

ZeroWIN
(Towards Zero Waste in Industrial Networks)

THEMATIC PRIORITY

Waste prevention in the industrial sector

PROJECT FUNDING

No project funding

DESCRIPTION

The ZeroWIN-project will examine and develop new and innovative approaches and effective strategies for the prevention of waste in industries based on industrial symbiosis. Industrial Symbiosis is concerned with regional collaboration of companies from traditionally separated sectors which exchange by-products, energy, water and materials in such way, that the waste from one industry becomes raw material for another. ZeroWIN concentrates on industrial networks in the automotive, construction, electronics and photovoltaic industries.

Main goals are finding innovative approaches and effective strategies for the prevention of waste in industrial network based on industrial symbiosis:

1. The development of innovative technologies, waste-prevention methodologies, strategies and system tools (e.g. eco-design, local industrial clusters, and resource exchange) export able into other European and worldwide contexts shall represent the main focus of this action.
2. The goal is to develop a structured and innovative production model for resource-use optimisation and waste prevention, also taking residues as secondary raw materials, and test it in real cases of sustainable industrial networks.

Results will translate the vision of sustainable development into elements of a sustainable entrepreneurship, focusing at enhancing business opportunities according to a "towards zero waste" approach.

Expected results:

- a decrease of at least 30% of greenhouse gases emissions,
- at least 70% of overall re-use and recycling of waste,
- a reduction of at least 75% of fresh water utilisation.

Besides the identification of new technological developments, development of waste prevention methodologies and the adoption of software tools, 10 industrial case studies form the core of the ZeroWin project:

- (CS1) D4R laptop
- (CS2) D4R Photovoltaic system
- (CS3) ReUse Network for ICT products
- (CS4, CS5) Case studies 4 and 5 centered on the construction of new buildings in Portugal and UK
- (CS6) Sustainable Refurbishment of the Deutsche Bank headquarters in Frankfurt
- (CS7, CS8) Case Studies on demolition of EOL buildings in the UK and Portugal
- (CS9) Case Study: Automotive
- (CS10) Case Study: B2B IT Industrial Networks

Interested stakeholders are invited to join the ZeroWIN project at their own cost as a

corresponding member (see section 'User Group' at ZeroWINs website <http://www.zerowin.eu/>).

ACTIVITY SUMMARY (November 2013 – May 2014)

Project funding:

No project funding

Meetings & Conferences:

ZeroWIN will organise the Green Electronics 2013 conference on Resource Efficiency in the Electric and Electronics Industry. It will take place from November 4 - 6, 2013 in Budapest, Hungary. Results of the ZeroWin project will be presented.

Deliverable, studies, results:

ZeroWin has developed an innovative and structured production model for resource-use optimisation and waste prevention. The production model was "translated" into an easy to use web based "ZeroWin guide" for different stakeholders e.g. producers, suppliers, scientists, etc. incl. 10 case studies. The guide was launched in July 2013 and will be available on the ZeroWin homepage.

Other deliverables of the projects are available on the ZeroWIN webpage

<http://www.zerowin.eu/> for download:

D1.1 Literature Review "Approaches to Zero-Waste"

D1.3a Vision Conference and Production of commonly agreed Vision Paper, revised as necessary

D1.4 IPR position papers and case studies for different industrial sectors

D2.2 Report on the impact of emerging micro- and nanotechnologies on waste prevention

D3.1 Summary Paper: EOL Impacts under appropriate and uncontrolled Treatment

D3.2 Guidance document on D4R for PV systems and flat panel products (incl. R&D needs)

D3.3 Database on LCA-oriented Evaluations for C&D Materials and Components

D3.4 Paper on the Certification Practices in different Countries

D3.6 Construction Waste Prevention Strategy: Consideration of Waste Prevention in Material Certification

D6B.1 The D4R Laptop, Industrial Network, Market Barriers to Commercialisation

D6B.2 Prototype of Electronic Power Conditioner for PV Plants

D8.1 Report national and regional Policies

D9.2 Presentations, Policy Briefs and other Forms of Dissemination of Policy Recommendations

D9.2a Presentations, Policy Briefs and other Forms of Dissemination of Policy Recommendations

D9.2b Presentations, Policy Briefs and other Forms of Dissemination of Policy Recommendations

D9.3 Knowledge Management Platform

Activities of the network:

Dissemination of the ZeroWin results e.g. on "Green Electronics 2013" conference.

Dissemination of results and deliverables

Others:

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START & END DATES

2009-05-01 - 2014-04-30

HOMEPAGE

<http://www.zerowin.eu/>

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