

## + Energy balance/ energy accounting

### Some terms

#### 1. Energy Accounting Framework:

The energy accounting framework is one that enables a complete accounting of energy flows from original supply sources through conversion processes to end-use demands with all double-counting avoided. By accounting for all conversion losses this framework provides an exhaustive accounting for itemizing the sources and uses of energy.

Normally the framework is applied to each individual fuel or energy type used in an economy and thus the energy account is essentially a matrix where:

- Each type of fuel is considered along the columns. The columns are chosen based on the importance of energy commodities in the country under consideration. More diversified the energy system, more detailed accounting is required.
- Each row captures the flow of energy. The rows are organised in three main blocks to indicate the supply of energy, its transformation and final use (see Fig. 2.3).

**Fig. 2.3** Main flows considered in energy accounting. *Source* UN (1982), Codoni et al. (1985), UN (1991) and IEA (2004)

Production (+) Imports (+) Exports (-) Bunkers (-) Stock Change (+ or -) Primary Energy Requirement (PER)	}	<b>Supply</b>
Statistical Difference Transformation input (-) Energy sector's own use (-) Transmission and Distribution losses (-) Net Supply Available	}	<b>Conversion</b>
Net Domestic Consumption Final energy consumption Agriculture Industry Transport Residential Commercial Non-energy uses	}	<b>Demand</b>

#### 2. Other terms:

Energy account, energy balance, supply, conversion, demance, primary energy requirement, total priary energy supply, final energy consumption...etc.