

*“P2G is a key technology to bridge the major energy grids and consumers. Our project will help stakeholders find and evaluate the beneficial regions”*

## Project in Short

SuperP2G interconnects leading P2G initiatives in five countries, ensuring joint learning. Each national project focuses on different challenges, where researchers team up with local need-owners to co-create solutions. SuperP2G focuses on improving existing tools, as well as develop a new open tool to help stakeholders evaluate the deployment of P2G (in regional energy systems). European potential, Market opportunities and regulatory issues are also analysed.



### Project Duration

01.11.2019 - 31.10.2022



### Project Budget

Total Budget: € 1.965.356.-  
Funding: € 1.417.301.-



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## Regional P2G projects

Integration of energy vectors is key to ensure cost-efficient inclusion of renewable energy. P2G contributes to the overall efficiency and balancing of the energy system with energy storage and transfer of green energy to end use sectors. Currently, regional commercial P2G-projects have not yet emerged. SuperP2G will ensure that P2G solutions approach commercial implementation by contributing to

- 1) technical optimisation and system integration
- 2) market access and uptake, as well as for
- 3) development of solutions for adoption.

## Joint learning

SuperP2G interconnects leading P2G initiatives in five countries, ensuring joint learning. Each national project focuses on different challenges, where researchers team up with local need-owners to co-create solutions. SuperP2G focuses on improving existing tools including open access, as well as develop a new open tool based on the OptiFlow and H2IndexII tools. This is supplemented with analysis of regulation and markets, as well as stakeholder involvement.



Figure 1 National cases

## Main objectives

The objective of SuperP2G is to lower the threshold for need-owners to validate and put P2G to practice for "Smart Energy Systems", "Sectorial Integration" as well as "Local&Regional development". The sub-objectives of the consortium is to:

- Optimise P2G systems by connecting leading national projects/regions with regard to P2G and their corresponding need-owners in EU with each other to utilise synergies with regard to the evaluation tools and procedures used when evaluating P2G;
- Showcase the potential for P2G in each involved country and derive pan European conclusion with regard to the technology, Market conditions and Stakeholder adaptation; and
- Raise visibility and knowledge levels about the possibilities with P2G throughout Europe and especially in the involved countries

## Expected main results

The results include a set of tools and procedures to foster implementation of P2G in the planning as well as in operation of P2G in integrated energy systems. These tools, databases and methodology are improved by the insights of the different case studies as well as the cross-insemination. Furthermore, the project will develop a new open and common European best-in-class standard tool for P2G-evaluation based on OptiFlow (FutureGas) and H2IndexII (HYPOS) and with added value from the other national developments.

Other results include scientific papers from the different case studies, including models for assessment of power-to-gas systems.

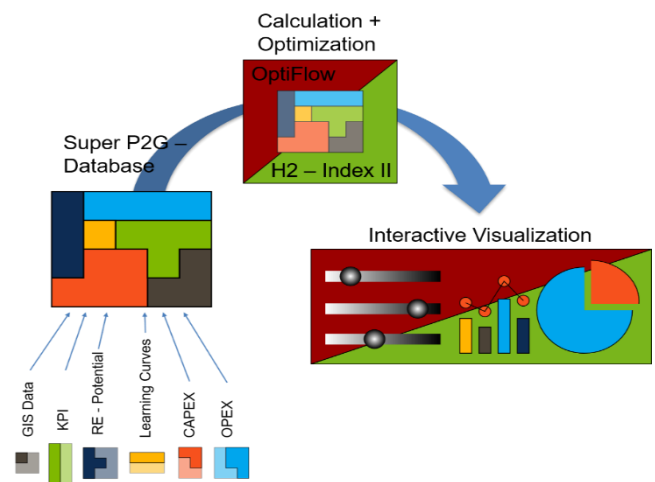


Figure 2 Cross Insemination overview

## Project Partners



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### About ERA-Net Smart Energy Systems | [www.eranet-smartenergysystems.eu](http://www.eranet-smartenergysystems.eu)

The transnational joint programming platform (JPP) ERA-Net SES unites 30 founding partners from European and associated countries. It functions as a network of owners and managers of national and regional public funding programs in the field of research, technical development and demonstration. It provides a sustainable and service-oriented joint programming platform to finance transnational RDD projects, developing technologies and solutions in thematic areas like smart power grids, integrated regional and local energy systems, heating and cooling networks, digital energy and smart services, etc.



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