Food & Energy
AWARDS

Awards

Intersolar Award 2017

In Intersolar 2017, the biggest fair about photovoltaic technologies in the world, SUNfarming Food & Energy won the Intersolar Award in the category "Outstanding Solar Projects" for its potential and its social benefits, including the opportunity of new job creation.

GREENTEC Awards 2018

In 2018, The SUNfarming Food & Energy concept was selected by an independent jury of experts among the top 3 finalists in the category Sustainable Development in the GREENTEC Award. One of the world's most prestigious environmental awards, GREENTEC demonstrates that economy and ecology go hand in hand.

Integrated Sustainable Model

FOOD & ENERGY "5 IN 1" INTEGRATED SUSTAINABLE MODEL

Energy, food, job creation, education and water management are the key elements integrated into the unique SF Food & Energy solution. Our model is applicable especially in underdeveloped or refugee areas in order to actively contribute to the sustainable improvement of the standard of living.

1. Energy Production

The sustainable energy produced by photovoltaic generators can be used for powering the components of the SF Food & Energy systems as well as supplying the local communities with power.

2. Food Production

Vegetables, fruits and flowers can be produced in environments where crops are protected from extreme conditions of wind, rain, hail or sun. SF quality controlled sales to retailers and SF shops.

3. Job Creation

Up to 1000 new jobs, including 500 franchise partners can be created among the local communities in 10 years per 1MW/2ha installed. Employees work in shifts to cultivate, maintain and harvest.

4. Education

Skill development and training are essential to achieve SUNfarming goals. Through our SF Solar and Food & Energy Training Center, we aim to transfer technology and encourage research based on specific local conditions and needs.

5. Water Management

Our special drip irrigation is up to 90% more efficient compared to regular irrigation systems. Crops can be grown with minimum water consumption in areas where agriculture would be barely possible.

Project Partners

PROJECT COORDINATION AND IMPLEMENTATION

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PROJECT LOCAL PARTNERS

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PROJECT LEAD

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FOOD & ENERGY
Hybrid Center Bahamas

Education • jobs • food production • energy security

With our unique „Food & Energy" project we redouble our efforts not only to ensure sustainable energy security, but also our agro-solar technologies provide sustainable food supply and support the fight against unemployment through education and jobs in resource-poor areas.

Food & Energy

HYBRID CENTER BAHAMAS

HYBRID CENTER BAHAMAS

German companies **SUNfarming** and **bioltec** have developed a training and demonstration center for renewable energy, energy efficiency and sustainable mobility for the Bahamas. Partners are **700 Island Energy** and **Windsor High School at Albany**.

The Hybrid Center Bahamas provides renewable power and renewable mobility combined with food production linked to the Environmental Management training program at one single site – a very unique concept.

This project is part of the worldwide dena Renewable Energy Solutions Programme coordinated by the Deutsche Energie-Agentur (dena) - the German Energy Agency - and supported by the German Federal Ministry for Economic Affairs and Energy (BMWi) within the German Energy Solutions Initiative.

Food & Energy

HYBRID CENTER BAHAMAS

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In The Hybrid Center Bahamas, a greenhouse with roof integrated semi-transparent PV modules, produces electricity from sunlight, while high-quality vegetables, fruits, flowers or medicinal herbs are cultivated inside. Renewable fuels power a cogeneration plant producing electricity and hot water simultaneously. Together with a battery storage, a smart grid management system makes electricity available as a 24/7 stand-alone solution or grid tied. Electric and renewable fuel powered vehicles showcase renewable mobility.

The FOOD & ENERGY system at the Hybrid Center Bahamas has an installed capacity of:

- Photovoltaic: 6 kWp
- Agricultural area: 62 m² (670ft²)
- Co-generation unit: 5 kWel/ 10 kWth
- Battery System: 10 kWh

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HYBRID CENTER BAHAMAS

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The Hybrid Center Bahamas yields to contribute meeting the Sustainable Development Goals of the United Nations by supporting

- to combat poverty,
- to promote good health and well-being,
- to give access to affordable, clean, reliable, sustainable and modern energy,
- to ensure durable sustainable economic growth, for productive employment, resilient infrastructure and innovations, sustainable cities and communities,
- to develop sustainable models for consumption and production,
- to implement timely measures to combat climate change,
- to protect rural ecosystems

and finally, to prevent conflicts and contribute to peace.

For more information please visit:
www.sunfarming.de/en/company/sustainability

Food & Energy

HYBRID CENTER BAHAMAS

SUNfarming Food & Energy Solutions

THE CONCEPT

The **SF Food & Energy Systems** were originally developed to combine the production of electricity and food with the creation of jobs in an economically weak environment such as developing and emerging countries. But they also offer the urban population the benefits of the combined double production: vegetables, fruits, flowers or fish, and regional or local PV production can be gained in PV free field installations or in special agro-solar greenhouses.

The **SF Food & Energy** solution consists of special modified free field PV systems, which can be used to grow vegetables, fruits and flowers. The **SF Food & Energy Free Field** plant is our most common system for utility scale plants all over the world. In the SF Food & Energy plant, the crops are protected from strong radiation, heavy rain, hail or storms. This technology can be adapted to local conditions.