## Culture in controlled environment

Crops in controlled environments are an alternative to the effects of sudden changes in climate, e.g. maintains threatened endemic species, but also the need for diversification of species in a given area (increase of biodiversity).

The aim is to provide all the elements and control settings needed to crops for their growth, respecting their biological balances.

LARANTIDE autonomie offers you its experience in engineering of development and industrialization:



## Diagnostic and optimisation of existing greenhouse process

The control of cultures in a controlled environment requires the integration of a large number of technical and economical variables making decisions complex.

### The issues:

- How to optimize my cultivation or production process?
  By monoculture culture combined or complementary?
- How to find a decision support helping to minimize my costs?
- How can I reduce my energy consumption?
- Are renewable energy solutions really economical? What is their return on investment?
- What will be the cost of installation and its maintenance?
- How to make my installation positive in energy?
- How to automate production steps?
- How to increase quality with automated control systems? with machine vision systems or a dedicated instrumentation?
- Integration of machinery from catalogue solutions or a new solution development?

For all these questions, LARANTIDE autonomie makes you benefit from his experience both in the preliminary stages (from diagnostic, technical and economical feasibility to the design and the industrialization) as well as in operation and withdrawal.

According to the agreement framework adapted to your project:

- Project manager assistance
- · Project management
- Conceptual design
- · Base and detail design





# Conception of new greenhouse and controlled environment culture system

Areas of application are varied and require multidisciplinary teams with a long history of development and industrialization whatever goals:

- Production of fruits or vegetables for sale,
- Integration of biological processes in production system (Biological recycling, CO2 storage, Production of oxygen, Hydrogen, Biofuels, Algae cultivation, Food for aquaculture Or production of organic fertilizers...)



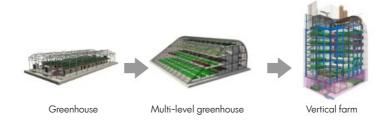
LARANTIDE autonomie offers its assistance in the preliminary phases in the expression of your needs also in project management in the selection and design of the best technical solutions. LARANTIDE autonomie also assists in project management execution of your projects up to the handover.



## Densification and multi-level cultures

The concentration of urban centers such as developments of living spaces and activities in hostile areas (floating structures, development of hot and cold desert areas) create the need to develop new forms of crops adapted to these environments and scarcity or value of the new spaces.

You benefit from the experience in engineering from LARANTIDE autonomie for the development in the design and implementation of solutions in high-density cultures and adapted to each project (i.e. urban, floating structures, spaces multilevel cultures...).



#### LARANTIDE

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