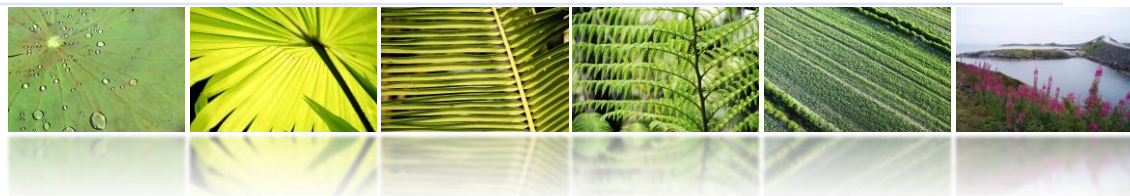




United Nations
Statistics Division

UNSD Energy statistics



Agnieszka KOSCIELNIAK
Statistician, Energy Statistics Section

Energy Balance Workshop
Beirut, Lebanon, 12 December 2018

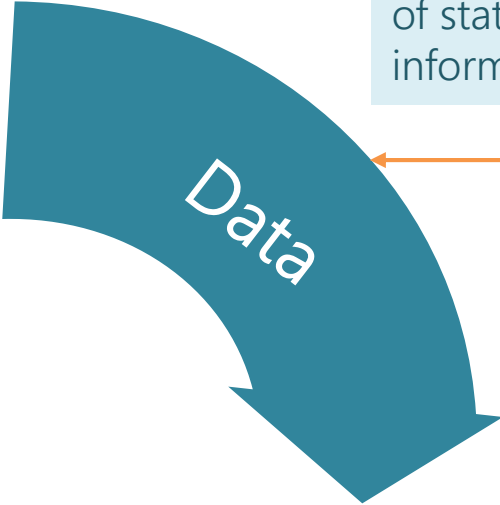
United Nations Statistics Division –

Functions

Coordination of international statistical programmes and activities



Collection, processing and dissemination of statistical information



Technical cooperation programme



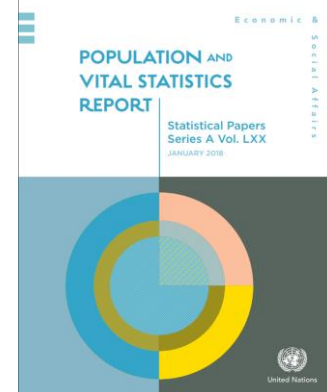
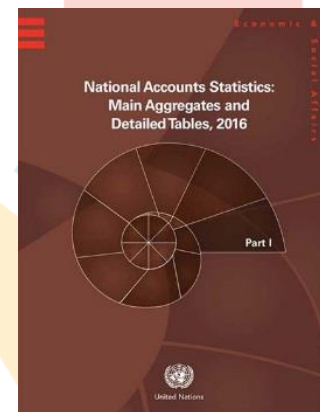
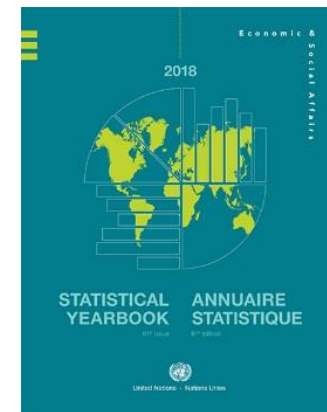
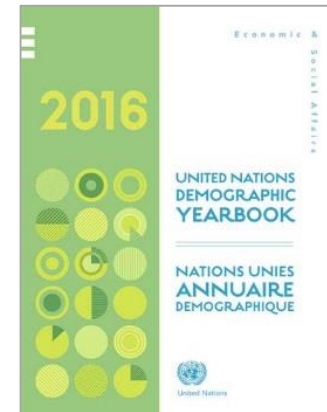
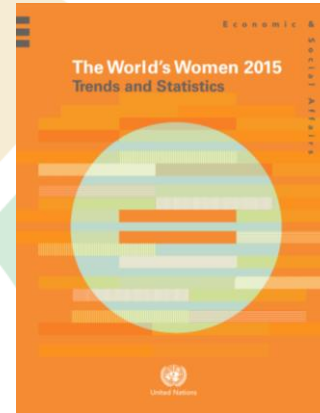
Standardization of statistical methods, classifications and definitions



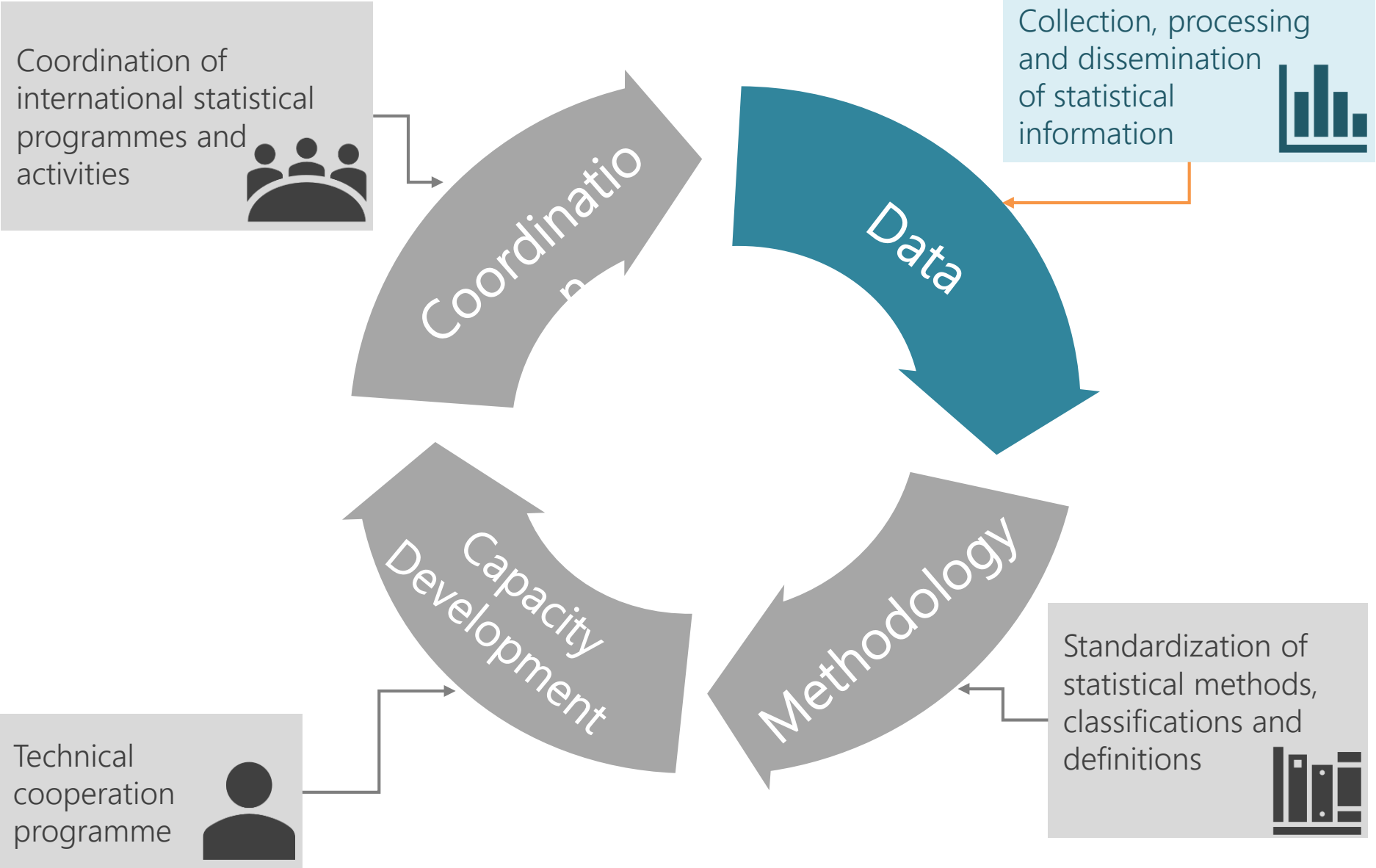
UNSD other key publications and database

Main topics:

- Economic Statistics
- Demographic and Social Statistics
- Environmental Statistics
- Geospatial Information



Energy Statistics - Data



Coordination of international statistical programmes and activities



Collection, processing and dissemination of statistical information



Data

Capacity Development

Technical cooperation programme



Standardization of statistical methods, classifications and definitions



Energy Statistics short history

1946: UN Statistical Commission established (UNSC)

1950s: Fundamental work: among others: Industrial Statistics, Migration Statistics,
1952: World Energy Supplies in Selected Years, 1929-1950 published

2005 UNSC: need for developing energy statistics as part of official statistics
2006: Oslo Group established
2006: Intersecretariat Working Group on Energy Statistics convened

1950

2018

1950: UN Statistical Office (UNSO, now UNSD) instituted as the central statistical unit within the UN Secretariat

1970s: Energy statistics separated from Economic statistics

1976 UNSC agreed on the use of energy balances as the key instrument of energy statistics. UNSC recommended preparation of SIEC.

2011: "International Recommendations for Energy Statistics" (IRES)

Energy Statistics Database

Annual energy data collected from 230 countries and areas:

- 267 countries/areas if historical data are included
- Available since 1950

Coverage:

- 72 energy products
- 197 flows



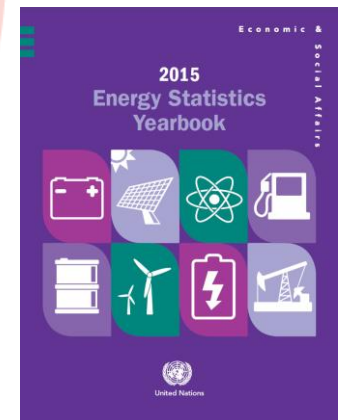
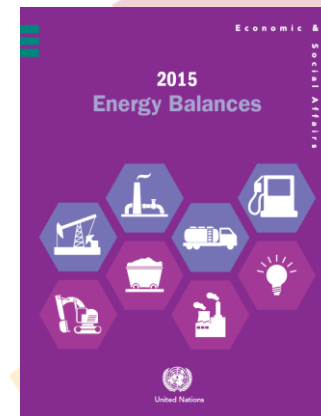
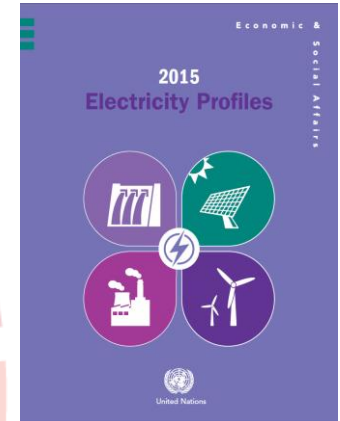
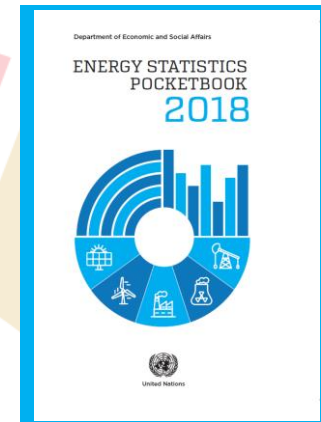
Energy Statistics publications and statistics

Main publications:

- Energy Statistics Pocketbook
- Energy Statistics Yearbook
- Energy Balances
- Electricity Profiles
- Statistics Yearbook
- Monthly Bulletin of Statistics (MBS)

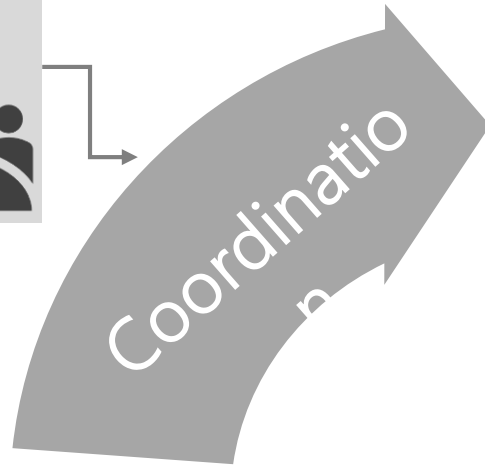
Datasets available via:

- UN data portal, MBS portal
- JODI database
- SDG7 Tracking

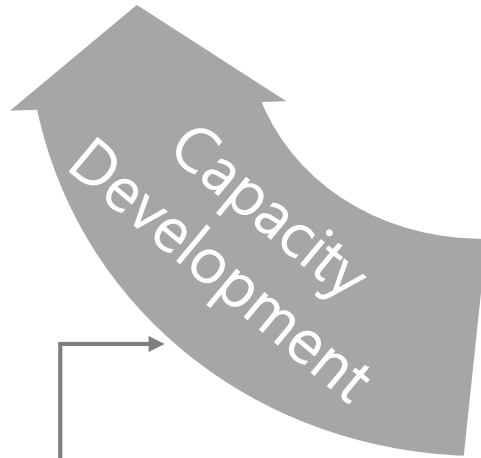
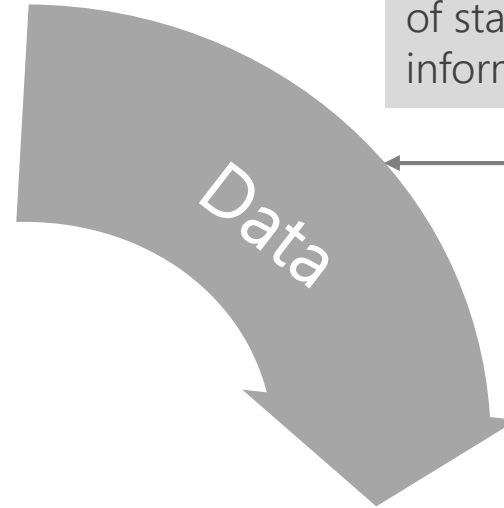


Energy Statistics methodological work

Coordination of international statistical programmes and activities



Collection, processing and dissemination of statistical information



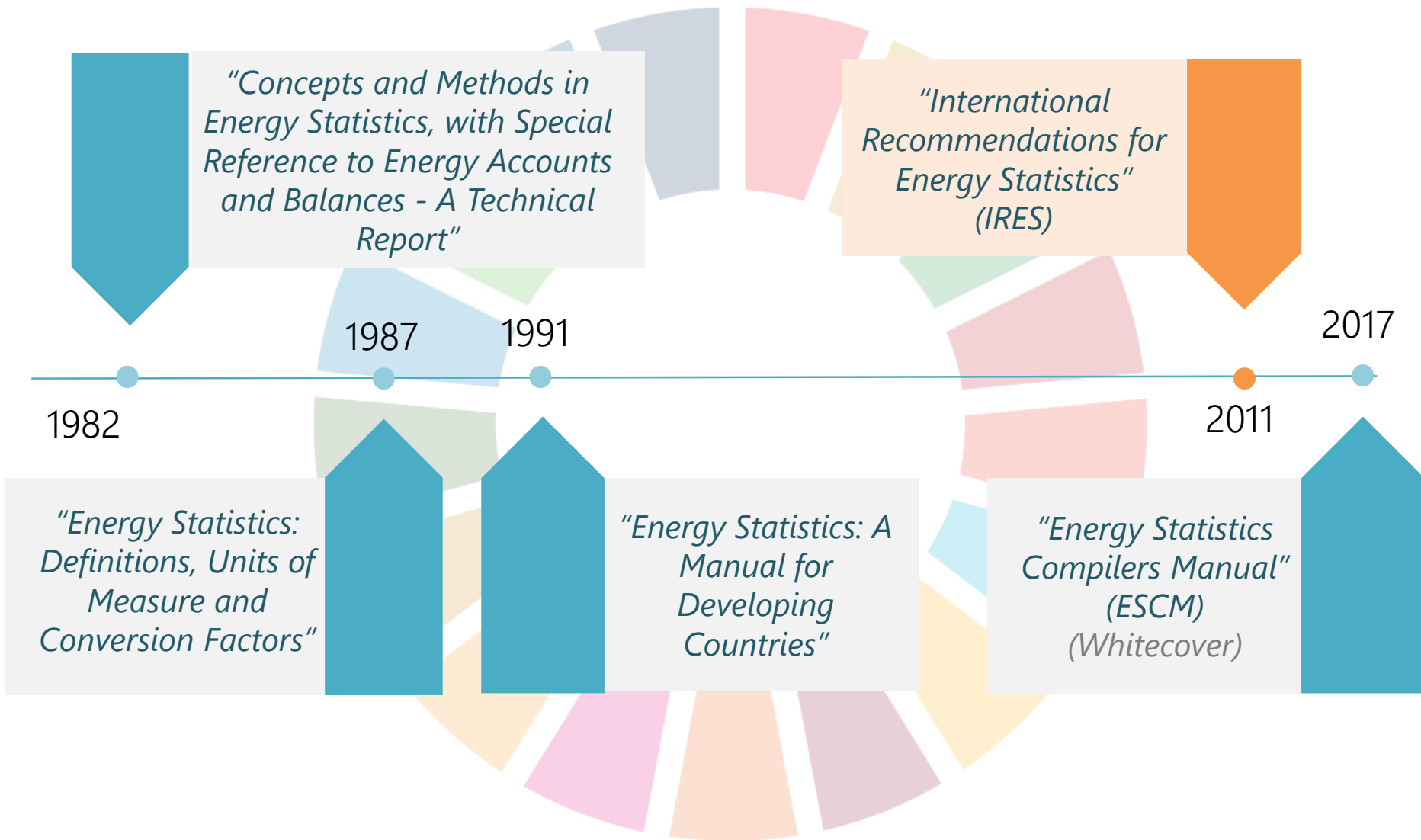
Technical cooperation programme



Standardization of statistical methods, classifications and definitions

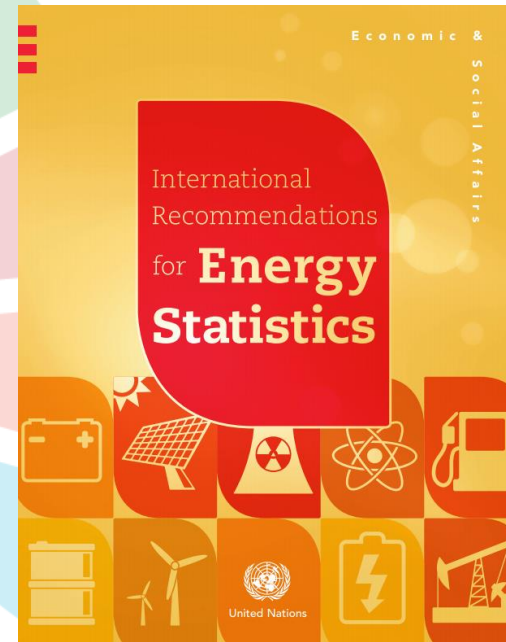


Energy Statistics methodological work



IRES – International Recommendations

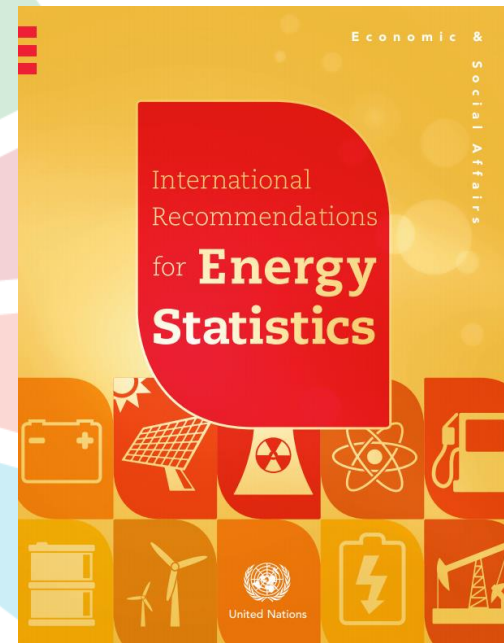
- Adopted by United Nations Statistical Commission in February 2011.
- Prepared by UNSD in close cooperation with the Oslo Group on Energy Statistics and the InterSecretariat Working Group on Energy Statistics.
- Available in English, in Arabic (ESCWA translation) and in Spanish (non official translation).
- Other translation pending (French, Russian, Chinese...).



IRES – International Recommendations

IRES improves comparability across products, flows and countries:

- Countries measure the same thing, reducing systematic errors
- Countries publish data in similar formats, increasing transparency
- Data for different products are compiled the same way, meaning product comparisons/balances are possible
- Data users understand what the statistics should represent

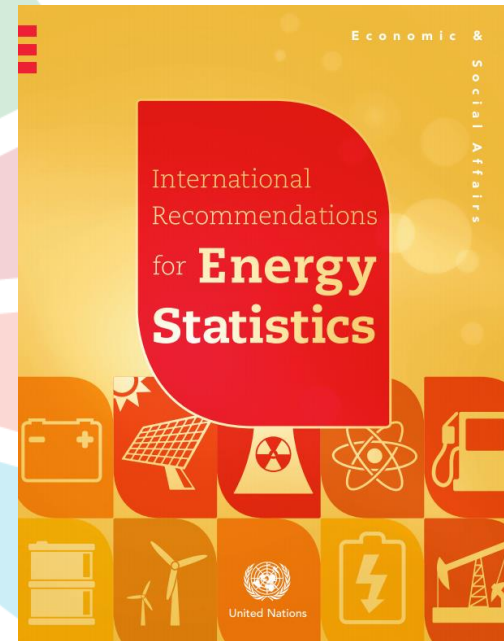


IRES – Energy products

2.9 “Energy products” refers to products exclusively or mainly used as a source of energy. Biomass and waste included only when used for energy purposes

➤ Practically:

- Wood, or ethanol **excluded** when not used as an energy product.
- Lubricants (fossil non-energy products) **included** (allowing refinery balance checks)



IRES – Scope of Energy Statistics

IRES 2.18: it's important that data on the production of energy outside energy industries is also collected and included in total energy production.

- Practically, need to be **accounted for**:
 - fuelwood collected and used non-commercially;
 - by-products used by industries for energy (e.g., bagasse, black liquor);
 - output from small teapot refineries

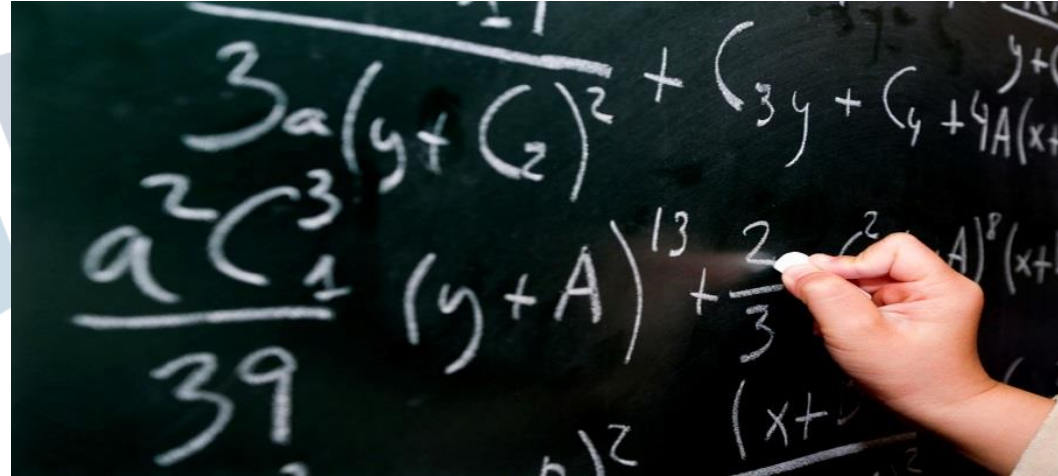


IRES – Renewables and non-renewables

	Primary products	Secondary products
Non-renewables	<ul style="list-style-type: none"> - Hard coal, Brown coal - Peat - Oil shale - Natural gas - Conventional crude oil - Natural gas liquids (NGL) - Additives and oxygenates - Industrial waste - Municipal waste (partially¹) - Nuclear Heat - Heat from chemical processes 	<ul style="list-style-type: none"> - Coal products - Peat products - Refinery feedstocks - Oil products - Electricity and heat from combusted fuels of fossil origin - Electricity derived from heat from chemical processes and nuclear heat - Any other product derived from primary/secondary non-renewable products
Renewables	<ul style="list-style-type: none"> - Biofuels (except charcoal) - Municipal waste (partially¹) - Heat from renewable sources², except from combusted biofuels - Electricity from renewable sources², except from geothermal, solar thermal or combusted biofuels 	<ul style="list-style-type: none"> - Charcoal - Electricity and heat from combusted biofuels - Electricity from geothermal and solar thermal - Any other product derived from primary/secondary renewable products

IRES and ESCM

IRES is about definitions of flows/products:
THEORETICAL



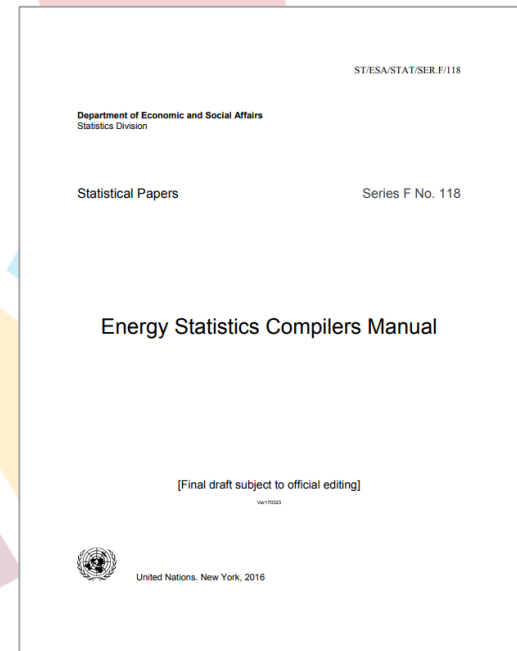
ESCM is about practical guidance and country examples:
PRACTICAL

Energy Statistics Compilers Manual (ESCM)

After the adoption of IRES, UNSD started the preparation of the ESCM, which:

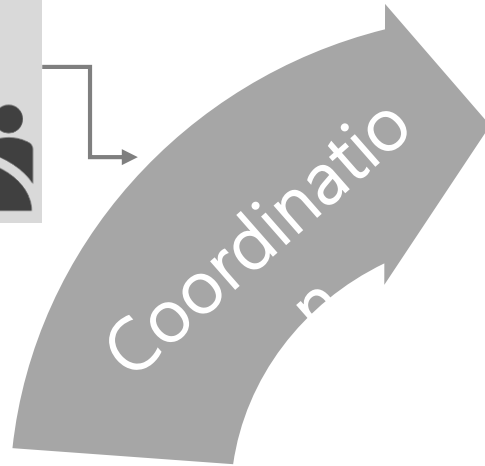
- contain further and more detailed explanations of the recommendations,
- provide practical guidance for compilers of energy statistics, balances and accounts,
- contains many country practices.

The ESCM has been prepared by UNSD in close collaboration with the Oslo Group on Energy Statistics

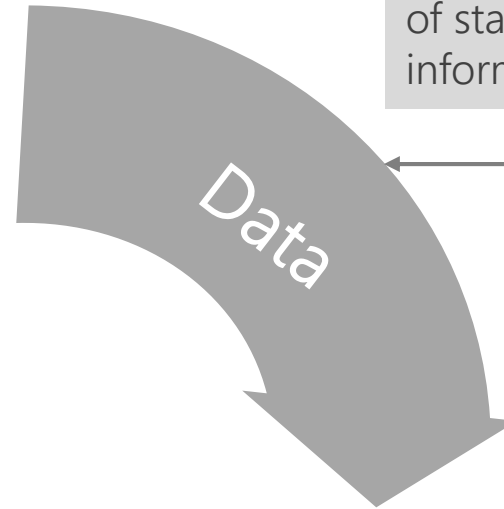


Energy Statistics – Capacity Development

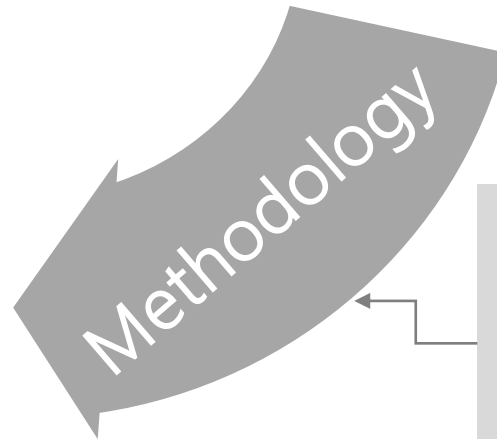
Coordination of international statistical programmes and activities



Collection, processing and dissemination of statistical information



Standardization of statistical methods, classifications and definitions



Technical cooperation programme



Energy Statistics workshops

International Workshop on Energy Statistics
Baku, Azerbaijan

Training Workshop on Environment and Energy Statistics for Arab Countries
Amman, Jordan

International Workshop on Energy Statistics
Beijing, China

Regional Workshop on Energy and Environment Indicators for Latin America
Guatemala City, Guatemala

2011

Sep 2012

Mar 2014

Nov 2017

2019

Sep 2011

Sep 2013

May 2016

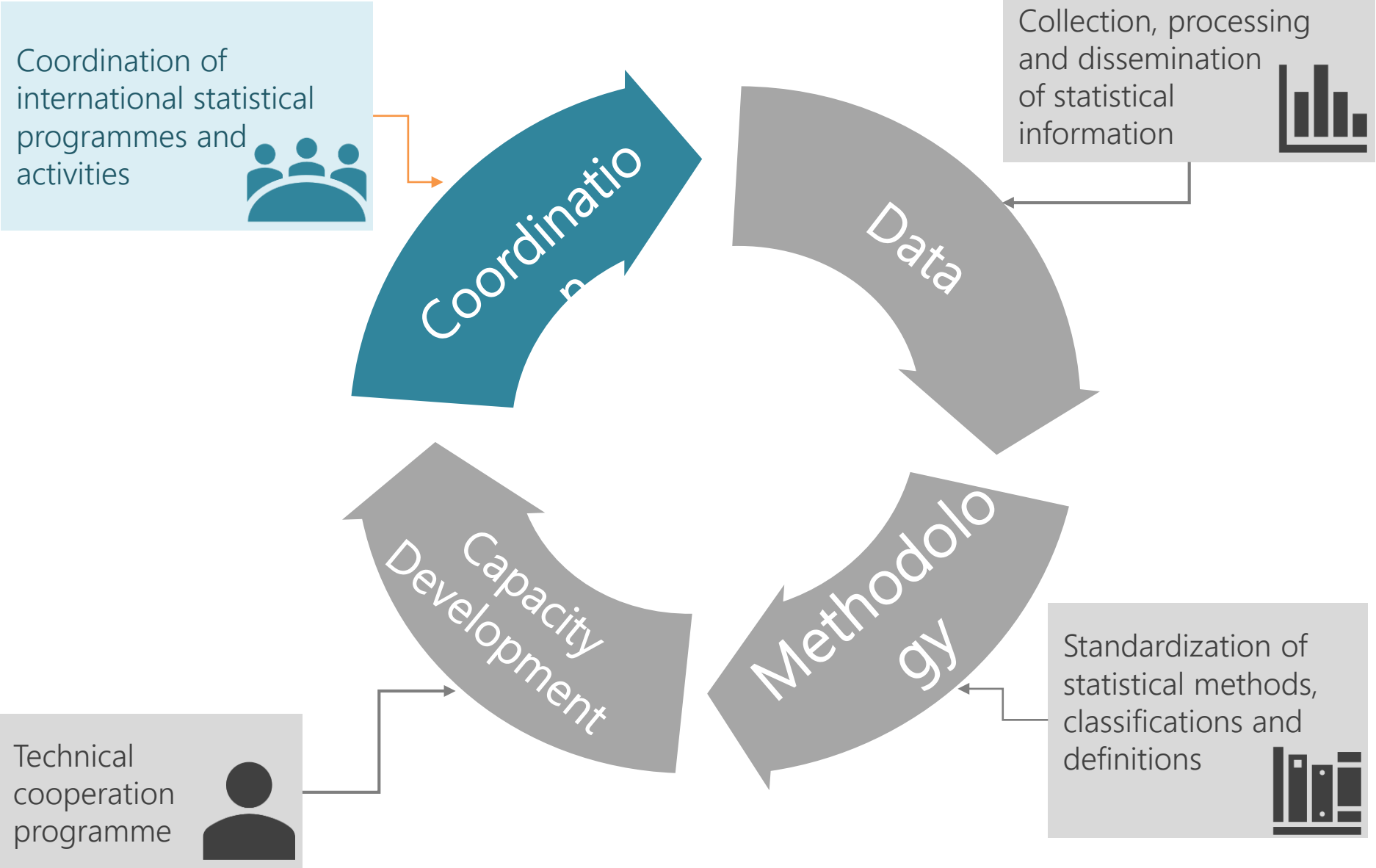
Jan 2018

International Workshop on Energy Statistics
Beijing, China

Training for Trainers on Energy Statistics and Balance
Muscat, Oman

Workshop on Energy Statistics for ASEAN Countries
Kuala Lumpur, Malaysia

Energy Statistics – Coordination



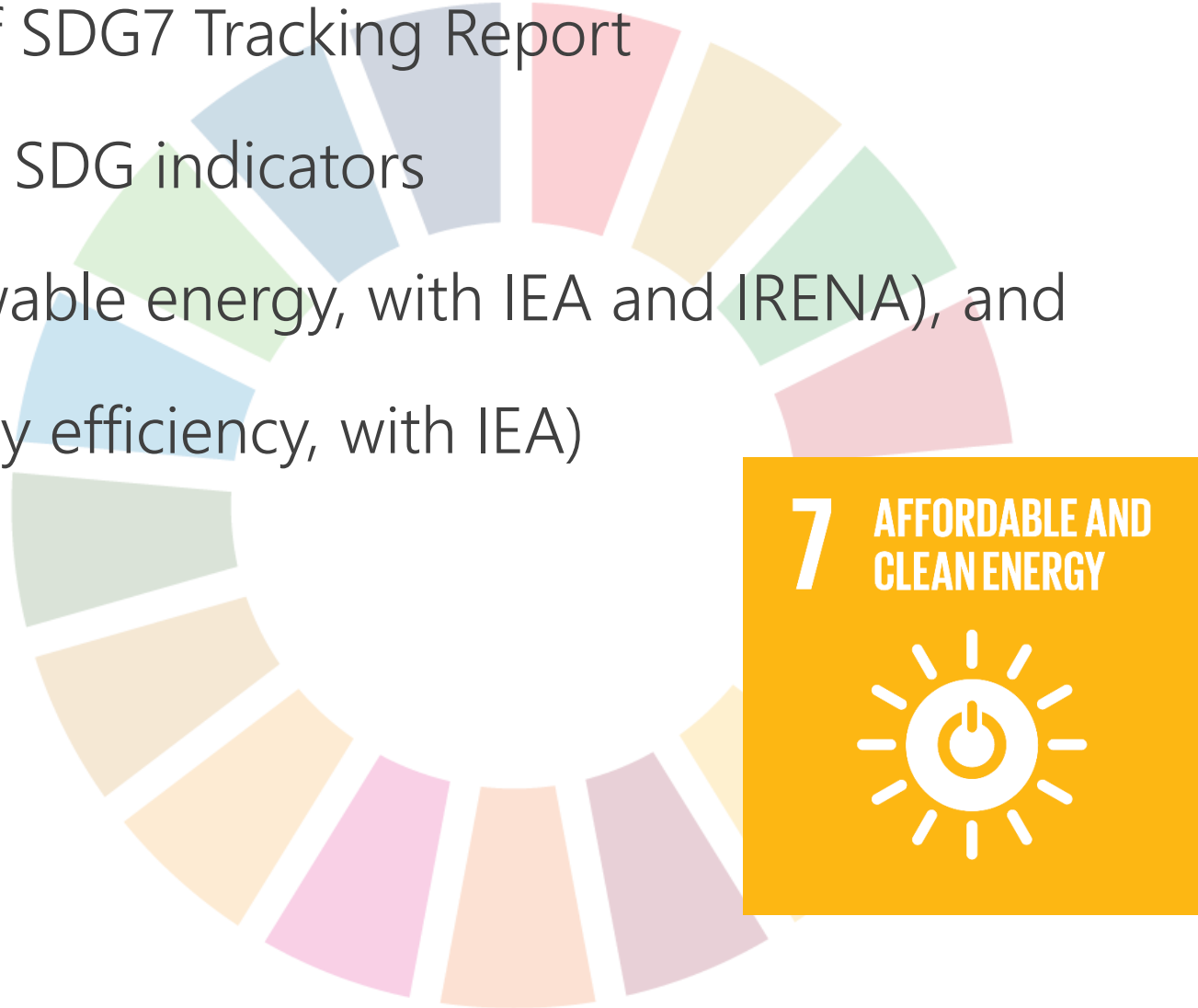
International cooperation/coordination:

SDG7

Co-author of SDG7 Tracking Report

Custodian of SDG indicators

- 7.2.1 (renewable energy, with IEA and IRENA), and
- 7.3.1 (energy efficiency, with IEA)



International cooperation/coordination: JODI



Supporting Energy Data Transparency

Better Data
Better Decisions

www.jodidata.org



SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD

<http://un.org>

<http://unstats.un.org/unsd>

energy_stat@un.org