

SHAREBOX
SECURE SHARING

EPOS
SYMBIOSIS IN INDUSTRY

TRIS
Interreg Europe

SYMBI
Interreg Europe



European Union
European Regional
Development Fund



European Union
European Regional
Development Fund



Introducing the proposed industrial symbiosis workshop

International Synergies
industrial ecology solutions

Dr. Rachel Lombardi, International Synergies Limited

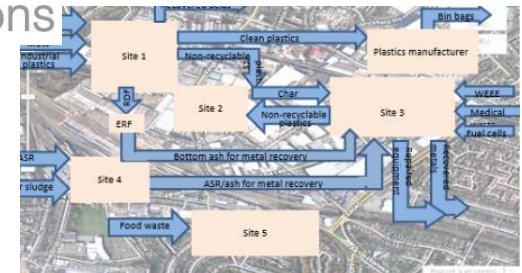
CEN Workshop Agreement on Industrial Symbiosis, Kick-off
(Brussels, Belgium, 21 February 2018)

“To lead the world in innovative industrial ecology solutions for a low carbon, sustainable economy”



Industrial Symbiosis Limited

advancing industrial ecology solutions



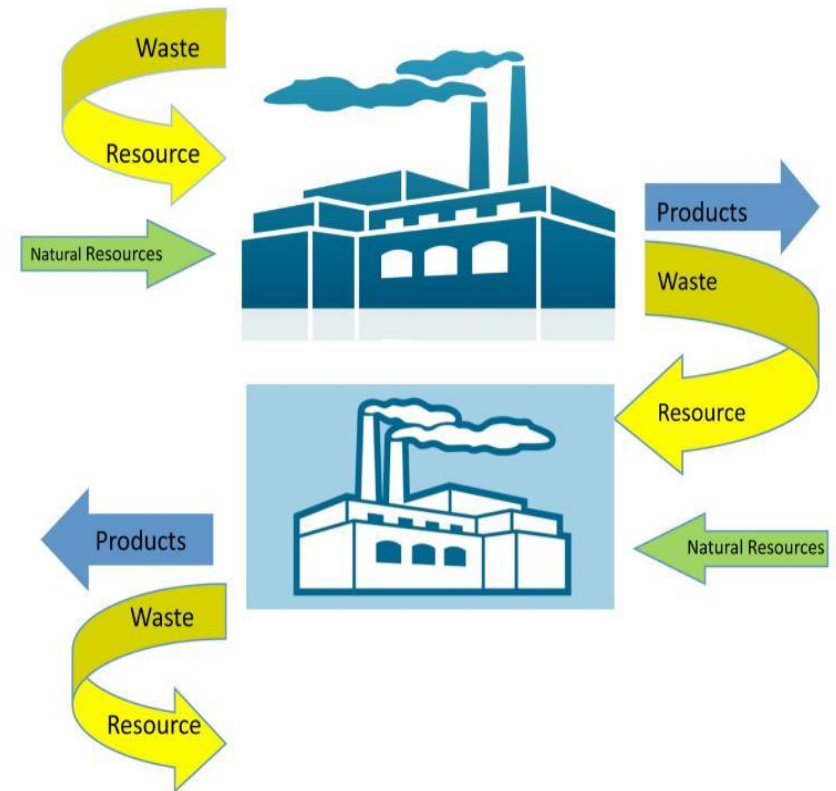
| International Synergies Ltd:

Enabling industrial symbiosis globally



Industrial Symbiosis

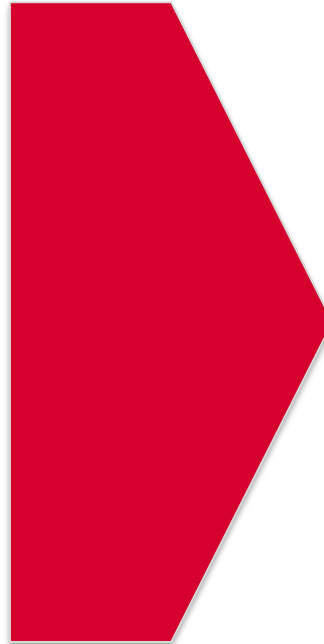
- Network of diverse organisations for **cross-sector** opportunities
- All **resources** (materials, capacity, expertise, energy etc.)
- Impact through **profitable transactions** (inputs, outputs, processes)



Lombardi & Laybourn, 2012, Journal of Industrial Ecology 16(1):28-37

Success factors

- ✓ Facilitators with industrial experience
- ✓ Engagement model (all sizes, all sectors)
- ✓ Holistic – materials, energy, capacity, expertise, logistics
- ✓ Data and ICT



Impacts

- Resource efficiency
- Landfill diversion
- Eco-innovation
- Jobs/green growth
- Carbon emissions reduction
- Best practice sharing/cascading
- Regional economic development

Adding Value to Global Agendas

Circular Economy

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

Resource Efficiency (RE)

G7 Alliance for RE
European RE Programme
Roadmap to a RE Europe
Manufacturing Commission
COWI Report

Climate Change

UK FCO
Financial Times
Nature Climate
Turkey INDC



Green Growth

Global Green Growth Forum
Global Green Bus. Summit
GLOBE Series
DG Regions & DG GROW
Technopolis Report

UN Sustainable Development Goals

Decent Work & Econ. Growth (8)
Industry Innovation & Infrastructure (9)
Sustainable Cities (11)
Responsible Cons'n, Prod'n (12)
Climate Action (13)
Partnerships (17)

Eco-innovation

UNEP, WWF, OECD, ETAP, DG Innovation, Worldwatch Institute

1. CWA Background: The Need

Industrial symbiosis has found its way into the policies, reports and recommendations of the European Commission across multiple DGs and various member states at national, regional and local scale.

The variety of terminologies and methodologies used in these documents can be confusing and sometimes misleading.

Such confusion dilutes the power of the approach to deliver resource efficiency, greenhouse gas reduction and economic benefits.



1. CWA Background: The Need

Multiple directives/communiqués mention industrial symbiosis:

- DG ENV, Circular Economy Package (since 2014)
- EEA, Circular Economy in Europe (2016)
- European Resource Efficiency Platform key recommendation (2014)
- DG ENT: Communique on Green Entrepreneurship (2013)
- DG ENV: Priority for industrial policy (2013) recommendation
- DG REG: Connecting Smart and Sustainable Growth through Smart Specialisation (2012)
- EU 2020 RE Flagship: Roadmap to a Resource Efficient Europe (2011)
- DG ENT: Sustainable Industry: Going for Growth & Resource Efficiency (2011)
- DG ENV, European Waste Framework Directive 'Being Wise with Waste' (2009)

2. CWA Motivation

The aims and objectives of the proposed workshop are as follows:

- Support the adoption of best practice methodologies proven through implementation.
- Support the shared understanding of businesses/policy makers/users/organisations using the term industrial symbiosis in different ways, for mutual benefit and effectiveness.

3. CWA Target audiences

- Companies involved in resource efficiency and industrial symbiosis, including process industries and energy-intensive industries.
- Industrial park managers and site developers
- Industrial symbiosis facilitators and enablers
- Trade associations communicating best practice to their members
- Governmental agencies at all levels: local, regional, national and supranational
- Policy makers (political and civil servants) and regulators
- Funders and investors supporting industrial symbiosis activity
- R&D and academic communities.

4. CWA Workshop proposers



TRIS
Interreg Europe



SYMBI
Interreg Europe



SHAREBOX: Secure Management Platform for Sharing Process Resources

- **SPIRE-06-2015:** Energy and resource management systems for improved efficiency in the process industries
- Sep 2015 – Aug 2019
- 16 partners



- EC funding (A): 5.416.544,75 €
- Private investment (B): 1.500.000 €

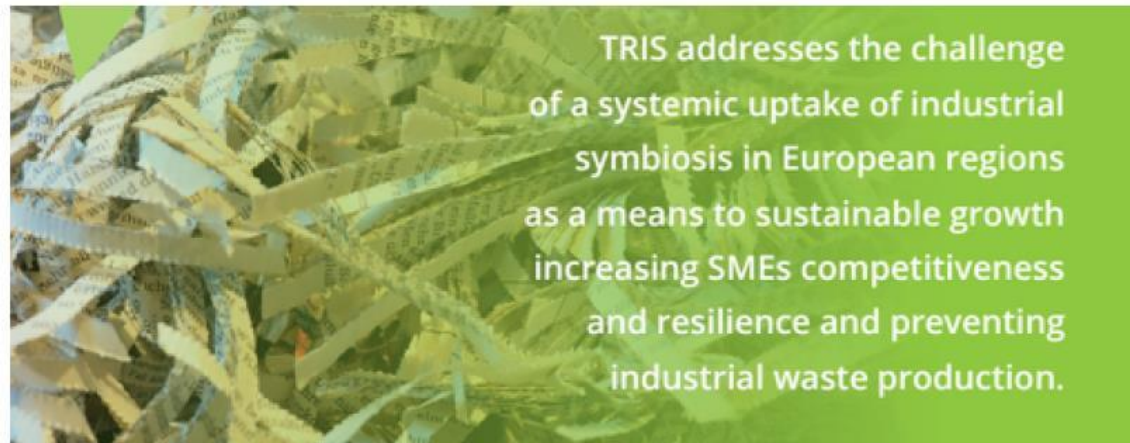




| TRIS -- Transitioning Regions Toward Industrial Symbiosis

Industrial Symbiosis Limited

advancing industrial ecology solutions



- Birmingham, UK: Birmingham City Council, Industrial Symbiosis Ltd (International Synergies' not-for-profit arm)
- Emilia Romagna, Italy: Region DG for Territorial & Environment Care, ASTER
- Central Hungary: IFKA, Herman Otto Institute
- Småland, Sweden: Energy Agency SE
- Valencia, Spain: IVACE, AIDIMME

SYMBI 
Interreg Europe



European Union
European Regional
Development Fund



SPIRE-06-2015 Energy and resource management systems for improved efficiency in the process industries
Grant Agreement no. **.680843**



Thank you for listening!

Rachel Lombardi

rachel.lombardi@international-synergies.com

rachel.lombardi@industrialsymbiosis.co.uk

+44 (0) 75 68 108 287

SHAREBOX
SECURE SHARING

