

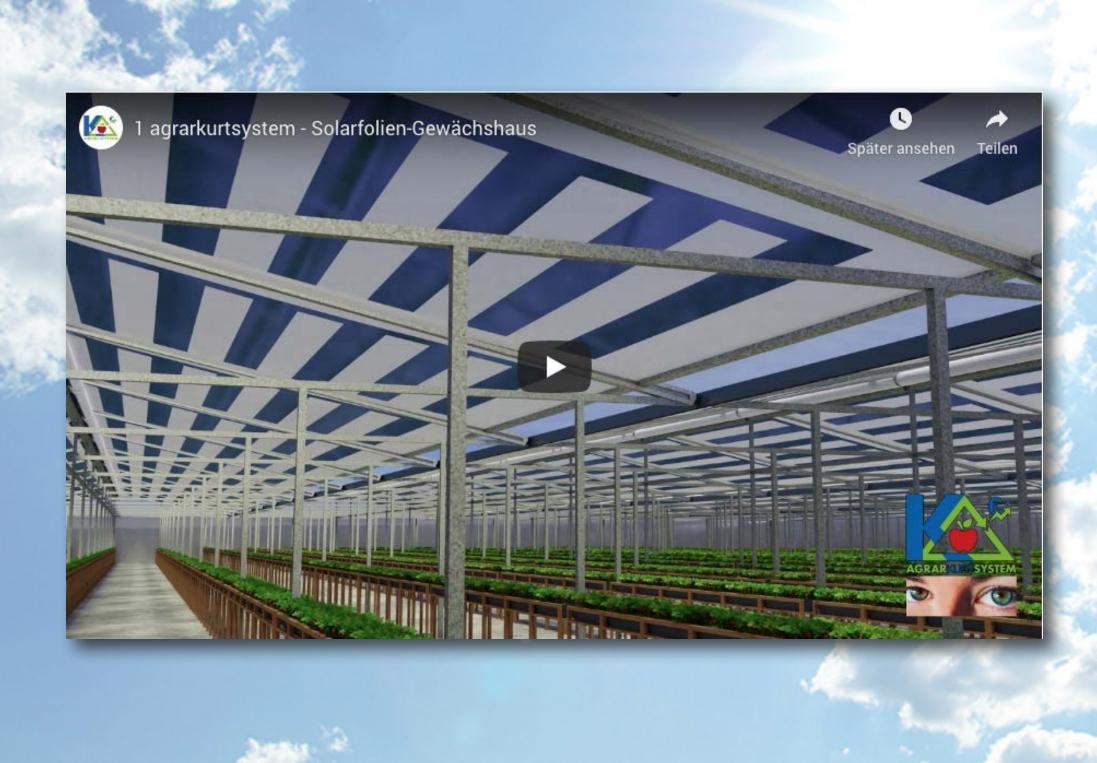
#### Kurt Raffl – Research Centre for Agricultural Weather Protection Systems – Renewable Energy South Tyrol – Italy

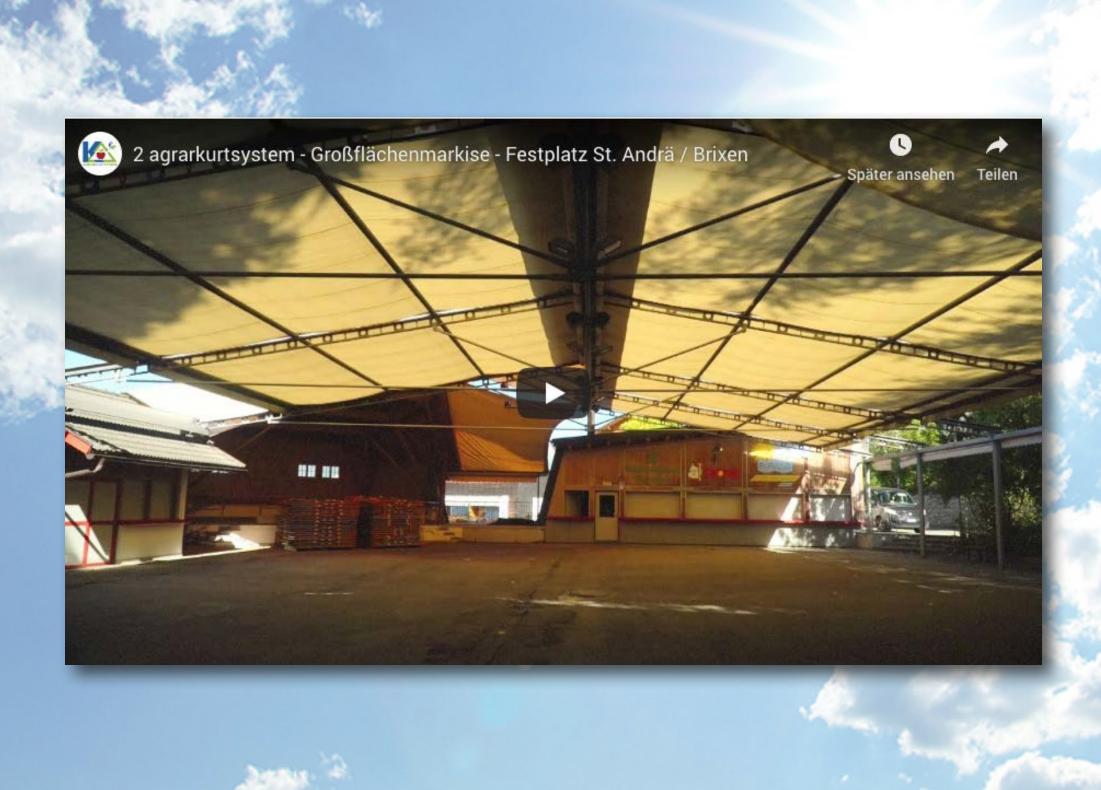




### Why is a future worldwide project, worth billions, being created?

The agrarkurtsystem is **supporting the sustainable environmental protection against climate change**, which has been caused by CO<sup>2</sup>, and is protecting the agricultural cultivation against increasing weather catastrophes.

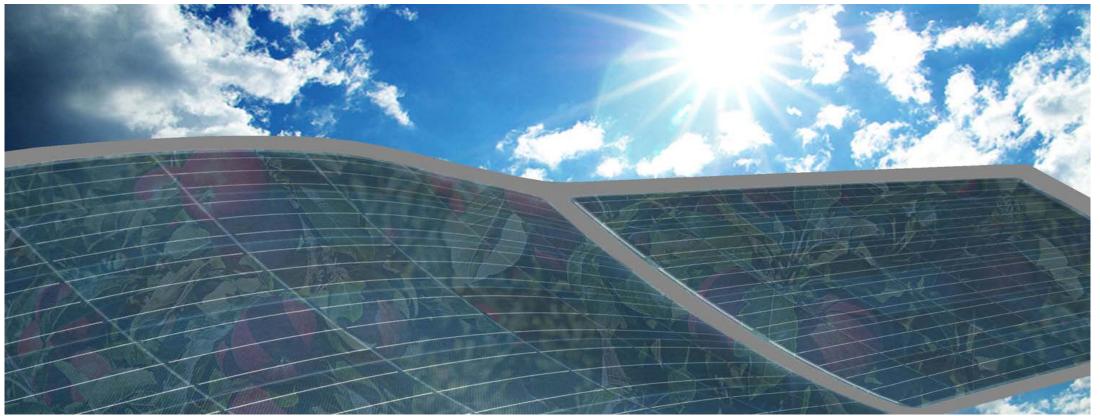




### **Open-Air-Greenhouses with Photovoltaic**

The **innovative Open Air Greenhouses** with or without photovoltaic foils produce electricity and provide therefore renewable energy. The structure with a size of a hectare (10,000 m<sup>2</sup> ≈ 11,960 yard<sup>2</sup>) can be opened and closed in only twelve minutes, with an application.



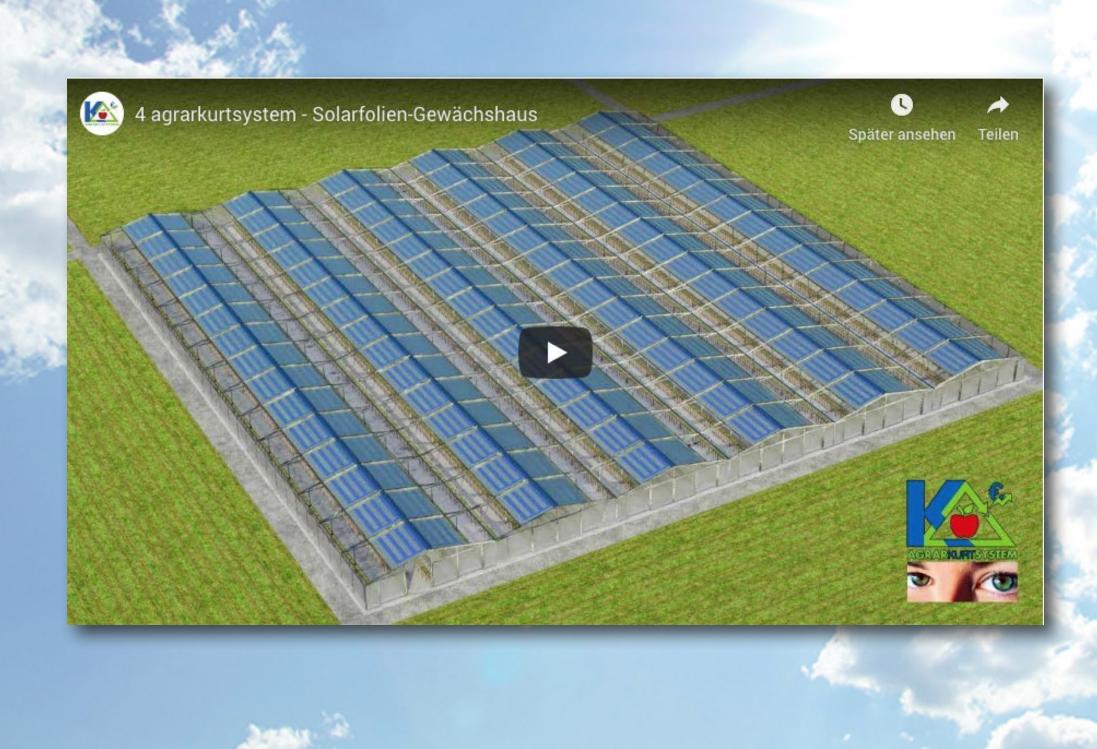




These **weather protection systems** offer a solution beyond the borders of the climate zones, for sheltered organic cultivation: **from desert areas to cold regions**.

Greenhouses with photovoltaic foils: vegetable production – plant and flower growing – horticulture – medicinal plants





The **fuel cell technology** enables the storing of energy, which can be used to cool, as well as to heat the installation. Another field of application is the **water purification** and the **water extraction** from the air.





### **Organic Cultivation Unit**

This particular protection of the agricultural fields creates **controllable conditions**, which facilitate the organic cultivation, among other things, because **the spray is prevented from drifting**, when applying **plant protection products**.

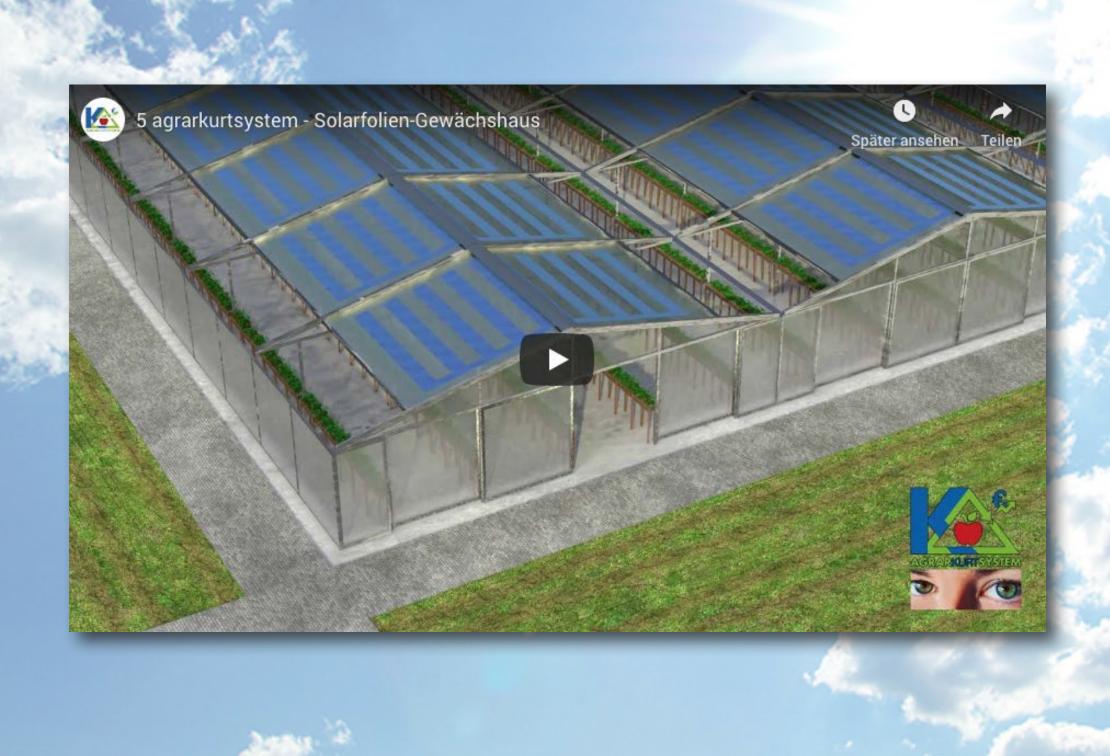
The targeted application **allows minimal and efficient usage of the products**: biological cultivation and the **protection of bees** are only some of the resulting advantages.



### **Economic Construction**

unit made of corten steel or timber:

the Organic Cultivation Unit is applicable for **fruit**, **berry**, **vegetable and flower cultivation**, **for the animal husbandry and for equestrian sport**. The installation protects against all types of weather.





### A revolutionary idea against the changes of the climate

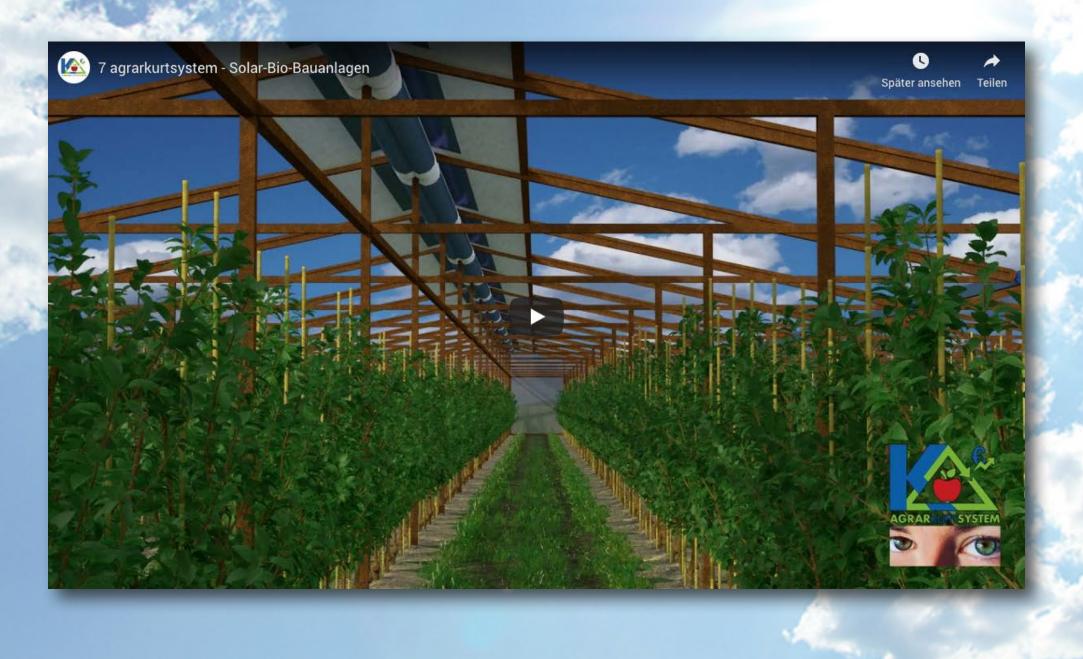
It is human nature to face new situations with **innovative methods** and inventions. Ideas were turned into **pilot projects**, which have led to the collaboration of different companies and production facilities, between farmers and bulk purchasers.

**Primary objective:** to satisfy the requirements of consumers, while creating a rewarding work for the farmers, never losing sight of sustainability and **environmental awareness**.

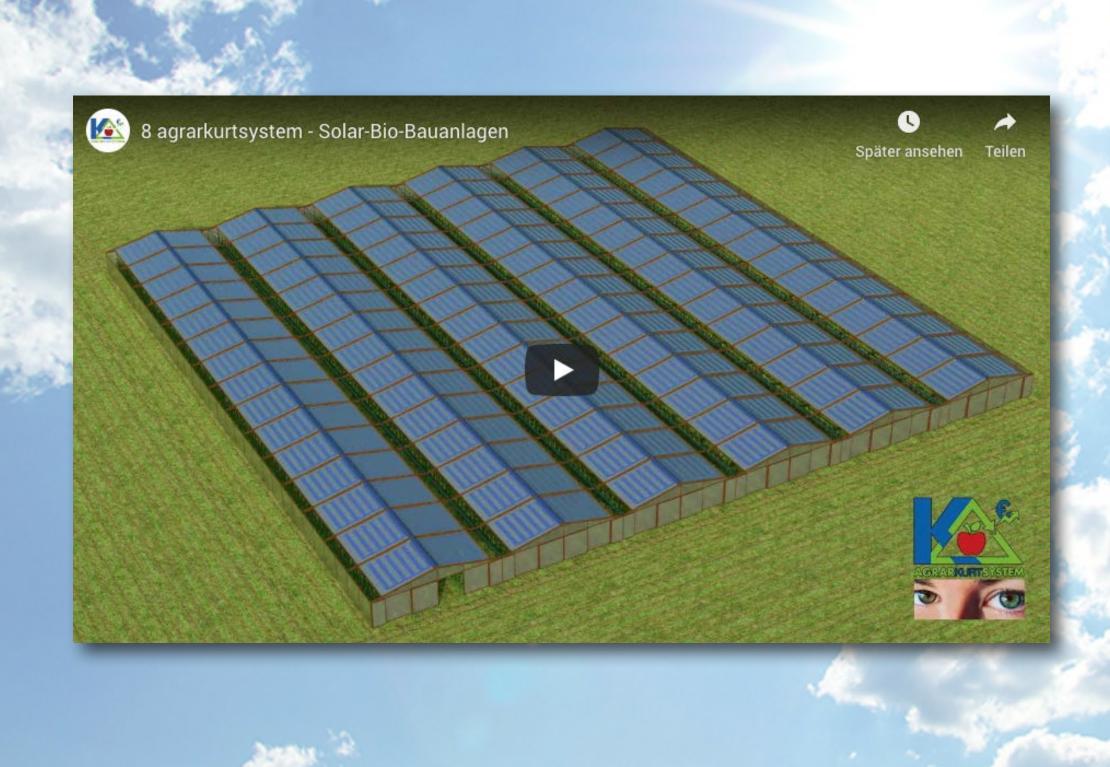
Environmental sins, atmospheric pollution and the resulting **change of the climate** poses a new challenge. It is up to us to get from talking to acting. Not only to save the small local economy, but the whole world – for us and for our descendants.

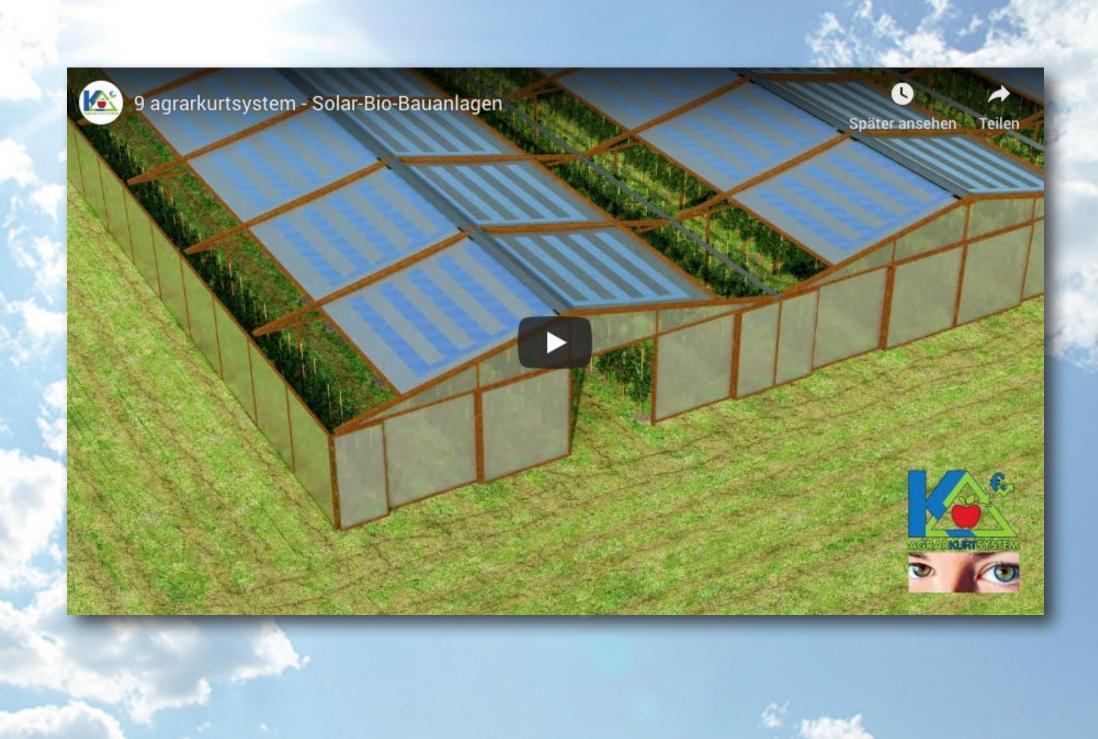
This installation offers **protection from climatic conditions** such as frost, hail, solar radiation, rain and wind. In this way, the cultivation is also protected from consequential damages like sunburn and mould.





Jacour 4





# Advantages of the Or

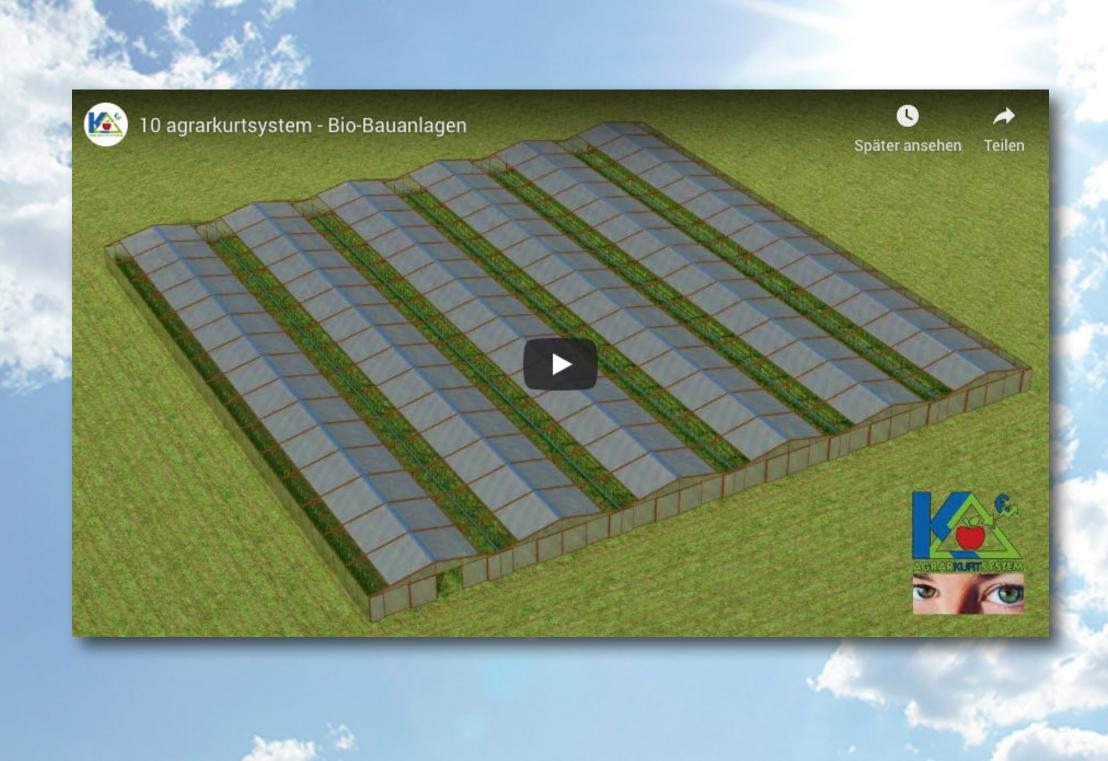
The Organic Cultivation Unit protects the agricultural fields against increasing weather catastrophes, allows the **farming in climatically unfavourable regions and the cultivation of wastelands**.

We put an end to crop failure: even the intensity of the sun radiation and the ventilation of the installation can be regulated according to the plant's needs. That means that farmers can expect higher yields and richer harvests.

- agrarkurtsystem offers modern workload reducing and economically viable technologies, which are controllable via application on a phone or a computer
- This enables the control from anywhere and is a huge timesaver. This application has a connection to the national weather centre, a "must have" nowadays
- Modular construction hall manufacturing prefabricated, robust elements
- Easy installation, wear and tear resistant construction
- This optimization allows earlier harvests and the crops will obtain a higher price
- Under good weather conditions, the installation can be opened. This allows on apples: a beautiful colouring, a good taste and an ideal sugar development

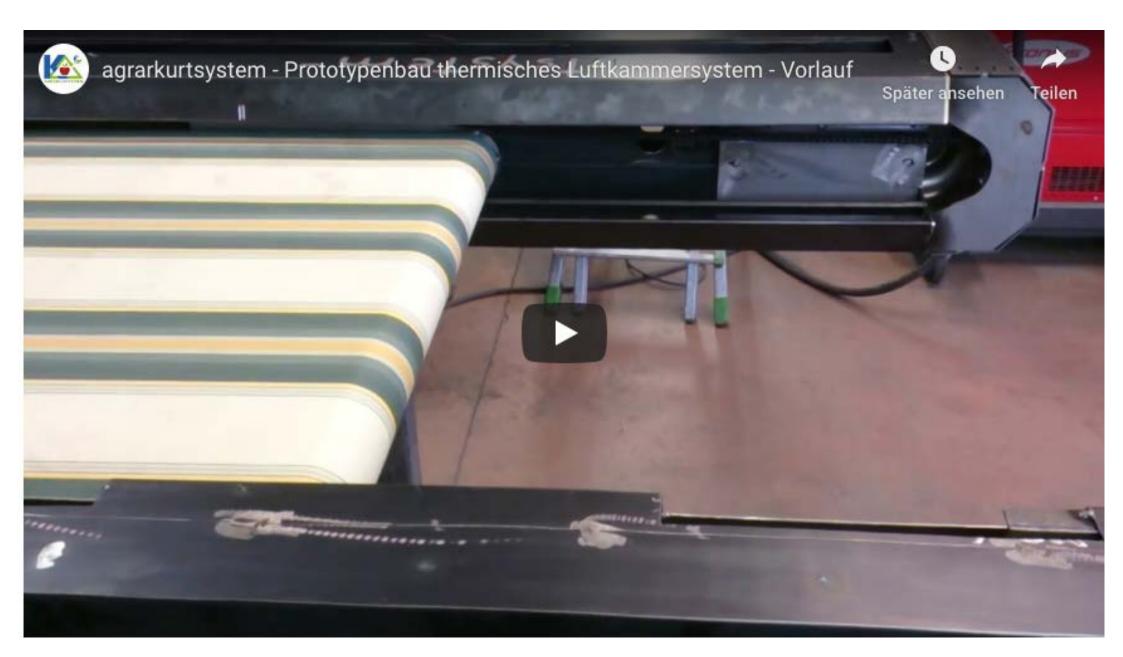
## ganic Cultivation Unit

- The harvesting can always take place: the gatherer are protected from the rain and the sun
- The top of the installation opens and closes on one hectare (10,000 m<sup>2</sup>  $\approx$  11,960 yard<sup>2</sup>) automatically in twelve minutes, thanks to the countertension system even with wind
- An electrically controlled spraying nozzle system will distribute the plant protection products evenly
- Renewable energy because of the usage of solar foils, which can be rolled up on a motor shaft
- Conservation of the natural scenery and the protection of the environment will be guaranteed, because of the openable and closable installation
- Thanks to an attachment of a rail guide, picking carts can be used for the cutting and the cultivating of the plants
- A medial platform will be created, for networking and exchange between companies, farmers, research institutions, producers, bulk purchasers and end consumers
- In parallel, the new research centre for agricultural weather protection systems agrarkurtsystem will be established. The main focus is on innovation, construction and digitalization agriculture 4.0





## The Prototype of the Thermic Air (



## **Chamber System for Greenhouses**



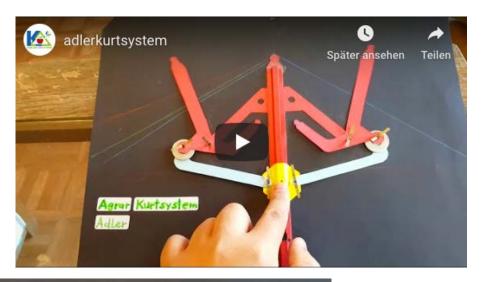
## Food Security in your own Country



### **Desalination and Destillation of Water**









Kurt Raffl Inventor & Developer



### **My Vision**

is to develop an overall concept for the weather protection of the harvest, for the animal husbandry and for equestrian sport. A concept, which is even suitable for unpredictable weather conditions and above all affordable.

Furthermore, I want to contribute to the environmental and climate protection, to ensure the global food security and to take action against the climate change, caused by CO<sup>2</sup>.



agrarkurtsystem Kurt Raffl Research Centre for Agricultural Weather Protection Systems Renewable Energy

HAFLINGERHOF – I-39025 NATURNS (BZ) – Eichgasse 10 – Tel. +43 664 2638918 www.agrarkurtsystem.eu – Email: info@kurtsystem.com

## Hydrogen - gasoline of the future

