Mission oriented research – Climate Neutral Cities



Introduction

- O M.Sc. Environmental planning (Environmental, Technological and Socio-economic Planning)
- PhD Global Studies (Political economic & critical policy studies).
- O Associate Professor, City and Regional Planning
- Project Lead:
 - Research Network for Smart Sustainable Cities
 - Future Energy Hub (Urban renewable energy/sustinable buildings)
 - Academic member UiS Green Transition Lab
 - Stavanger Climate Neutral City Task Force



The 5 EU missions

- 150 European Regions and communities to become climate resilient by 2030
- Beating cancer improve the lives of more than 3 million by 2030 through prevention and solutions to live longer and better.
- Restore our oceans and water by 2030.

- 100 Climate-Neutral and Smart Cities by 2030
- A Soil Deal for Europe: 100 living labs and lighthouses to lead the transition towards healthy soils by 2030



The mission framework



Figure 1. From Challenges to Missions Image: RTD - A.1 based on Mazzucato (2017)



Five criteria of mission-oriented research and innovation

O Bold, inspirational with wide societal relevance
O A clear direction: Targeted, measurable and time-bound
O Ambitious, but realistic research and innovation actions
O Cross-disciplinary, cross-sectoral, cross-actor innovation
O Multiple bottom-up solutions



Implementation

- Engagement of diverse national and regional stakeholders
- Measurement and impact by goals and milestones.
- A portfolio of instruments to foster bottom up solutions
- Flexibility, pro-active management and building in-house capabilities
- Public engagement



Climate neutral cities mission





EU implementation plan





Stavanger's climate neutral cities mission

O June 11, 2020 – the city council adopted resolution to apply for the 100 climate neutral cities mission.

O Application submitted early 2022

O Stavanger was selected in May 2022



A mission-oriented organization

O Climate neutral taskforce

- Municipality
- County
- University of Stavanger
- Region Stavanger EU Office
- Lyse (electricity company)
- IVAR (waste management)
- NHO (Industry association)
- Civil society



Next steps

- O Identify and prioritize key challenges
- O Sign contract with the EU
- O Reach out to stakeholders for each challenge to form working groups
- O Work with potential private and public investors
- O Engage citizens



University Activities

- O Link researchers to regional challenge working groups
- Student activities (master theses, hackathons, courses, internships).
- O Adjust and align study programmes
- O Partner with city and other regional for EU and national R&I calls related to the city's priorities.



Examples

O Just and inclusive urban planning (New European Lighthouse Pilot Demonstrator)

- O Positive Energy Districts
- O New and Shared mobility solutions
- O Circular economy



Thesis challenge – Energy positive and lowcarbon livestyles

- O Thesis living lab Low carbon lifestyles
- O 4 apartments
- Selected students get to live for free for 6 months to conduct their research project.
- O Operating budget of NOK 50.000 to buy equipment





Energy positive and climate neutral campus

- O Energy production and consumption
- O Energy efficiency
- O New and shared mobility services
- Waste recycling and re-use
- O Acquisition policies
- O Campus biodiversity

