





GROOF OPEN CALL

"Coaching for Building Integrated Greenhouses"

Building Best Practice through Learning

PRESS RELEASE - JANUARY 2022

The GROOF consortium is pleased to announce the release of its new initiative supporting the accelerated adoption of the Building Integrated Greenhouse concept by offering up to 10 early adopters a **one-year individual and collective coaching program**. GROOF's partners are European experts in construction, energy, horticultural production, and business who will support up to **10 building-integrated greenhouse projects** through their design and delivery stages to improve their chances of success and CO2 reduction capacity.



Video: https://youtu.be/ jcggkjypeY

Through thematic days and individual coaching sessions, this guidance will enable project leaders to, among other things, predict outputs, reduce construction costs, optimize their design, evaluate alternative business models, bolster their network, develop local and international relationships, and navigate the regulatory requirements.

This new open call focus on 4 countries in the Northwest Europe region: the UK, the Netherlands, Ireland and Germany. We are now opening our call for projects to <u>3 new countries: France, Belgium and Luxembourg</u>. GROOF partners have welcomed three associated partners who are joining the consortium to further the initiative:

- The Netherlands: <u>Association for Vertical Farming</u> (AVF) is a non-profit organisation enabling international exchange and cooperation to accelerate the development of the Vertical Farming industry.
- The United Kingdom: The <u>UK Urban AgriTech</u> (UKUAT) is a cross-industry group devoted to promoting technology-led urban agriculture and fostering collaboration between its members.
- Ireland: The <u>South Kerry Development Partnership</u> (CLG) is a community-led regional economic development company which explores new opportunities and helps individuals access local employment.

- CONDITIONS TO APPLY -

GROOF is offering a one-year coaching programme for projects fulfilling the following criteria:

- > The project must involve the **integration of a greenhouse into a new or existing building** on either its roofscape or its facade.
- The greenhouse component may serve any **defined function** (educational, social, amenity, etc.) and must employ **an appropriate horticultural growing technique** (hydroponic greenhouses, aquaponics, soil-based vegetable gardens, etc.);
- The project must be **based in an urban or peri-urban environment** in one of the 7 targets territories: the UK, the Netherlands, Ireland, Germany, France, Belgium and Luxembourg.
- The project must demonstrate an ambition to **reduce overall building CO2 emissions** as one of its key drivers.
- The project should be at an **early design phase** and be able to demonstrate that the building owner has given its promoters their approval to pursue its development.
- Ideally the project will have already benefitted from discussions with the Local Authority and have been designed up to a conceptual level. The key project team members should already be identified
- ➤ GROOF strongly recommend that all projects have **potential alternative sites** in reserve should any factor prevent the development of their favoured site.

The deadline to submit your application is the 24th February, 2022 at 12pm

What is GROOF - Greenhouses to Reduce CO2 on rOOFs?

GROOF is a cross-sectoral innovation project involving 13 European partners from the UK, Ireland, the Netherlands, Luxembourg, France, Belgium, Germany and Spain. It is financed by the INTERREG North-West Europe program, to explore how building integrated greenhouses can help the built environment reduce CO2 emissions both by improving the thermal, operational, and metabolic performance of their host buildings while substituting the need to import perishable greenhouse products from long distances to their urban markets. The GROOF project aims to demonstrate how





building integrated greenhouses can exploit a wide range of synergies at building, block, district, city and bioregional level while also examining the social impact this realignment of the food-city nexus could offer.

GROOF partners expertise and references

- Since 2017, GROOF partners are realising a large benchmark in North-West Europe region on existing (successful and failing) sustainable greenhouse projects using synergies with a building.
- ➤ GROOF partners are building **4 pilots rooftop greenhouses** in Belgium, France, Luxembourg and Germany. Find out more on GROOF pilotes projects.
- In September 2019 **GROOF launched its first open call and coached 10 building integrated greenhouse projects** through to September 2021. GROOF has since helped five of these through more advanced design stages and through to implementation. Find out more about GROOF's previous coaching experience.
- ➤ GROOF partners are **currently writing a comprehensive set of guidelines** for the design, development and delivery of building integrated greenhouses based on the experience gained from its activities. www.urbanfarming-greenhouse.eu

Some figures:

- **1 person/year emits 30Kg of CO2**. A tomato plant occupying 1sqm of greenhouse space captures 30kg of atmospheric CO2.
- The **build cost** of 1sqm of greenhouse space is highly variable (between 500 and 2000€/m²) and is dependent on multiple factors.
- **Average horticultural production**: 30-100kg/sqm/annum for tomato production or 27kg/sqm/annum for cucumbers.
- Some **key figures of GROOF pilot** projects:
 - 44 tons of CO2 saved per year for a 400m² rooftop greenhouse at IFSB pilot project;
 - 13% of energy demand saved thanks to the design of the U Liege rooftop greenhouse;
 - 7239 kwh/A of net positive energy output and 10,9 KG CO2e/m² emissions saved per year at EBF pilot project;
 - 2°C higher indoor temperature in the greenhouse due to a concrete wall on the north side.