

Community-integrated plants: The promise of a low carbon future

November 1 2013



Credit: Mikhail Nilov from Pexels

An EU project, which aims to promote low carbon manufacturing, has just released the results of a fact-finding study in communities surrounding four major industrial parks. The goal of the survey, which

covered Spain, Denmark, Finland and England, was to examine the interaction between parks and their surroundings, and to identify the perceived benefits, concerns and challenges.

Notable results included the perceived payback for local communities of living close to industrial parks. Communities listed competitive rates on electricity and heat, as well as possibility and availability of facilities for personal development and training. In terms of issues, clean air and health were identified as possible concerns, whereas tourism and property values were not considered priorities.

These results will feed into the rest of the LOCIMAP (Low Carbon Industrial Manufacturing Parks) project's work, which is scheduled for completion at the end of 2014. LOCIMAP has received nearly EUR 2 million in EU funding. Launched in December 2012, the project began by focusing on CO₂ targets set for industrial parks, as well as identifying possible energy- and emissions-saving potential by better integrating services.

A major part of the project is dedicated to looking at technological possibilities and possible new plant designs. In addition, industrial parks and local communities are often highly interdependent, with the local community potentially benefiting from heat, power and employment opportunities. The park in return benefits from access to a workforce, infrastructure and other resources. Closer integration with the [local community](#) can further strengthen these synergies.

Given this close interaction, an important part of the project has therefore been to identify the most important socio-economic aspects involved in realising closer integration. This is why surveys, such as this one published in October, and continual contact with local communities is central to the project. One important end result will be a white paper with recommendations to European producers and policy makers to

ensure that industrial parks and local communities complement each other.

Supported with state-of-the-art technical and business know-how, the project will ultimately identify practical options for Europe to establish a revitalised low carbon industrial base. The key word throughout all of this is integration: closer integration in manufacturing complexes so that they can operate at increased efficiency both of energy and material use and with lower emissions, and closer integration with communities.

The project team believes that the achievement of integrated industrial plants will bring substantial benefits to Europe's production sector, and hopes that the positive results will herald a migration towards completely integrated manufacturing. In designing integrated sites of the future, LOCIMAP wants to see industrial partners identifying groups of complementary manufacturing processes in areas such as energy supply and use, customers or raw materials.

Only after this has been achieved, integration of heat and power between manufacturing units and optimisation of overall site carbon emissions can begin. Future work of the LOCIMAP [project](#) will focus on this integration potential, and how to make best use of this.

More information: www.locimap.eu

Provided by CORDIS

Citation: Community-integrated plants: The promise of a low carbon future (2013, November 1) retrieved 25 April 2024 from <https://phys.org/news/2013-11-community-integrated-carbon-future.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.