

insolight



Swiss Confederation

Federal Department of Economic Affairs, Education and Research EAER

# PRESS RELEASE

7 October 2021

# WORLD PREMIERE: INSOLAGRIN CONTHEY, THE NEW AGRIVOLTAIC SOLUTION IS NOW OPERATIONAL

Is it possible to feed citizens and the grid at the same time? The construction of insolagrin Conthey in Valais (Switzerland), a highly innovative solar power plant, provides some elements of answer. This is the first time - worldwide - that this new agrivoltaic technology has been deployed on a large-scale pilot. The first raspberries from the project were harvested in late summer, launching a four-year program to analyze and optimize agricultural and electrical yields. These results could pave the way for large-scale, unprecedented solar deployments, bringing a new solution without additional land take.

The pilot project, which was created by the three partners Insolight, Romande Energie and Agroscope, is operational at the Agroscope site in Conthey (VS) since July 2021. The installation, which is supported by the Swiss Federal Office of Energy (SFOE), covers an area of  $165m^2$  and will be used for the growth of raspberries - and strawberries from 2022 onwards - under cover in pots. Insolight develops and supplies the solar module technology and the light control system. Agroscope studies plant physiology, yields and crop quality. Romande Energie built the installation and supervises the energy production. Over the next four years, agricultural and electrical yield data will be collected and analyzed to optimize the performance of the installation.

## **Revolutionary Swiss solar technology**

This solution - developed by Swiss start-up Insolight - incorporates innovative translucent solar modules. Based on optical micro-tracking technology, they offer a dynamic light adjustment while maintaining an interesting electrical yield. More than a simple photovoltaic installation, it is a tool for farmers, which allows to adjust the light transmitted to the crops. This makes it possible to optimize the photosynthesis of the plants during the seasons, while converting the excess light into electricity.

## Research to optimize a unique agrivoltaic solution

The pilot plant was developed to replace and improve the protection used over crops against weather conditions, while producing energy at the same time. It allows Agroscope to study the impact of light conditions on crop development. The aim is to use this agronomic data to adjust the control algorithm of the photovoltaic modules, irrigation, and nutrient supply according to the plant species, stage of development and solar irradiance. At the same time, Romande Energie

will evaluate the solar electricity production of the installation during the four years of the project. The infrastructure will also be further optimized according to the agricultural exploitation needs.

This research should make it possible to produce solar energy while maintaining, or even increasing, the quantity and quality of the fruit harvested under the solar modules.

#### Convincing additional solar potential on roofs

The potential for agrivoltaic structures that benefit both crops and electricity production is significant. In Switzerland, nearly 4,600 hectares could be considered, representing a power of 5 gigawatt-peak, equivalent to the consumption of 800'000 to 1'200'000 households. The ambition is to bring a new solution for large-scale photovoltaic deployments, without additional impact on land and reducing the carbon footprint of crops. In this respect, an important signal was sent by the Federation of Migros Cooperatives which decided to support the project.

This is a first step towards the future of energy-positive crops, offering sustainable development perspectives for the food and energy sectors.

The project is supported by the pilot and demonstration program of the Swiss Federal Office of Energy.

More information on the pilot project can be found in the flyer attached to this press release (Flyer Pilot insolagrin Conthey).

Download here the visuals of the project, with the copyright © Insolight for any use.

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#### About Insolight

A startup based in Lausanne, Switzerland, Insolight is developing a new generation of solar modules, opening new deployment opportunities in a high-growth solar market. The patented technology is based on an optical concentration system combining high efficiency and translucency. Insolight focuses on the design and the sale of related products and services, whilst the module manufacturing is outsourced to an assembly company (currently in Switzerland).

Insolight is seeing strong market traction in agrivoltaics, where the adjustable translucency of the THEIA modules offers a key differentiation compared to conventional modules. The aim is to install the solar modules over crops to optimise agricultural production whilst generating electricity.

In July 2020 Insolight closed a Series A (CHF 5 million) financing round for installing the first 1,000 modules, led by Verve Ventures and other Swiss-based investors. The team now consists of more than 15 individuals with a strong expertise in R&D and sales. The company's long-term goals are to open up new lands for the deployment of photovoltaics and achieve a reduction in the number of megatons of  $CO_2$  emitted.

For more information on the Insolight, please visit: <u>www.insolight.ch</u>

#### About the Romande Energie Group

A key power producer and the number-one electricity supplier in French-speaking Switzerland, the Romande Energie Group offers numerous sustainable solutions in fields ranging from power distribution and generation to energy services, energy efficiency and electromobility.

Working in tandem with customers, investors and partners, the Group aims to contribute to a better quality of life, through its own 100%-renewable production, its innovative services and its Corporate Social Responsibility policy. Romande Energie is also committed to providing high-quality services and ensuring reliable day-to-day provision, thereby meeting the expectations of its customers and supporting French-speaking Switzerland during the transition to a decarbonised energy system.

Romande Energie is always in search of innovative solutions that support decarbonisation in Switzerland. Through its investment in the insolagrin pilot project in Conthey, the Group provides expertise as an energy producer and serves as a key contact for agrivoltaics, contributing to the boom in alternative infrastructures.

For more information on the Romande Energie Group, go to: <u>www.romande-energie.ch</u>

#### About Agroscope

Good food, healthy environment: as the Swiss federal centre of excellence for research and development in the field of agriculture, food and the environment, Agroscope develops solutions for the benefit of a sustainable agriculture and food sector. Affiliated with the Federal Office for Agriculture, Agroscope is spread out over a number of sites across the whole of Switzerland. Research is conducted along the entire value chain of the agriculture and food sector, from farm to fork.

Swiss berry production has been rising steadily in recent years. Advances in growing techniques have contributed greatly to this trend, as well as to an improvement in fruit quality. To face the various challenges of the future, production techniques must be optimised in order better to respond to the demands of consumers and producers and to meet sustainability criteria. The 'Berries and Medicinal Plants' Research Group develops and tests new approaches for reducing residues on fruits, promoting their eating and nutritional quality and increasing the diversity of the berries. In addition, the optimisation of production techniques aims to improve crop profitability and resource efficiency (water, nutrients, energy) whilst bearing in mind climate change.

For more information on Agroscope, please visit: www.agroscope.ch

#### About Migros:

With an annual turnover of CHF 29.9 billion (2020), the Migros Group is Switzerland's largest retailer and the country's largest private employer, employing around 100,000 people.

Organized in ten regional cooperatives, more than two million members own Migros. The cooperatives are responsible for the core business of the group: retailing. In addition, the Migros Group has its own industrial companies, various trading companies and travel agencies as well as Migros Bank.

Migros alone distributes 20% of the Swiss agricultural production. The country's largest agricultural customer is also the world's most sustainable retailer (ISS-Oekom ranking 2019), thanks to its sustainability program that covers the entire value chain.

For more information on Migros: Migros Media Service - tel. 058 570 38 38/ mail: <u>media@migros.ch</u>