

## **4. Climate change – fossil subsidies**

### **Development of statistics on fossil fuel transactions from the SEEA**

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#### **1.1 Key issue**

The SEEA community can provide data for the Agenda 2030 by identifying the fossil fuel related transactions in the national accounts. The data used for the current global assessments is today largely being collected by energy companies (for the IEA) and by ministries (to OECD). The statistical system could provide statistics in a coherent way from the national accounts. For countries with a developed SEEA, the provision of statistics on emissions and energy use by industries can increase the quality of data and the possibilities for analysis.

#### **1.2 Question to the London group participants**

Would you agree to search your data systems for these transactions to make some pilot analyses? Can you see that there would be good practices that we can follow from your country?

#### **1.3 Output**

To provide statistics on fossil fuel transactions that show how the SEEA design can extract integrated economic and environmentally relevant data that can help the Agenda 2030 follow up.

### **2 Fossil fuel subsidies in the Agenda 2030**

The agenda 2030 follow up of the sustainable development targets includes an indicator on fossil fuel subsidies in the goal number 12 on Sustainable Production and Consumption (the indicator to follow up target number 12c).

There are data and methods available to make such indicators and UN Environment is the custodian organization for this indicator, which means they will collect and interpret the global numbers for the agenda 2030. General agreed country statistics for this indicator are not yet in place, even if there are global estimates available.



Sweden is part of a group that is discussing how to achieve this indicator with members from international organizations such as UNEP, IEA, OECD and IMF that are active in assessing fossil fuel subsidies and countries involved in Agenda 2030 follow up. The group has met via teleconference in the spring of 2017 and in person in Rome in September 2017. In the Rome meeting a suggested methodology was presented and discussed.

A methodological note is being prepared. From the discussions, it seems that the statistics of direct and indirect fossil fuel subsidies could use national data and become statistics.

If the statistical system in the countries are not on board in the development work, the data may still be available through the work on IEA, OECD, World Bank and IMF. However, if the statistical system can take this challenge, the comparability and analytical possibilities are likely to be higher. If the statistics is produced in the SEEA, the data could be shown by industry and compared with energy use and carbon dioxide emissions.

There are in principle three types of transactions in the different global estimates: direct transactions, indirect transaction and the value of the externalities from the emissions (OECD, 2015).

The data on direct subsidies paid from the state is collected in surveys of the International Energy Agency to around 40 countries that give direct transactions to the producers or consumers. The IEA's latest estimates indicate that fossil-fuel consumption subsidies worldwide amounted to \$493 billion in 2014, \$39 billion down on the previous year, in part due to the drop in international energy prices, with subsidies to oil products representing over half of the total. Those subsidies were over four-times the value of subsidies to renewable energy. Since 2009, the IEA has provided ongoing input to the G-20 and APEC in support of their commitments to "rationalize and phase out over the medium term inefficient fossil fuel subsidies that encourage wasteful consumption" (IEA, 2017).

In 2010, IEA, World Bank, and OECD published a report on fossil fuel subsidies with an agreed methodology. For the purpose of the analyses the energy subsidies were defined as any government measure that lowers the price of production, raises the revenue of energy producers or lowers the cost of consumers (IEA, OECD, World Bank, 2010).

The indirect subsidies come in the form of tax exemptions for certain types of fuels. These numbers are calculated as a part of the OECD numbers based on country data from finance ministries.

Last but not least, the transactions that should have been paid if the polluter pay principle was upheld, are calculated as the damage cost

of the emissions and included in the numbers from IMF and World Bank studies.

### **3 Fossil fuel transactions in the SEEA**

There is a need to complement the environmental taxes and environmental subsidies that are already a part of the SEEA (Eurostat, 2015). The users are asking for an internationally harmonized set of data on fossil fuel transactions that would include more transactions than what is covered in the National Accounts (SNA) definition of subsidies. In the SEEA, we instead use the term transactions to be able to include also other relevant data from the SNA. The statistical community need a measurement definition to single out the transactions of interest.

This topic has been discussed in earlier London Group meetings. Statistics Sweden prepared a discussion paper together with Eurostat for the revision of the SEEA, discussing what transactions in the SNA could be of interest for a measure of potentially environmentally damaging subsidies (Statistics Sweden and Eurostat, 2010). The conclusion then was to test the ideas in further pilots like e.g. a EU Task Force on Environmentally related transactions.

The Task Force on Environmentally related transactions went through the state of the art and tested methods in the participating countries. The European Commission has been running surveys on state aid since 1997. Some countries collect data on environmental subsidies and similar transfers. For example, Sweden has collected data for several years on environmental transfers. Denmark has also worked on environmental subsidies and similar transfers in their environmental accounts. In the Netherlands, the statistical office has been working on subsidies and similar transfers. In Germany, the Federal Environmental Agency regularly reports on fossil fuel subsidies (UBA, 2014).

At European level, statistics related to environmental subsidies and similar transfers are part of the legislations in the area of environmental accounts and national accounts. Regulation (EU) No 691/2011 of the European Parliament and of the Council as amended by No 538/2014 on European environmental economic accounts provides a framework for the development of various modules of environmental accounts. Presently the Regulation includes the following modules: air emissions accounts, environmentally related taxes by economic activity, economy-wide material flow accounts, environmental protection expenditure accounts, environmental goods and services sector accounts and physical energy flow accounts.

Regulation (EU) No 691/2011 makes references in article 4 (pilot studies) and article 10 (report and review) to the development of new modules, and among other work areas, to environmentally related transfers (subsidies and similar transfers) as a future area for inclusion. The work in the Eurostat Task Force made progress on the 'environmentally motivated' transactions but still need to find a common method for the potentially environmentally damaging ones. Thus, the topic is part of the SEEA research agenda in order to describe and define how to include these transactions as part of the system and in an internationally harmonized way.

Data on fossil fuel subsidies are reported directly from the finance ministries to the OECD, but the reference points are nationally defined and this makes international comparison very difficult. In the global estimates, a price gap method is used to overcome this dilemma.

The SEEA structure makes sure there would not only be a statistics for the country but that subsidies are reported by industry and that there is a possibility to compare with energy use and emissions statistics.

The environmental accounts provide emissions by industry, so for researchers or analysts who want to apply other price references on the emissions would be able to calculate those.

It would be valuable if the statistical community could agree on some standard values (like one reference value for EU and one for the world) because then the structure of the fossil fuel transactions would be easier to follow.

#### **4 Way forward**

We suggest to create a group of experts to discuss following items (via web) during 2018. We will use the method proposed by the Expert group led by UN Environment as a starting point.

1. Discuss and test the measurement definition for the transactions of interests – subsidies, investment grants and social transfers in kind, indirect transactions: as well as some suggested reference values
2. Evaluate and adjust proposal
3. Propose an approach to the SEEA – discuss the proposal at UNEP/London group 2018/2019
4. Go through established process: SEEA Technical Committee and UNCEEA and publish on SEEA website.

## 5 References

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