Key Insights from NTNU & opportunities within the new Framework programme Horizon Europe

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A supermarket of knowledge......
First class laboratories and research infrastructure
Research

• Participating in 171 Horizon 2020 projects and has 10 ERC grants
• Is the institution that is awarded the most funding from the Research Council of Norway
• Host or partner for 35 major research centres (SFF, SFI, and FME)
• 397 doctoral degrees completed in 2018
• Internal initiatives to develop and recruit top researchers
• Strategic research areas and enabling technologies in 2014 – 2023:

- ENERGY
- HEALTH
- OCEANS
- SUSTAINABILITY
- NTNU BIOTECHNOLOGY
- NTNU DIGITAL
- NANO@NTNU
Collaboration with business and the public sector

- Wide-ranging collaboration in education (internships, business networks, etc)
- Almost 8% of NTNU’s external income comes from business and industry
- In 2005–2015, NTNU collaborated with business and industry in more than 10,000 projects. This included some 1200 Norwegian and 760 international companies
- Close collaboration with SINTEF, ranked as No. 1 in the world in the Times Higher Education ranking
- 88 industrial PhDs and 9 public-sector PhD projects
- Participates in 6 Norwegian Centres of Expertise, 2 Global Centres of Expertise and 2 European Knowledge and Innovation Communities (KICs)
- University Hospital, University Schools and University Municipality
Main collaborative countries in H2020, number of project participation collaborations with NTNU outside Norway

- Germany: 199
- Great Britain: 191
- Spain: 188
- France: 158
- Italy: 124
- Holland: 101
- Belgium: 85
- Greece: 68
- Sweden: 66
- Portugal: 66

Total number of countries: 49
Total number of partners: 1473

Awards:
- Goal: 1000 Millions
- Awarded: 850 Millions

Projects:
- 171

Pr. 17th. September 2019
Projects distribution

Total

Pillar

Objectives

Secure, clean and efficient en... (19.0% 13.39 M€)
Health, demographic change and... (11.1% 7.82 M€)
Climate action, environment, r... (5.7% 5.47 M€)
Food security, sustainable agr... (5.1% 2.66 M€)
Secure societies - Protecting... (2.0% 1.40 M€)
Smart, green and integrated tr... (1.6% 1.13 M€)
Europe in a changing world - I... (1.6% 1.12 M€)

Societal Challenges (48.0% 33.92 M€)

Excellent Science (38.0% 26.83 M€)

Industrial Leadership (12.1% 8.55 M€)

Science with and for Society (1.9% 1.35 M€)

NTNU (100.0% 70.66 M€)

Source: Signed projects, eCORDA H2020 database, April 15, 2019

Kunnskap for en bedre verden
Playfields for collaborations
Horizon Europe: Preliminary Structure

Pillar 1: Excellent Science
- European Research Council
- Marie Skłodowska-Curie Actions
- Research Infrastructures

Pillar 2: Global Challenges and European Industrial Competitiveness
- Health
- Culture, Creativity and Inclusive Society
- Civil Security for Society
- Digital, Industry and Space
- Climate, Energy and Mobility
- Food, Bioeconomy, Natural Resources, Agriculture and Environment
- Joint Research Centre

Pillar 3: Innovative Europe
- European Innovation Council
- European innovation ecosystems
- European Institute of Innovation and Technology

Widening Participation and Strengthening the European Research Area
- Widening participation and spreading excellence
- Reforming and Enhancing the European R&I system
Heurope: Budget EC proposal 2021-2027

€ billion
In current prices

- Excellent Science
- Global Challenges & European Ind. Comp.
- Innovative Europe
- Widening Part. & ERA
- Euratom

€25.8
€52.7
€13.5
€2.4
€2.1
Heurope: Novelties

Lessons Learned
from Horizon 2020 Interim Evaluation

- Support breakthrough innovation
- Create more impact through mission-orientation and citizens' involvement
- Strengthen international cooperation
- Reinforce openness
- Rationalise the funding landscape
- Encourage participation

Key Novelties
in Horizon Europe

- European Innovation Council
- R&I Missions
- Extended association possibilities
- Open science policy
- New approach to Partnerships
- Spreading Excellence
European Innovation Council

Support to innovations with breakthrough and disruptive nature and scale up potential that are too risky for private investors (70% of the budget earmarked for SMEs)

Helping innovators create markets of the future, leverage private finance, scale up their companies, Innovation centric, risk taking & agile, pro-active management and follow up

Two complementary instruments bridging the gap from idea to investable project

Pathfinder: grants (from early technology to pre-commercial)

Accelerator: grants only & blended finance (from pre-commercial to market & scale-up)
«the door to NTNU» for organizations that want to collaborate and create synergies with NTNU, and «the door to Europe» for colleagues active in or willing to enter the European Arena.
NTNU Brussels office Activities

A. Promote NTNU at Brussels and EU level
B. Position NTNU in relevant initiatives/bodies, where possible in leadership positions
C. Advise on relevant upcoming EU policies/initiatives and possible anticipatory actions that can be taken
D. Contribute to reinforce strategic collaborations with key stakeholders
E. Scout project opportunities
F. Improve internal culture about EU opportunities
G. Support to improve proposal quality
Thank you for your attention