

Are you a developer with construction projects?

You are a community and wish to green your territory?

Meet us, we propose you turnkey offers and we accompany you in all the stages of your geothermal project:

- ✓ Advice, study and design of your project
- ✓ Management of regulatory aspects
- ✓ Engineering
- ✓ Construction
- ✓ Monitoring, operation and maintenance of installations

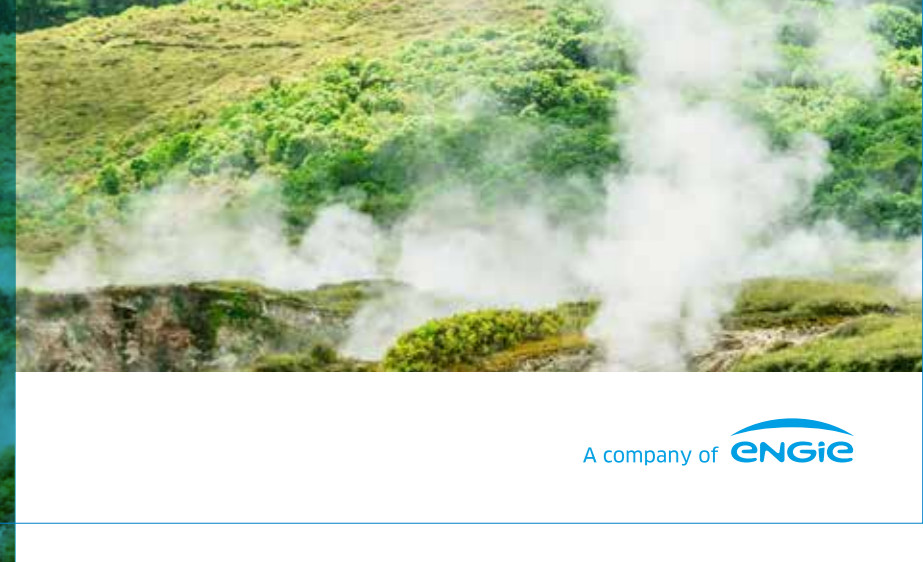
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GEOTHERMAL ENERGY, A SUSTAINABLE COMMITMENT TO RENEWABLE ENERGIES



NATURAL GAS STORAGE

(France, Germany, United Kingdom)

Gas storage facilities

LOW-CARBON ENERGY PRODUCTION AND STORAGE

(France, United Kingdom)

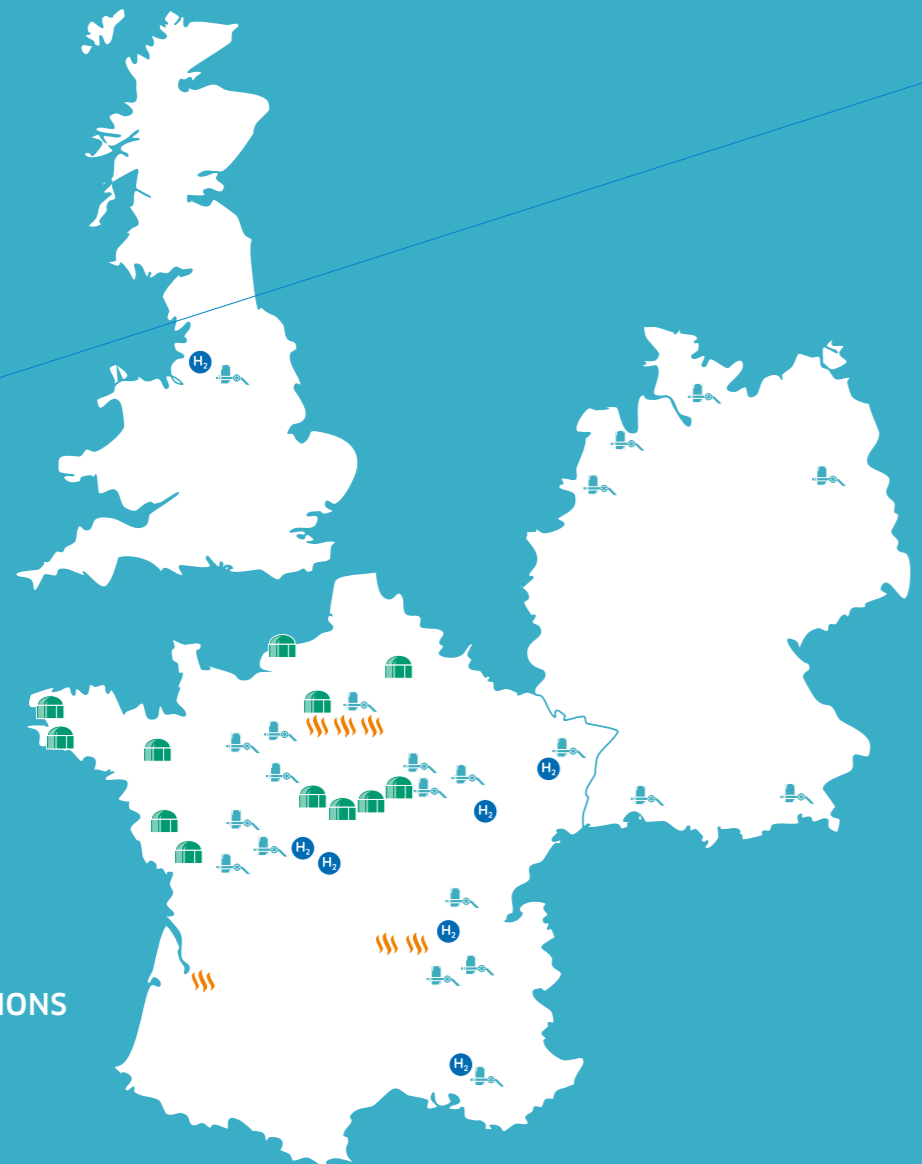
Biomethane plants

Hydrogen projects

GEOTHERMAL ENERGY SOLUTIONS

(France, Indonesia, Mexico, Caribbean)

Geothermal projects



Storengy, a subsidiary of ENGIE, at the cutting edge of geothermal energy

A key player in the development of geothermal energy, Storengy is a subsidiary of ENGIE, a leading global group in zero-carbon energy and services, and leader of the energy transition. Storengy, in association with other ENGIE subsidiaries and with its partners, is one of the few operators with all the expertise required to develop geothermal energy solutions for the production of heat, cold and electricity.

Storengy's expertise is based on 60 years of experience in the development and operation of underground natural gas storage facilities. With more than 600 wells drilled and 21 sites in operation in Europe, Storengy has developed advanced expertise in drilling and earth sciences.

60

YEARS OF EXPERIENCE
IN DEVELOPMENT
AND OPERATION
OF UNDERGROUND
UTILITIES

MORE THAN

600

WELLS

Geothermal energy, a vital response to renewable energy needs

By nature local, by definition ecological and available at all times, benefiting from a recognised technological maturity, geothermal energy provides a response to low-carbon energy needs.

Depending on the temperature, the heat stored in the Earth's crust is used to power heating and cooling

networks, or to produce electricity. Depending on the nature and the depth of the soil, three technologies are available, all of which are mastered by Storengy. They meet energy needs at building, city or regional level.

Storengy develops innovative and competitive offers that are guaranteed "zero carbon".

Depending on the technique used, geothermal energy can supply the equivalent of

50,000
homes with
year-round comfort

more than **100,000**
homes with electricity.

28,000
homes will soon
benefit from
the Plaine de Garonne
district heating
system in Bordeaux.

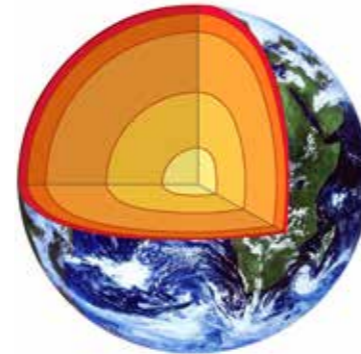


Geothermal energy, natural energy...

Geo (“Earth”) and thermos (“heat”)

It all starts in the soil. Thanks to various mature technologies adapted to the depth and typology of the soil, the heat naturally stored in the Earth’s crust is drawn on by drilling.

Geothermal energy is possible anywhere. Its environmental qualities make geothermal energy a major asset for meeting regional renewable energy targets and ensuring compliance with the strictest building labels and regulations.



The inner core of our planet naturally produces high heat, which is transmitted into the mantle and the Earth’s crust.



Geothermal energy, versatile energy

(3 techniques for 3 uses)

100 metres below ground or at a depth of 3 kilometres, liquid or vapour, the heat contained in the Earth takes many forms. Storengy is one of the few companies to master all the geothermal energy techniques.

How can we ensure the year-round comfort of eco-districts or buildings as part of a zero-carbon approach?



THE LOW-TEMPERATURE SOLUTION

Heat is drawn from less than 200 metres underground at an average temperature of 15 °C. Combined with heat pumps, this so-called “surface” geothermal energy can be used to supply a building or residential or service-sector property complexes.

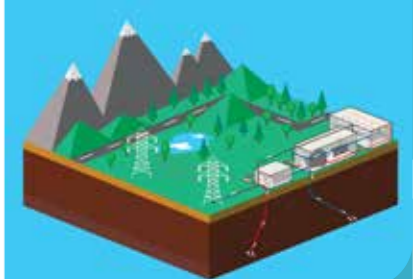
How can we supply a district heating network with local, renewable energy?



THE MEDIUM-TEMPERATURE SOLUTION

The heat collected here between 900 and 2,000 metres underground, estimated at 50 °C, has a wide range of uses. It provides power to a heating or cooling network for a district or a city. The supply capacity of medium-temperature geothermal energy can reach up to 50,000 homes.

How can we produce environmentally friendly, non-intermittent electricity?



THE HIGH-TEMPERATURE SOLUTION

The temperature is extracted at about 200 °C, usually near a volcanic zone. The energy produced can be used to generate electricity and for cogeneration throughout a territory, supplying power to up to 100,000 homes. In France and in Europe, Storengy strives to green the energy mix with the production of environmentally friendly electricity.

4 advantages and a whole host of benefits.

Ecological

Geothermal energy is renewable. It does not release CO₂ into the atmosphere and can be recycled indefinitely.

Safe

No combustion is required for generation.

Comfortable

Geothermal energy offers users the comfort of a renewable energy without the intermittence.

Economical

Geothermal solutions are not subject to fuel price fluctuations and therefore offer visibility of energy costs in the long term. In France, users enjoy a 5.5% VAT rate on the production of clean, virtuous energy and financial aid from ADEME at the time of investment (Heat Fund).



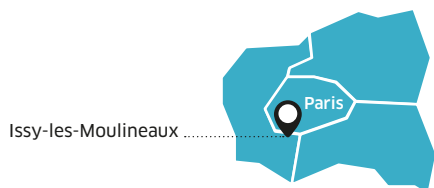
Storengy, a subsidiary of ENGIE, is the number 1 operator of natural gas storage facilities in Europe and 4th worldwide. It employs more than 1,000 people in France, the UK and Germany.

For many years, Storengy has used its expertise in underground utilities for the benefit of the energy transition by developing geothermal and hydrogen and biomethane production and storage projects in France and in Europe.

Low-temperature geothermal energy in Ile-de-France

Driven by ambitious targets to ensure the energy transition, the low-energy geothermal “industry” is popular with public and private developers, for eco-district and smart building projects. Because of its environmental assets and the features inherent in the solution, covering up to 80% of the heating and cooling requirements of buildings, low-energy geothermal energy has many advantages.

As part of the “Issy Coeur-de-Ville” project, Storengy is involved in the implementation of the Issy-les-Moulineaux geothermal network. This future district will cover over 100,000 m², of which 17,270 m² are planned to accommodate shops, a 7-screen cinema, a digital centre, 627 homes and 40,874 m² of offices. Public facilities will be available, including a new school and a crèche.



80%
of the heating and cooling requirements of the buildings will be covered



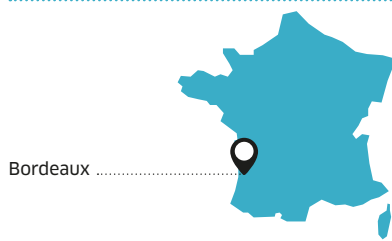
Storengy, a subsidiary of ENGIE, designs, develops and operates all types of storage facilities and provides its customers with innovative products based on its in-depth experience in many markets and their respective environments.

Storengy is present in Europe (France, Germany and the United Kingdom) and has gradually extended its activities worldwide. Committed to the energy transition, **Storengy** provides its technical expertise to many partners around the world in order to develop geothermal projects (heating, cooling and production of electricity) and innovative energy storage solutions.

Medium-temperature geothermal energy in Aquitaine

To best meet the needs of Metropolitan Bordeaux, Storengy and ENGIE Cofely have joined forces to develop a unique, integrated deep geothermal offering, combining ENGIE Cofely's know-how in the field of district heating and Storengy's expertise in underground exploration and development.

Metropolitan Bordeaux has chosen a company that is committed in the long term to every aspect of this ambitious project. It marks the revival of deep geothermal energy in France. The 25 km heating network, which will supply nearly 28,000 dwellings, will save 19,000 tonnes of CO₂ per year, the equivalent of nearly 12,000 vehicles in the urban area.



25 km
of heating network
will supply power to almost
28,000 homes



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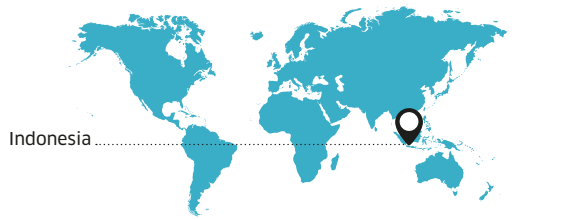
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High-temperature geothermal energy worldwide

Storengy has unique drilling know-how and proven knowledge of “underground utilities”. Bringing our expertise to ENGIE projects and intervenes in the phases of qualification and resource development in Indonesia, in Muara Laboh, Indonesia, and Rantau Dedap, for the realization of his first power plants from geothermal energy. Construction of the plants will generate 170 MW

of electricity, without CO₂ emissions, the equivalent of the energy consumption of nearly 120,000 households.

This project illustrates the ability of Storengy and ENGIE to develop large-scale projects, from underground exploration to the construction and operation of geothermal power plants.



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