



Germany

Institutional Arrangements for the National Greenhouse Gas (GHG) Inventory System

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| Activity | Institutional arrangements and processes between government and non-government actors to enable continuous collection and reporting of sector based data relevant for the GHG inventory |
| Country | Germany |
| Sector(s) involved | All |
| Time frame | 2007-ongoing |

Case summary

In response to international reporting requirements, Germany set up a national GHG inventory system in 2007. The system is coordinated by the Federal Environment Agency (UBA) and builds on cooperation with a range of government and non-government entities. A particular feature of the system is the industry cooperation agreements signed between the German government and industry sector associations and individual companies. The agreements ensure regular and efficient flow of data and information to enable the estimation of GHG emissions.

The German GHG inventory system is considered good practice as it is an example of an efficient and comprehensive national GHG reporting system based on extensive collaboration between a large number of different stakeholders. In particular, the cooperation between government and the private sector is exemplary, and resulted in significant benefits, both in terms of high quality, robust data outputs as well as increased trust and transparency.



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Background

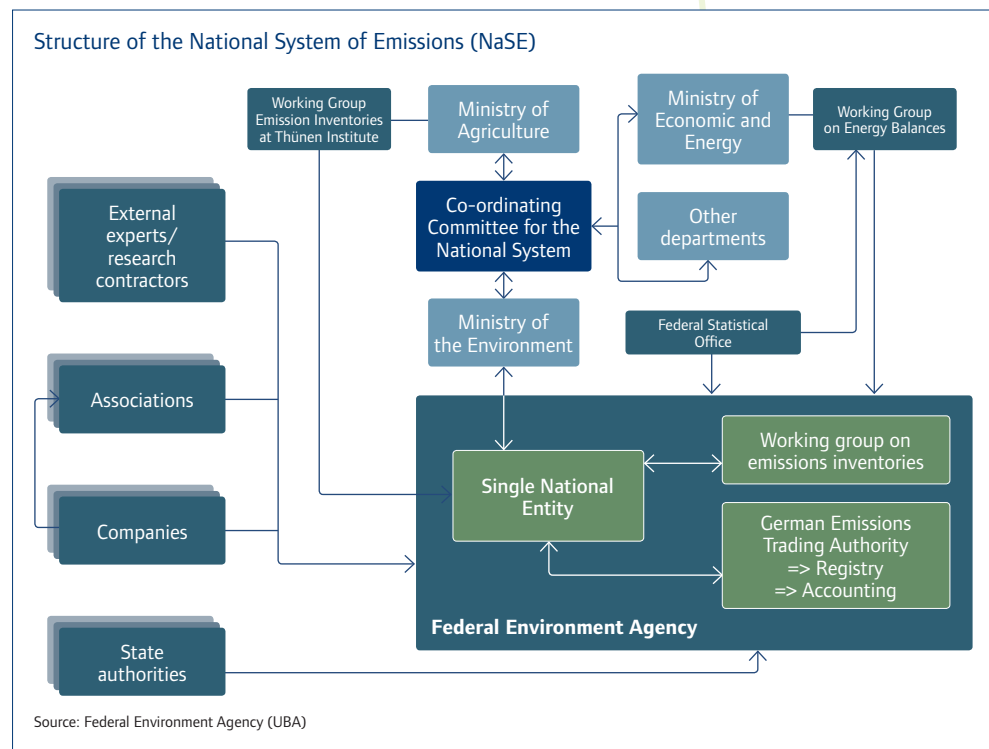
Germany established its national inventory system in 2007 in order to comply with reporting requirements according Art. 5 (1) of the Kyoto Protocol and the United Nations Framework Convention on Climate Change (UNFCCC). The National System of Emissions (NaSE) follows the IPCC Good Practice Guidance and is the framework under which annual National Inventory Reports are prepared in order to comply with UNFCCC and associated EU requirements, and in particular with the Kyoto Protocol.

The national system was formally set up through an agreement of the State Ministry Secretaries of relevant Ministries with basic reporting principles and responsibilities laid out in the "Principles Paper for the National System on Emission Inventories".

The system operates on three levels:

- » The Federal Environment Agency (UBA) as coordinating entity
- » The ministerial level under the leadership of the Federal Ministry of Environment, Nature Conservation, Building and Nuclear Safety (BMUB)
- » Entities outside the federal government sector including private entities.

The structure of the system is shown in Figure 1 below.



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As coordinating entity, the UBA serves as the single national entity and focal point for the different institutions and actors involved. The different ministries involved in the NaSE cover all relevant emission sources and are responsible for coordination of data flows and processes for their respective sector and area of competence. In addition, there is a national coordinating committee, headed by the BMUB, which includes representatives of all federal ministries that participate in the reporting process.

In contrast to many other countries, the German GHG reporting system is not enshrined in law, but rather based on the mentioned agreement between the state secretaries. The agreement also stipulates that the national GHG inventory system should use existing data flows and processes wherever possible.

The majority of data used for GHG emissions reporting (approximately 80%) is derived from data from the Federal Statistics Office. This includes energy statistics, environmental data and production statistics. In order to be able to use this data for GHG emissions reporting purposes, a separate agreement with the Statistics Office was also required.

Where no existing data flows are available, additional source specific, voluntary agreements between relevant institutions and actors are put in place that specify how the sectors provide the necessary data to the UBA. Only if such agreements cannot be reached may legal measures be considered.

Activities

1. **Agreement between State Secretaries in 2007:** The agreement was made between the State Secretaries of all Federal Ministries with responsibility for sectors relevant for the reporting of GHG emissions and is the backbone of the German GHG reporting system. It deals with responsibilities for reporting and data flows in the context of the national GHG emission inventory system. The agreement was triggered by the Kyoto Protocol, which came into force in 2005 (first commitment period 2008 – 2012) and mandates annual GHG reporting in compliance with the associated EU regulation.
2. **Voluntary industry commitments:** As early as the 1990s the German industry made commitments to the Government to reduce GHG emissions. These voluntary commitments, in the form of letters from different sector and industry associations, also stipulated specific monitoring requirements. Initially, the data from these voluntary agreements was used by the UBA for the GHG inventory and reporting.
3. **Industry cooperation agreements:** As the voluntary industry agreements expired – from ca. 2009 onwards – agreements with the industry were needed in order to facilitate data flow with UBA. UBA signed individual cooperation agreements with the relevant sectors to ensure continued data provision and flow. These cooperation agreements were negotiated and signed on an ad hoc basis, depending on the individual expiration date of the earlier voluntary commitment. Between 2009 and 2012, a number of voluntary agreements were thus converted into cooperation agreements, which took the form of legal contracts between the industry body concerned - and UBA.
4. **Continuous review:** Since cooperation agreements with all relevant sectors were concluded in 2012, ongoing activities include the modification or updating of existing agreements in light of changing reporting requirements where data gaps appear (e.g. new emission sources or gases such as the reporting of nitrogen trifluoride (NF3) emissions under the Kyoto Protocol's second commitment period, 2013–2020).

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| Institutions involved | <ul style="list-style-type: none"> » Federal Ministries and agencies: Federal Environment Agency (UBA); Federal Statistical Office; Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB); Federal Ministry of Economics and Energy; Federal Ministry for Food, Agriculture and Consumer Protection; Federal Ministry of the Interior; Federal Ministry of Defence; Federal Ministry of Finance; Federal Ministry of Transport and Urban Development » State level authorities » Institutes and research organisations » Industry associations and companies |
| Finance | <p>The activities are funded through the German federal budget. The ongoing operation of the system cost an average of EUR 1 million per year. Activities undertaken by non-government actors are funded by those actors themselves.</p> |
| People | <p>Approximately 50 experts work part-time on the preparation of the yearly National Inventory Reports at UBA.</p> <p>Additionally, representatives and technical experts from the institutions mentioned above are also part of the system.</p> |
| Impact of activities | <ul style="list-style-type: none"> » Robust and timely data: The agreements with industry ensure a continuous flow of current data directly from the relevant source. This helps to produce an accurate national GHG inventory. At the same time, the collection of data at the source allows the industry sector to track and obtain accurate information and data of GHG-relevant activities. » Efficient use of resources and capacities: The direct involvement of industry in the reporting processes reduces the need for additional capacity at the government level. The data is collected by those in the best position to do so, which helps to build and maintain relevant capacities in the respective sectors. » Increased trust between government and the private sector: The collaboration on the GHG inventory has led to constructive and open relationships between government actors and industry. This increased trust arguably has a positive impact also in other areas. » Avoidance of legal procedures: The cooperation agreements with industry avoided the need for more complex and lengthy legislative processes to enable data collection and reporting. The voluntary cooperation agreements are more flexible also in view of potential modifications and amendments. |
| Why is it good practice | <ul style="list-style-type: none"> » The national GHG inventory system and associated cooperation agreements are a good example of effective collaboration between government and the private sector. The collaboration supports the establishment of a robust GHG reporting system, which is based on accurate, sector specific data. » Through the collaboration between the different actors, reporting processes are very efficient thus minimising the need for additional resources in particular at the governmental level. Quality is assured through the involvement of industry and sector experts. » In contrast to reporting systems, which are enshrined in law, a system which is based on collaboration helps to improve trust and an open communication between the different actors and is more flexible in view of potential modifications and amendments. |
| Success factors | <ul style="list-style-type: none"> » Open and direct communication – open communication between the UBA and the industry sectors in cooperation with the relevant ministries and industry associations using an existing and growing network of contacts. » High level political involvement – the Ministry of Economy and Energy (BMWi) was involved at the start and acted as a door opener to initiate contact with industries, building on their longstanding relationships with the relevant sectors |

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- » **Clear benefits for industry** – highlighting the benefits to industry such as accurate data of GHG-relevant activities and avoidance of legal arrangements
- » **Forging alliances and strategic partnerships** – using alliances with organisations where a good relationship already existed to build relationships with more sceptical parties
- » **Stepwise approach** – starting small, and building up the system over time rather than attempting to arrange and solve everything from the outset
- » **Transparency** – being transparent about how the data is collected and used and clearly demonstrating that the information is only used for the agreed purpose helped to build trust and good working relationships

Overcoming barriers/ challenges

Financial

What were the main barriers/challenges to delivery?
How were these barriers/challenges overcome?

Companies/ industries saw the reporting requirements as an additional burden.

Building awareness and increasing understanding among industry about the value of site-specific data collection and reporting. Site-specific monitoring typically results in lower GHG emission values as estimations take a more conservative approach. The alternative to reporting information directly would have been for the UBA to estimate production data for the calculation of GHG emissions that would have likely resulted in higher calculated GHG emissions.

Information

Some companies/ industries did not understand the need for additional data reporting, given that a lot of data was already being reported to the same agency.

Clear communication and awareness building on the need for additional data collection which was based on the fact that either not all relevant data is reported or that, legally, data can only be used for one purpose, especially if reported to different branches of the same agency.

Institutional

UBA is the agency that leads the GHG inventory and at the same time sets emission limit values for industry. Companies feared that data reported for the GHG inventory may be used to tighten emission limits.

Credible and transparent institutional arrangements to ensure firewalls between the relevant departments and avoid data misuse. At the same time, it was important to gain the trust of companies through continuous and open communication. Over time, it became clear that no data transfers or misuses occurred.

Capacity

Occasional capacity constraints to ensure necessary level of sector expertise for collection and assessment of data. For example, in 2011 the European Statistics Directive expired for the iron & steel sector, and hence data for the GHG inventory could no longer be drawn from the official statistics. At the same time, the relevant knowledge and capacities at the agency level had long been reduced.

Case by case agreements and strategies to build up capacities at the agency and/ or industry level. Such technical capacity is often relevant for other management processes and hence it can be in the interest of industries/companies to maintain or build such capacities.

Lessons learned

- » **Confidence and trust is key:** Confidence building is a continuous effort and can be achieved through open communication and transparency. Trust is essential to ensuring good and effective relationships especially when dealing with sensitive information.
- » **Clear institutional responsibilities:** The handling of data and commercially sensitive information requires well-designed institutional processes and structures to ensure data is only used for the agreed purpose.

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- » **Carrots are effective but sometimes sticks are needed:** Generally, industries and companies recognised the benefit of entering into voluntary agreements as well as collecting the GHG relevant data as this ensures its accuracy and may also be of use for other management processes. However, in some cases the “threat” of legislation had to be used to facilitate the voluntary agreement.
- » **Processes and relationships need time:** Over time and through daily practice, relationships between the UBA and industries became stronger, more open, and based on mutual trust. Transparency and actual evidence on the way data is handled and used helped to give confidence to companies that the information is only used for the agreed purpose. For example, initially one of the industry associations only provided aggregated data across their member companies; later on they agreed to provide individual company data directly and entrusted the UBA with their aggregation.

How to replicate this practice

- » **Start small, but start somewhere:** It is important not to overly complicate the system from the start, and therefore possibly postpone implementation. Better to start small and build the reporting system up over time.
- » **Start with existing data and information and do not reinvent the wheel:** A lot of data, if not most, that is needed for the GHG inventory and reporting system is already available, collected and reported somewhere. Good sources are national statistics offices, other ministries, business associations and international sources such as International Energy Agency for the energy sector.
- » **Highlight the national / private sector interest and benefits:** Much of the information gathered for international GHG reporting is relevant for other processes owned by companies as well as national governments. By highlighting the use of sector-specific, economic and production data for planning purposes (including company planning, sector plans or climate policy activities), different actors can be motivated to participate and contribute.
- » **There are no blueprints for GHG inventories:** Each country has to find its own strategy and way to collect the relevant data and ensure continuous information flows based on its own specific national circumstances. It is important to learn from others but not everything makes sense in every context.
- » **Initial costs can be significant however decrease over time:** The initial costs and resources required to set up the reporting system can be significant. It is important to understand this as a long-term investment and process which, once operational, requires less resources over time if set up as a continuous process.

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| References | » Günther, Dirk. "Institutional and procedural arrangement of the German National System on Emissions Inventories" Presentation at the PAKLIM workshop: Exchange on Institutional Arrangements for MRV. March, 2014. » Damassa, Thomas. Management and Coordination of the national GHG inventory process by the lead institution: Case Study from Germany, WRI, October 2013. |



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