FIRST LOOK AT ECO-INDUSTRIAL SYMBIOSIS

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HOW TO MIX CLEAN ENERGY WITH BUSINESS PROWESS


INDUSTRIAL SYMBIOSIS IS ABOUT

• Environmental and societal impacts.
• Harmonization of technologies, processes, policies.
• Civil society engagement to a circular economy.
• Waste resources information.
• Waste treatment technologies.
• Business models and coordination between value chain actors.

The local government initiates a project to build an EIP with a blueprint in which synergies of resources and materials are well-designed for achieving a goal, such as zero-waste. Through replacing firms who are upstream or downstream of the anchor tenant with firms who have no waste-exchange collaborations with the anchor tenant, more IS synergies are added for converting existing industrial parks to EIPs. Usually happens in ageing comprehensive industrial parks, in which firms from different countries in different sectors with different norms and cultures are located. The development of these ageing comprehensive industrial parks can date back to the 1980s. The decisions made by private firms, where the exchange of resources tends to be motivated by economic benefits, such as cost reduction, revenue enhancement, or business expansion.

INDUSTRIAL SYMBIOSIS CASES IN EUROPE

Amendments to the Customs Legislation of Ukraine - under consideration in the Verkhovna Rada


Amendments to the Tax Code of - under consideration in the Verkhovna Rada


Annual savings

- Bottom-line savings of 24 million EUR
- 14 million EUR in socio-economic savings
- 635,000 tons of CO2
- 3.6 million m³ water
- 100 GWh of energy
- 87,000 tons of materials

The purpose of industrial symbiosis is to create loops of technical or biological materials while minimizing the leakage and waste in the loops - demonstrating some key parts of a circular economy, at a local scale.


**THE UK PICTURE**

**Resource Efficiency**
- G7 Alliance for Resource Efficiency
- European Resource Efficiency Programme
- Roadmap to a Resource Efficient Europe Manufacturing Commission
- COWI Report

**Circular Economy**
- Circular Economy Package, Accenture, UNIDO, The Circulars, Globe Scan 2015, FP7 POLFREE & DYNAMIX, EEA

**Green Growth**
- Global Green Growth Forum
- Global Green Bus. Summit
- GLOBE Series
- DG Regions & DG GROW Technology Report 2018

**UN Sustainable Development Goals**
- Decent Work & Economic Growth (8)
- Industry, Innovation & Infrastructure (9)
- Sustainable Cities (11)
- Responsible Cons’n, Prod’n (12)
- Climate Action (13)
- Partnerships (17)

**Climate Change**
- UK FCO
- Financial Times
- Nature Climate
- Turkey INDC

**Eco-Innovation**
- UNEP, WWF, OECD, ETAP, DG Innovation, Worldwatch Institute

**Industrial Symbiosis**

### Years
- 2005 - 2013

### Companies involved
- 15,000

### Generated
- £1 billion in sales

### Achieved cost reductions
- £1.1 billion for the participating companies, largely small and medium-sized enterprises (SMEs)

### Reduced
- Carbon emissions by 39 million tonnes

### Created
- More than 10,000 jobs


2020 WORK PLAN

Activity 1.1.1 Stakeholder mapping

Activity 1.1.2 Policy analysis

Activity 1.2.1 Preparation of tailored capacity building and awareness raising materials on EIP development for policy developers

Activity 1.2.2 Capacity building and awareness raising

Component 1
Inception and final events (PSC)
25 Feb 20 - 25 Nov 23

Develop and implement project communication strategy
20 July 20 - 20 Nov 23

Preparation, implementation and updating capacity building and awareness raising materials
30 July 20 - 28 Nov 20

Assessment of pilot industrial parks against the international EIP framework
22 Oct 20 - 27 Mar 21

Component 2

GLOBAL ECO-INDUSTRIAL PARKS PROGRAMME
THANK YOU FOR YOUR ATTENTION!