Impact Pathways and Impact Roadmaps

DECODE SUSTAINABILITY PROJECT
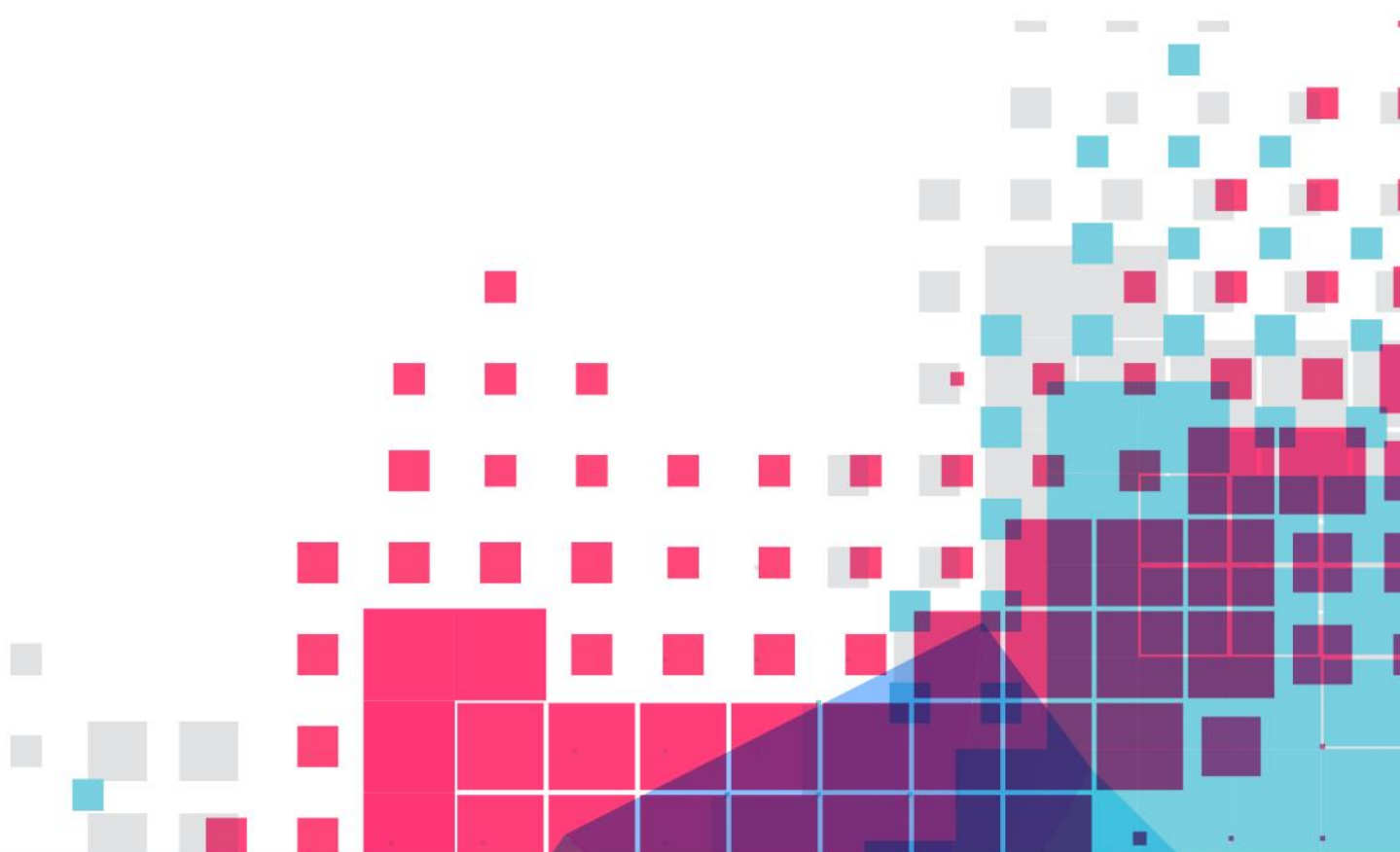
Table of Contents

1. Introduction

The DECODE Sustainability project (https://decode-council.org/) aims to push the boundaries of higher education by providing support to academic units in universities (i.e., faculties, schools, and departments) to develop and implement their own sustainability roadmaps by establishing the "European Deans Council for Sustainable Development".

The shared vision of the initiative relies on the belief that deans and their representatives for sustainable development are core in increasing the contributions higher education institutions make as they are the important "glue" between the university strategy and the ground-level work done by academics. This tactical level and the role of deans and their representatives are often overlooked. Higher Education is considered a prerequisite in the advancement of sustainability due to its mandate of creating knowledge and forming new leaders with the competencies and vision to foster change. However, the efforts of HEIs (higher education institutions), although echoed across national strategies and policies, remain at an operational level that has yet to transcend systemic embeddedness. Thus, the DECODE Sustainability project addresses the need to strengthen the link between HE and sustainability by providing HEIs with a suitable tool-based process to institutionalise SD (sustainable development) at the department level and contribute to its impact. According to such premises, the initiative can offer an effective added value for society and the EU.

The ultimate purpose of the European Deans Council for Sustainable Development is to design a clear pathway towards improving sustainability contributions in and through higher education. In order to fulfill such an ambitious aim, the fourth intellectual outcome of the project was focused on the DECODE Impact Pathways and Impact Roadmaps Framework.

More specifically, efforts were made to create a framework for generic Impact Pathways that university units or departments can use to advance their contributions to sustainability, and a framework for the creation of department-specific Impact Roadmaps (based on each of the generic Pathways) which will outline the specific steps to be taken by departments to promote positive change.

![DECODE Sustainability]

Co-funded by the
Erasmus+ Programme
of the European Union

2. Impact Pathways and Roadmaps rationale

To enable deans to break down the change process and steer their academic departments toward their sustainability goals into manageable components, a framework is developed in IO 4 based on two concepts: (1) Impact Pathways and (2) Impact Roadmaps.

An Impact Pathway can be understood as a general way in which deans can promote sustainability in their academic departments. It is a broad plan. The impact pathway focuses on one (or more) of the three main missions (e.g., education, research, operations) and the two supporting missions of a university or academic department (e.g., operations, governance).
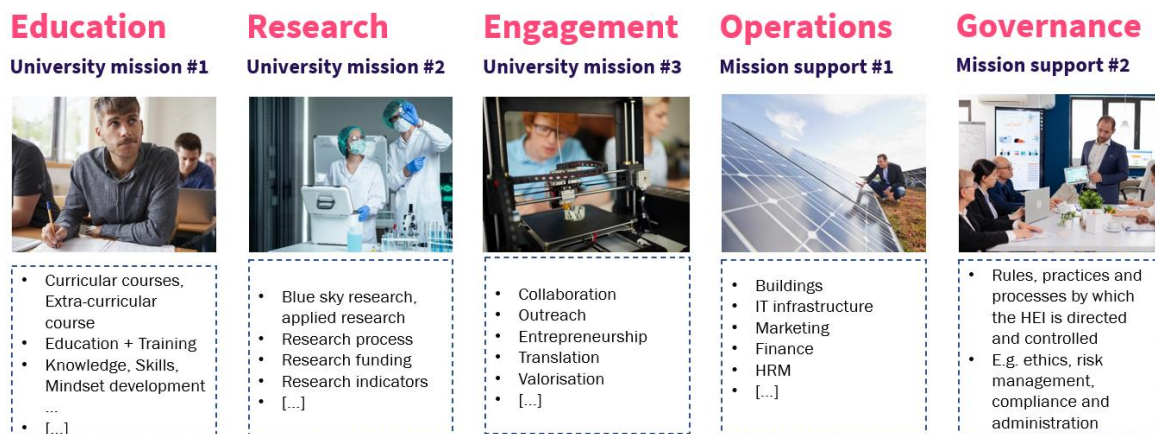

Each pathway is composed of five building blocks adapting the five policy levers codified by the literature on sustainability in higher education (Schneider and Ingram, 1990), as follows:

1. **Strategy**: using symbolic and encouragement signals to influence perceptions or values;
2. **Mapping and Monitoring:** to increase the understanding of an issue or reduce uncertainty about how to address it;
3. **Capacity building:** to provide information, training, skills, and resources to enable individuals or groups to make decisions or carry out activities;

Co-funded by the
Erasmus+ Programme
of the European Union

4. **Incentives:** using tangible payoffs (rewards, bonuses, prizes) to induce compliance or to encourage people to do things that they might not have done otherwise;
5. **Structures & regulations:** to implement the selected strategies, policies, or specific actions.

An *Impact Roadmap* shows the specific steps taken along the Pathway toward achieving the goals laid out in the Pathway. Based on the Pathway, the Roadmap is more specific and pays attention to the context in which the department functions, laying out the required resources in terms of time, human and financial resources, and expertise. It also provides details on the expected intermediate deliverables of the activities undertaken along the Pathway.

The Impact Pathways and, consequently Roadmaps are built across two key components: missions (horizontally in the picture shown here) and building blocks (vertically). The visual representation of impact pathways is depicted in the diagram below.
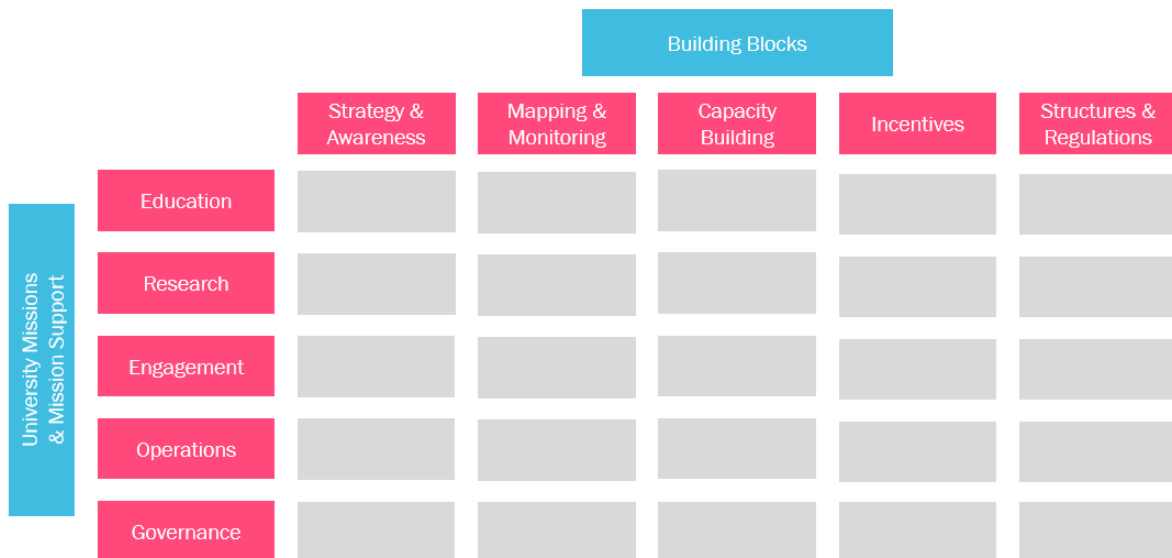
There are usually several pathways to choose from when trying to achieve organisational change toward achieving your sustainability goals. Based on the *priorities* set by the academic department and an analysis of its strengths, weaknesses, opportunities, and threats (*SWOT*), a roadmap can be selected.

The table shown below gives five examples of pathways, together with a fictitious quote by a dean to characterise the intentions for a particular pathway.

Table 2.1: Characterisation of impact pathways

Pathway	What's the ambition?
Education pathway	"We are focusing on integrating sustainability step by step in the different lectures and courses offered by our department"
Research pathway	"We want to direct our research more towards sustainability in order to get better ranked in THE's new Impact Ranking"

Pathway	What's the ambition?
Engagement pathway	"We want to introduce challenge-based learning, letting our students tackle challenges suggested by the communities in our university's neighbourhood"
Operations pathway	"We started to reduce the use of plastics and paper by our department and now we want to move on to saving electricity"
Governance pathway	"In our way of working, we want to act as an example for our university as a whole and direct all of our functions more towards sustainability"

Selecting a particular pathway and translating it into a customised roadmap for the department requires an assessment of the status quo and a consideration of the department's future priorities. Since each department has its own unique characteristics, there is no universal formula for developing the 'right' Roadmap. Each plan is likely to be a unique blend of missions, policy tools, and characteristics of HEIs and their resources. Each department has a different starting point, depending on its resources (e.g., financial, human), existing capacity, and autonomy levels. The changing environment is also shaped by university strategies, broader regulations, socioeconomic factors, and funding options.

3. Self-Assessment tool

To support deans in making their decisions, three questions are important:

1. To what extent sustainability is currently addressed in their department across the five missions (i.e., education, research, engagement, operations, governance)
2. To what extent are the department's sustainability efforts for each of the five missions (i.e., education, research, engagement, operations, governance) perceived as effective?
3. What are the department's future ambitions for promoting sustainability within its five missions (i.e., education, research, engagement, operations, governance)?

To address the first two questions, deans (or, for instance, a working group acting under the dean's remit) will have to make an inventory of their sustainability initiatives and assess their strengths and weaknesses in supporting sustainability and SDGs. For this task, the DECODE project offers a **self-assessment tool** based on a concise set of questions that address the various missions and sustainability/SDG-related activities undertaken by the academic department. The DECODE self-assessment is a short (~5-minute) survey aiming to shed light on the current state of development regarding the integration of sustainability in the academic department.

The self-assessment consists of 30 questions that are answered by marking checkboxes. Among these, 25 questions pertain to whether a particular policy tool (a total of 5 tools) is present in each of the five university missions (5 missions x 5 tools=25). The policy tools refer to the five categories of the building block (strategies, incentives, monitoring tools, etc.), while missions refer to teaching, research, operations, etc. Additionally, one question for each of the five missions evaluates the department's effectiveness in advancing sustainability initiatives. In total, there are 30 self-assessment questions (5 x 5 + 5 =30).

The self-assessment questions have the following structure:

> **When it comes to your department's [education/ research/ engagement/ operations/ governance] mission, is sustainability addressed in the following areas?**
>
> (Please select all options that apply):
>
> - o Strategy & awareness
> - o Mapping & monitoring
> - o Capacity building
> - o Incentives
> - o Structures & regulations
>
> **On a scale of 1-7, and considering all your academic unit's efforts, how would you rate the overall effectiveness of your unit in embedding sustainability in your [education/ research/ engagement/ operations/ governance] mission?**

From the self-assessment responses, a quantitative score (ranging from 10% and 100%) is calculated for each mission. The score is calculated using a simple algorithm that considers the available policy levers for each mission and the effectiveness score (as indicated on the above 7-point scale). The department, therefore, considers the tools that an academic unit already has in place and how effectively it is performing (its strengths – or weaknesses).

With these scores in hand (internal strengths and weaknesses), deans are encouraged to reflect on their self-assessment scores. The assessment identifies and evaluates existing activities and pinpoints the department's challenges. Before making a decision on the particular pathway to pursue further, deans are presented with decision approaches as part of the self-assessment results. These decision approaches include:

1. Excellence strategy: Continue with what you are especially good at
2. Opportunity strategy: Select the biggest potential for development
3. Diversification strategy: Broaden the basis (and create synergies within the missions)
4. Commitment strategy: Fulfil a moral or government obligation
5. Alignment strategy: Follow (your university's/unit's) strategic priorities

Deans can finally choose a particular pathway (see the above 'pathways table').

4. Inputs to design your own impact roadmap

Considering its challenges (priorities) and the instruments available (current and potential tools and approaches provided in the DECODE toolbox), the academic department can start to build its tailored Roadmap.


It assembles the various building blocks in the preferred sequence, prioritising instruments aligned with its ambitions and opportunities.
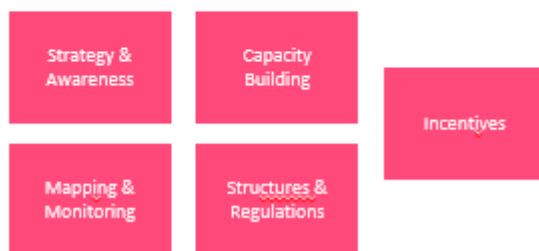
The Roadmap steps should align with the individual situation of the academic unit. Thus, the Roadmap does not have a predetermined sequence of steps but allows the assembly of the building blocks flexibly. It's important to start thinking about the design process, but the sequence can be adjusted later. Think of it as "every journey starts with a first step." To design the sustainability roadmap, let's delve into the detailed specification of the sequential steps. In the image below, we see three yet-to-be-defined steps:
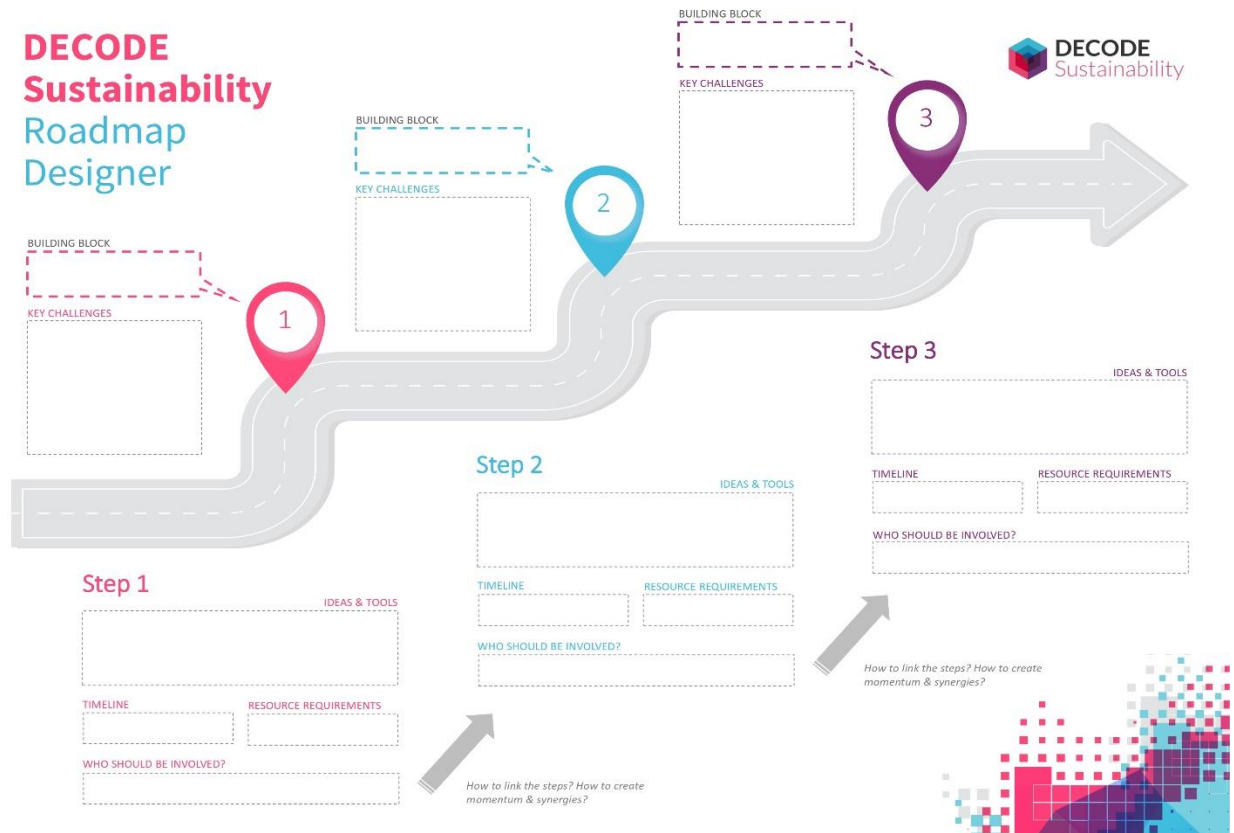
As part of the Roadmap, deans can highlight their first prioritized building block (e.g., Mapping and monitoring) after their decision on a particular pathway (e.g., Operations pathway). They can highlight their key challenges under this prioritized building block (e.g., tracking or measuring total annual departmental CO_2 emissions) and begin step 1 by specifying the underlying ideas and tools that are part of each step. These ideas focus on potential solutions to the challenges and the ambitions of academic departments (e.g., establish annual department carbon footprint accounting), while the tools explain what could be used to achieve the ideas (GHG gas protocol tool). Similar to the classic approach to project management, a timeline and a budget (resources, facilities) can be specified. In order to ensure the legitimacy and the reach of the project, it is also helpful to specify the internal (say, unit-level) and external persons (e.g., stakeholders from the central university level, or from the community).

5. Conclusion

DECODE Sustainability focuses on supporting academic units within universities (faculties, schools, departments) to develop sustainability roadmaps. The European Deans Council for Sustainable Development serves as a framework for this initiative. Deans and their representatives play a crucial role in bridging the gap between university strategies and the practical work done by academics. Their role in advancing sustainability is often overlooked. DECODE Sustainability addresses the need to strengthen the link between higher education and sustainability by providing tools and processes to institutionalize sustainable development at the department level.

DECODE's fourth intellectual outcome focuses on Impact Pathways and Impact Roadmaps, which help academic units to outline their sustainability goals and steps to achieve them. Roadmaps are tailored to each department's unique characteristics, resources, and starting points. Various pathways can be chosen based on departmental priorities. DECODE offers a self-assessment tool for deans to evaluate sustainability initiatives in five missions (education, research, engagement, operations, governance) and set future ambitions. Deans can choose pathways based on excellence, opportunity, diversification, commitment, or alignment strategies. Academic departments can design tailored roadmaps based on challenges, available tools, and ambitions.

DECODE
Sustainability

Project Partners

ACEEU
ACCREDITATION COUNCIL
FOR ENTREPRENEURIAL &
ENGAGED UNIVERSITIES

GUNI
GLOBAL UNIVERSITY
NETWORK FOR INNOVATION

cheps
Center for
Higher Education
Policy Studies

RIGA TECHNICAL
UNIVERSITY

www.decode-council.org

Project Number: 2020-1-IT02-KA203-079952