

## PRESS RELEASE

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# Alfen constructs mega energy system for sustainable cacao production in Nigeria

***ALMERE, THE NETHERLANDS - Alfen B.V. is constructing a large and sustainable energy installation for the Theobroma cacao factory in Nigeria. This innovative system combines solar energy, bio energy from cocoa shells and large-scale battery storage for the sustainable production of energy and steam. It guarantees a reliable energy supply and attains a considerable saving on both operational costs and carbon emissions, including an annual saving of over a million liters of diesel.***

### **Diesel generators**

Theobroma B.V., headquartered in Amsterdam and part of global sustainable commodity merchant Ecom, processes cocoa beans into high-end cacao products for the chocolate industry. As the energy grid in Nigeria is not always reliable, their factory in Lagos currently uses diesel generators. Diesel however, is a polluting and expensive fuel, and its local supply is not always guaranteed as well, causing expensive interruptions in the production process. Theobroma therefore opted for a sustainable alternative that guarantees the continuity and cuts the expensive operational costs.

### **Solar energy with battery storage**

The company Alfen from Almere, The Netherlands, was awarded the contract to build a sustainable end-to-end energy installation. Over 8,000 solar panels will be installed on the roofs and at the factory terrain of Theobroma. To optimally use the generated electricity, Alfen combined this solar energy with its in-house developed battery storage system. Sales Engineer Energy Storage at Alfen, Evert Raaijen, explains: "With two energy storage systems of approximately 1 MWh each, this is the largest local energy storage project in Nigeria. With the combination of solar energy and battery storage, we expect to help Theobroma attain an annual saving of over one million liters of diesel".

In addition to the solar energy system, bio energy is also produced with the cocoa bean waste of the Theobroma factory. This integrated energy concept and system is a perfect fit with the high ambitions Theobroma has in the field of Corporate Sustainable Responsibility and sustainability in general, while this project is regarded as a giant innovation, especially in a local context.

## **Complete integration**

As an industry leader on both energy distribution and energy storage solutions, Alfen is the ideal partner to bring about this energy transition for Theobroma. Alfen carries out the entire project, from the design and delivery phases, up to assembly, operating and maintenance. Evert Raaijen elaborates: "The installation we're building for Theobroma is a combination of system innovations, integrated with existing solutions. We are highly specialized in complex system integrations with energy storage solutions such as these systems." He continues by saying: "Theobroma will be able to remotely monitor performance with our back office system, while maximum savings are attained with smart power management features. Furthermore, this installation is a modular system, which enables quick and easy future upscaling."

Alfen expects to complete this facility for Theobroma in 2018.

## **EDITOR'S NOTE, NOT TO BE PUBLISHED:**

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## **About Alfen**

*With transformer substations, energy storage systems, charging stations for electric vehicles and a diverse portfolio of other products and services, Alfen has a central and connecting role in the energy grid.*

*Alfen's transformer substations provide millions of households and companies with energy, while thousands of electric vehicles make daily use of Alfen's charging stations. The Alfen energy storage system is used for applications such as load balancing, energy trading, frequency regulation and creating autonomous electricity grids in combination with solar or wind energy.*

*With its large range of in-house developed products and vast experience as systems integrator, Alfen is building the electricity grid of the future: reliable, sustainable and innovative.*