

Tolo Green to showcase air-cleaning microalgae at Expo 2020 Dubai

Gilberto Gabrielli: «Ecological treatment of air through biofixation of the carbon dioxide exhaled by visitors with production of oxygen»

by Davide Madeddu

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Italian growing technology for spirulina and other microalgae to be presented at Expo 2020 in Dubai. The process will use the carbon dioxide produced by visitors as they walk through the exhibition halls. A show set-up designed like a proper challenge for the Tolo Green Group, a company active in the field of microalgae production as well as in the energy sector.

Ecological air treatment

More specifically, the company managed by the entrepreneur Gilberto Gabrielli, who will present the project in Matera as part of the Italian Hall presentation initiative, will deal with the installation of a microalgae processing plant for air purification in the "Belvedere" area of the Italian Hall. The system, says the president, «will allow the ecological treatment of air through biofixation of the carbon dioxide exhaled by visitors with resulting oxygen production». A system of photosynthetic lamps "specially designed by C-LED, a company that is part of the CEFLA industrial and technological group, used to boost microalgal growth" will contribute to the general installation operation. The lamps "are designed to boost algal proliferation even in a confined space with poor radiation".

Throughout Expo 2020 Dubai, visitors will be able to monitor the growth and processing of microalgae (Spirulina, Chlorella and Dunaliella) in the Italian Hall. And there's more: digital panels will show the values of the air inlet flow and purified oxygen outflow in real time. The group, which started off as an experimental project for the production of fuel oils, and has produced spirulina algae for a few years (as the technical partner for the production of microalgae within the scope of the European consortium Spiral G, part of the Horizon 2020 European project) is now focussing on international markets and new potential investors. "Our goal is to penetrate this industry which is globally worth 5 billion dollars - says Gilberto Gabrielli - and records a growth rate between seven and eight percent per year". Of the 100 tons consumed in Italy "twenty are produced in our country and support a market which - argues Gabrielli - is worth 35 million euro". After the start-up of plants in the Oristano plain, in Sardinia, where the company has invested around six million euro, and an experimental agreement recently signed for the use of spirulina algae in cattle breeding, new products are now being considered which - in addition to the "traditional microalgae bars, will include pasta and rice".