



COST Action CA19126 - Positive Energy Districts European Network (PED-EU-NET)

Open Call for Virtual Mobility (VM) Grants

Important Dates:

Application: open continuously

Notification of Results: 14 working days after application submission

Mission Period: 01 July 2021 – 15 October 2021

Virtual Mobility Grants (VMGs) is part of the new Virtual Networking Tools, which aim to develop skills and capacities through virtual collaboration between researchers across Europe. VMGs foster the establishment of existing networks through virtual collaborations by sharing knowledge, by learning new skills and techniques, by reaching deliverables, disseminating the Action results. This is a pilot scheme, which will run until 31 October 2021.

VMG Applicant

The VMG applicants are Action participants with a primary affiliation to an institution located in a COST Full or Cooperating Member country or a COST Near Neighbor Country participating in the Action. The applicants shall explain the aim of the VMG and how its outcomes will generate benefits to the Action, actively contribute to the overall objectives and relevant deliverables of the Action. The applicants are required to submit an activity report at the end, to be approved by the Virtual Networking Support (VNS) Manager on behalf of the Action Management Committee.

A VMG is a fixed financial contribution, which takes into consideration the budget request of the applicant and the outcome of the evaluation by the VNS Manager.

*A maximum of 6 VMG can be awarded within this Action and each VMG cannot exceed EUR 1 500.

How to Apply?

- ✓ First contact the Working Group (WG) leaders, which the VMG is linked to. A list of WG priority topics can be found at the end of the document.
- ✓ After the agreement is reached, complete an online [VMG application](#), and send the following by email to the VNS Manager [Jelena Brajković \(jelena.brajkovic@arh.bg.ac.rs\)](mailto:jelena.brajkovic@arh.bg.ac.rs) of this Action:

The list of supporting documents to be submitted for the evaluation is as follows:

1. Application form (download [here](#))
2. Cover letter, explaining how your work will benefit from this VMG and how it will contribute to the achievement of the objectives of the WG(s) and this COST Action. Please make sure you indicate how your personal and professional experiences and skills will make you a good candidate, and what you intend to do during your VM (800 words).
3. CV (2 pages), including list of publications.

Evaluation

The applications will be assessed by the Evaluation Committee, which will perform the scientific assessment of the applications based on the perceived contribution that the proposed VMG will make against the scientific objectives outlined in the Action's Memorandum of Understanding (MoU). The criteria for evaluation include:

1. Aim & Motivation

Does the VMG contribute to the objectives of the Action, and benefit the applicant (and the host if any)?

5 Excellent 4 Very Good 3 Satisfactory 2 Deficient 1 Poor 0 Failed

2. Relevance & Excellence

How appropriate is the VMG, considering the quality, scope, and feasibility of the outcomes?

5 Excellent 4 Very Good 3 Satisfactory 2 Deficient 1 Poor 0 Failed

How aligned is the VMG with the selected Working Group and objectives?

5 Excellent 4 Very Good 3 Satisfactory 2 Deficient 1 Poor 0 Failed

3. Methods & Techniques

How practical and feasible are the candidate's selected methods to answer the research questions or meet the objectives? Does the VMG add value to the Action and contribute to innovative solution, method, or theory?

5 Excellent 4 Very Good 3 Satisfactory 2 Deficient 1 Poor 0 Failed

4. Planning

Is the quality and feasibility of the work plan reasonable and satisfying? Are the VMG objectives, questions, methods, plan, and desired outcomes coherent, balanced and compelling?

5 Excellent 4 Very Good 3 Satisfactory 2 Deficient 1 Poor 0 Failed



5. Diversity and Inclusiveness

Does the applicant promote gender equality? (0-1)

Is the applicant an Early Career Investigator? (0-1)

Is the applicant or the host based in an Inclusiveness Target Country? (0-1)

Does the applicant have a publication plan after the mission? (0-1)

After the VM Grant

The grantee has 30 calendar days from the end of the Grant Period to submit a report to the Action Chair or VNS manager of the Action including the followings. A template of the report can be downloaded [here](#)

- Description of the outcomes and achieved outputs (including any specific MoU deliverables, or publications resulting from the Virtual Mobility).
- Description of the benefits to the COST Action Strategy (what and how).
- Description of the virtual collaboration (including constructive reflection on activities undertaken, identified successful practices and lessons learned).

For more information on the VMG, please contact the Action Chair Vicky Bo Ki Albert-Seifried (vicky.bo.ki.albert-seifried@ise.fraunhofer.de), Vice Chair Laura Aelenei (Laura.aelenei@lneg.pt) or VNS Manager Jelena Brajković (jelena.brajkovic@arh.bg.ac.rs).

Priority VMG topics

In this open call, the Action offers i) 2 fix topics with dedicated supervision and ii) a list of WG priority topics as follows. If you are interested in undertaking a research mission on any of these topics, please contact the WG leaders or proposed supervisor(s) for further discussion.

I. Fix Topics

Mission 1 – Title: Review of Integrated Solutions ‘Replicated’ in Horizon 2020 Lighthouse Projects: what, where, how and why?

Scope: The 18 Horizon 2020 SCC01 Lighthouse projects with involvement of 128 cities provide a wealth of knowledge in the planning, design and implementation of smart cities and communities. It is acknowledged that many of the integrated solutions developed in the SCC01 projects are significantly relevant to Positive Energy Districts (PEDs). To facilitate the rapid scaling up of PEDs in Europe, it is crucial to learn from the experiences gathered in the SCC01 projects, particularly to identify the success factors and avoid pitfalls. This study will review integrated solutions that have been successfully replicated or adapted by Fellow Cities. In doing so, the study will find out how Fellow Cities decided on what to replicate or implement and why. Eventually, the study will identify the success factors for replication using the Three C’s Pillars (i.e. Connectedness of the stakeholders, Competence and Capital) framed by the European Innovation Council. This study will be a collaboration between the COST Action and the SCC01 Replication Task Group and the outcome will benefit all city stakeholders who are interested in the replication of integrated solutions for PEDs.



Duration of the mission: 1 – 2 months

Supervision: COST Action PED-EU-NET WG2 and SCC01 Task Group on Replication

Key contacts: Vicky Bo Ki Albert-Seifried (vicky.bo.ki.albert-seifried@ise.fraunhofer.de), Nienke Maas (nienke.maas@tno.nl) and Savis Gohari Krangsås (savis.gohari@ntnu.no)

Mission 2 – Title: Framework for Categorizing Technical PED Tools

Scope: The mission will focus on WG2- PED Guides and Tools. Within this WG, the applicant is expected to carry out work under SG3 – Technical tools for design and planning, more concretely on creating a framework to categorize technical tools and assisting the Action in collecting and categorizing tools, using the mentioned framework, through action members’ and other practitioners’ literature.

The framework will be oriented to the categorization of tools linked with Energy Communities and Local Energy Markets, which, due to their essence in terms of regulation and governance, could be considered as a less-ambitious (in terms of energy positiveness), but more easily understood and managed Positive Energy District. By characterizing and ranking those tools in terms of impact, governance, optimal size, relation with surroundings, etc., the framework will assist in the solving of some challenges that still gravitate around PEDs’ implementation, for instance:

- PEDs are, by nature, areas where innovative solutions should be experimented. Due to the difficulties found in setting regulatory sandboxes, would be possible to have an “official label” for PEDs, recognized at EU-level, to facilitate the testing of solutions?
- Can/should we count green energy that is being generated near the frontier of the PED? How? In case we turn PED frontiers more virtual and less geographical, which tools should be put in place to ensure homogeneity between PEDs?
- What’s the best dimension of a PED in order to make it scalable: big, involving a lot of entities? Smaller? In terms of governance – big vs small –, which one is better?

Moreover, the applicant will have a hands-on experience within one PED tool, by being placed in either POCITYF or SPARCS teams (two H2020 SCC-1 where EDP NEW is part of the consortium) in order to work on the development of one the following PED-related tools: 1) Management Platform for Energy Communities; 2) Replication-oriented tool, allowing municipalities to identify major PED potential of respective cities. Case the scenario 1 is chosen, the applicant will also have the opportunity to work on the setting up of a Local Energy Market.

Duration of the mission: minimum of one month

Supervision: EDP NEW (Centre For New Energy Technologies, S.A), Portugal

EDP NEW is a subsidiary of the EDP Group with the mission to create value through collaborative R&D in the energy sector. EDP NEW is entirely committed to research and development with a strong focus in technology demonstration projects. The result of an internal reorganisation process in 2014, EDP NEW centralises the Group’s R&D activities and is established inside EDP Labelec – EDP’s



laboratorial facilities and technical excellence centre. EDP NEW has carried out work in several EU H2020 in all the energy value chain, adopting an integrated and sustainable approach towards disruptive solutions that empower its partners and bring value to the shareholders. EDP NEW has proven competencies in cross cutting topics, such as project management, use cases writing, architecture design, scalability and replicability analysis, new business models' analysis and development, validation of technologies in laboratorial environment and demonstration in real conditions. EDP NEW is divided into five knowledge areas, reflecting EDP Group overall orientation to innovation, namely: Smart Energy Systems; Positive Energy Communities; Renewable Energy Sources Technology; Renewables' Integration and Flexibility; Digital for Energy.

Key contact: José Miguel Costa; josemiguel.costa@edp.com

II. WG Priority Topics

WG1- PED Mapping, Characterisation and Learning

WG1 aims at mapping existing concepts, strategies, projects, socio-technical innovations related to PEDs in Europe. It will identify the main PED characteristics and key performance indicators (KPIs), scientifically validate PED definition, advance understanding on socio-technical measures and devise roadmap for the implementation of PEDs.

Contacts: Michal Kuzmic (Michal.Kuzmic@cvut.cz) and Paolo Civiero (pciviero@irec.cat)

Recommended topics:

- Which are the key enabling parameters for national level strategies towards reaching PEDs (legislation, policy, pricing, market relations, standards etc.)?
- Which are the key enabling parameters for municipal level strategies towards reaching PEDs (regulatory policies, collaborative culture etc.)?
- Enhancing the institutional practice learning potential through user-friendly interface for information and data sharing in PEDs

WG2- PED Guides and Tools

WG2 aims at developing guides and tools to support the implementation of PEDs. It will synthesise existing knowledge in a coordinated manner across traditionally technical domains (digital planning, building information management, etc.) and acknowledged crucial governance concerns (e.g., institutional structure, funding and business models) and generate insights into new guides and tools for optimizing the design, operation, financing and opportunities of PEDs.

Contacts: Nienke Maas (nienke.maas@tno.nl) and Savis Gohari Krangsås (savis.gohari@ntnu.no)



Recommended topics:

- Which type of tools exist (collection of tools) for implementation/support of PEDs?
- How can existing tools help to devise framework for new tools development. Preferable tools to look at:
 - Platform for Energy communities (could include the governance perspective) – how can it relate to P2P energy market, who can deal / trade with the Energy communities
 - Simulation platform
 - Replication tools

WG3- PED Laboratories, Monitoring and Replication

WG3 aims at developing common protocols for monitoring and evaluation of PEDs and PED Labs across Europe to track progress and provide feedback on improvement and adaptation in the PED demonstration projects. For this we will review the existing monitoring concepts, demonstration projects and facilities relevant for monitoring PED Labs. Based on this review we will identify and evaluate current methods applied in the monitoring, evaluation, and replication of PEDs/PED Labs.

Contacts: Ghazal Etminan (Ghazal.Etminan@ait.ac.at) and Oscar Seco (oscar.seco@ciemat.es)

Recommended topics:

- What are the most critical research gaps/questions in PED labs?
- What could make PED facilitation, mobilization, incubation, replication and acceleration better?
- How can we Integrate different advanced technologies within the district?
- How can we assess and monitor multiple benefits/impacts arising from PED projects?
- What are the KPIs for different stakeholders to translate in monitoring indicators?

WG4- Dissemination, Outreach and Exploitation

WG4 aims at broadening the impacts and outreach of the COST Action, raising the awareness of PEDs and highlighting their relevance to different stakeholders so as to ensure the transfer of knowledge and translation of experience within and beyond the network Leaders/contact people:

Contacts: M-Beatrice Andreucci (mbeatrice.andreucci@uniroma1.it) and Mari Hukkalainen (mari.hukkalainen@vtt.fi)



Interconnection between WGs

One of the objectives of the Action is to increase synergy, inter- and intra- disciplinary collaboration between different aspects of PEDs. Thus, this call encourages those candidates that want to contribute to development of the conceptual and operational interconnection between PEDs topics.

Contacts: Vicky Bo Ki Albert-Seifried (vicky.bo.ki.albert-seifried@ise.fraunhofer.de), Laura Aelenei (Laura.aelenei@Ineg.pt) and VNS Manager Jelena Brajković (jelena.brajkovic@arh.bg.ac.rs).