

## Plenary Keynote: Brian Vad Mathiesen

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### Energy Efficiency First - REPower EU 2030 and 100% renewable energy in 2050 for Europe

#### Abstract

The energy crisis started last summer, long before the Russian invasion of Ukraine. In this presentation, the newly finished results in the sEnergies project focus on inputs for dealing with the energy crises, REPowerEU and Fitfor55. The primary aim of the project was to quantify energy efficiency in a climate-neutral energy system in 2050. The project has overall EU results as well as results for all EU27 countries including the UK. Sectoral results are presented for buildings, transport and mobility, industrial process as well as on grids. This enabled the development of 28 smart energy systems for a clean, smart, and secure European energy system driven by significant energy savings, the deployment of renewable energy, all in the focus of the Energy Efficiency First Principle. Energy efficiency must have priority in planning processes and investments. sEnergies answers essential questions and provides policy recommendations regarding effective energy efficiency measures and identifies where renewable energy is more cost-effective than further end savings. ([www.seenergies.eu](http://www.seenergies.eu))

