Atlas of European ornamental stone resources

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This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 731166
Countries in Europe that are members of EuroLithos or other, connected projects
Why Ornamental stone?

• Ornamental stone has been and is important to European architectural heritage – our common heritage
• Ornamental stone exploitation and production is important SME industry many places – our jobs and skills
• Ornamental stone has low emissions compared to other construction materials – our environment
Ornamental stone – the «new» wonder material in a time where sustainability counts?

Ornamental stone = quarried rock, cut rock = low energy consumption
All other non-organic building materials = blasted rock, crushed and milled, processed and sorted, mixed, glued together = high energy consumption
Why Eurolithos?

• Where are the most important resources and quarries in Europe?
• What are their qualities?
• How can we prevent these to be sterilised for future exploitation?
• How do we valorise such resources from a societal point of view?
Production

Production in EU: approx. 10 bn euro
EU part of global trade: approx. 50 bn euro
EU import: approx. 25-40 bn euro

NB: information sources are scarce and not official
Important trends

• Sustainable stone production: EPD, LCA, electrification, zero waste
• Responsible sourcing
• Awareness on heritage values
• Volumes of 19th/20th century constructions in need of repair and restoration
  = right time for bringing european stone resources to the foreground
Making a digital atlas

Spatial data and maps of stone resources

The location of geological units containing resources of ornamental stone and quarries located therein
Making a digital directory

Connect the spatial data to unique ID and technical/geological characteristics

Physical, petrographical and geochemical properties, and links to other databases
Making guidelines for value assessment

From case studies: non-economic value assessment of ornamental stone resources for resource management

Large quarry areas/landscapes
Connecting quarries and built heritage
Intangible heritage
Sustainable quarrying
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12 case studies, 9 countries
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Communication and dissemination
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Web:

www.eurolithos.org

https://geoera.eu/projects/eurolithos1/
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Facebook: https://www.facebook.com/europeanstonestories/

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