





cVPP: community-based Virtual Power Plant Newsletter N°2

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cVPP Partnership meeting in Tipperary, Ireland

Exciting and inspiring times for the community-based Virtual Power Plant. Lots of theoretical and on-site research has already been done in the Netherlands, Ireland and Belgium. Therefore it was time to come together again, to brainstorm and inspire each other. What better place to put our heads together and spark new ideas than in green and lush Ireland. Besides, it was a perfect opportunity to meet the Irish replicating communities, hear their stories and learn from their local experience.

Six months after the start of the project, partners gathered again for their 2nd Partnership Meeting at the Great National Abbey Court Hotel in Tipperary, Ireland, on 11-13 April 2018. This time we were guests of project partners Tipperary Energy Agency (TEA) and Templederry Renewable energy Supply Limited., T/A Community Renewable energy supply (CRES).

Various teamworkshops and information sessions were organised to present partners' progress on the tasks carried out so far, assess the current results and set the direction of different work packages as well as future goals. Stimulating debates took place around defining what a community-based Virtual Power Plant is or what it could be, the nature of the Mobilisation and Replication (MoRe) and how it is informed by the Transnational Design framework and the FIETS elements (Financial,



Institutional, Environmental, Technological and Social). Furthermore insights into national characteristics, regulations, 'experimental rights' and technological feasibility studies were presented and debated. Thought-provoking ideas on user-centred business models were shared, along with the need to involve the user in all stages of development and thus moving away from "selling products" towards "selling services".

Spotlight on Irish Partners

The 2nd Partnership meeting was not solely intended for the cVPP consortium, but was an excellent opportunity for launching the project among local Irish communities interested in cVPP.

The four Irish communities, which are co-operative organisations from various parts of Ireland, teamed up in Tipperary to share experiences and generate creative ideas on how the first community-based Virtual Power Plant in Ireland should be realised.

The developers of the first and only community-owned wind farm (Templederry wind farm) and the electricity supply company CRES outlined their plans for their community-based Virtual Power Plant. Representatives from the Microgeneration Electricity Association of Ireland also shared their experiences, who, along with Friends of the Earth Ireland (FOEI), are sub-partners on the project.

Tipperary Energy Agency (TEA)

Tipperary Energy Agency (TEA) has specific expertise in technically delivering energy projects, establishing community energy projects, interaction with regulators and network companies, and significant EU project experience. TEA is at the centre of the project bringing the expertise to many different tasks including supporting implementation. The Investment of PV generation will be on TEA's parent municipality buildings to which TEA will complete all the permits, tenders and management. TEA and Friends of the Earth Ireland will work to support the interested communities (sub-partners to CRES) in terms of replication, with TEA focusing on the technical aspects (generation, funding, communications architecture, regulation) and FOEI more on communications & prosumer engagement.



TEA will also ensure progress providing input from the community replication process & testing model strategies with local communities. Furthermore TEA will support the communication on the more technical measures of CVPP, including communication with national and regulatory stakeholders.

CRES

Templederry Renewable Energy Supply Limited. t/a Community Renewable Energy Supply, or CRES for short, will be the main investing partner in the Tipperary community-based Virtual Power Plant. CRES has specific experience in the energy market and in the area of community energy in terms of the parent community, developing Ireland's first and only community owned wind farm. CRES will become a consumer-owned, non-profit energy supplier as part of this project and will work on a transnational basis with the other partners to establish a plan for the realisation of the cVPP.

Following this, the role of CRES will focus on the establishment of the community VPP in Ireland. In order to

achieve this goal CRES will invest in energy supply IT systems and software, establishing a route to market for prosumers, developing and establishing the consumer offering and rolling it out to a test bed within one of the participating Irish sub-partner communities. CRES's contribution will also include identifying the substantial regulatory challenges to the establishment of the cVPP in Ireland and will seek approval form the Energy regulator to develop the concept..

Moreover CRES is going to support the sub-partners with the utilisation of the invested CVPP regulatory approval to roll out the CVPP concept in more replicating communities. CRES will also provide the platform for sub-partner SMART M Power to test emerging demand/respons systems, security equipment and cVPP infrastructure.

Friends of the Earth Ireland (FOEI)

Friends of the Earth Ireland will be working with the Irish Communities, CRES and Tipperary Energy Agency to support the establishment of Ireland's first community virtual power plant. Friends of the Earth will engage with politicians and civil servants to ensure Irish policy and regulation best supports communities to generate and sell renewable power, and will work to remove some of the barriers in the Irish system that present unnecessary hurdles for communities to overcome in the energy sector.

As the first of its kind in Ireland, the concept of a community virtual power plant will be almost entirely unknown to Irish people. So Friends of the Earth will work within the target communities to spread awareness of



Pictured at the Energy in Agriculture Trade Show -Sept 2017 | Paul Kenny (Ceo of TEA) Gregg Allen (Ceo CRES), Minister Denis Naughten DC-CAE), John Fogarty (Chairman CRES) Noel Carey (Secretary CRES), Tom Harrington (Former Chair of NTCC)
DCCAE – Department of Communications, Climate Action and Environment | NTCC – North Tipperary County Council

the virtual power plant and help potential customers or members understand how to get involved, and the local benefits of being involved in local power generation and use.

The community virtual power plant will also have an online presence, and Friends of the Earth will support this with promotional and marketing materials and will engage local and national media to spread awareness of the project outside of the target communities with the aim of supporting more and more communities to get involved.

Smart M Power Ltd.

Smart M Power is developing novel methods of community local demand response. The development of these methods as a smart micro-grid to date needs the inclusion of a community energy supplier so that the business case for the additional software and control can be realised through the demand response and system services market.

This will be provided by testing on a small number of buildings the smart demand response and linking this to the electricity market via the cVPP.



The local Irish communities have shown strong interest towards progressing to Renewable Energy Sources (RES), which underlines their motivation to join the cVPP project.

The ambition of partners TEA and CRES is to assist a number of small communities to replicate cVPP. These communities will learn from the test-case model CRES, utilise its regulatory architecture and elaborate a business case to attract prosumers into their own creation of cVPP. CRES will allow for a mechanism by which a community can generate its own power and sell it within the community, while at the same time, remaining in control of its energy and management.

Claremorris and Western District Energy Cooperative Ltd.

Claremorris & Western District Energy Co-operative is based in a rural town in the west of Ireland. They are

planning a biomass and biogas fuelled district heating system to provide heat to a collection of businesses, community buildings and homes in the town and a solar power farm to provide electricity. They have assessed the town's baseline energy demand and created a new spatial mapping tool which demonstrates the energy performance of individual buildings.

Energy Communities Tipperary Cooperative Ltd.

There are eight small communities in the Energy Communities Tipperary Co-operative located in the south west of Ireland who have been working together to deliver retrofitting services for businesses, community buildings and homes in their area and install micro renewable energy at their buildings. In addition to their ongoing energy efficiency work, their plan is to move into renewable energy generation.

Aran Islands Energy Cooperative

The Aran Islands Energy Co-operative is located across three islands off the west coast of Ireland. Their vision is to be energy independent by 2020, and they have been working together to improve the energy efficiency of their buildings and install on site micro generation technology. They are in the process of designing a wind energy development which would consist of one wind turbine and one wind turbine that can provide enough power for all three islands.

The Urban Co-op Limerick

The Urban Co-op in Limerick is a community cooperative that grows and supplies local food to their customers in inner city Limerick, a medium sized city in the south of Ireland. Their desire is to move from producing community food to producing community owned renewable energy.

An Irish network of cVPPs

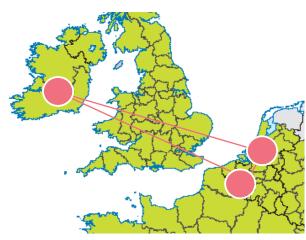
Out of a relatively inhospitable environment for communities involved in sustainable energy in Ireland, these four communities are pioneering and forging a path for others to follow. Their ambitions are to generate locally owned affordable and sustainable energy within their community, for the benefit of their communities. The cVPP offers an opportunity for Irish communities to participate in the energy market that has never existed in Ireland before. Together they will form the first network of cVPP in North-West Europe and will inspire others to follow.

Future challenges

Formulating of a solid structure for the Mobilisation and Replication (MoRe) model is now in full swing, with the TU/e and DuneWorks working tirelessly for making it user-friendly for the Replicating Communities, yet at the same time keeping the depth of knowledge and research embedded at its core.

Project facts

September 2017 to September 2019 € 6.11 million total project budget € 3.66 million funded by ERDF



The cVPP Partnership network

Upcoming events

- The 3rd Partnership meeting will take place from 7 to 9 November 2018 in the lovely city of Ghent, in Belgium. Information on various events will be published on the website cVPP
- 9th International Sustainability Transitions (IST) Conference (TU/e), Manchester (11-14 June 2018).
 read more.
- JustDOit: inspiration day for thinkers and doers Ge-WOONdoen: inspiratiedag voor denkers en doeners (Kamp C), Heist-op-den-Berg, Belgium (28 May 2018) read more.

The cVPP Partners

Do you want to meet all of our partners?

Visit the cVPP-website and watch all partners interviews

http://www.nweurope.eu/projects/project-search/cvpp-community-based-virtual-power-plant/



Contact

Friends of the Earth Ireland Kate Ruddock E kate@foe.ie | T +35 386 1513886



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Linkedin Group: community-based Virtual PowerPlant (cVPP)