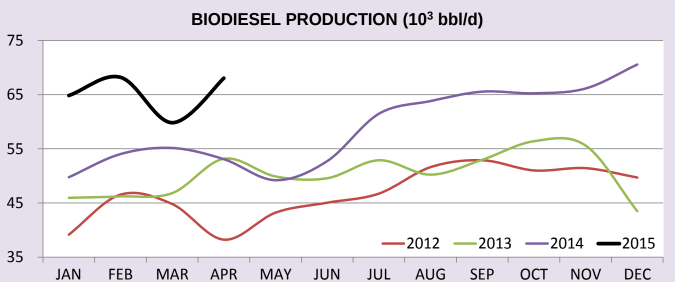

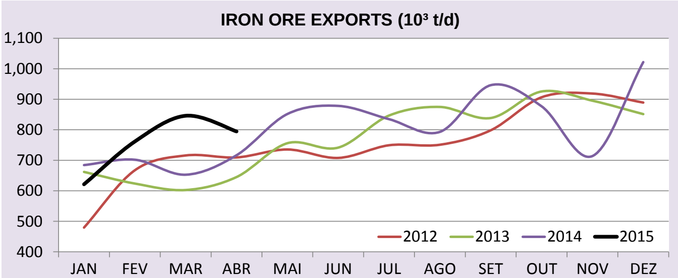

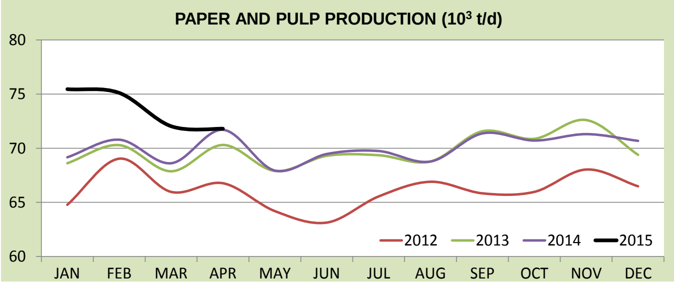

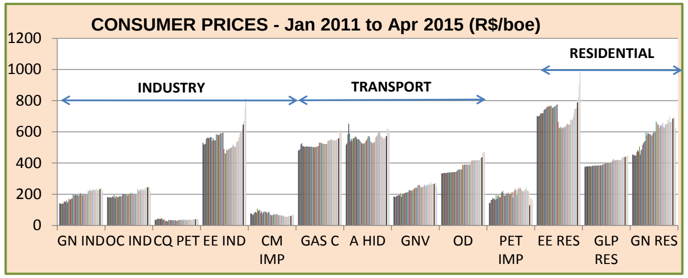

Note: For a better visualization, the minimum scale of the graphs was raised to the level close to the lowest value of the curves.

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.

(**) 2014 data reflect the 2015 cycle of the National Energy Balance, completed in April by the Energy Research Company (EPE), with the support of MME and its institutions.

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Monthly Energy Bulletin - Brazil

Reference Month: April 2015

Domestic Energy Supply – DES

In April, remained in high the oil, gas, biodiesel and cellulose productions. Iron ore and pellets exports also maintained good performances. In steel industry, the steel tends to lose ground for the pig iron exports. Oil products demand strong recoil in April, presenting a negative rate in the year.

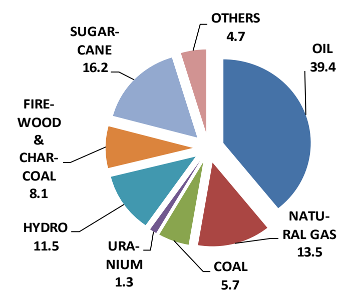
In such conditions, the **Domestic Energy Supply (DES) (*) (**)** estimated growing rate, year to date, was only 0.8%.

DES should remain stable in 2015

For the full year 2015, the estimates for the DES growth are in the range of 0 to 1% (1.5% to 2.5% in the previous edition). A good performance of commodities production and a stronger retraction in the share of domestic energy demand associated with the population welfare are expected. Renewable sources should maintain their participation near 40% in the DES matrix.

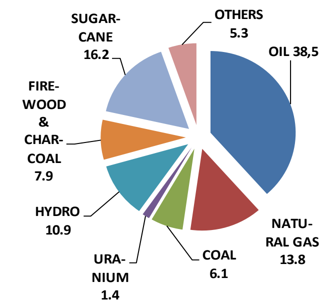
Until the date of this report, the growth rate of the DES for 2015 was estimated at 0.4%.

DES 2014 (%)



305.6 million toe
39.4% renewables

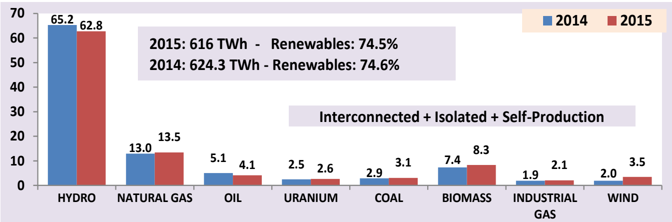
DES 2015 (%)



306.6 million toe
39.3% renewables

The **Domestic Electricity Supply** was estimated at 616 TWh for 2015 (**), with a decrease of 1.3% over 2014. Until June, the charge in National Interconnected System (**SIN**) was 1.4% negative.

Domestic Electricity Supply, by Source (%)



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

Highlights of April 2015

Oil and Gas production on the up

In April 2015, oil production grew expressive 11.6%, and natural gas, 13.9%. Year to date, the rates are 15.1% and 15.8%, respectively.

Minerals exports in high

Steel production increased by 4.4% in April, compared to the same month of 2014 (recoil of 7.4% in March) and, in the year, accumulated a 1.6% growth. Iron ore exports, with up 10.9% in the month, have already accumulated an expansion of 9.7% in the year. Pellets exports remain high: 25.3% in the year.

Hydraulic energy supply at low

The hydro power supply declined 5.9% in April (-2.7% in March). Itaipu generation recoiled 11.7% in April. Up this month, the hydraulic supply is negative 6.7% (-7% until March).

Oil products consumption turns to recede

The oil products apparent consumption decreased by 4.8% in April and, in the year, accumulates a decrease of 2.5%. The C gasoline retreated 8.6% in April (-4.8% in March) and diesel still has a positive rate of 3.9%. During the year, the rates are 3.3% for diesel, and negative 3.8% for gasoline.

The gas consumption grew by 2.8% in April and 6.5% in the year, no longer repeating the previous high rates arising from use in thermoelectric generation.

The energy consumption (in gasoline equivalent) of the Otto cycle transport – gasoline, ethanol and natural gas – fell 3.1% in April, over the same month of 2014. For the year, the rate is still positive at 1.1% (6.2% in the full year 2014).

Electricity consumption is stable

Electricity consumption (excluding captive self-production) grew by 0.2% in April (-1.1% in March), accumulating in the year a negative rate of 0.5%. Industrial consumption, with a negative rate of 3.9% in April, accumulates a recoil of 4.1% in the year. The industrial sector has been greatly affected by the 31% decline in aluminum production. Residential consumption, with a rate of 1.7% in April, accumulates positive rate of 1.5% in the year. The commercial sector accumulates positive rate of 2.4% in the year.

Biodiesel production still high

The biodiesel production stood at 68 kbbl/day in April, with an expressive high of 28.2% over the same month of 2014. In the year, its accumulates an increase of 23%.

Electricity rates continues in high

In the year, the national average residential electricity tariff increased 35.2%, the commercial tariff grew 37.3%, and the industrial, 42.3%.

Basic data of 2014 and 2015

SPECIFICATION	APRIL – IN THE MONTH 2015	IN THE MONTH 2014	IN THE MONTH % 15/14	ACCUMULATED IN THE YEAR 2015	ACCUMULATED IN THE YEAR 2014	ACCUMULATED IN THE YEAR % 15/14	%2015
OIL							
PRODUCTION - with Shale Oil and NGL(10^3 b/d)	2,490	2,231	11.6	2,527	2,196	15.1	-
IMPORTS AVERAGE PRICE (US$/bbl FOB)	61	112	-45.5	62	114	-45.6	-
OIL PRODUCTS							
TOTAL CONSUMPTION (10^3 b/day)	2,672	2,805	-4.8	2,646	2,715	-2.5	**100.0**
hereof: DIESEL with biodiesel - (10^3 b/day)	1,046	1,007	3.9	1,041	1,007	3.3	37.4
hereof: GASOLINE C (10^3 b/day)	722	789	-8.6	724	753	-3.8	21.9
CONSUMER PRICE - DIESEL (R$/l)	2.81	2.50	12.3	2.75	2.49	10.5	-
CONSUMER PRICE - GASOLINE C (R$/l)	3.31	2.99	10.7	3.24	2.97	9.1	-
CONSUMER PRICE - LPG (R$/13 kg)	45.8	42.7	7.3	45.1	42.6	6.0	-
NATURAL GAS							
PRODUCTION (10^6 m^3/day)	94.3	82.9	13.9	95.5	82.4	15.8	-
IMPORTS (10^6 m^3/day)	55.0	55.5	-1.0	53.9	52.8	2.2	-
NON-UTILIZED AND REINJECTION (10^6 m^3/day)	27.5	19.9	38.6	25.8	19.2	34.5	-
AVAILABILITY FOR CONSUMPTION (10^6 m^3/day)	121.8	118.5	2.8	123.6	116.0	6.5	**100.0**
INDUSTRIAL CONSUMPTION (10^6 m^3/day)	44.7	44.0	1.7	44.8	42.9	4.5	36.3
POWER GENERATION CONS. (10^6 m^3/day)	48.7	47.9	1.7	49.9	44.8	11.3	40.4
INDUSTRIAL PRICE SP(*) (US$/MMBtu) - consumption range of 20,000 m^3/day	12.9	18.0	-28.4	14.0	17.3	-18.9	-
MOTOR PRICE SP (US$/MMBtu)	14.7	20.6	-28.5	16.1	19.6	-18.1	-
RESIDENTIAL PRICE SP (US$/MMBtu)	37.0	51.3	-27.8	41.0	49.1	-16.6	-
ELECTRICITY							
NATIONAL INTERCONNECTED SYSTEM	63,861	64,264	-0.6	66,867	67,379	-0.8	**100.0**
SOUTHEAST/MIDWEST POWER LOAD (MWavg)	37,477	38,272	-2.1	39,452	40,346	-2.2	59.0
SOUTH POWER LOAD (MWavg)	10,667	10,734	-0.6	11,784	11,634	1.3	17.6
NORTHEAST POWER LOAD (MWavg)	10,512	9,962	5.5	10,544	10,107	4.3	15.8
NORTH POWER LOAD (MWavg)	5,205	5,296	-1.7	5,088	5,292	-3.9	7.6
TOTAL CONSUMPTION (TWh) (**)	39.6	39.5	0.2	160.5	161.4	-0.5	**100.0**
RESIDENTIAL	11.0	10.8	1.7	46.4	45.7	1.5	28.9
INDUSTRIAL	14.6	15.2	-3.9	57.3	59.8	-4.1	35.7
COMMERCIAL	7.9	7.6	4.5	32.0	31.2	2.4	19.9
OTHER SECTORS	6.1	6.0	2.6	24.9	24.7	0.7	15.5
PLANTS ENTRY INTO OPERATING (MW)	354	821	-56.9	1,946	2,943	-33.9	-
RESIDENTIAL PRICE (R$/MWh)	595	390	52.5	531	393	35.2	-
COMMERCIAL PRICE (R$/MWh)	530	343	54.7	470	342	37.3	-
INDUSTRIAL PRICE (R$/MWh)	495	307	61.4	438	308	42.3	-
ETHANOL AND BIODIESEL							
BIODIESEL PRODUCTION (10^3 b/d)	68	53	28.2	65	53	22.9	-
MOTOR ETHANOL CONSUMPTION (10^3 b/d)	463	395	17.2	462	413	11.9	-
ETHANOL EXPORTS (10^3 b/d)	4	29	-84.7	19	25	-24.6	-
HYDRATED ETHANOL PRICE (R$/l)	2.18	2.18	0.1	2.17	2.12	2.6	-
COAL							
ELECTRICITY GENERATION (MWavg)	2,023	2,063	-1.9	2,171	2,073	4.7	-
IMPORT PRICE (US$ FOB/t)	93.7	117.4	-20.2	96.5	115.4	-16.3	-
NUCLEAR ENERGY							
ELECTRICITY GENERATION - (GWh)	1,490	982	51.7	5,399	5,191	4.0	-
INDUSTRIAL SECTORS							
STEEL PRODUCTION (10^3 t/day)	97	93	4.4	94	93	1.6	-
ALUMINIUM PRODUCTION (10^3 t/day)	2.2	3.0	-28.1	2.2	3.3	-30.9	-
IRON ORE EXPORTS (10^3 t/day)	795	717	10.9	755	688	9.7	-
PELLETS EXPORTS (10^3 t/day)	163	107	52.8	145	116	25.3	-
PAPER PRODUCTION (10^3 t/day)	27.7	29.7	-6.7	28.2	29.0	-2.7	-
PULP PRODUCTION (10^3 t/day)	44.1	42.0	5.0	45.4	41.0	10.6	-
SUGAR PRODUCTION (10^3 t/daY)	51	52	-1.5	26	26	-0.5	-
SUGAR EXPORTS (10^3 t/day)	43	43	0.0	58	57	1.6	-

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

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