

ANNEX A - THEORY OF CHANGE

With Horizon Europe the EC and members and associated countries want to generate impact-driven R&I projects and to create significant societal and environmental impacts. In line with this perspective, it is requested to include a plan that describes what impact the R&I project, either driven by academia or industry, is expected to achieve in the long run and how it contributes to the overall impacts defined in the call:

- *the potential for impact beyond the academic world, such as in societal, technical, environmental, economic, policy-making, or behavioural realms.*
- *how relevant stakeholders can be involved in, and/or benefit from, the design and achievements of the R&I project.*
- *to what extent the project addresses the uptake of research findings and innovative outputs into decision-making processes and policymaking.*
- *how approaches for achieving impact are integrated into the R&I design and conducted by the consortium.*

To better consider these different aspects, it is requested to include a plan that describes what impact the R&I process is expected to achieve in the long run and how it contributes to the overall impacts defined in the call. One way to make such a plan is to establish a methodology of Theory of Change (ToC) with a related Impact Pathway (IP) to describe the research process, mentioning well-specified outputs and outcomes. See below a summary with further information on the Theory of Change, as well as freely accessible online workshop proposed by the Dutch Research Council (NWO): <https://impact.nwo.nl/en/working-with-an-impact-plan>.

The integration of the above elements will be considered in the evaluation of the proposals. In particular, it will be considered whether the proposal ensures that the project consortium, in its composition, sufficiently reflects the project’s stated aims in relation to output, outcome and impact creation, i.e., that its initial Theory of Change is realistic and achievable by the consortium partners.

A training session will also be organized at the beginning of the funded projects (back-to-back to the kick-off meeting) to exchange best practices related to Theory of Change principles.

Using a theory of change:

A Theory of Change is a logical framework that can be used as a tool to write a good R&I proposal with the aim to have societal impact (see box 1 for a schematic overview). It describes how the research and innovation process can contribute to societal, economic and, environmental change, considering the context, and all actors involved and

describing the sequence of logically linked consequential relations. A Theory of Change contains of two parts, a Problem Analysis and an Impact Pathway.

The Problem Analysis is a joint effort with research partners as well as stakeholders which allows for making explicit which (and whose) problem is being tackled and how the desired change is perceived to happen through research efforts. You start by clearly defining the societal problem and the desired impact. Next, the causes are discussed, and the knowledge gaps are identified. This part should form a logical chain to the project, hypotheses, methodology and work plan.

The Impact Pathway is the visualisation of the change process following research execution as described in the Theory of Change. It makes explicit how the research activities will lead to results (output) and how the exchange of knowledge and the uptake of research output will contribute to desired changes in behaviour, relationships, actions and activities of partners and stakeholders (outcome) that are considered essential to achieving the desired impact.

Any projections on expected change will of course be based on a myriad of *assumptions*, which can differ from person to person, between organizations or groups and even over time. Making assumptions explicit helps to create a shared vision and documenting these assumptions allows for reflection on whether and how expected pathways to impact remain adequate.

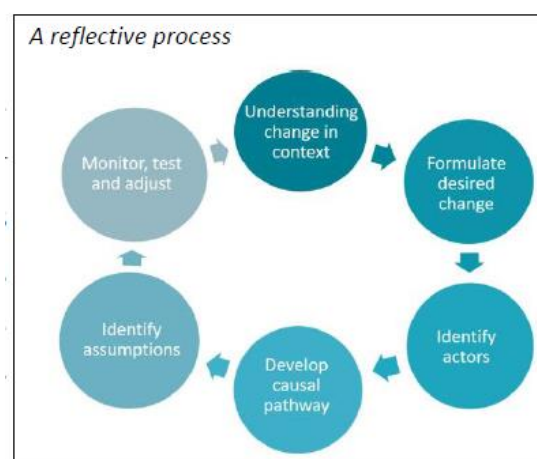
Given its construction based on logical-linked outputs and outcomes, a Theory of Change is also used as part of the monitoring, evaluation and learning trajectory.

An important element are productive interactions: Exchanges between researchers and stakeholders in which knowledge is produced and valued that is both scientifically robust and socially relevant. No change can be made without exchanging information AND people acting on that information. Interactions can be direct/personal, indirect, or financial. The quantity as well as quality of the productive interactions forms an indicator for the potential for societal impact. Examples of productive interactions are:

- Co-design: formulation of research questions and approaches jointly with potential end-users;
- Co-creation: joint execution of research projects with stakeholders and interactive dialogue on research results.

A Strategic Activity Planning spells out how the proposed productive interactions contribute to achieving outcomes. Outputs do not automatically lead to outcomes; thus, strategies are needed of the research consortium to plan and monitor how their efforts will enhance the potential for outcomes.

This planning should include specific activities for:



- *Stakeholder engagement: Who are the relevant stakeholders to engage with according to context analysis, how and when are the productive interactions organised?;*
- *Communication strategy: How are engagement dialogues organised and results exchanged and translated, and whose responsibility is it?;*
- *Monitoring, Evaluation and Learning: How are results of activities monitored and evaluated, such that assumptions can be tested and activities adjusted accordingly and whose responsibility is it?;*
- *Capacity strengthening: How are required capacities (of consortium partners and stakeholders) strengthened to achieve the outcomes, how is this organised and whose responsibility is it?*
- *A Risk assessment entails a description of potential risks for the successful execution of your project and options for handling or mitigating these risks.*

Box 1: Defining output, outcome and impact

Research and innovation outputs relate to the direct and immediate insights obtained by a research project or programme.

Research and innovation outcomes relate to the changes in behaviour, relationships, actions, or activities of stakeholders because of sharing and uptake of research. This starts during the project but continues after the end of the project.

Research and innovation impact is defined as changes in economic, environmental, and social conditions that a project or programme is aiming at. The actual impact is often long after the project ends.

