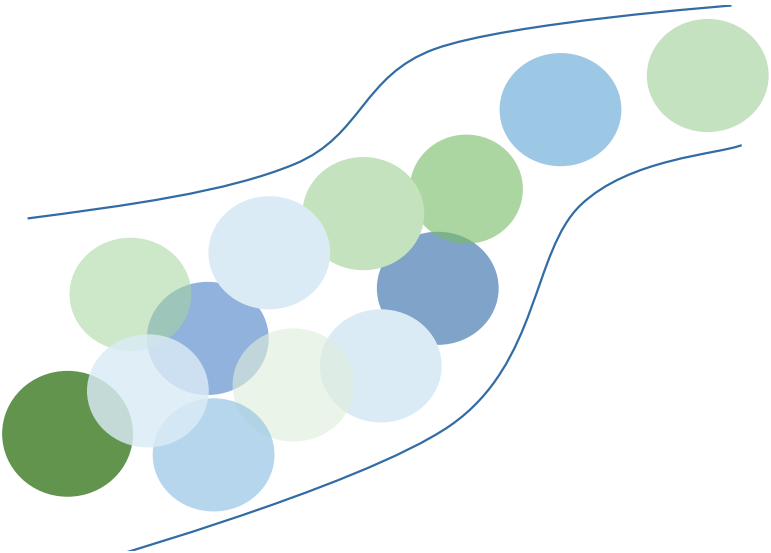
REEEM

Modelling the transformation of the European Energy System



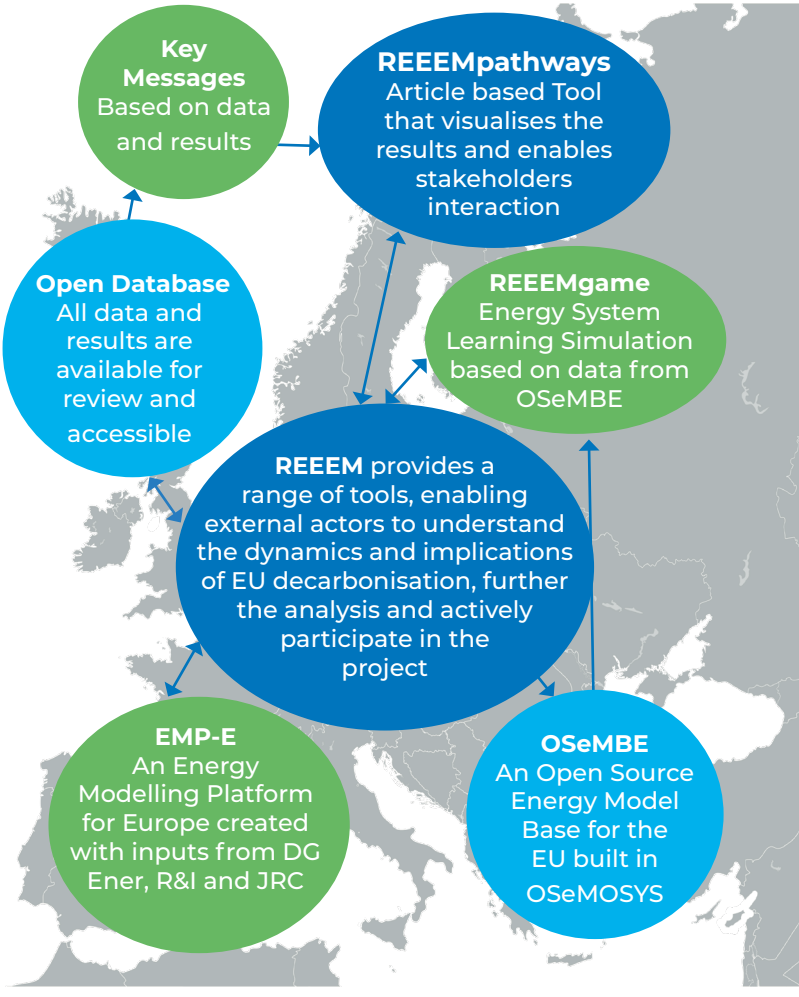
What is REEEM?

REEEM is a Horizon 2020 Research and Innovation action, funded under the Low-carbon Energy call LCE21-2015. It provides a comprehensive and transparent assessment of the implications of EU decarbonisation strategies through a large modelling framework.

Its four key activities are:

1. Co-design of deep decarbonisation pathways for the EU and its Member States
2. Development of an integrated assessment framework spanning several sectors and spatial scales
3. Creation of platforms for informing policy decisions.
4. Creation of transparency in model-based assessments.

Outcomes of REEEM



Decarbonisation pathways

3 Deep decarbonisation pathways are assessed:

Coalitions for a low carbon path: energy carrier suppliers take on the highest burden in the decarbonisation of the EU energy system, while consumers observe it mostly passively or respond to policies as they come.

Local solutions: consumers (especially households) engage in the transition towards a low-carbon energy system, by choices on end use appliances, energy efficiency measures and transportation technologies.

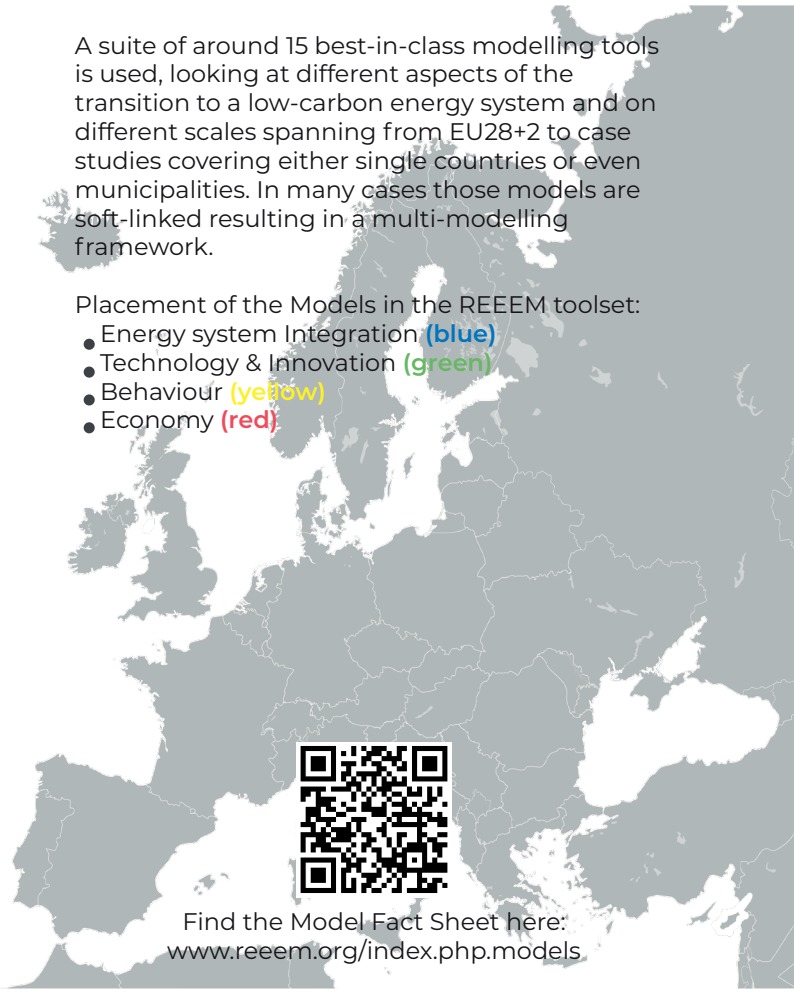
Paris Agreement: the EU undertakes an ambitious decarbonisation effort, with a target of 95% reduction of CO2 emissions by 2050. This overshoots the Paris Agreement pledges. Both energy carrier suppliers and consumers engage in the challenge.

Multi Modelling Framework

A suite of around 15 best-in-class modelling tools is used, looking at different aspects of the transition to a low-carbon energy system and on different scales spanning from EU28+2 to case studies covering either single countries or even municipalities. In many cases those models are soft-linked resulting in a multi-modelling framework.

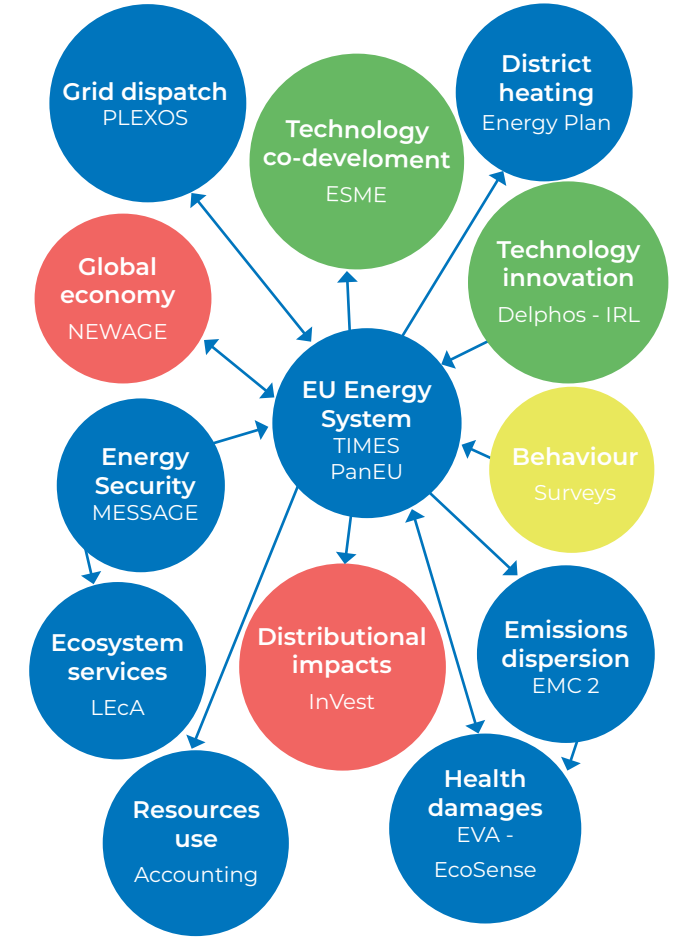
Placement of the Models in the REEEM toolset:

- Energy system Integration **(blue)**
- Technology & Innovation **(green)**
- Behaviour **(yellow)**
- Economy **(red)**



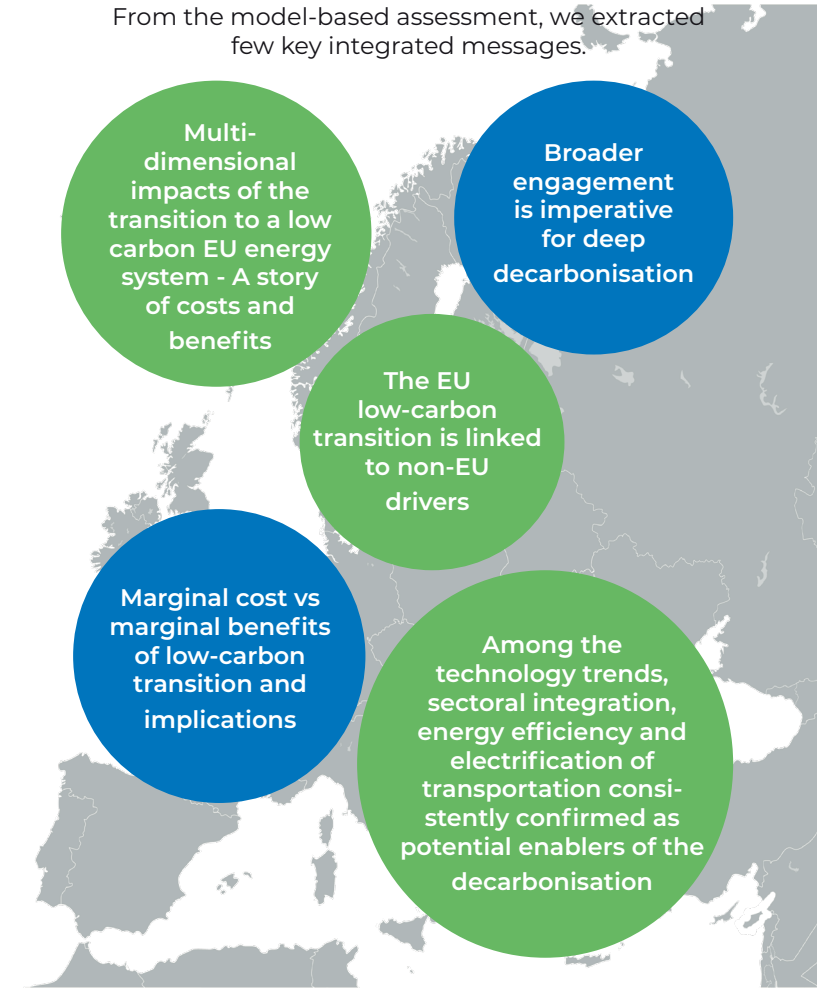
Find the Model Fact Sheet here:
www.reeem.org/index.php.models

Multi Modelling Framework



Key messages

From the model-based assessment, we extracted few key integrated messages.



REEEMpathways

REEEMpathways is an article-based open access online tool, developed to visualize the results and key messages of the project and to enable stakeholder interaction.

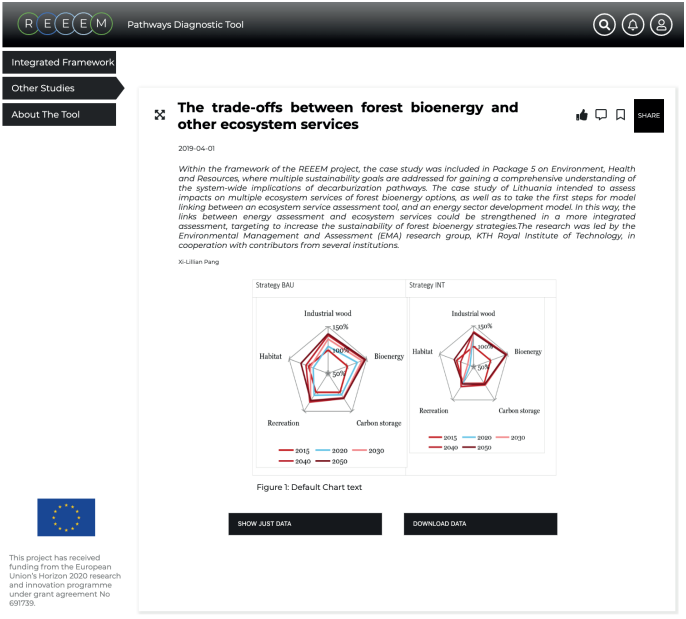
REEEMpathways is populated by data stored in the REEEM Pathways Database and provides public access to modelling insights from the project.

The tool allows REEEM partners to publish and update their own articles providing multiple types of static and dynamic charts to choose from to visualize their own key messages and the data behind it.

REEEMpathways has been integrated with Twitter and this enables discussion of results/key messages and allows other modellers to contribute with their knowledge.

Following the concept of the REEEM project, this allows policy makers and stakeholders to explore and compare possible decarbonization pathways and hopefully this can assist in understanding the effects of and requirements for energy system changes.

REEEMpathways



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www.pathways.reeem.org

REEEMgame

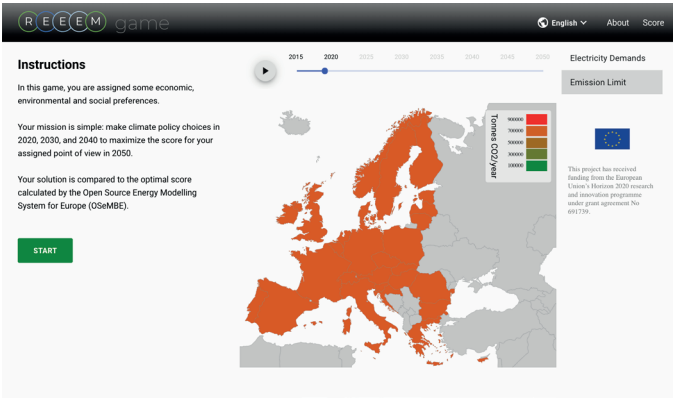
REEEMgame is developed to disseminate the data behind the simplified Open-source Engagement Model: OSeMBE and the purpose is to support learning sessions with stakeholders and provide a low-threshold understanding of energy system dynamics.

REEEMgame simulates how the future will look depending on how the player decides to act and the goal is to maximize the score in 2050, considering the social, environmental and economic dimensions.

At three points in time (2020, 2030, 2040) decisions need to be made concerning the emission reduction pathway, the investment in Renewable Energy Technologies, and the trans-border electricity transmission between European countries.

The game aims to let the player interactively discover how (policy) decisions might affect the development of the European electricity sector in the transition to a low carbon system.

REEEMgame



www.game.reeem.org

REEEMpartners

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