

Accounting for CO₂ emission trade certificates in the Capital account

Meeting of the Group of Experts on National Accounts, Geneva

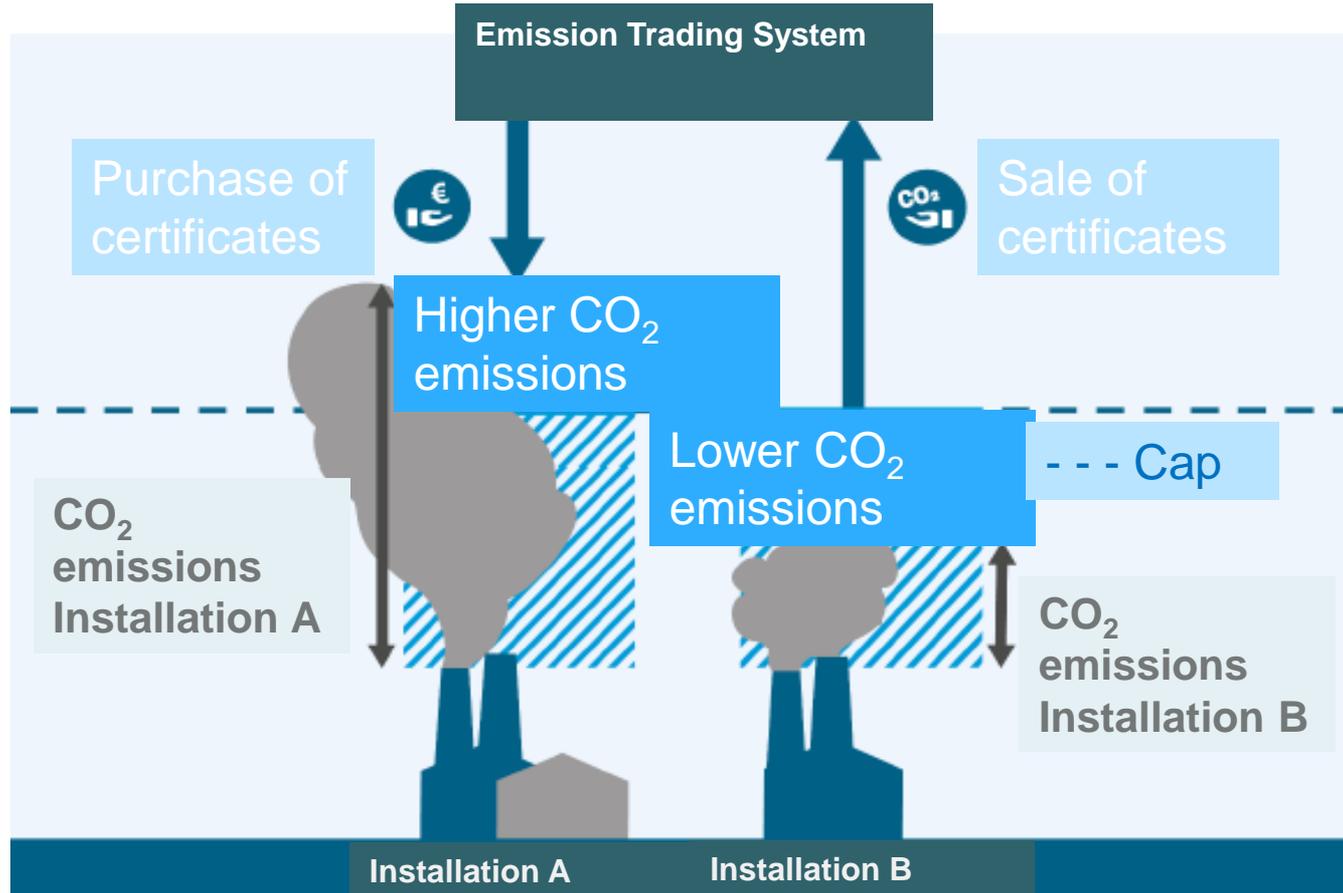
Susanne Goldhammer, Deutsche Bundesbank

Accounting for CO₂ emission trade certificates in the Capital account

Outline:

- European Emission Trading System/ Cap and trade principle
- Economic asset classification
- Data sources used in Germany
- Insights: trade volume, seasonal trend, trading partners, information about respondents
- Emissions trade certificates in the Capital account
- Lessons learned
- Outlook and discussion

Cap and Trade principle



Source: Umweltbundesamt / Deutsche Emissionshandelsstelle (2022) <https://www.umweltbundesamt.de/publikationen/der-europaeische-emissionshandel>

Emission trade certificates – key issues

- EU Emissions trading allowances entitle an installation or an aircraft operator to emit 1 tonne of carbon dioxide equivalent (1 metric tonne of CO₂ or an amount of another greenhouse gas with an equivalent global-warming potential) during a specified period.
- At a certain moment, installations or aircraft operators must present allowances to cover each unit of emissions.
- Relevant for National Accounts: issuance of emissions trading allowances by government and surrender of allowances
- Relevant for Balance of Payments: trade in emissions trading allowances between residents and non-residents (changes in economic ownership)

Classification of the Emissions trading allowances

- Allowance entitles the holder to do a certain activity: to "emit one tonne of carbon dioxide equivalent during a specified period"
- Allowance does not entitle property rights
- Allowance is registered and transferable
- Allowance is tradeable
- Allowance does not have a corresponding liability



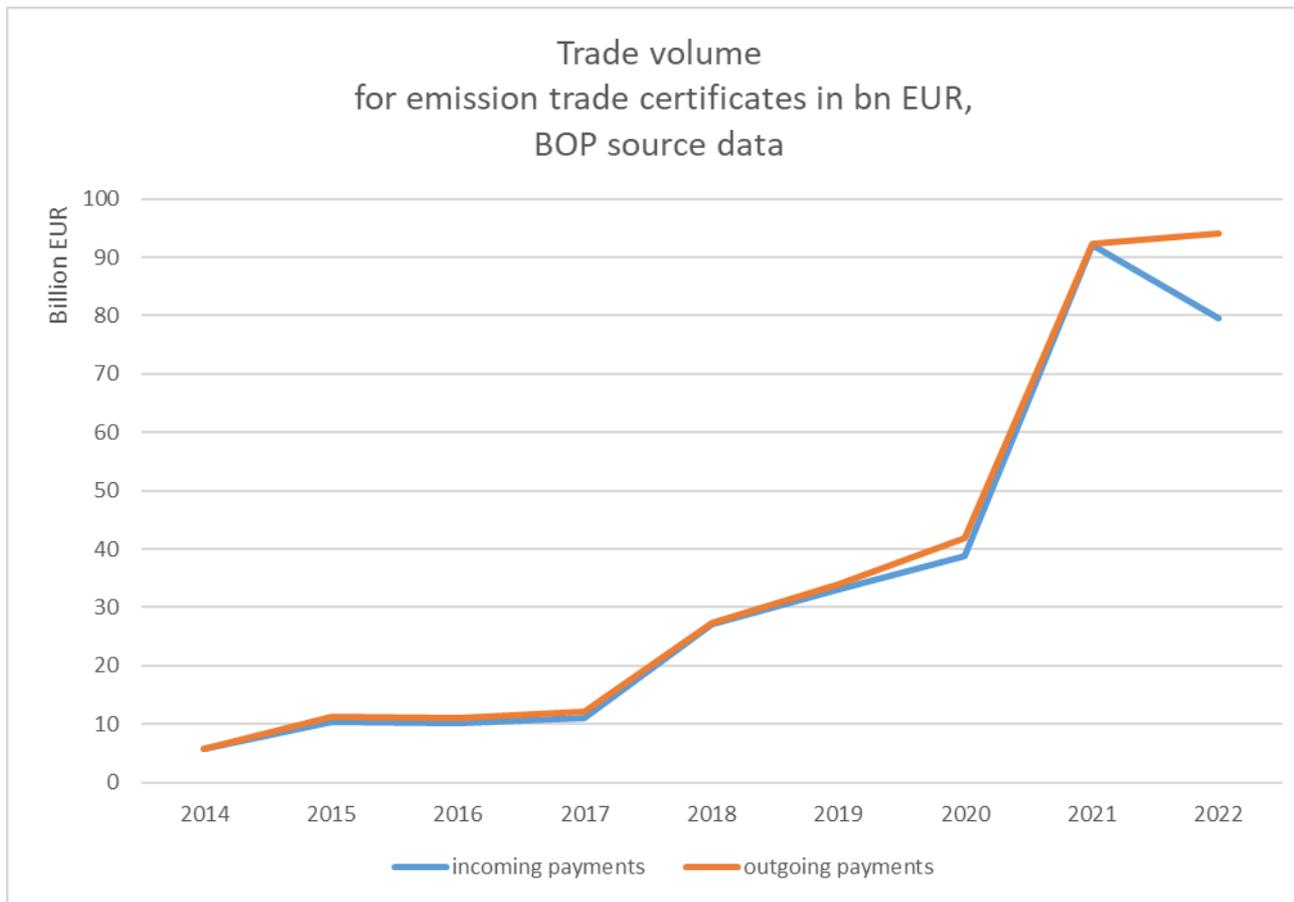
Non-produced non-financial asset
License

Table 5.1. Economic Asset Classification
(Includes 2008 SNA codes)

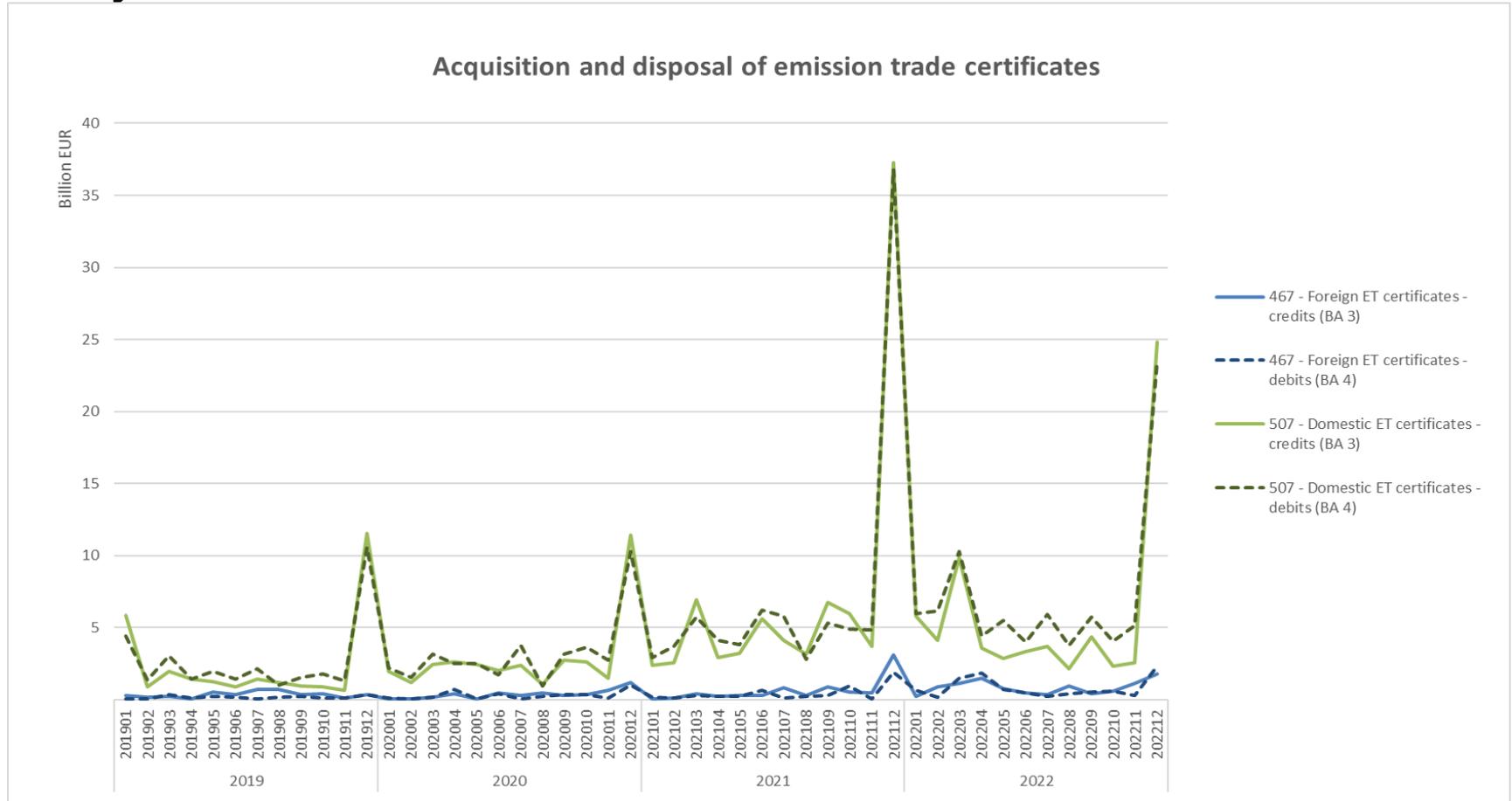
Asset classes	Examples
AN Nonfinancial assets	
ANI Produced assets	
ANI1 Fixed assets	Tangible assets: dwellings; other buildings and structures; machinery and equipment; weapons systems; cultivated biological resources. Intangible assets: research and development; mineral exploration; computer software and databases; entertainment, literary, and artistic originals.
ANI2 Inventories	Materials and supplies, work-in-progress, finished goods, goods for resale.
ANI3 Valuables	Precious metals and stones, antiques, and other art objects.
AN2 Nonproduced assets	
AN21 Natural resources	Land and subsoil assets, noncultivated biological resources, water resources, radio spectra.
AN22 Contracts, leases, and licenses	Marketable operating leases, permissions to use natural resources, permissions to undertake specific activities, entitlement to future goods and services on an exclusive basis.
AN23 Goodwill and marketing assets	Brand names, mastheads, trademarks.
AF Financial assets	See Table 5.3.

Source: BPM6, Table 5.1

Emission trade certificates in Germany: development of trade volume



Emission trade certificates in Germany: insight in seasonal trend of monthly source data



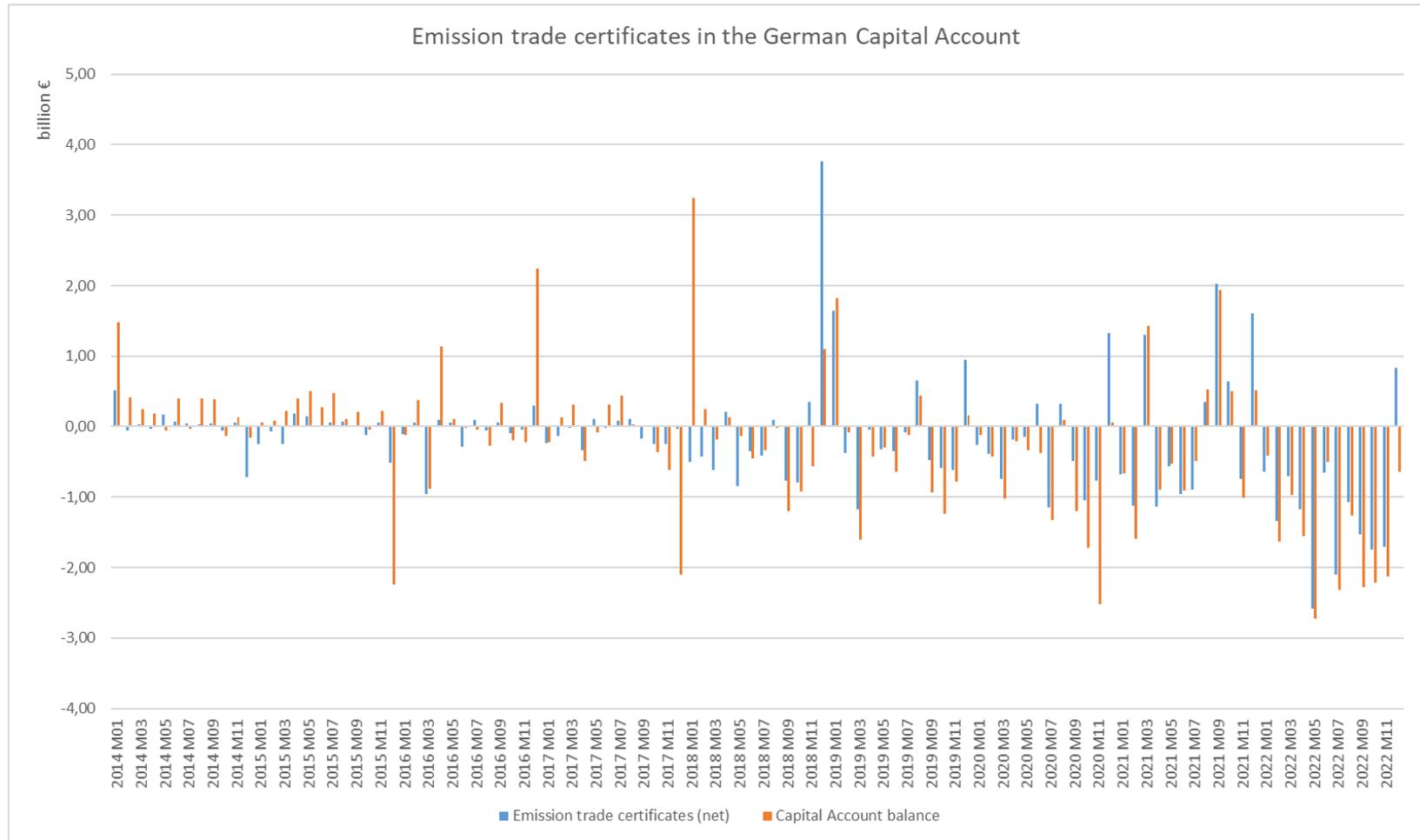
Emission trade certificates in Germany: main trading partners 2022



Emission trade certificates in Germany: main respondents 2022

NACE Rev.2	Division	Number of reports	Reported volume
Financial and insurance activities	64.19	404	53,25 bn EUR
	64.90	66	5,84 bn EUR
	66	878	57,75 bn EUR
Electricity, gas, steam and air-conditioning	35	758	49,13 bn EUR
Manufacture of chemicals and chemical products	20	85	2,96 bn EUR
Manufacture of coke, and refined petroleum products	19	55	2,36 bn EUR
Manufacture of glass and glass products	23	115	0,87 bn EUR
Manufacture of basic metals	24	53	0,71 bn EUR

Emission trade certificates (net) in the German Capital Account



Susanne Goldhammer, Deutsche Bundesbank

17 April 2023

Page 11

Emission trade certificates in Germany – lessons learned

- In our direct reporting system, we are not able to separate between primary market and secondary market, but we are able to separate derivatives
- Separation between foreign and domestic certificates is difficult
- If respondents are not able to identify foreign and domestic certificates separately, they are allowed to report the total under domestic certificates
- Banks report on behalf of their clients (in this case, we do not know the branch of the client)
- Clearing by stock exchange causes geographic bias: Clearing house becomes central counterparty, change in economic ownership happens. At the moment, we „look through“ the clearing house.
- Domestic transactions (e.g. domestic airline buys emission trade certificates from domestic stock exchange) are not reported.

Outlook and discussion

- Proposed next generation of EU own resources: European Commission plans to use 25 % from revenue of EU emissions trading flows as own resources

- BPM6 Update Process:

 - Guidance Note B.6 Sustainable finance

 - („Making purchases and trade in CO₂ emission permits visible”)

 - Guidance Note WS.7 Treatment of Emission Trading Schemes

Outlook and discussion – Guidance Note WS.7

- Proposed option 4 (emission permits as financial assets) is problematic from a conceptual perspective for both, the BPM and the SNA:
- Emission permits do not comply with the definition of financial claims in the SNA:
SNA 2008 para. 3.35: "**A financial claim is the payment or series of payments due to the creditor by the debtor under the terms of a liability.**"
Yet emission permits do not include a payment from the debtor (the government) to the creditor (the holder of the permit) in any case.
The fact that emission permits are traded on markets does not make them financial assets as pointed out in BPM6 para. 5.8.
- GN WS.7 recommends to record every transaction of EPs at market prices and all positions at the auction price. This would be extremely data demanding since the auction price of every single EP worldwide has to be known at every point in time. **The recording of positions at auction price breaks with the principle that positions are to be recorded at market prices.**
- Data from a centralized body that coordinates the sales and purchases of emission permits (e.g. Union Registry) is not in accordance with change in economic ownership principle
- With emission permits as financial assets, they would of course no longer appear in the Capital account

Accounting for CO₂ emission trade certificates in the Capital account

Thank you for your attention!



Looking forward to your questions
and experiences during the
discussion!