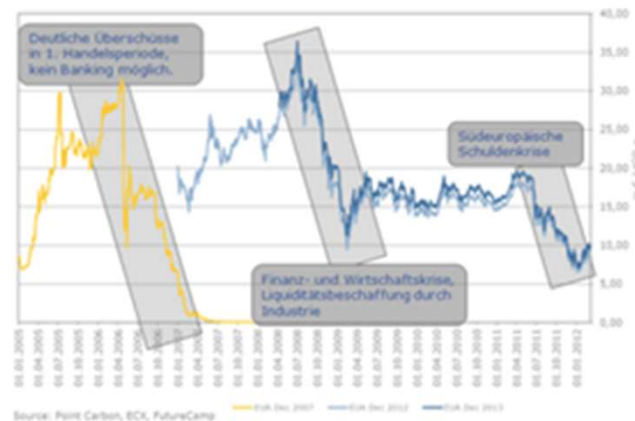


EU-ETS – lessons learned from a private sector's perspective



Study trip of GiZ Mexico

“Preparation of an Emission Trading System in Mexico
Learning from the EU ETS Experience”

Dr. Roland Geres / Felix Nickel, FutureCamp
Leverkusen, October 17th 2018



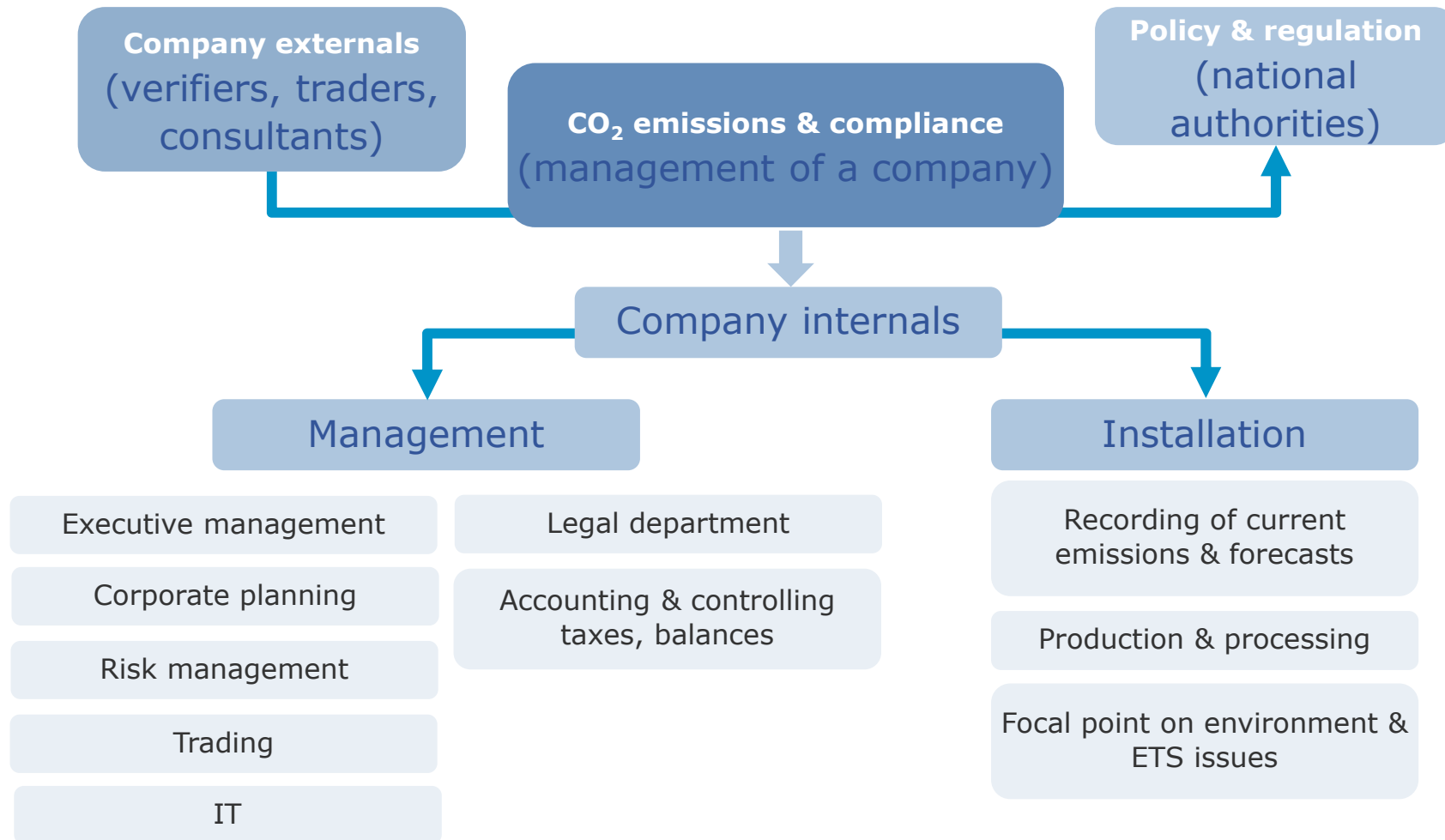
Content of this presentation

- = **“Carbon Management” of a company**

- = Lessons Learned

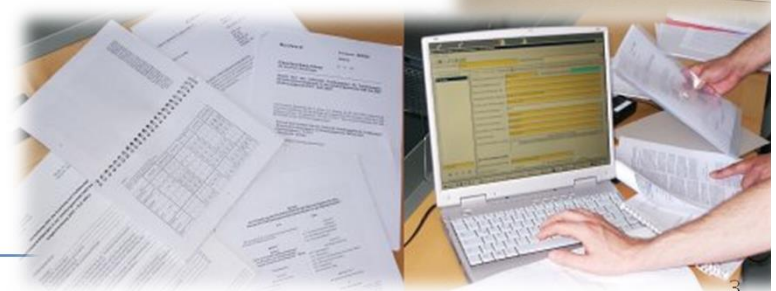
- = Conclusions and Recommendations

Carbon Management of a company - Overview



Typical challenges for companies with (EU-)ETS Introduction

- == Inside of a company: issue sometimes underestimated
 - Treated as classical „environment issue“ not one of financial impact;
 - Lack or slow provision of personal and / or financial capacities;
 - Processes not defined (e.g. “who is responsible for what?”);
 - Lack of or not well defined internal management systems.
- == Related to government action
 - High time pressure; late release of legal documents;
 - Sometimes important regulation appeared with considerable delay (e.g. treatment within taxes and balances for companies).
- == Accruing conditions like establishment of registries
- == Please note: In EU we introduced MRV and ETS at the same time!





Content of this presentation

= “Carbon Management” of a company

= **Lessons Learned**

= Conclusions and Recommendations

Experiences and Lessons Learned – Scope

2005-2007	2008-2012	2013-2020
<ul style="list-style-type: none"> Combustion >20MW Industrial activities 		
	<ul style="list-style-type: none"> Further industrial activities, e.g. steam cracker; aviation (2012) 	
		<ul style="list-style-type: none"> Further industrial activities, e.g. organic chemicals and other GHG (N₂O, PFC)
Critical issues for operators		
<ul style="list-style-type: none"> Definition of installation boundaries Cumulation of units Purpose of combustion 	<ul style="list-style-type: none"> Definition of industrial / energy installations 	<ul style="list-style-type: none"> Combustion included regardless of purpose

Experiences and Lessons Learned – market behaviour

2005-2007	2008-2012	2013-2020
Energy sector		
<ul style="list-style-type: none"> • Active trading from the beginning • Large windfall profits 	<ul style="list-style-type: none"> • Active trading • Still windfall profits 	<ul style="list-style-type: none"> • Active trading • No free allocation for electricity • No windfall profits
Industry:		
<ul style="list-style-type: none"> • No or little trading activities • Free allocation sufficient • No selling of allowances 	<ul style="list-style-type: none"> • Beginning of trading activities • Free allocation sufficient • Selling of allowances during economic crisis 	<ul style="list-style-type: none"> • Increase of trading activities • Beginning of structural shortage (slowly) • Selling of allowances during economic crisis

Experiences and Lessons Learned - Allocation

2005-2007	2008-2012	2013-2020
Subject to national legislation		EU harmonized
Germany: <ul style="list-style-type: none"> Optional grandfathering or benchmarking Up to 60 special rules 	Germany: <ul style="list-style-type: none"> Energy: <ul style="list-style-type: none"> Benchmarking Auctioning (10%) Industry: Grandfathering 	<ul style="list-style-type: none"> Energy: <ul style="list-style-type: none"> Auctioning (electricity, 100%) Benchmarking (heat) Industry: Benchmarking
Complexity allocation rules:		
Average allocation vs emissions:		

Experiences and Lessons Learned – MRV

2005-2007	2008-2012	2013-2020
<ul style="list-style-type: none"> • EU Guidelines, national implementation in law • Supported by templates and guidance on national level 		<ul style="list-style-type: none"> • EU regulation, no national implementation • Several EU guidance documents and templates
<ul style="list-style-type: none"> • Little standardization, very individual concepts 	<ul style="list-style-type: none"> • Increased standardization • Sector specific examples (Germany) 	<ul style="list-style-type: none"> • Simplifications, e .g. <ul style="list-style-type: none"> • Meters under metrological control • Frequency of analysis • Increased expectations, e.g <ul style="list-style-type: none"> • Individual uncertainty calculation

2nd period of EU-ETS (2008-2012) – some more lessons learnt

= Lessons learnt on allocation and other regulations:

- Simplification supported the efficiency and acceptance of the system
- General economic development in Europe and missing ex-post adaptation possibilities led to oversupply in the market, further fed by success of CDM and JI leading to rapid import of CERs and ERUs
- Trade volumes increased - market oversight issues more important

= Lessons learned within operators:

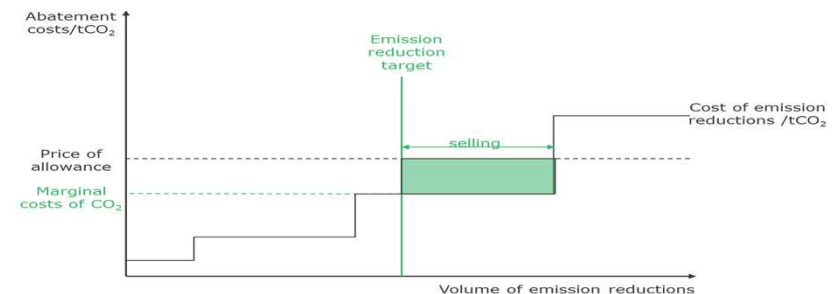
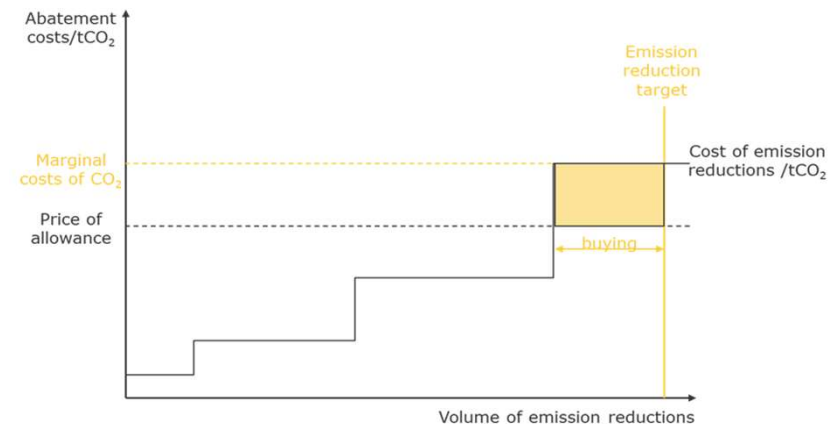
- For most operators managing emissions and ETS is „**business as usual**“
- More operators have become more active also in trading, made **use** of the instrument in order to
 - co-finance investments,
 - create revenues and even
 - generate liquidity (economic crisis 2009!)

Some more lessons learned: Flexibility - “Make or Buy”

= Companies learned quickly on the advantages of an ETS if compared to other instruments

- Flexibility of the ETS
- Taking into account own criteria (e.g. investment cycle, market development)
- Fit to other business targets such as efficiency, modernization
- Using allowances as an asset

= Co-financing of emission reduction measures with revenues from ETS

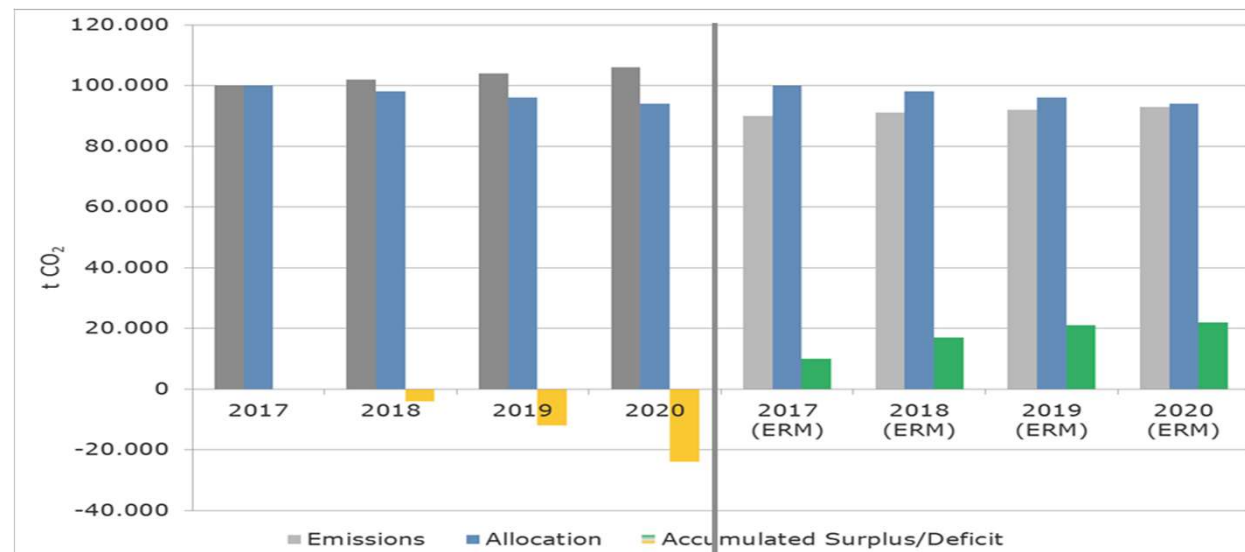


Some more lessons learned: Emissions Reductions

= **Emission reduction measures (EMM) should and can be stimulated by carbon costs and/or revenues**

= Typical measures (also see CDM!) are e.g.

- Power production: Retrofit (Energy efficiency)
- Industry/District heating: Boiler renovation (Energy efficiency)
- Industry: Waste heat utilization (Energy Efficiency)
- Power/Industry: Fuel Switch (from coal/oil to natural gas or biomass)





Content of this presentation

= “Carbon Management” of a company

= Lessons Learned

= **Conclusions and Recommendations**

Conclusions and Recommendations – from EU-ETS experience and discussions with operators

- = Existing MRV regulation is an advantage for ETS introduction. But needs to be implemented properly!
- = Avoid complexity especially on allocation as far as possible, concentrate more complicated rules on emission sources of relevance.
- = ETS: market-based instrument – needs framework and participants. Price signals from ETS should influence investment decisions.
- = Emission reduction targets exist - ETS should be compared with other instruments, not with the status quo. **Businesses should be aware that the alternative to an ETS is NOT nothing else!**
- = Companies need time to implement internal processes and might have additional costs - but also might support business targets by making use of ETS.

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