



# MEET THE GSEU

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## Mapping & Managing Sustainable GeoEnergy Capacities in Europe

### GeoEnergy in GSEU

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# Outline GeoEnergy in GSEU

## Sustainable Geo-Energy Capacities (SGEC):

Geothermal energy and storage of heat and cold

Subsurface storage of CO<sub>2</sub>

Subsurface buffering of sustainable energy carriers (hydrogen, compressed air)



## Inventory of information on SGEC's.

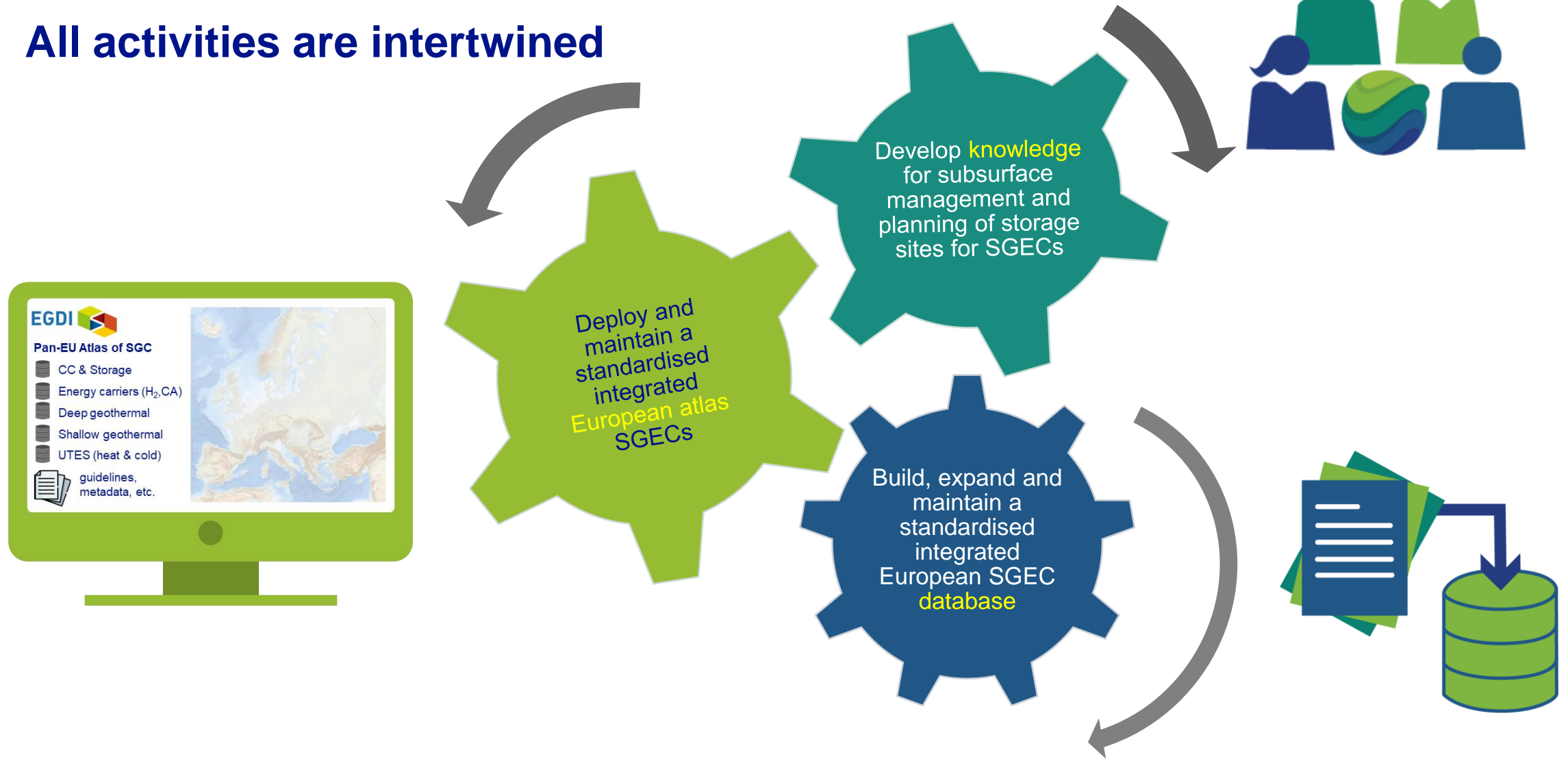
Build, expand and maintain a standardised integrated European SGEC **database**

Deploy and maintain a standardised integrated **European atlas** SGEC's

Develop **knowledge** for subsurface management and planning of storage sites for SGEC's

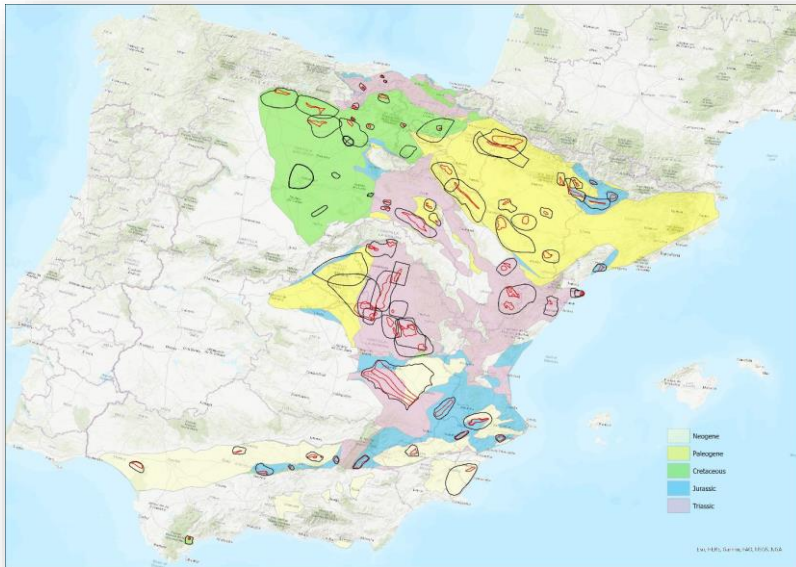


# All activities are intertwined



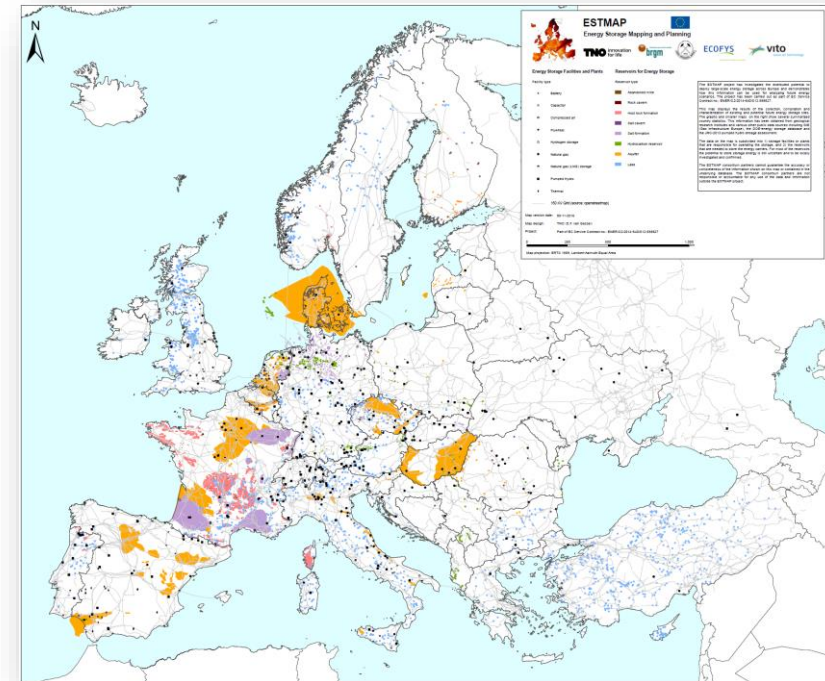


# Examples



- H2 storage
- Subsurface Sites
- Porous media/
- Play/area/structure
- H2 capacity

# ESTMAP: Energy Storage Mapping & Planning



- On Surface Sites
- Subsurface Sites
- Existing and Potential Sites
- Standardized Database
- Technology KPI's
- Application in EU systems models

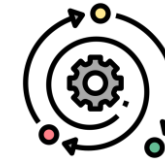


# Objectives & expected impacts



## Objectives

Provide **pan-European dataset and map inventories, characterisations and knowledge** of geothermal energy resources, underground capacities for CO<sub>2</sub> sequestration and the temporary storage of sustainable energy carriers.



## Impacts

- Improved **planning, regulation and decision-making** to enable a responsible and effective uptake of GeoEnergy.
- Improved **alignment of cross-border GeoEnergy developments**.
- **Accelerate efficient and competitive uptake** of clean and sustainable GeoEnergy and storage technologies.







# Stakeholders

- Improved **planning, regulation and decision-making** to enable a responsible and effective uptake of GeoEnergy.
- Improved **alignment of cross-border GeoEnergy developments**.
- **Accelerate efficient and competitive uptake** of clean and sustainable GeoEnergy and storage technologies.





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The background image is a landscape photograph. In the foreground, there is a large, dark, layered rock formation, possibly a cliff or a natural archway. Beyond it, a bright blue lake is nestled between green, rolling hills. The sky is a deep blue, suggesting a clear day. The overall scene is a mix of natural geological and scenic beauty.

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