

press release

9 May 2016

THE SIAAP AND SUEZ INTRODUCE BIOGNVAL, AN UNPRECEDENTED SOLUTION TO CONVERT WASTEWATER INTO LIQUID BIOFUEL

At the Valenton plant (Val-de-Marne), **Belaïde Bedreddine**, the President of the inter-departmental syndicate for the sanitation of the Paris conurbation (SIAAP) with the administrators and **Jean-Louis Chaussade**, CEO of SUEZ, today presented **BioGNVAL, the innovation that transforms a part of the wastewater in the Paris region into liquid biofuel**. The tour took place in the presence of **Chantal Jouanno**, Vice-President of the Ile-de-France region, **Jean-Louis Missika**, Deputy Mayor of Paris, **Joëlle Colosio**, Ile-de-France Regional Director of the French Environment and Energy Management Agency, the officials of Val-de-Marne and all the companies that took part in the project (ENGIE, IVECO, Cryo Pur, Thermoking).

The Valenton plant: a pioneer in France

Valenton's plant is one of the largest water treatments plants in Europe, dealing with the wastewater produced every day by almost 9 million inhabitants of the Paris region.

The BioGNVAL industrial demonstrator is the first of its kind in France to **reuse the biogas from the treatment of wastewater as liquid biofuel (bioLNG), a renewable energy that is easy to store and transport**.

This innovation is made possible by the cryogenic process developed by Cryo Pur that purifies the biogas by separating its components - methane and CO₂ - to produce biomethane, which is then transformed into liquid biofuel.

A local innovation with international ambitions

With the support of the "Investissements for the Future" Programme organised by the French Environment and Energy Management Agency (ADEME), the SIAAP and SUEZ, which operates the Valenton plant (800,000 m³ of water/day), launched the project in February 2013 to demonstrate the **technical and economic feasibility of producing liquid methane gas from biogas**, with a view to developing the process on an international scale.

The BioGNVAL project has now demonstrated that we can produce from our wastewater **a clean fuel that does not emit any fine particles, make 50% less noise and cuts CO₂ emissions by 90% compared with a diesel engine**. The BioGNVAL industrial demonstrator can treat almost 120 Nm³/h of biogas, to produce one tonne/day of bioLNG, or two full tanks for a heavy good vehicle. Tests have shown that the wastewater produced by 100,000 inhabitants could produce enough bioLNG to fuel 20 buses or 20 trucks.

BioLNG has numerous applications, because the liquefaction process reduces its volume by a factor of 600, making it easy to store and transport. It can be used to **transport people and goods over long distances** (HGVs, vans and buses) or can be supplied to **stations services or industrials**, who then use it instead of fossil fuels. It represents an alternative solution for the reuse of the biogas produced in purification stations, when it cannot be easily re-injected back into the natural gas distribution network¹, particularly for distance-related reasons.

¹ Since July 2014, French regulations have allowed for the injection of biomethane from wastewater treatment plants into the natural gas network.

An innovation that addresses the issues of climate change and regional development

The European directive 2009/28/CE set the target of incorporating 10% of renewable energies in the transport sector by 2020. **The production and distribution of bioLNG as an alternative to fossil fuels** therefore continues the drive to develop renewable energies that is encouraged by French, European and global authorities.

The SIAAP is actively encouraging the development of this biofuel. It also offers some major advantages to the regions: it is both a **lever to achieve regional energy independence and a solution to combat climate change**.

Belaïde Bedreddine, President of the SIAAP, declared: *“In my opinion, this biogas from our wastewater treatment plants represents a concrete contribution by the regions to the joint effort to the energy transition. Indeed, this innovative offer is in line with our industrial strategy by a medium and long term. It is a technological solution that can be duplicated with the environmental benefits of an economic fuel, sustainable, easy to store and safe for public health”*.

For SUEZ, this technology of the future strengthens the company’s position on the French and the international biogas markets, by enabling it to propose a new form of local and renewable energy to local authorities and industrials. The Group is a pioneer and a leader in the production and recovery of biomethane from wastewater in France and has many references, with almost 170 methanation installations in its water and waste treatment plants all over the world. It aims to increase its production of biogas by between 30% and 50% in the next five years.

Jean-Louis Chaussade, CEO of SUEZ stated: *“We are proud of this innovation, made possible by the collaboration with the SIAAP and our partners, that will make our regions more attractive and help to combat climate change. This successful example of the circular economy and local reuse circuits opens up new prospects, both for local authorities and industrials that want to fully engage in the energy transition”*.

About the SIAAP

The SIAAP (Syndicat Interdépartemental pour l’Assainissement de l’Agglomération Parisienne) is the public organisation that depollutes wastewater produced every day by almost nine million inhabitants of the Paris region, as well as rain and industrial water, so that the Seine and the Marne rivers are filled with water that is conducive to the development of the natural ecosystem. The SIAAP, with its 1,700 employees, depollutes almost 2.5 million m³ of water 24x7 that is transported by 440 km of channels and treated in its six purification stations.

More information at www.siaap.fr

About SUEZ

We are at the dawn of the resource revolution. In a world facing high demographic growth, runaway urbanisation and the shortage of natural resources, securing, optimising and renewing resources is essential to our future. SUEZ (Paris: SEV, Brussels: SEVB) supplies drinking water to 92 million people, delivers wastewater treatment services to 65 million, collects waste produced by almost 50 million, recovers 14 million tons of waste each year and produces 5,138 GWh of local and renewable energy. With 80,990 employees, SUEZ, which is present on all five continents, is a key player in the sustainable management of resources. SUEZ generated total revenues of €15.1 billion in 2015.

Press contacts:

SUEZ

Catherine des Arcis

+33 1 58 81 54 23

catherine.desarcis@suez.com

SIAAP

Charlotte Euzen

+33 1 44 14 99 99

c.euzen@tilder.com