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# Administration



MADE IN  
EUROPE



Learn more about **GREENPEG**:  
We offer to the administration Inhouse  
Seminars, Meetings and Excursions

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## Exploration “Made in Europe” – the EU GREENPEG project at a glance

Many of the raw materials for green energy production can be sourced from lithium-caesium-tantalum (LCT) and niobium-yttrium-fluorine (NYF) pegmatites, a unique ore body being relatively common in Europe. The pegmatite deposits have the size and grade to especially attract small mining operations. GREENPEG aims at reducing exploration costs and impact on environment by developing two innovative and competitive toolsets, including:

- three new instrumental techniques and devices (piezoelectric sensor, helicopter-complementary nose stinger magnetometer, drone-borne hyperspectral imaging system),
- two new datasets and workflows for prospect scale (<50 km<sup>2</sup>) and district scale (50-500 km<sup>2</sup>) exploration.

***Validation will be ensured from industry-led trials at locations in Norway, Finland, Austria, Portugal, Ireland, and Spain testing different landscape, vegetation and climate environments, and geological settings.***



Wolfsberg lithium mine project, Carinthia, Austria

## Regional Enhancement in smart specialization

To foster mining from domestic mineral resources will require further geological knowledge in the regions. Smart exploration tools combining the experience from the past with the latest know-how such as GREENPEG results will contribute to lower costs in surveying and technically to the encouragement of regional geological surveys in the territorial mapping. GREENPEG tool sets and work flows tailored for LCT and NYF pegmatites will specially contribute where regional enhancement includes mobility and energy objectives, particularly in the themes of e-mobility, batteries and new materials in the generation of renewable energy.

***GREENPEG will feed the EU raw materials data base in support of responsible and secure sourcing and attracting investments.***



Drone borne geophysics at Tysfjord test site, Northern Norway

## Lowering the burden: easing the Environmental and Social Impact Assessment (ESIA) process

Under European Law exploration projects are required to produce an environmental and social impact assessment (ESIA) before exploration goes ahead. This is stipulated by the country's legislation and can be subject to even more requirements and obligations to fulfill during the permitting process at member state level or regional level. GREENPEG will establish and distribute an overview of best practice in environmental and social governance, including the findings from latest EU Coordination and Support Actions, and international performance standards. For each main GREENPEG methodology being applied in the project the following assessment criteria will be collected and assessed:

(1) holistic carbon footprint; (2) waste generation; (3) best site utilisation to minimize disturbance; (4) environmental and social practices in the planning, design and implementation of the exploration and development activities; (5) regulatory requirements and conditions that may apply to permits and licenses; (6) risk assessment for the workforce and local communities; (7) use of water and energy; (8) impact on the local ecological system; (9) practicing of ethical standards.

***GREENPEG approach in pegmatite exploration will lower expenditures in the process of ESIA and accelerate the prospection and exploration by reducing costs in staffing and operation.***