Modernising the EU’s batteries legislation - Public consultation response

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EGEC is the voice of the European geothermal industry. It is a not-for-profit organisation representing over 120 members across the entire value-chain located across 28 countries. Geothermal energy provides renewable heating, cooling, baseload electricity and sustainably sourced raw materials everywhere. It is included on the European Transparency Register number: 11458103335-07 Further information can be found at www.egec.org.

We welcome the opportunity to contribute to the process of modernising the EU’s batteries legislation, to drive the development of a sustainable batteries value chain. For EGEC, a European sustainable batteries value chain must be first and foremost compliant with the imperatives of decarbonisation and those of minimising the environmental impacts. For this reason, EGEC acknowledges the emphasis put on recycling.

Lithium is one of the key raw materials of the batteries value chain, and a global race is ongoing to secure the supply of this critical raw material. The EU is mostly shut out of the battery manufacturing supply chain, notably upstream and mid-stream steps linked with lithium extraction, refining and cathode/anode production. This creates a vulnerability for the European battery value chain in a context of exploding demand.

To develop a domestic production of lithium must however be done in a way that is environmentally friendly and includes local communities. Geothermal lithium is a solution.

Geothermal energy is a renewable energy source in form of heat beneath the surface of the earth. For decades the presence of materials, such as lithium, in the geothermal brine has been know. High temperature lithium-rich brine can be pumped to the surface from a geothermal reservoir. The heat is removed from the brine for use in renewable electricity/heat and whilst raw lithium carbonate – the form of lithium used in batteries for uses such as ICT or electric vehicles – is converted into numerous products. A frantic race is on to secure the technology and the supply of geothermal lithium, with the USA, New Zealand, Japan and Latin America investing in many projects. Europe, which is also on the starting line cannot be late, as it has a tremendous resource potential and several projects already under way.

The multiplicity of advantages from geothermal energy can be a factor of competitiveness for the European economy, where a single renewable resource can provide security of supply for several crucial inputs for the decarbonisation of the EU.

Geothermal lithium projects are a solution to the environmental impact of the production of raw materials for batteries that provide value for local communities, notably in the form of locally sourced renewable electricity and low cost heating and cooling for industry, businesses and households.
Geothermal lithium technologies are a process that is much less resource intensive than alternatives, making it a better fit for densely populated areas such as the EU, and to provide
the best environmental protection possible. It is a 0-carbon process, with minimal water and land consumption.

The Modernising of the EU’s battery legislation can contribute to establishing the policy architecture to deliver self-sufficiency in geothermal lithium production requires:

- **Target: 25% of lithium used in EU battery manufacture should come from indigenous geothermal resources by 2030.** It should contribute to the -55% climate target in 2030 as either a stand-alone target or through an additional increase in the Renewable Energy Directive.
- Incentivising extraction and lithium processing capacity: linkages with the TEN-E and TEN-T should be made to **classify geothermal lithium and lithium processing plants as critical to European transport and energy networks** to enable Projects of Common Interest classification and access to Connecting Europe Facility funding. This will facilitate establishment of the full value-chain of lithium-ion batteries in the EU.
- **Mapping EU resources:** Funding for mapping geothermal lithium resource is a necessary first step in deploying this technology. Some Member States are already planning this through their National Energy and Climate Plans, and EU financing schemes such as the Connecting Europe Facility can fund the establishment of this basic knowledge infrastructure.
- **Reducing administration and licensing for geothermal lithium investments:** The planning process for geothermal lithium plants must be streamlined, without undermining the robustness of the environmental standards. The Renewable Energy Directive, TEN-E and Smart Sectoral Integration legislation should address this issue.

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