



# Working with Systems-Informed Theory of Change

A practical introduction  
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**Author:**

**DR. ISABEL VOGEL**

**Supported by:**

**KARIM R. ABOSENNA**

**EIT CLIMATE-KIC MEL TEAM**

To support EIT Climate-KIC's strategy, Transformation with Urgency 2024-2030, EIT Climate-KIC would like to support teams and partners to use a Systems-informed Theory of Change (S-ToC) approach.

## What is Systems-Informed Theory of Change (S-ToC)?

The urgency and complexity of the climate crisis requires systems change and interconnected solutions – across scales and siloes, across hearts and minds.

**Systems innovation** and other systems work involve developing holistic portfolios of coordinated climate innovation projects to accelerate learning, connect efforts across siloes and sectors, and address complex intersectional challenges.

**Systems-Informed Theory of Change (S-ToC)** is an overarching approach that can help you navigate complex system change. We have adapted conventional ToC by integrating systems concepts to help teams and their stakeholders analyse systems, identify leverage points and shared directions, and facilitate change-oriented strategies and action.

**EIT Climate-KIC's S-ToC guide and templates are available for the wider community of climate innovators, to support partners, peers and stakeholders in their climate innovation work.**

*Just follow the link to the Miro board on page 4.*

## ➡ How can S-ToC be useful for systems innovation and systems work?

Working with **systems innovation**, you need an integrated and flexible way to monitor, interpret and learn from **emerging change, processes, assumptions** and a **context** that is constantly changing.

Using an S-ToC approach supports teams to work effectively with **adaptive monitoring, evaluation** and **ongoing learning and sense-making**. S-ToC can underpin both large and small adaptations of strategies, and the documentation of the engagement and impact being catalysed amongst our partner constellations.

## ➡ Intended users of the S-ToC guidelines

This guide is intended for **EIT Climate-KIC teams, partners and anyone working to tackle the climate crisis** and interested in developing systems-informed ToCs for their areas of work. The S-ToC approach can be applied to any scale of project or initiative. The guide can also be used to facilitate ToC processes with **partners and stakeholders**, and as 'a train-the-trainer' approach.

# Overview of S-ToC



*"Articulating a systems-informed ToC for their programme of work provides teams with potential change trajectories to test through systems innovation - experimenting, designing, catalysing and learning from action."*

## ➔ What is S-ToC?

**Theories of change** are the ideas, narratives and hypotheses ('theories') that people and organisations have about **how change happens**. They form the theoretical underpinnings for actions and strategies aimed at creating change. These theories can be **conscious or unconscious, articulated or tacit**, and are based on a mix of **personal and professional beliefs, academic theories and philosophies, lived experience, and social and cultural norms**. All of these combine to create subjective mental models about how change happens and the actions required to push change in a particular direction. If left tacit and unexplored, these mental models can lead to misaligned strategies and interventions, which at best are ineffective at catalysing change, and at worst can be damaging (Van Es et al, 2015).

**S-ToC** is a structured approach to guide a collective critical thinking process that helps groups of people articulate, critically examine and refine their hypotheses and assumptions **about how change happens in systems**. The S-ToC approach includes an explicit integration of systems concepts:

- **System mapping** to explore the wider system of interest
- Critically reflecting on **system factors** that could enable or inhibit change
- Setting **realistic stepping stones**, and expressing **multiple directions and feedback loops**
- Making explicit **assumptions, hypotheses and uncertainties** to be explored through **actions, system innovation experiments and learning**.

S-ToC's **aim** is to enable individuals and organisations to better understand the system they are part of, to conceptualise the change process they seek in order to catalyse change in a strategic and responsive way. This supports adaptive learning from how the process evolves in reality, so that strategies can be reviewed and adapted along the way.

## ➔ EIT Climate-KIC's S-ToC Step-wise approach

This guide takes you through a **stepwise process** (see figure below) to enable you to approach the elaboration of a S-ToC in a systematic and logical way. Each step builds on previous ones. However, the stepwise approach is **designed to be iterative** and you can move back and forth between the steps. Depending on whether you are at the start of a change initiative, or are reviewing an existing one, you can enter the stepwise process at any point.



## ➔ Critically reflecting on assumptions

Assumptions are arguably the most important aspect of 'ToC thinking'. Our thinking about change is based on myriad assumptions - about **how change happens**; about the **system and the factors and actors** at play; about how we and others should **behave**; and about which **solutions** could work in which conditions.

Making assumptions explicit and discussing them from multiple perspectives is important for:

- Creating **shared values and motivations**
- **sparking experimentation and innovation** to test critical assumptions for which there is little evidence;
- Identifying **uncertainties and risks** that need to be monitored and learned from;
- Underpinning **adaptive learning and strategy revision**.

The EIT Climate-KIC S-ToC guide encourages you to reflect on different types and levels of assumptions at each stage of the stepwise process.



## Get started with the guidelines

- ➔ First, **make a copy of the Master guidelines board** and paste it into an empty Miro board so that you can use and adapt the templates without altering the master board.
- ➔ **Structure** - each step of the ToC process is structured in the same way. There are templates to complete, key points which explain the aim of each step, point by point guides for generating the output, and further tips and resources for how to facilitate a group discussion on each step. Additional resources are signposted if you'd like to dig deeper.
  - **Templates:** Each step provides templates for you to use, in the white boxes along the top row of each section.
  - **Key points to note:** The section below each template provides more information about the purpose of that step, why it matters and what the output should look like, in the grey boxes on the second row of each section.
  - **Resources and facilitation tips:** Further information on additional resources plus facilitation tips are provided in the third row of each section in the green boxes.
- ➔ **Make a copy of the board** - and start your S-ToC journey.
- ➔ **Gather your group** - this could be your team initially, but you should also engage **partners, key stakeholders and multi-sectoral groups** to bring different perspectives to enrich your S-ToC analysis.
- ➔ **Put in place processes for ongoing analysis, data and evidence to keep re-evaluating your S-ToC** - both at the design stage but also throughout implementation. In systems innovation, you need to be constantly **reviewing how the system is changing**, so you need monitoring, evaluation, data and evidence to help you learn and make an ongoing re-assessment of the best course of action at key points.



**Miro Board | Systems-informed ToC Design Guidelines**

Make a copy of the board - and start your S-ToC journey

# Practical ways to work with the S-ToC stepwise approach

## 1. Decide on your purpose and adapt the S-ToC approach

S-ToC can be used for a number of different purposes, and at a number of different points in the project cycle:

- **Programme and/or project design:** If you are starting from a blank slate, you will need to complete all seven steps, ideally involving partners and stakeholders.
- **Strategy revision:** You may be revising strategies in response to learning and new shifts in the context, in which case you may need to prioritise Steps 2, 4 and 5.
- **Quality check:** You may be reviewing a programme or project and so may need to prioritise a focus on assumptions and vector pathways - Step 5; and monitoring evaluation and learning, Step 7.
- **Evaluation and strategic learning design** - for an evaluation, you may need to retrospectively construct the implicit S-ToC for an initiative, which may mean completing all seven steps, with the benefit of clarifying the initiative for the team and stakeholders.

## 2. Decide on the timeframe, staff time, resources you want to dedicate to developing your S-ToC, and who need to be involved

- How much time you are able to dedicate to this may depend on your funder and if they are willing to fund a programme design phase. These guidelines have been designed to be scalable - you can tailor the process to suit your circumstances.
- Each step can be approached separately and completed within a 90-120 mins session. You can also iterate - complete an outline version first, then deepen and enrich the S-ToC through follow-up discussions.
- Making S-ToC a collective approach is key - involve your partners and stakeholders if possible.
- To enhance the approach, we recommend assigning two or three focal people to shepherd the process, make sense of what is generated in between group discussions, and maintain the momentum over several sessions.

### S-ToC Guide development process:

The S-ToC guide was developed by **Isabel Vogel** in collaboration with two EIT Climate-KIC Cluster teams: Capital and Investment Cluster and the Industry Value Chain Cluster.

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