

Deep geothermal energy for sustainable greenhouses

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Province of Antwerp
Team EU Funding

Province of Antwerp

- Regional Authority in the North of Belgium
- 1.800.000 inhabitants
- Expertise:
 - Horticulture, poultry and cattle research
 - Management of Industrial sites
 - Sustainable building techniques
 - Mobility (e.g. Big Data on cycling)
 - Living lab for Care professions
 - Cooperation with Port of Antwerp
 - Partnership with China since 1982
 - ...
- Large offer of possible demo locations: industrial sites, schools, heritage,...
- Running EU projects in H2020, COSME, Interreg, Erasmus+,...



Greenhouse cluster: SPARK

- Municipality of Merksplas: Largest and most innovative greenhouse cluster in Belgium
- Energy and heat are important factors in horticulture. A partially shared energy policy and the uptake of renewable energy sources can make the area more sustainable.
- Temporary trading company SPARK: Sustainable partnership of 9 greenhouse owners (90 ha)
- Close cooperation with Department of Agriculture – Province of Antwerp.
- Deep geothermal energy feasibility study done by VITO

720-750m

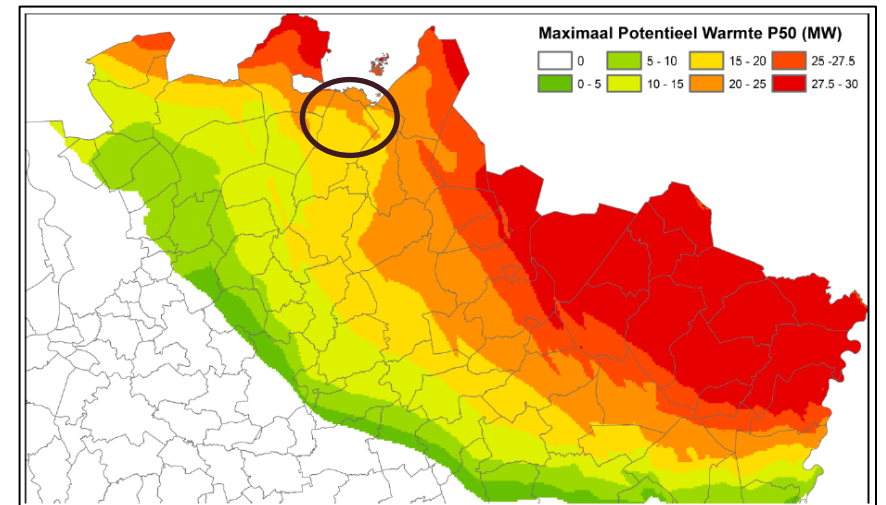
T: 35-37°C

P: <0,5MW

1930-2030m

T: 90-95°C

P: 12MW



Objectives

- GEOTHERMICA proposal submitted Nov 2017:
Effect of deep geothermal drilling on the surrounding area
- H2020 RES12 proposal submitted Febr 2018:
Symbiosis between geothermal energy and other renewable energy sources
Possibilities for residential heating
- Aim future projects: **testing, piloting, demonstrating,...**
- Next to geothermal energy, **built in PV** are interesting for greenhouses.

H2020 calls we go for!

Energy

- LC-SC3-EE-2-2018-2019: Integrated home renovation services
- LC-SC3-EE-6-2018-2019: Business case for industrial waste heat/cold recovery
- LC-SC3-EE-8-2018-2019: Capacity building programmes to support implementation of energy audits
- LC-SC3-EE-16-2019: Supporting public authorities to implement the Energy Union
- LC-SC3-RES-8-2019: Combining Renewable Technologies for a Renewable District Heating and/or Cooling System
- LC-SC3-EC-1-2018-2019-2020: The role of consumers in changing the market through informed decision and collective actions

Thank you!

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