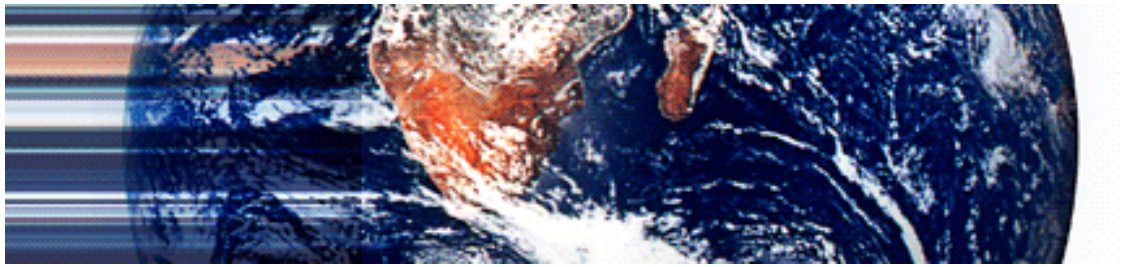
Future Climate

Engineering Solutions



Presentation by Bjarke Fonnesbech

The Danish Society of Engineers

Project partners

VDI

Sveriges Ingenjörer

NITO

IDA
STRENGTH THROUGH KNOWLEDGE

Presentation

1) The Danish Society of Engineers (IDA)

2) Energy & Climate – The Danish Example

3) Energy Year 2006 - Energy plan 2030

4) Future Climate

Future Climate

The Danish Society of Engineers (IDA)

Union & Profession Society (66.000 members)

More that 50 different professional societies:

- Society of process engineers
- Society of environmental engineers
- Etc.

Member of the European Metalworkers' Federation

Strength through knowledge

Future Climate

The Danish Example - 30 years with active energy planing

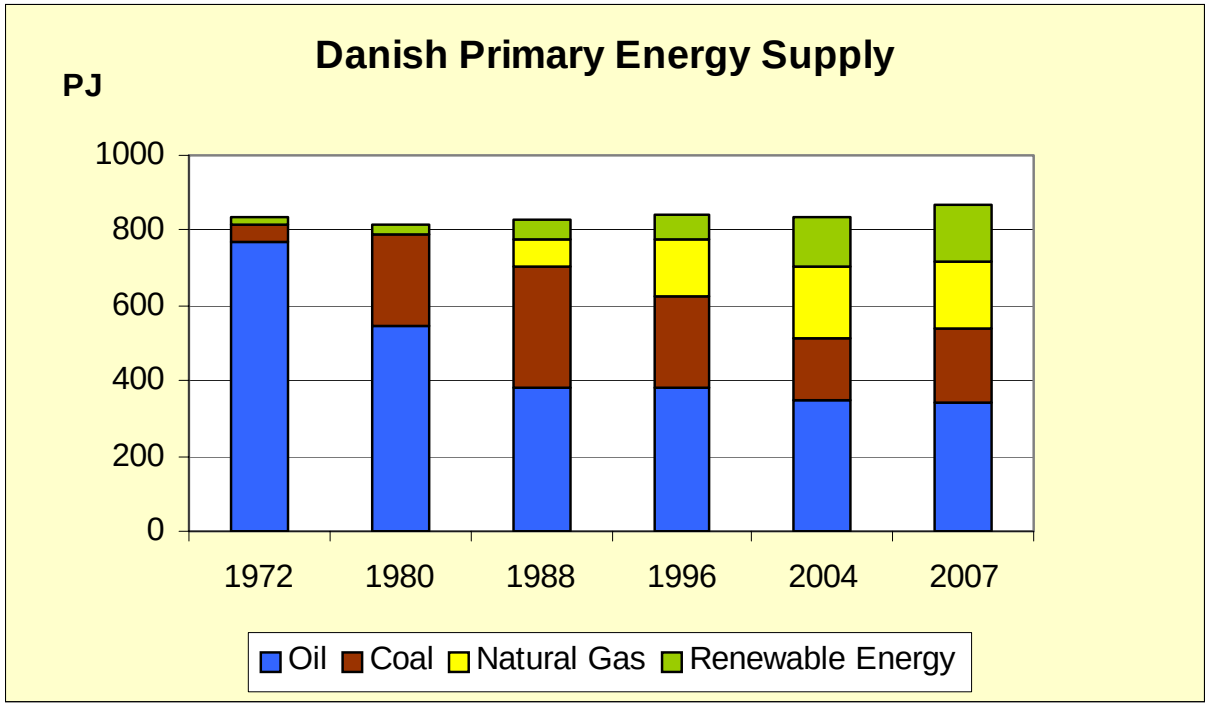
30 years of active Government and Parliament Energy Policies

Including NGO alternative strategies and public debate

Future Climate

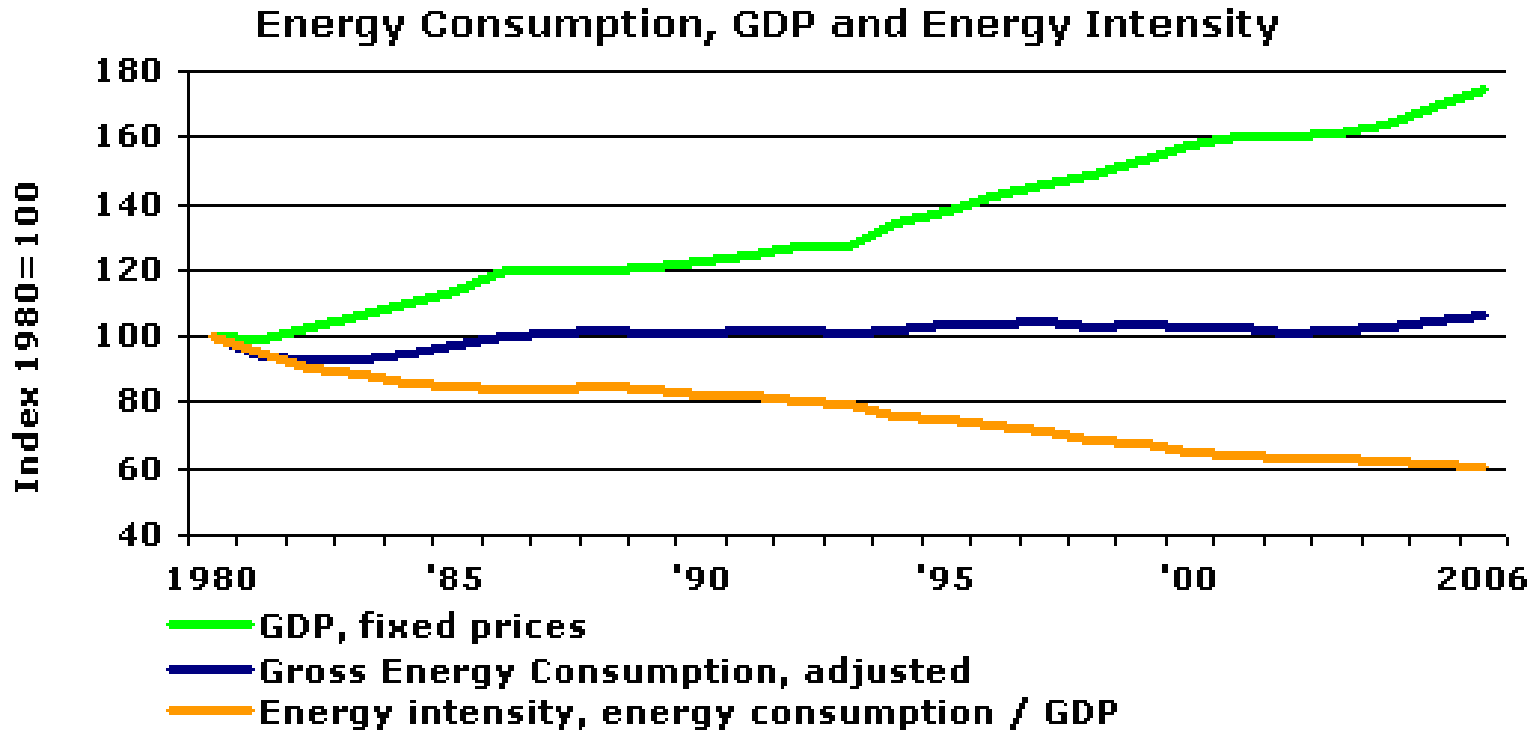
The Danish Example

30 years with a stable energy consumption



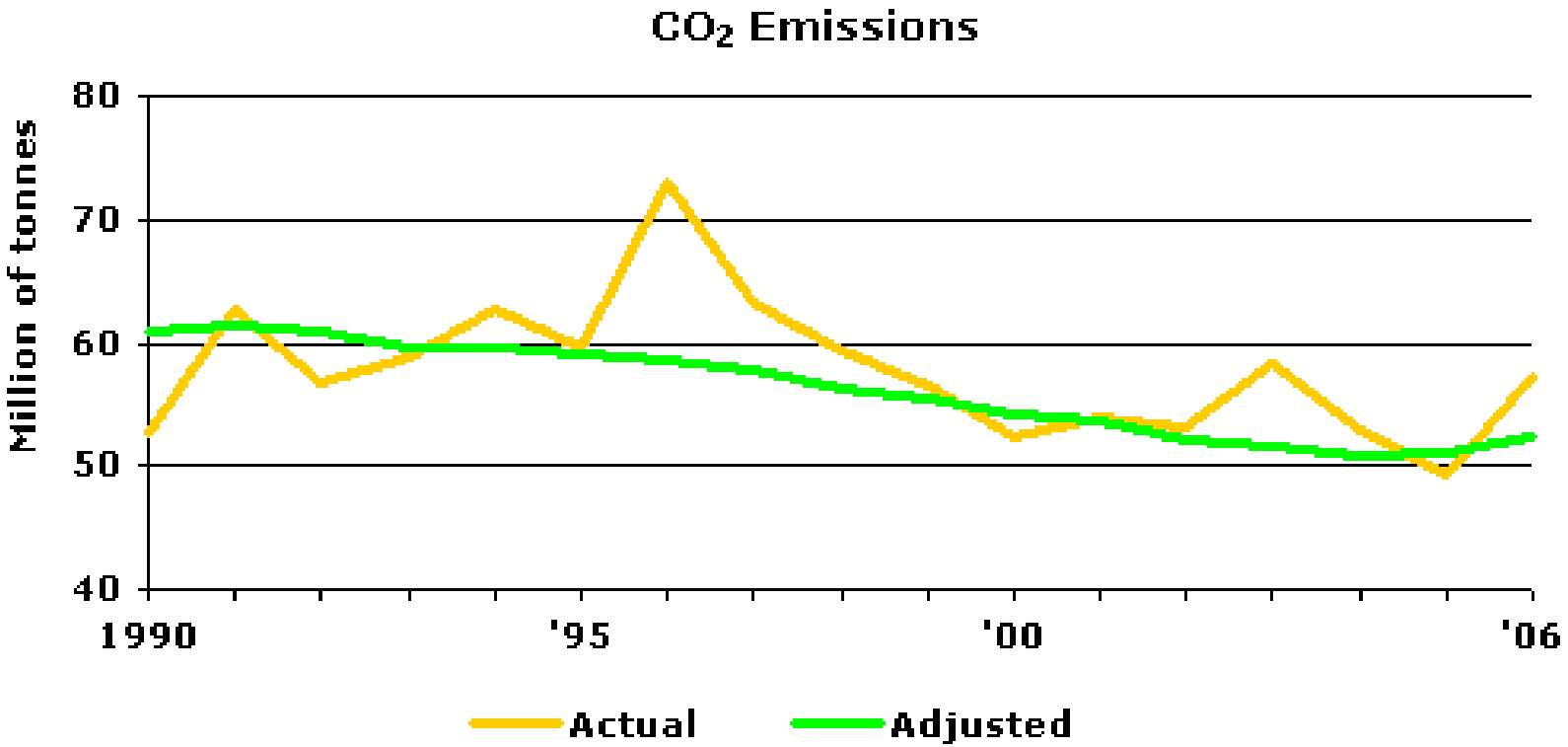
Future Climate

The Danish Example

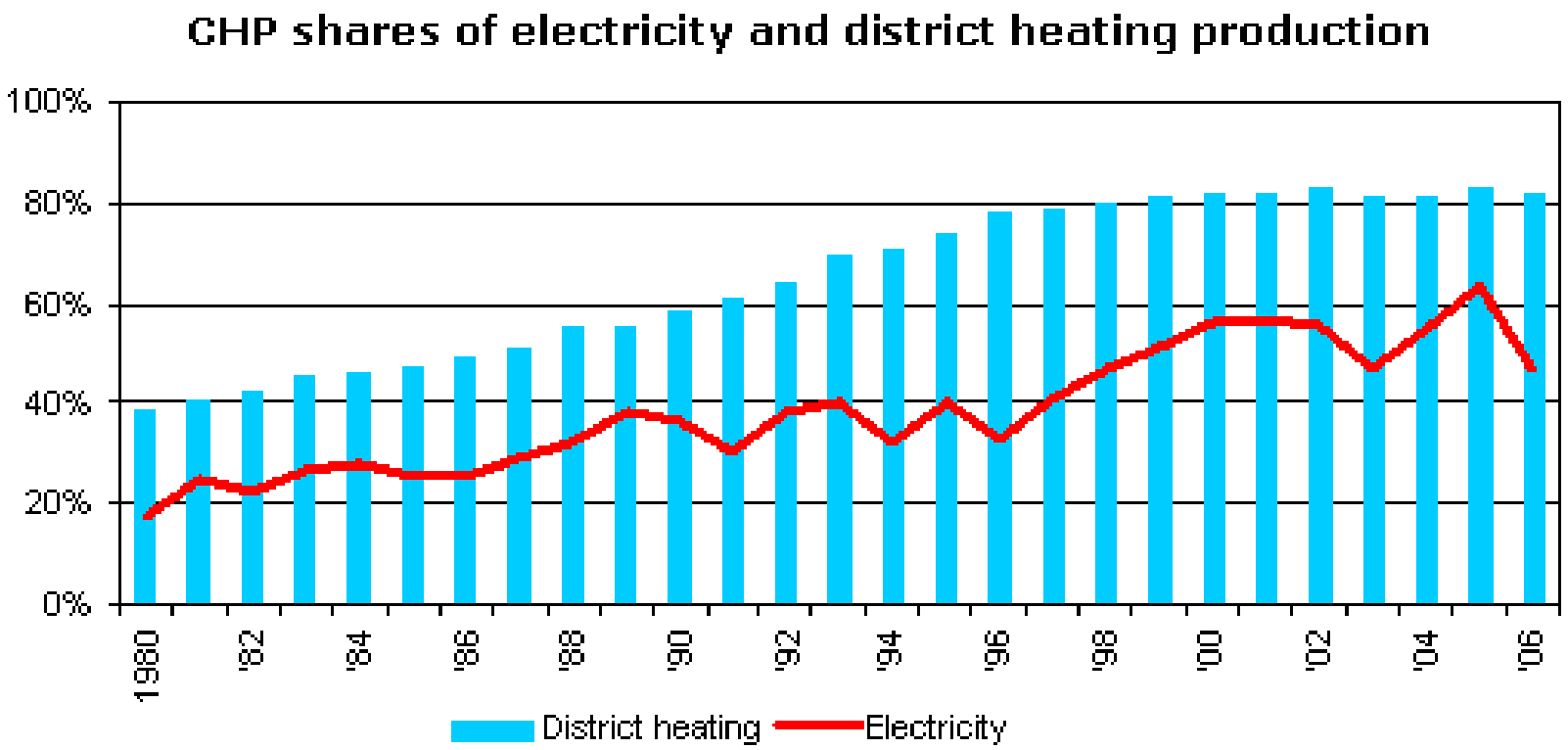


Future Climate

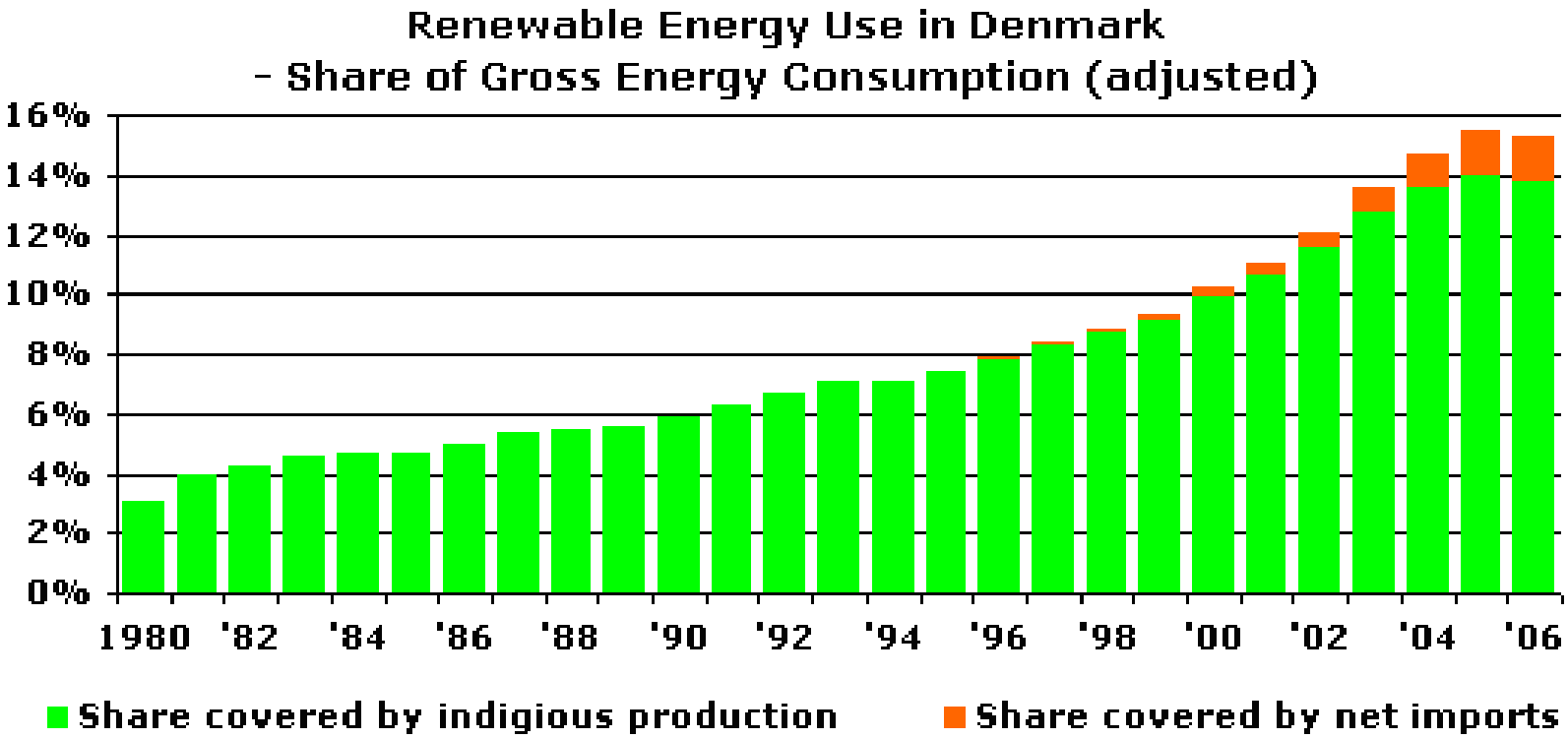
The Danish Example



The Danish Example

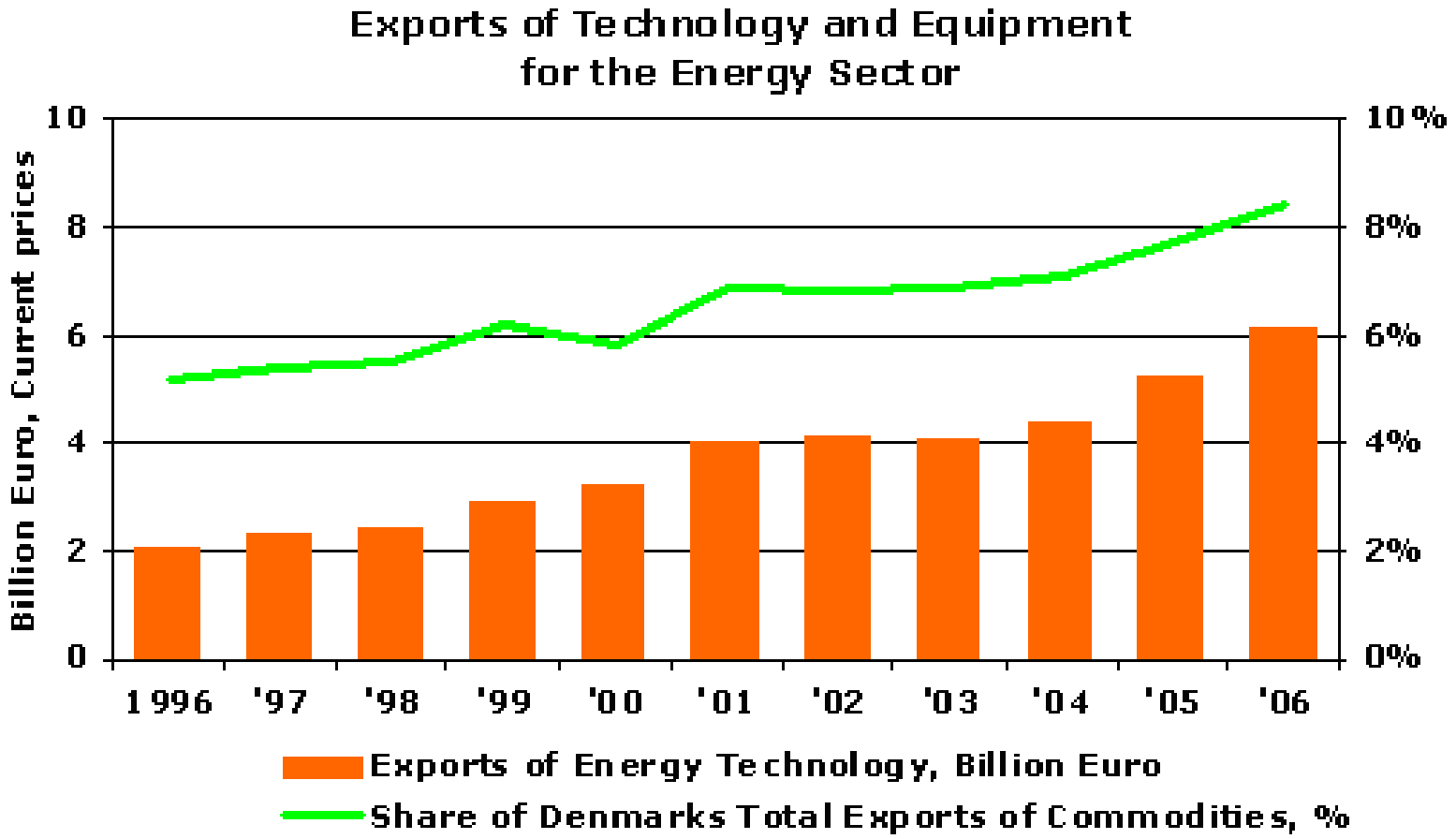


Future Climate



Future Climate

The Danish Example



Climate

The Energy Year 2006 of IDA

Guiding goals of the Energy Year:

- 50 % reduction of CO_2 emissions within 2030

- Sustained self-sufficiency

- Quadruplicating of the export of Danish energy technologies in 2030

Future Climate

Energy Year 2006

Themes

Manufacturing Industry

Transport & Mobility

Building

Energy Systems

Hydrogen, Fuel Cells, Bio Fuels and Batteries

Wind, Waves and Solar

Seminars:

- Knowledge-seminar
- Future-seminar
- Roadmap-seminars
- Seminars around the country arranged by societies.

More than 40 seminars with more than 1600 participants.

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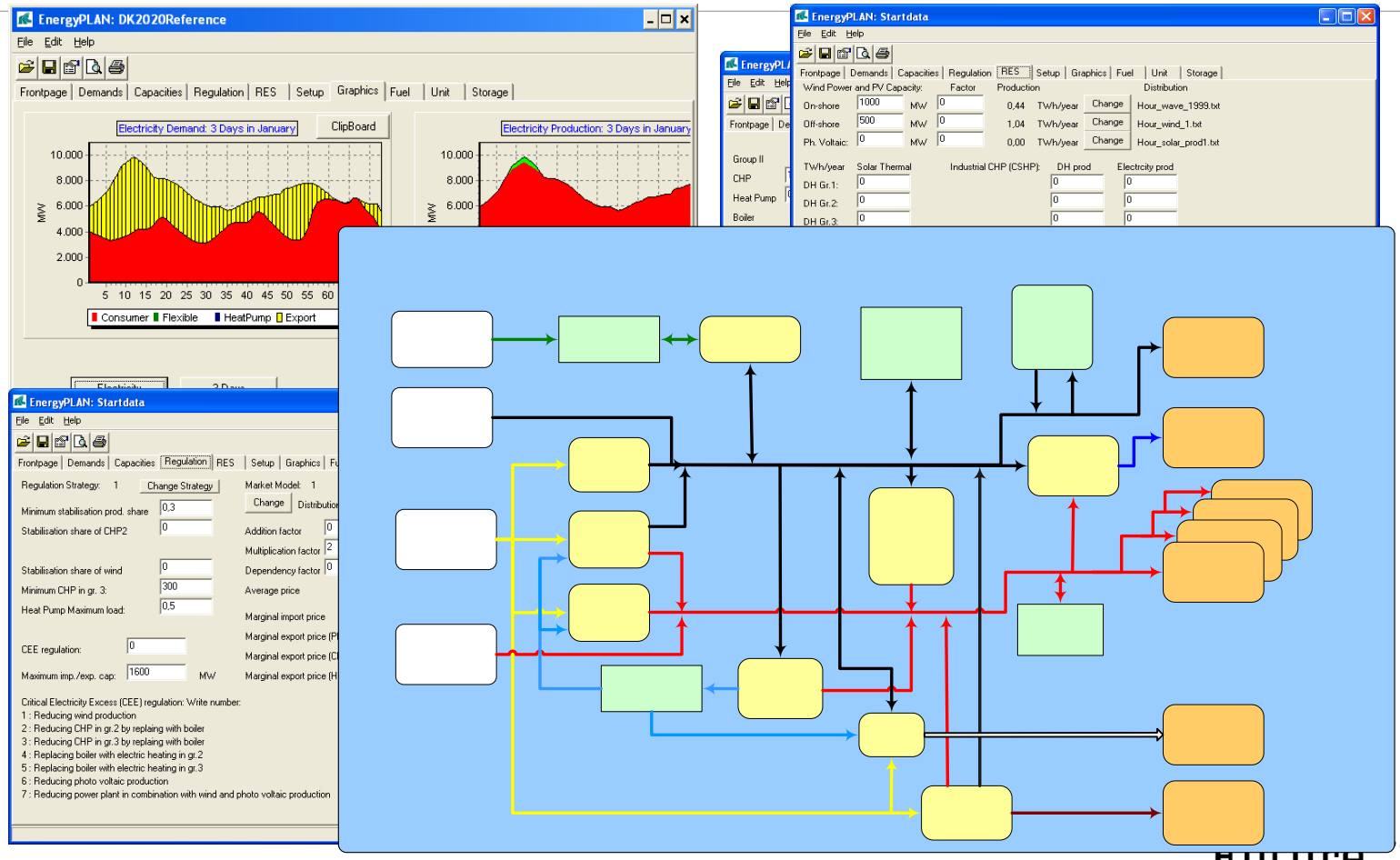
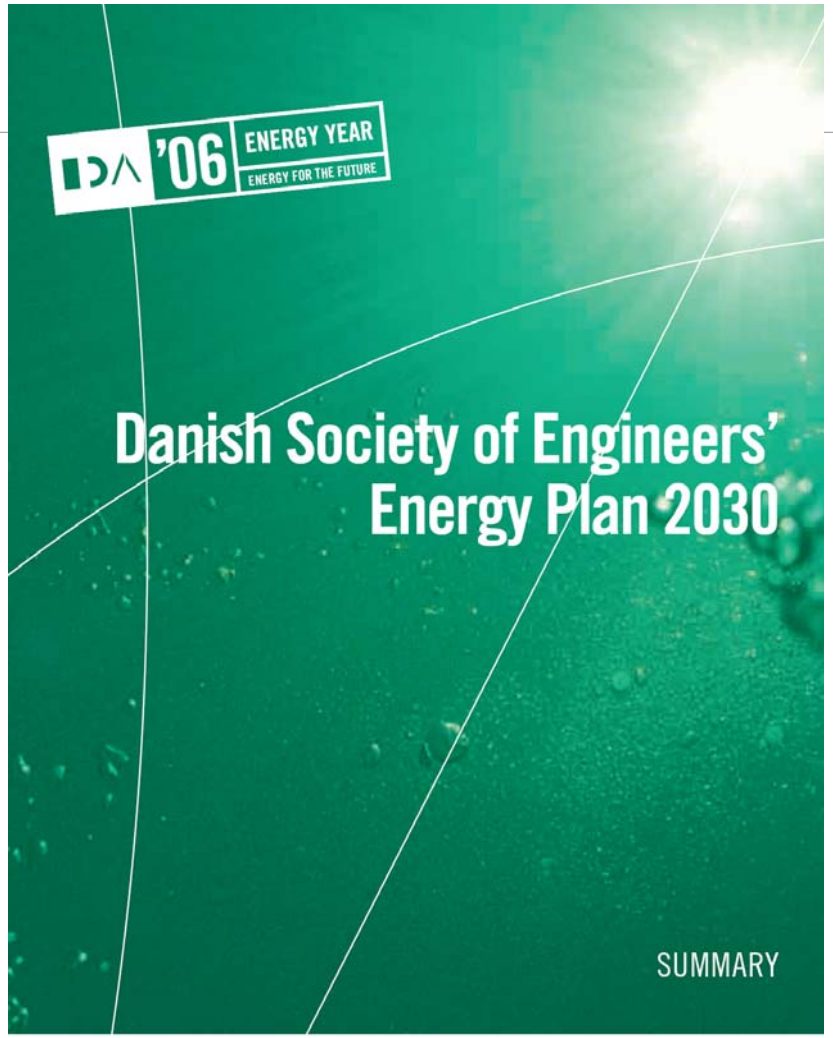
Energy Year 2006



www.EnergyPLAN.eu

Future Climate



THE DANISH SOCIETY OF ENGINEERS

STRENGTH THROUGH KNOWLEDGE

Future Climate

A few results

Buildings: 50 % reduction in energy use in housing

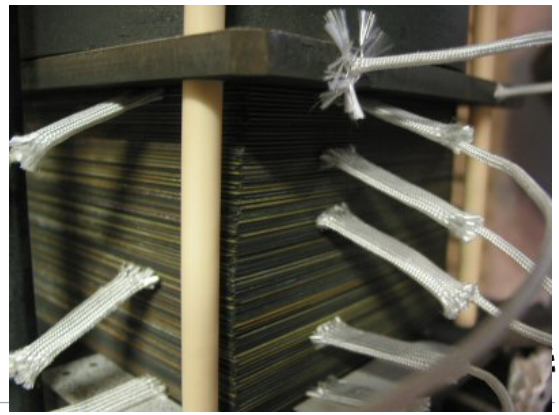
Recommendation: Establishment of fond for energy savings. High saving and efficiency standards

Transport: 20 % of road transport is changes to rail

Recommendation: Heavy investments in railroads.

Power stations: 1/3 of the CHP is based on Fuel cells.

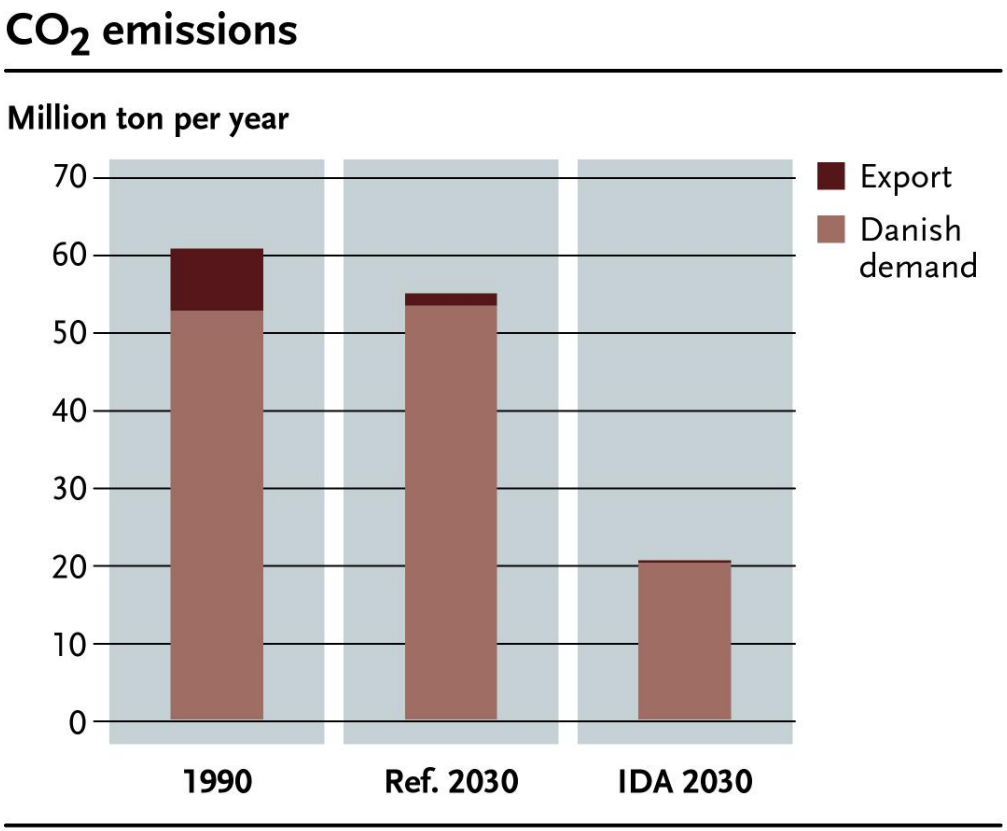
Recommendation: Increased R&D



Renewable: 55-60% of all electricity comes from windmills.

Recommendation: Feed-in tariffs

Energy plan 2030



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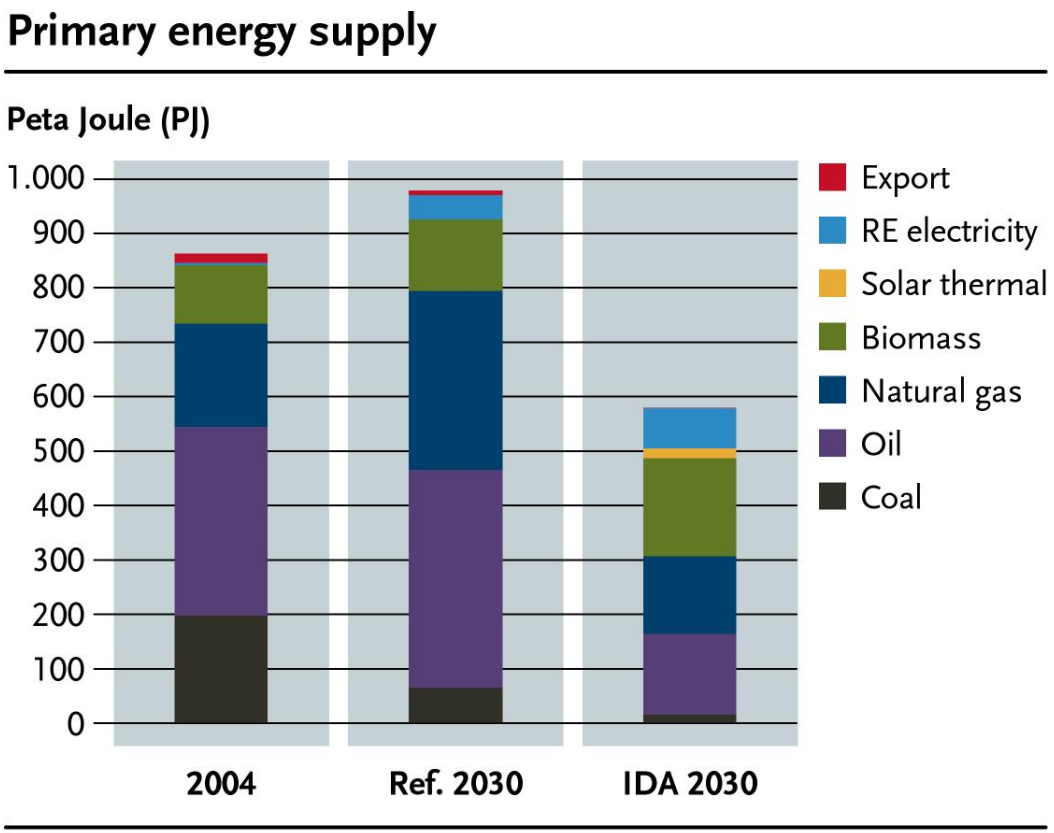
Energy plan 2030



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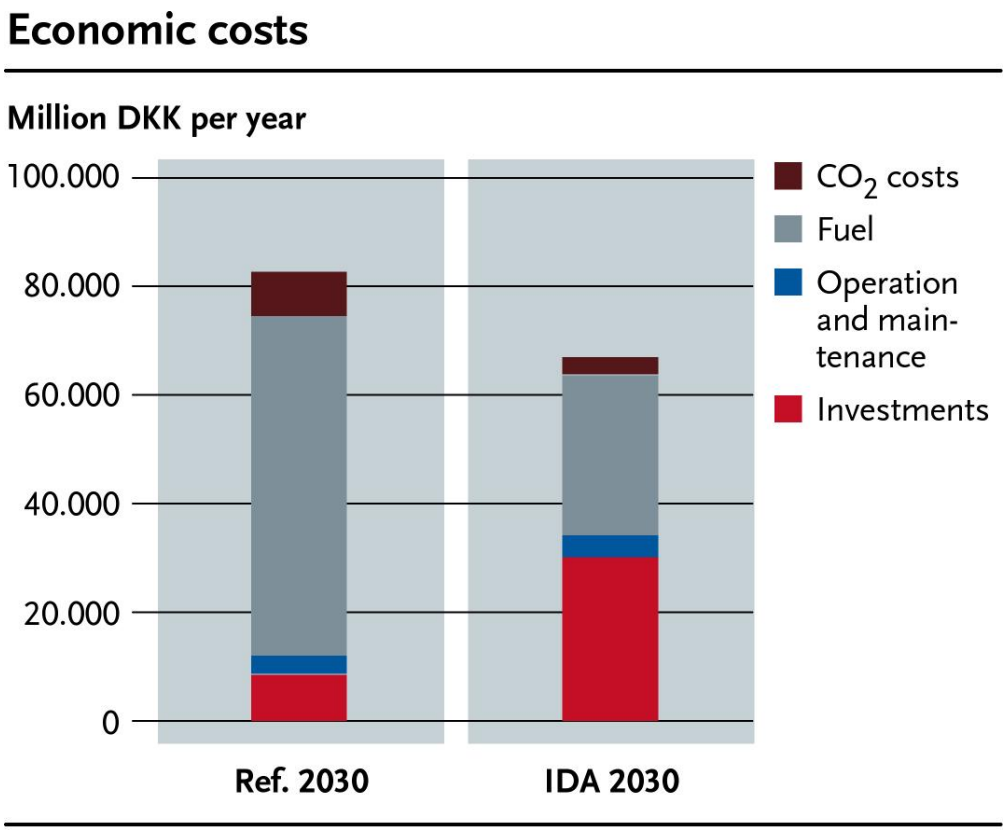
Energy plan 2030



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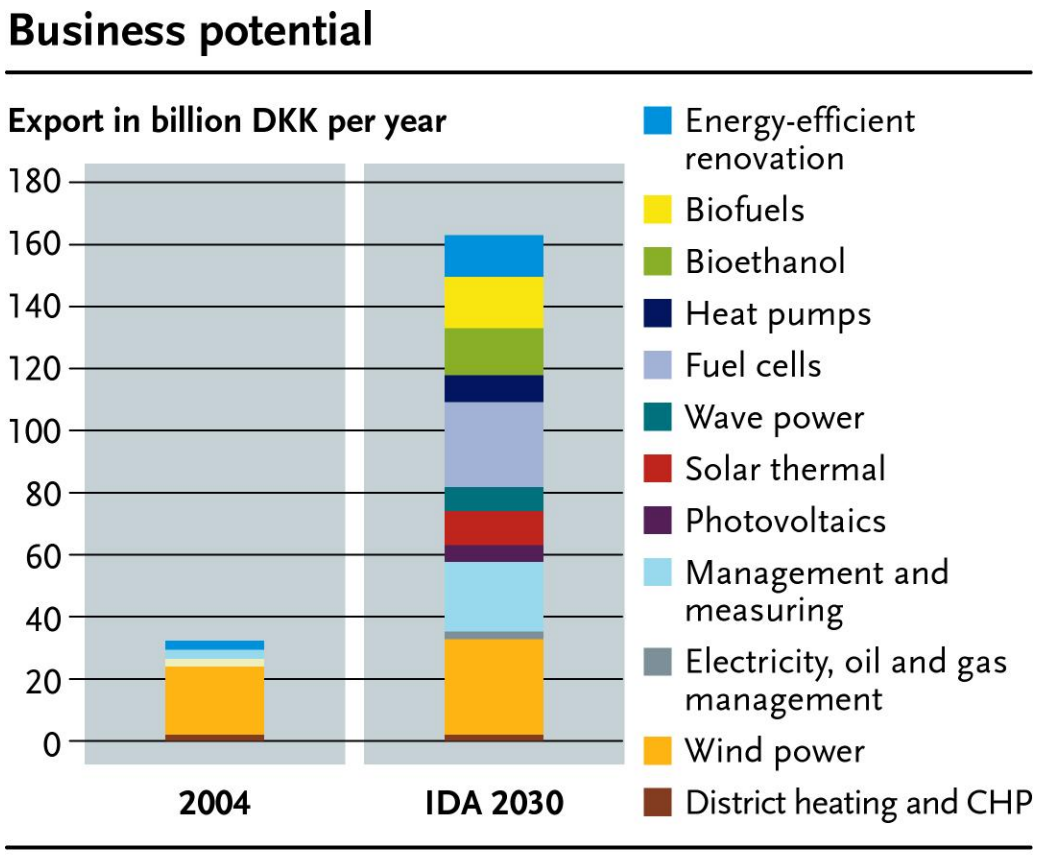
Energy plan 2030



Future Climate

Effect of Energy Year 2006 & Energy Plan 2030

A clear perspective on the challenges of the energysector within IDA

High media and public attention

A political point of reference

Knowledge sharing between members

Future Climate

Future Climate – Engineering Solutions

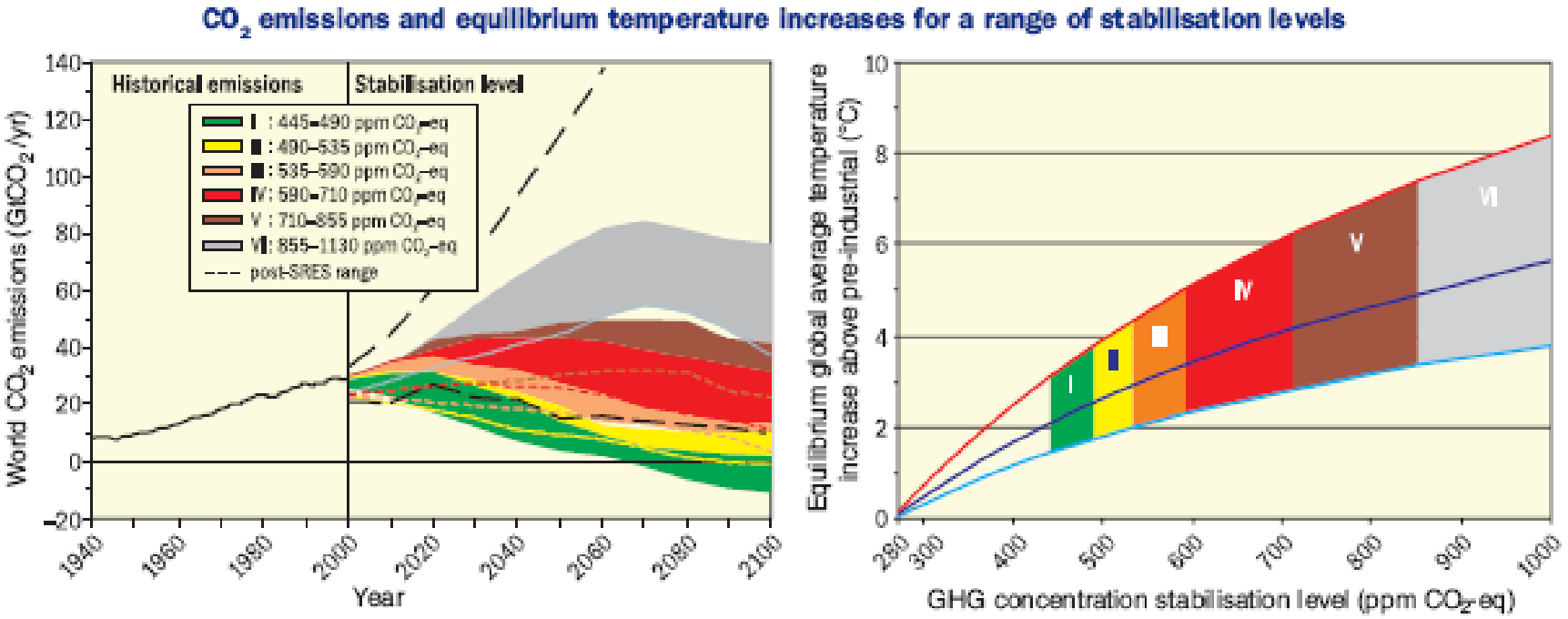
Future Climate

The purpose of Future Climate

- Gather engineering organizations around the world to develop national climate reduction plans.
- Displays sustainable, technical and economical viable energy technologies.
- Support an ambitious agreement at the UN Climate Change conference in 2009
- Building network between engineers and provide for competence development

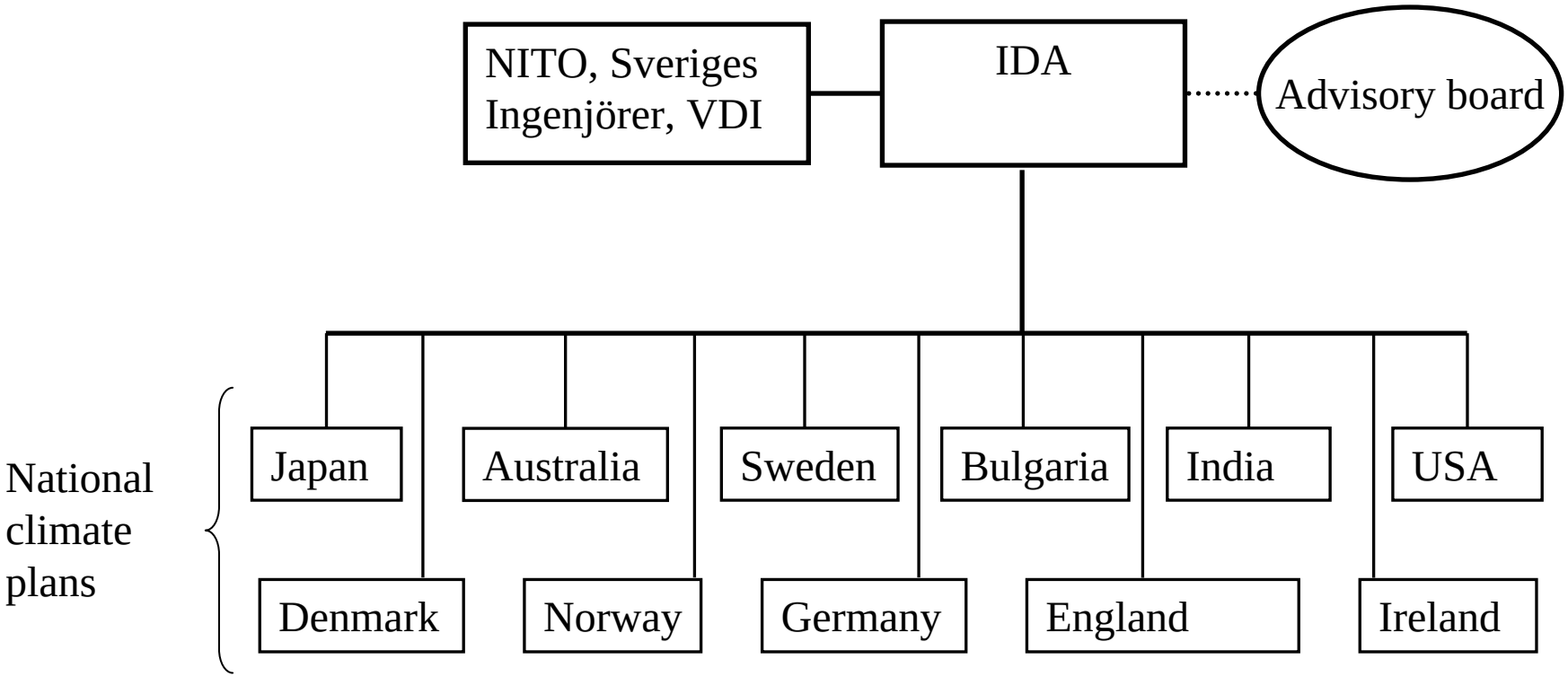
Future Climate

The guiding goal - Towards a scenario of maximum 2°C increase in temperature



Future Climate

The project organization



Future Climate

Participating organisations

- **The initiators**
  The Danish Society of Engineers, IDA
  The Swedish Association of Graduate Engineers
  The Norwegian Society of Engineers, NITO
  The Association of German Engineers, VDI

- **Associations participating in the conference**
  The Institution of Engineers, IEI (India)
  Institution of Mechanical Engineers (UK)
  The American Society of Mechanical Engineers, ASME
  The Japan Society of Mechanical Engineers, JSME
  APESMA (Australia)
  The Finnish Association of Graduate Engineers, TEK Union of Professional Engineers, UIL (Finland)
  Federation of Scientific Engineering Unions in Bulgaria
  Engineers Ireland

Future Climate

Time Schedule

18th -19th of September: Kick-off conference ”Future Climate – Engineering solutions”

September 2008 – Sept. 2009: Developing national climate plans

November/December 2008: COP 14 in Poznan, Polen

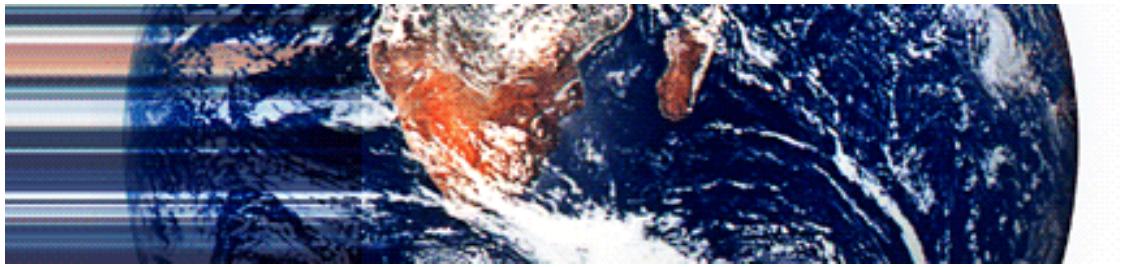
3-4th September 2009: Conference – presentation of climate plans and policy statements

December 2009: COP15 in Copenhagen, Denmark

Future Climate

Future Climate

Engineering Solutions



www.futureclimate.dk

Project partners

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