

A composite background image showing a coastal scene with wind turbines, an offshore oil rig, a boat, and people on a beach. The image is overlaid with a semi-transparent white box containing text.

DIGITALIZATION AND THE POWER INDUSTRY

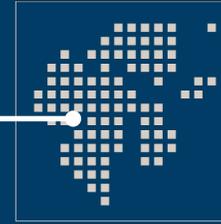
Alexandra Bech Gjørnv

CEO SINTEF



Welcome to Trondheim

Svalbard



Tromsø

Mo i Rana

Ålesund
Trondheim

Bergen

Raufoss

Porsgrunn

Oslo

Scandinavia's largest independent research organization



NOK 3,2 billion
Revenues

NOK 500 MILL
International sales

Applied research, technology and innovation

Expertise from ocean space to outer space:



Renewable energy



Ocean space



Industry



Buildings and
infrastructure



Materials



Microtechnology
and nanotechnology



Climate and environment



Oil and gas



Health and welfare



Society

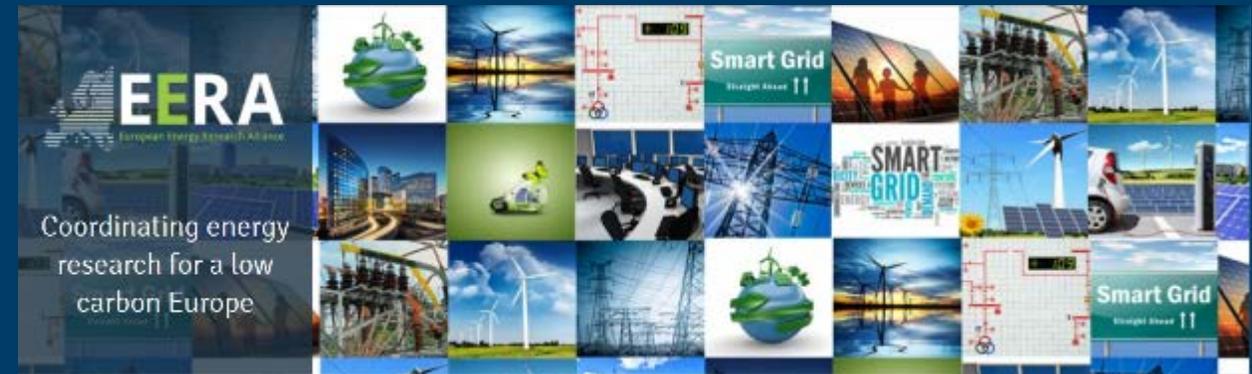
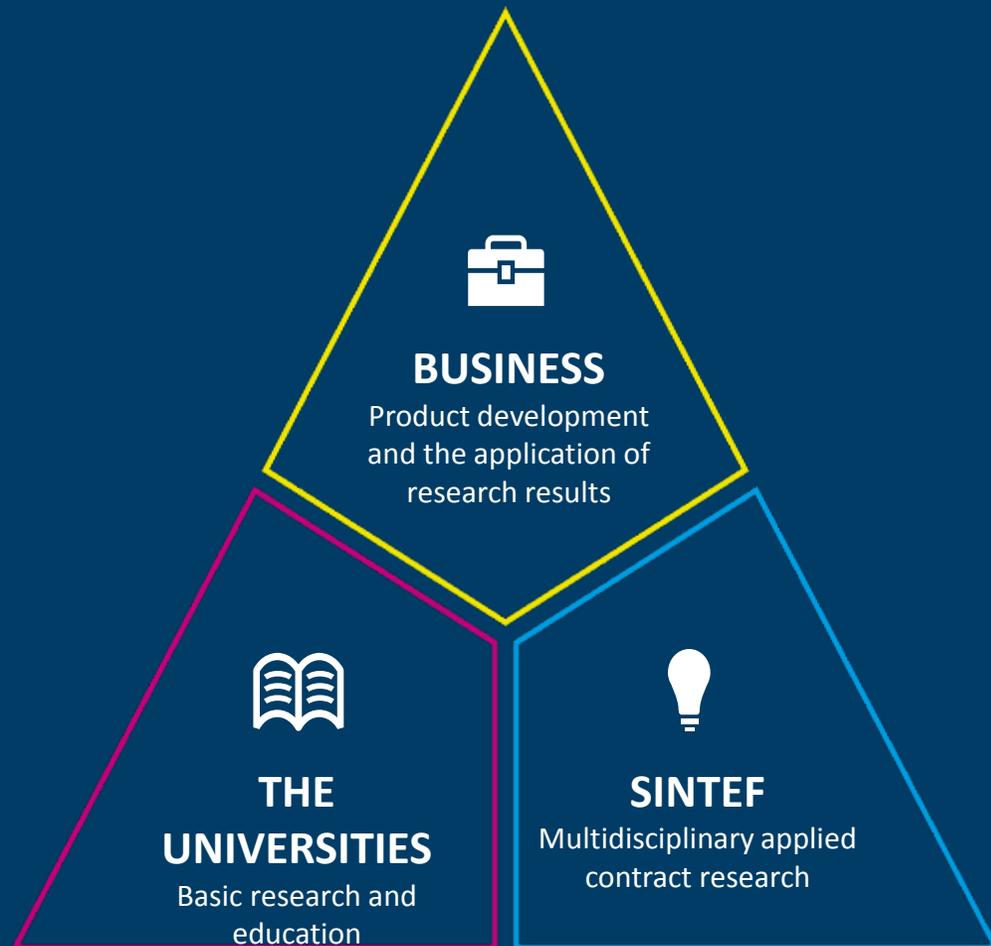


ICT



Biotechnology

Close working relationships generate innovation and high quality



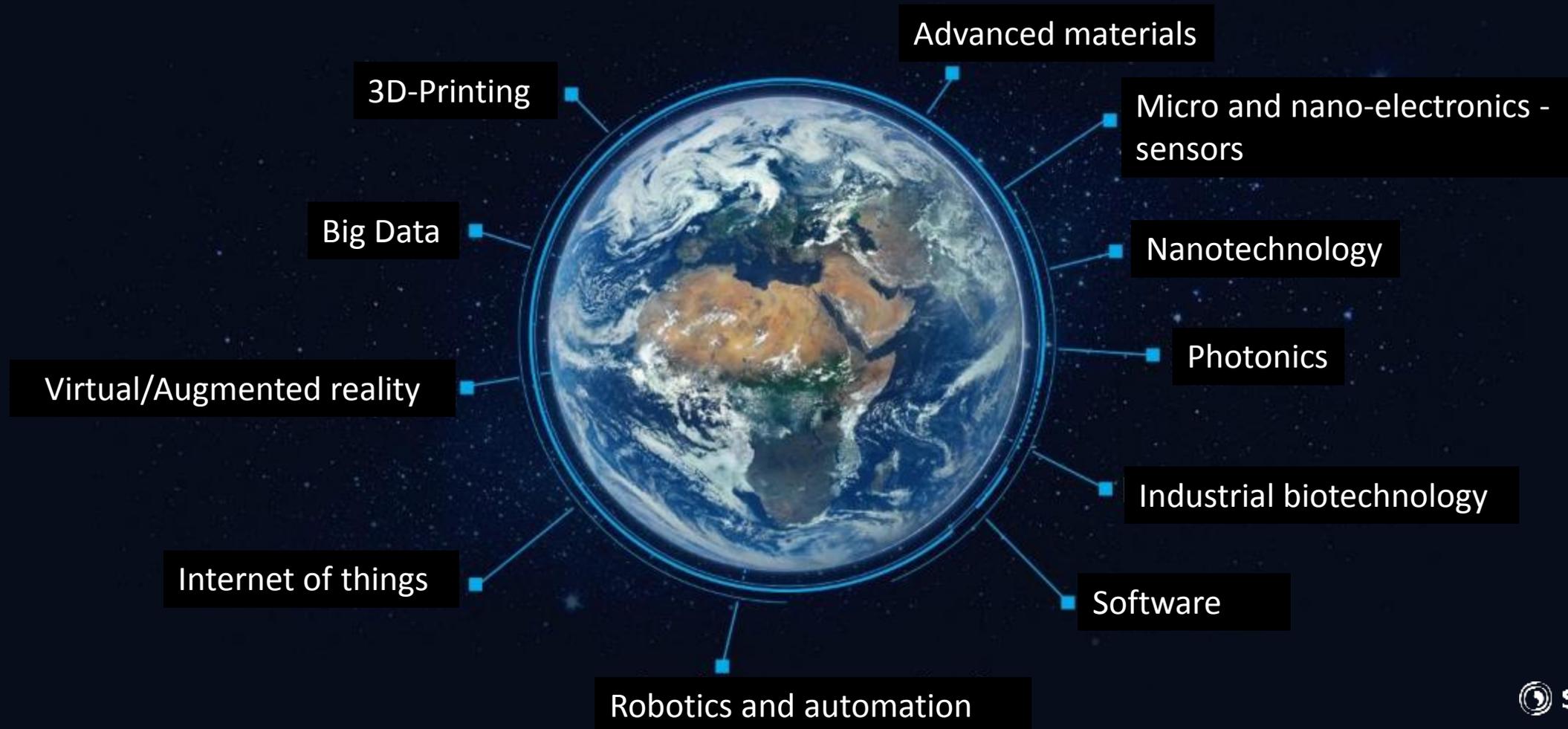


Societal mission and vision

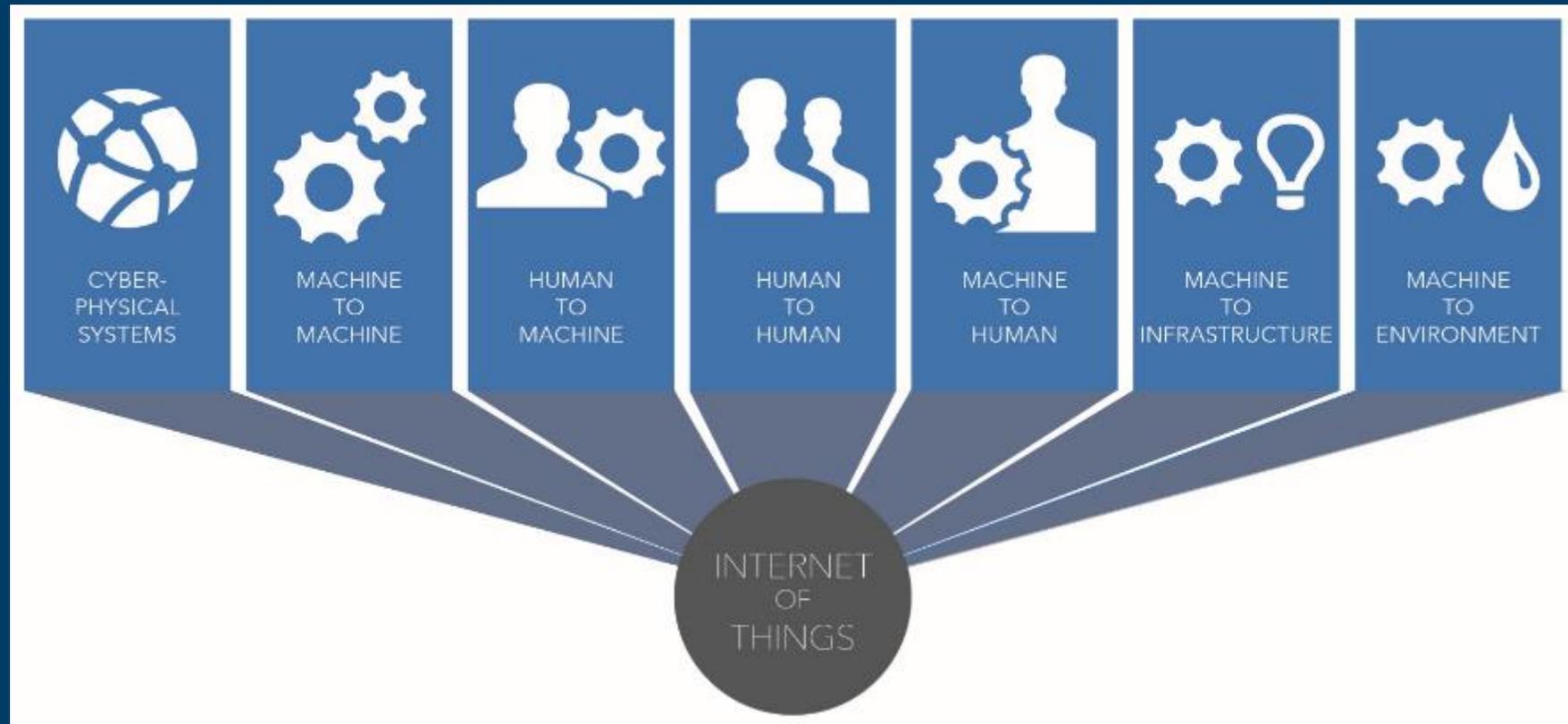


Our vision: **Technology for a better society**

Enabling Technologies



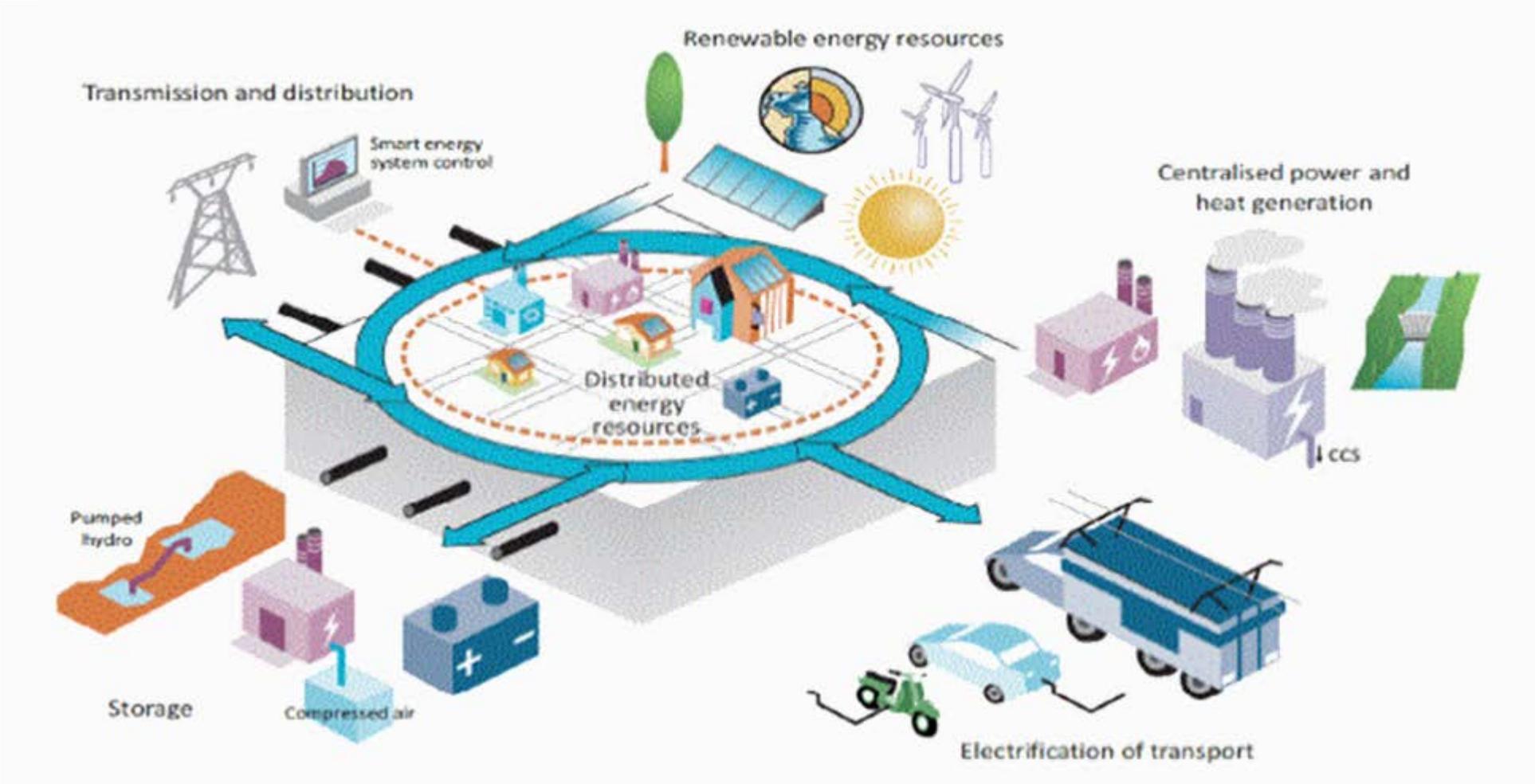
Internet of Things



Big Data



Digitalization in a customer centric power system



DeVID

Demonstrasjon og verifikasjon
av intelligente distribusjonsnett

DeVID RAPPORT 2014

Grid value from AMI

- Customer flexibility
- Fault localization and handling
- Grid operation and management

Transmission level digitalization

- Sensors and communication
- Synthetic inertia
- Big Data analytics for optimization of production
- Digital substations
- Transmission level integration of flexible resources





Capacity and stability in the Hasle corridor





Innovation in our most critical Infrastructure





Technology for a better society