Statistisk sentralbyrå
Statistics Norway

Notat

jwt, 30. september 2008

To: InterEnerStat
From: Statistics Norway/secretariat of the Oslo Group

Harmonisation of definitions

Introduction

We much welcome the InterEnerStat initiative to harmonise definitions which we recognize is an important and challenging task.

We understand that the definitions are provided by the organisations and that the aim has been to harmonise these definitions to the extent possible, and recognize the work done by Mr Simmons by putting these draft definitions up for discussion. We see this as a unique possibility for energy statistics to have a set of clear and consistent definitions. We express our hopes that the work of InterEnerStat and Mr. Simmons will lead to an agreement on definitions, and ascertain our willingness to contribute in such a way that this will be possible.

We have taken your request for comments seriously. As a first approach to comment on the definitions as provided by Mr Simmons we contacted several data providers and users of energy statistics in Norway for their comments. In the next step we had internal discussion on the different groups of commodities and debated how we should take into account the different views we received. Finally we came to some conclusions and questions that we would now like to forward to you as a response to your request for comments.

Principles for definitions – criteria for the definition of products

We completely agree with Mr. Simmons that definitions should be as simple as possible and limited to describing what the product is. With this we understand a description based on the physical and chemical properties of the products. We also agree that notes on reporting of quantities, classification of products, production and consumption processes should not be included in the definitions. We believe that by making simple definitions based on physical and chemical properties independent of classification it will be easier to come to an agreement on product definitions.

As we see it many of the products are not defined according to these principles and may need some elaboration. We have received many comments addressing the lack of consistency between the proposed definition and the criteria for the definition of products.

In energy statistics energy is traditionally classified into primary and secondary energy sources/commodities. Other classification schemes might be equally important. Energy sources and commodities can also be classified according to the state in which they are extracted, traded or consumed, gas, liquid or solid. Oil and gas are for instance in gaseous and liquid phases, while coal, coke and peat are in a solid phase (therefore solids, short for solid fossil fuels?). Recently, our awareness of climate changes and the importance of emission of carbon to the atmosphere have made us ask for more and better statistics on renewable energy. Therefore, energy sources are also classified in renewable and non-renewable energy sources. Energy sources can be renewable, fuels can not. We think that it is unfortunate to group side by side classes of energy sources and commodities like “oil and gas” on one hand and “renewables” on the other, as the word renewable belongs to a classification scheme.

We think that a more precise separation between definition and classification would clear up some confusion. To be able to classify products we need precise definitions. Hence, we would like to propose a two step approach to the continuance of the work on harmonisation of definitions. If a first step focuses on defining the commodities according to the criteria set up above it will hopefully be less difficult to agree on a second step on classification of the products in accordance with the challenges we face related to production of energy statistics.

General comments

First a question: We understand that the definitions are provided by the organisations. We would like to know if the Harmonized Commodity Description and Coding System 2007 (HS07) and Central Product Classification, Version 2 (CPC, Ver.2) have been consulted in the harmonisation process.

Tim Simmons has in his documents included a number of comments and questions. Many of his comments question whether we would like to see reporting distinctions/purposes in the definitions. Our answer to this is "no". By "breaking down" the definitions as suggested many of the other questions will fall out. One example is whether tar sand belongs to the definition of crude oil, or should be classified together with coal and coke. If tar sand has its own definition it will be an issue for the classification scheme to identify which products to be considered as crude oil.

Another example is Natural Gas Liquids (NGL). According to the Norwegian Ministry of Petroleum and Energy, we need the definitions of seven products to be able to define NGL. Natural Gas Liquids consist of methane, ethane, LPG (which again consists of propane and butanes), natural gasoline and/or field condensate. NGL is thus an aggregation of many products. This shows that the definitions must be simple enough to meet the level of aggregation needed. We would therefore like to propose to have definitions of methane, ethane, propane and butane (and other constituents of oil and gas) as simple as their chemical composition. It would make definitions of composite products much easier.

We also see that if production processes are included in definitions, we get problems with for instance LPG which is not only produced at plants, a large fraction is separated from NGL at the field in the liquefying process. Also crude oil is not consistently defined, as it is described both as oil from the reservoir but also as a stream where lighter products are mixed in.

As definitions of oil and gas products are especially important for Norway, we have included here a comment from the Norwegian Ministry of Petroleum and Energy:
"The classification of condensate is a difficult issue and varies among companies and countries. Most people seems to include the condensates in the NGL, but some define the condensate as an independent category of liquid hydrocarbons that is separate from the crudes and the NGLs.

Simmons proposal to include in the crude definition field condensate that are commingled with crude seems reasonable (we take it that commingled covers condensate that has been blended into crude oil).

However, only allowing into the NGL definition "plant" condensates might create a loophole as there are some field condensates that are produced at the gas field and are marketed separately from the gas and without being blended into any crude stream. Sleipner condensate is one example. 50 000 barrels per day of this condensate is produced at the Sleipner platform, and is transported through a 200 km long dedicated pipeline to shore where the condensate is stabilised, stored and then loaded onto ships. Snøhvit and Ormen Lange condensates are other example of these kind of field or heavy condensates. All three are very similar to the super light crudes, but in Norway they are all classified as NGLs.

Simmons has made a note to the classification of ethane, questioning whether this product belongs to the NGL. In our view the answer is yes. To better understand the sub-categories of NGL we enclose a

figure with the classification used by the Norwegian Ministry of Petroleum and Energy (the slide has a Norwegian text, but all names should be easily understood as they are basically the same in English).”

See figure on page 4 of this document

Missing definitions

While reading the documents we have noticed that a few commodities on the market where not included in the list of definitions. We were also made aware of some of these by our correspondents. We find it important that the list is as complete as possible, and would therefore list some of the missing definitions here. The list of missing definitions may not be complete.

Fuel
Raw gas (Rich gas)
Dry gas (Sales gas)
Gas Hydrates
LNG
Condensate
Heat-pumps
Osmosis
Hydrogen
Straight oils
Hot springs

Comment on energy sources

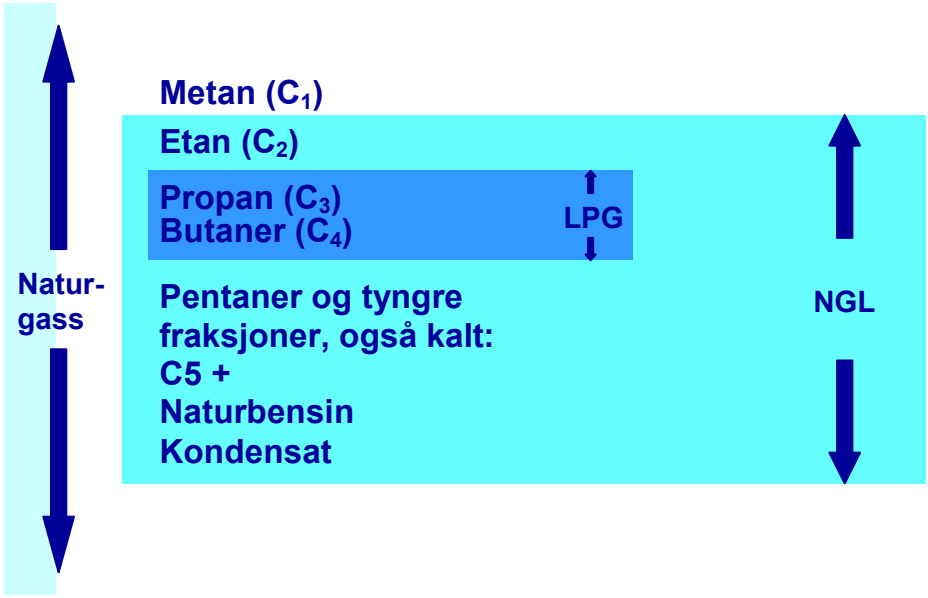
As input to the grouping of energy sources we would ask you to consider the following list of energy sources (some of which is not on your list) to avoid mixture of sources with different characteristics:

- Oil and gas
- Solid fossil
- Nuclear
- Hydrogen
- Biomass
- Waste
- Direct solar radiation
- Hydro
- Wind
- Wave
- Tides
- Osmosis
- Geothermal heat

Conclusion

In conclusion we would like to underline the importance of the work initiated by InterEnerStat, and would like to give our full support to the continuance of the work on trying to reach joint international definitions on energy sources/commodities. We are looking forward to the meeting in Paris ultimo October.

Definition of NGL



Kilde: OED

Source: Norwegian Ministry of Petroleum and Energy