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Preparing the National Allocation Plans for the EU Emissions Trading System

Some Austrian Perspectives

Stefan P. Schleicher
Wegener Center for Climate
and Global Change
University of Graz, Austria

Wegener Center
www.wegcenter.at

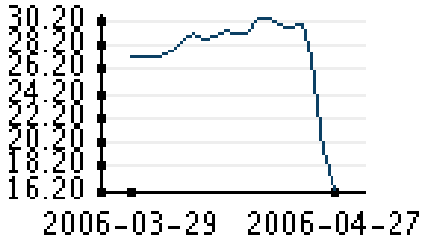
Is the EU Emissions Trading System breaking down?

The meltdown of CO2 market prices

- **Market fell price yesterday to €16,20**

EU: “ETS is one of our flagships”

- Market fell price yesterday to €16,20
- Response to emerging actual emissions in 2005 compared to allocations
  - ↗ -12% France
  - ↗ -15% to -30% Czech Republic



The origins of a market for CO2: EU emissions caps and the Kyoto Protocol

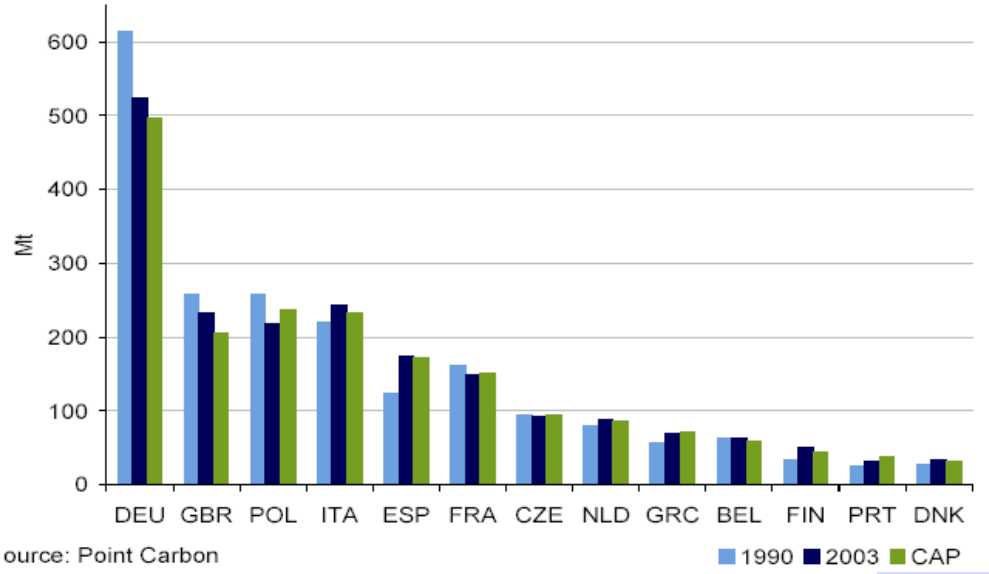
The market for CO2 emission allowances

- **The market volume**

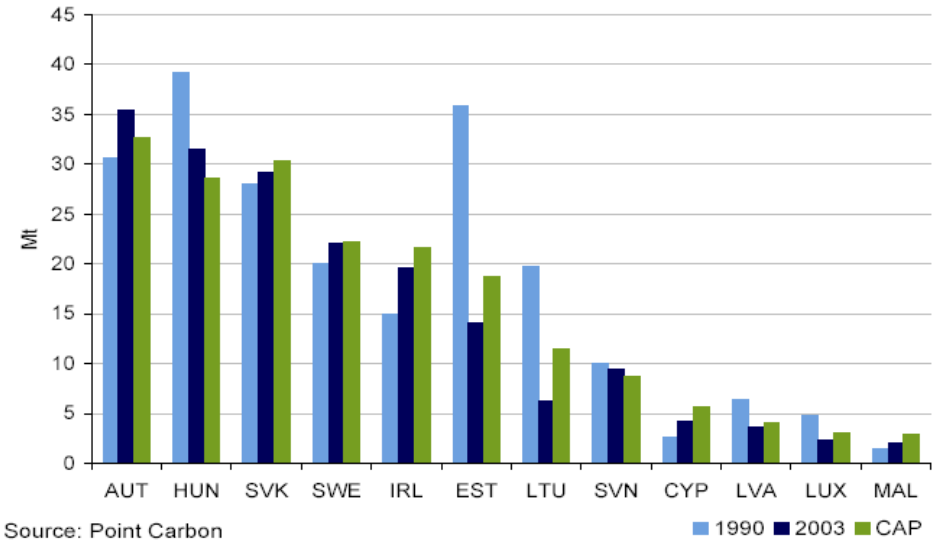
	2004		2005	
	[Mt]	[€ million]	[Mt]	[€ million]
EU ETS total	17	127	362	7,218
- OTC + exch.	*9.7*	*n.a.*	*262*	*5,400*
- Bilateral	*7.3*	*n.a.*	*100*	*1,818*
CDM	60	188	397	1,985
CDM 2nd	0	0	4	50
JI	9	2.1	28	96
Other	7.9	34	7.8	52
Sum	94	377	799	9,401

The EU ETS cap by countries

- **Allocations for Phase 1**
  - ↗ **2005-2007**



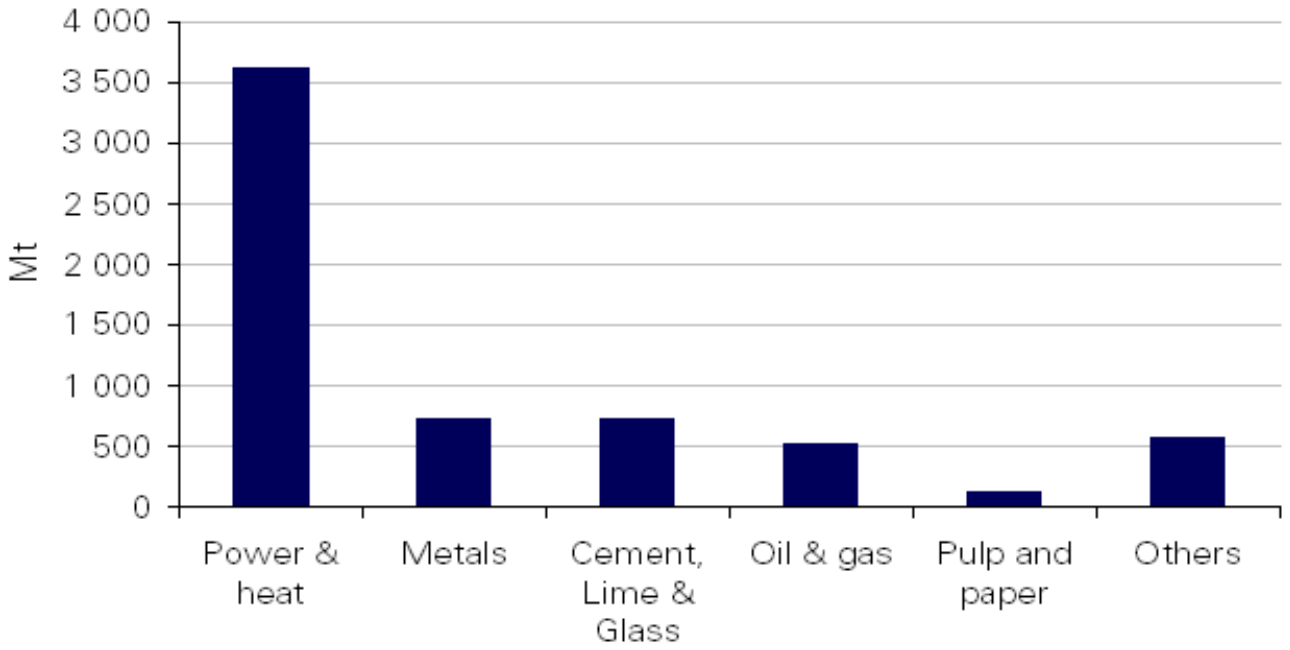
ource: Point Carbon



Source: Point Carbon

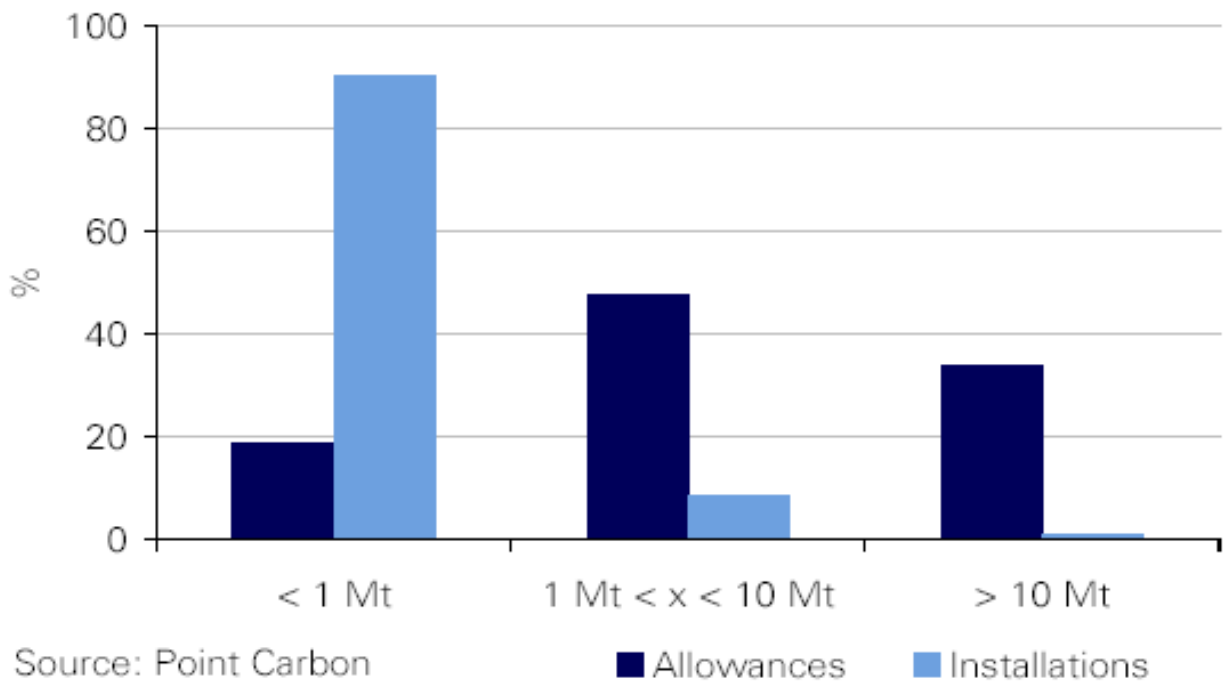
The EU ETS cap by sectors

- **Allocations for Phase 1**
  - ↗ **2005-2007**



The EU ETS cap by size / installations

- **Allocations for Phase 1**
  - ↗ **2005-2007**



The Kyoto cap

- **First Commitment Period**
  - ↗ **2008-2011**

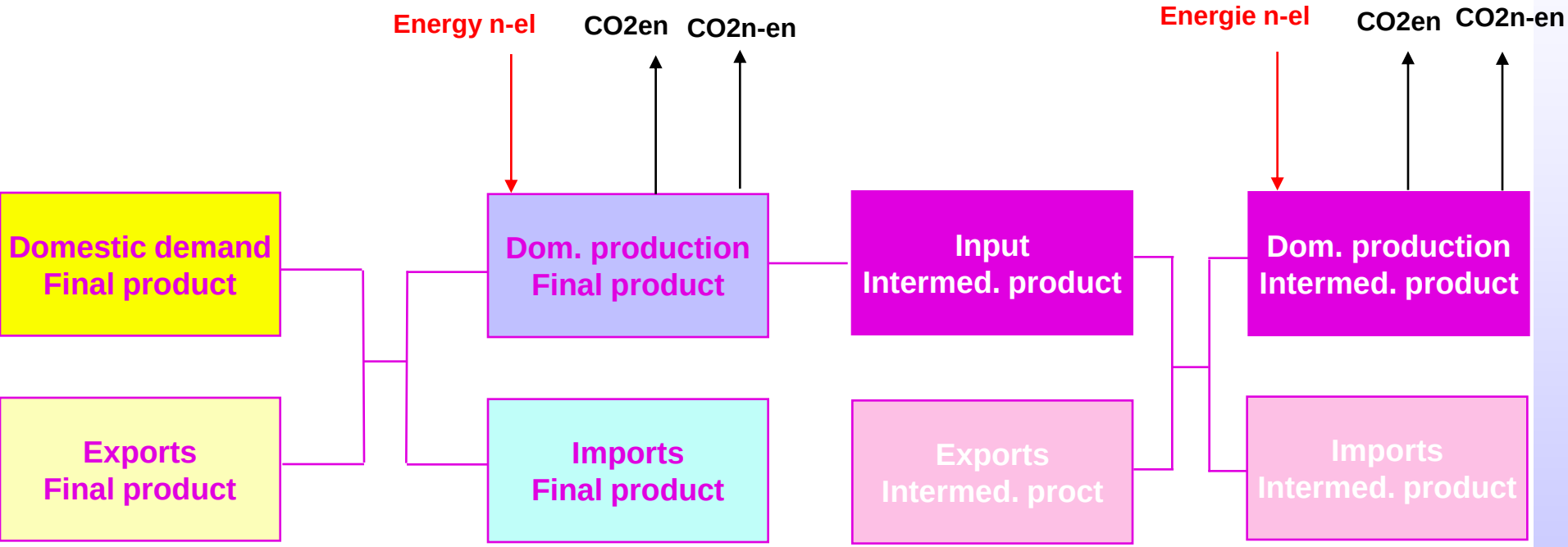
Country	GHG emissions in 1990 as share of Annex 1	Kyoto target, in % of 1990 emissions
Canada	3.3%	-6%
Japan	8.5%	-6%
EU 15	24.2%	-8%
Germany	7.4%	-21%
UK	4.3%	-12.5%
France	2.7%	0%
Italy	3.1%	-6,5%
Spain	1.9%	+15%
EU 25	29.8%	n.a
Poland	3.0%	-6%
Russia	17%	0%
Ukraine	not available	0%
USA	36.1%	-7%
Australia	2.1%	+8%

Preparing the Austrian National Allocation Plan

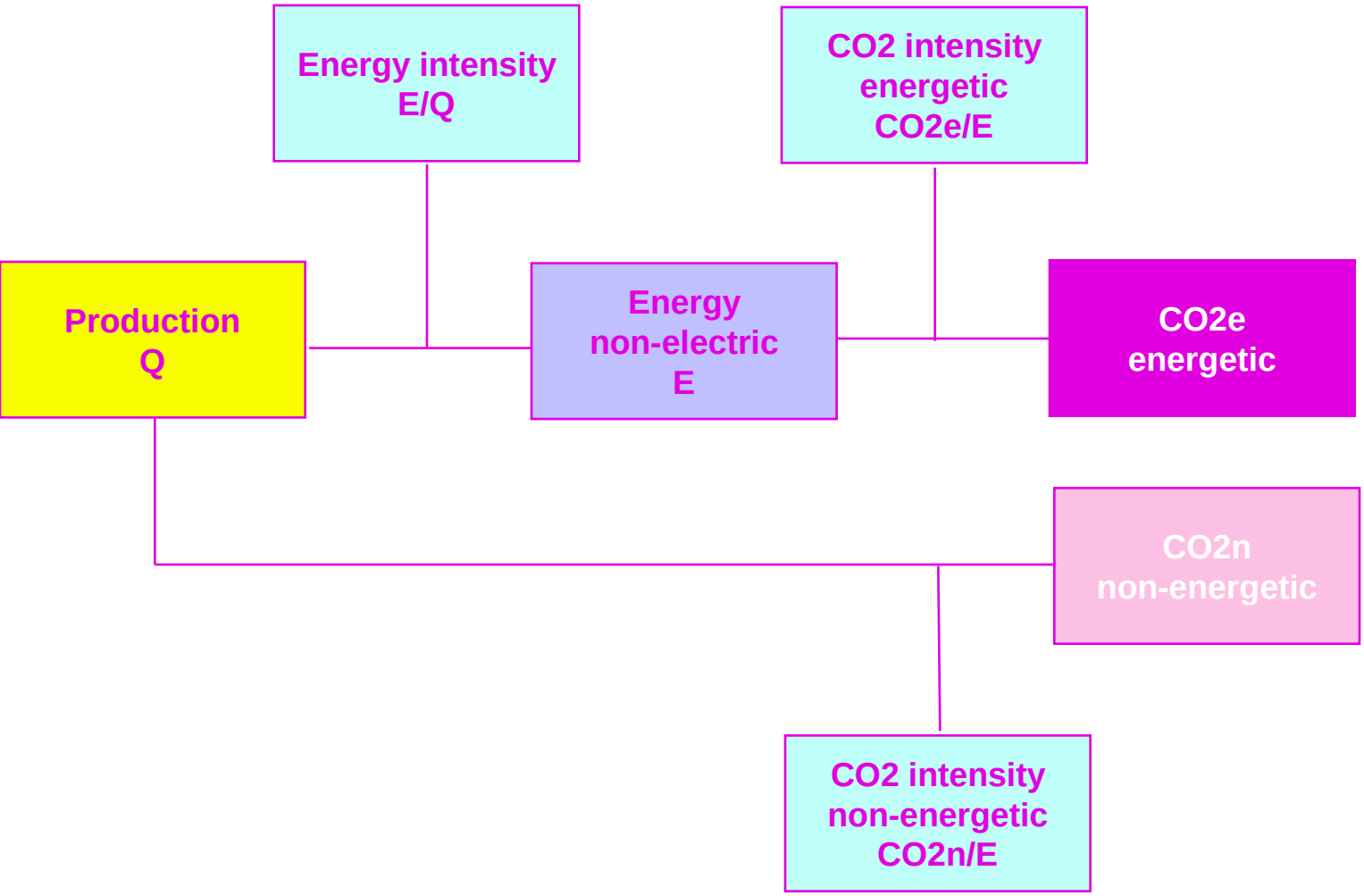
Methodology: Forward looking

- **Step 1: BAU forecast for CO2**
  - ↗ **based on projections for**
    - – **Production**
    - – **Energy intensity (energy / ouput)**
    - – **CO2 intensity (CO2 / energy)**
- **Step 2: Adjustments to BAU**
  - ↗ **Bonus - e.g. for cogeneration**
  - ↗ **Malus – for Kyoto committmentr**

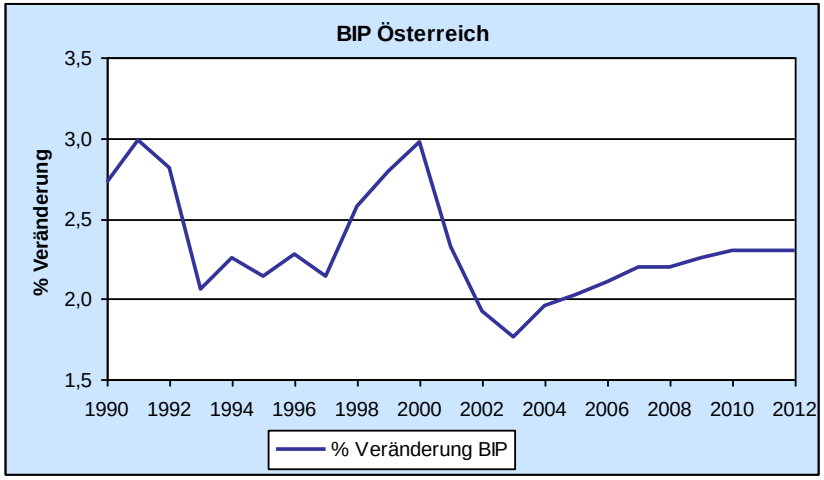
Methodology:
Production is determined by market structure

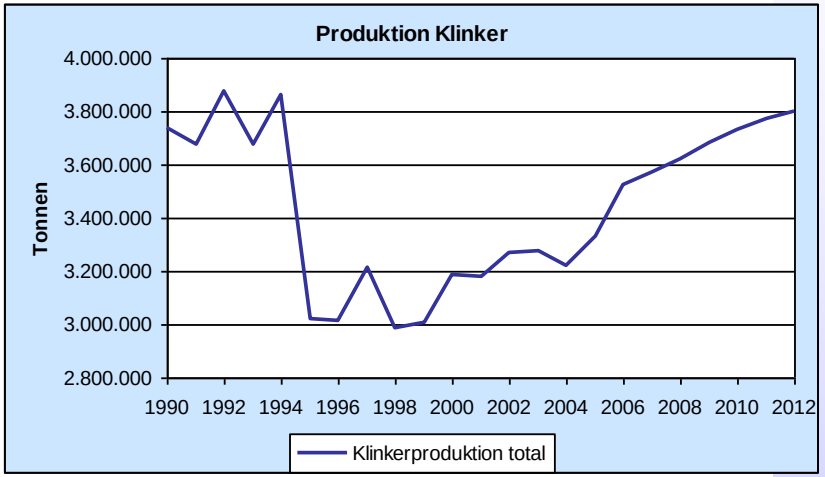


Methodology: Technology and CO2 Emissionen

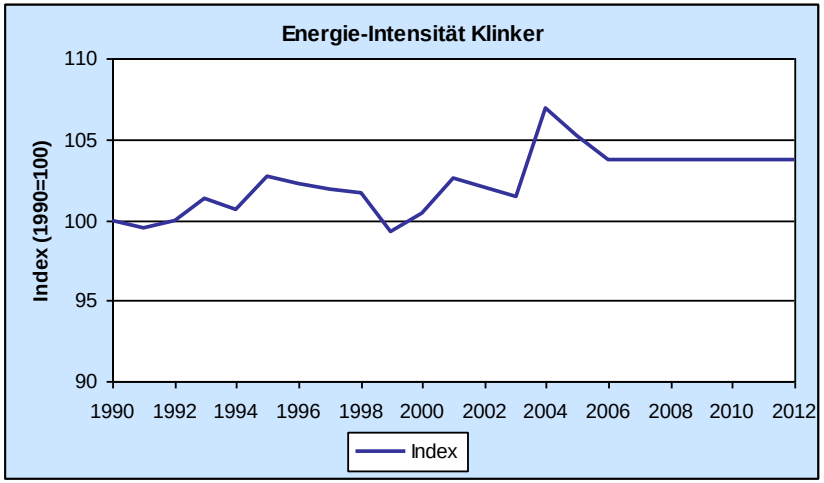


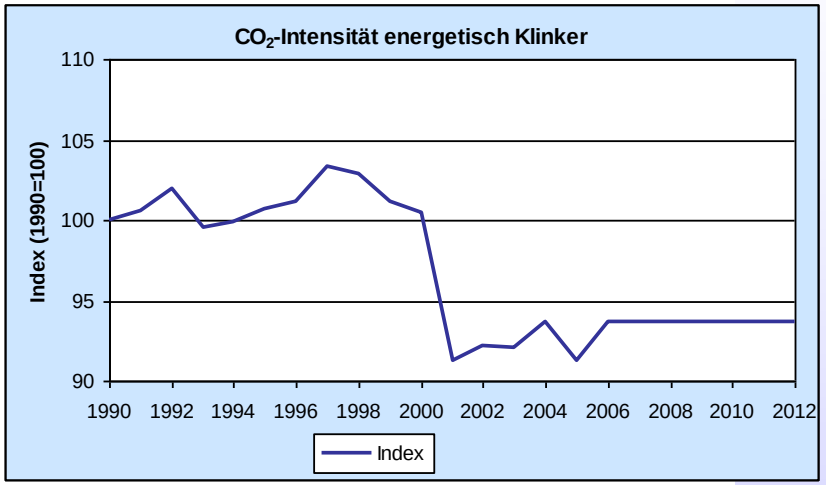
BAU Forecast for an Industry (1)

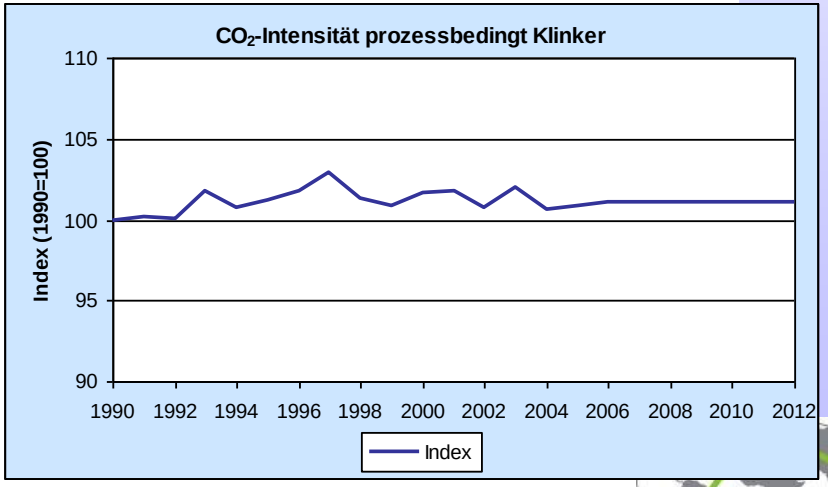




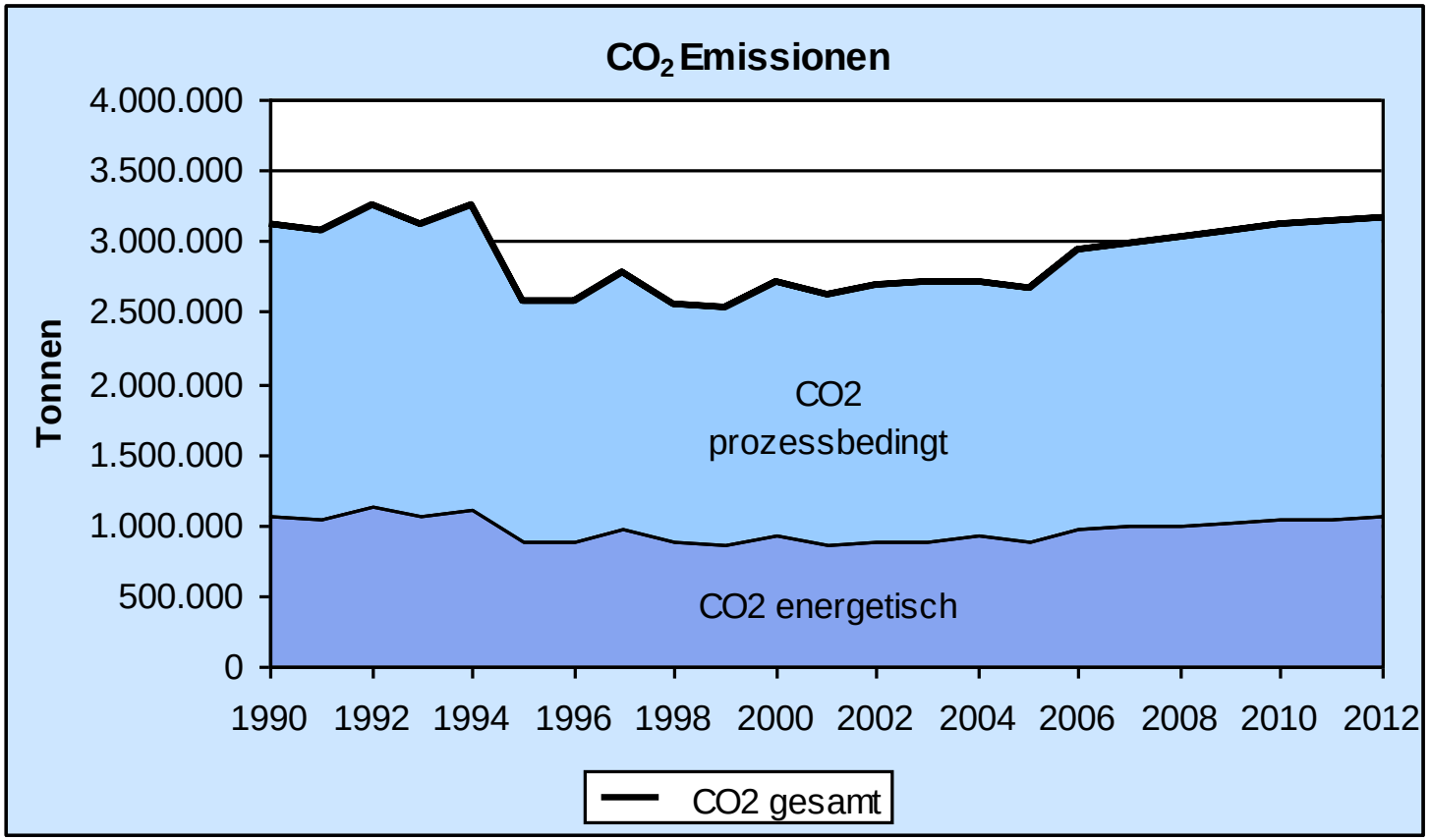
BAU Forecast for an Industry (2)



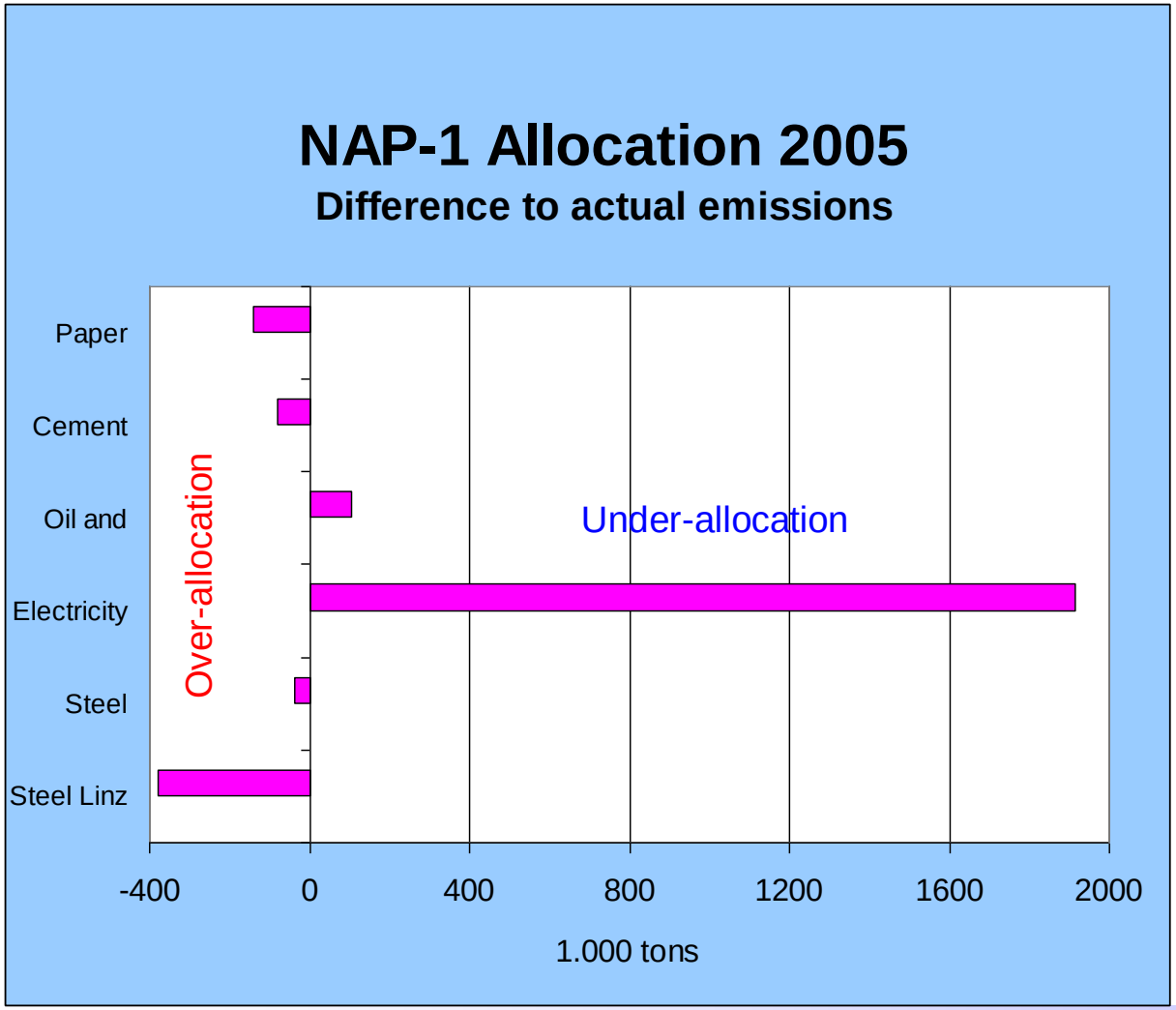




BAU Forecast for an Industry (3)



NAP-1 Evaluation 2005: Austria



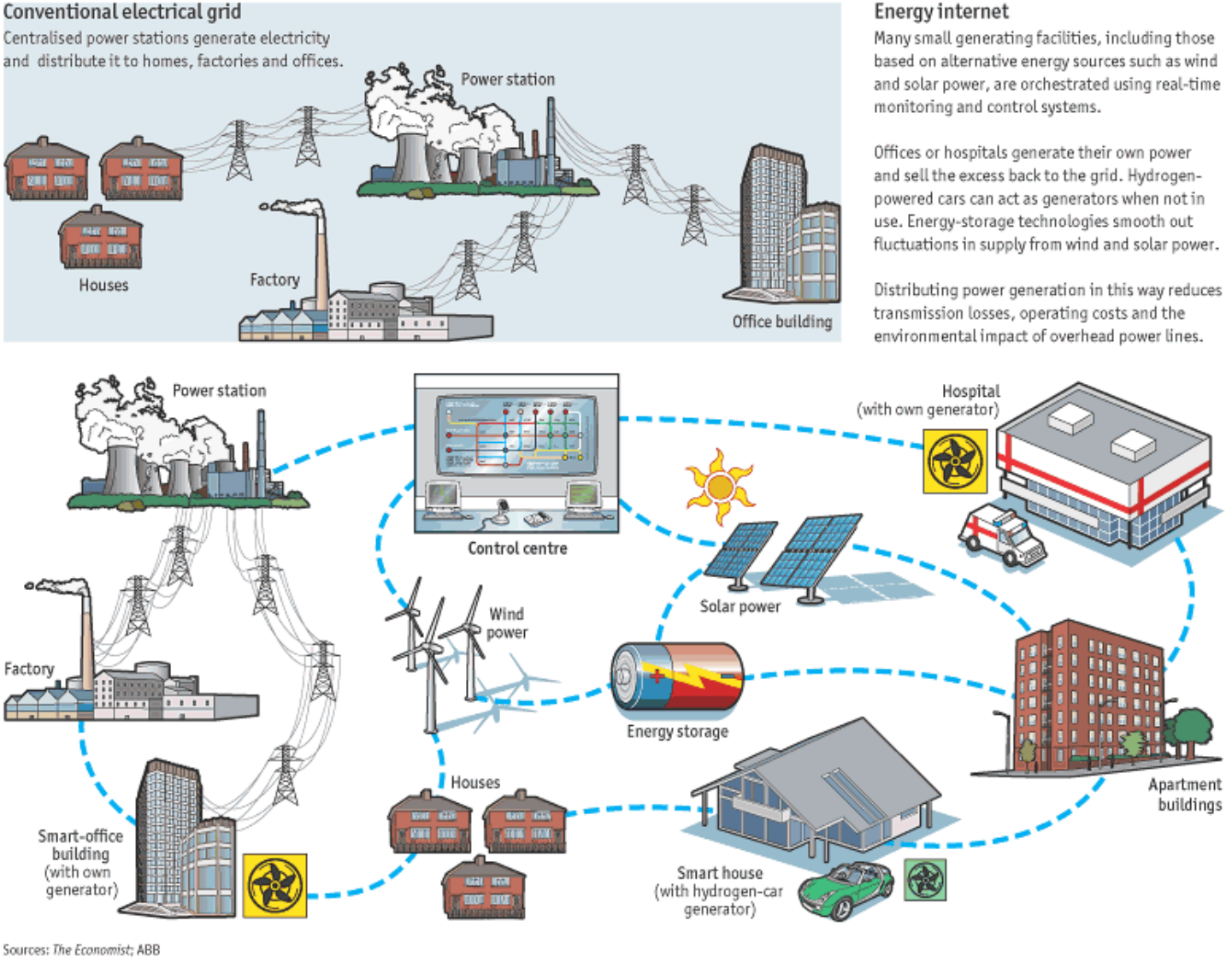
Rethinking the EU ETS

What was the question?

- How can we provide incentives for the transition to a low-energy and low-carbon economy?
- Is CO2 trading an adequate answer?

An example: Transforming electricity production

The shape of grids to come?



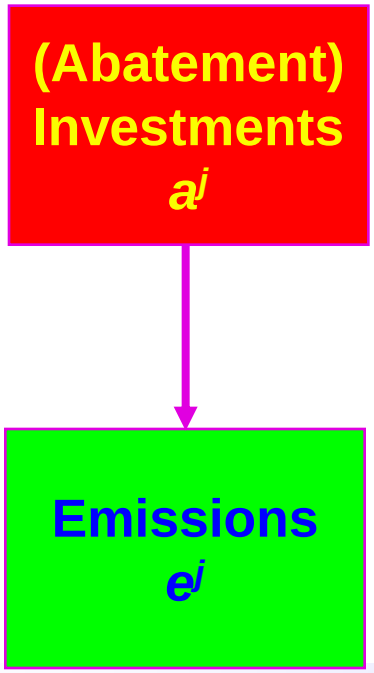
The economic foundations of ETS: SO2 trading in the US

- Clean Air Act 1990
- A cost-effective strategy for reducing SO2

- Abatement costs are well defined

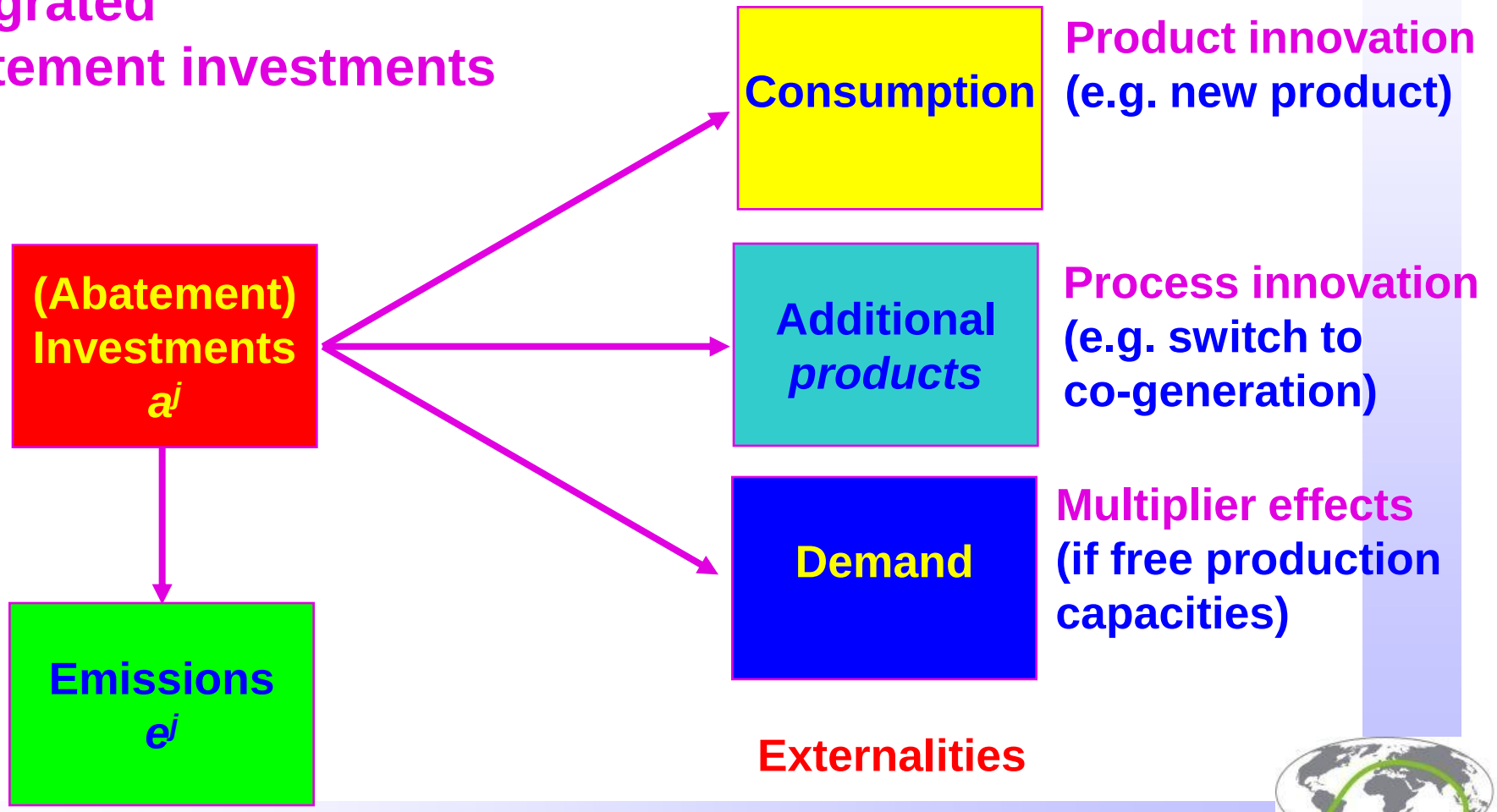
Why CO2 is different from SO2

Separable
abatement investments



Why CO2 is different from SO2

Integrated abatement investments



Is minimizing abatement costs a valid argument?

- Abatement costs are not well defined
- There are not only costs but also benefits
- There are also externalities – costs and benefits
- Short-run vs. long-run decisions

ETS is not self-enforcing

- **Incentives for inflating the allocations**
  - **Member states decide on national caps**
  - **Installations bear the full risk of under-allocation**

ETS creates perverse effects

- **Electricity**
  - ↗ **Short run: switch from coal to gas**
  - ↗ **Long run: switch back to coal**
- **Multinational company**
  - ↗ **Over-allocation in Slovak Republic**
  - ↗ **Under-allocation in Austria**
  - ↗ **Pressure to reduce costs in Austria**

Suggestions for reforming the EU ETS

Failures of the EU ETS

- **Hardly any additional reductions of CO2**
  - ↗ **Fuel switch to gas was triggered by new gas technologies**
  - ↗ **Energy intensive industries have enough incentives for reducing energy costs**

- **Hardly any incentives for switching to low-energy and low-carbon technologies**
  - ↗ **New investments into electricity from coal**

Reforming the ETS (1)

- **Eliminate**
  - **The smallest half of installations contributes less than 3 % of ETS emissions in Austria and less than 4 % EU wide**
- **Eliminate emissions from processes**
  - **Directive requires a full allocation**

Reforming the ETS (2)

- **Make allocations comparable**
  - **Transparent procedures for large installations as electricity and heat**
    metals, cement
  - **Set technology targets**
    e.g. relative targets instead of absolute caps

Reforming the ETS (3)

- **Accept Early Action**
  - By taking into account e.g. energy intensity and CO2 intensity
- **Risk pooling for unexpected events**
  - E.g. by opening the allocation reserve for unexpected increases in production
- **Auctioning**
  - Recycling the revenues from auctioning into via a technology fund adds leverage

Preparing the Austrian NAP-2

- **The Guidance Paper of the Commission is not very helpful**
  - **Extreme focus on caps**
  - **„Keep it simple and transparent“**
- **The Austrian dilemma**
  - **NAP-1 exhibits an under-allocation**
  - **Austria‘s CO2 emissions are 34 % above Kyoto target**

Thank you.

www.wifo.at/Stefan.Schleicher
www.accc.at