



Key Messages - Socio-economic Analysis of Well Reuse (TRANSGEO Deliverable 1.2.3. Municipal use)

A. Target Groups



The main municipal users of heat from reused wells are::

1. District heating systems
2. Small residential communities
3. Tourism, balneology, and spa facilities

B. Energy Potential



Applicable well-reuse technologies include:

1. Closed-loop systems; DBHE/BTES → suitable for small-scale heat demand
2. Open-loop systems; ATES/HE/EGS → suitable for municipal system

C. Economic Findings



1. significantly lower investment than drilling new geothermal wells.
2. Typical reuse investments range for DBHE/BTES/ATES, 0.23-0.63 million €
3. Typical reuse investments range for HE/EGS, 0.59-1.72 million €
4. Drilling a new geothermal well typically costs EUR 2.25-8.34 million €

D. Socio-economic Benefits



1. Increased local energy independence
2. Reduced capital expenditure and project risk
3. Lower CO₂ emissions and fossil fuel replacement
4. Reuse of existing infrastructure with limited environmental footprint
5. Sustainable and environmentally friendly solution

E. Key Challenges



1. Well integrity and availability of historical data
2. Legal, ownership and permitting procedures
3. Fluid chemistry, scaling, and reinjection issues
4. Public perception and regulatory complexity (especially for EGS)

F. Drivers for Implementation



1. Transparent communication with local communities
2. Improved access to well data
3. Clear legal frameworks for well ownership and reuse
4. Financial incentives and EU/national support schemes



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