

EEA & Norway Grants – Institutional Cooperation Programme

Application number: EHP-CZ-ICP-3-018
funded under the EEA Financial Mechanism 2014-2021
CZ-EDUCATION

Programme of the First Peer-learning Activity
Academic Development through bilateral peer-learning activities on mission-oriented innovation for Climate Neutral and Smart Cities

June 7-8, 2022, Prague, CTU Prague

Hosting institution:

Faculty of Transportation Sciences, Czech Technical University in Prague (FTS CTU)

Co-organizer:

Faculty of Science and Technology, University of Stavanger, Norway (FST UiS).

Venue:

FTS CTU, Conference room, ground floor, Na Florenci 25, Prague 1, 110 00.

Main objectives of this initiative:

This first peer-learning activity is the first joint initiative between FTS CTU and FST UoS in the framework of the project “Academic Development through bilateral peer-learning activities on mission-oriented innovation for Climate Neutral and Smart Cities” that is funded by the Institutional Cooperation Programme of EEA & Norway Grants.

This project is aimed at creating a bilateral synergy among academic staff members of different background of the Czech Technical University in Prague (CTU) and the University of Stavanger (UiS) in the field of climate-neutral and smart cities. A joint interdisciplinary approach is planned to be undertaken between CTU and UiS towards the improvement of education and research activities in alignment to the designated area.

CTU and UiS plan to organize four peer-learning activities (PLAs) in the framework of this project for the academic staff of different faculties in order to encourage and foster interdisciplinary sharing of knowledge and expertise and co-creation of innovative teaching methodologies and approaches through challenge-based learning in the context of sustainable, climate-resilient, attractive and productive cities. The peer learning activities will also promote mission-oriented goals in research and innovation to be pursued through European grant schemes such as H2020 and EEA and Norway Grants.

The PLAs are expected to contribute to the creation of **two Intellectual outputs**.

The first intellectual output will be supported by the **first and second peer-learning activities**. It will consist of **guidelines and principles for challenge-based education and mission-oriented research approaches**. It is aimed to help professionals of academia to address and incorporate in their teaching and research activities the relevant aspects of climate change, sustainable development goals, competitiveness and growth in the context of smart cities.

The second intellectual output will be supported by the **third and fourth peer-learning activities**. It will consist of **guidelines on innovative methodologies and digital tools for online education in the field of smart and sustainable cities**.

At the end of the project the intellectual outputs (the guidelines) will be presented and promoted among external stakeholders, i.e. representatives of other universities, enterprises (including those involved in the development of e-learning platforms and online teaching tools), municipalities and civic organizations. Policy makers, training centres directors, unemployed people and students will also be invited.

The reports of PLAs and the intellectual outputs will be made publicly available in the project website to serve as a relevant and inspirational source for other universities interested in engaging in similar initiatives.

Target audience:

The **primary target groups** are early career researchers and lecturers of both universities (CTU and UiS), all fully employed by these institutions. The secondary target group will be composed by senior lecturers and researchers.

Research shows that recent graduates tend to lack more generic skills outside their own field or discipline (Germain-Alamartine et. Al. 2019). This is a result of the current education approaches adopted by most of universities. Doctoral education was primarily designed to answer the human resources needs of academia. However, nowadays, increasing numbers of doctorate holders seek employment outside academia. Accordingly, doctoral education can be one of the means by which universities take part in the development of industry in their regions.

Such generic skills that are considered useful include the ability to work across disciplines and sectors, work collaboratively in addressing societal challenges and finally to secure external funding for research and innovation. This project proposes that these challenges can be addressed in a progressional model in which researchers and lecturers from different disciplines within the field of sustainable and smart cities learn to work across disciplines and sector. The second step is to augment skills related to challenge-based research i.e. research that takes its starting point in a broader societal challenge rather than a specific disciplinary research project. In other words the participants are able to contextualize their own research as a component towards broader societal challenges. Finally, the participants will be introduced to mission-based research & innovation as a way to think about and organize challenge-based research. The target groups will benefit from the project by becoming prepared for how to work within the new research and innovation framework in the upcoming Horizon Europe Framework and elsewhere whether they decide to remain in academia or will enter knowledge intensive industries.

Programme of the First Peer-Learning Activity

June 7, Tuesday

Thematic area of the day: Teaching development approaches oriented to graduate and postgraduate courses related to sustainable and smart cities

Presentations to encourage debate and sharing of ideas and expertise:

10:00 – 10:45 | Challenge-based Learning as a pedagogical and didactic framework

Masoumeh Shahvedi, Associate Professor, Department of Education, University of Stavanger.

10:45 – 11:15 | Roundtable discussions around first topic addressed.

11:15 – 12:00 | Ingenious – A challenge-based course

Nelly Narges Karimi, Project Coordinator - Ingenious, Department of Innovation and Society, University of Stavanger.

12:00 – 12:30 | Roundtable discussions around second topic addressed.

12:30 – 13:15 | Conceptualizing climate change education in the framework of higher education

Ticiano Costa Jordao, Department of Science & Research, Faculty of Transportation Sciences, Czech Technical University in Prague

13:15 – 13:45 | Roundtable discussions around third topic addressed.

At the end of the first day of the PLA the participants will be encouraged to continue further collaboration organized in groups of thematic areas of interest to foster a multidisciplinary approach in the field of teaching development.

June 8, Tuesday

Thematic area of the day: Best practices in research and approaches on writing for publication and grants

Presentations to encourage debate and sharing of ideas and expertise:

10:00 – 10:45 | Mission-oriented research for societal challenges at University of Stavanger

Utky Alpaydin, Advisor, Department of Innovation

10:45 – 11:15 | Roundtable discussions around first topic addressed.

11:15 – 12:00 | Green transition at University of Stavanger

Anders Riel Müller, Associate Professor, Department of Safety, Economics and Planning, University of Stavanger.

12:00 – 12:30 | Roundtable discussions around second topic addressed.

12:30 – 13:15 | Mission-oriented research & innovation in the European Union grant schemes with emphasis on the mission towards Climate Neutral and Smart Cities and the mission towards Climate Change Adaptation

Ticiano Costa Jordao, Department of Science & Research, Faculty of Transportation Sciences, Czech Technical University in Prague

13:15 – 13:45 | Roundtable discussions around third topic addressed.

At the end of the first day of the PLA the participants will be encouraged to continue further collaboration organized in groups of thematic areas of interest to foster a multidisciplinary approach in the field of mission-oriented research and innovation for climate neutral and smart cities and climate change adaptation.