Contributing to carbon neutrality: Net Zero

SUEZ Group and Airex Energy will industrialize an innovative carbon capture solution to restore soil quality and act for the climate

SUEZ Group and Airex Energy have formed a partnership in order to provide solutions to regions and industries on their path towards carbon neutrality. The expertise of the two Groups will enable them to industrialize the recovery of biomass residues into biochar (a stable form of organic carbon), which is essential to the resilience, vitality and fertility of urban and agricultural soils.

With expertise in the fields of organic residues, soil amendments, agricultural biofertilizers and smart irrigation, SUEZ will use the CarbonFX™ torrefaction technology developed by Airex Energy for the global deployment of industrial-scale production plants that transform residual lignocellulosic biomass (bark, sawdust, waste wood, etc.) into a stable carbon with high technical and environmental added-value known as “biochar.”

The conversion of waste wood residues, from silviculture to the lumber and wood processing industries, into biochar enables the extension of the “carbon sink” effect of natural plant photosynthesis, which captures a quarter of global CO₂ emissions each year. Biochar is a viable solution to remove carbon from the atmosphere and sequester it in soils for several centuries. When used as a soil amendment, biochar improves plant growth and yields of urban and agricultural soils by enhancing water and nutrient retention, soil aeration and micro-organisms activity.

The industrial production of biochar from forest residues, resulting from increasingly frequent natural accidents (disease, infestation, storms, etc.), is part of the fight against climate change, the management of its impacts and the adaptation of ecosystems. Biochar provides new opportunities to the biomass segment, by delivering a complementary, credible and perennial energy recovery alternative. It constitutes a certified¹ CCUS² solution while generating major co-benefits in favor of sound and sustainable agriculture, the preservation of natural capital, soils, their ecosystems and water resources.

Due to its intrinsic properties, biochar can also be usefully mixed and combined with a variety of materials, including cement, and thus contribute to improving the carbon footprint of the final product.

Diane Galbe, SUEZ Group SEVP, Smart & Environmental Solutions global Business Unit and Strategy: “Thanks to this new partnership with Airex Energy, we will provide our customers with access to high-quality carbon credits while helping the agricultural industry to strengthen soil resilience and food security. The properties of biochar, in terms of carbon capture, but also fertilization of agricultural soils and optimization of water supply to crops, make it one of the most popular CO₂ sequestration solutions on the market. Its development is fully in line with our strategy aimed at providing our customers with 100% sustainable solutions and thus contributing to the achievement of carbon neutrality.”

¹ Methodology established by PURO.earth: other standards (VERRA) are also in preparation
² Carbon Capture Utilization and Storage
Sylvain Bertrand, CEO of AIREX ENERGY: “We are very pleased to partner with the SUEZ Group to accelerate the deployment of CarbonFX™ technology on a global scale. SUEZ Group is recognized for its expertise in the management, treatment and recovery of residual organic materials and is a leading partner to develop the industrial production of biochar. Through this partnership, our goal is to have a sustainable impact on climate by producing hundreds of thousands of tons of biochar in the years ahead.”

Contacts:

SUEZ
Isabelle Herrier Naufle / Elodie Vandevenoorde
+33 (0)6 83 54 89 62 / +33 (0)6 78 36 19 52
Isabelle.herrier.naufle@suez.com
elodie.vandevoorde@suez.com
Twitter : @suez

AIREX Energy
Laurence Fafard - Public Stratégies et Conseils
(514) 467-5517
laurence@publicsc.com

About SUEZ:
Since the end of the 19th century, SUEZ has built expertise aimed at helping people to constantly improve their quality of life by protecting their health and supporting economic growth. With an active presence on five continents, SUEZ and its 90,000 employees strive to preserve our environment’s natural capital: water, soil, and air. SUEZ provides innovative and resilient solutions in water management, waste recovery, site remediation and air treatment, optimizing municipalities’ and industries’ resource management through “smart” cities and improving their environmental and economic performance. The Group delivers sanitation services to 64 million people and produces 7.1 billion m³ of drinking water. SUEZ is also a contributor to economic growth, with more than 200,000 jobs created directly and indirectly on an annual basis, and a provider of new resources, with 4.2 million tons of secondary raw materials produced. By 2030, the Group is targeting 100% sustainable solutions, with a positive impact on our environment, health and climate. SUEZ generated total revenue of €17,2 billion in 2020.

About Airex Energy:
Airex Energy is a world-leading climate solutions provider, leveraging its expertise and technology for customers seeking to reduce and offset their carbon footprint. Thanks to its innovative CarbonFX™ torrefaction technology, Airex transforms all types of biomass into high value-added carbon products such as biochar and biocarbon. Biocarbon, in the form of torrefied pellets, is a renewable alternative to replace fossil fuels used in thermal power stations. Since 2016, Airex Energy has operated the first and only industrial biochar/biocarbon production plant in Canada. Four large-scale production biochar and biocarbon projects are currently in development to serve the markets of Canada, the United States, Europe and Asia.

Find out more about the SUEZ Group on the website & on social media