

95% of the plastic from the Solar Greenhouses in southern Spain is recycled

The protection offered by the plastic sheets allows Solar Greenhouses to feed 500 million Europeans healthy food all year round.

At the end of their life cycle, 95% of plastic sheets are sent for recycling, and up to 80% are used to make waste containers, street furniture, cups or fuel

Brussels, XX October 2021 - Solar greenhouses cannot be operated without plastic. This material, commonplace at first sight, is the result of several years of research and innovation. Above all, it allows fruit and vegetables to be grown in a completely natural way that would otherwise not withstand rain, cold wind or frost. Thanks to this protection, the Solar Greenhouses in southern Spain supply 500 million people with healthy food. The promotion and information programme "Cute Solar: Cultivating the Taste of Europe in Solar Greenhouses" now wants to dispel false rumours about recycling plastic from these greenhouses.

Amount of plastic waste produced by the Solar Greenhouses

The production model of the Solar Greenhouses in southern Spain, which makes extensive use of plastic sheeting, often painted white, is responsible for only 7% of the amount of plastic waste produced by Spanish agriculture as a whole. But it is most notable for its exceptional level of recycling. Of the 32,000 tonnes of plastic discarded each year by the Almeria and Granada Solar Greenhouses, only 5% cannot be recycled.

Greenhouse growing produces two types of waste. The first is the plastic used as roofing to protect the crops. It has an estimated useful life of between 3 and 5 years. The sheets are then removed and sent to recycling companies. They are recovered and transformed into LDPE (low-density polyethylene) granules, which are used to make new consumer objects, such as crates, cups or street furniture. "Every year, some 16,000 tonnes of plastic waste of this kind are generated, all of which is 100% recycled," says Rosa García, a technician in the Agroecology Department of APROA, the Association of Fruit and Vegetable Producers' Companies.

The second type of plastic is used in agricultural activities to solarise the soil (a natural disinfection method), plastic mulches, thermal blankets, anti-thrips nets etc.) Of the 16,000 tonnes of plastic waste generated each year, 90% is recycled.

A small percentage still escapes recycling. APROA stresses the need to take action to achieve a total recycling rate: "We are thinking, among other things, of information and awareness campaigns for cooperatives, auctions and producers, agreements with public authorities to improve regulations and the use of specific management systems that guarantee the traceability of waste.

In this sense, according to the APROA expert, "it is necessary to set up a system obliging all farmers to show that they have handed over all their plastic waste to an approved recycling company so that traceability is guaranteed. Such a system already exists for cultivated products and their transport. Furthermore, "producers and distributors of agricultural plastics should develop a management system that facilitates the recycling of plastics by farmers (this is already the case in the agricultural plastics industry). Finally, agricultural associations and public authorities should continue to raise awareness among farmers, and to pillory all practices that discourage plastic recycling".

What is a solar greenhouse?

A solar greenhouse is a closed structure covered with a plastic film through which the sun's rays shine, giving the plants the light they need to maintain the right temperature for their development during the winter months so that they can carry out photosynthesis. In the process, the plants produce nutrients from the CO₂ they absorb from the air and release enormous amounts of oxygen into the atmosphere. Solar greenhouses are very different from the production methods used in other greenhouses, which use fossil fuel-based heating and lighting systems that consume up to 30% more energy and are therefore harmful to the environment.

About CuteSolar

CuteSolar is a promotion programme funded by the European Union (EU) and supported by a consortium of Andalusian fruit and vegetable growers' associations (APROA), the Spanish inter-branch fruit and vegetable association (HORTIESPAÑA) and the European fruit and vegetable trade association FruitVegetablesEUROPE (EUCOFEL). The aim of the information and promotion campaign, which will run until 2022, is to inform consumers about the sustainable and environmentally friendly production and cultivation methods of EU fruit and vegetables, the high standards of greenhouse technology and the quality of fruit and vegetables from southern Spain.

The programme, with a total investment of €1.95 million, is co-financed by the proposing organisations and the European Union, will run for three years (2020-2022) and will be implemented in Spain, Germany and Belgium.

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