



Danish Strongholds in Energy Technology

Karl Kristian Malling Granov
Market Development Consultant - Asia
Confederation of Danish Industries

Confederation of Danish Industries

Committed Industry

- 7,000 companies employing more than 320,000 workers.
- Many internationally oriented knowledge-based companies
- A private organization funded and managed entirely by its member companies
- DI has 450 employees

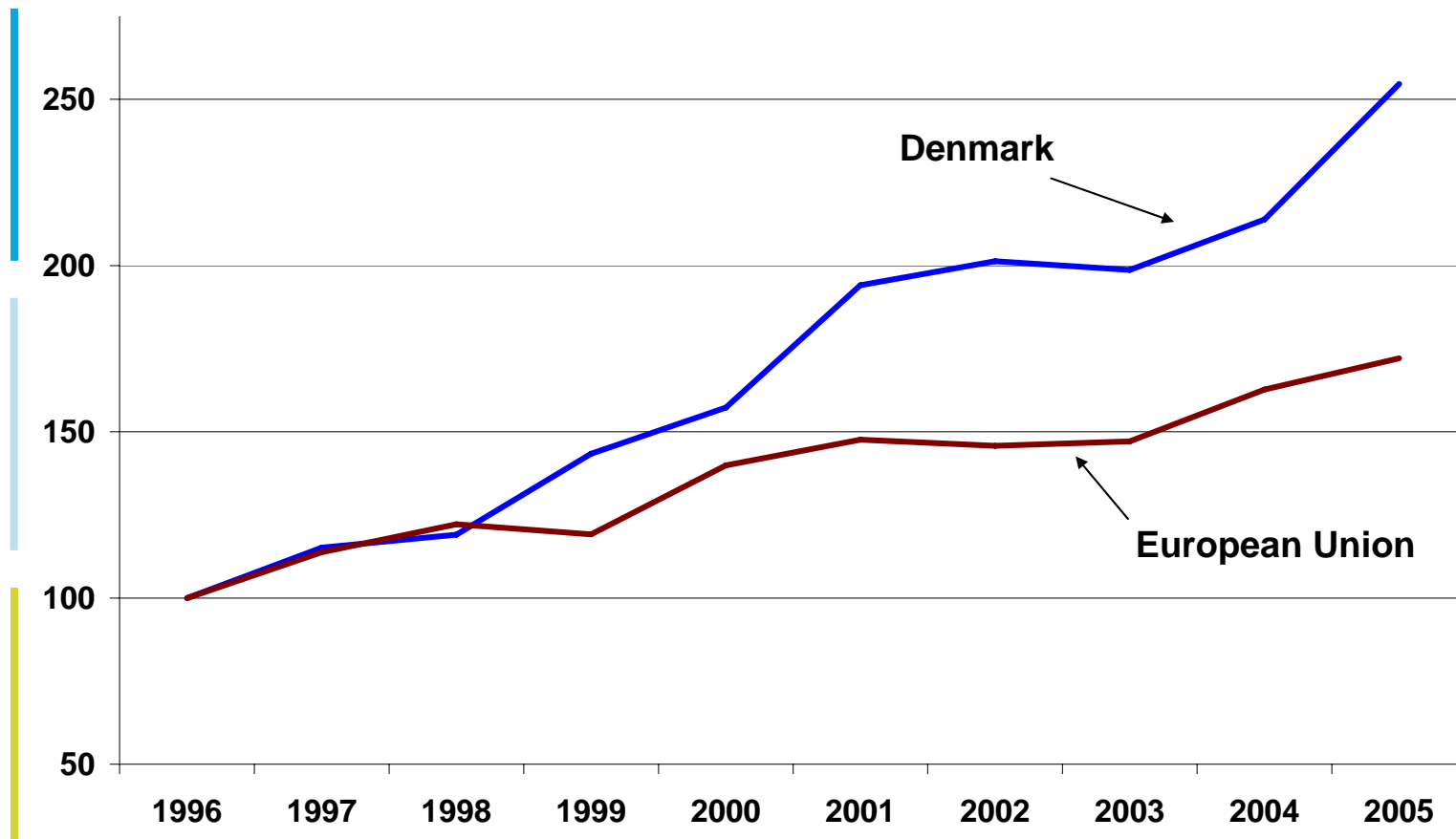
Political Influence

The Voice of Industry

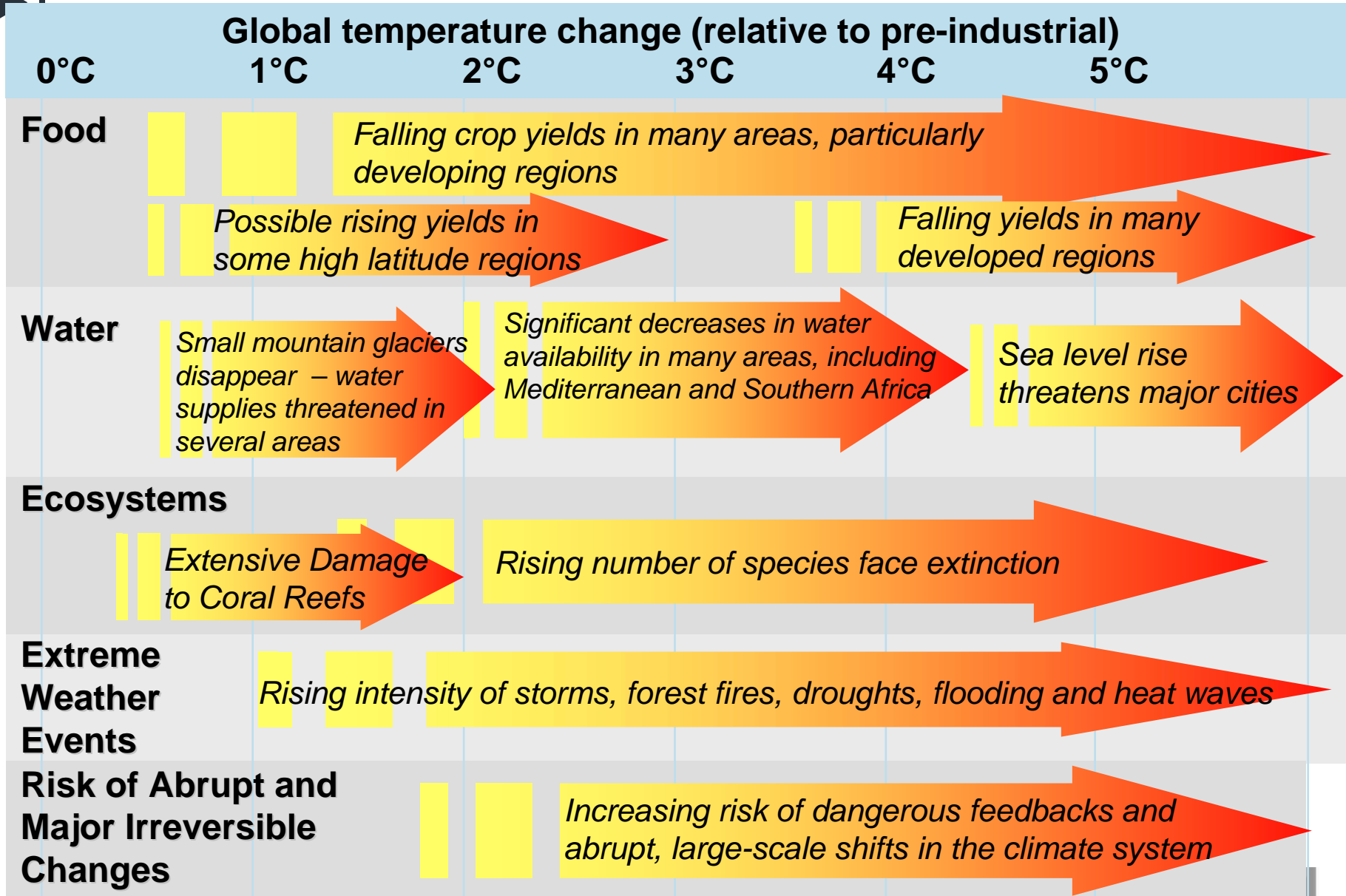
- DI aims to provide the best possible framework conditions for Danish businesses
- DI undertakes collective bargaining.
- DI provides services in many fields.
- DI is a web of many networks connecting companies, authorities, experts, media and the public.
- DI has a strong international strategy

Exports of Energy Technology - Benchmarking Denmark and the European Union

Index 1996 = 100

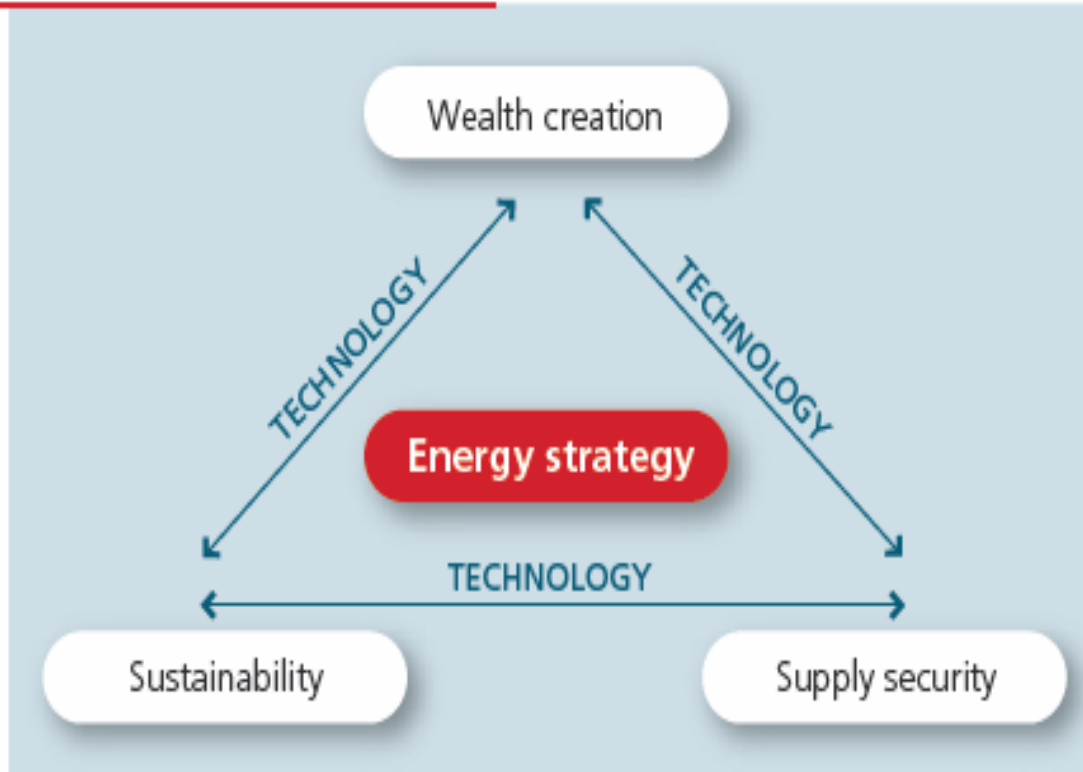


Projected impacts of climate change



The role of Technology

The key to sustainability



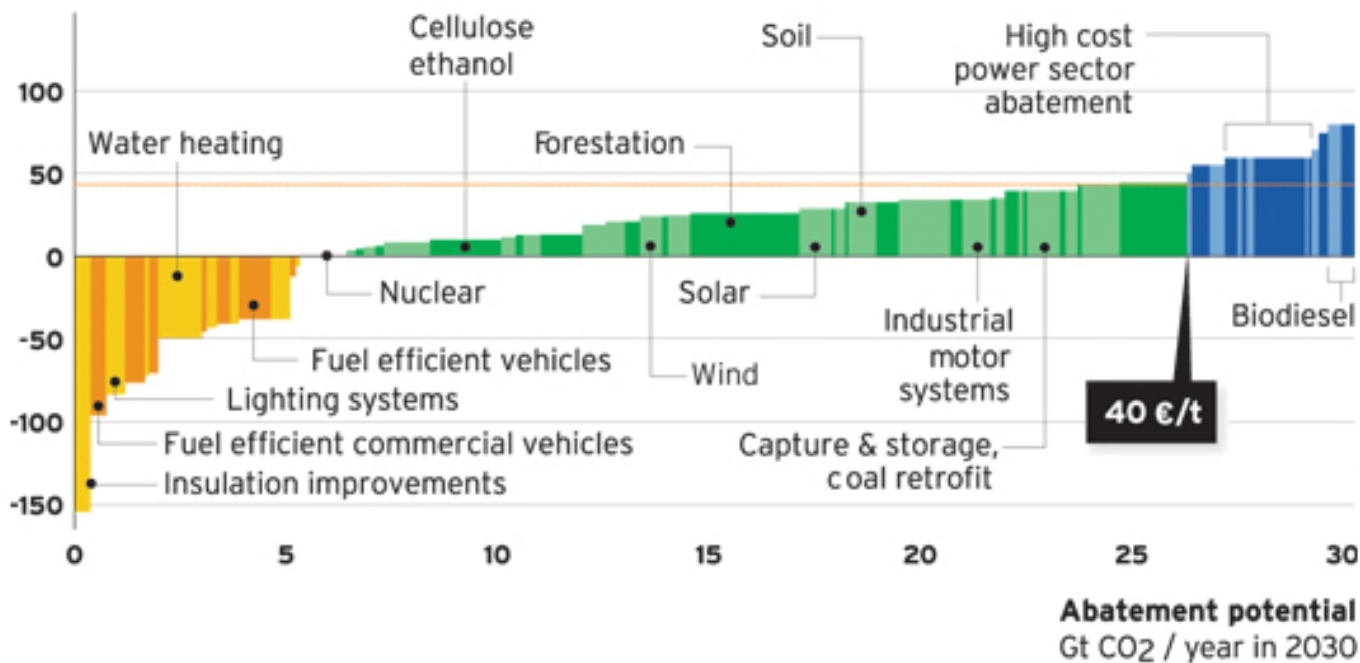
A future-proof energy strategy is about devising a sensible balance between wealth creation, supply security and sustainability based on the framework given by the technological development.

The cost of reducing emissions

Global cost curve

Marginal cost of abatement - examples

€/t CO₂



■ Negative abatement marginal cost
 ■ Abatement marginal cost below 40 €/t
 ■ Abatement marginal cost above 40 €/t

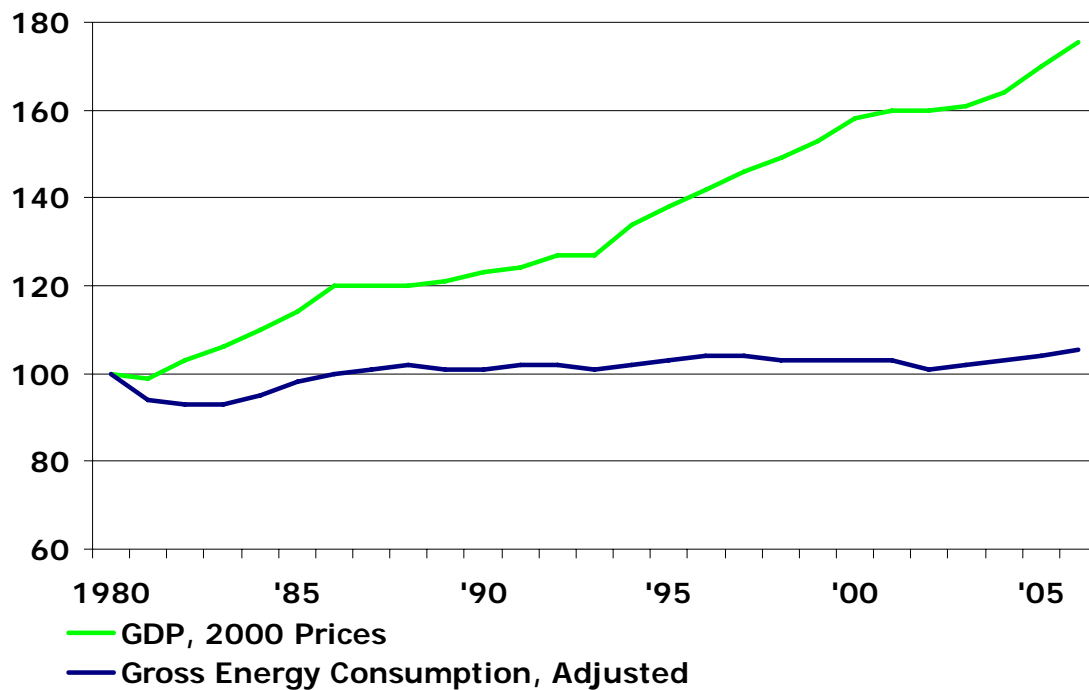
Source: Vattenfall, 2007



Bright Green

Bright Green

The case of Denmark: Wealth-creation at constant energy consumption



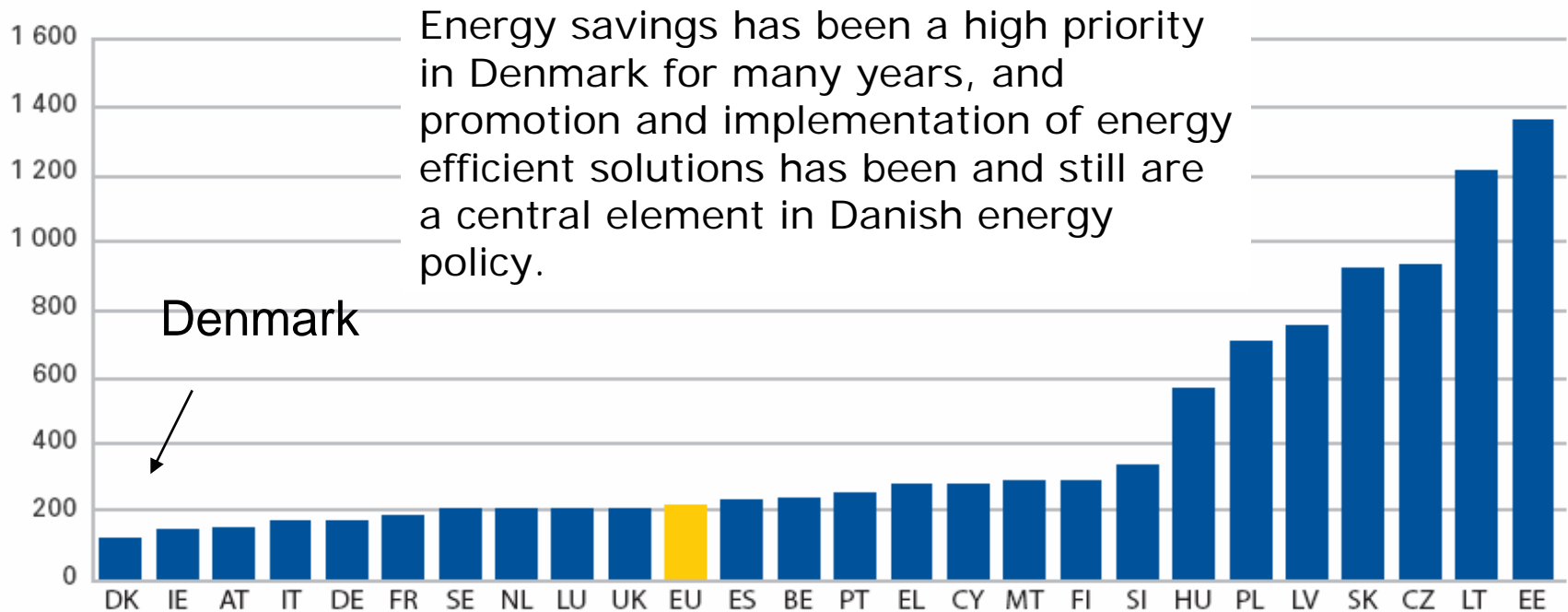
The Danish gross domestic product (GDP) grew by 75 pct. from 1980 to 2006 (at constant prices). In the same period the consumption of energy in Denmark has been more or less constant.

This means that each unit of GDP requires approximately 40 per cent less energy today than in 1980

Source: Danish Energy
Authority

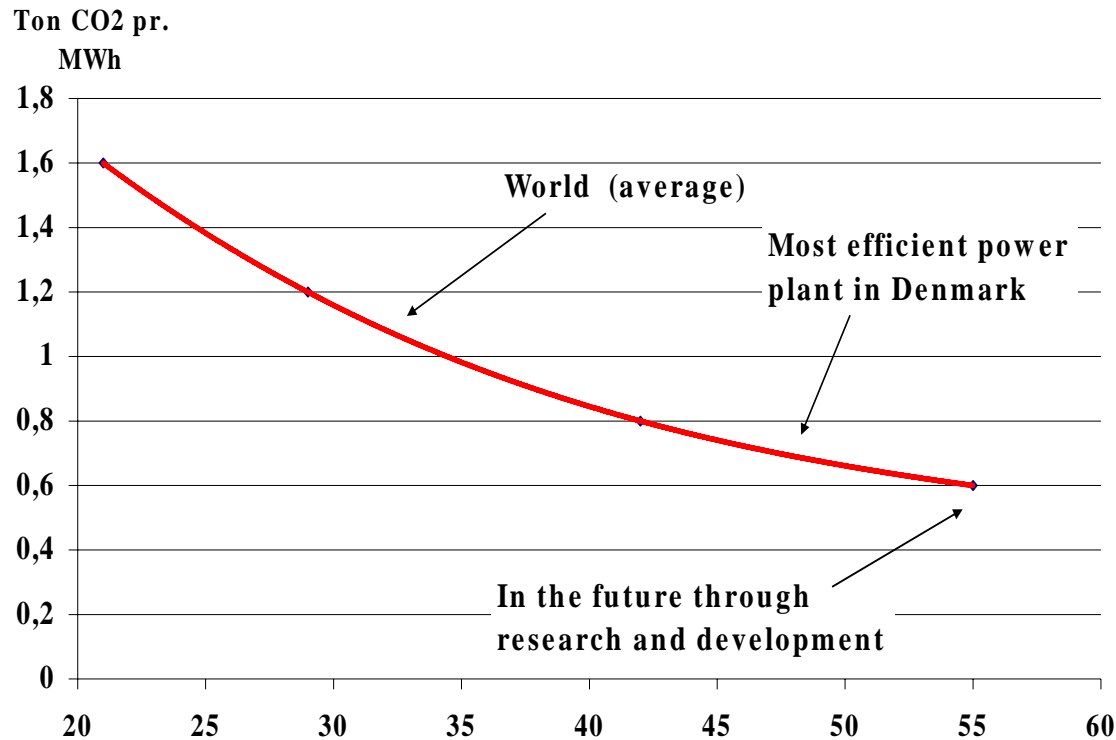
Denmark has the lowest energy intensity in EU25

Figure 2. Energy intensity in 2003 (in toe/million EUR of GDP at 1995 market prices) in EU-25



Source: Enerdata (calculations based on Eurostat data).

Denmark has some of the most efficient coal fired power plants in the world

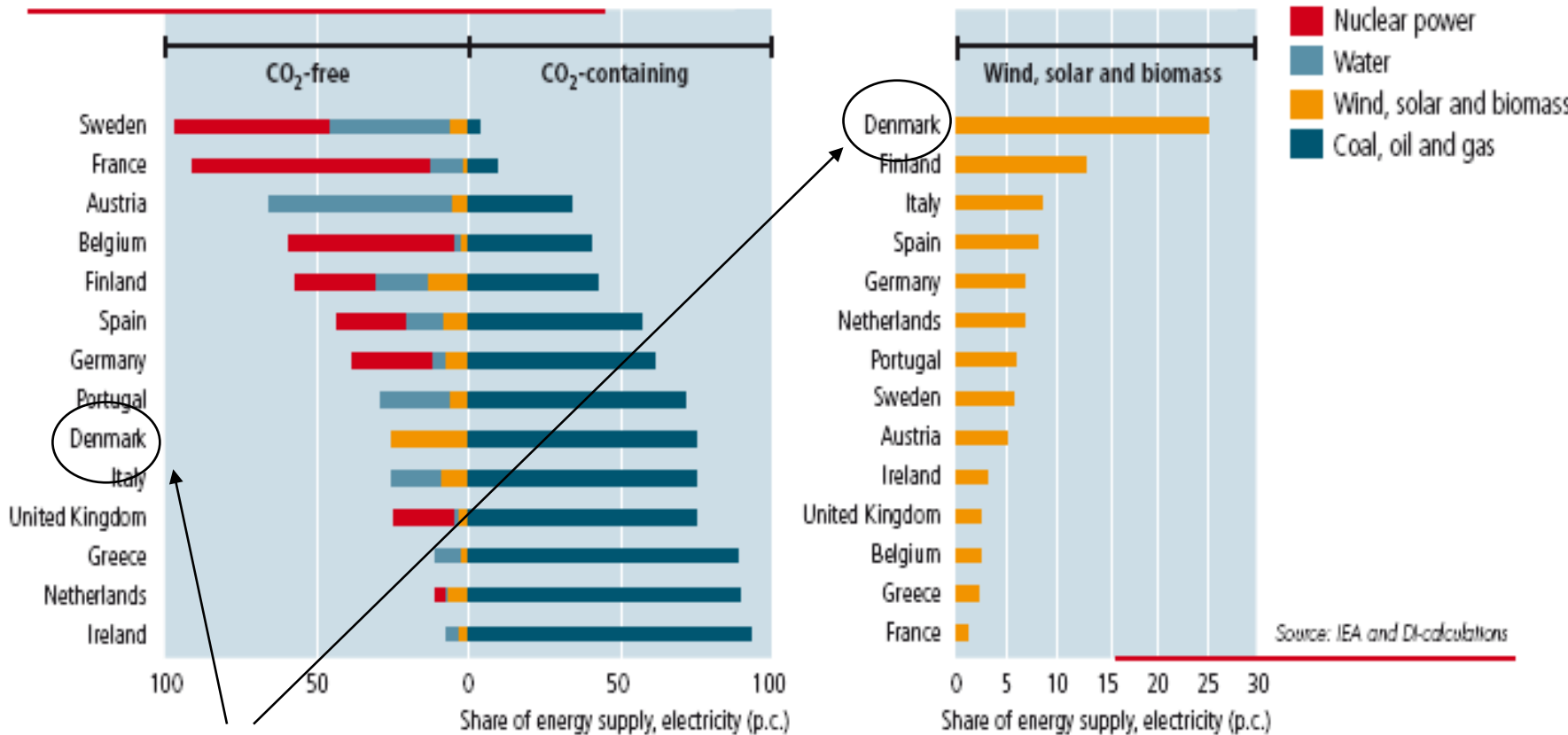


Source: BMWA-Bericht COORETEC 2003 **Efficiency in percentages of energy content**

Consumption of electricity will grow more quickly than all other types of energy use. Fossil fuels will account for the major part of this growth (IEA, UN, WEC).

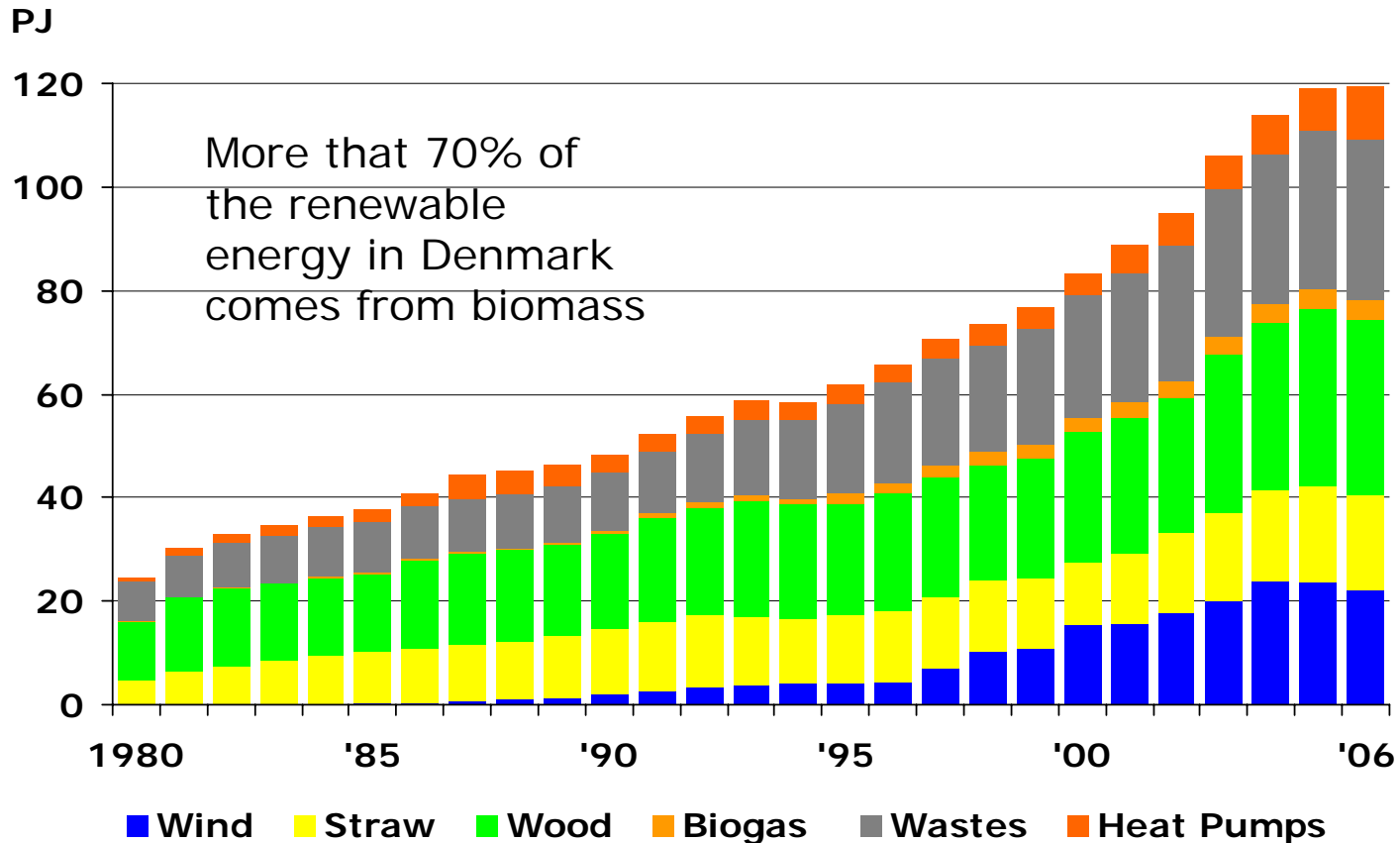
Investments in highly efficient power plants would be a benefit to both security of supply and the environment.

Denmark is in the forefront when it comes to renewable energy



Denmark

Production of Renewable Energy by Type - DK



Source: Danish Energy Authority



Danish Key Energy Competencies

Renewable energy

- Wind energy
- Biomass / waste management
- Biogas / bioethanol
- Hydrogen and fuel cells
- Grid connected PV-cells

Energy efficiency

- Combined heat and power generation
- District heating/cooling
- Insulation
- Metering solutions
- Intelligent automation / control



Thank you for your attention

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For more information contact:

Karl Kristian Malling Granov

E-mail: kkg@di.dk

Phone: +45 3377 3792