

VIRIDE PROJECT

This project can be integrated among the activities to direct crops to carbon neutrality.

Viride is a software that simulates the growth and development of vegetables farming to forecast performances (in terms of quantities and date of harvest) and optimize the planning process in the Fresh cut supply chain. To do so, we have a partnership with Michigan State University (USA).



Target
**CARBON
NEUTRAL**



Advantages:

1. **Waste reduction:** not only for what concerns products but production inputs too (such as seeds and fertilizers)
2. **Cost savings** whose advantages can be distributed along the supply chain
3. **No emergency purchases** in case there is no product available (procurement from emergency suppliers coming from other countries)
4. **Fresher product** because there is an optimized forecast



PAPER PROJECT

It is a project which has been studied to avoid, **in an automated way**, weeds' germination **without using plant protection products**. The aim is to obtain **zero residual** farming.

The seed is sown between two paper layers: the first one, which is sturdier, is placed on the field, holding it and working as mulch. The second one, which is thinner, has the same function as soil in the traditional sowing: to cover the seed maintaining it humid and helping its germination.

Once it has germinated, the seed, with its roots, makes a hole in the lower paper and, at the same time, it holes the upper layer allowing the sprout to grow.

Once the plant has reached maturity and is ready to be harvested, paper will be completely naturally degraded and assimilated by soil.



**Target
ZERO
RESIDUAL**



1. **Completely biodegradable**
2. **Completely automated**
3. **For zero residual farming**