

## **International Project**

**11 Partners** coming from France, Belgium, Germany, Spain and Luxembourg are involved and led by Council for Economic Development of the Construction sector (CDEC) in Luxembourg.

Each Partner brings valuable skills and knowledge to the project such as construction process and methodology, buildings energy management, urban farming development, plants and growing systems knowledge, entrepreneurship skills, socio-economic skills...

# GROOF

WHERE INNOVATION GROWS UP !





Greenhouses to reduce CO2 on Roofs



## **AN INNOVATIVE PROJECT**

The GROOF project is an innovative crosssectoral approach to reduce CO2 emissions in the construction and agricultural sectors by combining energy sharing and local food production.

#### **3 MAIN STEPS**

• the identification of barriers and opportunities in order to provide the best suitable guidance to the future project carriers located in North West Europe.

In parallel of that, GROOF Partners will do a **state of the art analysis** in collaboration with local entities to determine the regulatory context, the building context and the urban farming context in FR, BE, LU, DE, NL, IR, CH and UK.

- the development of the pilots in France, Belgium, Germany and Luxembourg.
- looking for rooftop greenhouse project carriers located in North West Europe. The applications will be collected in 2019 through an open call for project.

GROOF project aims at disseminate and demonstrate an alternative way to participate in the CO2 emissions reduction with compliance to the European directives.

## FOR TODAY AND TOMORROW

So this international project has 3 main objectives to maximise its impact over time: **TODAY** 

Implement 4 demonstrators called "Pilots" in France, Belgium, Germany and Luxembourg with the purpose of demonstrating the technical feasibility and the profitability. **TOMORROW** 

#### UNIORROW

Support rooftop greenhouse project carriers in NWE by providing them with a feasibility study free of charge.

### MAKE THE EFFORT SUSTAINABLE

Identify barriers but also opportunities at legal, financial and technical level for implementing a greenhouse with a CO2 emission reduction purpose on North-West Europe rooftops.

The experience gathered during the project will be shared in guidelines disseminated at the end of the project.

# WHY greenhouses on roofs?

The idea is precisely to use the roof greenhouses as a powerful equipment with the aim of:

- recover the heat produced and not consumed by the building actively (by the ventilation and heating system) and passively in a plant production,
- collect CO2 produced by people and building activities to "feed" plants,
- reduce CO2 emissions from transport by producing plants locally.

Thus, the ecosystem formed by the roof greenhouse and the existing support construction requires much less energy than if the greenhouse were separated.

The greenhouse itself is an additional activity located outside the building but which shares energy in order to make both constructions more efficient.

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