



**STRATEGIC
PARTNERSHIPS OF
HORIZON EUROPE**

**INFORMATION ON PARTNERSHIPS AND
CURRENT NTNU INVOLVEMENT**

BY NTNU BRUSSELS OFFICE

PARTNERSHIPS AND CURRENT NTNU INVOLVEMENT



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Introduction

This annex gives an overview over the current 49 strategic partnerships under Horizon Europe, and details about NTNU's involvement in these. Each page is dedicated to one partnership, giving a brief description of the partnership as well as details about type of partnership, timeframe, predecessors, NTNU involvement and relevant parallel initiatives.

In some partnerships, NTNU has already established an internal forum or is in the establishment process. The ones which have established the internal forum, are presented in this annex with a more detailed content.

The partnerships which are projected to be launched under the work programme 2023/2024 are still not finalized and could miss relevant information like the type of partnership. The partnerships that are missing details about NTNU involvement, does not have any current involvement from NTNU.

THEMATIC AREAS

- **HEALTH**
- **DIGITAL, INDUSTRY & SPACE**
- **CLIMATE, ENERGY & MOBILITY**
- **FOOD, BIOECONOMY, NATURAL
RESOURCES, AGRICULTURE AND
ENVIRONMENT**
- **PARTNERSHIPS ACROSS THEMES & KICs**

HEALTH

01 EU - Africa Global Health Partnership



The EU–Africa Global Health Partnership – the third programme of the European & Developing Countries Clinical Trials Partnership (EDCTP3) – will support international research partnerships accelerating the clinical evaluation of drugs, vaccines and diagnostics for key infectious diseases affecting sub-Saharan Africa. Additionally, it will promote novel approaches for surveillance and control of emerging/re-emerging infections. It will also strengthen clinical research capacity in the region. Building on the two previous EDCTP programmes, the Partnership will ensure that more people gain access to new medical interventions and contribute to protecting regional and global health security.

[The establishment of EDCTP - EDCTP](#)

Form/type

Institutionalised under Article 187

Launch Timeframe

A185/7 in 2021

Predecessors

EDCTP1 (originally based on Article 185) and EDCTP2

Current NTNU involvement

None.

Norwegian participation in the General Assembly of the EDCTP Association runs through 2 other Norwegian institutions. These are the Norwegian Directorate of Health and the Research Council of Norway.

HEALTH

02 Innovative Health Initiative



The Partnership for Health Innovation aims at enabling the integration of cross-sectoral technologies, know-how, products, services and workflows for people-centered health care. Its ambition is to support the delivery of timely and well-informed prevention, diagnosis and treatment. The partnership aims at keeping EU citizens in good health, and decreasing disease burden for patients, caregivers and health care professionals. It will contribute to the sustainability of health care systems, competitiveness of health industries, and EU technological sovereignty.

[Innovative Health Initiative | IHI Innovative Health Initiative \(europa.eu\)](https://www.euro.who.int/en/health-topics/innovative-health-initiative)

Form/type

Institutionalized under article 187

Launch Timeframe

A185/7 in 2021

Predecessor(s)

PPP Innovative Medicines Initiative (IMI) and IMI2.

Current NTNU involvement

None.

Norway is involved in the States Representatives Group (SRG) via the Norwegian Ministry of Health and Care Services, and the Research Council of Norway.

HEALTH

03 European Partnership for chemicals risk assessment



PARC is an EU-wide research and innovation programme to support EU and national chemical risk assessment and risk management bodies with new data, knowledge, methods, networks and skills to address current, emerging and novel chemical safety challenges. It will facilitate the transition to next generation risk assessment to better protect human health and the environment, in line with the Green Deal's zero-pollution ambition for a toxic free environment and will be an enabler for the EU Chemicals Strategy for sustainability.

[HBM4EU – science and policy for a healthy future](#)
[Candidates for European Partnerships in health | European Commission \(europa.eu\)](#)

Form/type

Co-funded

Launch Timeframe

Work Programme 2021/2022

Predecessor(s)

Human Biomonitoring for Europe (HBM4EU) (co-funded)

Current NTNU involvement

None.

The Norwegian Institute of Public Health carries the role of National Hub Contact Point when it comes to HBM4EU. The other Norwegian partner involved in HBM4EU is the Norwegian Ministry of Health and Care Services.

HEALTH

04 European Partnership on ERA for Health Research (ERA4Health)

Health is an area where, since 2003, several pilots have developed a healthy eco-system of Public-Public Partnerships. In the wider ERA, some 80% of all national public research investment is made by some 15 research funders, including the European Commission. There is an unnecessary duplication of procedures, meetings and in some cases diversification of criteria. This Partnership will be an instrumental platform for flexible joint programming of health related research and innovation programmes, effectively coordinating most of these funding organisations, also including most smaller EU research funders. The partnership is meant to contribute to reaching destination 3 “Tackling diseases and reducing disease burden” as well as destination 1 “Staying healthy in a rapidly changing society”. The partnership consists of 2 phases - phase 1 will last for 2 years, whereas phase 2 will last for 5 years. The budget distribution for phase 2 will depend on an evaluation of phase 1.

[Candidates for European Partnerships in health | European Commission \(europa.eu\)](#)
[ERA for Health — ERA-LEARN](#)
[Funding & tenders \(europa.eu\)](#)

Form/type

Co-funded

Launch Timeframe

Work Programme 2021/2022

Predecessor(s)

HBM4EU (Human Biomonitoring) and a number of other actions

Current NTNU involvement

None.

HEALTH

05 Health and Care Systems Transformation

Health and care systems have been facing increasing challenges. COVID19 pandemic has highlighted that improvements are urgently needed to reach high quality, efficient, accessible, health promoting, peoplecentred, resilient, health and care systems for all EU citizens. Research and Innovation activities (R&I) in a EU Partnership will accelerate the transformation towards sustainable health and care systems. The partners' composition will reflect the complexity of both the European health and care systems and the R&I funding landscape that underpin improvements in this field. The Partnership has an open call to become partners, where Norway is eligible, more information about the partnership and the open call can be found on the websites linked below.

[European partnership on Health and Care Systems Transformation](#)
[. | European Commission \(europa.eu\)](#)
[Funding & tenders \(europa.eu\)](#)

Form/type

Co-funded

Launch Timeframe

Work Programme 2021/2022

Predecessor(s)

AAL2 (Art. 185), JPI 'More Years, Better Lives' and others

Current NTNU involvement

None.

HEALTH

06 Personalised Medicine

Personalised medicine (PM) optimises individual health and health systems. EP PerMed will align PM priorities, provide investments of scale, and create synergies to accelerate PM R&I and implementation. To realise the full potential of this partnership, countries will join forces with the EC to fund transnational consortia, share evidence, demonstrate solutions and to drive supportive activities in policy, regulatory science and health economics. It will collaborate with other health partnerships and reach out to national, regional, and international initiatives and frameworks. The Partnership is expected to be launched by the end of 2023, more information can be found on the website linked below.

[European Partnership for Personalised Medicine | European Commission \(europa.eu\)](#)

Form/type

Co-funded

Launch Timeframe

Work Programme 2023/2024

Predecessor(s)

ERA-PerMed and ICPPerMed

Current NTNU involvement

None.

HEALTH

07 Rare Diseases

The aim of the Rare Diseases (RD) Partnership is to improve the health and well-being of 30 million persons living with a rare disease in Europe, by making Europe a world leader in RD research and innovation and delivering concrete health benefits to rare disease patients (through better prevention, diagnosis and treatments). To leave no one behind, RD Partnership will deliver a RD multi-stakeholder ecosystem by supporting robust patient need-led research, developing new therapies and diagnostic pathways, by utilizing the power of health and research data and spearheading the digital transformational change in RD research and innovation (R&I). Finally, the Partnership will structure the European Research Area (ERA) on RD by supporting the coordination and alignment of national and regional research strategies, including the establishment of public-private collaborations, through research activities all along the R&I value chain, ensuring that the journey from knowledge to patient impact is expedited, thereby optimising EU innovation potential in RD. This Partnership is expected to be launched during the Work Programme 2023/2024, more information can be found on the website linked below.

[European Partnership on Rare Diseases](https://europeanpartnershiponrare.com/) | [European Commission \(europa.eu\)](https://ec.europa.eu/europa/europa_en)

Form/type

Co-funded

Launch Timeframe

Work Programme 2023/2024

Predecessor(s)

EJP Rare diseases

Current NTNU involvement

None.

HEALTH

08 One Health Antimicrobial Resistance (OH AMR)

The OH AMR Partnership aims to coordinate and align antimicrobial resistance (AMR) research activities and funding in Europe and beyond. It will facilitate transdisciplinary co-operation and national coherence on AMR policy between different sectors (e.g. human health, agriculture, environment, innovation). The main goal is to contribute to achieving the objectives of the European One Health Action Plan against AMR and the World Health Organization (WHO) Global Action Plan on AMR, by reducing the threat of AMR and contribute to achieving the objectives of the Health Emergency Preparedness and Response Authority (HERA). This Partnership is expected to be launched during the Work Programme 2023/2024, more information can be found on the website linked below.

[European Partnership for One Health/AMR Antimicrobial Resistance \(AMR\) | European Commission \(europa.eu\)](#)

Form/type

Co-funded

Launch Timeframe

Work Programme 2023/2024

Predecessor(s)

ERA-NET, EXEDRA, JPI AMR, One Health EJP

Current NTNU involvement

None.

Norway is involved through The Research Council of Norway (RCN).

HEALTH

09 Pandemic Preparedness (BE READY) (New partnership)

The Covid-19 pandemic revealed the need for better coordinated EU action to respond to health emergencies. This partnership aims to improve the EU's preparedness to predict, prevent and respond to emerging infectious health threats by better coordinating funding for research and innovation at EU, national (and regional) level towards jointly agreed objectives and an agreed strategic research and innovation agenda (SRIA). The partnership will contribute to building a coherent European Research Area (ERA) enabling Member States and the European Commission to rapidly and jointly support R&I in pandemic preparedness. This partnership is largely under development and is expected to be launched during the Work Programme 2023/2024. More information about the partnership can be found on the website linked below.

[European Partnership on Pandemic Preparedness | European Commission \(europa.eu\)](#)

Form/type

Under definition (Co-funded or co-programmed)

Launch Timeframe

Work Programme 2023/2024

Relevant entities/initiatives

Health Emergency Response Authority (HERA), PANDEM-2 Horizon project

Current NTNU involvement

None.

DIGITAL, INDUSTRY & SPACE

10 High Performance Computing (HPC)



EuroHPC
Joint Undertaking

By 2027, develop, deploy, extend and maintain in the Union a world leading federated and hyper-connected supercomputing, quantum computing, service and data infrastructure ecosystem; support the autonomous production of innovative and competitive supercomputing systems based on indigenous European components, technologies and knowledge and the development of a wide range of applications optimised for these systems; and, widen the use of this supercomputing infrastructure to a large number of public and private users, and support the development of key skills that European science and industry need. The European High Performance Computing Joint Undertaking (EuroHPC JU) is a joint initiative between the EU, European countries and private partners to develop a World Class Supercomputing Ecosystem in Europe, more information can be found on the websites linked below.

[Home](#) | [European High Performance Computer Joint Undertaking \(europa.eu\)](#)
[Frontpage](#) | [Sigma2](#)

Currently open calls

[EuroHPC JU Call for Proposals for Regular Access Mode](#) | [European High Performance Computer Joint Undertaking \(europa.eu\) deadline the 1st of July and the 7th of October 2022.](#)

Form/type

Institutionalised under Article 187

Launch Timeframe

A185/7 in 2021

Predecessors

EuroHPC (Art. 187)

Current NTNU involvement

None.

Norway is involved through The Research Council of Norway (RCN) in the EuroHPC JU and through the non-profit business Sigma2 which is jointly financed by the RCN and the universities in Trondheim, Bergen, Tromsø and Oslo.

DIGITAL, INDUSTRY & SPACE

11 Key Digital Technologies (KDT)



The overall objective of the Key Digital Technologies (KDT) Partnership is to reinforce Europe's potential to innovate through contribution of electronic components and systems, including microsystems, software technologies, sub-assemblies, and systems of systems giving secure and trusted technologies to strategic value chains. It aligns R&I policies among its participating states to reach the critical mass needed for achieving Europe's sovereignty through the tripartite involvement of Participating States (Member States, Associated countries), the EU and industry. The Key Digital Technologies Joint Undertaking - the Public-Private Partnership for research, development and innovation – funds projects for assuring world-class expertise in these key enabling technologies, essential for Europe's competitive leadership in the era of the digital economy. KDT JU is the successor to the ECSEL JU programme, supporting its ongoing projects. Three associations are linked to this Joint Undertaking: EPoSS, AENEAS and the Inside Industry Association.

After the publication of the EC Chips Act Communication, this partnership is expected to be transformed into the Chips Joint Undertaking with an even more ambitious scope and a much more significant budget: the EU contribution is proposed to be increased from € 1.8 billion up to € 4.175 billion.

<https://www.kdt-ju.europa.eu/>
[Home](#) | [Inside \(inside-association.eu\)](#)

Form/type

Institutionalised European Partnership under Article 187

Launch Timeframe

A185/7 in 2021

Predecessor(s)

ECSEL JU, ECSEL (Art. 187), part of Photonics cPPP

Current NTNU involvement

NTNU is currently involved in KDT through the Inside Industry Association, the contact person is [Ingrid Schjølberg](#).

DIGITAL, INDUSTRY & SPACE

12 Smart Networks and Services (SNS)



This partnership will support technological sovereignty for smart networks and services in line with the industrial strategy for Europe, the EU Cybersecurity Strategy and the 5G Cybersecurity Toolbox. It aims to help resolve societal challenges and to enable the digital and green transition, as well as support technologies that will contribute to the economic recovery. It will also enable European players to develop the technology capacities for 6G systems as a basis for future digital services towards 2030. The 6G Smart Networks and Services Industry Association (6G-IA) is the voice of European Industry and Research for next generation networks and services. Its primary objective is to contribute to Europe's leadership on 5G, beyond 5G and SNS/6G research. The 6G-IA represents the private side in both the 5G Public Private Partnership (5G-PPP) and the Smart Networks and Services Joint Undertaking (SNS JU), while the European Commission represents the public side. More information can be found in the websites linked below.

Form/type

<https://6g-ia.eu/about/>

[Smart Networks and Services Joint Undertaking | Shaping Europe's digital future \(europa.eu\)](#)

Launch Timeframe

Institutionalised European Partnership under Article 185/7 in 2021

Predecessor(s)

cPPP 5G

Current NTNU involvement

None.

DIGITAL, INDUSTRY & SPACE

13 AI, Data and Robotics

AI DATA ROBOTICS PARTNERSHIP EU

To deliver value to Europe from AI, data and robotics this Partnership will drive innovation, uptake and acceptance by building on the opportunities these technologies offer. It will support research, development and deployment, foster novel applications and stimulate public and private investment, to create economic, technological and societal value for business, citizens and the environment. It will build bridges between stakeholders that enable a human-centric and trustworthy European vision of AI to flourish. The AI, Data and Robotics Partnership is a joint initiative by BDVA, CLAIRE, ELLIS, EurAi, EU Robotics which together formed the AI, Data and Robotics Association (Adra) and the European Commission. More information can be found on the websites linked below.

[Home - Ai Data Robotics Partnership \(ai-data-robotics-partnership.eu\)](https://ai-data-robotics-partnership.eu)

[AI, Data and Robotics Association \(Adra\) \(adr-association.eu\)](https://adr-association.eu)

[BDVA |.](#)

Form/type

Co-programmed

Launch Timeframe

Work Programme 2021/2022

Predecessor(s)

cPPPs on Big Data and robotics

Current NTNU involvement

NTNU is involved in the AI, Data and Robotics Association (Adra) through full membership in the Big Data Value Associations (BDVA) - contact person: [TSO Digital](#).

DIGITAL, INDUSTRY & SPACE

14 Photonics Europe



Photonics – the technology of light - underpins daily life from smartphones to the internet and medical instruments to laser technology. It is an essential building block for the digital transformation of industry and society and for a green and healthy future in Europe. The new Photonics Partnership will secure Europe's technological sovereignty through photonic innovations and their transfer into applications, raising Europe's competitiveness and ensuring long-term job and prosperity creation. The Photonics Europe Partnership is co-programmed by the Photonics21 Association and the European Commission.

[Photonics | Shaping Europe's digital future \(europa.eu\)](#)
[Photonics21 – A Key Enabling Technology for Europe](#)

Form/type

Co-programmed

Launch Timeframe

Work Programme 2021/2022

Predecessor(s)

cPPP Photonics21

Current NTNU involvement

The Partnership can be participated through Photonics21 which is open to individuals willing to be part of it. At the moment NTNU is involved through the participation of: [Steinar Bjornstad](#) and [Irina Sorokina](#).

DIGITAL, INDUSTRY & SPACE

15 Clean Steel Partnership



The Clean Steel Partnership is designed to tackle two major challenges: climate change and sustainable growth for the EU. This Partnership is developed in the context of the EU's goal to achieve climate neutrality by 2050, as laid down in the European Green Deal climate goals, and – in parallel - to move towards zero-pollution for a toxic free environment and a circular economy. As investment cycles in the steel industry are 20 to 30 years, developing, testing and scaling up technologies for climate neutral steel production must start now to ensure the full roll-out across the EU by 2050. Steel is at the heart of everyday life for citizens and societies as it is an input for industries like automotive, energy production and networks, urban and long-distance transport infrastructures, and general mechanical engineering industries. Furthermore, steel is a key material in changing environments as it provides for solutions to infrastructure and construction needs around the world, to build climate-resilient cities and coastal protection. It represents around 95% of all metals produced. The Partnership will help remove R&D&I and systemic bottlenecks such as the transition from the pilot phase to industrial-scale deployment, high technology risks, large capital requirements and higher production costs. The European Steel and Technology Platform (ESTEP) represents the private side of the partnership and presents an opportunity to provide input.

[ESTEP - Clean Steel Partnership \(CSP\)](#).
[| ECCSEL](#)

Form/type

Co-programmed

Launch Timeframe

Work Programme 2021/2022

Predecessors

Fuel cell and Hydrogen (Article 187) cPPP Spire

Current NTNU involvement

None.

There is an indirect connection through ECCSEL ERIC, which is a member of ESTEP. NTNU is the coordinator of the Norwegian node of ECCSEL ERIC, where [Morten Grønli](#) from the IV Faculty is responsible. Additionally, [Sina Blix Prestmo](#) is advisor for European funding at ECCSEL ERIC.

DIGITAL, INDUSTRY & SPACE

16 European Partnership on Metrology



Metrology, the science of measurement, underpins all domains of science, technology and innovation. Increased accuracy, precision and new measurement capabilities are central to addressing societal challenges and emerging technologies. This proposal is for a new initiative for metrology in Europe. Its aim is the development of a self-sustaining integrated metrology system for Europe by 2030 at least equal to the top global performers.

[EURAMET - European Association of National Metrology Institutes Candidates for European Partnerships in digital, industry and space | European Commission \(europa.eu\)](#)

Form/type

Institutionalised through Article 185

Launch Timeframe

A185/7 in 2021

Predecessor(s)

European Metrology Research Programme (EMRP) and then European Metrology Programme for Innovation and Research (EMPIR) (Article 185)

Current NTNU involvement

None.

Norway is involved in the European Association of National Metrology Institutes (EURAMET), which cooperates with the EC on this partnership. Norway has one member: the Norwegian Metrology Service (Justervesenet). In addition, Norway has three associates: the Norwegian Radiation and Nuclear Safety Authority (DSA), Norsk Institutt for Luftforskning (NILU) and Norwegian Institute for Water Research (NIVA).

DIGITAL, INDUSTRY & SPACE

17 Made in Europe Partnership



European manufacturing is at the centre of a twin ecological and digital transition, being both driver and subject to these changes. At the same time, manufacturing companies must maintain technological leadership and stay competitive. The Made in Europe Partnership will be the leading European lighthouse and driver of this change, bringing together the leading actors from manufacturing and relevant European industrial ecosystems, coming from academia, industry, non-governmental organisations and the public sector. The Partnership will serve as a platform for national and regional manufacturing technology initiatives and the required disciplines and technologies, creating economies of scale, common understanding and alignment of objectives and priorities. Based on joined expertise and resources, the Made in Europe partnership will be the voice engine for sustainable manufacturing in Europe. It will boost European manufacturing ecosystems towards global leadership in technology, towards circular industries and flexibility. The Partnership will contribute to a competitive, green, digital, resilient and human-centric manufacturing industry in Europe.

<https://www.effra.eu/>

Form/type

Co-programmed

Launch Timeframe

Work Programme 2021/2022

Predecessors

cPPPs Factories on the Future (FoF)

Current NTNU involvement

None.

Norway is involved through SINTEF Raufoss manufacturing and the Federation of Norwegian Industries as members of EFFRA.

DIGITAL, INDUSTRY & SPACE

18

Processes4Planet



The partnership aims at circularity and an extensive decarbonisation of European process industries, with a strong focus on competitiveness. Within a cross-sectorial approach, it will develop and deploy the innovations needed for a profound transformation of process industries, e.g., cement, chemical, steel, to achieve the EU Green Deal targets by 2050. Due to their resource and energy-intensive nature, the activities of the partnership will play a crucial role. Process industries will be frontrunners in the transition to carbon neutrality in Europe by 2050, by decreasing greenhouse gas emissions and dependence on fossil fuels while increasing the use of renewable energy sources. With the ultimate goal of zero landfilling and water discharge, circular models will be implemented across industrial sectors, value chains, as well as regions and cities. As for the structure, the European Association A.SPIRE contributes to steering the Processes4Planet Partnership with its input.

Form/type

Co-programmed

Launch Timeframe

Work Programme 2021/2022

Predecessor(s)

cPPPs SPIRE

Current NTNU involvement

NTNU is a member of ASPIRE, but the corresponding internal NTNU structure is currently in the process of being relaunched under [Maria Wallin](#) from NV Faculty.

Current status of internal structure can be found on the next page.

18 Processes4Planet NTNU Structure

Steering committee



Maria Wallin, Department of
Materials Science and Engineering



Massimo Busuoli, Head of NTNU
Brussels Office
+ Thematic ambassadors

PWG1 Energy

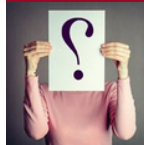


Thematic ambassador
You?

Reference group

TBA

PWG2 Process Optimization & CCU

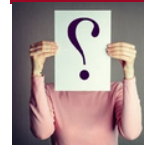


Thematic ambassador
You?

Reference group

TBA

PWG3 I-US/H4Cs



Thematic ambassador
You?

Reference group

TBA

PWG4 Resources & Circularity

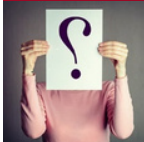


Thematic ambassador
Maria Wallin

Reference group

TBA

PWG5 Framework Conditions

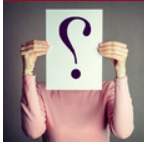


Thematic ambassador
You?

Reference group

TBA

PWG6 Societal Innovation

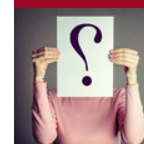


Thematic ambassador
You?

Reference group

TBA

PWG7 Digital



Thematic ambassador
You?

Reference group

TBA

19 European Partnership for Globally competitive Space Systems

The partnership aims at circularity and an extensive decarbonisation of European process industries, with a strong focus on competitiveness. Within a cross-sectorial approach, it will develop and deploy the innovations needed for a profound transformation of process industries, e.g., cement, chemical, steel, to achieve the EU Green Deal targets by 2050. Due to their resource and energy-intensive nature, the activities of the partnership will play a crucial role. Process industries will be frontrunners in the transition to carbon neutrality in Europe by 2050, by decreasing greenhouse gas emissions and dependence on fossil fuels while increasing the use of renewable energy sources. With the ultimate goal of zero landfilling and water discharge, circular models will be implemented across industrial sectors, value chains and with regions and cities. The partnership has been launched, but its final shape remains unclear for now.

Form/type

Co-programmed

Launch Timeframe

Work Programme 2021/2022

Predecessors

n.a.

Current NTNU involvement

None.

CLIMATE, ENERGY & MOBILITY

20 Europe's Rail Joint Undertaking (JU)



Rail is a complex system of systems. Like other transport modes, it is an enabler, capable of delivering huge value both to its users and to wider society, with the ability to carry large volumes of passengers and freight safely, speedily, and sustainably. Rail offers its value in terms of mobility and transport services. To do this successfully, it must be user centred, organised, and engineered to deliver the highest levels of dependability, resilience, and service quality. The Green Deal has underlined the urgency of action on decarbonisation: rail is generally vastly more environmentally friendly and energy-efficient than other modes, yet still capable of being even more so. By developing a better understanding of the interfaces and interactions between the components of the whole system and its connections with other modes - creating a functional system architecture - it will be possible to develop an integrated programme of research and innovation.

[Home - Shift2Rail](#)

Form/type

Institutionalised under Article 187

Launch Timeframe

A185/7 in 2021

Predecessor(s)

JU Shift2Rail (S2R) also institutionalized under Article 187

Current NTNU involvement

[Anders Rønnquist](#) from IV Faculty is the NTNU contact for an indirect connection via the Norwegian rail directorate.

In addition, there are Norwegian bodies involved in the States Representatives Group.

CLIMATE, ENERGY & MOBILITY

21 Integrated Air Traffic Management



This partnership is promoting the digital transformation of ATM in order to make the European airspace the globally most efficient and environmentally friendly sky to fly in. This should be done while supporting the competitiveness and recovery of the European aviation sector in a post-COVID crisis Europe. Key areas: improving connectivity, air-ground integration and automation, increasing resilience and scalability of airspace management, safe integration of autonomous vehicles. Deliver by 2030 the solutions identified in the European ATM Master Plan for Phase D at TRL 6 while significantly increasing market uptake for a critical mass of early movers focusing on Phase C and D infrastructure modernisation priorities.

[SESAR Joint Undertaking | Delivering the Digital European Sky. \(sesarju.eu\)](https://sesarju.eu)

Form/type

Institutionalised under Article 187

Launch Timeframe

A185/7 in 2021

Predecessor(s)

SESAR1 and SESAR2

Current NTNU involvement

None.

22 Clean Aviation



Clean aviation aims to put aviation en route to climate neutrality, by accelerating the development, integration, and validation of mainly disruptive R&I solutions for deployment as soon as possible. The partnership also aims at developing the next generation of ultra-efficient low-carbon aircraft, with novel power sources, engines, and systems, which will emerge from the research and demonstration phase at a high TRL. As of March 2022, there is also the Clean Aviation Forum, which serves as an arena where various actors and stakeholders can contribute with input.

[Home](#) | [Clean Aviation \(clean-aviation.eu\)](#)
[Clean Aviation - NTNU](#)

Form/type

Institutionalised under Article 187

Launch Timeframe

A185/7 in 2021

Predecessors

JU Clean Sky PPP and its successor JU Clean Sky 2 PPP

Current NTNU involvement

NTNU is an Associated Member of CAJU and the official NTNU representative is [Jonas Kristiansen Nøland](#) from the IE Faculty. Other relevant contacts from NTNU are [Ole-Morten Midtgård](#), Vice-Dean for Sustainability and Innovation from the IE Faculty, and [Camilla Knudsen Tveiten](#), IE Faculty Senior Advisor.

23 Clean Hydrogen



Europe's ambitions will require clean hydrogen at scale. Without it, the EU will miss its climate, environmental and energy objectives as well as the opportunity to create a strong, European, competitive industry. Clean Hydrogen for Europe aims to accelerate development and deployment of European clean hydrogen technologies, enabling them to contribute to a sustainable, decarbonised and fully integrated energy system.

[Homepage \(europa.eu\)](https://europa.eu)

[European Clean Hydrogen Alliance \(ech2a.eu\)](https://ech2a.eu)

Form/type

Institutionalised under Article 187

Launch Timeframe

A187 in 2021

Predecessor(s)

Fuel Cell and Hydrogen (FCH) (Article 187) and FCH 2 JU

Current NTNU involvement

NTNU is in Norsk Hydrogenforum, which in turn is a member of Hydrogen Europe. Additionally, NTNU is involved through being a member of the Clean Hydrogen Alliance.

NTNU contact persons: [Nicola Paltrinieri](#) and [Bruno G. Pollet](#)

Relevant Parallel initiatives

[European Clean Hydrogen Alliance](https://ech2a.eu)

CLIMATE, ENERGY & MOBILITY

24 Built 4 People (B4P)



The partnership brings together the whole value chain to accelerate people-centric innovation in the built environment that drives the transition towards a sustainable society and economy, relying on the active engagement of its partners and a European network of Innovation Clusters. The three General Objectives are: Scientific (generate holistic innovation towards sustainability), Economic (revitalise the sector through decarbonisation and sustainability transition) and Societal (induce lasting behavioural change towards sustainable living). The B4P Partnership is nurtured by the European Construction and Technology Platform. For instance, the ECTP gathers actors and stakeholders through workshops, seminars and conferences.

[Home \(ectp.org\)](https://ectp.org)

Form/type

Co-programmed

Launch Timeframe

Work Programme 2021/2022

Predecessor(s)

PPP Energy-efficient Buildings (EeB)

Current NTNU involvement

[Prof. Rolf André Bohne](#) from the IV Faculty sits on the B4P Management Board. NTNU is a part of ECTP. Moreover, an internal NTNU ECTP Forum has been created in order to fully realize the potential of this connection.

Current status of internal structure can be found on the next page.



NTNU ECTP FORUM

Organizational Secretariat



Rolf André Bohne
Professor
Department of Civil and Environmental
Engineering



Massimo Busuoli
Director
NTNU Brussels Office



Sonja M.E. Hammer
EU Research Advisor
Department of Civil and Environmental
Engineering

Steering Group

WG1 Built For
Life

Ambassador

You?

Group of
Reference

WG2 Digital
Built
Environment

Ambassador



**Lizhen
Huang**

Group of
Reference

WG3 Energy
Efficient
Buildings

Ambassador



**Arild
Gustavsen**



**Niki
Gaitani**

Group of
Reference

WG4 Heritage
& Regeneration

Ambassador

You?

Group of
Reference

WG5
Infrastructure
& Mobility

Ambassador



**Inge
Hoff**



**Rao
Martand
Singh**

Group of
Reference

WG6 Materials
&
Sustainability

Ambassador



**Rolf
André
Bohne**



**Jochen
Köhler**

Group of
Reference

WG 1 - 6 Members across NTNU

CLIMATE, ENERGY & MOBILITY

25 Towards zero-emission road transport (2ZERO)



The partnership will set an ambitious research programme to accelerate the development of zero tailpipe emission transport in Europe with a system approach, will develop a common vision and deliver a multi-stakeholder roadmap for a climate neutral and clean road transport system. It will improve air quality, mobility and the safety of people and goods. In this manner, the partnership ensures future European leadership in innovation, production and services. By paving the way to a climate-neutral road transport system, the partnership will make a key contribution to the success of the European Green Deal. The European Green Vehicles Initiative Association (EGVIA) for 2Zero is the arena for having an impact on the partnership.

[Home - 2Zero Emission](#)

Form/type

Co-programmed

Launch Timeframe

Work Programme 2021/2022

Predecessor(s)

European Green Cars Initiative and European Green Vehicles Initiative (cPPP)

Current NTNU involvement

NTNU is a member of EGVIAfor2Zero. [Anders Hammer Strømman](#) from IV Faculty is the NTNU contact person.

CLIMATE, ENERGY & MOBILITY

26 Connected, Cooperative & Automated Mobility (CCAM)



The proposed Partnership aims to harmonise European R&I efforts to accelerate the implementation of innovative CCAM technologies and services. It aims to exploit the full systemic benefits of new mobility solutions enabled by CCAM: increased safety, reduced environmental impacts, and inclusiveness. By bringing together the actors of the complex cross-sectoral value chain, the Partnership will work on a shared, coherent and long-term R&I agenda. The Vision of the Partnership is: “European leadership in safe and sustainable road transport through automation”. Established in 2021, the international not-for-profit organisation CCAM Association represents the private side of the CCAM Partnership, regrouping more than 180 innovation stakeholders involved in the connected, cooperative and automated mobility field. More information can be found on the websites linked below.

[Connected Automated Driving | European Partnership on CCAM](#)
[CCAM - European Partnership on Connected, Cooperative and Automated Mobility](#)

Form/type

Co-programmed

Launch Timeframe

Work Programme 2021/2022

Predecessor(s)

Related: 5G, Big Data, ECSEL, S2R, SESAR, batteries, 2ZERO

Current NTNU involvement

None.

Participation can be achieved through the CCAM Association.

CLIMATE, ENERGY & MOBILITY

27 Zero-emission Waterborne Transport



Amid growing global and European societal pressure to resolve issues related to climate change, air pollution and the degradation of the world's oceans, political and regulatory attention has been increasingly directed towards waterborne transport, due to this mode of transport's high environmental and climate impact. The Partnership aims to create the foundations to transform waterborne transport into a net zeroemission mode of transport, through the demonstration of deployable zero-emission solutions suitable for all main ship types and services before 2030. It will contribute to maintaining and reinforcing Europe's global leadership in innovative, green waterborne transport solutions. The Partnership's objective is to provide and demonstrate zeroemission solutions for all main ship types and services before 2030, which will enable zero-emission waterborne transport before 2050 In order to facilitate zero-emission waterborne transport, the Partnership will contribute to the development of regulations and policies at both national and international level including the development of standards to enable the implementation of technological solutions for zeroemission waterborne transport by 2030 at the latest. The Waterborne Technology Platform (TP) will coordinate the preparation and execution of the Co-Programmed Partnership on zero-emission waterborne transport.

[Partnership - waterborne.eu](https://Partnership-waterborne.eu)

[Welcome to Waterborne - Setting the agenda for Maritime Research in Europe - waterborne.eu](https://Welcome-to-Waterborne-Setting-the-agenda-for-Maritime-Research-in-Europe-waterborne.eu)

Form/type

Co-programmed

Launch Timeframe

Work Programme 2021/2022

Predecessors

n.a.

Current NTNU involvement

NTNU is involved through the Waterbourne Technology Platform. The contact persons are [Siri Granum Carson](#), [Mary Ann Lundteigen](#) and [Camilla Knutsen Tveiten](#).

Current status of internal structure can be found on the next page.

27 NTNU Waterborne Forum Structure

Steering committee



Siri Granum Carson, Professor and Director
NTNU Ocean

Mary Ann Lundteigen, Professor and Centre
Director, SFI Autonomous Shios

Camilla Knudsen Tveiten, Senior Advisor EU, IE
Faculty

+ Thematic ambassadors

WG Digital Green



Thematic ambassador

Mary Ann Lundteigen



Pierluigi Salvo Rossi



Ibrahim A. Hameed

Reference group

Agus Hasan
Asgeir Sørensen
Astrid H. Brodtkorb
Roger Skjetne
Anastasios Lekkas
Edmund Førland Brekke
Guoyuan Li
John Potter
Ole Andreas Alsos
Thomas Porathe
Nils Thorbjørn Ekman
Kimmo Kansanen
Egil Eide
Karl Henning Halse
Jørn Vatn

WG Design and Retrofitting



Thematic ambassador

Henrique M. Gaspar



Stein Ove Erikstad

Reference group

Bjørn Egil Asbjørnslett
Ola Jon Mork
Hans Petter Hildre
Karl Henning Halse

WG Electrification



Thematic ambassador

Mehdi Zadeh



Roy Nilsen

Reference group

Øyvind Kåre Kjerstad
Jon Are Suul

WG Energy Efficiency



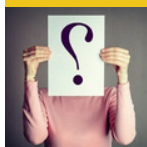
Thematic ambassador

Jan Emblemståg

Reference group

David Kristiansen
Lars Erik Holmedal
Robert Nilsen
Vilmar Æsøi
Mehdi Zadeh

WG Ports



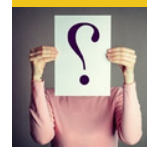
Thematic ambassador

You?

Reference group

Jon Arne Suul
Anton Shiriaev
Viktoria Koilo
Mehdi Zadeh

WG Use of Sustainable Alternative Fuels



Thematic ambassador

You?

Reference group

David Emberson
Ann Rigmor Nerheim

CLIMATE, ENERGY & MOBILITY

28

European industrial battery value chain (BATT4EU)



Batteries Partnership vision is to establish best in the world sustainable and circular European battery value chain to drive the transformation towards carbon-neutral society. The Partnership ambition is to prepare and equip Europe to manufacture and commercialise by 2030 the next generation battery technologies, through results-oriented innovation programme, which will enable the rollout of the zero-emission mobility and renewable energy storage, thus directly contributing to the success of the European Green Deal. This is a Co-programmed partnership where the European Commission represents the public side and The Batteries European Partnership Association (BEPA) represent the private side.

[BATT4EU \(bepassociation.eu\)](https://bepassociation.eu)

Form/type

Co-programmed

Launch Timeframe

Work Programme 2021/2022

Predecessors

n.a.

Current NTNU involvement

NTNU involved through membership in BEPA, the contact person is

[Ann Mari Svensson](#).

[Daniel Rettenwander](#) is also a member in EMIRI which is a parallel initiative.

CLIMATE, ENERGY & MOBILITY

29 Driving Urban Transitions to a Sustainable Future (DUT)

Our future relies on tackling complex grand challenges here and now, many of which must be addressed within cities and by urban communities. The DUT partnership addresses this complex set of urban challenges with an integrated approach to offer decision makers in municipalities, companies and society the means to act and enable the necessary urban transformations. The partnership will create a portfolio of measures and critical mass beyond joint calls to enhance its impact, build capacities in all stakeholder groups and contribute to the European mission on climate-neutral and smart cities. This is a co-funded partnership and is supported by two existing member states networks, the JPI Urban Europe and the PED Programme of the SET Plan, and the European Commission.

[Driving Urban Transitions to a Sustainable Future | JPI Urban Europe \(jpi-urbaneurope.eu\)](https://jpi-urbaneurope.eu)

Form/type

Co-funded

Launch Timeframe

Work Programme 2021/2022

Predecessors

JPI Urban Europe

Current NTNU involvement

Norway involved in the partnership through The Research Council of Norway (RCN). The most active player in this framework from NTNU is [Annemie Wyckmans](#).

CLIMATE, ENERGY & MOBILITY

30 Clean Energy Transition (CETP)

A transformative R&I Programme across Europe, the European Partnership for Clean Energy Transition will boost and accelerate energy transition in all its dimensions. It will enable joint R&I programmes from regional to national and global level, co-supported by industry, public organisations, research and citizens' organisations to make Europe a frontrunner in energy innovation and eventually the first climate-neutral continent. With an ambitious SRIA targeting 2030 it will address key challenges of energy transition with a clear output orientation and measurable impacts. The LIFE Clean Energy Transition sub-programme is a related parallel initiative. The European Energy Research Alliance is also a related parallel initiative and plays a key role in developing the Clean Energy Transition Partnership.

https://ec.europa.eu/info/sites/default/files/research_and_innovation/funding/documents/ec_rtd_he-partnerships-clean-energy-transition.pdf

[Clean Energy Transition \(europa.eu\)](https://ec.europa.eu/clean-energy-transition/)

[EERA - European Energy Research Alliance \(eera-set.eu\)](https://eera-set.eu/)

Form/type

Co-funded

Launch Timeframe

Work Programme 2021/2022

Predecessors

Around 10 existing ERANET Cofund actions

Current NTNU involvement

Norway is involved through the Research Council of Norway (RCN) NTNU has an input in voice through membership in EERA. NTNU contact person is [TSO Energy](#).

FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE & ENVIRONMENT

33 Accelerating farming systems transition: agro-ecology living labs & research infrastructures



The partnership aims to accelerate the transition towards sustainable (economic, environmental and social), climate- and ecosystem-friendly farming practices. To do so, it will 1) enable a better comprehension of short to long-term agroecological processes from farm to landscape levels, 2) boost place-based innovation in co-creative environments ensuring farmers and other key stakeholders' engagement (including citizens) and 3) improve the flow and uptake of knowledge and innovations on agroecology across Europe. It pursues the common vision to team-up and unlock the transition to agroecology so that farming systems are resilient, prosperous, place-sensitive, climate-, biodiversity- and people-friendly by 2050. The partnership belongs to a “partnership landscape” that will avoid overlaps and build synergies, including with the candidate partnerships on Food Systems, Agriculture of Data, Animal Health and Welfare, the Biodiversa+ partnership and the EU Mission “A Soil deal for Europe”, for win-win collaboration and solutions. Establishment ongoing, the pre-draft proposal is available in the link below.

https://ec.europa.eu/info/files/european-partnership-accelerating-farming-systems-transition-agro-ecology-living-labs-and-research-infrastructures_en

Form/type

Co-funded

Launch Timeframe

Work Programme 2023/2024

Predecessor(s)

None.

Current NTNU involvement

None.

32 Animal health & Welfare (PAHW)

Through a coordinated public-public and public-private collaboration of most major actors in Europe, the Partnership Animal Health & Welfare (PAHW) will generate key knowledge and foster its uptake, generate innovative methodologies, tools and products helping to reduce the socio-economic and environmental impact of animal infectious diseases and to strengthen animal welfare in production animals (livestock and aquaculture). PAHW will also reinforce preparedness against upcoming and re-emerging threats (including those originating from resistant microorganisms), and support evidenced based intervention and policy making in both the fields of animal health and welfare at the same time. Establishment ongoing, the final draft proposal is available in the link below.

[European Partnership for Animal health: Fighting infectious diseases | European Commission \(europa.eu\)](#)

Form/type

Co-funded

Launch Timeframe

Work Programme 2023/2024

Predecessors

A small number of current ERA-NETs

Current NTNU involvement

None.

FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE & ENVIRONMENT

33 Agriculture of data

The Horizon Europe Partnership “Agriculture of Data” (AgData) aims to support a sustainable agriculture in Europe as well as strengthening policy monitoring and evaluation capacities, by using the potential that digital and data technologies in combination with Earth observation (EO) and other environmental and agricultural data offer. The partnership will contribute to – among others - the objectives of the European Green Deal and the Headline ambition of “A Europe fit for the Digital Age”, those of the Farm-to Fork Strategy, the Europe Strategy for Data and the Coordinated Plan for Artificial Intelligence (AI) in particular, as well as to the objectives of the CAP, the United Nations’ Sustainable Development Goals and the ambition of better policy-making. Establishment ongoing, the pre-draft proposal is available in the link below.

[Agriculture of data | European Commission \(europa.eu\)](#)

Form/type

Co-funded

Launch Timeframe

Work Programme 2023/2024

Predecessors

EuroGEOSS

Current NTNU involvement

None.

Norway is involved through the Norwegian Institute of Bioeconomy Research.

FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE & ENVIRONMENT

33 Rescuing biodiversity to safeguard life on Earth



This Partnership will provide an overarching platform connecting national/local and European Research & Innovation programs and combining in-cash and in-kind resources in support of one goal: by 2030 biodiversity in Europe is back on a path of recovery. It will co-develop multidisciplinary R&I programs with stakeholders, set up a European network of harmonized observatories for biodiversity monitoring, and implement a broad range of activities to increase relevance, impact and visibility of R&I and EU leadership in tackling the biodiversity crisis, in line with the European Green Deal and the new EU Biodiversity Strategy for 2030.

[BiodivERsA: home](#)

Form/type

Co-funded

Launch Timeframe

Work Programme 2021/2022

Predecessors

ERA-NET, Biodiversity, EKLIPSE, ESMERALDA

Current NTNU involvement

None.

Norway is involved through the Research Council of Norway (RCN)

FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE & ENVIRONMENT

35 A climate neutral, sustainable and productive Blue Economy

The partnership will catalyse the transformation of Europe's ocean economy towards climate neutral status by 2050. By aligning national, regional and EU R&I priorities and bringing together science, industry, governance and society, it will deliver knowledge and solutions to make ocean business sustainable. Responding to national and EU policy goals (e.g. MSFD, Green Deal), the partnership will target a healthy ocean and a sustainable, productive ocean economy and the well-being of citizens. The partnership has synergies with several other partnerships and is also related to the Mission on "Ocean, seas and waters". JPI Oceans is one of the partners involved. Further the related consortium is being coordinated by Italy, with co-coordination being provided by Norway. The call closed only during March 2022, so the partnership is still in the making.

Form/type

Co-funded

Launch Timeframe

Work Programme 2023/2024

Predecessor(s)

BONUS, MARTERA, JPI Oceans, BlueBio

Current NTNU involvement

None.

Norway through RCN is currently expected to become coordinator of the new partnership in collaboration with Italy.

FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE & ENVIRONMENT

36 Safe and Sustainable Food Systems (SSFS)

Provide an overarching platform and process to underpin the needed transition to sustainable food systems to support and provide solutions to the “Farm to Fork” Communication by connecting national/regional and European Research & Innovation programmes and food systems actors, to deliver co-benefits for nutrition, climate, circularity and communities. Foster alignment, boost investments, and increase the societal relevance, impact, uptake and visibility of R&I, and strengthen EU leadership in tackling food system transformation. The co-fund owners and the EU will be in the role of the first circle of partners responsible for the financing of activities. However, the partnership will also be open to in-kind contributions from private as well as public stakeholders. JPI Healthy Diet for a Healthy Life is foreseen to facilitate a transition to the SSFS Partnership through its own experiences.

[Candidates for European Partnerships in food, bioeconomy, natural resources, agriculture and environment | European Commission \(europa.eu\)](https://ec.europa.eu/europa.eu/candidates-for-european-partnerships-in-food-bioeconomy-natural-resources-agriculture-and-environment)

Form/type

Co-funded

Launch Timeframe

Work Programme 2023/2024

Predecessor(s)

The successful food system related parts of JPIs, ERA-Nets and KICs, such as FACCE Surplus, ICT Agri2, Core-Organic, ERA GAS, SUSAN, ERA HDL, SusFood2, JPI HDHL, and so on.

Current NTNU involvement

None.

However, Norway is a full member of JPI HDHL through the Research Council of Norway and the Ministry of Health and Care Services.

[Eva Falch](#) from NV Faculty acts as national expert in this framework.

FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE & ENVIRONMENT

37 Circular bio-based Europe (CBE)



CBE aims to accelerate the transformation of Europe into a circular bio-based economy. It substitutes non-renewable fossil and mineral resources by waste and biomass for renewable products and nutrients (not bioenergy). In this manner, the partnership promotes sustainable, resource-efficient and climate-neutral solutions for a healthier planet. Public and industry investments drive sustainable and competitive transitions by supporting R&I, and thus leverage direct additional investment. Innovation, Market deployment and Environmental performance are additional central keywords linked to the purpose of the partnership. Further developments, such as the adoption of the partnership's Work Programme for 2022 and its first call for project proposals are to take place in the course of 2022. As for the working dynamics, the Bio-based Industries Consortium (BIC) is the Commission's counterpart in the partnership and a means of influencing its activities.

[Circular Bio-based Europe Joint Undertaking \(CBE JU\) | Circular Bio-based Europe Joint Undertaking \(CBE JU\) \(europa.eu\)](#)

Form/type

Institutionalised through article 187

Launch Timeframe

A185/7 in 2021

Predecessors

Bio-based Industries Joint Undertaking (BBI JU)

Current NTNU involvement

NTNU is involved through being an Associate Member of BIC. The NTNU contact person is [Heinz A. Preisig](#) from NV Faculty.

FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE & ENVIRONMENT

38 Water4All: Water security for the planet



The Water4All partnership aims at enabling water security for all in the long term. This will be achieved through boosting systemic transformations and change in research as a whole. More specifically, a water innovation pipeline is needed, and it is necessary to foster matchmaking between problem owners and solution providers. The partnership proposes a portfolio of multinational, multifaceted and cross-sectoral approaches, encompassing policy, environmental, economic, technological and societal considerations. Enabling water security for all is a keystone for achieving the Green Deal and a Healthy Europe.

[Candidates for European Partnerships in food, bioeconomy, natural resources, agriculture and environment | European Commission \(europa.eu\)](#)

Form/type

Co-funded

Launch Timeframe

Work Programme 2021/22

Predecessors

Water JPI

Current NTNU involvement

None.

Norwegian participation in the new partnership remains unclear at this point. However, the Norwegian Environment Agency and the Norwegian Research Council are voting members in Water JPI.

Relevant Parallel initiatives

EIP Water: IV/IBN - [Sveinung Sægrov](#), [Tone Merete Muthanna](#) and [Cynthia Hallé](#).

PARTNERSHIPS ACROSS THEMES & KICs

The European Institute of Innovation and Technology (EIT) is an EU body created by the European Union in 2008 to strengthen Europe's ability to innovate and is Europe's largest innovation community. The EIT is an integral part of Horizon Europe, the EU's Framework Programme for Research and Innovation. The Institute is a unique EU initiative that drives innovation across Europe by bringing together organisations from business, education and research and find innovative solutions to pressing global challenges to create, cooperate and innovate. EIT's vision is to become the leading European initiative that empowers innovators and entrepreneurs to develop world-class solutions to societal challenges and creates growth and skilled jobs. EIT's mission is to contribute to the competitiveness of Europe, its sustainable economic growth and job creation by promoting and strengthening synergies and cooperation among businesses, education institutions and research organisations. Create favourable environments for creative thoughts, to enable world-class innovation and entrepreneurship to thrive in Europe. The EIT Community is a growing, evolving and thriving community that brings together like-minded individuals from the EIT, existing and upcoming Innovation Communities, and the EIT Alumni Community. These communities create and find innovative solutions to major societal challenges. The Knowledge and Innovation Communities (KICs) supported by the EIT are:

1. EIT Climate-KIC

2. EIT Digital

3. EIT Food

4. EIT Health

5. EIT InnoEnergy

6. EIT Manufacturing

7. EIT RawMaterials

8. EIT Urban Mobility



These EIT-KICs are further described one by one below, and further information about EIT can be found here: [European Institute of Innovation & Technology \(EIT\) \(europa.eu\)](https://europeaninstituteofinnovationandtechnology.eu).

PARTNERSHIPS ACROSS THEMES & KICs

39 Innovative SMEs

 eureka



Eurostars-3 will be the largest funding programme in the European innovation landscape for international research & innovation collaboration by SMEs, executed in a partnership of 36 countries. A high economic impact is realised by innovative SMEs that collaborate in projects with a societal and environmental impact. An improved evaluation process will result in a six weeks faster time-to-approval. A joint and synchronised programme can only be realised at this scale in close cooperation with the European Commission to leverage the strengths of the national support systems.

[Eureka | Home \(eurekanetwork.org\)](https://eurekanetwork.org)
[European Partnership for Innovative SMEs | European Commission \(europa.eu\)](#)

Form/type

Co-funded

Launch Timeframe

Work Programme 2021/2022

Predecessors

Eurostars -2

Current NTNU involvement

None.

PARTNERSHIPS ACROSS THEMES & KICs

40

European Science Cloud (EOSC)



**EUROPEAN OPEN
SCIENCE CLOUD**

The European Open Science Cloud (EOSC) Partnership will enable a trusted, virtual, federated environment in Europe to store, share and reuse research data across borders and scientific disciplines. The Partnership will bring together institutional, national and European initiatives and engage all relevant stakeholders to co-design and deploy a European Research Data Commons where data are Findable, Accessible, Interoperable, Reusable (FAIR). This European contribution to a “Web of FAIR Data and Related Services for Science” will enhance the possibilities for researchers to find, share and reuse publications, data, and software leading to new insights and innovations, higher research productivity and improved reproducibility in science. This partnership is Co-programmed by the European Commission, the EOSC Association and the EOSC Steering board, more information can be found through the links below.

[European Open Science Cloud \(EOSC\) | European Commission \(europe.eu\)](https://europe.eu)

[Advancing Open Science in Europe | EOSC Association EOSC Secretariat](https://eosc.eu)

Form/type

Co-programmed

Launch Timeframe

Work Programme 2021/2022

Current NTNU involvement

None.

Norway is involved in the EOSC Association through CESSDA, RCN and UNIT.

PARTNERSHIPS ACROSS THEMES & KICs

41

EIT Climate-KIC



It is a partnership of companies, scientific institutions and universities, city authorities and other EU public bodies working on innovation to mitigate climate change and to adapt to its unavoidable impacts. Building on EIT Climate-KIC's experience to date, EIT Climate-KIC's objectives moving forward - including beyond 2021 - have shifted away from identifying single-point incremental solutions and towards catalysing systemic change. EIT Climate-KIC's mission is to catalyse systemic change through innovation in areas of human activity – cities, land use, sustainable production systems, finance - that have a critical impact on greenhouse gas emissions and to create climate-resilient communities and empowering people to change systems. EIT Climate-KIC aims to direct its efforts at systems innovation, working with ambitious actors to connect supply and demand while leveraging the power of its community to catalyse change. In this way, EIT Climate-KIC will work to unlock systemic change through strategic innovation – designing, executing and connecting entrepreneurial experiments and deep demonstrations selected and assessed as a portfolio of innovation effects on levers of systemic change.

[Climate-KIC | The EU's main climate innovation initiative](#)

Form/type

EIT-KIC

Current NTNU involvement

NTNU contact person: [Arild Smolan](#)

PARTNERSHIPS ACROSS THEMES & KICs

42 EIT Digital-KIC



EIT Digital's mission is to drive digital innovation and develop entrepreneurial talent in order to enhance both economic growth and quality of life across Europe. EIT Digital aims at global impact through European innovation fueled by entrepreneurial talent and digital technology. EIT Digital strengthens Europe's position in the digital world by delivering breakthrough digital innovations to the market and breeding entrepreneurial talent for economic growth and improved quality of life. EIT Digital helps business and entrepreneurs to be at the frontier of digital innovation by providing them with technology, talent, and growth support. EIT Digital invests in strategic areas to accelerate the market uptake and scaling of research-based digital technologies (deep tech) focusing on Europe's strategic, societal challenges: Digital Tech, Digital Cities, Digital Industry, Digital Wellbeing, and Digital Finance. EIT Digital breeds Tshaped entrepreneurial digital talent focused on innovation through a blended Education Strategy that includes a Master School, an Industrial Doctoral School and a Professional School.

[Home // EIT Digital](#)

Form/type

EIT-KIC

Current NTNU involvement

None.

PARTNERSHIPS ACROSS THEMES & KICs

43 EIT Food



It aims at catalysing the transformation of the food system by integrating education, innovation, business creation and consumer engagement activities, to foster the production and consumption of safe and healthy food, and promoting sustainable practices in agriculture, aquaculture, fisheries. The global food system faces significant challenges. 3.5 billion people suffer from hunger and micronutrient deficiencies while unhealthy lifestyles and worldwide numbers of overweight (~2 billion) and obese (>500 million) people are still growing. Obesity has been estimated to cost the EU € 60 billion annually through healthcare costs and lost productivity. The permanent availability of food has reduced its perception as a highly valued and critically important product, with almost one-third of total food production being wasted. However, global population growth and changes in dietary patterns require an increase in overall food production by more than 60% to feed 10 billion people by 2050. Food production puts significant stress on the environment. It is by far the largest user of global freshwater supplies, with agriculture being responsible for 70 % of consumption. It also accounts for 60 % of global terrestrial biodiversity loss. Including primary production, the food sector accounts for more than 25 % of global greenhouse gas emissions.

[EIT Food accelerates innovation to build a future-fit food system that produces healthy and sustainable food for all | EIT Food](#)

Form/type

EIT-KIC

Current NTNU involvement

NTNU is a partner of EIT Food. The contact person on NTNU's side is Thais Mothe-Diniz from NV Faculty.

Relevant Parallel initiatives

NTNU is a part of the European Food Forum (EFF) and also has its corresponding internal NTNU Food Forum. Representing NTNU as Vice President of the EFF Management Board is [Eva Falch](#) from the Department of Biotechnology and Food Science.

Moreover, NTNU is involved in the consortium of the METROFOOD Research Infrastructure. The NTNU contact person here is [Turid Rustad](#) from the Department of Biotechnology and Food Science. The NTNU Food Forum is dynamic and accepts new members at all times to join.

43 NTNU Food Forum Structure

	Eva Falch Forum Leader	Forum animation and orchestration
	Thais Mothe-Diniz Administrative Coordination	
	Massimo Busuoli Strategic advisory and EU positioning	

Strategic Initiatives Ambassadors

NTNU FOOD FORUM - members



	Eva Falch
<ul style="list-style-type: none"> European Food Forum JPI A healthy diet for a healthy life (Scientific Advisory Board) European Multidisciplinary program on sustainable food and biomass European region of gastronomy National professional body for education and research in nutrition (UHR) Green research 	



	Turid Rustad
<ul style="list-style-type: none"> Metrofood infrastructure Europe 	



	Hilde Bjørkhaug
<ul style="list-style-type: none"> Norwegian Research Council/HEU Cluster 6*... 	



	NN
<ul style="list-style-type: none"> Animal Welfare Europe Food Systems... 	

Aditya Suneel Sole	Faouzi Alaya Cheikh	Johanne Kjerstad	Per Henning
Alexandra Neyts	Ferne Edwards	Jostein Vik	Pernille Feilberg
Alexandros Asimakopoulos	Gine Roll Skjærvø	Jørgen Lerfall	Per Østby
Alireza Ashrafian	Gisle Øye	Kari Helgetun Langfoss	Ragni Nergård
Andrei Lobov	Glenn Dunshea	Kristin Bjørdal	Rita V. D'Oliveira Bouman
Anita Nordeng Jakobsen	Grete Hansen Aas	Kristin Syverud	Rolf Erik Olsen
Anna Olsen	Hannah Monsrud Sandvik	Kristine Kvangarsnes	Rønnhaug Astri Ødegård
Annik Magerholm Fet	Hao Wang	Lars Øystein Ursin	Sony George
Atle M. Bones	Heidi Carin Dreyer	Line Skontorp Meidell	Sophia Efstathiou
Berit Johansen	Hilde Bjørkhaug	Line Tørum Amdam	Sophie Kendler
Bjørn Kåre Myskja	Hilde Ervik	Lorenzo Cañas Bottos	Sunniva Hoel
Bård Kåre Myskja	Hilde Røysland	Marcin A. Kurek	Sunniva Vikan
Bård Eirik Kulseng	Hugo Atle Jakobsen	Marcos Xosé Álvarez Cid	Tanja Plasil
Camilla Knudsen Tveiten	Ida-Johanne Jensen	Marianne Bjordal Havnes	Terje Finstad
Casper Boks	Inga Øystein Moen	Marte Berg Wahlgren	Thais Mothe-Diniz
Catia Martins	Ignat Tolstorebrov	Massimo Busuoli	Trygve Magne Eikevik
Duan Chen	Ingrid Salvesen	Michael D. Martin	Trym Holter
Egidijus Dauksas	Jan Ketil Simonsen	Miriam Kilano Khider	Turid Rustad
Eirin Marie Skjøndal Bar	Janna Cropotova	Morgane Colleau	Vegar Ottesen
Emma Louise Walton	Jennifer Leigh Bailey	Nils Kalstad	Veronica Hammer Hjellnes
Eugen Gravningen Sørmo	Jens Rohloff	Pasi Aalto	Vidar Halsteinli
Eva Falch	Johan Fredrik Rye	Paolo Pisciella	Widar Aalrust Kristoffersen

PARTNERSHIPS ACROSS THEMES & KICs

44 EIT Health



The partnership is a dynamic, integrated network of public, private, academic and innovation partners, combining their strengths and engaging their assets to address the health challenges of an ageing population. EIT Health's vision is that by 2022, improvements in the European healthcare systems will facilitate citizens' equal and fast access to high quality and affordable care across Europe, in turn leading to improved health outcomes. In order to realize its vision, the partnership will build on investments in prevention thanks to new payment models, the leveraging of new technologies and integration of digital health, and the sharing of health data. These efforts make it possible to generate new solutions. Empowering citizens through education is also of importance to the activities of this partnership. EIT health will be recognized as the leading European Health Innovation Network encompassing all of the developments mentioned in this paragraph.

[EIT Health | Promoting innovation in health](#)

Form/type

EIT-KIC

Current NTNU involvement

Since September 2021, NTNU has been an associate partner of EIT Health Scandinavia. This ongoing involvement is a collaboration with the biggest Norwegian health cluster, Norway Health Tech. NTNU's contact person is [Arild Smolan](#).

PARTNERSHIPS ACROSS THEMES & KICs

45

EIT InnoEnergy-KIC



It aims at accompanying energy transition and decarbonization of the European economy by fostering the generation of talents, supporting emergence and deployment of innovative solutions, accelerating innovative companies developing low carbon solutions. Delivering sustainable energy is critical in tackling climate change, security of supply and for the competitiveness of the European energy sector. As reminded in the HEU Partial General Approach and its Cluster 5, to meet the objectives of the Paris Agreement the EU will need to transition to climate neutral, resource-efficient and resilient economies and societies. This will entail on profound changes in technology, processes, products and services, to the ways in which businesses and consumers behave. To move towards net-zero greenhouse gas emissions, the EU has to rely on secure and sustainable energy supply underpinned by a market-based and panEuropean approach. The added value of InnoEnergy is in fostering innovation in low carbon energy, targeting market opportunities for these innovations, putting the consumers/citizens at the centre of the energy “New Deal”.

[EIT InnoEnergy- Accelerating sustainable energy innovations](#)

Form/type

EIT-KIC

Current NTNU involvement

NTNU Contact persons: [Johan Hustad](#) and [Karl Klingsheim](#)

PARTNERSHIPS ACROSS THEMES & KICs

46

EIT Manufacturing



It brings actors together in an innovation ecosystem that aims at boosting manufacturing innovation in Europe with a focus on skills and talent, digitalisation, socially and environmentally sustainable manufacturing. The manufacturing sector is crucial for competitiveness, innovation and job creation in Europe already now and even more so in the coming years. Increasing stakeholders' synergies in an efficient and visible way, reducing fragmentation and strengthening the links between the relevant ecosystems, as well as encouraging the identification of innovation hotspots are of a high priority for European manufacturing. Progress towards the Sustainable Development Goals (SDGs) requires an environmentally sustainable and responsible industry, as well as radical transition towards a circular economy. In Europe, the manufacturing sector contributes to about 25% of the waste, 23% of greenhouse gases, and 26% of NOx generated. Consequently, manufacturing innovation has huge potential to reduce negative environmental impact through a wide range of efforts, including the increase of energy and resource efficiency, waste reduction, extended use of secondary raw materials, and production of more eco-intelligent products. The shift of European companies towards more sustainable business models will create important cost savings, new jobs, and opportunities for workers and entrepreneurs.

[EIT Manufacturing - European manufacturers together](#)

Form/type

EIT-KIC

Current NTNU involvement

None.

PARTNERSHIPS ACROSS THEMES & KICs

47

EIT Raw Materials



The partnership is a network of universities, businesses and research organisations delivering solutions to boost competitiveness, growth and attractiveness of the European raw materials sector via radical innovation, new educational approaches and guided entrepreneurship. Raw materials are critically important for achieving the EU's economic, environmental and climate objectives. Raw materials are essential to securing a transition to green energy technologies, to securing growth and sustainable consumption and to securing access to clean and efficient consumer technologies. For instance, the production of low carbon technologies is expected to lead to an increase of demand for certain raw materials. Putting the sector on a more sustainable track requires multiple actors along the value chain acting in synergy. EIT RawMaterials is uniquely positioned to address this challenge and to develop the raw materials sector into a major strength for Europe. The KIC activities are very well aligned with the Raw Materials Initiative, the European Innovation Partnership on Raw Materials, the European Battery Alliance and other EU initiatives addressing the societal challenges of the sustainable supply of raw materials and resource efficiency, and so on. The KIC also focuses on several mission-driven so-called “Lighthouses”, which are large-scale and long-term coordinated innovation initiatives addressing critical raw materials challenges for Europe.

[EIT RawMaterials - Developing raw materials into a major strength for Europe](#)

Form/type

EIT-KIC

Current NTNU involvement

NTNU is a partner of EIT Raw Materials. The NTNU coordinator is [Maria Wallin](#) from NV Faculty. Additionally, a corresponding internal NTNU RawMaterials Forum is currently in the making.

PARTNERSHIPS ACROSS THEMES & KICs

48

EIT Urban Mobility



EIT Urban Mobility is a pan-European partnership of around 50 businesses, education and research excellence institutions, as well as multifaceted cities, aiming at delivering innovative solutions to meet 21st century urban mobility challenges. Today, we can observe multiple aspects of urban mobility that could be considered as a crisis or some type of turning point: urban growth and sprawl; planning, implementation and maintenance of infrastructure; economic and environmental costs of congestion; demands on accessibility, safety, and local air pollution to name just a few. In total, the partnership has identified 8 challenges to prioritize. At the same time, residents strive for a high quality of public space, mobility and increased participation in decision-making, with new services being end-user-centric by design, allowing for new schemes and increased mobility choices.

[Home - EIT Urban mobility.](#)

Form/type

EIT-KIC

Current NTNU involvement

None.

PARTNERSHIPS ACROSS THEMES & KICs

49

EIT Culture and Creativity



The partnership will aim at improving the competitiveness and the innovation capabilities in the Culture and Creative Sectors and Industries (CCSI) by fostering the generation of talents, supporting emergence and deployment of innovative solutions, and accelerating innovative companies developing solutions in the CCSI domain. EIT Culture and Creativity will empower network opportunities, collaboration, co-creation and knowhow transfer between education, research and business. First and foremost, this will happen within the CCSI domain, but there will also be spill-overs to other sectors of society and the economy. Currently, the partnership is still in the making. The process is ongoing throughout 2022, with the designation of EIT Culture and Creativity envisioned for June.

[Candidates for European Partnerships across various themes | European Commission \(europa.eu\)](#)
<https://www.ntnu.edu/neb>

Form/type

EIT-KIC

Current NTNU involvement

None.

Thematically related initiative

NTNU is an official partner of the New European Bauhaus (NEB) Initiative. NTNU's contact persons are [Florian Schneider](#) and [Annemie Wyckmans](#) from the Architecture Faculty.