

## Introduction to energy economics

### Some terms

#### 1. Energy economics:

Energy economics or more precisely the economics of energy is a branch of applied economics where economic principles and tools are applied to “ask the right questions”, and to analyse them logically and systematically to develop a well-informed understanding of the issues.

Energy economics is the field that studies human utilization of energy resources and energy commodities and the consequences of that utilization.

Like any branch of economics, energy economics is concerned with the basic economic issue of allocating scarce resources in the economy. Thus, the microeconomic concerns of energy supply and demand and the macro-economic concerns of investment, financing and economic linkages with the rest of the economy form an essential part of the subject.

The energy sector is complex because of a number of factors:

- The constituent industries tend to be highly technical in nature, requiring some understanding of the underlying processes and techniques for a good grasp of the economic issues.
- Each industry of the sector has its own specific features which require special attention.
- Energy being an ingredient for any economic activity, its availability or lack of it affects the society and consequently, there are greater societal concerns and influences affecting the sector.
- The sector is influenced by interactions at different levels (international, regional, national and even local), most of which go beyond the subject of one discipline.

#### 2. Source of energy:

Primary energy sources take many forms, including nuclear energy, fossil energy -- like oil, coal and natural gas -- and renewable sources like wind, solar, geothermal and hydropower. These primary sources are converted to electricity, a secondary energy source, which flows through power lines and other transmission infrastructure to your home and business. There are also final energy and useful energy.

#### 3. Other terms:

Fossil energy, renewable energy, economic growth, economic development, energy consumption, externality, environment, energy industry, oil, gas, nuclear energy, solar energy, wind energy, electricity...etc.