# **Glossary**

### General note

For editing convenience the definition for some items with "++" mark are different with APEC Energy Statistics 2002. In the Energy Balance sector the definition for all item are same as APEC Energy Statistics 2002.

## Energies

## Coal++

Defined as coal in narrow sense (all primary coal such as hard coal, lignite and brown coal) plus coal products (all fuels derived from coal including patent fuel, coke oven coke, gas coke, briquettes, coke oven qas and blast furnace gas).

#### Coal

Coal includes all primary coal, such as hard coal, lignite and brown coal.

#### Coal Products

Coal Products includes all fuels derived from coal including patent fuel, coke oven coke, gas coke, briquettes, coke oven gas, blast furnace gas and gas works gas.

Oil

Defined as crude oil (which comprises crude oil, refinery feedstocks and natural gas liquids and Natural LPG) plus petroleum products.

## Crude Oil

Crude Oil comprises crude oil, refinery feedstocks and natural gas liquids. Petroleum Products

Total of all petroleum products, such as LPG, naphtha, MOGAS(including AVGAS), jet fuel, kerosene, diesel oil, fuel oil, refinery gas and other petroleum products.

## Mogas

Mogas is light hydrocarbon oil for use in internal engines such as motor vehicles. Motor gasoline is distilled between 35 °C and 215 °C and treated by reforming, catalytic cracking or blending with aromatic fraction to reach a sufficiently high octane number (≥80 RON).

## Naphtha

Naphtha includes light or medium oils, a cut covering the end of the motor spirit and the beginning of the kerosene range. Naphtha distills between 30 °C and 210 °C.

### Jet Fuel

Jet fuel comprises both gasoline and kerosene type jet fuels meeting

specifications for use in aviation turbine power units.

Gasoline type: This includes all light hydrocarbon oils, distilling between 100 °C and 250 °C. It distills at least 20 percent in volume at 143 °C.

Kerosene type: This medium oil with same distillation characteristics and flash point as kerosene, with a maximum aromatic content of 22 percent in volume, and treated to give a kinematic viscosity of less than 18cST at -  $20~^{\circ}$ C (and a freezing point below -47  $^{\circ}$ C), octane number varying from 80 to 145 RON.

#### Kerosene

Kerosene comprises refined petroleum distillate intermediate in volatility between gasoline and gas/diesel oil. It is a medium oil distilling between 150  $^{\circ}$ C and 300  $^{\circ}$ C, which distills at least 65 percent in volume at 250  $^{\circ}$ C. Its specific gravity is in the region of 0.80 and the flash point is above 38  $^{\circ}$ C.

#### Diesel Oil

Diesel oil includes heavy gas oils. Gas oils are obtained from the lowest fraction from atmospheric distillation of crude oil, while heavy gas oils obtained by vacuum redistillation of the residual from atmospheric distillation.

#### Fuel Oil

Fuel oil defines oils that make up the distillation residue. It comprises all residual fuel oils (including those obtained by blending). Its kinematic viscosity is above 10 cSt at 80  $^{\circ}$ C. The flash point is always above 50  $^{\circ}$ C. and the density is always more than 0.90.

#### LPG

LPG is the light hydrocarbon fraction of the paraffin series, derived from refinery processes and from crude oil stabilization plants comprising propane ( $C_3H_8$ ) and butane ( $C_4H_{10}$ ) or a mixture of these two hydrocarbon.

#### Others

The category, "Other petroleum products", groups together white spirit and SBP, lubricants, bitumen, paraffin waxes, refining gas and others (tar, sulfur, grease).

#### Gas++

Defined as natural gas and LNG.

#### Natural Gas

Natural gas consists mainly of methane occurring naturally in underground deposits associated with crude oil or gas recovered from coal mines (colliery gas). Sewage gas is also included.

## **LNG**

LNG is liquefied natural gas.

## Hvdro

The primary equivalent is calculated with an efficiency of 100%.

## Nuclear

The primary equivalent is calculated with an efficiency of 33%.

### Others

Defined as sum of geothermal power, wind, tide, photovoltaic power, etc. The primary equivalent is calculated with an efficiency of 100% except for of geothermal power, which assumed efficiency is 10%.

#### Sectors

## Indigenous Production

Quantities of fuels extracted within the economy.

## Net Imports

Defined as imports minus exports.

## Total Primary Energy Supply (TPES)

Defined as indigenous production plus imports minus exports minus international marine bunkers plus or minus stock change.

## Refining

Petroleum refineries shows the transformation of crude oil, NGL and condensate to petroleum products. The production of synthetic petrol from natural gas is also included.

#### Power Generation

Gross electricity (including power stations' own use) produced from thermal, hydro, nuclear, geothermal and other power plants of public utilities and auto-producers. An auto-producer is an establishment which, in addition to its main activities, generates electricity wholly or partially for its own use, such as industries, railways, refineries, etc.

## Total Final Energy Consumption

Defined as industry plus transport plus residential and commercial plus others sector.

## Industry

Consumption of the industry sector is specified in the following subsectors (energy use for transport by industry is not included here but reported under transport):

- Iron and steel industry
- Chemical industry
- Non-ferrous metals basic industries
- Non-metallic mineral products such as glass, ceramic, cement, etc.
- Transport equipment
- Machinery, Fabricated metal products, machinery and equipment other

than transport equipment

- Mining (excluding fuels) and quarrying
- Food processing, beverages and tobacco
- Pulp, paper and printing
- Wood and wood products (other than pulp and paper)
- Construction
- Textiles and leather
- Collection, purification and distribution of water
- Non-specified (any manufacturing industry not included above)

## Transport

Consumption of the transport sector covers all transport activity regardless of the economic sector to which it is contributing, and is divided into the following sub-sectors:

- Air transport (international and domestic)
- Road transport
- Railways
- Internal navigation (including small craft and coastal vessels not purchasing their bunker requirements under international marine bunker contracts).

#### Residential and Commercial

Defined as residential plus commercial.

\*Residential shows all consumption by households

\*Commercial shows consumption of the commercial and public sectors.

#### Others

Agriculture and non-energy use sectors are included.