Project description

Digitalized cultivation systems in Stockholm's industrial districts.

An innovation project with support from Viable Cities/Swedish Energy Authority and 14 partners.

The project concerns the implementation of innovative installations of climate protected cultivation techniques in urban and vacant industrial premises. The site is localised in the former food processing city district "Slakthusområdet", now in transition to a modern, mixed use area for housing, creative industries and tech companies.

The innovation platform offers a common digital and integrated infrastructure for all resource flows within the cultivations, the site itself and the open district heating network to a number of tech companies. The operations are in connection with the municipal infrastructure of the optical fiber network company Stokab, the Stockholm Water and Waste Company as well as with the Stockholm Exergy and the project Stockholm Biochar.

The concept is intended to contribute to the objective of enabling several small production units to raise their efficiency, sustainability and profitability. The project should also demonstrate possibilities for industrial synergies in an urban environment.

The participating technology companies are developing and/or scaling up their own commercial systems with the support from researchers from the IVL, the Swedish Environmental Institute and the KTH, the Royal Institute of Technology.

A tailor-made common IT platform supports steering and quality control and facilitates the collection of data.

The installation is designed as an economic and technically replicable concept. The project might result in a 30 % saving of heat energy and higher resource efficiency, (95 % water saving). The release of CO2 from climate protected, local production and distribution will be reduced still further by connection with the city's technical infrastructure.

This project is a continuance of the feasibility study, https://cleantechhogdalen.se/rapporter/

Project co-ordinator: Invest Stockholm Business Region **Project partners, actor constellation:**

Invest Stockholm Business Region, Stockholm's Labor Market Institution/EFAS unit for business co-operation, Stockholm Exergi, Atrium Ljungberg, IVL, Swedish Environmental Research Institute; KTH, Royal Institute of Technology,

Small and medium-sized companies:

Arvalla AB, Greensight AB, Greenworks AB, Ecotopic; Ecobloom AB, Farmy AB; Kretsloppsbolaget AB, PE Teknik och Arkitektur AB, Sweheat, Swedish Heating and Cooling Association.

Total project budget: 5,874,000 SEK **Subsidies applied for:** 2,785,002 SEK **Project duration:** 01-04-20 – 31-12-21

Project type: Innovation project

Key words: District heating, urban cultivation, infrastructure integration, energy efficiency,

circular economy, digitalisation, smart and creative urban districts