

LOW CARBON SOCIETY
RESEARCH NETWORK 4TH MEETING

Parallel Session 1: Reducing Energy Demand

German Energy Efficiency Policy

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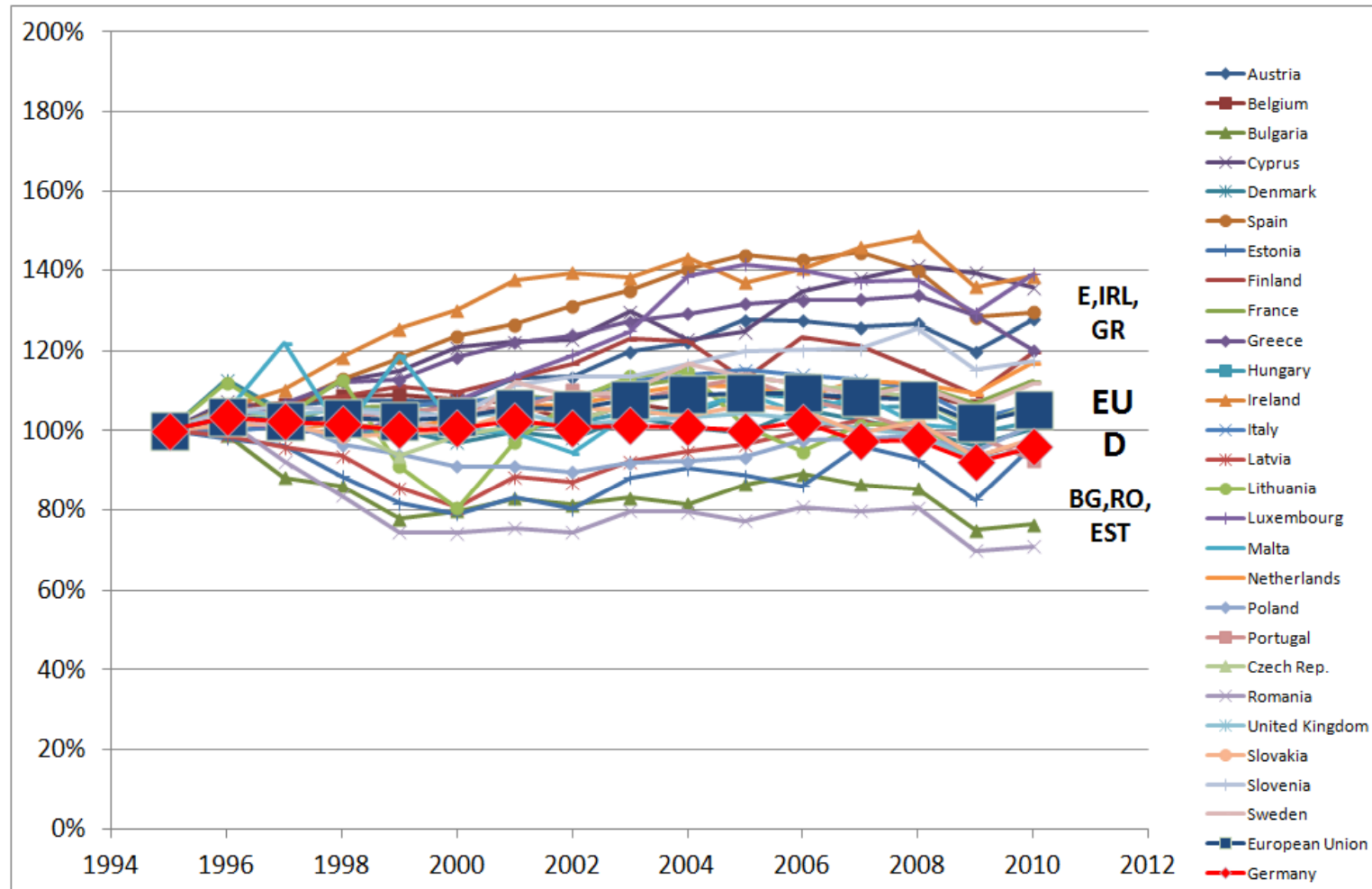


Overview

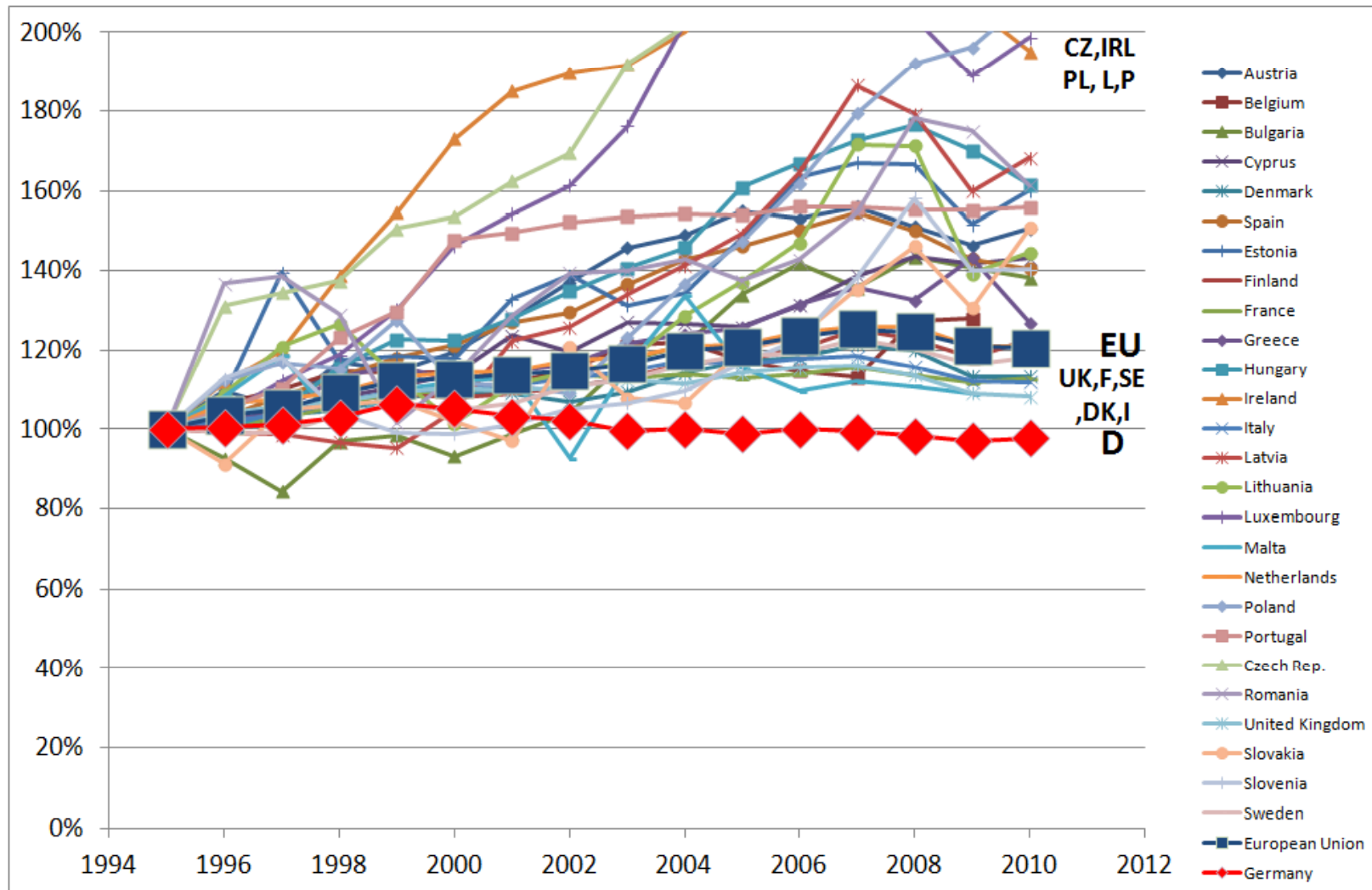
- Achievements of energy efficiency policy so far
 - primary energy
 - transport
 - electricity demand
 - energy efficiency index (ODEX)
- Policy effort or unification as the only driver for the improvement in energy efficiency?
- Intermediate and long-term objectives of German energy policy
- Pluses and Minuses in Energy Efficiency Policy



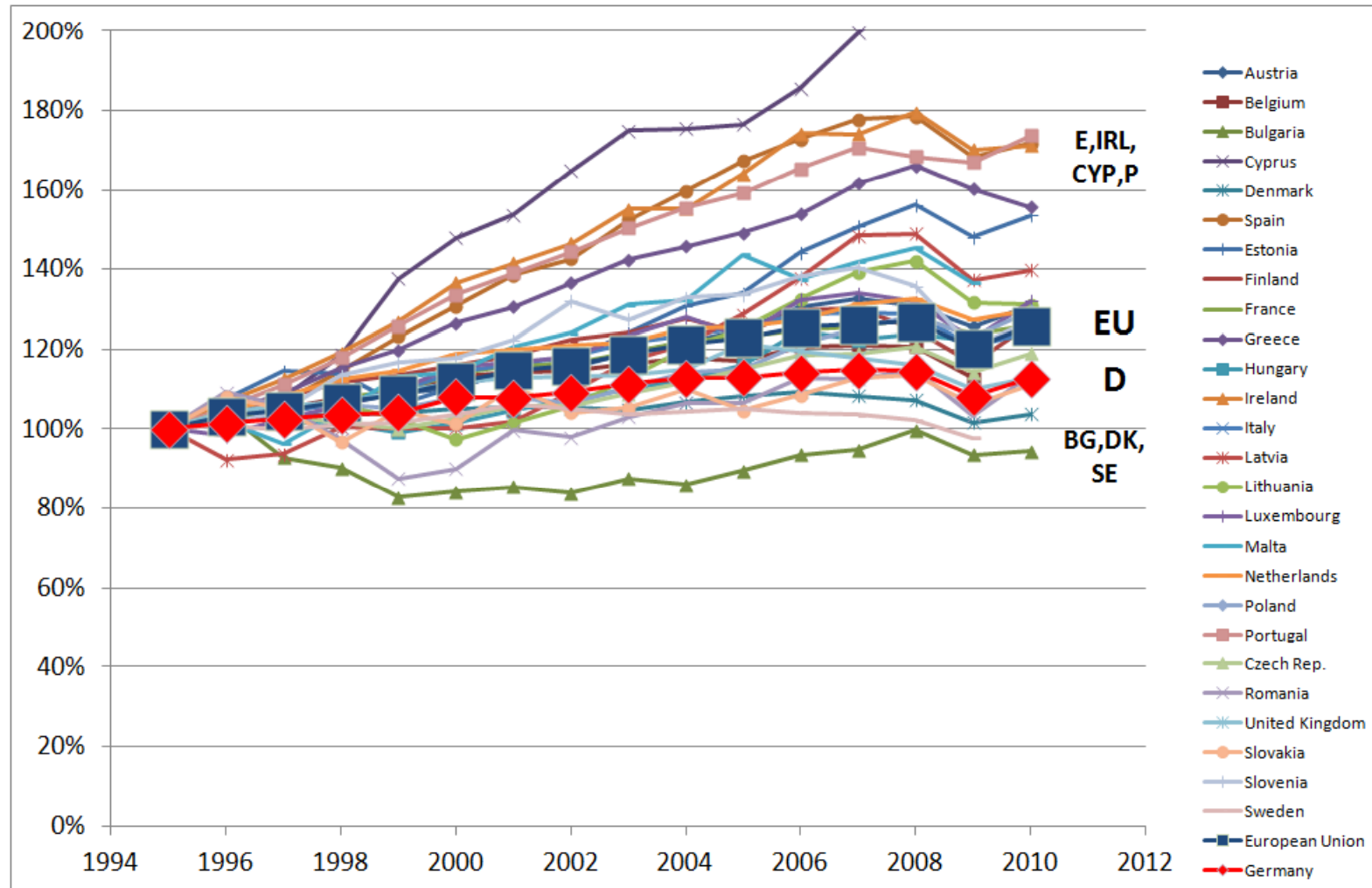
Germany has been rather successful in stabilising its primary energy consumption in the past 15 years...



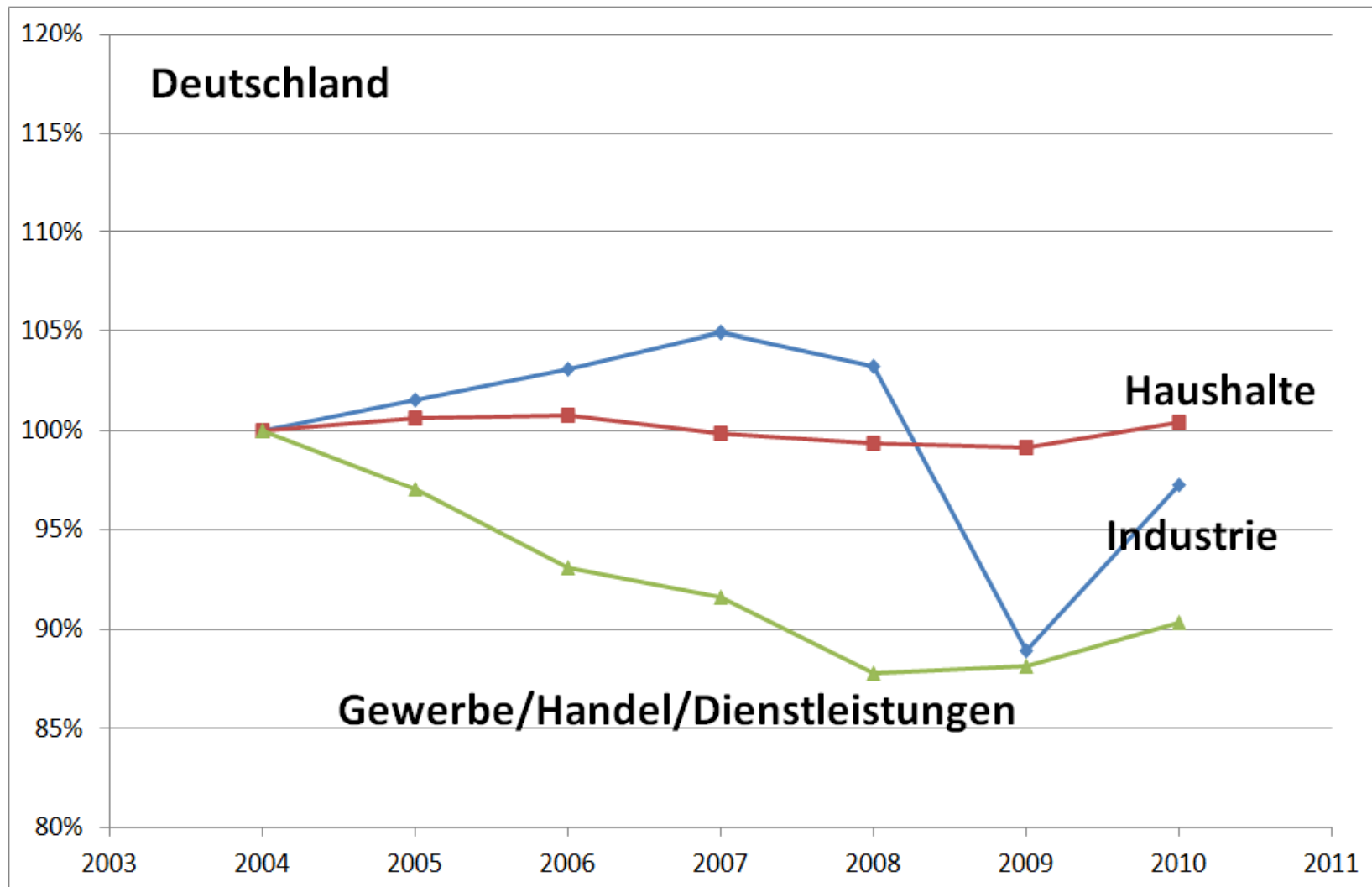
...has stabilised its transport energy consumption...



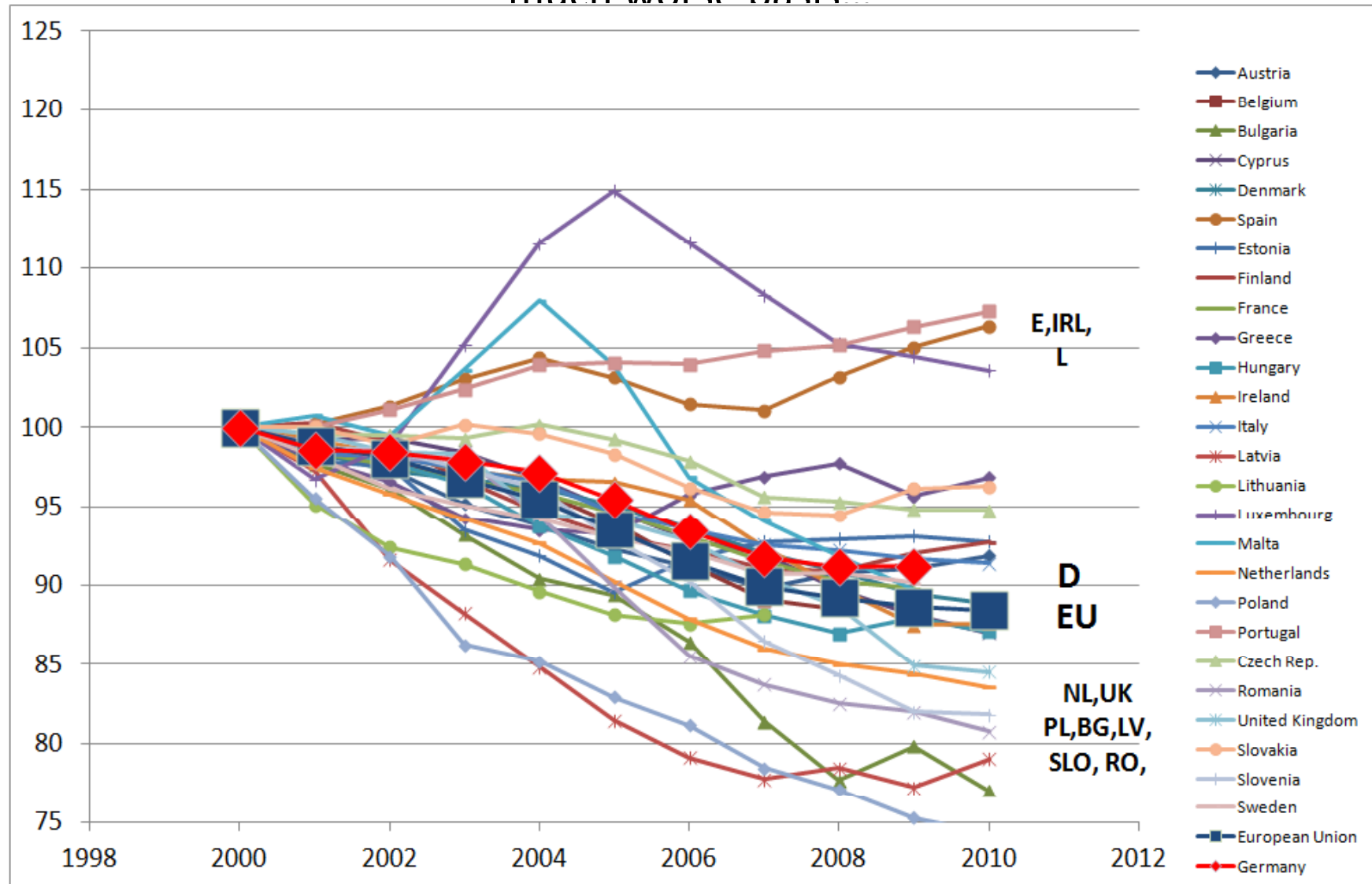
...also in terms of limiting the increase in electricity consumption Germany was rather successful...



...and not only as a consequence of the economic crisis...



Measuring energy efficiency efforts (ODEX) shows that Germany performed not better than EU average; however those countries performing better came from a much worse basis...



Some myths about the past achievements...

recent improvements in carbon and energy intensity cannot be repeated. The progress in emission reductions since 1990 was largely largely accounted for by the collapse of the former east Germany's energy-inefficient heavy industry. As Chancellor Merkel remarked in a recent speech on the *Energiewende*, 'we cannot have [the carbon reduction benefit of] German reunification again'.

- Citation from the study “The Energiewende – Germany’s Gamble” by The Oxford Institute for Energy Studies, June 2012
- Yes: Germany has profited from “Wall fall profits” quite substantially from 1990-1995. However, considering the period 1990-2012, about two thirds of changes are a consequence of energy and climate policy



Germany's targets in the frame of the Policy for the Transformation of the Energy System („Energiewende“)

| | today | 2020 | 2030 | 2040 | 2050 |
|--|--------|--------|--------|--------|--------|
| <i>Reduction in greenhouse gas emissions (base year: 1990)</i> | - 27 % | - 40 % | - 55 % | - 70 % | - 80 % |
| <i>Share of renewable energies in total final energy consumption</i> | 10 % | 18 % | 30 % | 45 % | 60 % |
| <i>Share of renewable energies in electricity consumption</i> | 16 % | 35 % | 50 % | 65 % | 80 % |
| <i>Reduction of primary energy consumption (base year: 2008)</i> | - 5 % | - 20 % | | | - 50 % |
| <i>Reduction of electricity consumption (base year: 2008)</i> | - 1 % | - 10 % | | | - 25 % |
| <i>Reduction of final energy consumption in the transport sector (base year: 2008)</i> | | - 10 % | | | - 40 % |

Pluses and Minuses in Energy Efficiency Policy (1)

The Pluses

- Strong vision on the policy level
- Strong use of the information provided by appliance labels by the population
- Regular updates of the building regulation with comparatively strict requirements (though not the most ambitious in Europe)
- Promotion of renewables in buildings
- Advanced toll system for lorries
- Success in the improvement of local and long-distance public transport
- In preparation: linking energy efficiency requirements and exemptions from energy taxation for energy-intensive industries



Pluses and Minuses in Energy Efficiency Policy (2)

The Minuses

- A lack of coordination and vision among the different bodies responsible for energy efficiency policy with as a consequence Germany appearing as an important actor in diluting requirements
- A strong car and generally industrial lobby (delays in the implementation of policies such as eco-design and car CO₂-standards)
- So far insufficient visibility of building and car labels
- High impact of comfort improvement (comparatively large buildings and cars)

