ACTIVITY CLASSIFICATION

All local establishments (industries) that are occupied in the same or similar activity constitute an activity. The activity classification used in the environmental accounts is based on national accounts (Norwegian Standard Industrial Classification SN2002), which is an elaboration of the EU standard NACE Rev.1 (Nomenclature générale des Activités economiques dans les Communautés Européenes). The environmental accounts are compiled of 44 industries (plus households). All types of production, i.e. market producers, producers of own final use and other non-market producers (distinguished further on NPISHs, central government and local government), are broken down by kind of activity.

DECOUPLING

From a sustainability perspective, the aim is to change the content of the economic growth so that the environmental pressures do not increase with the same ration as, or preferably separate from, the development of GDP. Decoupling can be *relative*, which means that the economy is growing relatively more than the environmental pressure. In most cases one is concerned about the absolute change in environmental pressure. If the absolute pressure is declining, while the economy is growing, we have a situation of *absolute* decoupling.

EMISSION COMPONENTS

Emissions are measured in 1 000 tonnes, tonnes, kg, mg, CO2-equivalents, acid-equivalents or NMVOC-equivalents (ozone-precursors) depending on the emission component(s) chosen. In the environmental accounts, the following emission components are included (gases):

- GREENHOUSE GASES: Carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), PFCs (perfluorocarbons), HFCs (hydrofluorocarbons) and SF_6 (sulphur hexafluoride).
- ACIDIFYING PRECURSORS: Nitrogen oxides (NO_x), sulphur (SO_2) and ammoniac (NH_3).
- OZONE PRECURSORS: Nitrogen oxides (NO_x), NMVOC (non-methane volatile organic compounds), carbon monoxide (CO) and methane (CH_4).
- HEAVY METALS: Cadmium (Cd), lead (Pb), arsenic (As), copper (Cu), chromium (Cr) and mercury (Hg).
- OTHER COMPONENTS: Polycyclic aromatic hydro carbons (PAH-4), particles (PM_{10} and $PM_{2,5}$) and dioxins.

CO_2 EQUIVALENTS

The total emission of greenhouse gases is estimated by adding the emissions of all greenhouse gas components converted to CO_2 equivalents. The emission of greenhouse gases is weighted in relation to their heating potential with a GWP value (Global warming potential). The GWP value of a gas is defined as the accumulated influence on greenhouse effect from one tonne of emission of the gas compared to one tonne of emission of CO_2 over a given time period. The emission of greenhouse gases is weighted together to CO_2 equivalents by the GWP values. The GWP for the different gases are:

- Carbon dioxide (CO_2) *1
- Methane (CH_4) * 21
- Nitrous oxide (N_2O) * 310
- Hydrofluorocarbons (HFCs) (given in CO_2 equivalents)
- Perfluorocarbons (PFCs) (given in CO_2 equivalents)
- Sulphur hexafluoride (SF_6s) (given in CO_2 equivalents)

ACID EQUIVALENTS
The total emission of acidifying gases is estimated by adding the emissions of every gas in acid-equivalents. The emission of acidifying gases is weighted in relation to their acidifying effect. The following factors are used to convert the acidifying gases to acid equivalents (Potential Acid Equivalents):

- Nitrogen oxides (NO_x) * 0.022
- Sulphur dioxides (SO_2) * 0.031
- Ammoniac (NH_3) * 0.059

NMVOC-EQUIVALENTS
The total emission of ozone precursors is estimated by adding up the different components given in NMVOC-equivalents (unit of measurement for non-methane volatile organic compounds). The following factors are used converting it to NMVOC-equivalents:

- NMVOC (non-methane volatile organic compounds) * 1
- Nitrogen oxides (NO_x) * 1.22
- Carbon monoxides (CO) * 0.11
- Methane (CH_4) * 0.014

EMISSION INTENSITY
By emissions intensity we mean the ratio between emissions and a relevant variable.

Production volume or quantity are relevant variables for expressing production or economic activity. Using such measures as denominator allows for analysis of emissions efficiency or changes in emissions by industry. In some homogenous industries, the production can be expressed in physical units, which will vary between industries. To analyse the development over time, one can use the "output" measure of the national accounts, which in constant prices is an expression of changes in production volume across industries.

Production input is also relevant for efficiency analysis. Since emissions and energy use is closely related, emissions per unit of energy use is widely used as an emissions intensity indicator.

Another approach is to measure emissions intensity by the ratio of the emissions from an economic activity over the economic goods created by that same activity. Both value added (including GDP) and employment are relevant variables for this use. Emissions per unit of GDP is often used as a sustainable development indicator.

Internationally, value added (or GDP) or energy use is most often used as denominators, as these data are most readily available.

In the StatBank of Statistics Norway, two types of emissions intensities are published: emissions per unit of output (in constant prices) and emissions per unit of value added (in constant prices). The unit for the emissions intensity is tonnes of emissions per million NOK (in 2000 prices). The underlying statistics is also available to enable the users to calculate their own intensity measure as needed.

This statistics cover various types of emissions to air. However, intensity measures can also cover other types of emissions (to water or soil) or environmental pressures (e.g. waste or radiation). They can also be expressed by measures of resource pressure as numerator. The most common resource intensities are energy intensity, water intensity and materials intensity.

EMPLOYMENT, FULL-TIME EQUIVALENT PERSONS
Employed full-time equivalent persons is defined as the number of full-time employment (working conditions) and part-time employment converted to full-time equivalent persons (share of full-time employed as weight).

ENVIRONMENTAL ACCOUNTS
The purpose of integrated environmental accounts is to compare economic and environmental-related data at industry level. This gives the opportunity to analyse driving forces behind environmental development together with the opportunity to derive key figures for environmental economics.

Environmental-related variables included in the integrated environmental accounts are emissions to air (greenhouse gas emissions, acidification gases, ozone precursors, heavy metals and particles). Economic variables included are value added and production, measured in basic prices and employment.

Environmental accounts use the national accounts definition of Norwegian activity (resident principle) and not a geographical definition of Norwegian territory (territorial principle). Ocean transport and international air transport are thus included in the environmental accounts. Environmental accounts follow the standard industry classification in order to enable comparisons of economic activity and the environmental influences from industries and households.
There are important differences between the environmental accounts and the official national data on air emissions that are reported to the Kyoto and the Gothenburg protocols. The official national emissions inventory data (se http://www.ssb.no/klima_en/) reported to UN is principally distributed by source and main sectors, but does not follow the standard industry classification. The data sets are based on a geographical definition of Norway. Ocean transport and international air transport are therefore held completely outside the datasets in order to make them correspond with international conventions.

INTEGRATED ENVIRONMENTAL AND ECONOMICS ACCOUNTS
See "Environmental accounts" for definition/explanation.

NAMEA
National Account Matrix including Environmental Accounts. See "Environmental accounts" for definition/explanation.

OUTPUT
Value of goods and services from domestic production activities, i.e. from market production, production for own final use, and non-market production in general government and in NPISHs. Output of goods and services is not the same as sale of goods and services. Output is published in basic prices, i.e. subsidies on products are included, but not VAT or other taxes on products (see basic value).

In general government and other non-market production, output is estimated as total of compensation of employees, net taxes on production, consumption of fixed capital and intermediate consumption.

VALUE ADDED
Values added and gross income generated from domestic production in an industry or sector (or in total for all industries/sectors), derived and defined as output less intermediate consumption. Value added is published in basic prices, i.e. subsidies on products are included, whereas VAT and other taxes on products are not (see basic price).

In general government and other non-market activities, value added is compiled as a sum of the compensation of employees, net taxes on production (taxes on production less subsidies on production) and consumption of fixed capital.