

Appendix 1

DESCRIPTION OF THE COMPETITION TASK

Competition for students "Circular transformation of the Polish economy. Developing a strategy for industrial symbiosis."

Deadline for stage 3 'competition task': 1 September - 11 October 2024

In this stage, project teams complete a competition task which consists of developing and describing the circular industrial symbiosis strategy presented in the first stage of the competition. The strategy must include an up-to-date market analysis, identifying bottlenecks, opportunities and possibilities in selected economic sectors, proposing the implementation of an industrial symbiosis, developing legislative challenges, creating an implementation plan and planning marketing activities. The task is to be completed in the form of a presentation, which the entire project team will present to the Jury during the Competition Final.

COMPETITION TASK

Objective of the competition task: To present a strategy for cross-industry industrial symbiosis to support the circular transformation of the Polish economy.

Format: The assignment must be submitted in the form of a multimedia presentation (max. 35 slides) and a text description in PDF format not exceeding 4,000 characters including spaces.

Deadline: The competition task must be sent to kontakt@innowo.org by 23:59 on 10.10.2024.

Detailed task description:

The solution presented in the work must include:

1. **a description of an innovative industrial symbiosis of two or more companies** that could be implemented in Poland.
2. **an up-to-date market analysis, determining bottlenecks, opportunities and possibilities** in selected economic sectors, **proposing the implementation of an industrial symbiosis**, developing **legislative challenges**, creating an **implementation plan** and planning **marketing activities**.

The work should include industrial symbiosis solutions as defined below:

An industrial symbiosis is a collaboration between at least two entities in which by-products, waste or energy from one entity are used by another entity. The result of an industrial symbiosis is economic,

social or environmental benefits. The actors involved complement each other through the efficient use of raw materials, technology or energy.

Proposal for a multimedia presentation outlining a solution to the industrial symbiosis strategy:

1. Introduction
 - a. Description of the problem
 - b. General context
 - c. Analysis of the current market situation
2. Our approach
 - a. Entities involved in the symbiosis
 - b. Mode of cooperation in symbiosis
3. Results
 - a. Economic effects
 - b. Environmental effects
 - c. Social effects
4. Implementation options
 - a. Proposal of implementation method or plan
 - b. Resource flow diagram
 - c. Financial flow diagram
 - d. Planning of marketing activities
5. Barriers and opportunities
 - a. Identification of implementation bottlenecks
 - b. Technologies conducive to implementation
 - c. Potential legislative challenges
6. Summary and next possible steps

Issue description:

Around the world, the industrial sector is experiencing significant changes. Companies are adopting more efficient technologies, seeking sources of raw materials with low environmental impact and adapting to markets and regulations that increasingly value sustainability efforts. These changes are taking place against the backdrop of the larger challenge of the triple planetary crisis involving the climate crisis, biodiversity loss and pollution.

However, action towards a more sustainable future is still insufficient. They are taking place too slowly and on too small a scale. One possible solution to this situation is to demonstrate the benefits of cooperation for a more efficient use of resources. Industrial symbiosis could be a solution. This is an approach to commercial operations - using, recovering and diverting resources for reuse - that results in resources remaining in productive economic use for longer. This creates business opportunities, reduces demand on natural resources and is a step towards a circular economy.

Activities of this kind start with simple ideas, backed up by sound analysis. This is what the student competition to which we invite you is all about.

Evaluation criteria for the competition task:

The evaluation of the main task will be carried out by the Jury according to the same criteria as in Stage 1. It will be evaluated:

1. **Implementability** - feasibility **of the** solution - 25 points.
2. **Comprehensiveness** - the description of the symbiosis activities should take into account the operating characteristics of the companies in the selected industries, the realities of the business and proven technologies - 25 points.
3. **Innovativeness** - the proposed solutions should not directly duplicate already existing symbiotic applications, but can significantly develop them - 20 points.
4. **Effectiveness** - the proposed solution should result in effects that are most likely to convince companies to actually implement the solutions - 30 points.

The second stage of the Competition - the Final:

The 10 best entries will be selected for the Competition Final.

Each of the 10 selected teams will have to present their solution in front of the Jury during the Final.

The presentation time is max. 15 min.

Date of the Final: 22.10.2024

Place of the Final: Warsaw School of Economics