

**Umwelt
Bundesamt**



DEHSt
Deutsche
Emissionshandelsstelle

ETS Capacity Building Chile Delegation at DEHSt

12 December 2017



European Emissions Trading System (EU ETS) and its implementation in Germany

Dr Jürgen Landgrebe

German Emissions Trading Authority (DEHSt)
at the German Environment Agency (UBA)

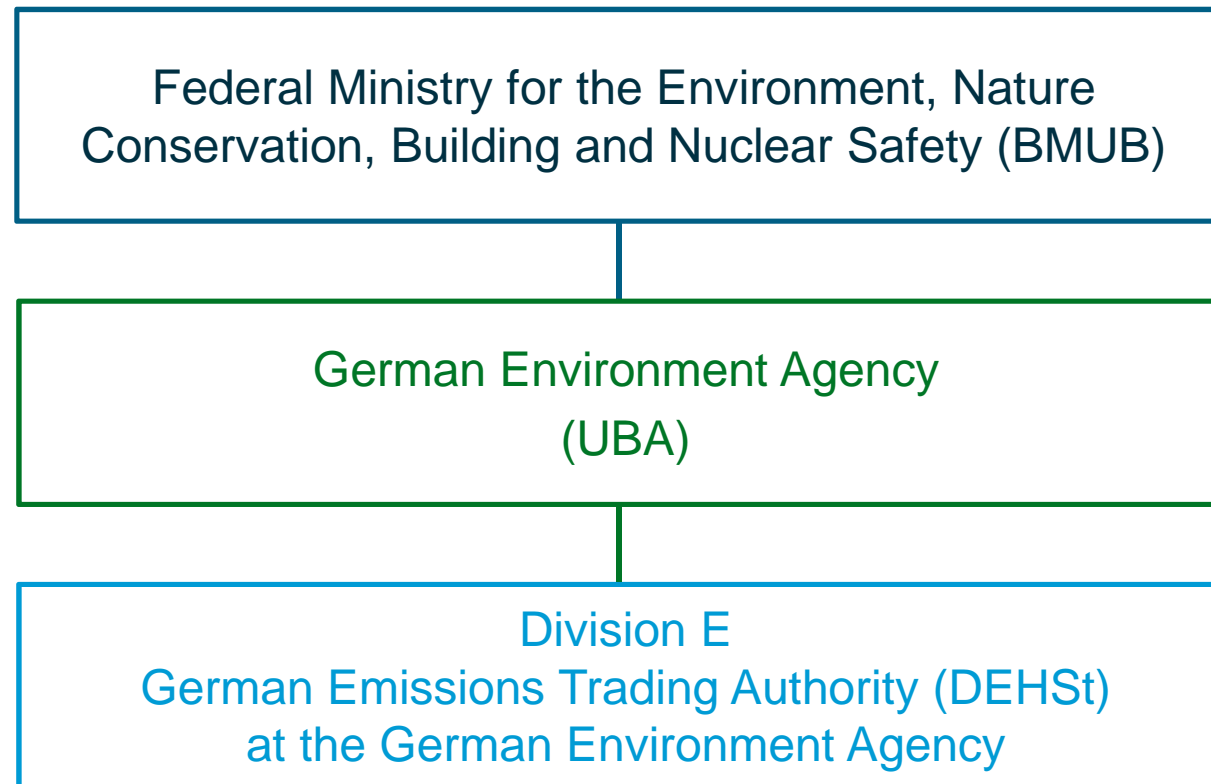
Head of Dep. E 2, Energy Installations, Aviation, Registry and Economic Aspects

12 December 2017

Umwelt
Bundesamt

DEHSt
Deutsche
Emissionshandelsstelle

The DEHSt at the German Environment Agency (UBA)



Introducing the German Environment Agency (UBA)

TASKS

Scientific Work

Collecting Data



UBA supports the Federal Government, esp. the Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)

Information to the Public

International Co-operation

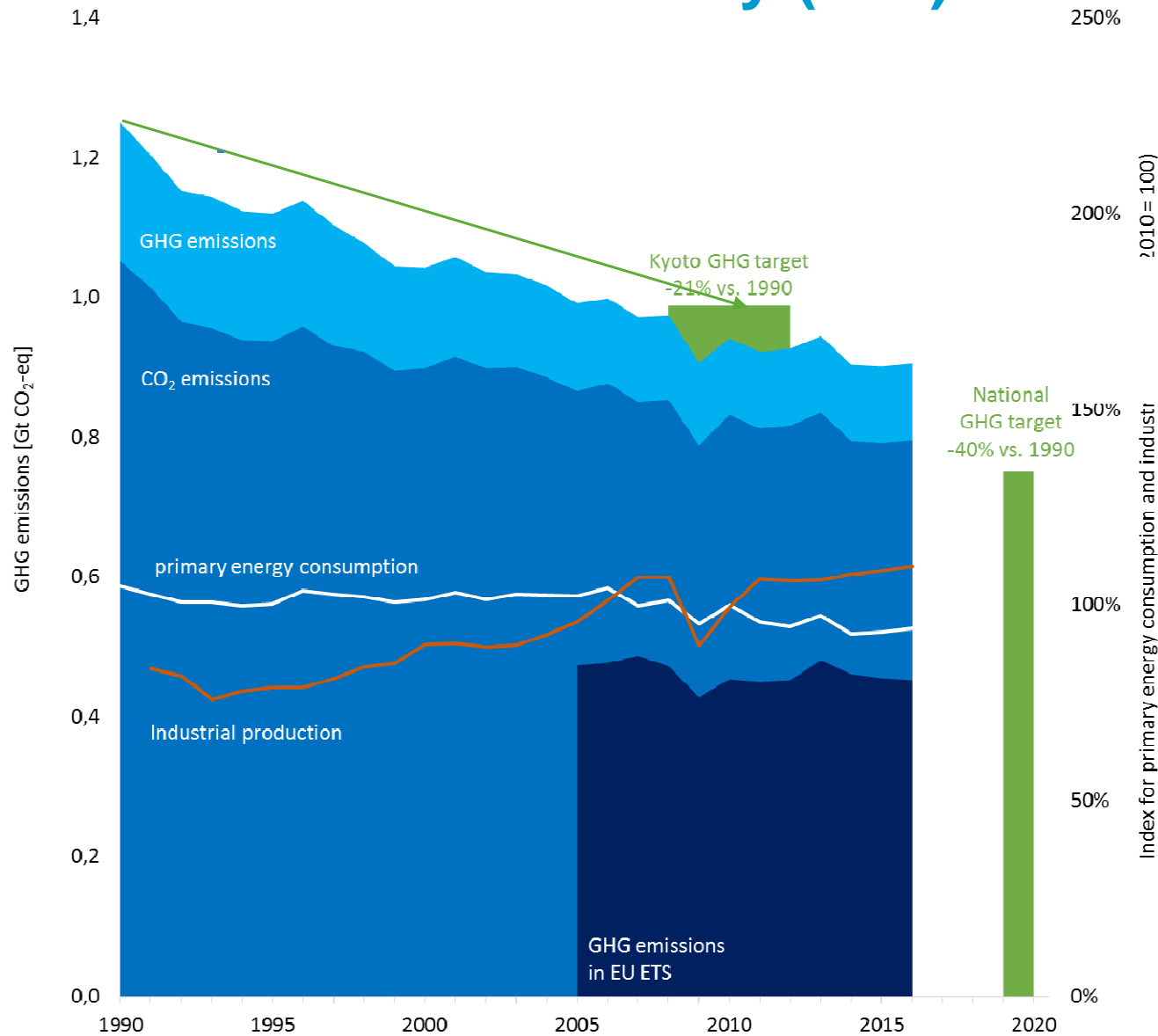
Implementing environmental legislation: such as **EU ETS**

Since 2014 the UBA has also been supporting the Federal Ministry of Economy and Energy (BMWi) by providing scientific knowledge on energy questions and issues such as renewable energy sources.

Outline

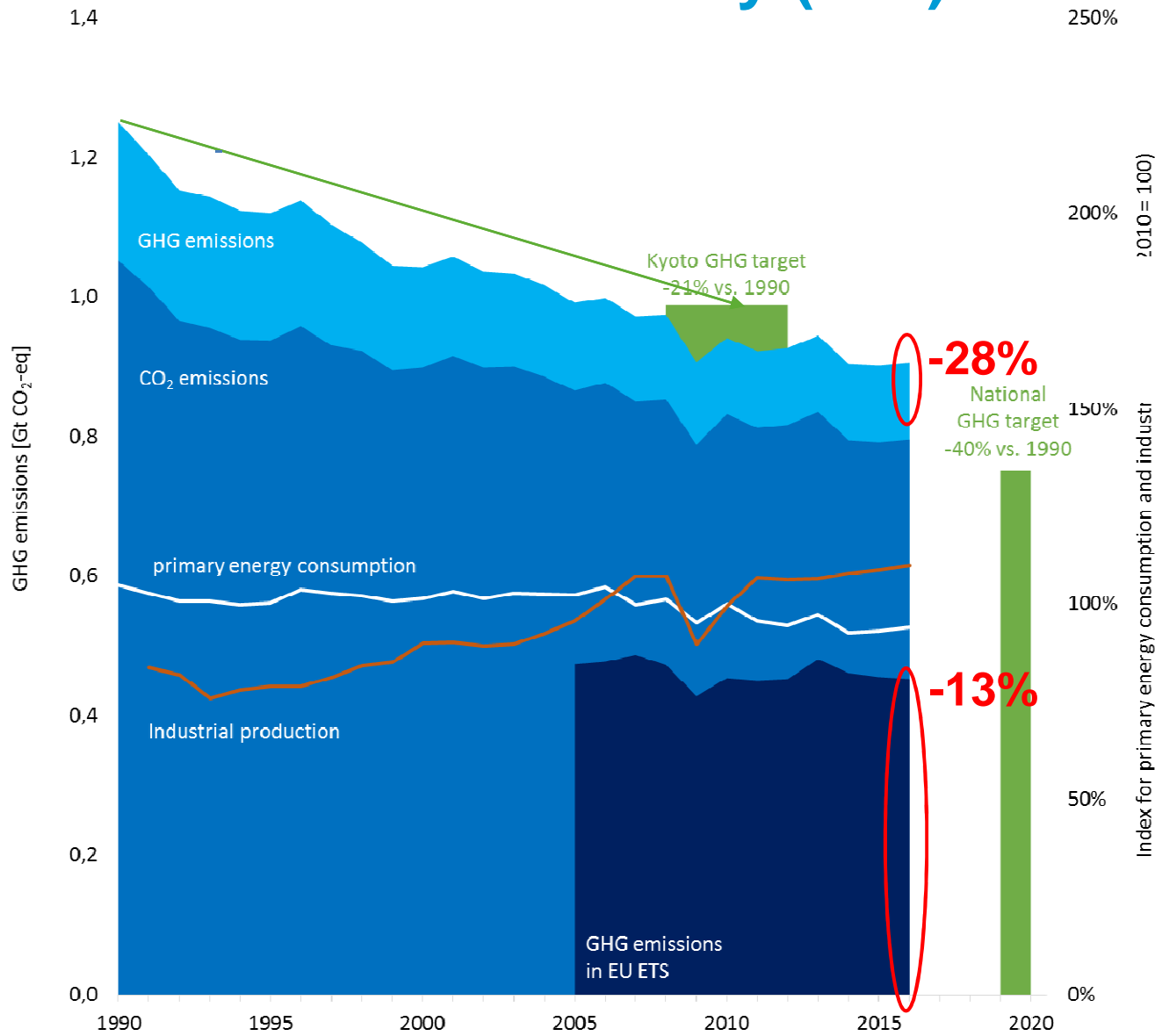
- **Why Emissions Trading?**
- **Institutional Set-up and Administrative structure in Germany**
- **EU ETS implementation in Germany:**
 - **What has been achieved?**
 - **What are the challenges?**

National GHG Inventory (NIR) of Germany



Sources: UBA/DEHSt, AGEb (Status: 05.04.2017)

National GHG Inventory (NIR) of Germany



**UBA preliminary data
2016 vs. 1990**

-28%

-13%

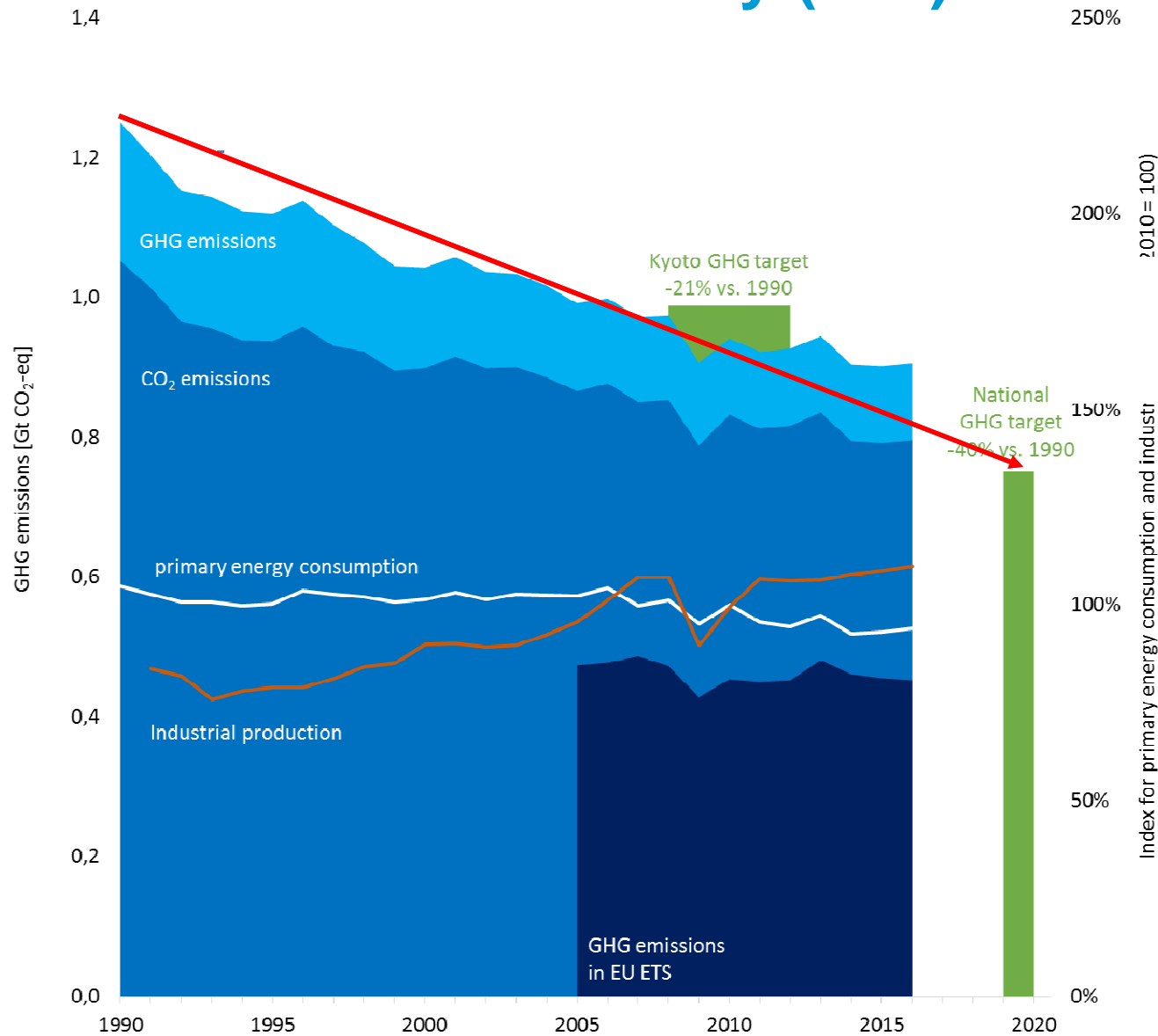
**DEHSt VET data
2016 vs. 2005**

National
GHG target
-40% vs. 1990

Kyoto GHG target
-21% vs. 1990

Sources: UBA/DEHSt, AGEB (Status: 05.04.2017)

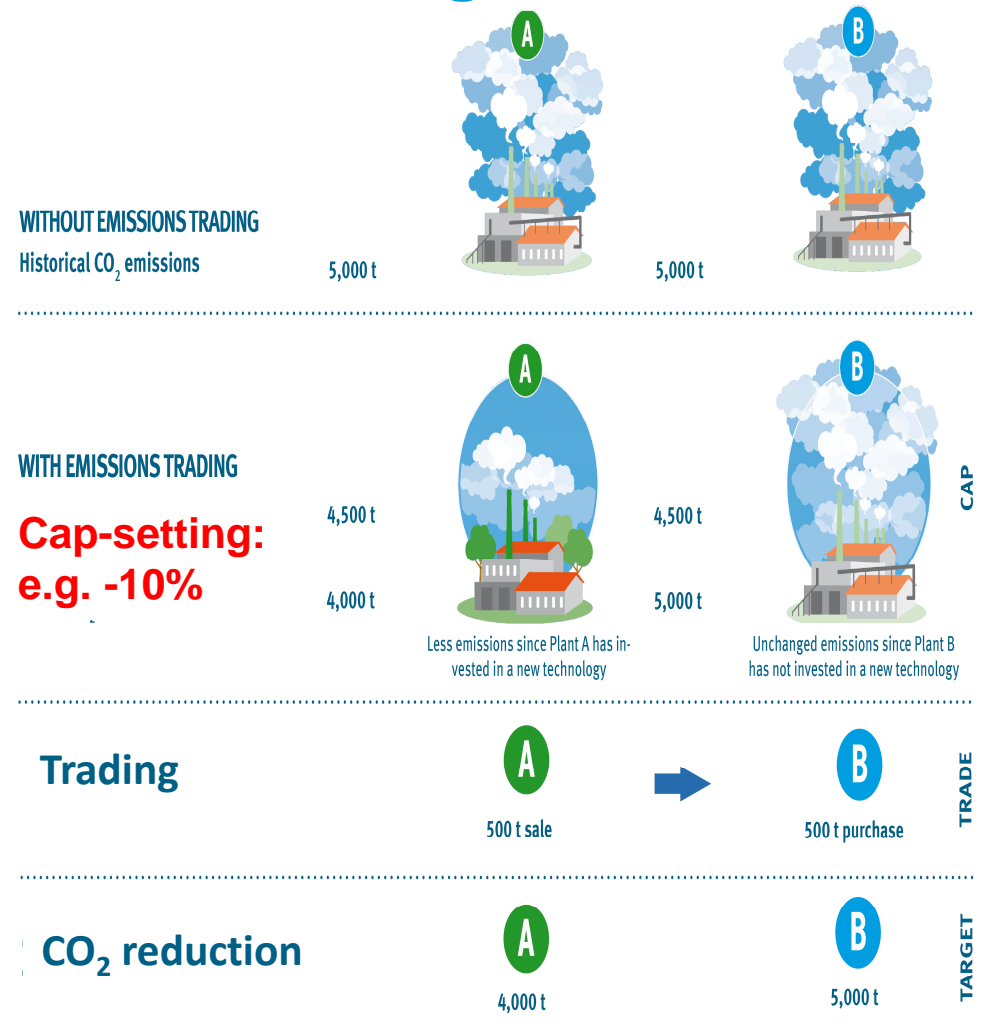
National GHG Inventory (NIR) of Germany



Sources: UBA/DEHSt, AGEb (Status: 05.04.2017)

Carbon pricing: Why Emissions Trading?

- EU ETS is an European **Climate Change Policy Instrument** for the sectors energy, industry and aviation setting an overall CAP as a target for CO₂-reduction. It gives economic incentives for the implementation of **cost-efficient** abatement measures:
 - » **Energy-efficiency**
 - » **Fuel Switch**
 - » **Renewable Energy**
- Principle: **Cap & Trade**
- EU ETS gives **flexibility** to the industry



German Emissions Trading Authority (DEHSt): TASKS

1. provide the infrastructure for emissions trading in Germany

- **allocate** and **issue** the EU allowances to installation and aircraft operators
 - free allocation according to EU wide allocation rules
 - **coordinate auctioning** of allowances and publish the results monthly
- **approve** operators' monitoring plans and **check** emissions reports
- **administer** the accounts of the German part within the EU ETS and the national Kyoto Registry (account management)

2. contribute to the development of emissions trading

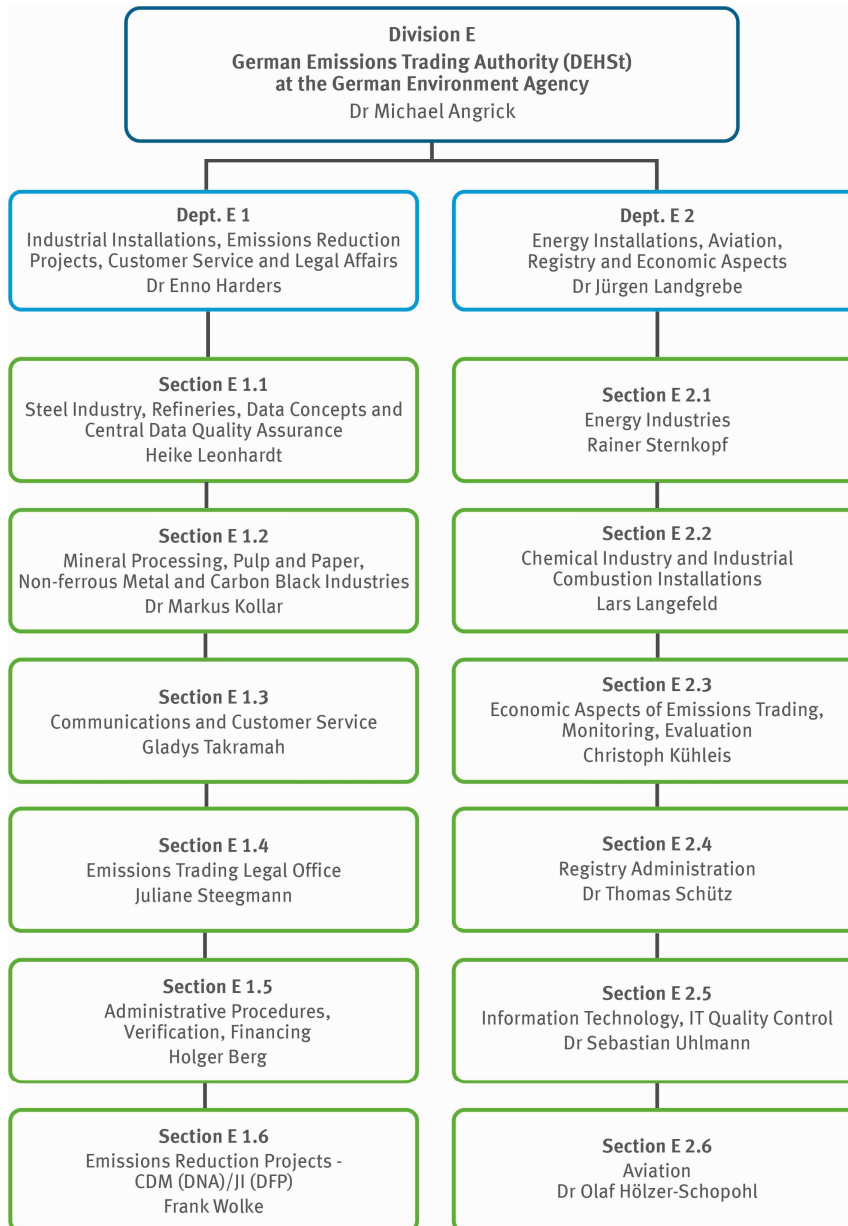
- draft national and international **reports** (ETS data → NIR)
- cooperate with EU and UNFCCC

3. approve JI and CDM projects

- Designated National Authority (DNA) / Designated Focal Point (DFP)

4. Compensation payments for indirect ETS costs (electricity)

German Emissions Trading Authority (DEHSt)



Staff: ~ 170 employees

German Emissions Trading Authority (DEHSt): TARGETS

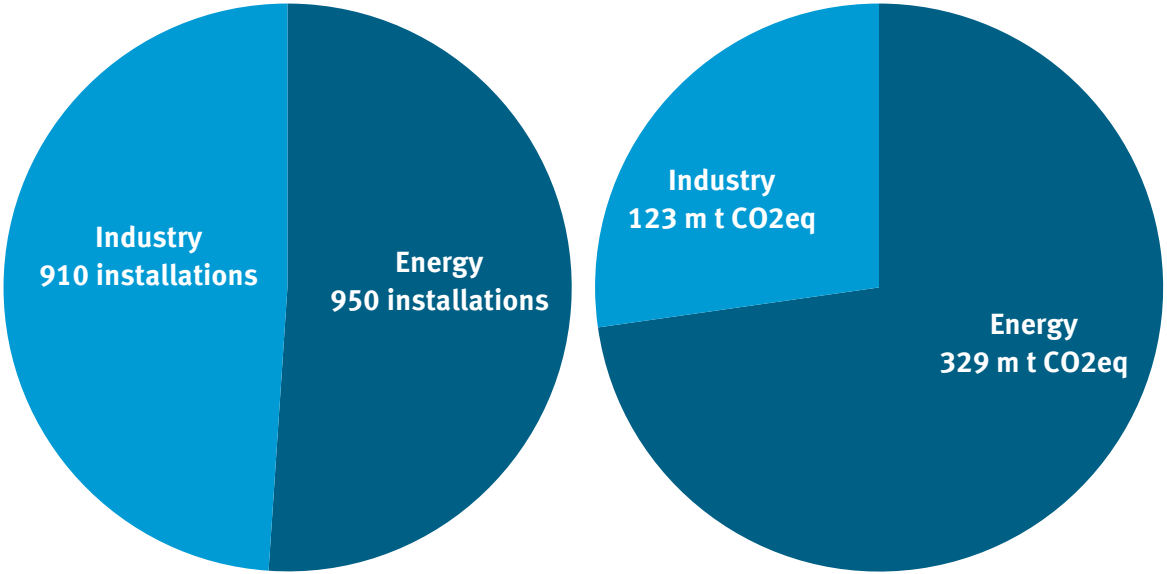
Our ambition is to set up Emission Trading as environmentally and economically effective as possible.

That requires:

- to ensure the **ecological integrity** of the instrument
- to avoid market distortions
- to minimize transaction costs
- to facilitate trading by an efficient interaction between traders, trading platforms and the registries

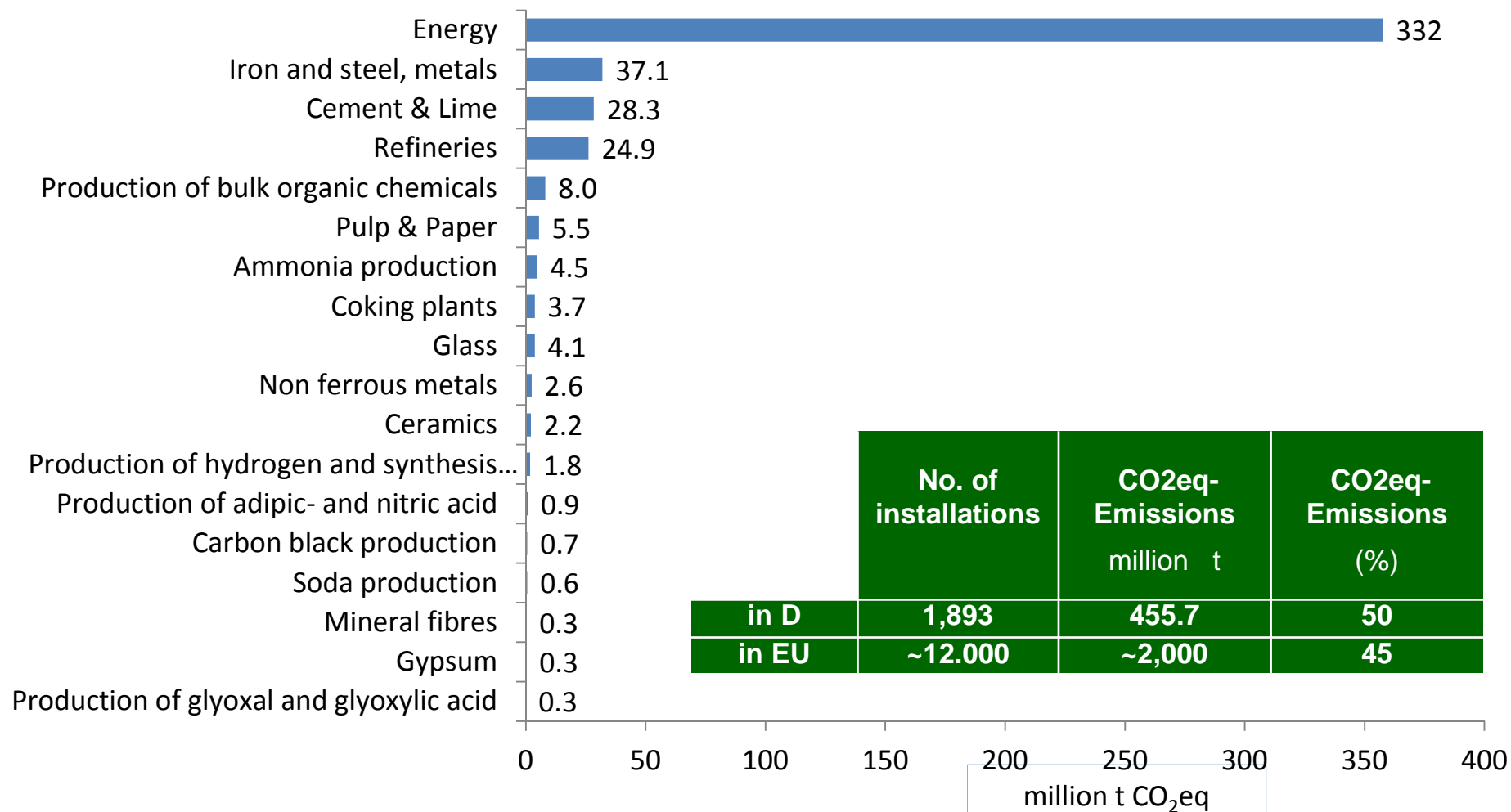
EU ETS in Germany: What has been achieved?

German ETS Emissions - Energy and Industry 2016



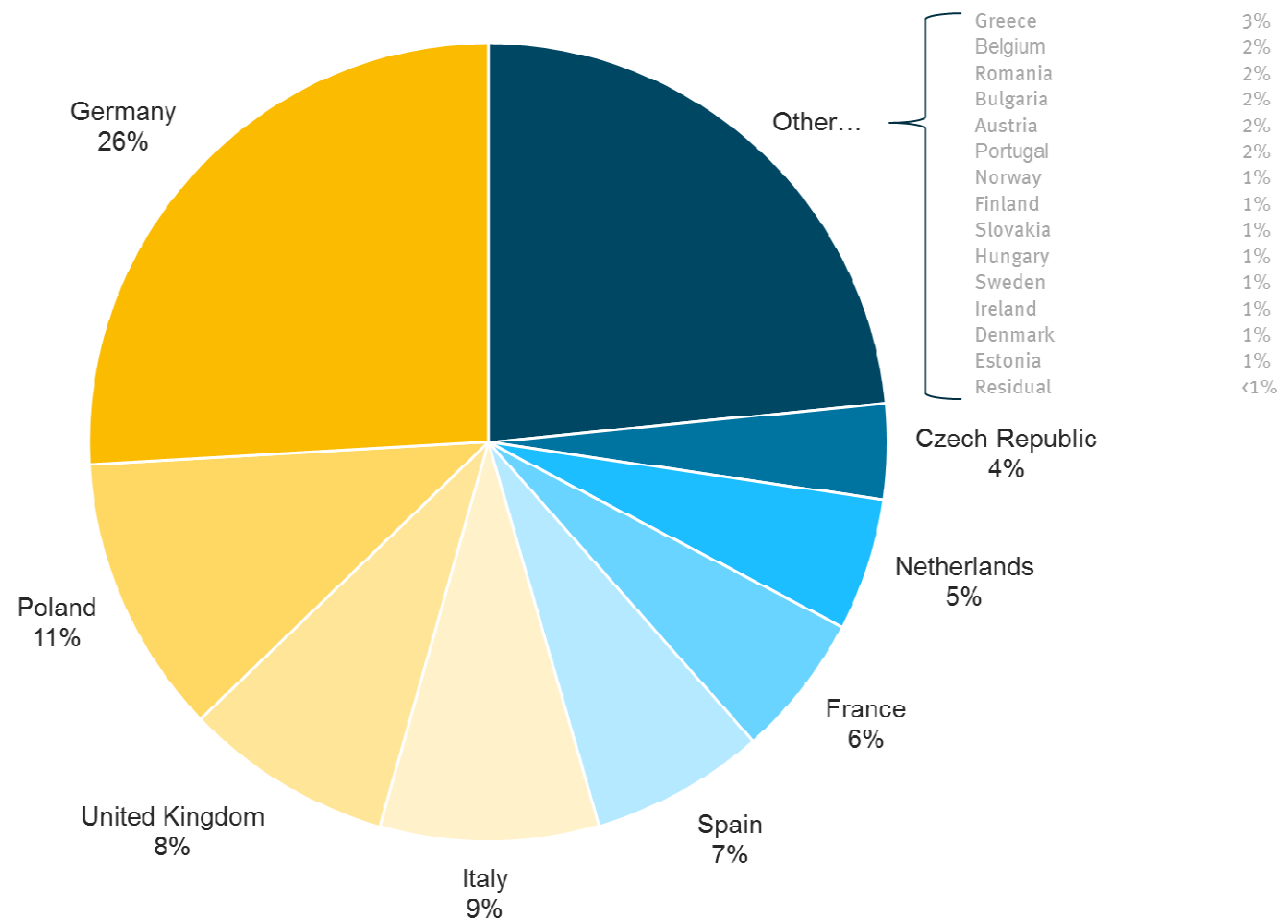
Source: DEHSt; as of 03/04/2017

EU ETS participants in Germany – CO₂eq emissions



Structure of the EU ETS 2016

Share of emissions by EU Member States

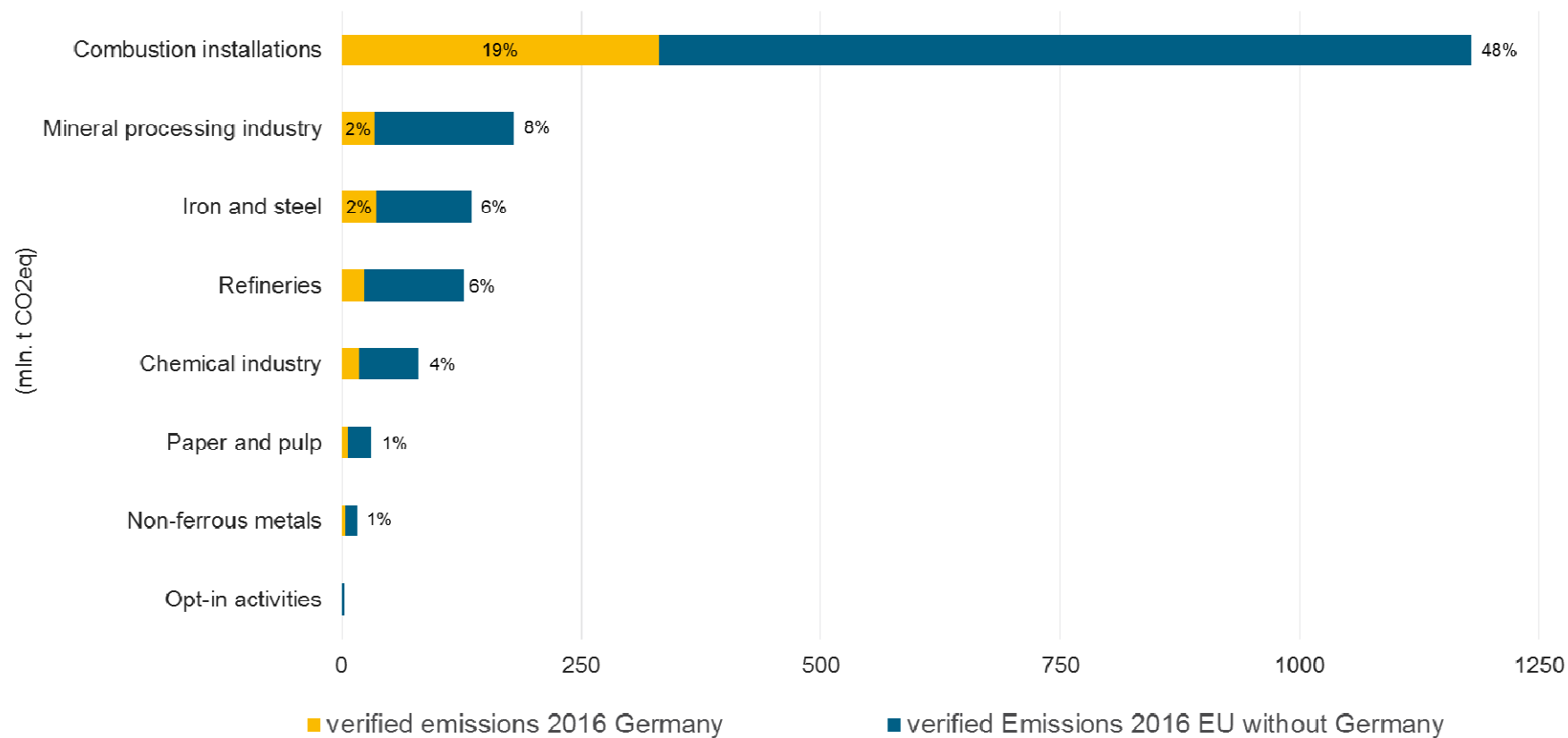


Source: DEHSt calculations based on data from the European Environmental Agency.

As of: 15/06/2017

Structure of the EU ETS 2016

Share of emissions by ETS sectors

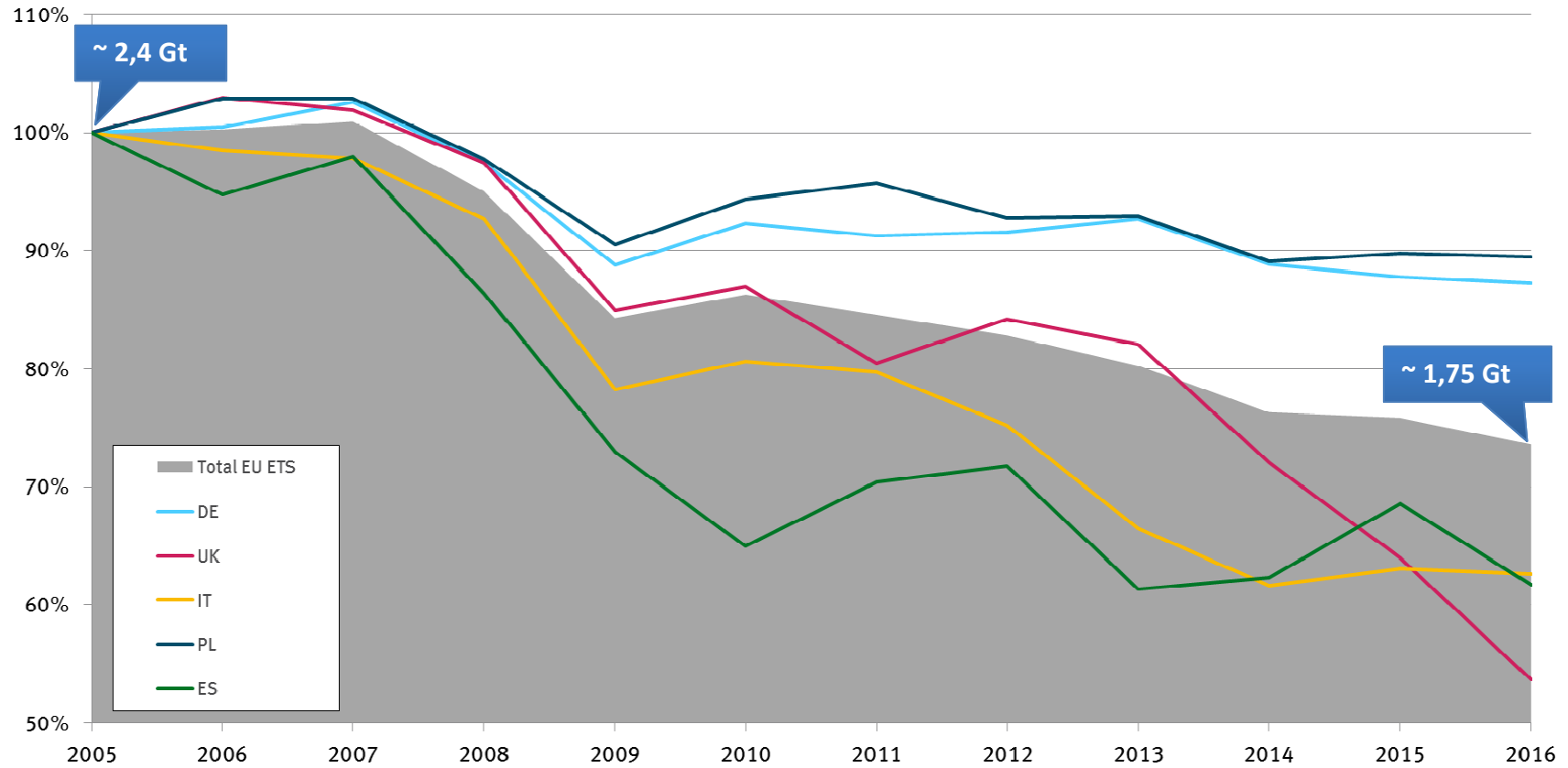


Source: DEHSt calculations based on data from the European Environmental Agency.

As of: 15/06/2017

Emission Reductions in EU ETS by 2016 (EU 31 and Germany)

Comparing the Largest Emitters



Emissions between 2005 and 2012 include an estimation of historical emissions for the scope of the third trading period.

Source: DEHSt calculations based on data from the European Environmental Agency.

As of: 15/06/2017

Results: EU ETS emissions in Germany

- **Consequent reduction of CO₂ emissions**; in 2016: -13% (2005)
- Phasing out nuclear energy in Germany could be compensated without increase of CO₂ emissions!
- Total **phase-out of nuclear** energy by 2022
29 plants until 2015, further 8 plants by 2017, 2019, 2021, and 2022)
2015: 11 GW remaining nuclear capacity (=14.1% of power generation)
- But:
 - In the average of the EU and many other MS higher emission reductions!

Conclusions

Emissions trading ...

- ... is the **most important pillar of climate policy in Europe**.
As an economic instrument emissions trading allows emission reductions for **as low costs as possible** .
- ... is effective and reliable! **But can only be as ambitious as the CAP** is set!
- ... causes low administrative effort and transaction costs, if allocation rules are simple and evident: **Auctioning** is the best option here!
- ... **goes along with other climate change policy instruments** (e.g. promotion of renewable energies, greening of the tax system, efficiency standards)

Thank you!

Dr Jürgen Landgrebe

This presentation is based on a speech held by the German Emissions Trading Authority (DEHSt) and is not clear for publication. Check against delivery. References and quotations from the presentation must at all times be approved in written form by the DEHSt.