



KTH Energy Dialogue 2021 – *Science for Sustainability & Impact of Research*

*The KTH Energy Dialogue is an annual event arranged by the KTH Energy Platform. It is a celebration of energy research and an inclusive meeting point for dialogues on scientifically based solutions aiming at the sustainable development goals (SDGs). The program highlights the width of research fields at KTH with a selection of topics vital for the transformation toward sustainability. Specifically for this year, guest speakers will add a business perspective, and short pitches will present research impact cases for targeting the SDGs. The event will be live at KTH Campus, Nymble, on **Thursday 18 November, 13-16 (networking lunch and poster session from 11.30)**. More information and registration: www.kth.se/energydialogue2021*

Program overview

Introduction

- Opening remark - Sigbritt Karlsson, President of KTH
- Welcome - Lina Bertling Tjernberg, Director of the KTH Energy Platform and Christophe Duwig Vice Director KTH Energy Platform
- Introduction to the moderator: Willy Silberstein

Panel A Sustainable developments: how science and business meet

- Jenny Larsson Country Managing Director, Hitachi Energy, Sweden
- Lena Österberg Head of Sustainability Research & Strategy Carnegie
- Per Lundquist Professor and Vice President for Sustainability at KTH
- Göran Finnveden Professor and Former Vice President for Sustainability at KTH
- Lina Bertling Tjernberg Professor and Director of the KTH Energy platform

Panel B Outstanding innovation: Research Impact Cases from KTH

- *Super capacitors for clean water*
Joydeep Dutta Professor in Functional materials
- *Impact on first wall construction and cost reduction in future fusion reactors*
Per Petersson Dr. Researcher at Division of Fusion Plasma Physics
- *Direct conversion of CO₂ to biofuels with bacteria*
Paul Hudson Associate Professor in Protein Science
- *High-voltage fast-acting circuit breakers enabling the super grid*
Staffan Norrga Associate Professor in Power Electronics
- *New legislation on embodied carbon in buildings*
Tove Malmqvist Stigell Docent and Researcher in Sustainable Buildings

Coffee break, meet a new colleague, and poster session (approx.: 14.20-14.50)

Panel C Challenges and possibilities with large scale wind power developments

- Lennart Söder Professor in Electric Power Systems and Markets
- Ulla Mörtberg Associate Professor in Energy Systems & Environmental Assessment
- Sergei Glavatskih Professor in Machine Design and Tribotronics

Panel D Future solutions combining solar cell technologies and recyclable battery solutions

- Lars Kloo Professor of Chemistry
- Kerstin Forsberg Associate Professor in Chemical Engineering
- Bo Normark Honorary doctor at KTH, Industrial Strategy Executive EIT InnoEnergy

Closing remarks, coming events and handing out of Best Poster Award.

The jury includes: Cissi Askwall, Vetenskap & Allmänhet, Karin Larsdotter, KTH Sustainability, and Mario Romero, Associate Professor in Visualization at KTH.