

## Changes to Statistics Finland's fuel classification effective as of 1 Jan. 2010

The fuel classification is used in the Greenhouse Gas Inventory, energy surveys and emissions monitoring related to emissions trading.

Statistics Finland has updated the fuel classification. The changes include new categories of fuel, changes made to the descriptions of the categories and updates of default caloric values and carbon dioxide emission coefficients.

The following changes have been made to the classification:

- The following new categories have been added: 3234 Deinking sludge, 3238 Municipal waste (unsorted), 325 Biosludge and 497 Sulphur.
- Category 317 was supplemented by a new subcategory: *3171 Reed canary grass, 3172 Cereal crops and straw parts and 3179 Other vegetable-based fuels*. In case the biofuel classified under fuel oil is reported separately, it is reported under 322 Liquid biofuel.

Fuel-specific default emission coefficients and caloric values have been revised and updated on the basis of the Greenhouse Gas Inventory and data on emissions trading.

The emission coefficients are based on a number of different sources presented in the National Greenhouse Gas Inventory ([http://tilastokeskus.fi/tup/khkinv/nir\\_unfccc\\_2006.pdf](http://tilastokeskus.fi/tup/khkinv/nir_unfccc_2006.pdf), p. 44). The default emission coefficients of key fuels are based on the following sources:

-Natural gas: Composition of Russian natural gas; estimated annual average, Gasum Oy.

-Heavy fuel oil: Neste Oy's results from the measurement of carbon concentrations in different types of fuels and an assessment made based on them.

-Gas oil: Based on Neste Oil Oy's data on carbon concentrations the default coefficient 74.1/TJ of the IPCC is suitable for Finland.

-LPG: Calculated based on the shares of propane and butane and data on the average compositions reported by the Finnish Natural Gas Association.

-Hard coal: Statistics Finland's report on imported volumes and shares and caloric values of coal. Based on the report it has been concluded that the default value 94.6 t/TJ of the IPCC suits Finland as a time series average.

-Motor gasoline and diesel oil: Product information of Neste Oil Oy.

-Peat: A report of the Technical Research Centre of Finland from 2003

-Mixed fuels: A degree thesis commissioned by Statistics Finland from a student. The CO<sub>2</sub> coefficient of mixed fuels includes the share of fossil coal only.

-Biofuels: For the moment, default CO<sub>2</sub> emission coefficients of the IPCC have mainly been used for biofuels. In emissions trading the carbon dioxide emissions generated by bio fuels are not reported, nor are they included in Finland's total greenhouse gas emissions. Instead, they are reported separately as supplementary information.

The revision of the classification will be effective as of 1 Jan. 2010. As regards any other changes that may require the modification of greenhouse gas emission permits or revision of the conditions for which emission permits have been granted, the holders of such permits are requested to contact the Energy Market Authority six months at the latest before such changes take place.

In the classification, updated coefficients have been marked out with an asterix. Contact information [energia@stat.fi](mailto:energia@stat.fi)

### **Applications for emission permits (Energy Market Authority)**

email: [paastolupa@emvi.fi](mailto:paastolupa@emvi.fi)

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## **Consistency of Statistics Finland's fuel classification with emission monitoring in accordance with the EU Emissions Trading Scheme**

### **Caloric value of a fuel**

Installations not required by the EC monitoring guidelines to specify the caloric value of a fuel by batch may apply these default caloric values to the fuel.

### **Emission factor**

Installations allowed by the EC monitoring guidelines to apply country-specific emission coefficients may apply these default emission coefficients.

More precise instructions on emissions monitoring in accordance with the EU Emissions Trading Scheme are contained in the EC emissions monitoring guidelines (2007/589/EC) and the decree on the monitoring of carbon dioxide emissions and reporting on such emissions of the Ministry of Trade and Industry (647/2007) <http://www.emvi.fi/data.asp?articleid=1378&pgid=234> The documents in question are also available on the website of the Energy Market Authority <http://www.emvi.fi/select.asp?gid=234&pgid=234>.