

Media Kit

Renewable energy production in Vienne

SVO Eco-industries

- **Committed to a sustainable development approach, SVO Eco-Industries is building a renewable energy division in Vigeant at its non-hazardous waste treatment site.**
- **In August 2008, SVO opened a new biogas recovery from waste site. This site will produce the equivalent of around 11,000 residents' electricity consumption.**
- **The electricity produced is distributed locally by Sorégies.**
- **Heat production resulting from energy recovery has enabled the management of a microalgae cultivation pilot project to produce eco-fuel.**



SVO Eco-Industries

Established in 1984 on the Vigeant commune in southern Vienne, SVO Eco-Industries has been a subsidiary of Séché Environnement since 2001.

A specialist in the treatment of non-hazardous waste (from households and industrial clients), SVO has developed expertise to guarantee high-quality environmental management of waste.

SVO has undertaken to build a waste treatment and recovery division, with the goal of sustainable development.

Benefiting from Séché Environnement's know-how and expertise, the implementation of the Energy division is part of a landscaping master plan in which biodiversity is a major component.

The permanent search for environmental excellence is systematic by using the best available techniques.

SVO Eco-Industries is ISO 14001 and OHSAS 18001 certified.

From a life cycle approach...

The world is a complex ecosystem in which waste must be handled with care in order to protect nature and its biodiversity. The preservation of the planet and humanity's well-being must be priorities.

Reaching a balance between such varying constraints calls requires a new approach to product and waste management. This approach must incorporate optimum management of natural resources through a "life cycle" and not an "end of useful life" perspective. It must recognize the fact that the product is tomorrow's waste and most certainly the resource for the day after tomorrow's product.

That is the approach that SVO has adopted in seeking to offer customers a comprehensive offering that handles their "waste" in the best and safest way.

... to renewable energy production

There cannot be world-scale sustainable development without addressing the waste problem. Technical progress has offered increasingly well-adapted waste management and offers new outlooks.

In the face of global warming, and in line with France's commitments to reducing greenhouse gas emissions, SVO is developing techniques to recover the potential energy contained in waste.

Treating waste is no longer an end; our responsibility now is to recover waste and take advantage of its energy potential.

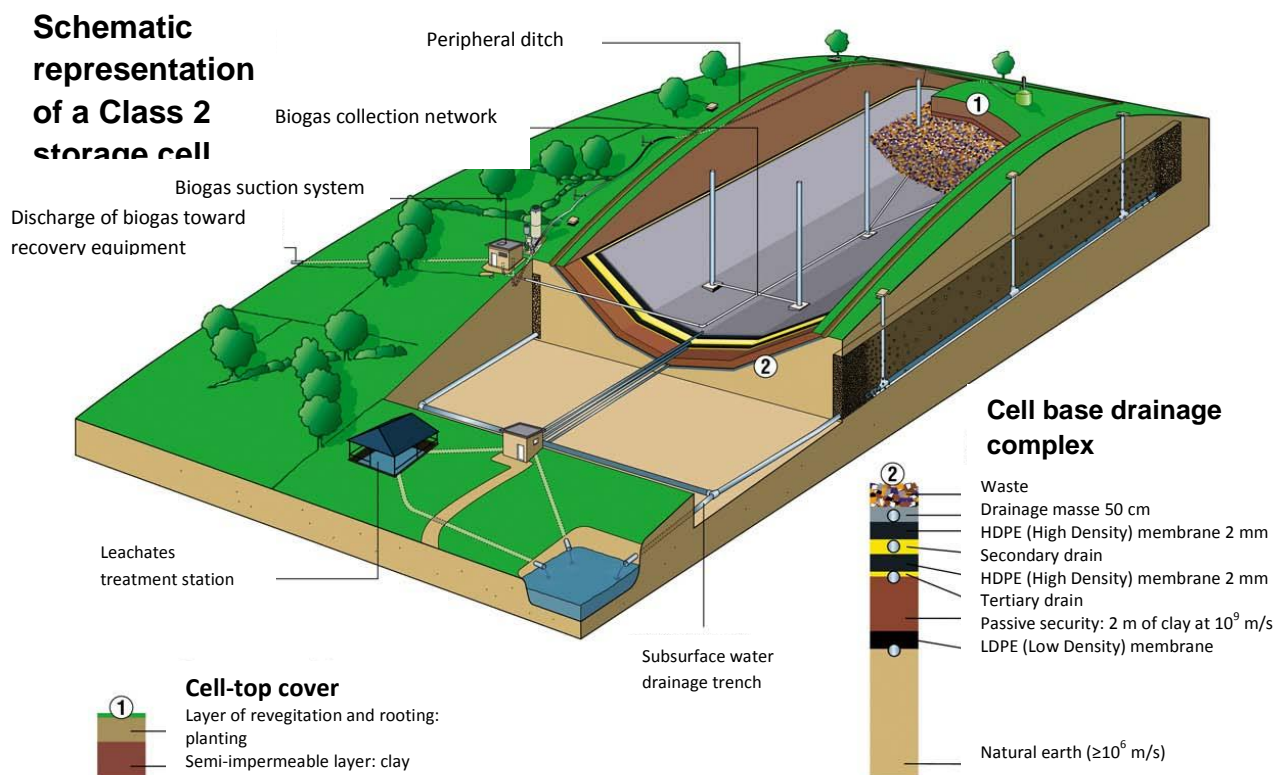
Recovery of biogas derived from waste

Biogas is the product of degradation of the fermentable components contained in waste. Naturally rich in methane, it is a source of green energy.

To recover the energy, the waste is stored in plots or cells accommodated for this purpose. The provision of different materials to create an impermeable complex enables the perfect isolation of the subsoil and the air.

The biogas is collected through a large network of pipelines distributed throughout the mass of waste.

With a well-managed network, SVO enjoys a continuous energy resource.



Electricity production derived from biogas since 2008

In August 2008, SVO opened a large recovery complex ensuring electricity production from biogas recovered on site (biogas derived from the natural degradation of the fermentable fraction of waste).

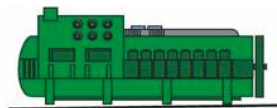
This unit is composed of two 1.4 MW engines. The technical choices were assessed to adapt to energy needs:

- Electricity production, locally distributed by the Sorégies grid
- Heat production, a part of which currently serves to promote the growth of microalgae

The facilities as a whole produce 12,000 MWh per year, the equivalent of 11,000 residents' household consumption.



Renewable energy from waste



Equivalent of 11,000 Residents' consumption Biofuel

Microalgae cultivation and eco-fuel production pilot project

Electricity production leads to the release of heat which may be used in some cases and may also optimize the energy output. This is called cogeneration

In the case of SVO, the geographic location of the site is a constraint on the implementation of industrial use of this heat which is difficult to transport (and thus recoverable).

The company has nonetheless made efforts to use this heat and has installed on-site microalgae culture basins to produce eco-fuel (bioethanol, biodiesel).

There are three advantages:

- Original form of cogeneration: the algal culture should eventually be able to absorb all of the heat produced and move from the pilot study phase to the industrialization phase. Use of this heat, in the production of microalgae, promotes their growth and development.
- Recycling CO₂ and fighting global warming: injected into the algal culture basins, the CO₂, generated by electricity production, promotes the microalgae's growth. These microalgae will almost completely absorb the CO₂ during their development.
- Eco-fuel production. The microalgae contain a high concentration of lipids (40%) and produce a yield 30 times that of other plants, such as Colza. Moreover, their use in manufacturing eco-fuel does not compete with other plants crops that are likely to be used as food for animals or humans. This is a decisively sustainable development-oriented approach.

