

Data availability for activities covered by the EU emissions trading scheme



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Anke Herold, Martin Cames



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1 Purpose and approach

This paper aims to assess the availability of data that can potentially be used to support the evaluation of national allocation plans (NAPs) under the EU Emission Trading Scheme. The paper concentrates on data sources that are currently used or compiled by the ETC/ACC for other purposes or where at least solid knowledge about the data sources exists within ETC/ACC. The paper describes the limitations of the data sources with regard to coverage of sectors, Member States and years and aims at identifying areas where additional work is necessary to enable the use of these data sources for an evaluation of NAPs by the Commission.

The paper is structured according to the allocation criteria relevant to data and information on greenhouse gas emissions data, policies and measures and projections that is compiled within ETC/ACC and excludes areas where the ETC/ACC does not see its main competences (e.g. issues related to competition, state aid, antitrust). For this purpose the questions from the 'Draft Common Format for the National Allocation Plan 2005-2007' were used.

There are a number of uncertainties that complicate the assessment of NAPs, especially the situation that even with the defined draft format for the NAPs, there is a lot of flexibility for Member States how exactly they will report on the issues addressed in the questions, the level of detail they will deem necessary to justify the allocation and the amount and type of data and information MS will deem necessary to include in the NAP. This situation seems to be comparable to the National Inventory Reports where a general list of contents was agreed at the UNFCCC negotiations without specifying the individual elements and data required which led to very heterogeneous approaches for those reports by Parties. This uncertain situation may require that in addition to a compilation of data and information from Member States in advance to the NAP submission, additional ad-hoc information gathering and compilation may be necessary on the basis of the submitted reports.

2 Determination of total quantity of allowances

The 'Draft Common Format for the National Allocation Plan 2005-2007' requests information to the following questions that is related to quantitative and qualitative information collected within ETC/ACC:

What principles, assumptions and data have been applied to determine the contribution of the installations covered by the emissions trading Directive to the Member State's emission limitation or reduction obligation (total and sectoral historical emissions, total and sectoral forecast emissions, least-cost approach)? If forecast emissions were used, please describe the modelling assumptions.

What is the total quantity of allowances to be allocated (for free and by auctioning), and what is the proportion of overall emissions that these allowances represent in comparison with emissions from sources not covered by the emissions trading Directive? How is it ensured that the total quantity of allowances to be allocated is not more than is likely to be needed?

What policies and measures will be applied to the sources not covered by the emissions trading Directive?

How is it ensured that the total quantity of allowances intended to be allocated is consistent with a path towards achieving or over-achieving the Member State's target under Decision 2002/358/EC or under the Kyoto Protocol (as applicable)? If the Member State will auction allowances, please state the percentage of the total quantity of allowances that will be auctioned, and how the auction will be implemented.

If the potential, including the technological reduction potential, or clean technology were taken into account in the allocation process at this level, please state so here and give details in section 4 below.

If benchmarking has been used as a basis for determining the intended allocation to individual installations, please explain the type of benchmark used, and the formula(e) used to arrive at the intended allocation in relation to the benchmark.

2.1 Total and sectoral historic emissions

The data availability for NAP verification depends on the base year or period chosen by MS for the allocation. Therefore the data needed for the assessment will be different for each Member States because of different assumptions chosen on the base year or period for allocation.

2.1.1 General data availability

GHG inventory data

Availability by 31 March 2004: Usually a large number of Member States does not submit in time (31 December 2003) or update previously sent inventory data. The deadline for updated data is 31 March 2004, thus new inventory data is only available between 31 March 2004 and 15 April 2004. It is recommended to use the latest data submission as Member States are allowed recalculate their previously submitted inventory data. This currently happens to a large extent and the data gathering exercise for the NAP is likely to trigger additional recalculations. This means that the data for past years can differ considerably between the latest and earlier submissions. In addition to the CRF data, additional information is provided in the national inventory reports (NIR). However, submission of NIRs to the Commission is usually even later than the CRF data and will most likely only be available between 31 March and 15 April 2004 (In 2003 7 Member States submitted an NIR before or by 15 April, six Member States submitted the NIR much later, Greece and Luxembourg did not submit a NIR).

Coverage of countries: Inventory data covers all Member States and most accession countries. Lithuania has not yet submitted annual inventories. Slovenia has not submitted CRF tables, but a national inventory report with data from 1990 to 1996. In 2003 very few accession countries submitted inventories in time, most of them only submitted information by end of May or later. Cyprus and Malta are Non-Annex I Parties. However, none of them has yet submitted an initial national communication.

Coverage of years: Greenhouse gas inventory data will be available for the years 1990 to 2002.

Sectoral coverage: The GHG inventory data covers total emissions and sectoral emissions for all Member States and a large number of accession countries (no data for Lithuania and Slovenia), however the sectoral coverage is different as the activities in Annex I of the Directive. One pre-requisite for the use of sectoral GHG inventory data is that combustion related emissions are separated from process related emissions in the NAP reporting of MS, because in the combustion related emissions are reported in the energy sector in the CRF and process related emissions are reported in the industry sector source categories. As the activities from Annex I of the directive in some cases do not correspond well with the CRF source categories, a total estimate for the sectors covered by the EC trading scheme versus the total MS emissions can not be derived from CRF data. However, for individual source categories/ sectors comparability may be quite good, provided that the separation between process emissions and combustion emissions is available. A more detailed discussion of sectoral coverage and correspondence with the Annex I activities is included in section ## of this paper.

Formats: Due to the late data availability, it is not possible to put a large efforts into the preparation of the GHG inventory data for the purposes of the NAP assessment. The GHG data can be provided in form of CRF tables per MS (CRF tables could be rearranged in order to make the information more easily usable, e.g. by deleting information not necessary for the purposes of the NAP assessment) and Excel files per MS from the EC inventory submission. ETC/ACC will try to fill the MS's data in the new database reporting format that will be provided by the UNFCCC secretariat in a trial version in December 2003. This database format will likely make the data quicker accessible, however considerable problems could occur with the use of the trial database formats and it is not sure if this format will work appropriately. Thus, data in this new database format can only be made available to the Commission at the beginning of April if it works without problems. Inventory data submitted in 2002 and 2003 are included in the CRF Data Locator tool of the UNFCCC secretariat. This is a very user-friendly, easily manageable tool to quickly access data for individual countries or groups of countries. However, the locator with the 2003 inventory submissions will only be available in the second half of 2004. The most recent version also only includes inventory submissions that were sent by June 2003 to the UNFCCC secretariat. With regard to EU MS this excludes a CRF resubmission from UK from August 2003 and data from Hungary. If the locator tool is used, the results would have to be checked with updated inventory data from 2004 submissions.

EPER data

Availability by 31 March 2004: By October 2003 14 MS had reported their EPER data and by the beginning of December all MS had reported EPER data. The EPER data base covers data from ca. 10000 facilities. The official launch of EPER data is scheduled for 23 February 2004, however EEA will be able to provide immediate access to the data for the purpose of NAP assessment in agreement with DG ENV G2 (Herbert Aichinger, Bernd Mehlhorn).

Coverage of countries: EPER covers EU-15 Member States. Accession Candidate countries do only have to report 2004 data in 2006.

Coverage of years: EPER data will generally only be available for 2001 (for some MS in data for 2000 and 2002 is used). Thus, EPER data will not cover all years that MS will use for their NAPs.

Sectoral coverage: The EPER data covers total emissions and sectoral emissions for all Member States. EPER activity thresholds for sectors included are the same as under the EC trading scheme, except for combustion installations where the EPER threshold is a thermal capacity of more than 50 MW, and the emission trading proposal includes combustion installations exceeding 20 MW. However, emissions under EPER includes an additional threshold for CO₂ emissions which is 100,000 tons CO₂/year. Further analysis is necessary in which way this thresholds in EPER leads to a reduced coverage of emissions in the different sectors. However, this threshold clearly complicates the comparison at aggregate level. An initial comparison between CRF and EPER data (performed by EEA) indicates that EPER covers ca 45% of the total emissions in EU in 2001. A potential complication for straightforward comparisons is also that emissions are allocated to the main activity of the facility in EPER.

Formats: EPER data are stored at EEA in a database format that has been developed by DG ENV contractors in close co-operation with EEA. Data checks etc. are performed. User-friendliness can only be judged once data will be available, however, it is assumed to be high as the of EPER website requires easy usability.

Eurostat, IEA data and other international statistics

Availability by 31 March 2004: Most recent data launch with data for 2002 will not happen until March 2004, but previous publications are available.

Coverage of countries: IEA data covers all Member States and accession countries. Country coverage has to be checked for Eurostat data.

Coverage of years: data covers entire time series usually from 1971 until 2001. The data included is provided by countries in annual questionnaires to the international institutions.

Sectoral coverage: Data covers complete activities, no thresholds are applied. An energy balance format is used for the energy data which includes use of individual fuels (highly disaggregated list of fuels) and sectoral data for public electricity and heat and autoproducers. The sector "other energy industries" includes petroleum refineries, manufacturing of solid fuels, coal mining, oil and gas extraction and others and therefore does not allow a separate estimate e.g. for refineries. Thus, IEA data could be particularly helpful if MS data would be presented for individual fuels (e.g. will very likely be the case for the German NAP as the formula emissions = activity × emission factor is used for the allocation). The IEA database also included emissions from other sectors, which is however the data from Edgar database (RIVM). For process emissions from cement production, cement production statistics (either UN or Eurostat) could be used together with default CO₂ EF. As those depend on the stoichiometric chemical relationship, EF do not vary largely. However this again

requires that MS provide data that separate process emissions from combustion emissions.

Format: IEA is producing an annually updated database on CO₂ emissions from fossil fuels based which is easy to manage. This database has to be bought from IEA.

2.1.2 Evaluation of data availability for individual sectors

For the NAPs provided emissions data for sectors/source categories could be compared with emissions data from other sources (e.g. inventories, EPER) in order to evaluate if the proportion of emissions that allowances represent is consistent with the amount of emissions reported for the same activities in other data sources. A comparison of different data sources is only possible where activities from Annex I of the directive correspond well with the source categories from other reporting obligations. This is analysed in greater detail in the following subsection:

Combustion installations with a rated thermal input exceeding 20 MW (except hazardous or municipal waste installations):

- One pre-requisite for the use of GHG inventory data is that combustion related emissions are separated from process related emissions in the NAP reporting of MS. Total emissions for this activity is difficult to get from inventory data because of the capacity threshold for combustion activities covered by the emissions trading directive. CRF data in the energy sector includes emissions from waste incineration for energy purposes.
- EPER covers combustion installations with a thermal capacity of more than 50 MW, whereas the emission trading proposal includes combustion installations exceeding 20 MW, therefore comparison at aggregate level is also difficult. However, this should result in relatively small differences. E.g. for Germany it is estimated that public power production covered by the emissions trading directive covers 100% of total fuel use in coal fired power plants and 95% of installations using gas and oil. For industrial power production about 95% of fuel use is covered (estimation Oeko-Institut). In smaller countries higher shares of smaller installations can be expected (e.g. in Finland), however for coal fired installations coverage is potentially quite complete in either EPER and under the emissions trading directive.

Higher disaggregation levels

- It is not unlikely that MS provide a greater disaggregation (related to fuel categories and sectoral structure) for combustion installations participating in the EU trading scheme. Fuel combustion is the largest activity within the trading scheme and Member States will collect data at a more disaggregated level than for the entire sector, but will use splits according to different criteria. It is assumed that most MS will base their allocated amounts on the basic equation: emissions = activity data × emission factor (× oxidation factor) and that they report at a minimum activity data and emission factors used for allocation in their NAPs. In this case also EF and activity data can be compared with information provided in the NIR. However such disaggregation approaches and the way of presentation of information may be different in each MS. Thus, it cannot yet be fully determined what and how data will be

presented. However, data at more disaggregated level offers additional possibilities for comparison with other data sets. Especially if fuel-specific emission factors or data on use of individual fuels are presented (which will be the basis to derive emissions data for the NAPs), then a more detailed comparison could potentially be performed. For such a comparison GHG inventory data and Eurostat/IEA data offer a range of additional possibilities.

- Fuel specific CO₂ emission factors are reported in NIRs/ CRF reference approach table inventories by Austria, Germany, Denmark, Finland, Ireland, Italy, Netherlands, Poland, UK, Slovakia, Slovenia, Spain, Sweden at the moment and possibly more countries in the next inventory submission. These factors could be compared with EF used for the allocation plan.
- Fuel use can be taken from energy balances. According to the new structure for the NIR energy balances shall be part of the NIR. However, this information was not yet provided in the past by most countries and will possibly only be available by mid/end March 2004 when the Commission receives a full NIR. In addition relevant CRF sub-source categories could be included in a database
- Eurostat and IEA produce harmonized energy balances which could be included in a database as well. IEA CO₂ emissions from fuel combustion is already organized in a data base where individual sectors and fuel types can easily be accessed, therefore it seems that this source is preferable. The workshop on energy balances under WG 1 addressed shortcomings of IEA/Eurostat data and all countries explained their specific problems. The annual synthesis and assessment reports of the UNFCCC secretariat already compare IEA energy data with GHG inventory data and shortcomings, problems can be collected from this source for each MS. This means for this data a compilation of the quality and known problems related to this data would be essential for its use. Further assistance in the use of such data would be necessary to the Commission after 31 March 2004.

Mineral oil refineries

- CRF data for petroleum refining under fugitive emissions. Reporting not very consistent across MS (e.g. Spain wrong allocation). Only few MS reported this category (France, Netherlands, Portugal).
- EPER data covers all mineral and gas oil refineries: data can potentially be used. The cumulative criteria in the emissions trading directive (smaller installations also count if a larger installations of an operator covered by the permit is above the threshold) may produce some differences in coverage. Emissions under EPER refer to the magnitude of the emissions exceeding the specified threshold values (CO₂ 100,000 tons/year). Further analysis is necessary if this additional EPER thresholds lead to a reduced coverage.
- Installation definition (allocation of crackers between chemical industry and refineries) still unclear, this results in additional problems

Coke ovens

- CRF: split to two source categories: manufacture of solid fuels and other energy industries and fugitive emissions from fuels – solid fuel transformation. Both have different coverage (inclusion of production of brown coal briquettes and patent fuel, the fugitive emissions does not only covers coke)
- EPER data covers coke ovens. However allocation difficulties with regard to individual fuel categories will be less important under EPER than under the emissions trading directive. For allocation under the trading scheme a more detailed allocation approach e.g. for blast furnace gas may have been chosen. EPER emission thresholds may reduce the coverage of emissions by EPER at the aggregate level.
- ⇒ availability of comparable alternative data is very limited

Metal ore (including sulphide ore) roasting or sintering installations

- CRF data different coverage, no separation, no thresholds
- EPER: same thresholds as emissions trading directive. However, it has to be clarified whether the EPER reporting format includes separate reporting items for primary and secondary metal production and sinter plants or whether sintering and production of iron and steel are aggregated in reporting. This is not completely clear from EPER guidance documents. EPER emission thresholds may reduce the coverage of emissions by EPER at the aggregate level.

Installations for the production of pig iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2,5 tonnes per hour

- CRF data different coverage; no separation, no thresholds
- EPER: same thresholds as emissions trading directive. However, it has to be clarified whether the EPER reporting format includes separate reporting items for primary and secondary metal production and sinter plants or whether sintering and production of iron and steel are aggregated in reporting. This is not completely clear from EPER guidance documents. EPER emission thresholds may reduce the coverage of emissions by EPER at the aggregate level.
- IEA data includes fuel consumption and emission data for iron & steel which corresponds to ISIC group 271 and class 2731.
- ⇒ Further analysis is necessary, however availability of comparable alternative data will be quite limited

Installations for the production of cement clinker in rotary kilns with a production capacity exceeding 500 tonnes per day

- EPER: same threshold, CO₂ emissions data can be used. The cumulative criteria in the emissions trading directive (smaller installations also count if a larger installations of an operator covered by the permit is above the threshold) may produce some differences in coverage. EPER emission thresholds may reduce the coverage of emissions at the aggregate level.
- CRF CO₂ emissions data:
 - only covers process emissions, no separate estimate for combustion emissions

- no threshold, but probably few installations below threshold (e.g. for Germany it is assumed that the emissions trading directive covers all cement plants),
- Process emissions from cement reported by the majority of countries
- CRF provides IEF for cement available as well as more detailed information in NIR on national EF and parameters used for estimation of cement emissions
- CRF also provides activity data, either cement production or clinker production. It is likely that MS will use the same activities for the allocation plan, as clinker production is the recommended method to estimate emissions and because countries should themselves strive for consistency with inventories. Cement production is also available from other data sources.
- ⇒ probably good data basis for assessment of allocation to cement industry. Analysis of CRF data, EPER data and probably independent data sources. Some additional analysis necessary related to EF, AD from NIR.

Installations for the production of lime in rotary kilns with a production capacity exceeding 50 tonnes per day or in other furnaces with a production capacity exceeding 50 tonnes per day

- EPER: same threshold for production capacities, however EPER emission thresholds potentially reduce the coverage of emissions at the aggregate level.
- CRF data: no threshold, but probably very few installations below threshold
- Reported in CRF by AUS, BEL, BUL, DK, FIN, FRA, GER, IRE, NET, Slovakia, ESP, SWE, UK
- CRF includes implied EF, NIR includes more detailed EF and activity data
- ⇒ probably good data basis for assessment of allocation to production of lime. Analysis of CRF data and EPER data. Some additional work would be needed for compilation, especially related to NIR information.

Installations for the manufacture of glass including glass fibre with a melting capacity exceeding 20 tonnes per day

- Process related emissions from glass production are included in the CRF category 2.A.7 together with CO₂ emissions from 'other industries'. Separate emission estimates only available for few countries (Austria, France, Germany, Portugal (for other EU MS not estimated or included elsewhere)
- EPER: same threshold for production capacities, however EPER emission thresholds potentially reduce the coverage of emissions at the aggregate level.
- ⇒ availability of comparable alternative data will be quite limited

Installations for the manufacture of ceramic products by firing, in particular roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain, with a production capacity exceeding 75 tonnes per day, and/or with a kiln capacity exceeding 4 m³ and with a setting density per kiln exceeding 300 kg/m³

- CRF: included under other, very few MS report category separately under 'other industries'
- EPER: same threshold for production capacities, however EPER emission thresholds potentially reduce the coverage of emissions at the aggregate level.
- ⇒ availability of comparable alternative data will be quite limited

Industrial plants for the production of (a) pulp from timber or other fibrous materials
(b) paper and board with a production capacity exceeding 20 tonnes per day

- CRF: data for energy emissions (CRF source category 1.A.2.d Manufacturing industries and construction – pulp, paper and print) and 2.D.1 Industrial processes – pulp and paper. For the latter, CO₂ does not occur according to the CRF, thus only 1.A.2.d is relevant. This source category is currently reported by the following Member States: Austria, Belgium, Bulgaria, Finland, France, Germany, Ireland, Latvia, Netherlands, Portugal, Slovakia, Spain and Sweden. Data covers all emissions with no thresholds.
- EPER: same threshold for production capacities, however EPER emission thresholds potentially reduce the coverage of emissions at the aggregate level. This is likely to be the case as in smaller countries total CRF emissions are below the EPER emission thresholds.
- IEA data: includes consumption and emission data for paper, pulp and print corresponding to ISIC Divisions 21 and 22. If countries have difficulties supplying an industrial breakdown for all fuels, the non-specified industry row has been used for the respective consumption/emission data. For some countries with gaps in the CRF (UK, Italy) data is available from IEA.
- ⇒ probably moderate data basis for assessment of allocation to production of pulp, paper and board for a considerable number of Member States, but not for all. Analysis of CRF data seems to be more promising than EPER data.

2.2 Total and sectoral forecast emissions

GHG projection data from Member States (national communications and updated projection data from Member States under the Monitoring Mechanism)

Availability by 31 March 2004: Projections data have been submitted in previous years by Member States. The revised Monitoring Mechanism Decision includes a later submission date and postpones the next data submission to 2005. If this is already applied by Member States in 2004, limited updated data will be available. However, some Member States have already announced to send updated projections. However, such data may be available rather late and potentially not before 31 March, but around this time. The annual analysis and compilation of projected data is only conducted until 30 April and not yet available by 31 March.

Coverage of countries: 3rd national communications are available for all EU-15 MS with the exception of Luxembourg which neither submitted the 2nd nor the 3rd national communication. 3rd national communications are available for Czech Republic, Estonia, Hungary, Latvia, Poland and Slovakia. Lithuania submitted its 2nd national communication in 2003, Slovenia submitted its first national communication in August 2002. Thus, even if these are not 3rd national communications, they may include rather recent projection data. Malta and Cyprus are no Annex I Parties and have not submitted any national communications. Additional data for a number of EU-15 Member States is available from submissions to the Commission under the Monitoring Mechanism.

Coverage of years: Depends on the selected years for projections. The UNFCCC reporting guidelines for national communications require to present projected information for the years 2005, 2010, 2015 and 2020.

Sectoral coverage: Sectoral disaggregation differs largely across Member States. For the EEA annual projections report, it was not yet possible to compile projected data at sectoral level. However, for a number individual Member States data will be available. However, there are large differences in the presentation of projection results and e.g. energy data could be presented for the entire energy sector, industrial emissions can be presented for entire industrial sector. Industrial combustion emissions may not be separated from other energy use. However, some Member States provide quite disaggregated information or additional more detailed reports are available at national level. In general, projections data will only provide a very rough information regarding the projections of the activities covered under the emissions trading scheme.

Formats: Data does not yet exist in databases or homogeneous formats.

Primes data

Availability of data by 31 March: Updated Primes results have been published in May 2003. It has to be checked if additional updates will be available before 31 March 2004.

Coverage of countries: The Primes data set covers all EU-15 and candidate countries.

Coverage of years: Projection data covers the years 2005, 2010, 2015, 2020, 2025 and 2030.

Sectoral coverage: Primes offers a consistent and comparable dataset at a highly disaggregated level. However, data covers complete emissions and no thresholds are applied. Data is disaggregated to individual fuel groups. At sectoral level the following disaggregation is available:

- Transformation input in thermal power stations
- Transformation input in independent power producers thermal power stations
- Transformation input in industrial autoproducers' thermal power stations
- Transformation input in district heating plants
- Energy consumption of refineries
- Energy consumption of refineries' boilers
- Final energy consumption in industry
- Final energy consumption and CO₂ emissions in iron and steel
- Final energy consumption and CO₂ emissions in non-ferrous metal industry
- Final energy consumption and CO₂ emissions in Non-metallic minerals
- Final energy consumption in glass, pottery and building materials
- Final energy consumption and CO₂ emissions in paper and printing industry

- Sectoral production for cement, ceramics, glass, paper and pulp
- Fuel input to refineries, cookeries/patent fuel/briquetting plants, Blast furnaces/gas works

Some analysis of Primes data with Member States data was performed in 2003 by Oeko-Institut.

Formats: Data are presented in homogeneous formats for all countries.

Other sources of information

National plans communicated to the Commission or available at national level. Those have been incorporated in some of the ETC/ACC analysis in the past. Additional searches for more information may not be possible by 31 March 2004 due to time and budget constraints.

2.3 Least-cost approach

No information available from MS submissions.

Primes data include data on average production costs, investment expenditure at a disaggregated level for each country. Primes also includes production costs, marginal cost and structure of production cost (for fuel, for energy technology, for non-energy) at sectoral level.

2.4 Policies and measures

The annual assessment of PAMs by the ETC/ACC covers PAMs in energy, industry, transport, agriculture and waste at a qualitative level for all MS. Quantitative information is not yet systematically compiled as data availability is quite limited and varies considerably depending on policies and measures and countries. However, information for selected Member States would be available. Further analysis would be needed to indicate exactly for which Member States this would be the case. The annual analysis of PAMs is only conducted by 30 April and is not yet available by 31 March.

2.5 Target path towards achieving or over-achieving the Member State's target under Decision 2002/358/EC

ETC-ACC annually compiles information on the target path in the annual trends report. However, compilation of this information will not yet have been finalized by 31 March 2003. The annual updating of the target path graphs is only conducted by 30 April and not yet by 31 March. The draft final trends reports is usually available in June.

2.6 Technological reduction potential, or clean technology

No data available from MS submissions.

Primes uses assumptions for technologies, however it depends on the information provided by Member States in the NAPs if this information is applicable for an analysis of the considerations conducted by Member States for the NAPs.

3 Conclusions

Historic emissions

The abovementioned analysis indicates that it will be difficult to produce a robust estimate of the share of MS's total CO₂ emissions to be covered by the activities included in the emissions trading directive. Total emissions are readily available but availability of robust data on activity level are in many cases much more limited. Further analysis and assessment of data availability is therefore needed for many activities. However, it is not likely that the identified limitations can be completely offset. The further analysis and assessment of data availability will therefore also need to address to what extent the available data can support qualitative conclusions in the evaluation process of the NAPs.

Forecast emissions

As for the historic emissions, Member States' projections of total GHG emissions are available, however sectoral disaggregation of projections is difficult and not comparable between Member States. Sectoral disaggregation of projections differs largely across Member States. For the EEA annual projections report, it was not yet possible to compile projected data at sectoral level. For a number of individual Member States data will be available. However, there are large differences in the presentation of projection results and e.g. energy data could be presented for the entire energy sector, industrial emissions can be presented for entire industrial sector. Industrial combustion emissions may not be separated from other energy use. However, some Member States provide quite disaggregated information or additional more detailed reports are available at national level. In general, projections data submitted from Member States will only provide very rough information regarding the projections of the activities covered under the emissions trading scheme and it will be difficult to relate the information from Member States to the activities covered by the EU emissions trading scheme.