



Geothermal heat in the Netherlands

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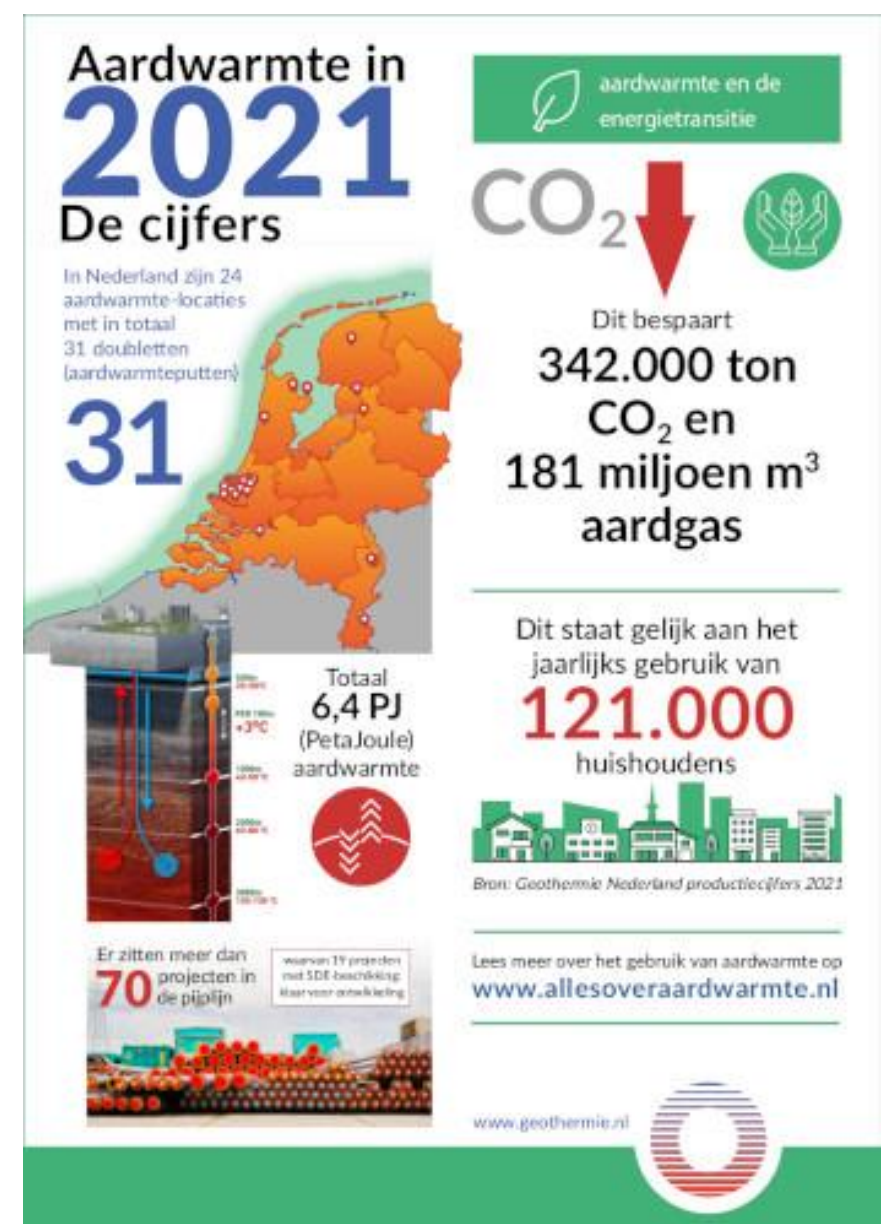
Together with our members, we are committed to ensuring the availability of sustainable and affordable (geothermal) heat for citizens and companies.



Geothermal energy in the Netherlands

- 24 locations
- 31 doublets
- 6.4 PJ heat
- 342.000 tonnes CO₂ reduction
- 181 million m³ natural gas reduction
- Equals 121.000 households

- Over 70 projects in development towards 2030



Geothermal heat in the agri-food sector

- Since 2012 geothermal heat projects – pioneers
- 2021 status: 20 locations at greenhouses



Political context for Geothermal heat in de agri-food sector

- Climate Agreement:
 - 35 new projects in 2030
- Government Policy:
 - 4.5 Mton CO₂ reduction 2030
 - Towards 2040 climate neutral
- Recent Sector document:
 - Geothermal is our main solution



Challenges to overcome

Financial:

- Bring cost down
- More suitable subsidy system
- Price natural gas and CO₂

Societal:

- Better legislation and permitting
- Social acceptance - risk



Technical:

- Better underground knowledge
- More efficient EPS
- Smarter organisation of drilling
- Heat storage



Opportunities

- Hybrid installations:
 - combine greenhouses with district heating and storage
- Sector under large stress:
 - New approach for government support (away from cheap gas)



Conclusion

- Geothermal heat will play a major/key role in the transition of greenhouses towards a sustainable sector.
- Heating hubs are being developed in all major greenhouse areas to provide both greenhouses and the built environment of sustainable heat.
- Some areas (especially South East) need urgently more research in order to better understand the subsoil





More information

www.allesoveraardwarmte.nl | www.geothermie.nl