

Republic of Iraq
Ministry of Higher Education
and Scientific
Al-Mustaqbal University College
Chemical Engineering and Petroleum Industries
Department



Subject: Petroleum Economics

Second Class

Lecture Five

Oil reserves and oil stock:

The concept of the oil industry or the oil economy, is associated with the term oil reserves, which are considered the basis for practicing the activity of the oil industry and the production of this depleting substance. If the forces of supply and demand change, for the oil market during the sixties and seventies, a new term appeared in the dictionary of the oil economy that is, the oil reserves. We will try to address these two terms through three headings

The main ones are:

- The basics of global oil reserves.
- Evolution of global oil reserves and future estimates.
- Global oil reserves.

The basics of the global oil reserve:

The oil reserve is the backbone of the oil industry, and it falls within the upstream stage of this industry. And that the concept of hydrocarbon reserves is very complex. Where precautions generally represent a group the resources available to meet the present and future requirements of societies.

Types of oil reserves:

The oil reserves change with time according to the prevailing technical conditions and the reservoir of depletion. The following are the main types of oil reserves:

1- Proved reserves:

It means the oil quantities lurking in the interior of the earth, which has been estimated on a scientific basis (based on engineering and geological information available) and its presence was known by drilling oil wells, which can be extracted by means and equipment the production followed, available, and economically, with a probability of 90%.

2-Probable Reserves:

These are the quantities that can be obtained from

Reservoirs adjacent to reservoirs have been developed. This type reserve indicates that it is fixed it is technically known, but it is not known in terms of its production costs, and it is missing some

Geological information that makes it in the ranks of proven reserves, and its probability is estimated at 50. %

3-Possible Reserves:

The quantities of oil expected to be extracted from reservoirs that have not been developed. This type requires the presence of oil, but it is not it is known in both quantitative and economic terms.

The significance of the oil reserve:

The importance of the accuracy of the reserves estimates appears in the multiple effects of its uses for all engineers and accountants, the most important of them are:

- 1- Evaluating the economic feasibility of the discovered reserves.
- 2- Determining the size of the facilities needed to exploit the reserve, which includes the construction of tanks (reception and processing / storage / shipping) and the lines and stations necessary for the operation and production of crude oil or gas.
- 3- Estimating the appropriate production rates that do not cause damage to the underground oil reservoir.
- 4- Determining the useful life of the tank, which greatly affects the final formation of the company
The continuity of its activity and the time of its liquidation.
- 5- Estimating the costs necessary to develop the fields discovered by digging productive and appraisal wells.

6- Laying down the necessary policies and planning programs to exploit the reserves in a way that achieves the largest possible return.

By reducing production costs and increasing production rates in a way that does not harm the reserves and tank capacity natural.

7- Calculating the annual depletion of intangible costs related to research, exploration and drilling.

Productive and evaluative, which is called by accounting the depletion rate.

8- Given the importance of oil reserves as the most important and largest assets in oil companies, the accuracy of its appreciation helps accountants who are newly interested in disclosing it in the financial statements in order to provide a better measure for the success of these companies and to show their true financial position.

Global oil stock:

The vital role of oil makes it the blood that runs through the arteries of the various economic sectors. This makes it a strategic material that states are keen to keep flowing in sufficient quantities for economic growth. That is why these countries plan to ensure their supply of it, even in the event of any political, natural or other restrictions economical on the flow of oil from areas of production to areas of consumption.

Importance and types of oil stock:

Definition of oil stock: It is the volume of oil that is actually present, and extracted from the ground to be stored in one form of storage, where countries and oil companies resort to storing quantities of oil in its raw form and in the form of its refined products.

Types of oil stock:

Oil stock are divided into three types, namely:

1-Strategic stock: the quantities stored to achieve goals related to securing and protecting countries from the fluctuations that may occur in oil supplies, in addition to the attempt to influence by countries consumed on the conditions of supply and demand for oil to reduce its prices.

2-Commercial stock: the quantities stored to achieve commercial objectives represented in obtaining higher levels of profits.

3-Floating oil reserves:

It is the quantities of oil stored in moving or stationary tankers (such as tankers that have expired and become eligible for scrapping).

Pictures of oil reserves:

Among the most important pictures of oil reserves, we find:

- Storing oil in the ground by re-injecting it or using dry wells.
- Storing oil in huge warehouses and tanks.
- Storing oil in refineries warehouses.
- Storage of oil inside oil pipelines.
- Storing oil in oil tankers, whether they are moving or stationary, such as tankers that have expired and become eligible for storage (floating stock).

Organization Of Arab Petroleum Exporting Countries (OAPEC)

Organization Of Arab Petroleum Exporting Countries (OAPEC) is an inter-governmental organization based in Kuwait. OAPEC fosters cooperation among its 11-member Arab oil-exporting nations.

OAPEC was established in 1968 by Kuwait, Libya, and Saudi Arabia. Its other members include Algeria, Bahrain, Egypt, Iraq, Qatar, Syria, Tunisia, and the United Arab Emirates. Although they have several members in common, OAPEC is a separate and distinct entity from OPEC (the Organization of the Petroleum Exporting Countries), the 12-nation cartel that plays a pivotal role in determining global petroleum prices. OAPEC sponsors joint ventures for its member countries to promote the effective use of resources and the economic integration of Arab countries.

The Influence of OAPEC:

According to Gulf News, although momentum is not at the pace it was 30 years ago, OAPEC has had a substantial positive influence on the Arab oil and gas industry since its inception. Arab energy and oil consumption has increased 15-fold and 10-fold, respectively, and oil reserves have increased to 710 billion barrels in 2016 from less than half that number in 1980. In addition, gas reserves grew from 15 to 53 trillion cubic meters, and Arab petrochemicals production is now almost 150 million tons a year