



Central Agency for Public Mobilization and Statistics (CAPMAS)



Energy Statistics and Energy Balance

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1-Introduction



- **Energy is the lifeblood and the essential foundation for the comprehensive development in all societies.**
 - **The future of energy is a key element in building the future of the nations.**
-
- **Energy Sector:**
 - **High Energy Demand growing in all economic sectors.**
 - **Limited Energy resources.**
 - **Poor Infrastructure.**
 - **Pollution and CO2 emission.**
 - **Geopolitics and Conflicts.**



Follow:1-Introduction



- **Lack of Data:**
 - At the energy demand side.
 - At the energy supply side.
- **Gap between the demand for information and reliable energy statistics.**
- **Low quality of existing statistical data on energy use .**
- **Absence of clear Energy Policy, especially for the transportation sector.**



2-Objectives



1-Developing an appropriate methodology for building National Energy Balances which are:

a-A tool for energy planning.

b-Viable to comparisons between the Economic Sectors in the country.

C-Viable to comparisons between the countries to benefits from the experiences of each other.



Follow:2-Objectives



2-To understand the Energy Sector Issues:

a-Strengthen Statistical Capacity.

b-Energy statistics..

C-Energy Consumption Surveys.



3-Expected Accomplishment



We expect:

The integration of the working group members “National Energy Balances ”in order to optimize the production , trade and use of Energy in our region.



4-Energy Balance Structure



- The Energy Balance is a matrix consists of a set of variables.
- The Energy Balance must be detailed.
- Systematic preparation (Work approach) of energy balance:
 - 1) Sources of data collection.
 - 2) Concepts used in the energy balance.
 - 3) Quality of the data.
 - 4) Publication of data.



Follow:4-Energy Balance Structure



- 6) Listing the components of these concepts as specific as possible.
- 7) Measuring or estimating the energy flow.



5-Energy Supply and Demand



1- Energy Supply:

- Primary Energy.
- Secondary Energy Supply.
(Energy Transformation Sector)

2-Energy Demand:

- Energy consumption.
- Sectorial Analysis.

3-Refining Industry:

- Design Capacity.
- Internal Consumption by product.
- Losses and flares.
- Net production by product.
- Sales by product(excluding bunkers)



Follow:5-Energy Supply and Demand



4- Imports by product.

5-Bunkers by product.

6-Stock change by product.

7-GAS Industry.

8-Electricity Generation.

9-Energy Consumption.

10-Sectorial Analysis.



Energy Balance of Egypt



6-Energy Balance of Egypt



Data Quality:

Rely on the statement of the Ministry of Petroleum and the annual report to the Ministry of Electricity and Energy, Electricity and Energy Bulletin issued by the Central Agency for Public Mobilization and Statistics Data are certified, reliable



Follow: 6-Energy Balance of Egypt2005/2006



Energy balance for the year 2005-2006

* in thousand tons equivalent

List	Hard coal	Coke oven	Crude oil	LPG	Gasoline	Naphta	Jet fuel	Kerosene	Gas/Diesel oil	Fuel oil	Others	Natural gas	Electrical energy
Primary production	1414		31139	1338								43299	
Imports	21	395	2491	1940					1200		194		14
Stock change								152-					
Exports	230	16	2551		975	2800	933			204	698	13004	81
Bunkers									175	1226			
Gross inland consumption	1205	379	31079	3278	975-	2800-	933-	152-	1025	1430-	504-	30295	67-
Transformation input	1205		31365						97	4132	4	17766	
Thermal power stations									97	3760	4	17200	
Coke-oven plants	1205												
Gas works													
Refineries			31365							372		566	
Transformation output		698		1199	3878	3832	2254	433	9257	11363	3607		8212
Public thermal power stations													8209
Independent thermal power stations													3
Coke-oven plants		698											
Investment company				561	753	142			461	889	1275		
Refineries				638	3125	3690	2254	433	8796	10474	2332		
Exchanges transfers, returns	1205-												1136
Interproduct transfers	1205-												1136
Consumption energy branch													753
Distribution losses													609
Available for final consumption		1077	287-	3053	2904	1033	1321	281	10374	5802	3099	12529	7919
Final energy consumption		1077		3986	3159		1276	334	10382	4233	1823	10989	7917
Industry		1077		199				93	1645	3647	499	7292	2812
Transport					3159		1276		3082	451	307	251	142
Households				3787				218				532	3433
Agriculture								23	1684		57		320
others									3971	135	960	2914	1210



Follow:6-Energy Balance of Egypt



The last energy balance of Egypt 2013/2014 was developed as we will see .





Follow:6-Energy Balance of Egypt



Publication of Data:

- **Energy Balance of Egypt disseminated by CAPMAS.**
- **Published energy balance of Egypt, concepts used in the preparation and some summary tables that show the production of crude oil and petroleum products, natural gas and electricity, transfers, final consumption of all sectors and on the website of the Central Agency for Public Mobilization and Statistics(CAPMAS)**

www.capmas.gov.eg



Follow:6-Energy Balance of Egypt



Difficulties and Impediments of Energy Statistics:

- **Lack of detailed quantitative data on final consumption of energy in different economic activities (Agriculture-Industry-Transport.....etc).**
- **Lack of special surveys in private sector (unregulated)In various economic activities due to Insufficient funding .**
- **Change of staff (lack of continuity).**



Follow:6-Energy Balance of Egypt



Some Difficulties can be overcome by conducting surveys :

- A survey was conducted by CAPMAS in “Consumption of Energy in the Transportation Sector”



Follow:6-Energy Balance of Egypt



Some Difficulties can be overcome by :

- Separation of investment companies from the rest of refinery products.
- **Separation of gas consumption for liquid Natural gas.**
- Separating the total consumption of electricity for each sector separately.
- Separating the quantities consumed in the manufacturing sector at the level of industrial activities.



7-Recommendations



- **Technical Assistance for the staff that working in the energy statistic Continuously.**
- **Conducting surveys in different economic activities(Agriculture-Industry-Transport.etc).**
- **Try to Collect the data of energy consumption at the level of each economic activity separately.**
- **Improving indicators related to energy efficiency.**



Thank you for your listening

