



The Federal Ministry  
for the Environment,  
Nature Conservation  
and Nuclear Safety

---

# **ETS KEY DESIGN ELEMENT: ALLOCATION**

## **Case Studie**

### **EU ETS / GERMANY**

**ETS ACADEMY MEXICO**  
**23 – 25 July 2019, Mexico City**

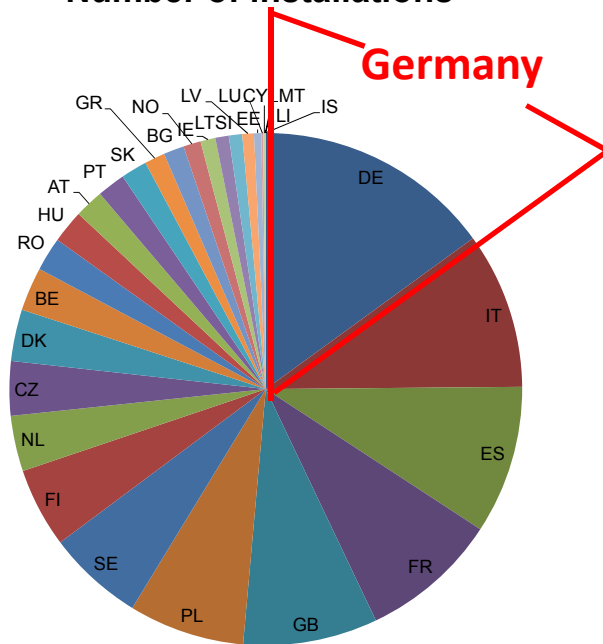
**Alexander Handke**  
Emissions Trading Division  
Federal Ministry for the Environment,  
Nature Conservation and Nuclear Safety  
Germany

---

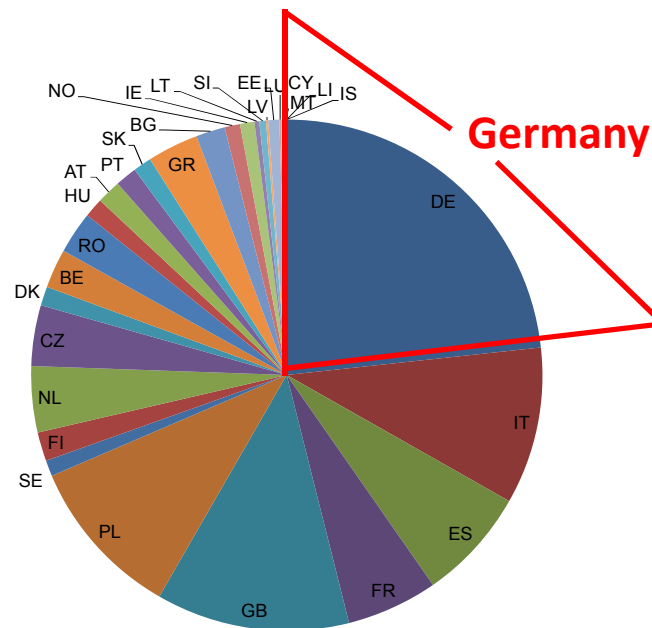


# EU ETS Overview

Number of installations



Emissions



## Current key figures - 2017:

### Germany:

- 1,833 installations
- 438 million t CO<sub>2e</sub>
- 3,4 % < 2016
- 72 aircraft operators
- 9.1 million t CO<sub>2e</sub>
- 1.8 % < 2016

### Europe:

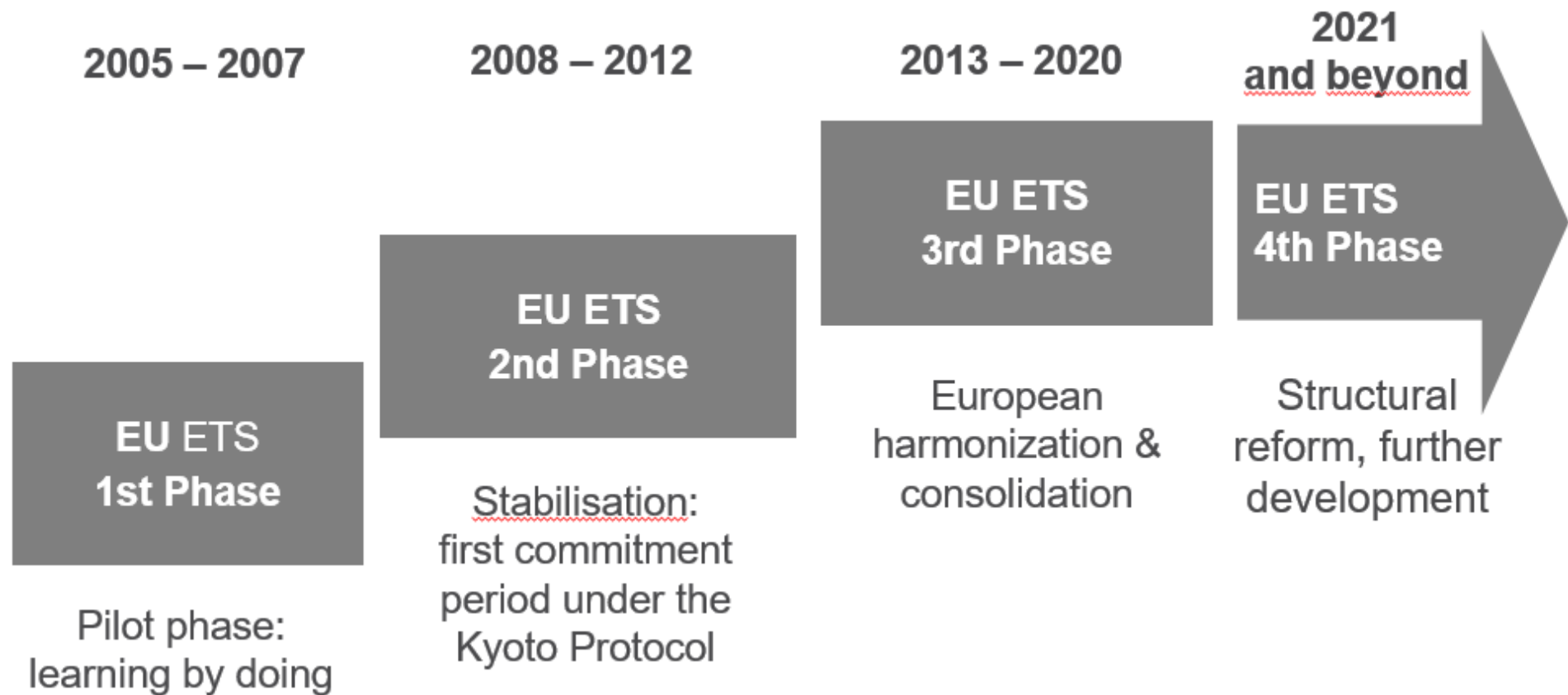
- 11,781 installations
- 1.75 billion t CO<sub>2e</sub>
- 0,2 % > 2016
- > 40 % of EU GHG
- 511 aircraft operators
- 64 million t CO<sub>2e</sub>
- 4.5 % > 2016

**Source:** EEA, Trends and projections in the EU ETS 2017  
UBA/DEHSt, VET Bericht 2017



# EU ETS Overview

## Development from Phase I to IV





# Allowance Allocation

## EU ETS/Germany

- Allocation regime subject to **several changes and adaptations** from **Phase I to Phase III** of the ETS
- **Further adaptations for Phase IV (2021 – 2030)**
- Changes **reflecting...**
  - **Experiences made** with different methods and their **specific pros and cons**
  - **Different competitiveness environment** in covered sectors, esp. **energy sector vs. industrial sectors**
  - **Grown understanding and acceptance** of the ETS



# Allowance Allocation

## Germany Phase I: “too many choices” I

- **No auctioning** of allowances
- **Grandfathering** for **incumbent** installations as the **default method**
  - Historic emissions in a Baseline Period x reduction factor (0,97)
- **Benchmarking** for **New Entrants, starting operation after 2004**
  - BAT Benchmark x projected output in the future
  - Ex-post correction if actual production was lower than projected



# Allowance Allocation

## Germany Phase I: “too many choices” II

- **Several “special rules” & high flexibility** for installations
  - **“Early Action Rules”**: reduction factor was not applied if operators provided evidence for emission reductions in the past
  - **“Option Rule”**: operators could choose to apply for benchmark allocation instead of grandfathering
  - **“Cogeneration Bonus”** for combined heat and power production
  - **“Hardship Rule”**
  - **“Cessation Rule”** for closed plants & **“Transfer Rule”**
- **58 combinations of allocations provisions could be used!**



# Allowance Allocation

## Germany Phase I: conclusions

- **Allocation amount** applied for **exceeded the cap** => additional **adjustment factor** had to be applied
- **Allocation rules** turned out to be **too complex** and **not sufficiently transparent**
  - disproportionate **high administrative efforts** for companies & authority
  - High number of **administrative & court proceedings** regarding allocation decisions
- **Windfall profits** especially for **electricity producers**
- **Over-allocation** of allowances and price drop (30 € => 0,10 €):
  - **Cap** was **not** ambitious (higher than actual emissions, no scarcity)
  - No **robust emissions data available** when determining the Cap



# Allowance Allocation

## Germany Phase II: Simplifications I

- **Grandfathering** for **industry installations** only, base period extended
- **Less special rules:** no "option rule",
  - only hardship provision in case of production growth for small operators and
  - strict hardship provision in case of existence threat
- **Reduction factor for industry:** -1,25 %
- **Bonus for small installations** (up to 25,000 t CO<sub>2</sub>/a): no reduction factor





# Allowance Allocation

## Germany Phase II: Simplifications II

- **Extension of benchmarking allocation instead of grandfathering:**
  - All energy installations and all installations with operation starting from 2003 onwards
  - **Simplified benchmarks for energy installations**
- **Phasing-in auctioning** to reduce windfall profits of electricity producers
  - Ca. **9 %** of the allowances **auctioned: 40 Mio allowances**
  - Auctioning amount was created by a corresponding **adjustment/reduction of allocation for electricity production (15,6 %)**
  - **preliminary allocation amount** (based on benchmarking) **x 0,844**  
**“Auctioning factor”**



# Allowance Allocation

## EU ETS Phase III: overview

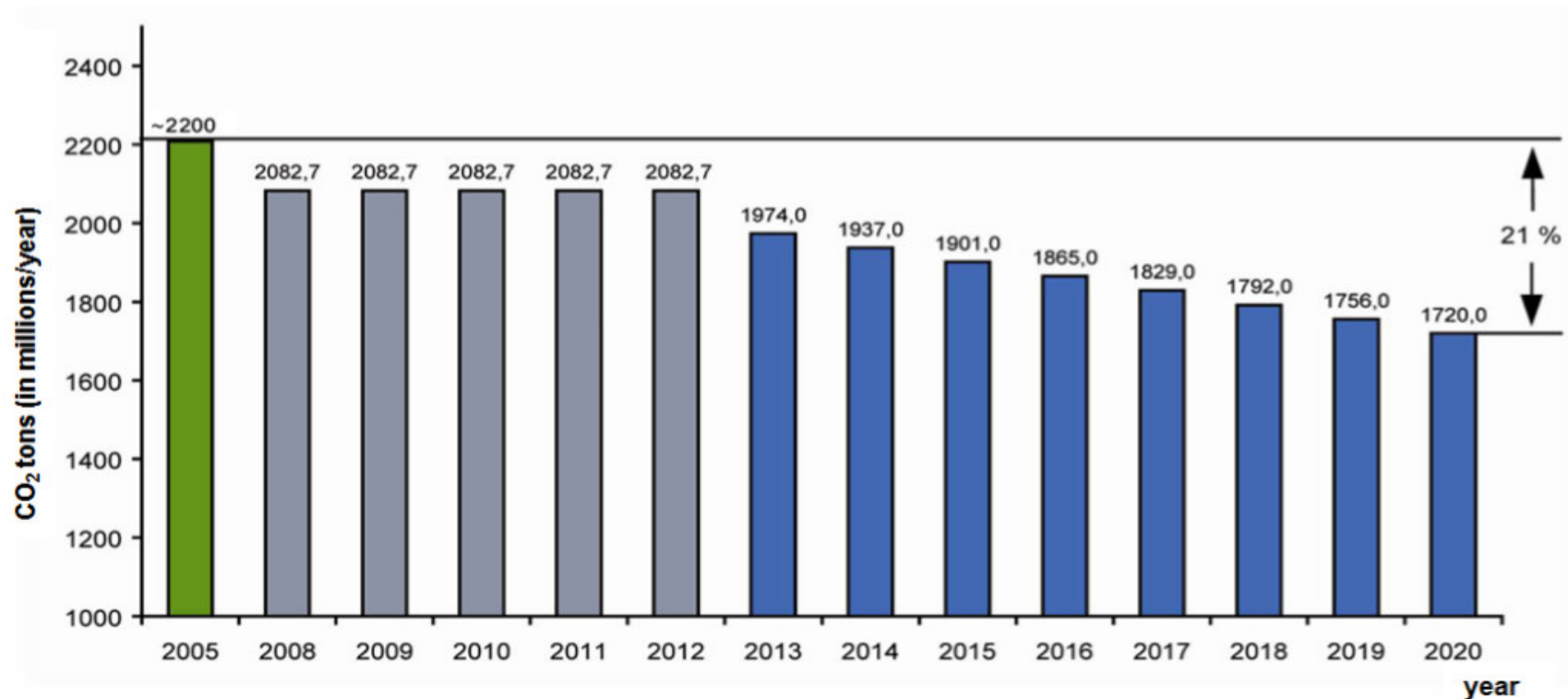
- **EU-wide Cap**, with a linear reduction factor of 1.74% per year
- **Auctioning as default allocation method**
  - **57 %** of the allowances available (cap) **to be auctioned**
  - In general, **no free allocation for electricity producers**
- (Transitional) **free allocation for industry**
  - **43 %** of the cap as “**industry budget**”
  - **Based** on ambitious **benchmarks x historic production output**
  - Planned **phase-in of auctioning for industry** (20% in 2013 - 70% in 2020)
  - **Exemptions for sectors** exposed to “**Carbon Leakage**”



The Federal Ministry  
for the Environment,  
Nature Conservation  
and Nuclear Safety

# Allowance Allocation

## EU ETS Cap from Phase I to Phase III



Phase III: EU ETS wide cap, decreased by 1.74 % annually (38 Mill t CO<sub>2e</sub>)



# Allowance Allocation

## EU ETS Phase III: Benchmarks

- **52 product benchmarks determined on European Level**
- In general : “**one product – one benchmark**”; **fallback benchmarks** for heat and fuel consumption for **heterogeneous products/sectors**
- **Top-10-benchmarks** based on real data:
  - **Average performance of 10 % most efficient installations** in a (sub-)sector
  - Reference period **2007/2008**; data gathered **EU-wide**, **verified** by third parties and **assessed by the EU Commission**



# Allowance Allocation

## EU ETS Phase III: Conclusions

- **In general high acceptance of the allocation regime**
  - **Incentive** to improve performance
  - **Benefits** for “**Early Movers**”
  - **Recognised** approach to address “**Carbon Leakage**” concerns of EU industry
  
- **However: preliminary allocation applied for exceeded the industry budget**
  - Additional “**Cross Sectoral Correction Factor**” had to be applied
  - **Industry exposed to Carbon Leakage** challenged these additional cuts

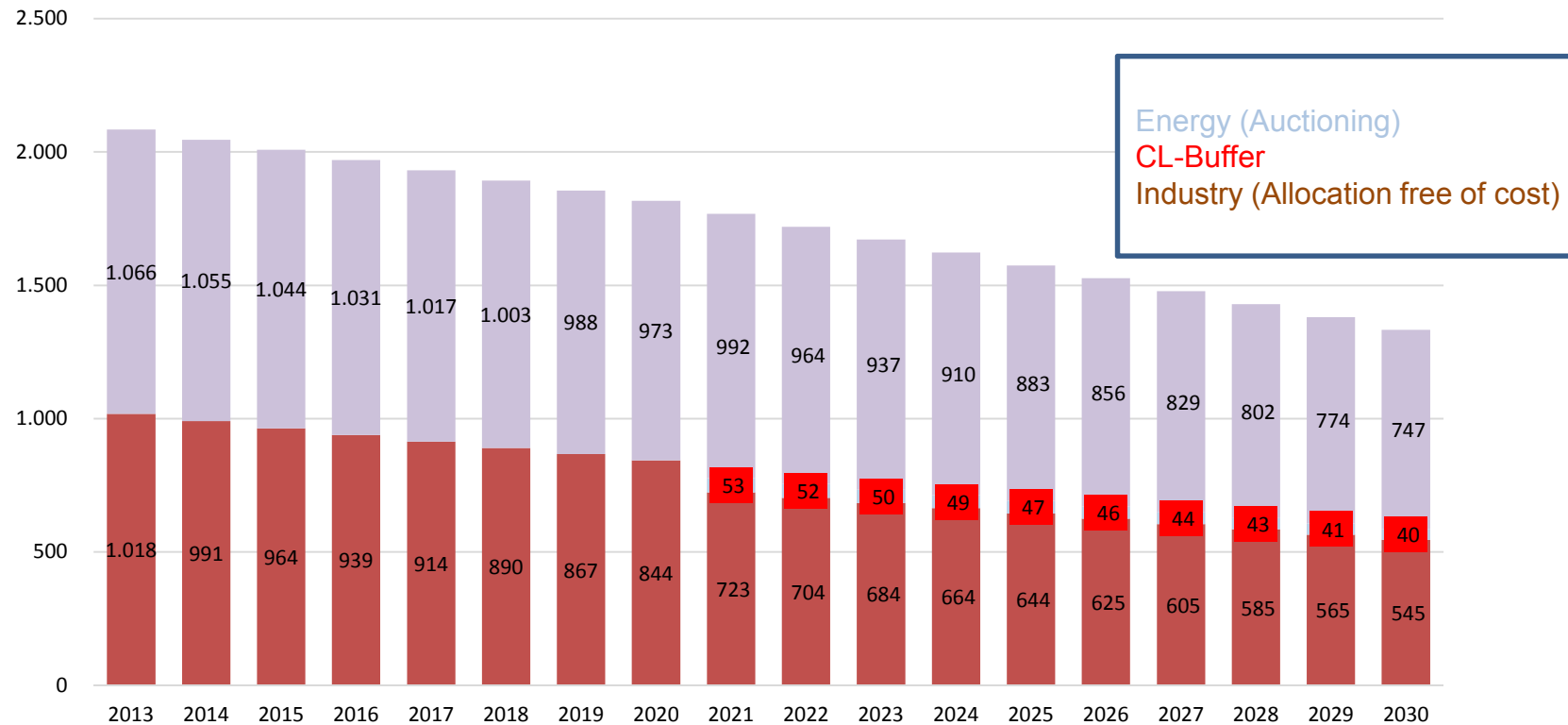


# Allowance Allocation Outlook: EU ETS Phase IV

- **More ambitious Cap reduction by 2.2 % p.a. instead of 1.74 %**
- **Continuation of the allocation regime; benchmark to be updated**
- **Additional measures to address competitiveness concerns**
  - „Industry budget“: **43 % of the cap**
  - **100 % allocation** based on benchmarking for **Carbon Leakage Sectors 2021 – 2030**
  - **Avoidance of „Cross Sectoral Correction Factor“** (buffer)
  - **„Dynamic Allocation“** regarding increases/decreases of the production output (15 % threshold)
  - Allocation for Non-Carbon Leakage sectors to be phased out 2026 - 2030 (30 % in 2021)



# EU ETS Cap in Phase III & Phase IV



Phase III 2013 - 2020: reduction factor 1.74 % annually (38 Mill t CO<sub>2e</sub>)  
Phase IV 2021 - 2030: reduction factor 2.2 % annually (48 Mill t CO<sub>2e</sub>)



The Federal Ministry  
for the Environment,  
Nature Conservation  
and Nuclear Safety

---

# Thank you for your attention

Alexander Handke

Emissions Trading Division

Federal Ministry for the Environment,  
Nature Conservation and Nuclear Safety

[Alexander.Handke@bmu.bund.de](mailto:Alexander.Handke@bmu.bund.de)

---