



Objectives of the Sustainable finance regulation

- 1. reorient capital flows towards sustainable investment in order to achieve sustainable and inclusive growth;
- 2. manage financial risks stemming from climate change, resource depletion, environmental degradation and social issues;
 - Natural disasters' increasing costs
 - Societal & reputational impacts (income inequality, poor working conditions...)
- 3. foster transparency and long-termism in financial and economic activity.
 - inform market participants, help to steer companies in a more sustainable and longterm direction.
 - reduce the undue pressure for short-term performance in financial and economic decision-making

Sustainable Finance Taxonomy regulation

Regulation entered into force in July 2020.

Its objectives include:

- An EU classification system the so-called Taxonomy to determine whether an economic activity is environmentally sustainable;
- An EU Green Bond Standard;
- Benchmarks for low-carbon investment strategies; and
- Guidance to improve corporate disclosures of climate-related information.

In practice the taxonomy regulation provides a list of technologies eligible to be considered as a sustainable investment (e.g. RES technology, Nuclear is for instance not included).

Proposes criteria for these technologies in terms of LCE, "do no harm criteria"



Criteria for geothermal energy

- **geothermal electricity**: "life cycle emission" threshold of 100gCO2e/kWh, decreasing to 0gCO2e/kWh in 2050; requirement of compliance with the Water Framework Directive, Air Quality regulations and other European Environmental legislations.
- **geothermal cogeneration or geothermal heat**: 'The threshold is calculated from the relative production of heat and power, and based on the declining power generation threshold of 100 gCO2e/kWh(e), and a notional heat threshold of 30 gCO2e/kWh(th)' declining to net zero for both metrics by 2050.
- geothermal heat pumps to justify a Seasonal Coefficient of Performance of at least 3.33 to be eligible



Issue from the perspective of the geothermal industry

- Discriminatory criteria: geothermal and some other technologies are submitted to a EPF. Some RES technologies are not.
- Application of the EPF:
 - Should be aligned with other RES technologies
 - Must reflect best practices: natural emissions not accounted for the geothermal project (see GEOENVI methodology).



Next steps: Platform on Sustainable Finance

- **Platform on sustainable finance**: established by the Taxonomy regulation it will determine the details of the Taxonomy and its application by the end of 2020 and beyond.
 - It is key for the geothermal industry to engage with the platform, almost exclusively made up of financial stakeholders



- Mechanism set up in the framework of the Governance of the 2030 Climate and Energy policies
- Operational from January 2021



A) For project developers – a system of EU-wide tenders will identify suitable renewable energy installation projects to receive support from the mechanism.

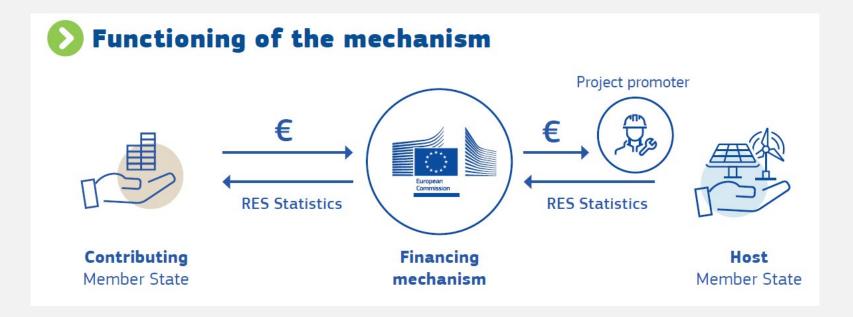


B) For private investors – they can invest in the mechanism in order to broaden their sustainable energy portfolio and benefit from the Union-wide green label.



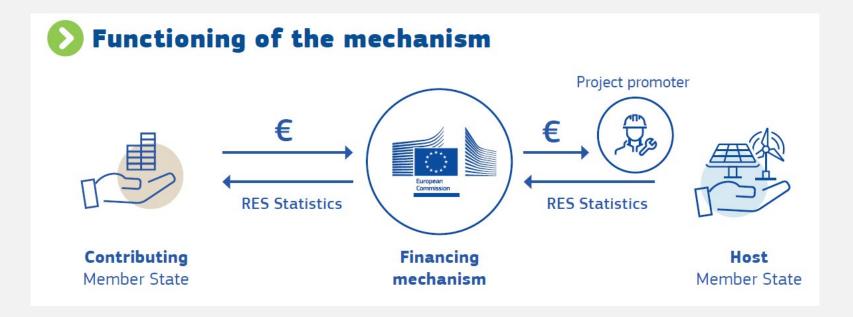
C) For member states – they can either host a project, without needing to provide finance themselves, or contribute financially to a project located in a different member state.

Designed to enforce "gap filling" in the progress towards RES targets at the EU level





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- Opportunities for geothermal energy projects:
 - Large projects may benefit from tendering scheme (insofar as the tendering design is suitable)
 - Geothermal derisking schemes may be financed via this programme [which puts a strong emphasis on de-risking finance]
 - Financing for regional heating and cooling schemes (e.g. subsidised loans for geothermal heat pumps, "ESCO model" for heat as a service...)
- NEXT STEPS: Focus on the tendering design to ensure it allow geothermal projects and schemes fit for geothermal to benefit.