



# MAESTRI

RESOURCE AND ENERGY EFFICIENCY  
FOR PROCESS INDUSTRIES

## Newsletter #05

#05\_January 2019

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**SPRE**

Sustainable Process Industry through  
Resource and Energy Efficiency



# MAESTRI Training in Poland: follow-up

In the context of WP8, MAESTRI Partners are expected to organize Training sessions with the aim to **spread the Project results** within the industrial sector of each involved country. **LEIP** (Lean Enterprise Institute of Poland) has recently held two Training activities targeted on **top-management and middle-management from the heating industry**, a sector that is crucial in Poland because of its impact on the environment.

- The 1st training was organized on **21-22 November 2018** and involved 11 participants
- The 2nd training took place on **16-17 January 2019** and saw the participation of 16 persons

The 1st and the 2nd MAESTRI Training dealt with **eco-lean manufacturing**, while the 3rd and the 4th Training sessions will be about lean **simulation with value stream mapping for process industries**. The groups were not particularly large because of the practical nature of the proposed exercises, whose results are more effective when applied in limited learning contexts.

As you can see from the **AGENDA** below, the training included a **theoretical part** on Lean Management, Kaizen, problem-solving strategies and the role of top management; and most importantly it focused on practical **exercises** which required participants to play an active role and be fully involved in the session: e.g. the Gemba Walk, case studies with practical examples and the preparation of an Eco Orbit Map for health production processes.

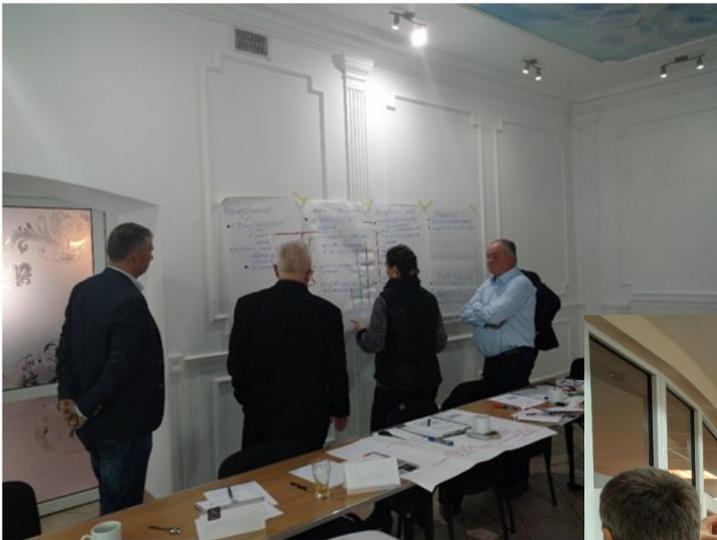
1st training day 9 a.m. – 5 p.m. (8 hours)	2nd training day 9 a.m. – 3 p.m. (6 hours)
1. Introduction to Lean Management	1. Eco Orbit View – exercise
2. Kaizen - theory	2. Success equation
3. Lean in heating plant – case study with examples	3. Problem solving – theory
4. Kaizen - exercise	4. Eco A3 – theory
5. The role of top-management	5. Problem solving – exercise
6. Eco Orbit View – theory	6. Eco Lean Manufacturing vs. ISO 14001
7. Eco Orbit View – Gemba walk	

# MAESTRI Training in Poland: follow-up

In general, the two trainings gave **positive results** and the audience was satisfied, with an overall increase in interest and confidence levels on the tackled topics.

In both cases, the vast majority of participants commented that their expectations were satisfied and that they intended to use the lessons learned in the context of their own company. All participants received a MAESTRI **certificate of attendance**.

LEIP is doing a great work in organizing MAESTRI Trainings in Poland, with 2 sessions already completed and 2 that will be organized before May 2019.



PARTICIPANTS DURING THE PREPARATION OF AN ECO ORBIT MAP FOR HEATH PRODUCTION PROCESSES



GEMBA WALK

# 1st National Workshop in Portugal

On Friday 22 November 2018, the 1st MAESTRI National Workshop was organized at ISQ headquarters in Portugal. The workshop saw the participation of **ISQ, COTEC, INEGI, Microprocessador and industrial Partners** who took part in the roundtable.

The Workshop began with a general overview of MAESTRI Project, especially on the Total Efficiency Framework as a tool aimed at fostering manufacturing sustainability in process industries, and its 4 pillars. This introductory part was then followed by a **roundtable** on the importance of sustainability tools for process industries with representatives from enterprises involved in the Project.



# MAESTRI goes to Paris



A Workshop on Industrial Symbiosis will be organized in Paris on the **12th of March 2019, from 10 a.m. to 2 p.m.** This activity will be considered as one of UK National Workshops.

During the session, some of the concepts and tools developed in the context of MAESTRI project will be introduced. The workshop is **free to attend**, and is specifically aimed at:

- Industry professionals with an interest in waste management and/or industrial symbiosis;
- Manufacturing managers on the lookout for innovative industrial symbiosis training systems accessible to workers at all levels, from the boardroom to the shop floor;
- Environmental and industrial symbiosis specialists interested in the latest tools and training materials developed through the MAESTRI project.

Participants will be taken through an interactive training session designed to **introduce the MAESTRI toolkit, as well as some of successful cases of Industrial Symbiosis.**

The session will be held in French, but there will be the possibility to run it bilingually in English if required.

To register, please send an email to **Daniel Summerbell**, who will also update you on the venue: [dls43@cam.ac.uk](mailto:dls43@cam.ac.uk)

# #WRF19 - Industrial Symbiosis in Europe

MAESTRI project will participate in this year's **World Resources Forum** (#WRF19), which will take place in Antwerp (Belgium) from 24 to 27 February 2019. The Forum will be hosted by the Public Waste Agency of Flanders (OVAM), the principal authority in the Flanders region of Belgium for sustainable management of waste, materials and soils.

What is interesting about the event is that this year it will focus on the topic “**Closing Loops—Transitions at Work**” and, therefore, it will specifically deal with circular economy and industrial symbiosis.

Parallel to the Forum, a number of thematic sessions, workshops and side events will be organized. One of those will be devoted to **INDUSTRIAL SYMBIOSIS IN EUROPE**, and it is here that MAESTRI comes into play.



# #WRF19 - Industrial Symbiosis in Europe

#05\_January 2019

WORLD RESOURCES FORUM

**Industrial Symbiosis in Europe**  
A joint initiative funded by H2020

A NEW GENERATION OF SOLUTIONS AND BEST PRACTICES FOR EUROPEAN INDUSTRIES AND DISTRICTS

Organized by:

EUREKA PROOF of Chain WISE FISSAC SCALEP symal prima EPoS SPRING MAESTRI

The projects have received funding from the European Union's Horizon 2020 research and innovation programme

FEB 24 - 27 2019 ANTWERP - BELGIUM BOOTH 28

In fact, MAESTRI will participate in this collateral event together with other 8 European projects dealing with Industrial Symbiosis. The goal of our involvement is at least double: on the one hand there will be the opportunity to present the outputs from MAESTRI to relevant stakeholders, on the other hand we will explore collaborations and synergies between European projects dealing with Industrial Symbiosis.

**Marco Estrela (ISQ) and Daniel Summerbell (UCAM)** will provide an overview on MAESTRI and then focus on the work concerning Industrial Symbiosis, namely the **T4IS** (Toolkit for Industrial Symbiosis). Their intervention will be held on Monday **25 February 2019 at 16:15** in Booth 28—WRF Antwerp 2019—Flanders Meeting and Convention Centre.

If you are interested in knowing more on the event, follow us on [Twitter](#) and [LinkedIn](#), or read more on the event on WRF website: <https://www.wrf-antwerp2019.be/>

To register, just click here: <https://www.wrf-antwerp2019.be/register>

# MAESTRI Final Conference - 18/06/2019

The poster features a background of interlocking gears. At the top, the text 'SAVE the DATE' is written in large, bold, white letters. Below this, the MAESTRI logo (Resource and Energy Efficiency for Process Industries) and the SPRE logo (Strategic Process Research and Energy Efficiency) are displayed. The text reads: 'MAESTRI Consortium is glad to invite you to the project's FINAL CONFERENCE Presentation of achieved results, implemented outcomes and future developments'. A green button with the text '>>> CLICK HERE TO REGISTER <<<' is centered below. A horizontal line separates this from a section with three icons: a location pin, a calendar, and an envelope. Under the location pin icon, the address is: 'OEIRAS - TAGUSPARK Av. Prof. Dr. Cavacao Silva, n. 33 2740-120 Porto Salvo (PORTUGAL)'. Under the calendar icon, the date and time are: '18/06/2019 09:00 - 17:15'. Under the envelope icon, the contact information is: 'For more info, contact us: ricerca@sinergie-italia.com MAEstrela@isq.pt'. At the bottom, a row of logos for partner organizations is shown, including ISQ, ineqi, LINKS, ANEP, Fraunhofer FIT, UNIVERSITY OF CAMBRIDGE, SINERGI, IZMAB Sp. z o.o., MP, OAS, WORLÉE, J.W. OSTENDORF, MCG, and GLN PLAST.

The Conference will be held at **ISQ headquarters in Oeiras** (Portugal) on **18<sup>th</sup> June 2019**. The objective of this event is to present the results achieved in the project's lifetime, the implemented outcomes and further development opportunities to be achieved in the future.

The development of the final agenda is still ongoing, but the event will be structured around **2 plenary sessions**, an introductory one on H2020 and SPIRE Programs and on a general overview of MAESTRI, and a conclusive one involving the Industrial Pilots involved, during which further potential research and development opportunities will be investigated. There will also be **4 parallel sessions** – one for each pillar:

- **Eco-efficiency:** LCA approach, environmental and energy management systems.
- **IoT and sensors:** applications and demonstration of real use of MAESTRI platform.
- **Industrial Symbiosis:** case studies, impact on business, toolkit for industrial symbiosis.
- **LEAN Management:** introduction to Lean Management system and presentation of developed lean tools.

# MAESTRI Final Conference –18/06/2019

If you are interested in participating, please click on the following link and fill in the registration form: <https://bit.ly/2TEbVnd>.

The target is mainly constituted by **policy makers, researchers, professionals in the technological and energy field, managers and university students**, but anyone interested in the tackled topics will be welcome. Therefore, if you have any colleague who is interested in participating, please feel free to forward the invitation and disseminate the news among your network of contacts.

Further information on the agenda and the speakers will be made available very soon, so make sure to subscribe to MAESTRI Social Media pages and follow the project's website: <https://maestri-spire.eu/>



**MAESTRI**  
RESOURCE AND ENERGY EFFICIENCY  
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18  
06  
19

**FINAL CONFERENCE**

OEIRAS - TAGUSPARK  
Av. Prof. Dr. Cavacao Silva, n. 33  
2740-120 Porto Salvo  
(PORTUGAL)

GET IN TOUCH WITH US FOR MORE INFO!



# Newsletter #5

## Project vision

“ *Manufacturing Industries should deliver competitively priced goods and services that satisfy human needs and bring quality of life, by finding progressively smarter and finer trade-offs between business and sustainability concerns.* ”

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## Project Partners

Coordinator



[www.maestri-spire.eu](http://www.maestri-spire.eu)

