

User groups to accelerate the transition from fossil fuels to renewable energy production in greenhouses

What is RE-Greenhouse?

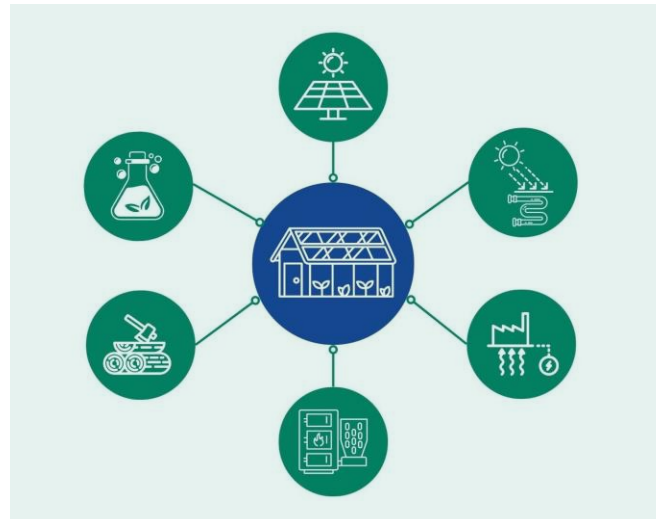
RE-Greenhouse is an EU funded Interreg project that brings together 11 partners from 5 countries from north-west Europe (NWE) to **accelerate the transition from fossil fuels to renewable energy production in European greenhouses**. The comprehensive mix in expertise from these partners will result in an international multidisciplinary collaboration, as the base for uniform data collection, comparison, energy benchmark, tool development, and decision making for both greenhouse holders and stakeholders.

What are the goals of the project?

Pilot Sites for a well-founded data analysis: Transnational Collection of comparable data and experiences from 5 pilot sites and their stakeholders in four NWE countries that are demonstrating six renewable energy technologies such as *heat grid, biogas, wood, pellets, residual heat, and solar energy*.

Developing a “decision tool”: New and historical data from our pilot sites are incorporated into the tool development together with stakeholder consultation. This tool will help greenhouse stakeholders to determine the best renewable energy source for their situation - both technically and economically.

Demonstrations and International Exchanges: We will organize international visits to pilot sites and trainings on the decision tool to inform and inspire greenhouse holders about transitioning to renewable energy sources.



Why set up local user groups?

Energy transition is a social transition and not only a technical-economic transition, also in greenhouse industry. Changing over from a fossil fuel-based system to renewable source, will have its direct relation and impact to e.g., infrastructure services, environmental conditions and social-political topics. With the decision tool, both greenhouse growers and upstream and downstream stakeholders can compare renewable options to fossil fuels in a uniform way, fit for different greenhouse and energy configurations, in different EU regions. **To ensure this, we need stakeholders from the European greenhouse industry to contribute their knowledge and experience to the project**

Interested?

Please contact:

Michael Schmidt
michael.schmidt@umwelt-campus.de

Karsten Wilhelm
k.wilhelm@umwelt-campus.de



11 partners from BE, NL, LU, FR, DE
Cooperating from 2023 - 2027

EU funding
€2,3 million

Total project budget
€3,8 million

User groups to accelerate the transition from fossil fuels to renewable energy production in greenhouses

What are your benefits from joining a local user group in either France, Belgium, The Netherlands or Germany/Luxembourg?

Invitation to pilot plants visits: Joining the visits to the pilot plants will challenge you in exchanging needs and experience with others in the NWE community, specialized in the state of art energy transition in the greenhouse industry.

Q&A / knowledge exchange with pilots: By joining, you will have the opportunity to ask specific questions about the energy transition in NWE. Based on aggregated data and potential options provided by project partners, viable energy transition options for specific greenhouse productions or regions will be calculated to meet your demands and needs.

Active participation in the development of the decision tool: Members of local user groups will participate in the project steps to facilitate economic transition to renewables. Topics will be:

- 1. Greenhouse Configuration:** Crop-system, climate settings, and interior/exterior conditions are key criteria for greenhouse energy consumption, which varies by location over time.
- 2. Energy Configuration:** Production consumption can be covered by various energy sources and installations, like boilers, CHP, buffer tanks, heat pumps, and heat exchangers.
- 3. Energy Infrastructure:** This includes connections to the power grid, natural gas grid, or district heating systems, and the availability of regional and micro energy infrastructure.

Being first at testing the innovative decision tool: The members of the local user groups will be our first testers who will take up the privilege of expressing the situational needs and the relationships between the system modules: "Crops - Greenhouse configuration - Energy configuration - Infrastructure". They will collaborate at different levels (individual, groups, stakeholders) nationally and internationally, with close co-operation with the group as a reward.

Benchmark possibilities: Partners in the project bring diverse perspectives and national experiences, enabling benchmarking of system modules (crop, greenhouse configuration, energy configuration, infrastructure) using key performance indicators (KPIs). Collaboration with similar initiatives in other regions and countries with similar climates and crop systems can enhance data sets and yield valuable aggregated outcomes. This cooperation can help negotiate better prices for carbon-neutral products with retailers.

Interested?

Please contact:

Michael Schmidt
michael.schmidt@umwelt-campus.de

Karsten Wilhelm
k.wilhelm@umwelt-campus.de