Positioning of NTNU to European Research and Innovation Programs

Massimo Busuoli

NTNU Brussels Office
A large proportion of NTNU’s research funds are external and won in competition

NTNU raises most funds among Norwegian institutions from the Research Council of Norway

NTNU has considerable funding from business and industry and the public sector

Total research funding: 2.3 billion NOK

Source: NTNU’s annual accounts
External research funding 2019
by faculty

Source: NTNU’s annual accounts
Research instruments

External
- EU
- Research Council of Norway
- Private

Internal
- Strategic research areas
- Enabling technologies
- Research excellence initiative
Participation in 2020

Aim
- 1000 million NOK
- 1100 million NOK

Awarded
- 206 projects
- 1997 applications

Main collaborators in H2020, number of joint projects with NTNU by countries outside of Norway

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of Joint Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>309</td>
</tr>
<tr>
<td>Spain</td>
<td>215</td>
</tr>
<tr>
<td>UK</td>
<td>211</td>
</tr>
<tr>
<td>France</td>
<td>205</td>
</tr>
<tr>
<td>Italy</td>
<td>181</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>139</td>
</tr>
<tr>
<td>Belgium</td>
<td>117</td>
</tr>
<tr>
<td>Greece</td>
<td>96</td>
</tr>
<tr>
<td>Portugal</td>
<td>76</td>
</tr>
<tr>
<td>Sweden</td>
<td>74</td>
</tr>
</tbody>
</table>

October 2020
“Europe must lead the transition to a healthy planet and a new digital world. But it can only do so by bringing people together and upgrading our unique social market economy to fit today’s new ambitions.”
Six ambitions for Europe

- **A European Green Deal**: Striving to be the first climate-neutral continent
- **An Economy That Works for the People**: Working for social fairness and prosperity
- **A Europe Fit for the Digital Age**: Grasping the opportunities from the digital age within safe and ethical boundaries
- **Promoting Our European Way of Life**: Building a Union of equality and diversity, standing up for justice and values
- **A Stronger Europe in the World**: Strengthening our unique brand of responsible global leadership
- **A New Push for European Democracy**: Nurturing, protecting and strengthening our democracy
The European Green Deal

Transforming the EU's economy for a sustainable future

- Increasing the EU’s Climate ambition for 2030 and 2050
- A zero pollution ambition for a toxic-free environment
- Preserving and restoring ecosystems and biodiversity
- From ‘Farm to Fork’: a fair, healthy and environmentally friendly food system
- Accelerating the shift to sustainable and smart mobility

And leaving no one behind

- Supplying clean, affordable and secure energy
- Mobilising industry for a clean and circular economy
- Building and renovating in an energy and resource efficient way
- A European Climate Pact
- The EU as a global leader

Designing a set of deeply transformative policies
<table>
<thead>
<tr>
<th>Pillar I: Excellent Science</th>
<th>23.097 million euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Research Council</td>
<td>14.861</td>
</tr>
<tr>
<td>Marie Sklodowska-Curie</td>
<td>6.288</td>
</tr>
<tr>
<td>Actions</td>
<td></td>
</tr>
<tr>
<td>Research Infrastructure</td>
<td>2.149</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Pillar II: Global Challenges</th>
<th>47.179 million euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>6.893</td>
</tr>
<tr>
<td>Culture, Creativity and</td>
<td></td>
</tr>
<tr>
<td>inclusive Society</td>
<td>1253.5</td>
</tr>
<tr>
<td>Civil Security for Society</td>
<td>1253.5</td>
</tr>
<tr>
<td>Digital, Industry and Space</td>
<td>13.429</td>
</tr>
<tr>
<td>Climate, energy and mobility</td>
<td>13.429</td>
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<tr>
<td>Food Bioeconomy, natural</td>
<td></td>
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<tr>
<td>resource, agriculture and</td>
<td></td>
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<tr>
<td>environment</td>
<td>8.952</td>
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<tr>
<td>Joint Research Center</td>
<td>1.970</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Pillar III: Innovative Europe</th>
<th>12.086 million euro</th>
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</thead>
<tbody>
<tr>
<td>European Innovation Council</td>
<td>8.752</td>
</tr>
<tr>
<td>European Innovation</td>
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<tr>
<td>ecosystems</td>
<td>448</td>
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<tr>
<td>European Institute of</td>
<td></td>
</tr>
<tr>
<td>Innovation and Technology</td>
<td>2.686</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Widening Participation and strengthening the European Research Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Widening participation and spreading excellence</td>
</tr>
<tr>
<td>Reforming and enhancing the European R&amp;I system</td>
</tr>
<tr>
<td>3.181 million Euro</td>
</tr>
</tbody>
</table>
NTNU Positioning approach:

• Expanding on relevant and high level collaborations
• Expanding participation in relevant platforms/initiatives/networks
• Building on existing positionings
Relevant initiatives/platforms in Horizon Europe

• European Partnerships
• Industrial alliances
• European Institute of Innovation & Technology
• European Food Forum
• Digital Innovation Hubs
Horizon Europe: Portfolio of candidates for European Partnerships (49)

**HEALTH**
- EU-Africa Global Health
- Innovative Health Initiative
- Chemicals Risk Assessment
- Fostering an ERA for Health research
- Large-scale innovation and transformation of health systems in a digital and ageing society
- Personalised Medicine
- Rare Diseases
- One Health AMR

**DIGITAL, INDUSTRY AND SPACE**
- High Performance Computing
- Key Digital Technologies
- Smart Networks and Services
- AI, data and robotics
- Photonics Europe
- Clean Steel - Low Carbon Steelmaking
- European Metrology
- Made in Europe
- Carbon Neutral and Circular Industry
- Global competitive space systems
- European Geological Service

**CLIMATE, ENERGY AND MOBILITY**
- Transforming Europe’s rail system
- Integrated Air Traffic Management
- Clean Aviation
- Clean Hydrogen
- Built environment and construction
- Towards zero-emission road transport
- Mobility and Safety for Automated Road Transport
- Batteries
- Clean Energy Transition
- Sustainable, Smart and Inclusive Cities and Communities
- Smart and zero-emission waterborne transport

**FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE AND ENVIRONMENT**
- Accelerating farming systems transition
- Animal health: Fighting infectious diseases
- Environmental Observations for a sustainable EU agriculture
- Rescuing biodiversity to safeguard life on Earth
- A climate neutral, sustainable and productive Blue Economy
- Safe and Sustainable Food System for People, Planet & Climate
- Circular bio-based Europe
- Water4All: Water security for the planet

**PILLAR III AND CROSS-PILLAR**
- EIT Climate KIC
- EIT Health
- EIT Manufacturing
- EIT Food
- EIT InnoEnergy
- EIT Raw Materials
- EIT Digital
- EIT Urban Mobility
- EIT Cultural and Creative Industries
- Innovative SMEs
- European Open Science Cloud (EOSC)
Where is NTNU towards HEU....

Digital Innovation Hub in preparation
NTNU Brussels Office

The NTNU Brussels Office overall task is from its base in Brussels to contribute to achieving the goals set out in the NTNU Strategy and the International action plan by contributing to increase the number of European funded projects NTNU coordinate and participate in.

Office activities and facilities

Services

Promotion and representation of NTNU in Brussels
Positioning of NTNU in relevant Brussels-based initiatives and bodies
Contribution to improve NTNU’s EU project portfolio
Provide internship opportunities for NTNU employees and students
Provision of logistic support and services in Brussels

https://www.ntnu.edu/brussel
Thank you