

# **Preliminary report of the NEB partnership activities at NTNU**

This intermediary report introduces and summarizes some of the initial ideas and proposals that have been developed at the [Norwegian University of Science and Technology \(NTNU\)](#) and [SINTEF](#) to contribute to the New European Bauhaus co-design phase.

## **What has happened in NTNU?**

### **Co-creation session in NTNU**

The goals, expectations and the potential of the official partnership have been introduced and discussed in the first of a series of workshops to co-design NTNU's New European Bauhaus partnership. This workshop was open to all scientific and administrative staff at NTNU and SINTEF and it took place from 1pm to 3:30pm, on May 19, 2021.

All participants had the possibility to present projects and experiences, to discuss with colleagues what could be done, to co-design the scope of our collaboration, and to plan for new activities together – in NTNU, Norway, Europe and globally.

Drawing on a diverse range of research methodologies — from scientific to practice-based and artistic —, NTNU has the capacities to explore the potentials, impacts and values of novel alliances across sectors, actors and contexts.

### **Meetings with Norwegian and international partners**

On April 6, 2021, a first meeting took place to connect key institutions on Norwegian level in support of the Nordic and the New European Bauhaus: It was attended by representatives of Design og Arkitektur Norge (DOGA), Innovation Norway (IN), Research Council of Norway (RCN), Nordic Edge (NE), University of Stavanger (UiS), Norwegian Association of Local and Regional Authorities (KS), and the Smart Cities Norway Network. This network has been extended by involving the Federation of Norwegian Enterprise VIRKE, the Young Artists' Society in Norway (UKS), and the Norwegian Programme for Artistic Research (NARP).

In parallel NTNU has initiated local collaborations with the municipalities of Trondheim, Stavanger and Ålesund to contribute to the goals and ambitions of the New European Bauhaus.

Next to the regular meetings of the official NEB partners, we have also started to coordinate strategic ambitions on European level: In a series of bi-lateral meetings with NEB partners, among smart city lighthouse projects and within the COST action 'European Forum of Advanced Practices'. NTNU's approach to the NEB was presented and discussed at events such as the Smart City Marketplace Forum, the NEB conversations between Aarhus, Hamburg, Trondheim and Melbourne, Nordic Edge China, European Regions for Smart Communities summit and many more.

## **Main outcomes:**

The main outcomes of the co-design phase at NTNU have generated evidence of three main areas of potential:

1. Linking artistic disciplines and technological innovation  
By connecting science and technology with artistic and practice-based research in the cultural and creative sectors, social sciences, and humanities, we can create the knowledge necessary to shape climate-neutral futures that are desirable and sustainable, attractive and inclusive.
2. Connecting research, education, and society  
Engaging researchers and students as societal actors and building a culture, language, and methods for societal innovation. NTNU's role could focus on developing concrete proposals that make it easier for the public to engage in multidisciplinary thinking, acting and cooperation. This requires openness and new forms of public spaces that enable discussions which connect research, education, and innovation.
3. Co-creating open and inclusive spaces for experimentation across disciplines  
As soon as sustainability, aesthetics and inclusion are understood as complementary dimensions, new spaces open for radical experimentation, reflection and discussion, exchange of ideas, insights, initiating activities and building new connections and collaborations. This will allow us to imagine and explore novel pathways to impact and to take decisive steps toward achieving widespread climate-neutrality.

## **Specific outcomes:**

### **Narratives**

- Taking risks and building trust for a common research culture
- Involving and renewing a multiplicity of different forms to produce knowledge
- Circular aesthetics and a new understanding of landscape
- Bridging between technology and society
- Claiming ownership of the Green Deal by making it a claim on local basis

### **Methodical principles**

- From silos to synergies: Cross-disciplinary toolkits enabling new ways of working together
- Promoting openness: engaging citizens and developing digital infrastructures
- Making the path by walking: Sharing knowledges and screens
- Focus on value-based approaches
- Transversally across the institution: bottom-up and, at the same time, top-down

### **Opportunities**

- Rethinking educational programs and developing new pedagogical visions for technology education of the future, as well as social sciences, the arts and the humanities
- Connecting NEB and integrating the main principles within the NTNU campus development project and the [Ocean space](#)
- Creating healthy environments for a diversity of forms of life
- Appreciating the potential of DIY, makers, and low-tech innovation
- Re-using and renovating existing infrastructure

### **Responsibilities**

- Translating the key imperatives into everyday life projects
- Involving students as key players
- Engaging with the public and social movements
- Long term cooperation with all stakeholders

- Addressing the entire range from large scale complex systems to vernacular objects for daily use

### **Concrete proposals**

- [‘Experts in Teamwork’](#) as both method and umbrella in close connection to the NEB
- Renewable energy and sustainable mobility projects in Trondheim
- Reducing the waste from electronic devices used at the university
- Promoting sharing activities from food to cars, for just and sustainable cities
- A NTNU model for incentivizing cross-disciplinary R&I

## **Outcomes from the NTNU NEB workshop May 19, 2021**

In total 92 staff members from all faculties of NTNU and different institutes of SINTEF participated in the co-design session. The results of the break-out sessions were documented in [padlets](#) and discussed with the facilitators of the breakout sessions in a follow up meeting on May 31. We enclose the summary of the workshop which outlines the first three goals of our NTNU NEB approach and concrete proposals for future activities:

### **Open space for radical experiments**

*Aim: An open space for radical experimentation, reflection & discussion, exchange of ideas, insights, initiating activities and building new connections and collaborations across NTNU and beyond*

This includes, amongst others:

- Staff & students engaging as societal actors, building a culture, language & methods for cooperative societal innovation unique to NTNU. NTNU's role could be about developing concrete proposals that make it easier for the public to engage in multidisciplinary thinking and cooperation. We should be open and more exposed to the public to enable discussions, and through this develop a form of methodology.
- Supporting open innovation & exploration, without pre-defining the result
- Testing things on a small scale, that might be considered too risky within NTNU's set structures.

- Connect the different ongoing initiatives with each other, learning from each other & from previous experiences of bottom-up initiatives at NTNU
- Extract and document experiences from ongoing and past activities and develop these into a mission-oriented approach unique for NTNU.

Examples of concrete activities:

- [Experts in Teamwork](#) cooperation (NEB as topic and as cooperation model)
- Engaging students through open-ended future workshops, assignments and courses, master theses & internships
- Engaging young researchers by expanding their PhD or postdocs into new formats to introduce, co-design and implement the research in the local and concrete contexts.

Examples of topics for discussion & cooperation:

- Designing multisensory environments to increase access to cultural understandings and knowledge through the senses
- Create premises/environments/arenas for Health Promoting Living for Diverse Persons and Nature
- How to bridge between technology and society?
- Appreciating the potential DIY, makers, and low-tech innovation
- Re-using and renovating existing infrastructure
- Renewable energy and sustainable mobility projects in Trondheim
- Reducing the waste from electronic devices
- Promoting sharing activities from food to cars, for just and sustainable cities
- Claiming ownership of the Green Deal by making it local
- Contextualising global goals to the local context: Define a future vision for each city that is based on its specific context and aims/ambitions

## **Supportive Shield**

*Aim: To safeguard, maintain and further develop the open spaces*

This includes, amongst others:

- A cross-cutting NTNU NEB Forum to boost a mission-oriented approach
- Anchoring at leadership levels 1-2-3, [TSOs](#), [Centres](#) etc
- Including societal impact & added value in research incentives (“telleanter”)
- Can we establish funds, so that there might be incentives to bring further the ideas from teamworking?
- Impact attribution model for societal innovation

Connecting with and giving input to already existing infrastructures and ongoing processes such as:

- [NTNU and Faculty strategies](#), [NTNU's strategic research areas](#), [Brussels office](#)
- [Fremtidens teknologi-studier](#) (FTS) and [HUMSAM-studier](#) (FHS)
- [Universitetskommune TRD3.0 Universitetskommune](#)
- [NTNU's Internationalisation strategy](#) and support structures for Horizon Europe
- [NTNU campus project](#)
- [NTNU Ocean space](#)
- Engaging with the public and social movements, from [Fridays for Future](#) to [Arkitekturopprøret](#), [Pådriv](#) & others
- National and European networks, including amongst others DOGA, VIRKE, KS, Innovation Norway, Research Council Norway, Nordic Edge, Smartbyene / Bærekraftsnettverket

## Exploration channel

*Aim: To engage different societal stakeholders and groups, communicate and discuss how we can cooperate, showcase what we do to inspire others (and get inspired by others)*

This includes, amongst others:

- Organising community workshops and engagement activities, field studies, local case studies, digital and on-site exhibitions, mobile pop-up hubs [\(/labs?\)](#)
- Using existing channels from our staff & students
- Monthly meeting points: on-site, digital and podcasts with invited guests
- Extract & publish criteria, guidelines & recommendations from our initiatives
- Collecting inputs into updates for the European Commission
- Publishing in journals, podcasts, and other forms of outreach