



# Carbonica

Joint Workshop of the GOFC-GOLD SCERIN and MedRIN Networks

CIHEAM conference center, Chania, Greece, July 16 – July 19, 2024

Land Cover Change (LCC) and Extreme Events in the Context of Climate Change

Mediterranean Agronomic Institute of Chania

Region of Crete

Eratosthenes Center of Excellence, Cyprus University of Technology

Aristotle University of Thessaloniki

NASA LCLUC Program

GOFC-GOLD and START, USA



## CARBONICA: Carbon footprint in agriculture in Cyprus using Earth Observation

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Cyprus  
University of  
Technology

# CARBONICA Excellence Hub at a glance

14 project partners from Cyprus, Greece & North Macedonia

More than 1000 participants in the training modules and workshops

Map & enhance the 3 PBIES  
Involvement of policy, industry, academia & civil society

20 experts participating in brain gain activities

1 Excellence Hub established in the widening region

More than 30 start-ups and SMEs participating in Carbonica's accelerator and benefiting from business development services

What is the Carbonica Excellence Hub



A joint strategic partnership that aims to increase knowledge and capacity on carbon farming solutions and uptake.



North Macedonia:

Annual: Barley, Broccoli,  
Cabbage

Permanent: Apple, Vine

MK0



Greece:

Annual: Broccoli

Permanent: Apple,  
Peach, Olive, Vine

EL-51, EL-52, EL 61



Cyprus

Annual: Cereals, Potatoes

Permanent: Vines, Olive,  
Citrus

CY0



# Carbonica

## Carbon Farming

Building a sustainable future with carbon farming innovation



A **green business model** rewarding land managers for improved land management practices, resulting in carbon sequestration in ecosystems and reducing the release of carbon to the atmosphere.

### Benefits of carbon farming:



Increased carbon removals



Additional income for land managers



More biodiversity and nature



Increased climate resilience of farm and forest land





# Carbonica

## What is the Carbonica Excellence Hub?

A joint strategic partnership aiming to facilitate the increase of knowledge and capacity on carbon farming solutions and uptake.



## Who is it addressed to?

Farmers, agricultural advisors, Industry, investors, Academia, policy makers and the society

## Targeting collective schemes

Actions relating to training, advice, education, innovation, digital and green investments should clearly have an exclusive collective dimension.





# Carbonica

## MRV process

Monitoring, Reporting, Validation

Supporting  
climate neutral future farming...

Satellite  
data

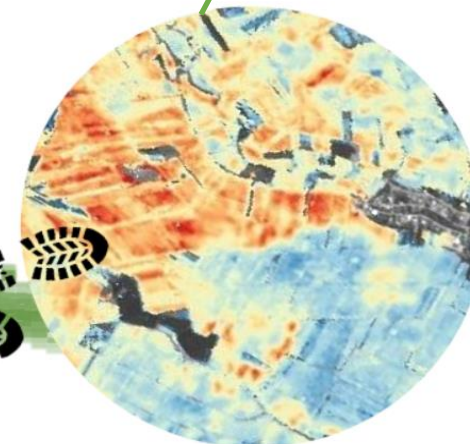


soil organic carbon  
content retrieval

Soil chemical  
analysis

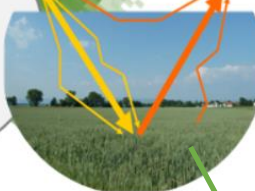


SOC models



...by monitoring  
soil organic carbon content

$f(x)$



Spectral  
Signatures



# Carbonica

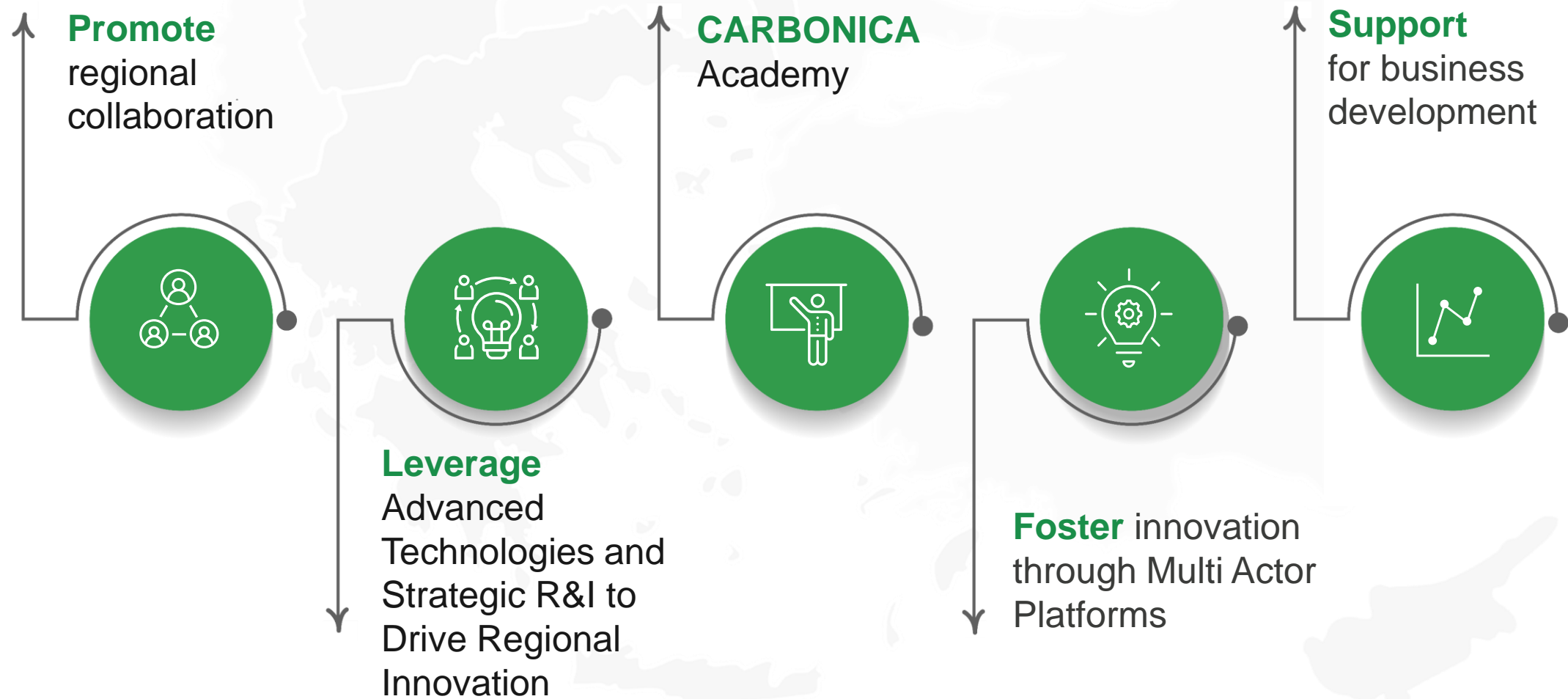
## brand naming

MRV (Monitoring, Reporting, Validation)

Green Color in  
Branding



# Carbonica fit-for region solutions







**Thank you!**

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