Maeva SABRE1, Franz SCHREIER2, David VOLK2, Nicolas ANCON3, Pierre RAULIER3, Nicolas BRULARD4, Christophe MELON5, Marcel DERAVET6, Karsten WILHELM6, Guillaume MOREL-CHEVILLET7, Marie A. SCHOTT7, Nicolas ZITA8, Caroline BINI9, Céline DOHONGNE9, Verónica PILZ10, Haissam JUAKLI11

1-2 CSTB (France) Centre Scientifique et Technique du Bâtiment, 3 EBF GmbH (Germany) Energy Biosphere Food; 4 ULg (Belgium) University of Liège, Gembloos Agro-Bio Tech & HEC Liège; 5 GALLY (France) Les Jardins de Gally; 6 IFSB (Luxembourg) Institut de Formation Sectoriel du Bâtiment, 7 ASTREDHOR (France) Institute Technique de l’Horticulture; 8 CEDDE (Luxembourg) Conseil de Développement Economique pour la Construction ; 9 HS Trier/Ifas (Germany) Hochschule Trier Institut für angewandtes Stattflormanagement; 10 Groupe One (Belgium) Groupe One; 11 CEC (Belgium) Cluster Eco Construction; 12 UAB (Spain) Universitat Autònoma de Barcelona.

**GROOF project** is an innovative cross-sectoral approach in the construction and agricultural sectors by combining energy sharing and local food production.

**COMPETENCE TEAMS**
- CT1 - Building & Construction: technical, urban planning rules, regulations, insurance, etc.
- CT2 - Energy performance of rooftop greenhouse and connection with the building
- CT3 - Socio-economic aspects: business and social models
- CTB - Plant production (vegetable and herbs but also plants, micro greens, fruits, medicinal or edible flowers).

**CONSORTIUM**

**GROOF**

**ORGANIZATION**

**WHAT**
- (1) recovering heat generated by the building supports of greenhouse, both actively (ventilation system) and passively (30% heat lost through the roofs) in plant production,
- (2) collecting CO2 by human activity and building activities to “feed” the plants,
- (3) reduce transport-generated CO2 emissions by producing locally

**4 PILOTS**
- I1/Gembloux-University of Liège (Belgium),
- I2/Bettembourg-IFSB (Luxembourg),
- I3/París-Gally (France),
- I4/Bürstadt-EBF (Germany)

**GROOF project** is an innovative cross-sectoral approach in the construction and agricultural sectors by combining energy sharing and local food production.

Preparing guidelines (WPT1), Selecting 10 candidates of the Open CALL (WPT2) and coaching them for one year, Calculating the LCA of each pilot and the Carbone budget (WPT3), building the pilots and install the equipment’s of sensors to follow the performances of energy, water supply, electricity, plant productions (I1, I2, I3, I4).