

UiO : **Department of Technology Systems**
University of Oslo

Topics of Interest

- **Societal Security, Trust**
- **Sustainable Infrastructures**

Josef Noll

<http://www.mn.uio.no/its>

<http://ITS-wiki.no>



Affordable Energy & Internet Lite for All

the catalysts for the goals

Showcase
"Non discriminating access"
project

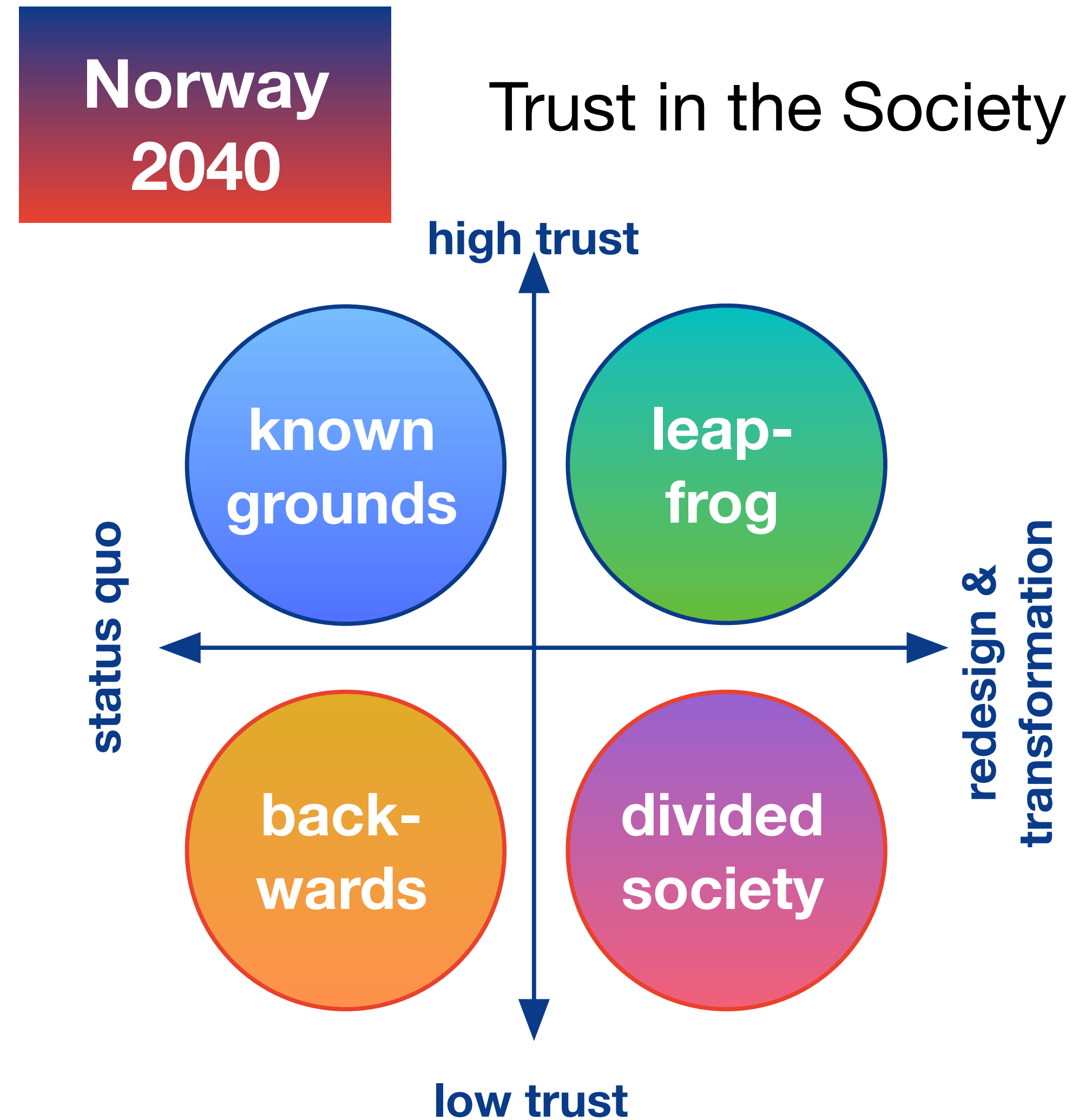
- funded by RCN and Mfa/Norad (14.9 MNOK for 2017-2020)
- Tanzania: digital health
- Mali: energy



Energy & Internet Lite for All
Target 7.1&7.2 Target 9.C Target 16.10

Examples of areas

- Societal Security
- Trust in Society
- 6G and SDGs



6G

Marja Matinmikko-Blue: Overview of new 6G white papers

Volker Ziegler: 6G technology and architecture – unify experience across the worlds

Josef Noll: Digital inclusion and the freemium model for access to information for all

Marianne Kinnula: Megatrends shaping sustainable development of 6G

Panos Kostakos: Linking 6G and UN SDGs

Addressing Education 5.0 and Global Challenges

→ Cognitive skills

- literacy and numeracy
- critical thinking
- problem solving

Edu 3.0

→ Social and emotional skills

- empathy, teamwork
- leadership, cultural awareness
- fraternity & social friendship

Edu 4.0

→ Global challenges

- Climate, Sustainability (SDGs)

Edu 5.0



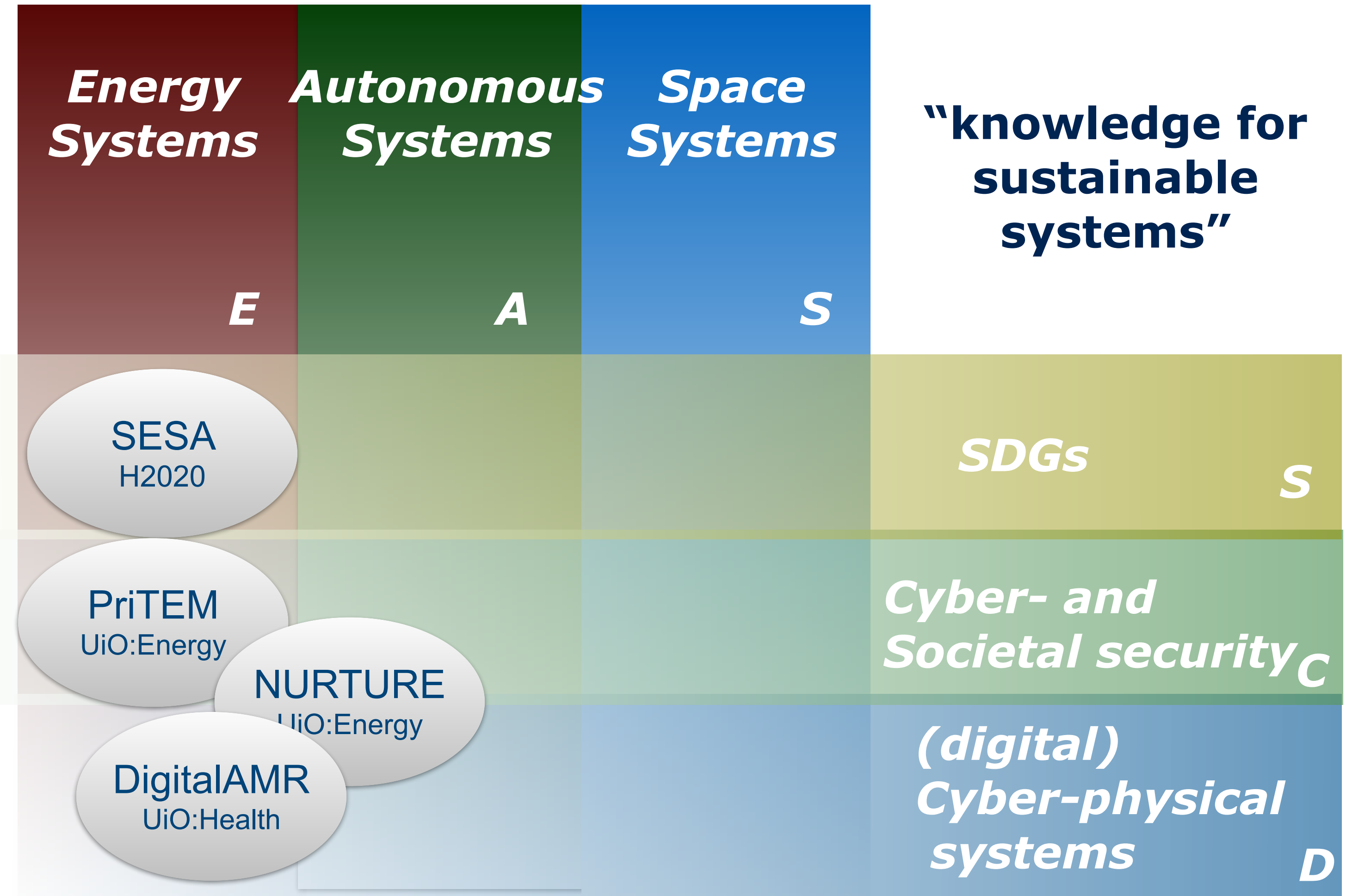
Our working areas

Department of Technology Systems ITS@UiO

- ➔ Cognitive skills
 - literacy and numeracy
 - critical thinking
 - problem solving

- ➔ Social and emotional skills
 - empathy, teamwork
 - leadership, cultural awareness
 - fraternity & social friendship

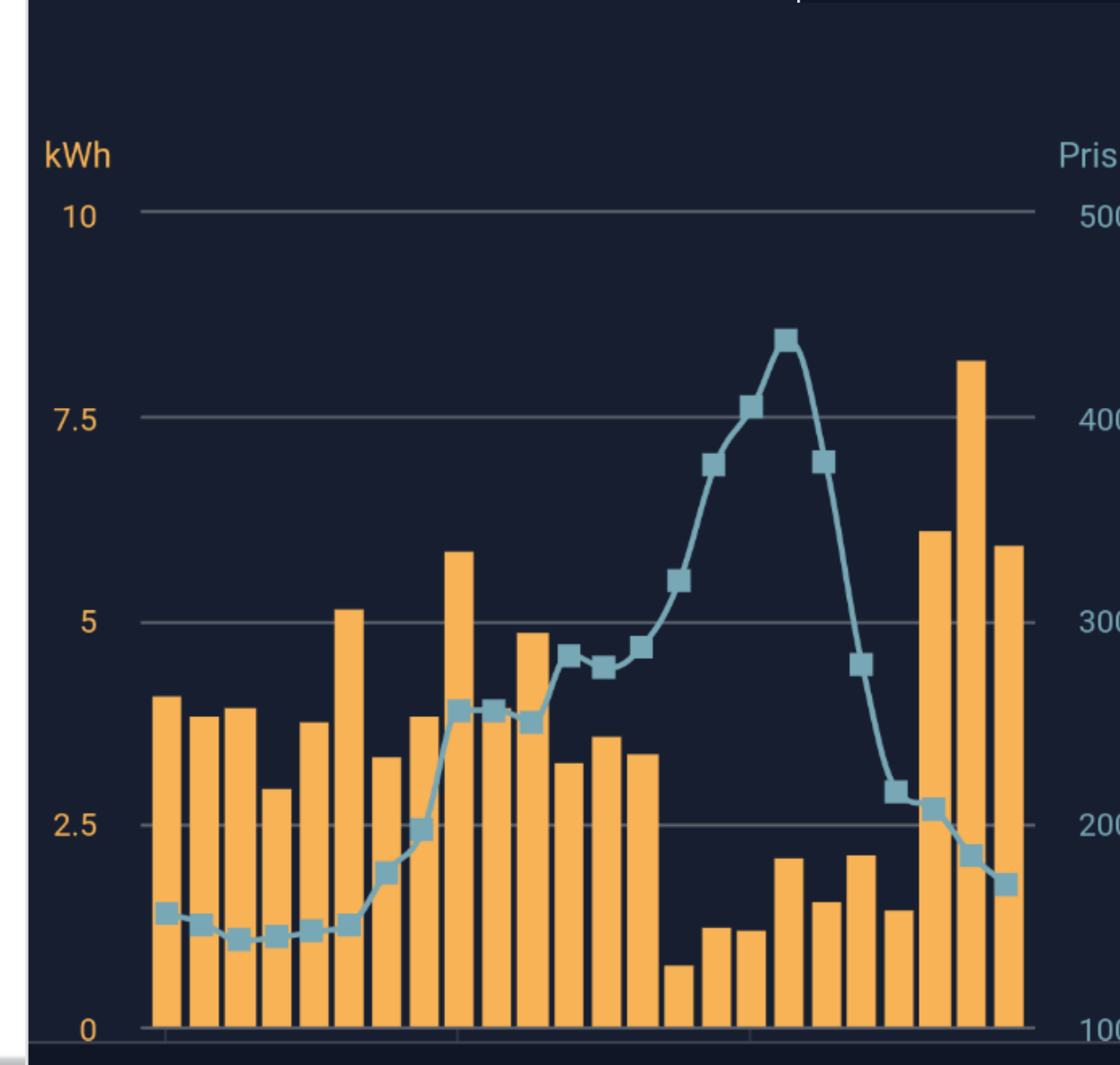
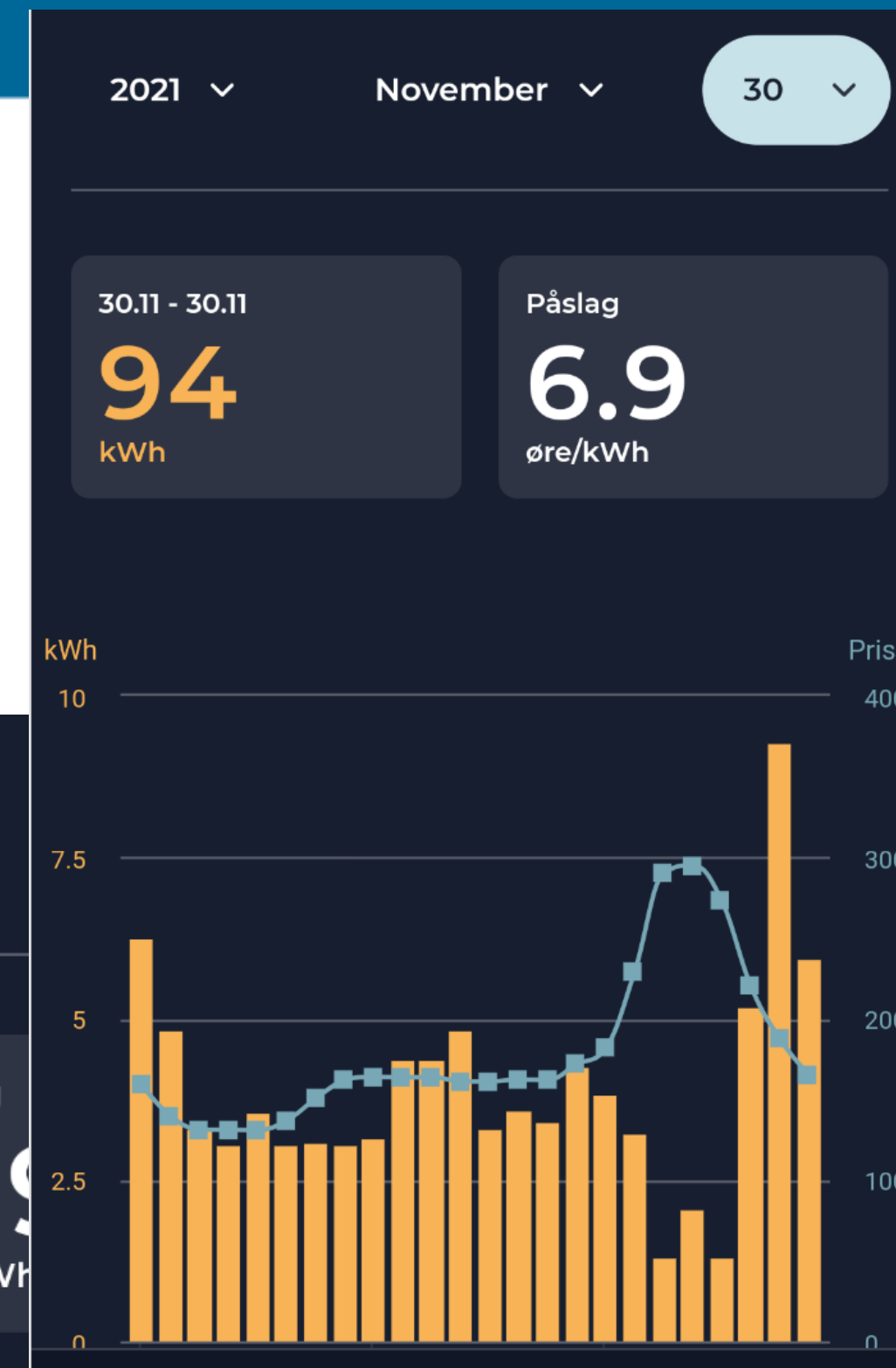
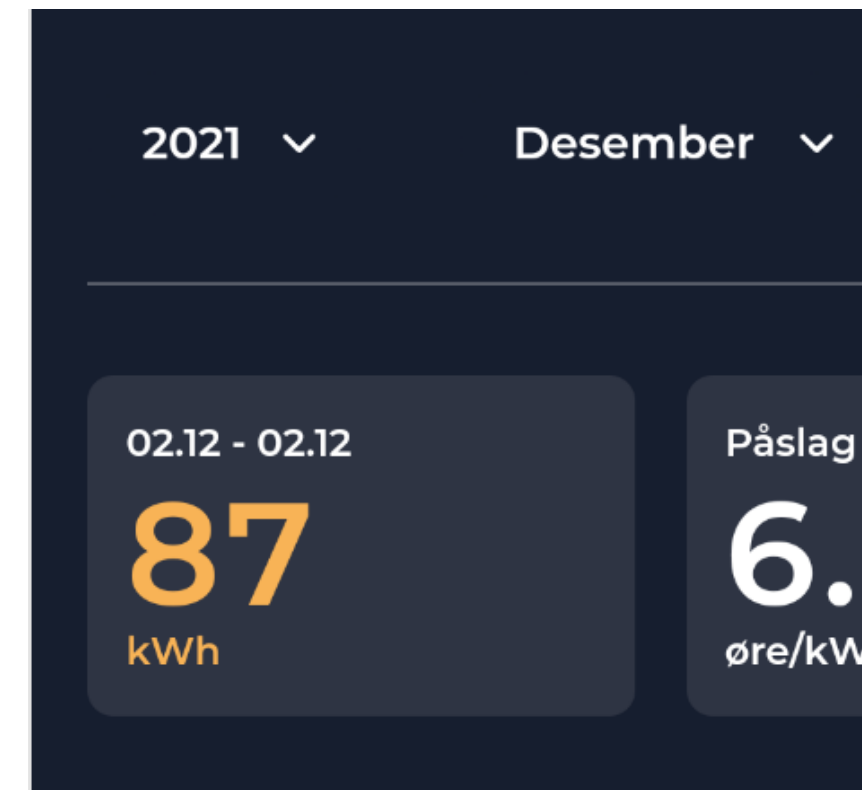
- ➔ Global challenges
 - Climate, Sustainability (SDGs)



PriTEM - Sabita Maharjan

Ifi, ITS, PSY, LAW

- Empower the customer
 - capability to adapt
 - decentralised solutions
 - distributed grid
- Upgrade houses
- **Neighbour-networks**



Digital Antimicrobial resistance (AMR)

UiO:Health Relight funded

- part of DigitalGlobalHealth.eu
- Digital Health Promotion (DHP) and community involvement
- here: AMR study with video as intervention



Figure 1: Scene from Antimicrobial resistance (AMR) animation

<https://nextcloud.basicinternet.org/index.php/s/G87o853sopqrfcZ>



NURTURE - Nurturing SDGs through Higher Education Capacity Building in Ethiopia

NORHED II project - Shegaw Mengiste (USN)

- University of South-Eastern Norway (USN)
- University of Gondar (UoG), Ethiopia
- Addis Ababa Science and Technology University (AASTU)
- Debre Markos University (DMU)
- Hawassa University (HU)
- Jimma University (JU)
- Norwegian Centre for E-health Research
- University of Oslo (ITS & Ifi)

eHealth

informatics

special needs education

3 Master programs,
16 curricula, 45 MSc &
15 PhD scholarship

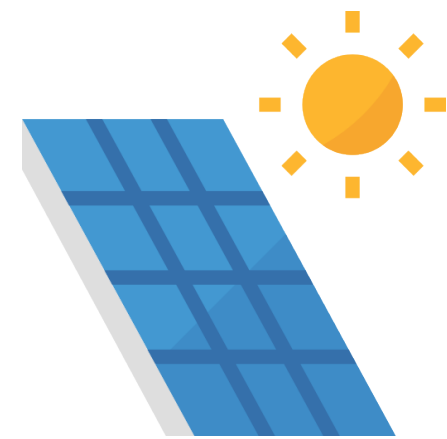


What is SESA?

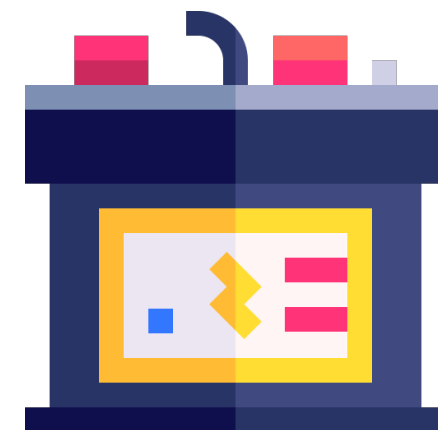
SESA is a collaborative project between the **European Union and nine African countries** (Kenya, Ghana, South Africa, Malawi, Morocco, Namibia, Tanzania, Rwanda and Nigeria) that aims at **providing energy access technologies and business models** that are easily replicable and generate local opportunities for economic development and social cohesion in Africa.



⚡ The technologies on focus



Decentralised renewables
(Solar PV)



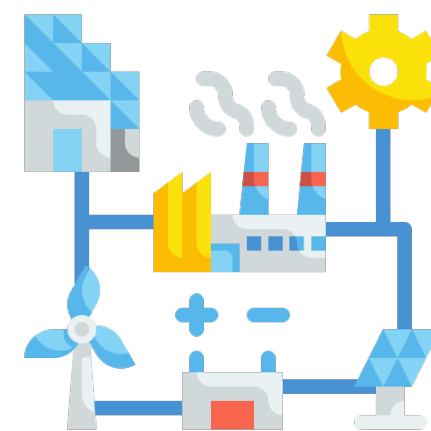
Second life electric vehicle (EV)
batteries for stationary energy
storage



Waste/Biogas-to-energy
systems



Climate-proofing,
resilience and adaptation



Smart micro-grids



Rural internet access &
free Energy information

