



# Status and Needs of Energy Statistics and Indicators in the ESCWA region

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# Some Facts

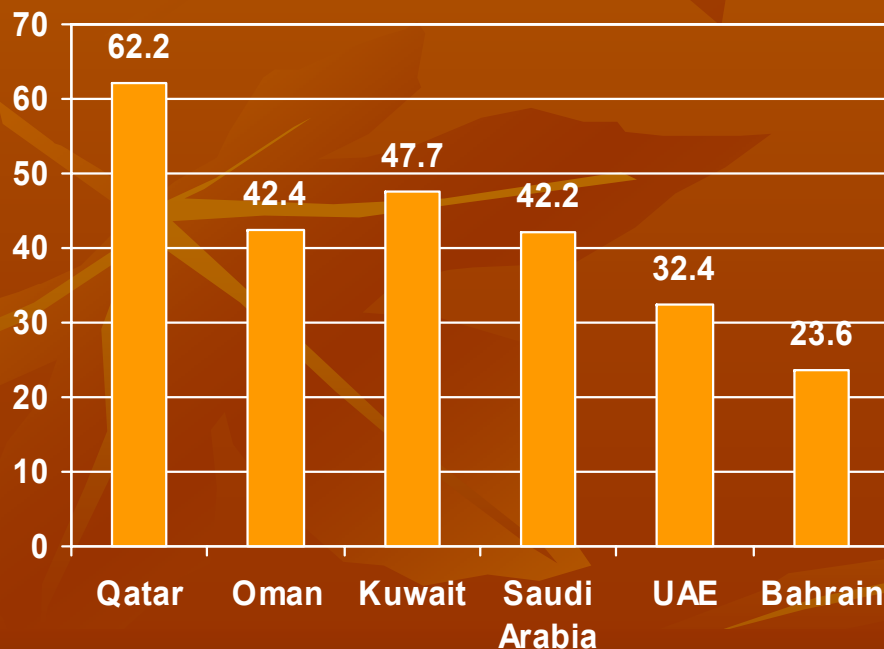
The ESCWA region, represents 13 countries of West Asia and Egypt

	Year	ESCWA	% ESCWA to World
Surface area (sq km)		4,831,070	4%
Population, total (000)	2005	191,705	3%
Annual growth rate	2000-5	3	208%
Arable Land & Permanent Crops	2002	21,707	1%
Irrigated area	2002	10,745	4%
<u>Energy Reserves Oil</u>	2003	602,239	53%
<u>Energy Reserves gas</u>	2003	46,323	26%
<u>Energy Production Oil and Others</u>	2003	19,466	25%
CO2 emissions per capita metric tons	2001	16	416%
Energy use per capita	2002	1,763	104%
Electricity use per capita KWH	2002	1,804	81%
Ren Fresh Water Resouces		167,011	0.4%
Ren Fresh Water Resouces (cubic meters/capita/yr)		965	14%
GDP (million 2000 cst US\$)	2004	588,552	2%

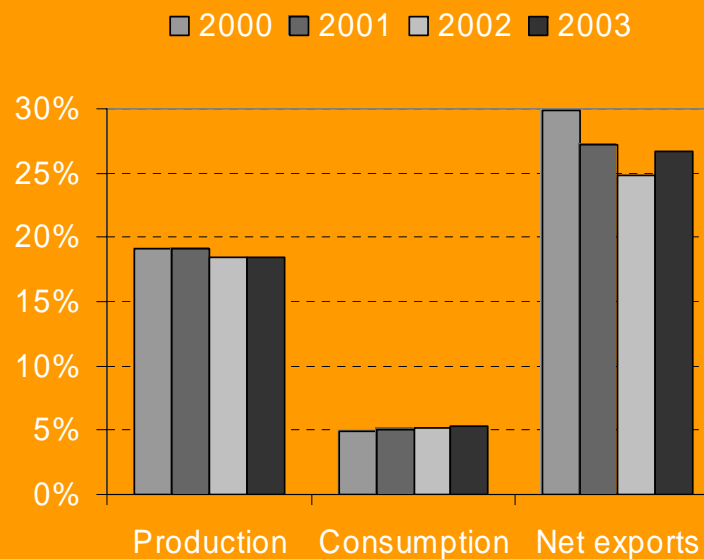
# Importance of Energy resources in ESCWA Region

- In the region, the energy sector plays a vital role in achieving social and economic development through satisfying the energy needs of the different economic sectors,
- The sector's contributes effectively, particularly the Oil and Gas sector, to the "GDP" of many ESCWA countries

□ % Mining & Quarrying of total GDP at curent prices 2004



حصة الاسكوا في امدادات الطاقة في العالم  
 ESCWA's share in world energy supplies

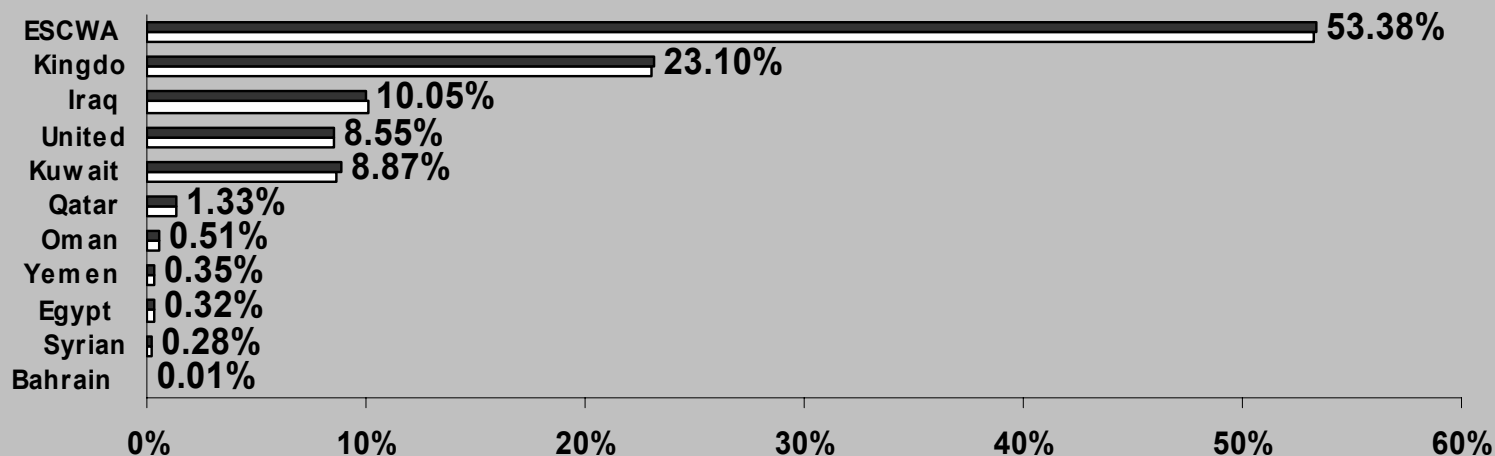


## Importance of Energy resources in ESCWA Region

نسبة الاسكوا من احتياطات النفط الخام في العالم

ESCWA's share of world's total oil reserves

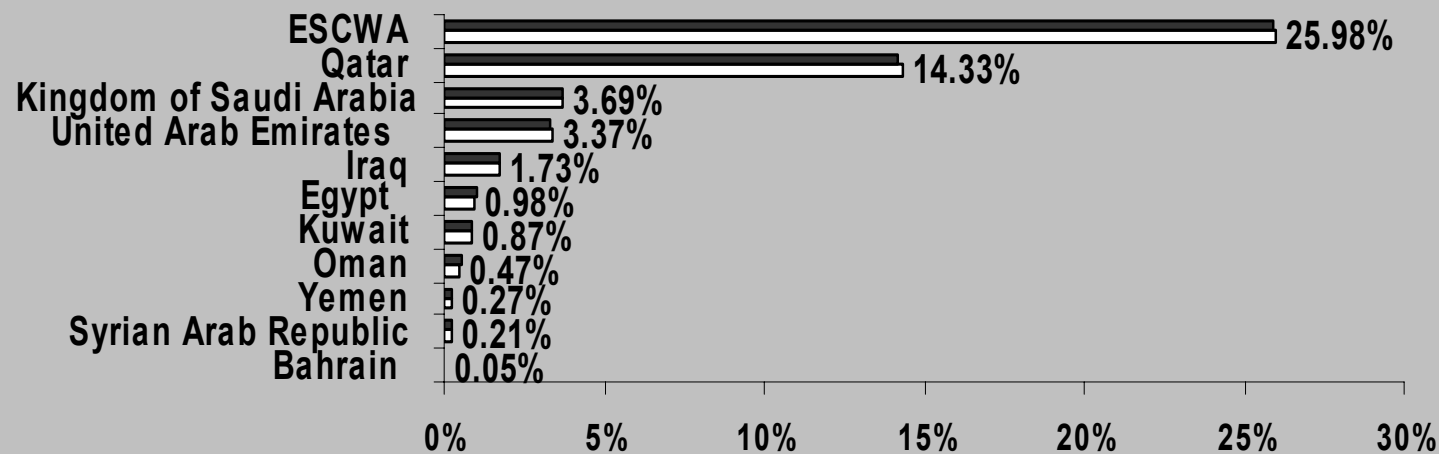
□ 2003 ■ 2004



نسبة الاسكوا من احتياطات الغاز الطبيعي في العالم

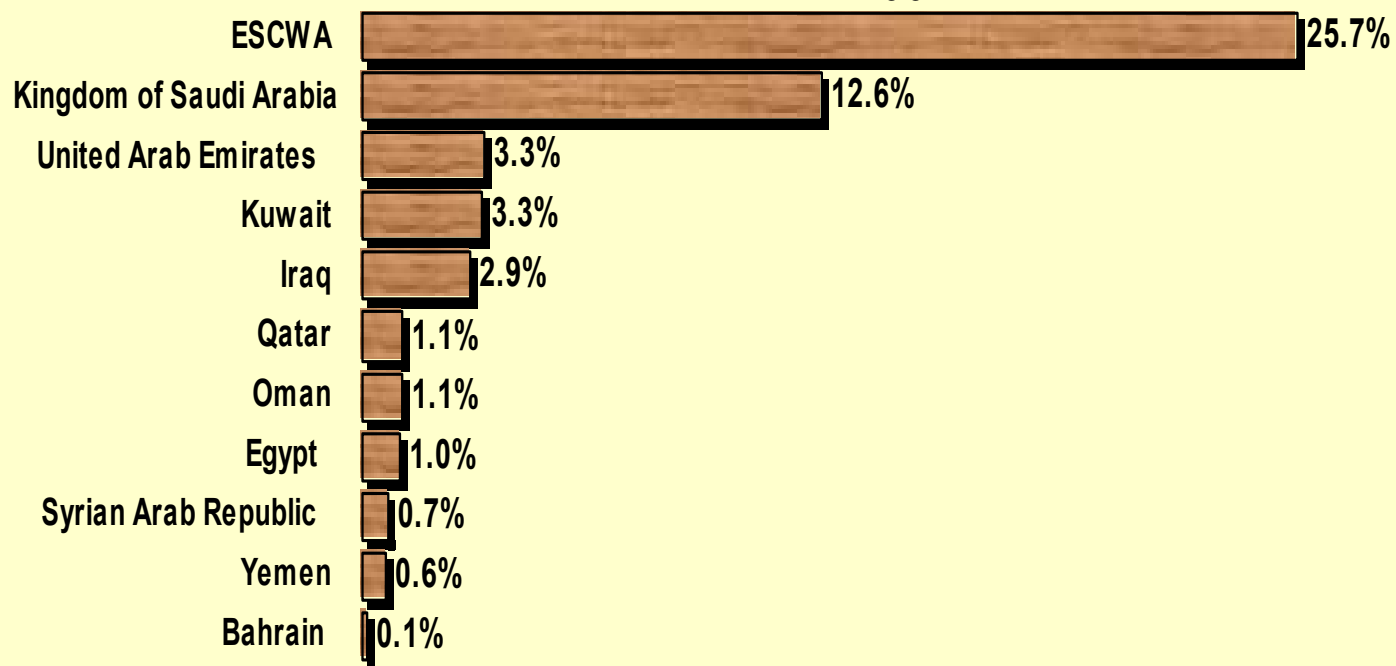
ESCWA's share of world's total gas reserves

□ 2003 ■ 2004



## ESCWA's share of world's total oil production 2004

### نسبة الاسكوا من انتاج النفط في العالم 2004



# The Status of Energy Statistics in the ESCWA Region

➤ The availability, accuracy and reliability of statistical energy production and sectoral consumption information is crucial for the development of national policies and programs

## Sources of Uncertainties in the Energy Reserves Statistics in ESCWA region

➤ The increase in proven reserves in the Arab countries which doubled during the period 1980±1997 came mostly from reservoir re-evaluation (reassessment of resources in place and recovery rates) and the application of new technologies such as 3D seismic and horizontal drilling. (Some sources estimate the total newly discovered proven reserves for the period 1980±1997 at only about 30 billion barrels.) Lababidi 1999

➤ The time lag between the discovery and appraisal of oil reserves and because some fields considered too small are left undiscovered . Lababidi 1999.

# Problems of Energy Statistics in the ESCWA Region

## ➤ Problems

➤ Incomplete questionnaires and inconsistent data.

➤ Lack of timely data

➤ Non-unified units of measurements within the same country and across countries

➤ Need for training of human resources and deployment modern tools

# Data Problems on Energy Reserves

## Reserves

- Estimates of reserves contain systematic errors: Probability assigned to reserve assessment: Definition of reserves based on P10, P50 or P90 estimation figures.
- Detailed Analysis in WEO 2004 on Oil And Gas Reserves showed lack of reliability and accuracy of reserves data reported by oil companies and a confusion in the overall reserves picture due to current practices and methods for calculation of “proven”, “probable” and “possible” reserves



## Role of ESCWA in Capacity Building in Energy Statistics and Indicators and Information Systems

- 2004-2005 Work Programme, ESCWA executed the following activities
- Expert Group Meeting on Statistics of Sectoral Energy Production, Consumption and Related Environmental Issues, and Workshop on Energy Data in ESCWA Member Countries with Special Focus on Oil Statistics, Beirut, 8-11 July 2003, in collaboration with UNSD and OPEC
- Workshop on Energy Statistics in ESCWA Member Countries, and Seminar on Application of the UNFC for Energy Reserves/Resources in ESCWA/OPEC Member Countries UN-House, Beirut, 31 May - 2 June 2004 in collaboration with UNSD, OPEC and ECE
- United Nations Workshop on International Economic and Social Classifications, UN-House, Beirut, 19-23 July 2004 in collaboration with UNSD
- Building a Database on Indicators for Energy in the ESCWA Region
- For the Biennium 2006-2007- Strategic Framework Subprogram 6. Objective 1. To improve the Production and Use of Harmonized and Comparable Stats (according to international standards) in MCs
- Project with OPEC on the dissemination of Renewable Energy Services for Poverty alleviation
- Continuous work on Clean Fuel

## Data Collection

**Collaboration within ESCWA**

**Collaboration with Member States**

**Collaboration with UN and regional Agencies**

# Energy Indicators

# Information System for Energy Indicators

## **Recommendations to ESCWA Member countries to improve Energy Statistics in the region**

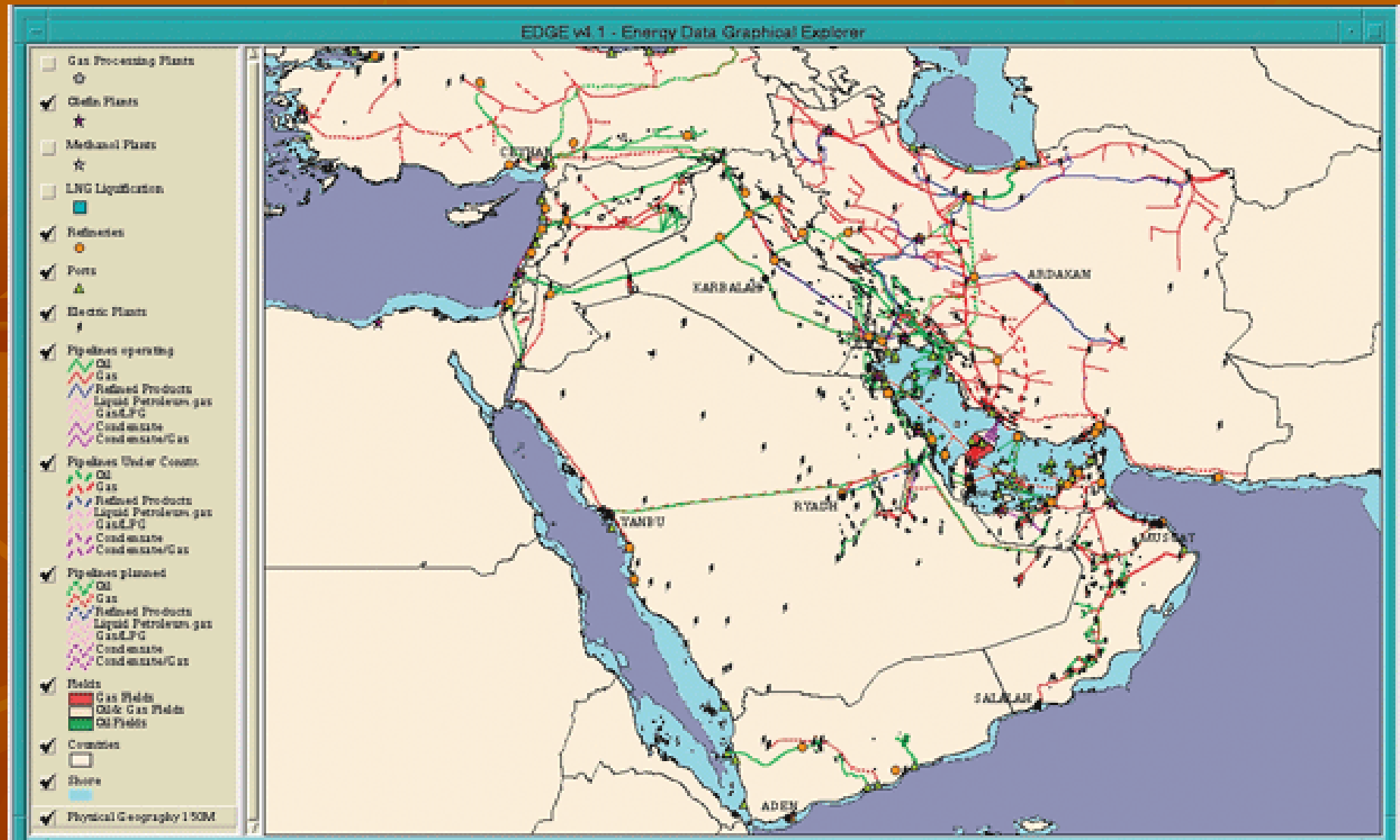
- **Application of a unified system and clear methodology for energy statistics and data availability on the national, regional and international level.**
- **Training of concerned staff in energy statistics and their analyses and on classification**
- **Emphasizing the importance of providing data and information in a detailed and comprehensive way at all levels.**
- **Preparation of energy balance regularly and accurately**
- **Defining one official authority who would be responsible for data collection and dissemination of recurrent publications on energy for the accomplishment of sustainable development.**
- **Establishing energy databases at the national level to support planning and decision-making processes to promote optimization of energy sources utilization and production.**
- **Conducting periodical surveys to improve the quality of data related to end use of sectoral energy consumption.**

# Future Directions

- Taking UNFC to a larger Dimension: from ECE to other regional commissions, the role of UNSD Division on Classification
- National Expert Group
- National Seminars on UNFC
- Develop guidelines in view to facilitate the practical application of UNFC.
- Select a number of country deposits for testing the classification
- Introduce UNFC to technical Universities

## Sources

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