

**Benchmarking local climate policies –
qualitative and quantitative results**

Introductory remarks:
*The new role of municipalities
in Germany*

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Side event to COP 14: Benchmarking local climate policies

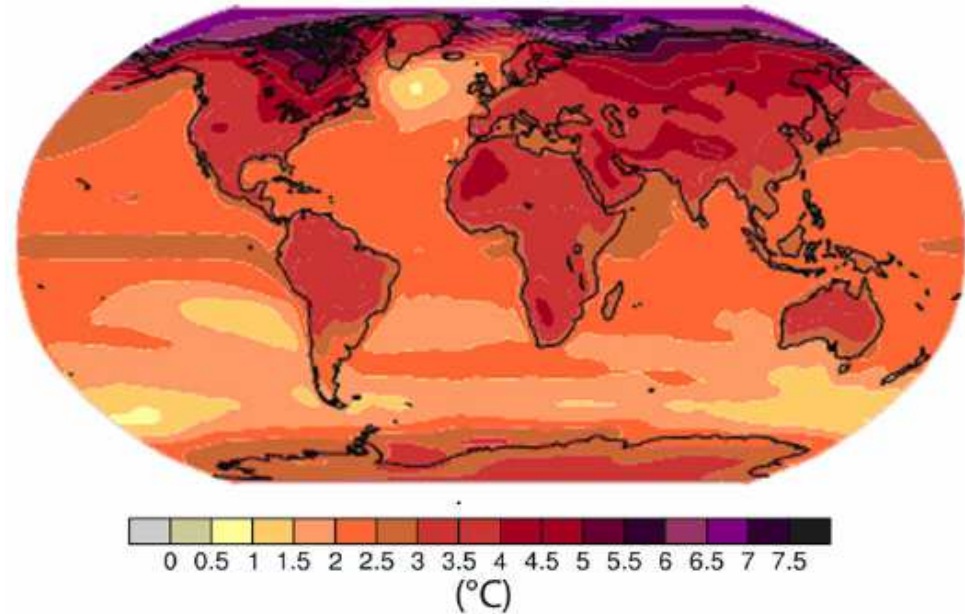
Overview

- Climate change – and its mitigation
- What is the role of German municipalities?
- Conclusions



Climate Change in pictures

Surface warming pattern
(A1B, 2090-2099 relative to 1980-1999)



Side event to COP 14: Benchmarking local climate policies

Dresden (Germany), 2002: damages: $16 * 10^9$ €
insured: $3 * 10^9$ €



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2004 – the **first** Hurricane in the **South** Atlantic:

Hurricane Katrina in front of Brazil in March 2004



Image courtesy of Earth Sciences and Image Analysis Laboratory, NASA Johnson Space Center, Number ISS008-E-19646. <http://eol.jsc.nasa.gov>

2005 – Hurricane Katrina (25–30 August 2005)

Largest insured damage in human history caused by a single event



Bildquelle: AP

| | |
|------------------------------|----------------|
| Damages in Mio. US\$: | 125.000 |
| Insured in Mio. US\$: | 60.000 |
| People killed: | 1.299 |

EU-target: Limiting Climate Change to +2°C

- Global stabilisation of GHG-Emissions necessary until 2020
-> industrialised countries need to reduce 1990's emissions by 30%
- 2050: global emissions decrease down to 50% of 1990's
-> industrialised countries: reduction of 80% (i.e. down to a level of 20%)
- EU reduction by 30% until 2020 will be supported by Germany with a 40%-reduction

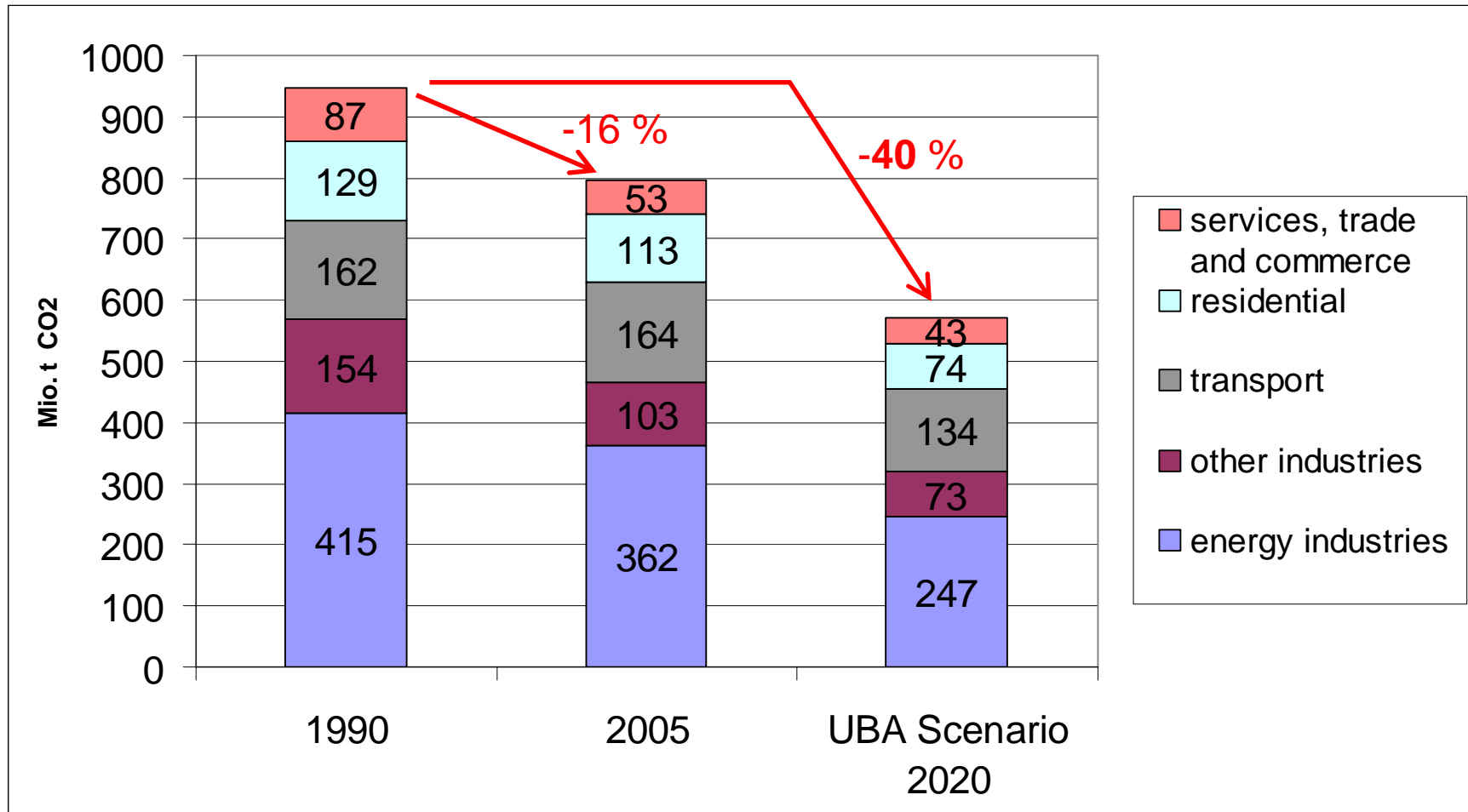
Reduction of CO₂ by 40%

in Germany

Reduction of German GHG emissions by 40% until the year 2020 compared to 1990

- Reduction achieved in 2006: 18.4%
- Energy-related CO₂: share of 80% of GHG emissions in Germany
- Therefore the energy system plays a key role in mitigation
- The German Government created the **Integrated Energy and Climate Protection Programme, 2007**
- Costs of a 40%-reduction: **max 0,5% of GDP** (based on results from scenario modelling and energy system models)
- Local administrations will play a new role

Energy related CO₂-emissions of different sectors



The new role of the German municipalities

Municipalities support the CO₂ emission targets of the federal government by support to:

- Doubling the electricity generation from renewable energies
- Introduction of shares of renewable heat in the local heat supply system
- Doubling the share of co-generation (sinks for heat are only available on the local level)
- Influence on energy efficiency and energy savings in the municipality
- Enforcement of the Energy Saving Ordinance (EnEV) of the federal government for taking heat saving measures in the municipality

The new role for municipalities in Germany

Create and moderate new policies and measures an the local level

- **Energy management** in their own facilities and vehicle fleet
- **Local procurement**: commodities with a low content of GHG emissions
- Re-organisation of the **local waste management** in order to use the energetic resources
- **Information and advice to the public** for saving energy for the avoidance of additional greenhouse gas emissions
- **Spatial and urban planning** in order to reduce greenhouse gas emissions
- Usage of **new financial instruments** e. g. third party financing
- Encouraging **private investors** to investments in biomass facilities etc.
- Starting divers **campaigns** in the cities, towns and villages to fight climate change by **new behaviour** of the inhabitants

The National climate protection initiative (1)

The focus of the National Climate Protection Initiative is on consumers, industry and municipalities and on social and cultural establishments.

- The support programmes and individual projects aim to
- advance **climate-friendly technologies** in a targeted way
 - demonstrate and disseminate **innovative climate protection technologies** using model projects and
 - identify and **overcome barriers** preventing the implementation of climate protection measures.

The National climate protection initiative (2)

Five support programmes have been published so far as part of the national initiative:

1. Guidelines on promoting climate protection **projects in municipalities** and in social and cultural establishments
2. Climate protection incentive programme for the **installation of mini-CHP plants** (CHP: combined heat and power) in private households and commercial enterprises
3. Climate protection incentive programme for **commercial refrigeration plants**
4. A programme for promoting projects to **optimise biomass energy use** and
5. An **extension** of the existing **market incentive programme for renewable heat**

Conclusions

Conclusions

- The global climate is already changing.
- But effective measures for mitigation, i.e. emission reductions, are at hand!
- Municipalities will play a new role in the framework of implementation of:
 - **Energy efficiency, energy savings**
 - **Renewable energies**
 - **Decentralised energy systems using Cogeneration**

The National Climate Protection Initiative will deliver the necessary financial support

Thank you for your attention!

Dr. Peter Pichl

Unit I 2.2 “Energy Policy and Supply Technologies”

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