



## ENERGY POTENTIAL ANALYSES

### RECYCLED ENERGY – WE MAKE THE PLAN

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Potential analyses provide the necessary fundamental information and instructions for examining and deciding which systems are best suited to exploit renewable energy, and which technical measures can best conserve energy for communities or individual property, under consideration of ecological as well as economical aspects.

The analyses are based on the examination of data concerning local energy consumption and associated greenhouse gas emissions as well as the reduction potentials estimated on the basis of the potentials gained by renewable energies.

Within the scope of climate protection concepts, systematic and long-term action within a community is made possible on the basis of realistic goals, procedures, and strategic roadmaps.

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#### Keywords

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- Renewable energies
- Energy efficiency
- Energy independence
- Regional added value
- Geo-information systems (GIS)
- Strategic roadmaps

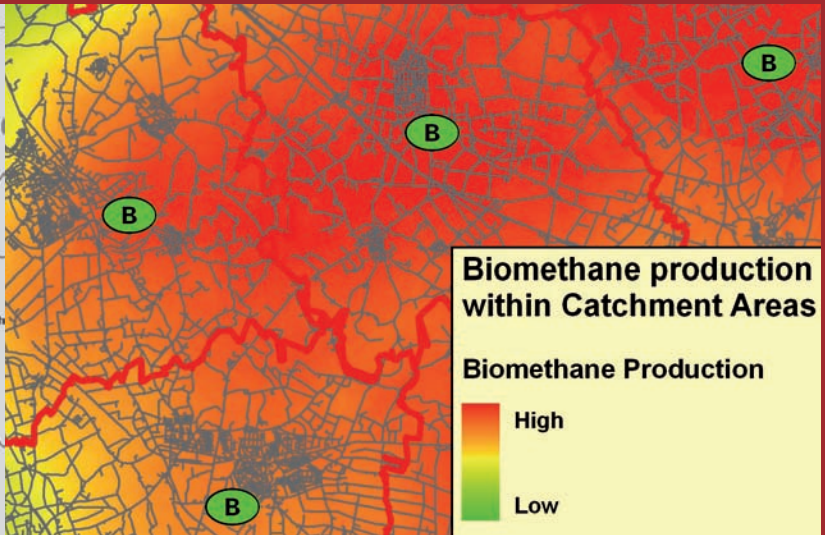
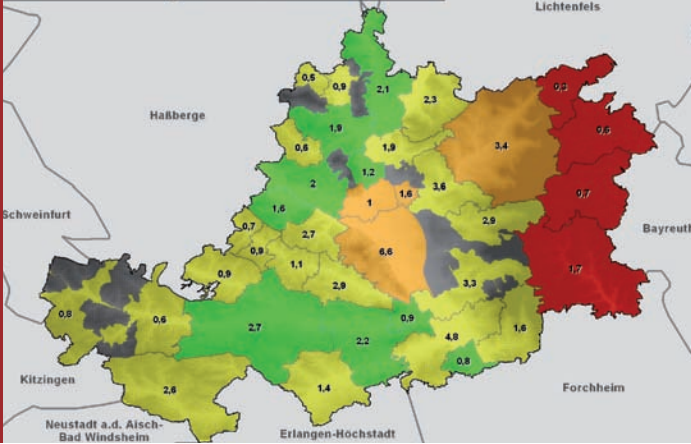
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#### Industries

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- District governments, administrative districts and communities
- Energy suppliers and municipal utilities
- Companies with real estate property

# Geothermal Energy: Suitability and Potential



## Suitability Geothermal Energy

- unsuitable
- limited suitable
- suitable
- very suitable

## Potenzial [GWh]

2,7 thermal use

Data relate to thermal use with geothermal heat pump

### Our service

- Situation analysis of the current energy consumption and energy supply structure
- Potential analysis of the useable renewable energies for electricity, heat, and fuels
- Evaluation of the accessibility of the potentials
- Calculation of scenarios
- Strategic recommendation for action for the utilization of available potentials
- Calculations and forecasts of the CO<sub>2</sub> impact of climate protection measures
- Impacts on the regional added value

### Your benefit

- Strategic basis for decision-making and planning assistance for future climate protection efforts
- Independence through own regenerative energy generation
- Strengthening of the regional economy in agriculture, handicrafts, construction, and planning
- Increase in tax revenues from property and business taxes
- Citizen participation
- Promoting the image of a region

### Technological specification

- Spatial analyses of the potentials with geo-information systems of individual buildings up to administrative units
- Greenhouse gas balances based on extensive software and databases (GEMIS, Gabi, UMBERTO, ecoinvent ...)
- SWOT analyses
- Technology-specific recommendation for action

Contracting party	Problem definition	Results
Klimaallianz Bamberg	Energy potential analysis of Bamberg city and district	Potential analysis, greenhouse gas balances for renewable energies in 36 communities
City and municipal utilities of Witzzenhausen	Renewable energies potential analysis for the city of Witzzenhausen	Potential renewable energies for 17 districts
RWE, City of Dorsten	Sustainable heat supply for the district Dorsten Wulfen-Barkenber	Evaluation of energy efficiency, energy conservation, and use of renewable energies
EU	Uniform localization of bioenergy potentials and stakeholders	Creation of online GIS register on potentials and energy reduction in European countries »www.ben-project.eu«