# Monitoring the fossil fuel subsidies indicator SDG 12.c.1

# Egypt case study - mission report

# 1. Background

The 2030 Agenda for Sustainable Development sets out 17 Sustainable Development Goals (SDGs) and 169 targets to be achieved by 2030. Countries' progress on delivering the SDGs will be measured and reported against 232 SDG indicators. UN Environment is the custodian of SDG 12.c.1 which is: Amount of fossil-fuel subsidies per unit of GDP (production and consumption), and as a proportion of total national expenditure on fossil fuels.

As the custodian of this indicator, UN Environment is responsible for developing a global methodology for measuring fossil fuels subsidies. The International Institute for Sustainable Development, with support from the OECD, is currently developing an "Options Paper" that outlines the proposed methodology for the monitoring of SDG Indicator 12.c.1. This paper will be reviewed by a technical expert group of several governments and organizations that are involved in the monitoring of fossil fuel subsidies, before being submitted to the Inter-Agency Expert Group on the SDG Indicators (IAEG-SDG) for approval.

To inform the Options Paper, three case studies were conducted in India (Sept.), Zambia (Nov.), and Egypt (Dec. 2017). These country case studies serve to build knowledge on the current national practices of monitoring fossil fuel subsidies. The following questions guide the country case studies:

- How does the country currently monitor fossil fuel subsidies and what data are available?
- How are the subsidies calculated?
- Which agencies monitor fossil fuel subsidies?
- Which types of subsidies should be included in the SDG monitoring?

## Timeline

| Presentation of outline of options paper and first case study at meeting of the technical expert group in Rome  | 29 September 2017               |
|---|---------------------------------|
| Three case study missions to India, Zambia and Egypt  | SeptDec. 2017                   |
| Review of the draft Options Paper (methodology) by technical expert group   | End-January to<br>February 2018 |
| Teleconference of the technical expert group  | March 2018 (TBC)                |
| Revised draft methodology circulated for review to the Inter-Agency<br>and Expert Group on the Sustainable Development Goal Indicators<br>(IAEG-SDG) and a wider group of countries | March-April 2018 (TBC)          |

# 2. How will the information from the case studies be used?

This mission report produced by the consultants (Anna Zinecker, IISD; Dr. Mohamed Salah Elsobki, University of Cairo) will be submitted to UN Environment and serves as a background document to inform the development of the Options Paper. The mission report will not be published.

The lessons learned with regards to the practice of monitoring fossil fuel subsidies identified in the three countries will be integrated into the Options Paper. No information on specific subsidies or subsidy amounts will be included in the Options Paper.

# 3. Lessons learned

The Government of Egypt is regularly monitoring subsidies to the energy sector and is including this information in publicly available documents.

Several institutions are involved in the monitoring of data with relevance for fossil fuel subsidies. These include the Ministry of Finance, the Ministry of Petroleum, the Ministry of Electricity and Renewable Energies, and the state-owned companies in the energy sector. The data is collected and reported by the Statistical Agency (CAPMAS).

The subsidies reported by the Government of Egypt are *direct budgetary transfers* to the petroleum and electricity sectors. These make up the difference between cost and revenue in these sectors, which arises from the comparatively low consumer prices set by Government.

In addition, desk research and discussions with energy experts in Egypt indicated that there might be other subsidies that are not covered by the definition of the Government of Egypt. These include *income of price support* due to the currently still regulated energy prices. There might also be subsidies that fall into the category of *government revenue foregone*, for example by selling gas at the price of domestic production to the electricity sector or tax breaks. No conclusive information could be retrieved on *risk transfers*.

No distinction is being made between producer and consumer subsidies. The distinction cannot easily be made for the subsidies reported by the Government of Egypt. External cost estimates for the impact of greenhouse gas emissions or air pollution are not included in the monitoring.

The issue of comparability was a particular concern. This pertains on the one hand to the differences of countries in terms of their natural resource situation, as well as the differences in the extent of fossil fuel subsidies that are being monitored, as some countries also include other subsidy categories like government revenue foregone or tax breaks.

## Annex I – Mission Report

#### **Country context**

Egypt is the largest oil producer in Africa outside of the Organization of the Petroleum Exporting Countries (OPEC) and the second-largest natural gas producer on the continent, behind Algeria. However, in the past years Egypt has changed from being a net exporter of energy to a net importer. In the context of a system of existing energy subsidies, the growing energy consumption places a heavy burden on the national budget. Egypt has a system of energy subsidies which offers energy products, such as petrol, gas, and electricity, at rates below the world market price.

In 2014, the Egyptian government introduced a number of measures to increase energy prices paid by businesses and households. Prices were increased for diesel, gasoline, natural gas, heavy fuel oil and electricity. The government is planning to introduce further reform packages for fossil fuel subsidies.

#### Institutional set-up

Several Government institutions are involved in the SDG process. The National Committee of the Prime Minister was designated by the Prime Minister's Decree No. 1410 (15 June, 2017) to follow up the implementation of sustainable development goals 2030. It involves several ministries<sup>1</sup>. The Ministry of Planning, Follow-up and Administrative Reform was designated as the Rapporteur of the Committee, and has a special role in overall coordination of implementation plans for the 2030 Agenda.

The Central Agency for Public Mobilisation and Statistics (CAPMAS) is in charge of publishing statistical information and is collecting the data for the SDG reporting from the relevant sectorial institutions. CAPMAS also represents Egypt as a member in the Inter-Agency Expert Group on the SDG Indicators (IAEG-SDGs).

<sup>&</sup>lt;sup>1</sup> Minister of Social Solidarity; Minister of Environment; Minister of Investment and International Cooperation; Minister of Local Development; Minister of Education and Technical Education; Minister of Higher Education and Scientific Research; Minister of Planning, Follow-up and Administrative Reform (Shall be the Rapporteur of the Committee); President of the National Council for Women; President of the National Council for Motherhood and Childhood; Representatives of the following ministries and entities: Ministry of Foreign Affairs - Ministry of Housing, Utilities and Urban Communities - Ministry of Health and Population - Ministry of Finance - Central Auditing Organization - Central Agency for Public Mobilization and Statistics - National Council for Disability Affairs - Information and Decision Support Center

## Institutions involved in data collection of fossil fuel subsidies

Data with relevance for the monitoring of fossil fuel subsidies is generated by the Ministry of Finance, as well as the Ministries and state-owned enterprises in the petroleum and electricity sector. The data is reported to CAPMAS for statistical reporting. The roles of the individual institutions are the following:

<u>CAPMAS</u>, as the statistical agency of Egypt, is responsible for the national reporting of fossil fuel subsidies. CAPMAS receives data from other Government institutions.

<u>The Ministry of Finance</u> is responsible for the fiscal implementation of fossil fuel subsidies (direct transfers) and as such reports on all subsidies in the National Budget. It also holds data on tax revenues.

<u>The Ministry of Petroleum</u> holds data on the subsidies to the petroleum sector. In addition, the Egyptian General Petroleum Corporation (EGPC) holds data on its business transactions that involve the complete value chain from supply (domestic and imports) to distribution to end-users.

<u>The Ministry of Electricity</u> is in charge of monitoring subsidies in the electricity sector. In addition, the Egyptian Electricity Holding Company records data on its transactions.

<u>The Egyptian Electric Utility and Consumer Protection Regulatory Agency</u> (EgyptERA) calculates the cost of electricity per energy unit (Kwh), including the cost of generation, transmission and distribution, including the capacity charge, and prepares the tariff scenario to be approved by the Cabinet.

The <u>Egyptian Gas Regulatory Agency</u> monitors the cost build-up for the gas sector in its mandate as regulator.

Sub-national entities have not been found to be involved in the provision or monitoring of energy subsidies due to the centralised structure of the Egyptian energy system.

The total capacity of staff involved in the monitoring of fossil fuel subsidies could not be assessed. The capacity seems to be sufficient to ensure the current domestic monitoring needs.

International bodies like the World Bank and the International Monetary Fund are conducting research on the topic of fossil fuel subsidies in Egypt.

# Data on fossil fuel subsidies

The Ministry of Finance is reporting <u>direct budgetary transfers to the petroleum and</u> <u>electricity sectors</u> as energy subsidies. As energy prices set by Government cannot recover the cost of production, these subsidies make up the difference between cost and revenue in these sectors. These subsidies are being regularly monitored and published in the annual budget [LINK]. The data is available broken down by type of fuel.

In addition, several publicly available documents contain information on fossil fuel subsidies:

- Financial statement in Arabic with detailed data on subsidies: <u>http://www.mof.gov.eg/MOFGallerySource/Arabic/budget2014-</u>2015/Financial\_statement14-15.pdf
- Ministry of Finance also publishes information on fiscal expenditure in English <u>http://www.mof.gov.eg/English/publications/MOF\_Publications/Pages/TheFinancialMonthly-April2017.aspx</u>
- World Bank reports on subsidies in the electricity sector in their loan operations: http://documents.worldbank.org/curated/en/630471468186542188/pdf/100978-PGD-P157704-R2015-0233-1-Box393255B-OUO-9.pdf
- CAPMAS reports on the share of natural gas and petroleum products as percentage of all subsidies: <u>http://www.capmas.gov.eg/Pages/IndicatorsPage.aspx?page\_id=6153&ind\_id=1</u> 145
- Reporting on energy subsidies also in latest IMF reports: <u>https://www.imf.org/en/Publications/CR/Issues/2017/01/18/Arab-Republic-of-Egypt-Request-for-Extended-Arrangement-Under-the-Extended-Fund-Facility-44534</u>

| Data   | Monitored<br>(yes/no) | Agency in charge<br>of data collection |
|--|-----------------------|--|
| Annual financial accounts  | Yes                   |  |
| Government budget  | Yes                   |  |
| SOE accounts   | Yes                   |  |
| Volumes and prices of fossil fuels                                       | Yes                   |  |
| imported, exported and consumed  |                       |  |
| Volumes and prices of electricity  | Yes                   |  |
| imported, exported and consumed  |                       |  |
| Greenhouse gas emissions from fossil                                     | Yes                   |  |
| fuel combustion  |                       |  |
| Tax expenditure  | Yes                   |  |
| Government loans and other financial instruments relating to fossil fuel | Yes                   |  |
| industries   |                       |  |

Data on total national expenditure on fossil fuels is available.

## Methods used for calculating subsidies

The subsidies reported by the government, i.e. the amount to be transferred as part of the State Budget to the petroleum, gas and electricity sectors, are calculated using the weighted average cost method, taking into account the cost of production and operations of the state-owned companies in the petroleum, gas and electricity sectors. For the electricity sector, it should be noted that this calculation is based on the domestic price for gas and HFO. Subsidies are reported with their nominal values in Egyptian Pounds.

Price-gap calculations of the economic cost of supplying fuels below market prices seem to be used by some government institutions as an analytical tool for internal purposes. This is not part of the process of the regular monitoring process of subsidies. The price benchmarks that should be used for comparison could therefore not be established. Price-gap approaches are being conducted by international organisations like the IEA, the IMF and the World Bank.

No full inventory of fossil fuel subsidies has been produced for Egypt.

#### Scope of subsidies reported

<u>Fuel types</u>: The energy subsidies reported by the Government of Egypt cover petroleum products, natural gas and electricity. Coal is not used in Egypt. The data is broken down by type of fuel that is diesel oil, HFO, butane, gasoline and electricity. There is no distinction made between energy subsidies from fossil fuels, and from other sources, so there is no clear information retrieved as to whether subsidies to electricity produced from fossil fuels would be considered a fossil fuel subsidy by the Government of Egypt. Calculations of fossil fuel subsidies by other organisations (World Bank, IMF) include subsidies to the electricity sector.

<u>Production and consumption</u>: No distinction is made between producer and consumer subsidies. The distinction cannot easily be made for the subsidies reported by the Government of Egypt. While these subsidies are transfers to EGPC and EEHC and therefore producers, they result from the regulated low prices to consumers. Some other support measures that are not reported by the Government could be more easily classified as one or the other. For example, tax breaks and potential credit support to companies involved in the extraction of fossil fuels as producer subsidies, and regulated prices, VAT exemptions on the electricity and gas consumption as consumer subsidies.

<u>Subsidy categories</u>: The Government of Egypt reports only on budgetary transfers to the petroleum, gas and electricity sector (*direct transfers*). In addition, desk research and discussions with energy experts in Egypt indicated that there might be additional subsidies outside of the Government definition of energy subsidies (see table below). The Government is aware of alternative definitions and calculations of subsidies, especially estimates of *income or price support* based on the economic cost (opportunity cost) of fossil fuel resources, but this is not covered by the current definition used. There is some interest in monitoring *government revenue foregone* for all sectors of the economy in the future, but this is not currently being done. Conclusive information on the category of *transfer of risk*, for example through government guarantees, could

not be retrieved.

It should be noted that there is potential double-counting between the categories of direct transfers and income and price support (regulated prices), as the direct transfers are partly covering the shortfalls in revenue due to the low consumer prices.

External cost of fossil fuel consumption and production is not included in the monitoring of fossil fuels.

| Subsidy category               | Subsidies with relevance for<br>fossil fuel monitored by the<br>Government of Egypt  | Other potential support measures<br>that are not covered by the<br>Government definition of a<br>subsidy  |
|--------------------------------|--|---|
| Direct transfer of funds       | <ul> <li>Direct transfers to the electricity sector to make up the difference between cost and revenue of operations</li> <li>Direct transfers to the petroleum sector to make up difference between cost and revenue of operations</li> </ul> |   |
| Income or price support        |  | <ul> <li>Regulated prices for petroleum<br/>products and electricity (set below<br/>economic cost) to consumers</li> </ul>  |
| Government<br>revenue foregone |  | <ul> <li>VAT exemption on the consumption<br/>of electricity and gas</li> <li>Natural gas from domestic<br/>production is made available at<br/>cost-recovery prices to the electricity<br/>sector</li> <li>Tax breaks for companies involved<br/>in the extraction of oil and gas</li> </ul> |
| Transfer of risk               |  | <ul> <li>Potentially support measures<br/>through government sovereign<br/>bonds and guarantees for fossil fuel<br/>extraction, but not enough<br/>information available to assess this<br/>question.</li> </ul>  |

# Fossil fuel subsidy reform

It could not conclusively established whether institutions were in favour of including information on fossil fuel subsidy reform as a sub-indicator into the SDG monitoring.

| Name                        | Institution   |  |
|-----------------------------|---|--|
| Ghada Abdala                | Under secretary for President Office, CAPMAS  |  |
| Hoda Mostafa Attia          | General Director, International Cooperation Department<br>CAPMAS  |  |
| Dr. Yosr Ibrahim            | Head of Sustainable Development Unit<br>CAPMAS  |  |
| Omar Mokhtar Abbas          | President Advisor for International Cooperation<br>CAPMAS   |  |
| Dr. Khaled Al Sayed         |   |  |
| Dr. Amenhoteb Amin Mikhail  | General Manager, CAPMAS   |  |
|                             | Energy Coordinator of Egypt in MEDSTAT programme  |  |
| <mark>Mr</mark>             | CAPMAS  |  |
| Amr El-Garhy                | Minister of Finance   |  |
| Ahmed Kouchouk              | Vice Minister of Finance for Fiscal Policies and<br>Institutional Reform  |  |
| Sherine Elsharkawy          | Ministry of Finance   |  |
| Eng. Sabah Mohamed Mashaly  | First Under-Secretary for Developing Performance and<br>Political Communication<br>Ministry of Electricity and Renewable Energy |  |
| Eng. Amr Ismail Mahdy       | Under-Secretary of State for Development<br>Ministry of Electricity and Renewable Energy  |  |
| Eng. Ghada Mohamed Boghdady | Head of Strategic Planning Sector<br>Egyptian Electricity Holding Company   |  |
| Hatem Waheed                | Executive Chairman<br>Egyptian Electric Utility and Consumer Protection<br>Agency (EgyptERA)                                    |  |