



ENGINEERS 4 EUROPE



# Responsible Innovation

**ENTREPRENEURSHIP 4 ENGINEERS**

**Workbook**

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# Instructions | Before Class

## 1. Watching the Module Video

## 2. Readings:

**Book:** Wulfan, G. V. (2016). The innovation Maze. 4 Routes to a Successful New Business Case. Bis Publishers.

### Articles:

- Seghezzeo, L. (2009). The five dimensions of sustainability. Environmental Politics, 18(4), 539–556. <https://doi.org/10.1080/09644010903063669>
- Guimarães, C., Amorim, V. and Almeida, F. (2022), Responsible innovation assessment tools: a systematic review and research agenda, Technological Sustainability, 2 (2) pp.206-223. <https://doi.org/10.1108/TECHS-11-2022-0043>

### Website:

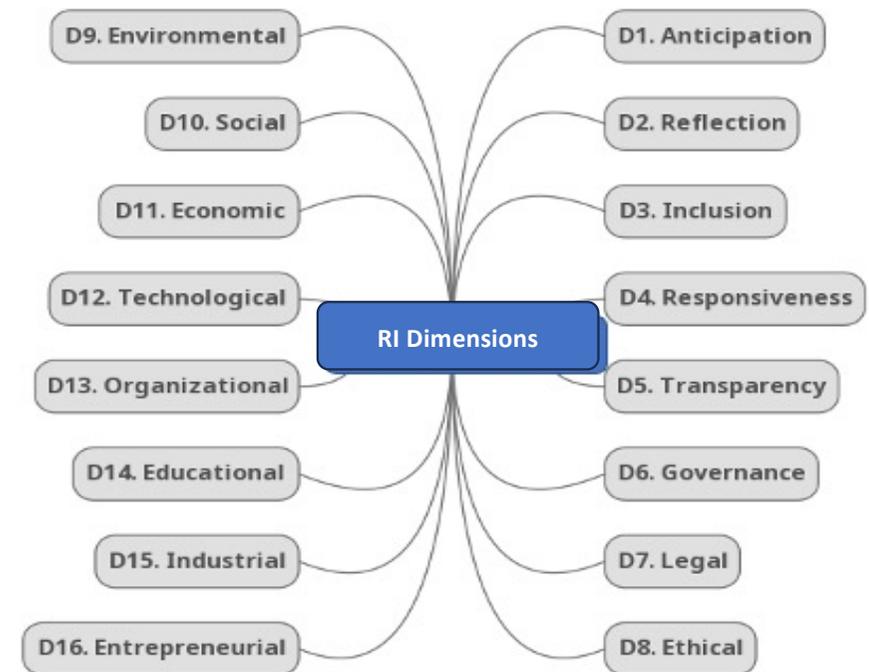
For an overview of SDGs read: “Transforming our world: the 2030 Agenda for Sustainable Development at <https://sdgs.un.org/2030agenda>

# Instructions | Before Class

Please make sure to remember the following instructions:

**Step 1:** Choose an **industrial innovation** to focus on. It should be something for which you can find information about the innovation process, whether it's related to the process, product, or both.

**Step 2:** Watch the module video and review all 16 Responsible Innovation Dimensions (RI) and the 4 Principles.





## Instructions | Before Class

Please make sure to remember the following instructions:

**Step 3:** Consider the importance of each question in the innovation process and share your comments in the last column of the two tables. The first column represents the corresponding RI dimension.

- For each question, provide thoughtful and detailed comments.
- Ensure that your comments address the key aspects of the question.
- Use relevant examples and data to support your comments.
- Ensure that your comments are organized and comprehensive.

## Instructions | In Class

Please make sure to remember the following instructions:

**Step 4:** Analyse and discuss in class (individually or in groups) each of your comments considering:

- Type of innovation you've analysed
- How does it promote sustainability
- Similarities of the comments
- RI principles that are represented



# BEFORE CLASS – Analyse the industrial innovation according to Responsible Innovation (RI) principles

Dim	Question	Comment
1	Is the potential impact of industrial innovation foresighted ?	
1	Is there a plan for responsibly usage of the innovation project results?	
2	The project has practices to monitor and manage risks?	
2	Are risks and benefits of innovation coomunicated among the stakeholders?	
3	Is the innovation centered in the user?	
3	Is Equality, Diversity and Inclusion Policy importante to the innovation process?	
4	The innovation processes are adapted considered external changes?	
5	Is visibility given on the different phases of innovation process?	



# BEFORE CLASS – Analyse the industrial innovation according to Responsible Innovation (RI) principles

Dim	Question	Comment
9	Is the impact on the environment assessed?	
9	Does the innovation promote a circular use of resources?	
10	Does the innovation addresses social needs?	
10	Does the innovation addresses vulnerable people?	
11	Does the innovation improves competitiveness?	
11	Local economic and development impacts are considered?	
12	Does the innovation promotes digital transformation?	
12	Does the innovation promote the development of new technological products?	

## IN CLASS- Record the results

- Go over your comments and discuss:
  - Type of innovation you've analysed
  - How does it promote sustainability
  - Similarities of the comments
  - RI principles that are represented

- *Please write here your discussion' results*



# Self-Assessment

## Scoring Guide:

1 – Strongly disagree; 4 – Neutral; 7 – Strongly agree

Questions	Scoring						
	1	2	3	4	5	6	7
Read carefully the questions. Your answers are your own guidance for future development and improvement.							
1. I have completely understood the concept of Innovation							
2. I have completely understood the concept of Responsible Innovation							
3. I understand the steps a company needs to take towards Sustainability							
4. I comprehend the Responsible Innovation Dimensions and how they incorporate the key elements of sustainable innovation							
5. I know how to identify the Responsible Innovation principles							



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