

GREENING THE EU, TOPIC BY TOPIC

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#H2020PROSPECT – THE FIRST PEER TO PEER FOR THE LEARNING PROGRAMME ABOUT TO BE CHOSEN

A learning program is starting in May to help local governments finance energy efficiency investments

The first PROSPECT learning programme campaign attracted over 60 cities and regions from 21 countries who applied for the first cycle of the learning programme starting in May 2018.

Five modules are starting this year: public buildings, private buildings, transport, public lighting and cross-sectoral. The participants can choose to be either a **mentor** and showcase their implemented projects, or to learn for other cities and regions as **mentees**. All participants can also choose between two learning

methods; **peer mentoring** is a method where one mentor



PROSPECT
THE NEXT CAMPAIGN
STARTS IN **MAY 2018**.
PREPARE, AND LEARN
MORE AT
WWW.H2020PROSPECT.EU

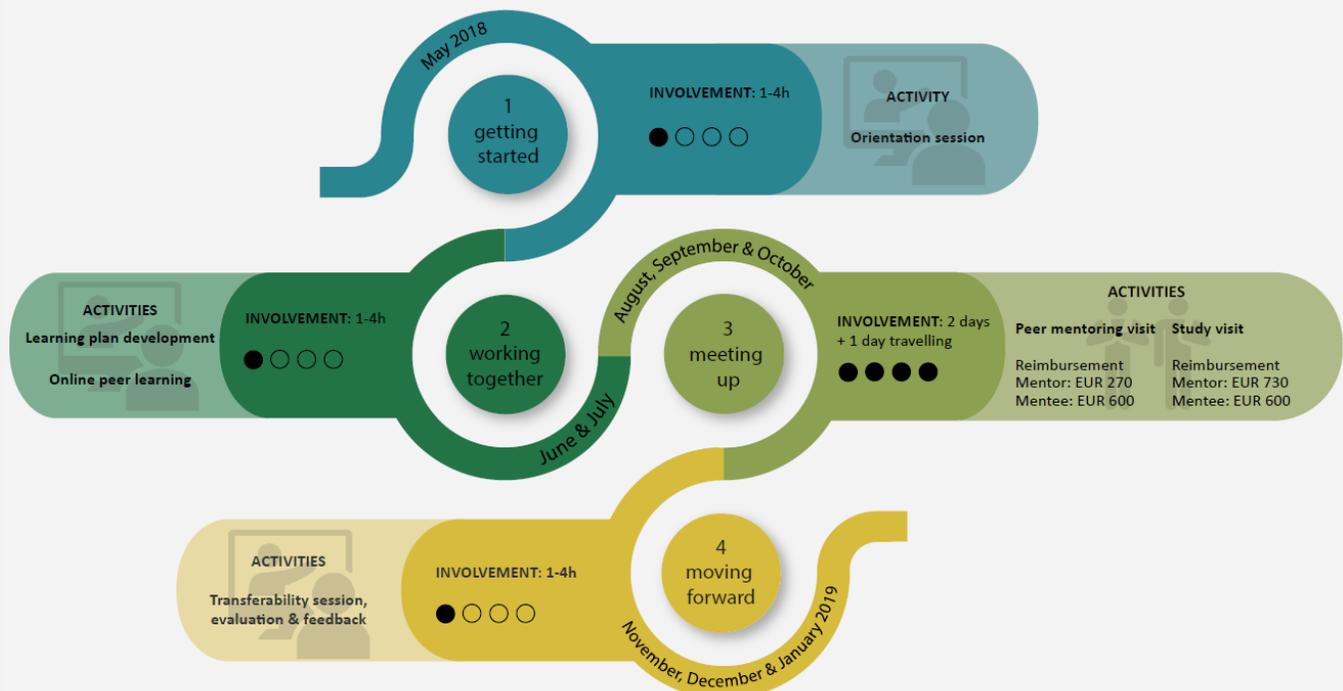
and one mentee go into depth about a subject. **Study visits** are planned for one mentor and up to seven mentees where a mentor showcases a successful project and is meant for a broader introduction into a topic.

The learning will empower participants to make use of best practices in developing financing for sustainable plans and actions, which have been implemented successfully in other cities and regions in the European Union.

Within each module, there will be three online and one physical meeting where concrete guidance for developing financing schemes will be provided.

The first learning programme schedule is visible on the timeline:

Learning cycle 1





A NEEDS ASSESSMENT OF LOCAL AUTHORITIES

Similarities are vast among cities' and regions' needs and barriers



To successfully create a learning programme under PROSPECT project, EUROCITIES conducted a study on the needs and barriers that local authorities face when financing their Sustainable Energy and Climate Action Plans. Its findings are based on input from relevant existing studies and interviews conducted by PROSPECT partners with representatives from cities, regions and local energy agencies. The needs and barriers were classified in three main groups; financial, legal and capacity. We bring here 5 main barriers:

enhance collaboration with the private sector and increase multi-level collaboration.

Next, burdensome regulations and complex administrative procedures create legal barriers for public and private sector investment. Budgeting regulations create difficulties, especially matching budget cycles with investment cycles and this can be particularly harmful to investments related to sustainability and climate. Regulations at national level limit investments that have long-term pay back periods, which is a typical characteristic of sustainable energy and

combining different financing and funding streams.

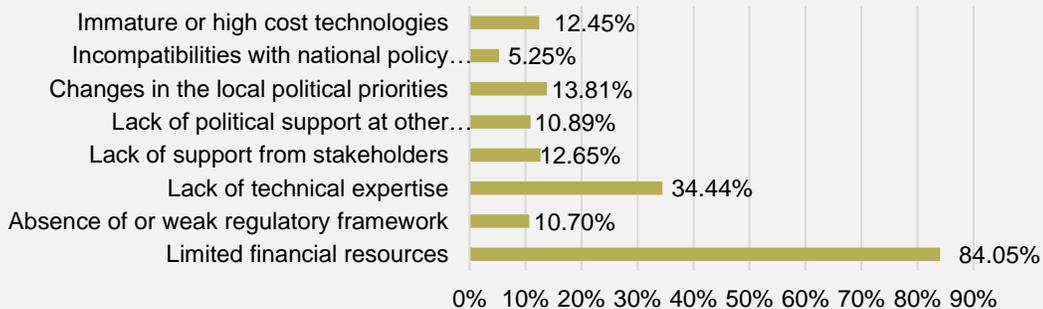
Also, local authorities tend to have very little experience with, and a high interest in learning about, innovative financing mechanisms, such as third-party financing and public and private bonds. Their lack of knowledge about the implementation of such instruments leads them to rely on their own limited means.

Finally, local authorities preferred to direct their sustainable and climate investments towards public buildings and public lighting, but these areas represent only 2.2% of total municipal CO₂ emissions. Conversely, the desire to place such investments in the areas of private buildings and in transport is very low, while the latter alone accounts for 30% of energy consumption throughout the European Union.

It seems that there is an evident lack of desire to invest in areas with higher perceived difficulty of investing, but such measures are usually much more efficient in tackling climate change.

www.h2020prospect.eu

Main barriers faced by municipalities



First, the local authorities' budgets are not sufficient to meet sustainable energy and climate goals. Because banks consider these projects too small to be attractive for investment, project scalability and bundling are important barriers to overcome and a great difficulty for local authorities. PROSPECT needs to

climate projects.

Thirdly, in terms of capacity barriers and needs, a lack of information on financing is most prevalent. There is a widespread need for raising awareness of opportunities for innovative financing, as well as improving technical expertise in using financial tools and



PRESENTING THE H2020 PROJECT

A SYSTEMATIC APPROACH FOR INSPIRING PUBLIC
AUTHORITIES IN ENERGY-SPATIAL
SOCIOECONOMIC SUSTAINABILITY



INTENSSS PA
Integrated Sustainable Energy Planning

The project

INTENSSS-PA aims to develop and implement a human and institutional capacity building approach related to integrated sustainable energy planning, addressed to public authorities and societal stakeholders in order to support them to enter in a new era of energy planning through a participatory, multi-level, interdisciplinary decision making process.

To implement this approach, the Living Lab (LL) concept has been adopted. Within INTENSSS-PA a **Regional Living Lab (RLL)** is defined as emerging citizens-public-private partnership, where all stakeholders work together to create, experiment and evaluate new innovative approaches and institutional innovation related to integrated sustainable energy planning. INTENSSS-PA has successfully established a network of seven regional RLLs coordinated by public authorities, which have added value to energy planning in the regional areas by developing and implementing planning processes in relation to a more open and collaborative approach to governance.

Inspiration and approach

The development of urban and rural landscapes has entered a pioneering era with novel combinations between energy production and consumption and the related changes in the urban and rural fabric including the associated socioeconomic uses. Accompanying this change is a realization that newly developing energy initiatives are more viable for development and upscaling and are less vulnerable to failure and societal resistance if they are well-integrated in their local and regional contexts. However, institutional questions remain regarding the required mechanisms and levels of integration, while simultaneously sustainable energy planning involves actors with diverse and conflicting objectives that must come to some degree of consensus. Inspired by these ascertainments, INTENSSS-PA developed an approach that urges for a holistic energy plan, going beyond a blueprint for allocating renewable technologies and based on the involvement of the wider society. Hence, this approach includes aspects such as the

development of spatial concepts, new co-creating strategies, business cases, societal alliances and institutional changes and formats. To implement this approach, the Living Lab (LL) concept is being applied supported by structured expert support with the involvement of: (i) a technical facilitator within each RLL, (ii) an interdisciplinary expert group to provide methodological tools and guidelines and (iii) a Database of Practice that includes training materials and case-studies to support and inspire the RLLs.

INTENSSS-PA's implementation approach

aims to develop a transnational network of RLLs; established in different levels of governance and in European regional areas with substantial differences on socio-economic, geographical and cultural characteristics. This project organization ensures the applicability, relevance and transferability of the project results.

For more information on INTENSSS-PA please visit: www.intenssp.eu



THE EFFECT OF ELECTRICITY RENEWABLE SHARE IN THE COMPARISON OF PRIMARY ENERGY CONSUMPTION OF COMBINED AND SEPARATE HEAT AND POWER PRODUCTION

IEECP's senior associate Daniele Russolillo, in collaboration with Polytechnic of Turin and ENEA (the Italian Energy Agency), published an article in Applied energy. We bring the summary;

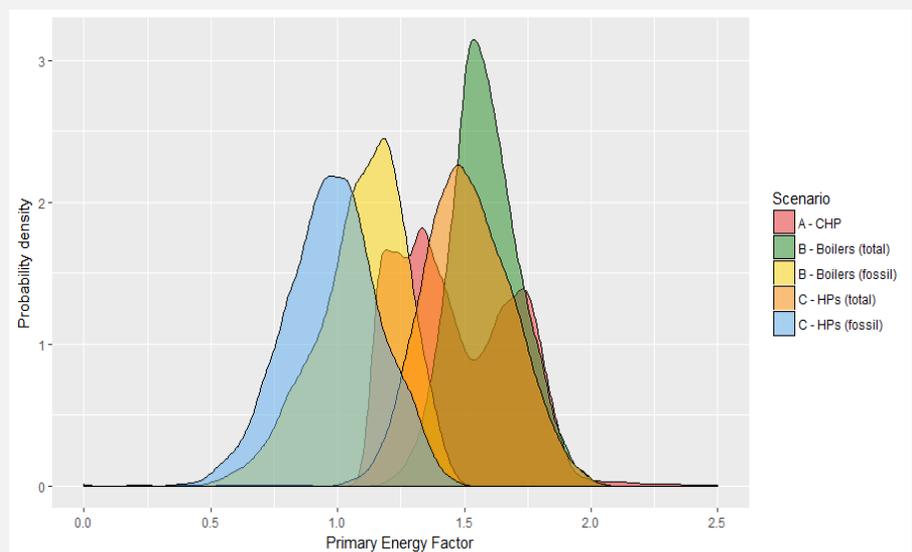
Combined Heat and Power (CHP) generation traditionally guarantees higher energy performances than separate production of heat and electricity. Large size CHP plants are often coupled to district heating networks, to provide efficient and effective solutions for space heating of buildings in urban contexts. Multiple policies, both at European and National levels, promote CHP as an effective technology toward energy savings and environmental benefits at both global and local levels.

However, high renewable shares in electricity production lead to lower primary energy consumption and CO₂ emissions, raising the performance of separate heat and power production. Better performance of electricity production could also have an influence on heat production if heat pumps are used instead of the traditional fossil fuels boilers. As a result, the benefits of CHP could need to be re-evaluated on the basis of a new layout of separate production, which performs significantly better than the traditional layouts (i.e. fossil-based electricity production and boilers).

A new research paper published on Applied Energy* performs an analysis on a case study, considering a large size natural gas combined cycle connected to a district heating network. The hourly analysis from CHP operation data allows a real-life performance comparison with separate production across different scenarios. The results show that also with relatively high shares of RES (around 40% on an annual basis) the CHP solution remains the most efficient. However, the carried sensitivity analysis shows that a slight increase of RES share would allow the separate production to become the best solution for heat and power supply to the final users.

The research work highlights the importance of detailed real-life analyses considering hourly time resolution, as the variability of electricity production from different sources as well as heat and power demand profiles are key aspects toward a system approach on energy analysis.

Read the article in detail:
Noussan, M.; Jarre, M.; Roberto, R.; Russolillo, D., Combined vs separate heat and power production – Primary energy comparison in high renewable share contexts. Applied Energy 2018, 213, 1–10, doi:10.1016/j.apenergy.2018.01.026





THE ENERGY EFFICIENCY DIRECTIVE

Where will the EED talks take us to?

Under the Bulgarian presidency in 2018, the focus is on a resilient Energy Union, on delivering the Clean Energy for All Europeans package, on the Paris agreement and on a better interconnection and diversification (also for the Western Balkans). The presidency has committed to proceed swiftly with the inter-institutional negotiations of the remaining legislative proposals in the Clean Energy for All Europeans package and stressed its readiness to start

trilogues on all files as soon as possible.

On the European Parliamentary level, the debates thus far have reached a broad agreement that all three parts of the Clean for Energy Package (Governance proposal, Energy Efficiency Directive and Renewable Energy Directive) are key to reach the Paris agreement commitment and to fight climate change. As far as the Energy Efficiency Directive is concerned, there is still no compromise across

political groups (including also the Article 7), while efforts are being required for a firm strategy to overcome energy poverty.

Irrespective of the finally decided binding target for the Directive (currently debated to 35%), the Article 7 maintains the energy savings goal of 1.5% and includes the transport sector, which has proven already to be a key driver for energy efficiency obligations in the EU Member States.

EPATEE SETS THE GROUND FOR CONCRETE EXPERIENCE SHARING ABOUT EVALUATION



www.epatee.eu

First outputs of the project are now available online:

10 case studies showing how evaluation helps to know the impacts of policies and to reinforce them:

<https://epatee.eu/case-studies>

A synthesis of the interviews and survey done with stakeholders about how they see the role of evaluation practices in their country, barriers to evaluation and what improvements in evaluation practices are needed:

<https://epatee.eu/main-results>

“One may fear to do an ex-post impact evaluation, because it may show smaller results than those based on engineering estimates. However, it increases the robustness of the results and therefore the confidence funders can have in them”

These first outputs provided grounds for the first experience sharing activities:

First European workshop in Paris (see proceedings: <https://epatee.eu/events/1st-european-peer-learning-workshop-evaluation-practices-energy-efficiency-policies>)

First webinars about what added value evaluations can bring to policies

(proceedings should be available in April).

A synthesis is under preparation to summarize the key messages and main lessons learnt from the experience feedbacks collected. The quote above from one of the interviews done for the case studies provides a good example of key messages.

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ENERGY EFFICIENT BUILDINGS

PLAN. INVEST. RENOVATE!

40% of energy use in the European Union arises in buildings. But three quarters of our building stock is more than 30 years old and thus miles away from modern near-zero energy standards. Without retrofitting these buildings, achieving the EU energy and climate goals is elusive. EmBuild, an H2020 funded project, tackles this challenge by helping Europe's municipalities to draw up local renovation strategies – in line with the obligatory national renovation strategies demanded by Article 4 of the Energy Efficiency Directive.

How to develop such local strategies – be it as stand-alone documents or integral parts of broader sustainable energy plans? EmBuild offers tools for all steps:

1. Getting a good overview of the building stock;
2. Analyzing which buildings to prioritize for deep-renovation;
3. Considering EU and national policies that facilitate or hinder certain renovation measures; and
4. Identifying the most suitable investment model.

Nobody disputes the positive economic and environmental effects of deep renovation. But in times of scarce resources and multiple priorities, "deep renovation of buildings" competes with many other worthwhile measures for resources and political attention. EmBuild attaches great importance to wider benefits of renovations; People get less sick as they benefit from better indoor climate, pupils

learn better in retrofitted schools, local economy gets a boost for being involved in renovation projects etc. In some cases, these wider benefits become the main driver – while energy efficiency becomes the by-product.

EmBuild works in more than hundred municipalities in Bulgaria, Romania, Serbia, Croatia, Slovenia and Germany. Through the Network of Associations of Local Authorities of South East Europe (NALAS) and other networks, EmBuild reaches many more public officers in EmBuild focus countries and beyond.

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 Coordinator of EmBuild,
 Gesellschaft für Internationale Zusammenarbeit (GIZ)

MEET US AT IEPPEC 2018 IN VIENNA

25-27 June; <http://www.ieppecc.org/>

The first results and perspectives of EPATEE will be discussed at IEPPEC (International Energy Policy & Programme Evaluation Conference) 2018. First in a regular session with presentations about evaluation practices in Europe. Then in a panel session with open discussions where policy officers and evaluators will share their views and experience feedback about what policy makers want from evaluation, and how to

prepare specifications to make evaluations successful.

Much more topics will be covered during the conference, including a special plenary session dedicated to energy poverty and inequalities, multiple impacts of energy efficiency policies, discussions on results from EEO schemes and alternative measures, what worked and did not work in policies for buildings, ... For more details, see the conference agenda:



<http://www.ieppecc.org/wp-content/uploads/2018/03/age-nda.pdf>

Don't miss the "early birds" registration fees available until 15th of March:
<http://www.ieppecc.org/vienna-2018/registration-information>

IEECP plays an active role in the preparation of the conference, with Jean-Sébastien Broc being a member of IEPPEC board.

UPCOMING EVENTS

- May 2018 PROSPECT 2nd learning campaign starting www.h2020prospect.eu
- 25 – 27 June 2018 IEPPEC, Vienna <http://www.ieppecc.org/>
- 4 – 8 June 2018, EU SEW – EU Sustainable Energy Week, Brussels <https://eusew.eu/>



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ABOUT

Our members are well renowned researchers and experts in the fields of **climate change**, **energy efficiency**, and **renewable energy policy**.

Our founding principles focus on the generation and dissemination of **scientific knowledge in energy and climate policy**. We have close ties to the actual policy making world (from regional and national governments to the European Commission and the UNFCCC negotiators) to ensure our outputs are useful, pragmatic and evidence-based.

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