

An aerial photograph of a river system, likely the Amazon, showing a large dam structure with a reservoir. The water is dark blue, and the surrounding land is a mix of green and brown, indicating a mix of forest and cleared areas. The text is overlaid on the right side of the image.

Future
Climate

Engineering Solutions

www.futureclimate.info



Future Climate

The future is a low carbon society

The UN Intergovernmental Panel on Climate Change has concluded that the rise in global temperatures is due to an increase in greenhouse gas levels. In order to avoid irreversible environmental damage, a fall in greenhouse gas emissions is necessary.

In order to keep the rise in temperature below two degrees, global emissions of greenhouse gases must peak before 2015 and must be reduced by 50-85 % by 2050.

Reaching global stabilisation in greenhouse gas emissions no later than 2015 is a huge challenge; cuts in emissions and a general de-carbonation of society call for major changes in technologies and lifestyle.





“ Designing solutions to reduce the emission of greenhouse gases is a well defined challenge to society and to the engineers of the 21st century.

As engineers, we hold the key to the future; and through

Future Climate we want to prove that it is possible to get our civilization onto a sustainable path.

However, as time is running out political leadership is needed. It is my sincere hope that the leaders of the world will find inspiration in our work, and will, no later than 2009, at the UN Climate Summit in Copenhagen, agree on an ambitious climate agreement.

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Lars Bytoft

President and Chairman
The Danish Society of Engineers

Engineering

Overcoming climate change is the number one engineering challenge of the 21st century

In the search for solutions to the climate challenge, the knowledge and the competences of engineers are essential. This is why thirteen associations of engineers from twelve different countries world-wide have joined the Future Climate – Engineering Solutions project.

The goal of the Future Climate project is to demonstrate climate solutions and technologies that can contribute toward a scenario where the global temperature does not increase more than two degrees Celsius.



Solutions

More than 1.3 million engineers are looking for solutions to the climate change challenge

Engineers in the participating associations are engaged in analysing technical solutions and developing national climate action plans for their home countries. The challenge is to find solutions which will create a low carbon society.

The engineers will analyse national energy and transport systems and, if possible, also agriculture and forests. These work will provide a technical perspective on each nation's ability to reduce climate gas emissions to a level

matching the climate scenario of a maximum rise in temperature of two degrees.

The results of the Future Climate Project will be presented at an international conference on 3rd and 4th September 2009 in Copenhagen. This conference will put forward the joint recommendations from the participating organisations addressing the UN, the parties to the Kyoto protocol, and others who will commit themselves to the new climate agreement.

Future Climate – Engineering Solutions

On 3 and 4 September 2009 the climate plans will be presented at a conference in Copenhagen. More information at www.futureclimate.info

Participating Associations

13 associations of engineers from 12 different countries worldwide participate in the Future Climate project.

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

PARTNERS

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