

GENERAL NOTES

Calculation of primary energy equivalent for electricity and heat

As mentioned previously, the publication now treats electricity and heat consistently with IRES energy balances. Notably, this leads to the following notional efficiencies applying to electricity and heat generation (to back calculate the primary energy):

- 100% for electricity from hydro, wind, tide, wave, ocean and solar PV;
- 33% for electricity from nuclear heat or solar thermal;
- 100% for solar thermal heat;
- 50% for heat produced from geothermal heat;
- 10% for electricity from geothermal heat.

Consumption

Consumption throughout the *Yearbook* is defined consistently with the definition of final consumption in IRES, namely the sum of flows reflecting energy consumption by energy consumers, as well as non-energy use of energy products. As such, the publication should no longer have the same issues with negative consumption figures that previous versions did, when consumption was calculated based on supply flows and as such negative figures could appear for countries that exported secondary products.

Negative Supply (and negative emissions)

Negative supply can represent a residual or statistical difference between production and exports when a particular product is mainly exported, or when a transferred product is subsequently exported. Likewise, carbon dioxide emissions in Table 4, which are calculated based on the supply of fossil fuels, may appear negative for a group of fuels as a result, without meaning that carbon dioxide was absorbed.

Time Period

The period to which the data refer is the calendar year, with the exception of the data of the following countries which refer to the fiscal

year:

Afghanistan and Iran (Islamic Rep. of) - beginning 21 March of the year stated;

Australia, Bangladesh, Bhutan, Egypt (for the latter two, electricity only), Nepal - ending June of the year stated;

Eswatini – ending March of the year stated;

Pakistan - starting July of the year stated;

India, Japan and Myanmar - beginning April of the year stated.

Trade data

Figures displayed for international trade by partner country in Tables 6, 15 and 28 are based on data from the International Energy Agency and from the United Nations Statistics Division COMTRADE (Commodity Trade Statistics). The total of all exports will likely differ from the figures given in other tables because not all of the importers are included, and also possibly because of definitional differences between data sources.

Per Capita Data

Data on a *per capita* basis use population data from the United Nations Population Division as a denominator. These indicators may sometimes show differences for certain years compared to previous versions of this publication, due to revisions made by the Population Division rather than changes to the underlying energy data.

Coverage

As Table 1 contains data back to 1990, data are included for former countries such as the Union of Soviet Socialist Republics, and older versions of countries such as Ethiopia which have since had territories split from them.

GEOGRAPHICAL NOTES

Australia – Data exclude the overseas territories.

Bonaire, Sint Eustatius, Saba – Data prior to 2012 are included in Netherlands Antilles (former).

China – Data exclude Hong Kong and Macao Special Administrative Regions (Hong Kong SAR and Macao SAR) and Taiwan Province.

Curaçao – Data prior to 2012 are included in Netherlands Antilles (former).

Czechoslovakia – prior to 1993, refers to the former Czechoslovakia composed of Czechia and Slovakia.

Denmark – Data exclude Greenland and the Danish Faroes.

France – Data up to 2010 include Monaco and exclude the following overseas departments and territories: Guadeloupe, French Guiana, Martinique, Mayotte, New Caledonia, French Polynesia, Réunion, Saint Barthélemy, Saint Martin, St. Pierre and Miquelon, and Wallis and Futuna. From 2011 onwards, data include Monaco and the overseas departments (Guadeloupe, French Guiana, Martinique, Mayotte and Réunion), excluding the overseas collectivities: New Caledonia, French Polynesia, Saint Barthélemy, Saint Martin, St. Pierre and Miquelon, and Wallis and Futuna.

French Guiana – Data after 2010 are included in France.

Germany – Through the accession of the **German Democratic Republic** to the **Federal Republic of Germany** with effect from 3 October 1990, the two German States united to form one sovereign state. Data for 1990 are shown separately for the former states.

Guadeloupe – Data after 2010 are included in France.

Indonesia – Data include Timor-Leste until 2001.

Italy – Data include San Marino and the Holy See.

Japan – Data include Okinawa.

Kuwait – The data for crude oil production include 50 per cent of the output of the Neutral Zone.

Martinique – Data after 2010 are included in France.

Mayotte – Data after 2010 are included in France.

Netherlands – Data exclude Suriname and the Netherlands Antilles (former).

Netherlands Antilles (former) – The country, comprising Bonaire, Curaçao, Saba, Sint Eustatius and Sint Marteen (Dutch part), was dissolved on 10 October 2010. For the purposes of this yearbook, data up to 2011 refer to the former territory of the Netherlands Antilles as it was known prior to 10 October 2010.

Pacific Islands – Until 1991, Trust Territory comprising Federated States of Micronesia, Marshall Islands, Northern Mariana Islands and Palau.

Portugal – Data include the Azores and Madeira.

Republic of Moldova – Data exclude Transnistria and the municipality of Bender.

Réunion – Data after 2010 are included in France.

Saudi Arabia – Data for crude oil production include 50 per cent of the output of the Neutral Zone.

Serbia – Data exclude Kosovo, which is shown separately.

Serbia and Montenegro – Data exclude Kosovo from 2000 onwards. As a former country/area, it appears in this edition only in Table 1.

Sint Maarten (Dutch part) – Data prior to 2012 are included in Netherlands Antilles (former).

South Sudan – Data prior to 2012 are included in Sudan (former).

Spain – Data include the Canary Islands.

Sudan – Data prior to 2012 are included in Sudan (former).

Sudan (former) – South Sudan became an independent state on 9 July 2011. This country represents the whole territory of Sudan as it was on 1 January 2011 for data up to and including 2011.

Switzerland – Data include Liechtenstein for oil statistics.

Ukraine – The Government of Ukraine has informed the United Nations that it is not in a position to provide statistical data concerning the Autonomous Republic of Crimea and the city of Sevastopol.

Union of Soviet Socialist Republics – Referred to as USSR, comprised up to 1990 Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania,

Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

United Kingdom – Shipments of coal and oil to Jersey, Guernsey and the Isle of Man from the United Kingdom are not classed as exports. Supplies of coal and oil to these islands are, therefore, included as part of UK supply. Exports of natural gas to the Isle of Man are included with the exports to Ireland.

United States – Includes the 50 states and the District of Columbia. Oil statistics as well as coal trade statistics also include Puerto Rico, Guam and the U.S. Virgin Islands.

Yemen – On 22 May 1990 **Democratic Yemen** and **Yemen Arab Republic** merged to form a single State. Since that date they have been represented as one Member with the name 'Yemen'. Data for 1990 are shown separately for the former states.

Yugoslavia – Data until 1991 refer to the former Socialist Federal Republic of Yugoslavia, namely Bosnia and Herzegovina, Croatia, North Macedonia, Montenegro, Slovenia and Serbia (including Kosovo).