



Sogliano
Ambiente

Energy from waste

We turn waste into
resources while protecting
the environment.

Sogliano Ambiente

Quality energy with reduced environmental impact



Since 1996 Sogliano Ambiente has been setting the benchmark for turning the problem of waste into an opportunity **for growth and economic development**. With a decade's worth of experience under our belt, we can manage the entire supply chain for the **electrical power generation** starting from the collection of landfill biogas.

Biogas is the end product emitted as biodegradable organic materials decay and is, for the most part, composed of methane. Extracting the biogas, and its subsequent use, **speeds up** the waste degradation process and thus **shortens the landfill** post-operational time.

It also reduces foul odors and greenhouse gas emissions, offering a **source of high quality energy** with low environmental impact. Today we can intervene in many different ways. For example we can: directly finance investments for the construction of in-landfill cogeneration plants; grant royalties for use of the gas; resolve the problem of foul landfill odors once and for all.

Since the mid 1990s, Sogliano Ambiente has managed the Ginestreto landfill which covers two valleys and has an overall waste capacity of about 5 million m³. Over the years the company has been able to **generate approximately 30,000,000 kWh of electricity a year**, enough to meet the demands of around **30,000 families**.

With the current plant arrangement, **100% of the biogas drawn off can be used to produce 5.3 MW of electricity**. A fraction of the power produced (around 4%) is used to operate the landfill and related systems, the remainder **is fed into the ENEL Distribuzione power grid**.

The Ginestreto plant also has a **system for post-combustion of fumes that adjusts combustion parameters to eliminate some of the pollutants emitted**, thus ensuring **full compliance** with the limits set by current law.

Value added services



- Design and construction of biogas uptake and combustion systems
- Design and construction of systems to recover the heat from discharge fumes
- Project financing
- Design, construction and operation of biogas recovery and cogeneration systems

Research and development



Sogliano Ambiente works actively to improve biogas collection systems. By way of example, we hold the patent for a **pneumatic wellhead closing system** for landfills.

A trailblazer in Italy, at the Ginestreto site we were one of the first companies to build and start up an electrical power generator that **recovers the heat from fumes emitted by the plant**, guaranteeing an average production of approximately 230 kWh.

Cogeneration system references

Plants connected to the Ginestreto landfill, Sogliano al Rubicone (FC)

3 million m³ of waste
33.000 MWh average annual production

Includes system to recover the heat from the fumes emitted by biogas combustion engines, thus obtaining an additional 230 kWh on the average. Plant operated by Romagna Energia, a Sogliano Ambiente affiliate that manages and performs scheduled maintenance of cogeneration plants.

Plant at the Cà Lucio landfill, Urbino (PU)

300.000 m³ of waste
4.000 MWh average annual production

Plant at the Tessello landfill, San Carlo di Cesena (FC)

860.000 m³ of waste
8.800 MWh average annual production

Plant owned by Romagna Energia, Sogliano Ambiente affiliated company that manages the plant and performs scheduled maintenance. The fume uptake system is managed by Sogliano Ambiente.

Plant at the Fosso Pondo landfill, Civitella di Romagna (FC)

450.000 m³ of waste
4.000 MWh average annual production

Plant owned by Imola Energie, Sogliano Ambiente affiliated company that manages the plant and performs scheduled maintenance. The fume uptake system is managed by Sogliano Ambiente.

Plant at the Tre Monti landfill, Imola (BO)

13.000 MWh average annual production

Plant owned by Imola Energie, Sogliano Ambiente affiliated company that manages the plant and performs scheduled maintenance.

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