



Negative CO₂

Taking the CO₂ Back: Making Sweden carbon negative by 2045

Date and time: 15 June 2017, 12:45 – 15:30
Location: The Parliament of Sweden, Stockholm
Entrance: Side entrance from Riksplan, Norrbro 1B
Room: Mittpoolen

This Nordic Energy Research (NER) event, organised by Bellona and the Moderate Party of Sweden, will give the opportunity to discuss policies and technologies needed to develop and implement carbon negative solutions in Sweden, the Nordic countries, and the rest of Europe. The seminar is organised in the context of the 25th European Biomass Conference and Exhibition (EUBCE).

In its 2017 climate strategy, Sweden's Cross-Party Committee on Environmental Objectives states that Sweden is to become completely carbon neutral by 2045. Importantly, it mentions that Sweden will in fact reduce CO₂ from the atmosphere after 2045, and thus become carbon negative. The strategy, however, leaves open how this goal is to be met.

Of the several methods to subtract CO₂ from the atmosphere, Bio-CCS, the usage of biomass feedstock and subsequent capture and storage of the CO₂, is one of the most cost effective and efficient. A promising CO₂ capture technology researched in one of the flagship projects of NER is Chemical-Looping Combustion (CLC).

Norway has made big strides in the development of a viable CCS infrastructure over the past 20 years. Cooperation between the Nordic countries, especially between Sweden and Norway, will be essential for the success of the NER project and a Nordic CCS infrastructure.

How can we ensure that meaningful steps will be taken to develop and deploy a Nordic CCS infrastructure in order to make Sweden carbon negative by 2045?

Among the speakers will be Bellona, the Moderate Party of Sweden, NER, Gassnova, and representatives of industries.

Program

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- 12:45-13:30 *Registration and security checks at entrance of the Parliament (Norrbro 1B), attendees to be guided to seminar room Mittpoolen*
- 13:30-13:35 **Welcome**
Jonas Jacobsson Gjørtler, Member of Parliament, the Moderate Party of Sweden
- 13:35-13:45 **Research on CCS in the Nordic countries**
Svend Søyland, Senior Advisor, Nordic Energy Research
- 13:45-13:55 **How to deploy CCS in Northern Europe and enable negative CO₂ emissions**
Jonas Helseth, Director, Bellona Europa
- 13:55- 14:05 **Sweden's climate framework and the need for negative emissions**
Johan Hultberg, Member of Parliament, the Moderate Party of Sweden
- 14:05-14:20 **Panel Debate: The need for carbon negative solutions**
- Elisabeth Undén, The Green Party, Gothenburg Municipality
 - Johan Hultberg, MP, The Moderate Party of Sweden
 - Mathias Fridahl, Analyst Climate Policy, FORES; Researcher, Centre for Climate Science and Policy Research, University of Linköping
- 14:20-14:30 Coffee break
- 14:30-14:40 **Gassnova's role in the deployment of CCS**
Trude Sundset, Director, Gassnova
- 14:40-14:50 **CCS and CCU inevitable for cement industry**
Stefan Sandelin, R&D Manager, Cementa
- 14:50-15:00 **CCS and negative emissions from the waste incineration**
Jannicke Gerner Bjerkås, Chief of Staff, Klemetsrudanlegget AS
- 15:00-15:15 **Panel Debate: How can we deliver carbon negative solutions with CCS in the Nordics?**
- Trude Sundseth, Director, Gassnova
 - Anders Lyngfelt, Project Leader, NER "CO₂ Negative Project", Chalmers University
 - Stefan Sandelin, R&D Manager, Cementa
- 15:15-15:30 Discussion