

Work package 5

Engage with geothermal market actors to implement tools



How Geothermal market actors could implement GEOENVI tools



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Geothermal market actors play a crucial role in spreading out the LCA culture

- We would like to ensure a broad implementation of the final **adoption of LCA approach**.
- **Stakeholder engagement** is an key factor to guarantee that
 - the proposed recommendations/changes are going to bring growth to geothermal energy exploitation
 - they will be sustainable for long term, keeping in mind to ensure the **environmental sustainability of a geothermal project life cycle**.
- Accordingly, different engagement scenarios are going to be carried out for some targeted stakeholders.
- The first step is to map relevant **geothermal market actors** in the countries listed in the case study, and other relevant EU countries. These stakeholders are all parties that affect or are affected by geothermal activities and their mapping will be carried out to identify their entity and relationship with geothermal energy and projects.
- After mapping, stakeholders will be involved and stimulated through informative materials on GEOENVI and on the opportunities to become aware about a **simplified LCA protocol** to be applied to further specific geothermal case studies.
- To be able to successfully implement the recommendation developed in previous stage of Geoenvi, specific tools and communication measures are going to be developed according to the engagement scenario.
- Recommendations will allow to follow **harmonized guidelines and to assess environmental impacts**, with the final aim of improving the whole sustainability performance of geothermal projects.
- The adoption of these recommendations will also be promoted, when possible, by incentive mechanisms.
- Identified draft tools will be tested and improved according to stakeholder feedbacks, which will be asked to endorse these instruments.
- The objective is indeed to see **market actors adopting the GEOENVI toolkit (methods and models) for environmental impact assessments and on life cycle assessment approaches**.

Objectives: Implementation of the final adoption of GEOENVI toolkit

- **Mapping relevant geothermal market actors**
 - ➔ i.e. Stakeholders affecting/affected by geothermal activities
 - ➔ Identify their entities and relationships with geothermal energy and projects.
- **Stakeholder engagement is important to guarantee:**
 - ➔ the proposed recommendations/changes are going to bring growth to geothermal energy exploitation
 - ➔ the environmental sustainability of a geothermal project life cycle.
- **Prepare and distribute informative and communication materials on GEOENVI and benefits.**
- **Recommendations and harmonized guidelines in estimating environmental impacts, to improve the whole sustainability performance of geothermal projects.**
 - ➔ Incentive mechanisms would be helpful.
- **Test and improve draft tool according to stakeholder feedbacks**
 - ➔ endorsement of final propose tools.
- **Look for market actors adopting the GEOENVI toolkit (methods and models) for environmental impact assessments and on life cycle assessment approaches.**

Task 5.1: Geothermal market actors mapping

(GEORG) (months 6-15)

- **Mapping** focused on stakeholders having highest potential towards the achievement of project.
- **Identify** → stakeholders and their relationships with geothermal projects.
 - past known experiences with the stakeholders that are relevant to the engagement strategy
 - i.e. geothermal developers, sub-contractors (drilling companies) and investors.
- **Evaluate** → Their relevance to the regulations → their openness to changes.
- **Engagement scenarios** carried out for certain stakeholders.
 - This could include training, workshop, data collaboration, capacity building, etc.
- **Impact on the adoption of the LCA** methodology, in terms of additional head count for stakeholders.
- All the partners will map the **key stakeholders** within the overarching European geothermal energy market:
 - project developers and operators (including energy cooperatives), → services companies, → NGOs, public & → private financial institutions national-european and international, → education bodies, → journalists, → representative from the civil society.
- They will be invited to join the webinar (by EGEC, on month 10) to present first results on WP2.

Task 5.2: Towards the adoption of the recommendation for European life cycle assessment approaches, and environmental impact methodologies of geothermal (OS) (months 16-30)

- **Task 3.4: one workshop per key region to test the interest towards the simplified model (around month 18)**

1. Select 2-3 stakeholders per region → committed in adopting the guidelines and the protocol for the simplified models.
2. Committed stakeholders will participate to a training seminar to explain and make available the adoption of these guidelines → one per country, → organized by national lead partners and COSVIG for Italy - month 21

Training materials: Video training, brochures and other communication measures translated in national languages (by EGEC and COSVIG)

3. **Test Period**: tests on the proposed tools for LCA (from WP3) are going to be performed (months 22 to 25).

A web-based platform (by OS), in the project's website, where stakeholders can upload their simplified model LCA implementation results. → to help monitoring the test period and validating the result.

Thanks to feedbacks from the stakeholders, → improvement of the models, → to update the guidelines and the protocol

4. **Feedback report**: At the end of the test period reports are going to be composed and distributed back to the stakeholders and the decision makers. During the transition period, one trained expert will be the contact point for stakeholders' question.

5. **Initiating transition period**: → the changes are going to be spread to other European countries.

- To a faster transition spreads to the European community, the inventories obtained will be integrated to Ecovinvent database (or other database).
 - In this phase changes are going to be spread also to other European countries, in liaison with EGEC.

Task 5.3: stakeholder involvement: adopt the tools

(COSVIG) (months 20-30)

- **Adoption of the GEOENVI simplified models** on LCA by **all** market actors.
- **Stakeholder engagement** at the national level will pivot around **2 workshops**.
 - ➔ The first workshops will serve to inform the participants about the project and strengthen their engagement in the process, (month 23)
 - ➔ The second round of workshops will be dedicated to present and discuss the solutions / actions derived from the project, (month 30)
- Experiences from the tests done in task 2 will be shared with all market actors.
- **Workshop** will be organised
 - by COSVIG and national lead partners
 - with the scientific contribution of ARMINES,
 - in each key regions of the 6 target countries.
- Market stakeholders mapped in task 1 will be invited to inform and **investigate the interest in using the LCA guidelines**.
- Discussion of the **protocol to establish simplified parametrized model** with the geothermal community and the LCA community.
- **WP 5 workshops might be organised jointly with WP 4 workshops with decision-makers.**

Deliverables

	Title	Partner in charge	Deadline
D5.1	Reports on market actors mapping and engagement strategies	GEORG	Month 15 (Dec 2019)
D5.2	Video training, brochures and training guidelines and incentive mechanisms to promote simplified models to market stakeholders (in national languages)	EGEC	Month 15 (Dec 2019)
D5.3	Updated protocol to deliver simplified models for geothermal installations	OS	Month 30 (Apr 2021)
D5.4	Feedback report with commitment letters from market stakeholders	COSVIG	Month 30 (Apr 2021)
D5.6	Report on training seminar	OS	Month 30 (Apr 2021)
D5.6	Web-based platform for stakeholders (in national language and into the GEOENVI website)	EGEC	Month 30 (Apr 2021)



THANK YOU!!

CoSviG

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