



## Annex 2

# Petroleum Products Sales Questionnaire Definitions

### Definition of Fuels

#### 1. Liquefied Petroleum Gas or LPG

LPG refers to liquefied propane ( $C_3H_8$ ) and butane ( $C_4H_{10}$ ) or mixtures of both. Commercial grades are usually mixtures of the gases with small amounts of propylene, butylene, isobutene, and isobutylene stored under pressure in containers.

#### 2. Naphtha

Naphtha refers to light or medium oils distilling between  $30^{\circ}C$  and  $210^{\circ}C$  which do not meet the specification for motor gasoline. Naphtha is mainly used as feedstock for high octane gasoline and the manufacture of olefin in the petrochemical industry.

#### 3. Motor Gasoline

Motor gasoline is a mixture of some aromatics (for example, benzene and toluene) and aliphatic hydrocarbons in the  $C_5$  to  $C_{12}$  range. The distillation range is  $25^{\circ}C$  to  $220^{\circ}C$ . Motor gasoline may also contain bio gasoline products.

#### 4. Kerosene-type Jet Fuel

This is a blend of kerosene suited to flight conditions with particular specifications, such as freezing point. The specifications are set down by a small number of national standards committees, most notably, Absorption Spectroscopic Methods–ASTM (United States), UK Ministry of Defence–Defend

Standard MOD (United Kingdom), and Russian Gasoil Specification-GOST (Russian Federation).

#### **5. Other Kerosene**

Kerosene is used for heating, cooking, lighting; as solvents; and for internal combustion engines. Other names of this product are burning oil, vaporising oil, power kerosene, and illuminating oil.

#### **6. Diesel Oil**

Diesel oils are middle distillates, predominantly of carbon number range C11 to C25 and with a distillation range of 160°C to 420°C. This product comprises road diesel and heating or other gas oil.

#### **7. Fuel Oil**

This comprises residual fuel oil and heavy fuel oil, which is usually a blended product based on the residues from various refinery, distillation, and cracking processes. Residual fuel oils A-5 have a distillation range of 350°C to 650°C and a kinematic viscosity in the range 6–55 centistokes (cSt) at 100°C. Their flash point is always above 60°C and their specific gravity is above 0.95.

#### **8. Lubricants**

Lubricants are oils, produced from crude oil, mainly used to reduce friction between sliding surfaces and during metal-cutting operations.

#### **9. Bitumen**

Bitumen is a solid, semi-solid, or viscous hydrocarbon with a colloidal structure, brown to black in colour. It is obtained as a residue in the distillation of crude oil and by vacuum distillation of oil residues from atmospheric distillation. It should not be confused with the nonconventional primary extra-heavy oils which may also be referred to as bitumen.

#### **10. Other Products**

Other products comprise white spirits and special boiling points, industry spirits, paraffin wax, petroleum coke, and other products.

## Definition of Flows

### 1. Import

Data should reflect amounts/quantities that have crossed the national territorial boundaries, whether customs clearance took place or not. Quantities of crude oil and products imported or exported under processing agreements (i.e., refining on account) should be included.

### 2. Blending

Petroleum companies blend several petroleum products and create a petroleum product. So, there are + (create) – (blended) and the total should be zero.

### 3. Own use

Own use by petroleum import companies

### 4. Stock (at the end of the year)

All stocks in national territory (including stocks held by governments, major consumers, or stockholding organisations); stocks held on board incoming ocean vessels, stocks held in bonded areas; and stocks held for others whether under bilateral government agreement or not.

### 5. Total Sales

= 1 ± 2 – 3

### 6. Sell to Power Producers

= 6 + 7

### 7. EDL

Sales of diesel or fuel oil to EDL (Electricité du Lao PDR)

### 8. Independent power producer, off-grid factory, etc.

Sales of diesel oil and fuel oil to other power producers

### 9. Sell to Large-Scale Industrial Users (13 subsectors)

= 10 + 11 + 12 + 13 + 14 + 15 + 16 + 17 + 18 + 19 + 20 + 21 + 22

## **10. Iron and Steel**

ISIC Group 241 and Class 2431 (NACE Groups 24.1, 24.2, 24.3 and Classes 24.51 and 24.52). To avoid double counting, oil used in blast furnaces should be reported in the energy or transformation sector.

## **11. Chemical (including Petrochemical)**

ISIC Division 20 and 21 (NACE Division 20 and 21)

Note: This heading includes petroleum products used as fuel and as feedstock (non-energy use). However, consumption should be net, after deduction of backflows. The breakdown of net consumption by product should be calculated applying the same proportion of product split for gross deliveries.

## **12. Non-ferrous Metals**

ISIC Group 242 and Class 2432 (NACE Group 24.4 and Classes 24.53, 24.54)

## **13. Transportation Equipment**

ISIC Divisions 29 and 30 (NACE Divisions 29 and 30)

## **14. Machinery**

ISIC Divisions 25, 26, 27, and 28 (NACE Divisions 25, 26, 27, and 28). Report fabricated metal products, machinery and equipment other than transport equipment.

## **15. Mining and Quarrying**

ISIC Divisions 07, 08 and Group 099 (NACE Divisions 07, 08 and Group 09.9)

## **16. Food, Beverage, and Tobacco**

ISIC Divisions 10, 11 and 12 (NACE Divisions 10, 11, and 12)

## **17. Pulp, Paper, and Printing**

ISIC Divisions 17 and 18 (NACE Divisions 17 and 18). This category includes reproduction of recorded media.

## **18. Wood and Wood Products**

ISIC Division 16 (NACE Division 16)

## 19. Construction

ISIC Division 41, 42 and 43 (NACE Division 41, 42, and 43)

## 20. Textiles and Leather

ISIC Divisions 13, 14, and 15 (NACE Divisions 13, 14, and 15)

## 21. Not Elsewhere Specified (Industry)

If the economy's industrial classification of oil consumption does not correspond to the above ISIC (or NACE) codes, please estimate the breakdown by industry and include in Not Elsewhere Specified only consumption in sectors which are not covered above. ISIC Division 22, 31, and 32. For NACE, it covers Divisions 22, 31, and 32 -Industry).

## 22. Sell to Large-Scale Transport User

=23+24+25+26+27

## 23. Taxi, Bus, Road Freight, etc.

- Report oil for use in road vehicles.
- Include fuel used by agricultural vehicles on highways and lubricants for use in road vehicles.
- Exclude motor gasoline and diesel used in stationary engines (see Not Elsewhere Specified – Other sectors); diesel oil for non-highway use in tractors (see Agriculture/Forestry – Other sectors); military use (see Not Elsewhere Specified – Other sectors); and gasoil used in engines at construction sites (see Construction – Industry sector).

## 24. International Civil Aviation

- Report quantities of aviation fuels delivered to aircraft for international aviation bunkers (also known as International Aviation Bunkers). The domestic/international split should be determined based on the departure and landing locations and not by the nationality of the airline.
- Exclude fuels used by airlines for their road vehicles (see Not Elsewhere Specified – Transport sector) and military use of aviation fuels (see Not Elsewhere Specified – Others sectors).

## 25. Domestic Air Transport

- Report quantities of aviation fuels delivered to aircraft for domestic aviation – commercial, private, agricultural, etc.
- Include fuel used for purposes other than flying, e.g., bench-testing of engines. The domestic/international split should be determined based on the departure and landing locations and not by the nationality of the airline. This may include journeys of considerable length between two airports in an economy (e.g., San Francisco to Honolulu).
- Exclude fuels used by airlines for their road vehicles (see Not elsewhere specified – Transport sector) and military use of aviation fuels (see Not elsewhere specified – Others sector).

## 26. Inland Waterways

Report fuels delivered to vessels of all flags not engaged in international navigation (see international marine bunkers). The domestic/international split should be determined based on the ports of departure and arrival and not by the flag or nationality of the ship. This may include journeys of considerable length between two ports in an economy (e.g., San Francisco to Honolulu).

## 27. International Marine Bunker

Bunkers cover the quantities of fuels delivered to sea-going ships of all flags. Consumption of warships should be included in Final Consumption under the Other sectors, Not Elsewhere Specified. Consumption by ships engaged in fishing and in transport in inland and coastal waters is not included.

## 28. Sell to Other Large-Scale Users

=29+30+31+32+33+34

## 29. Commercial Services Such as Mall, Hotel, School, Hospital, Office building

ISIC Divisions and NACE Divisions 33, 36, 37, 38, 39, 45, 46, 47, 52, 53, 55, 56, 58, 59, 60, 61, 62, 63, 64, 65, 66, 68, 69, 70, 71, 72, 73, 74, 75, 77, 78, 79, 80, 81, 82, 84 (exclude Class 8422), 85, 86, 87, 88, 90, 91, 92, 93, 94, 95, 96, and 99. Oil consumed by businesses and offices in the public and private sectors. Oil use at railways, bus stations, shipping piers, and airports should be reported in this category and not shown in the Transport sector.

### **30. Public Services Such as Central and Local Governments**

Sales of petroleum products to central and local governments

### **31. Residential**

Report fuels consumed by all households including 'households with employed persons' (ISIC and NACE Divisions 97 and 98).

### **32. Agriculture**

ISIC Divisions 01 and 02 (NACE Divisions 01 and 02). Report oil consumption by users classified as agriculture, hunting, and forestry.

### **33. Fishing**

Report fuels used for inland, coastal, and deep-sea fishing. Fishing should cover fuels delivered to ships of all flags that have refuelled in the economy (include international fishing). Also include energy used in the fishing industry as specified in ISIC Division 03 and NACE Division 03.

### **34. Petroleum Wholesaler**

Sales of petroleum products to petroleum wholesaler

### **35. Sell to Gas Station**

=36+37

### **36. Company-Owned Stations**

Delivery of petroleum products to owned service stations

### **37. Company Franchises**

Delivery of petroleum products to franchised service stations

## Petroleum Product Sales Questionnaire

Corporation/Company:  
Year:

Contact Person:

Tel:  
Email:

Quantity Description	LPG	Naphta	Motor Gasoline	Kerosene Type Jet Fuel	Other Kerosene	Diesel Oil	Fuel Oil	Lubricants	Bitumen	Other Products (specify)
	Ton	KL	KL	KL	KL	KL	KL	KL	Specify	Specify
Import										
Blending										
Own Use										
Stock (in the end of the year)										
<b>Total Sales</b>										
<b>Sell to Power producers</b>										
EDC										
IPP, Rural, etc										
<b>Sales to Large-Scale Industrial Users</b>										
Iron and Steel										
Chemical (incl. Petrochemical)										
Non-ferrous Metals										
Transportation Equipment										
Machinery										
Mining and Quarrying										
Food, Beverages, and Tobacco										
Pulp, Paper, and Printing										
Wood and Wood Products										
Construction										
Textiles and Leather										
Not Elsewhere Specified (Industry)										
<b>Sell to Large-Scale Transport Users</b>										
Taxi, Bus, Road Freight, etc.										
International Civil Aviation										
Domestic Air Transport										
Inland Waterways										
International Marine Bunker										
<b>Sell to Other Large-Scale Users</b>										
Commercial Service such as mall, hotel, school, hospital, office building										
Public Services such as central and local governments										
Residential										
Agriculture										
Fishing										
Petroleum Wholesale										
<b>Sell to Gas Station</b>										
Company-Owned Stations										
Company Franchise										