

# Adaptation Catalyst

## Exploring Adaptation Options for Long Term Resilience to Climate Change

The Adaptation Catalyst is a software tool designed to help overcome the 'implementation gap' in realizing adaptive capacity, to get from research and design to actual realization of measures. The AC does this by offering the possibility to assemble primary information about climate pressure and the adaptive capacity of measures into one overview. This is the information that usually results from climate effect and adaptation options research projects. Added to this is functionality to interactively vary climate pressure and characteristics of measures, and instantly view what the result of these changes are on adaptive capacity, co-benefits and costs. This will help create awareness, help with choosing and planning of measures and support decision making about adaptation strategies.

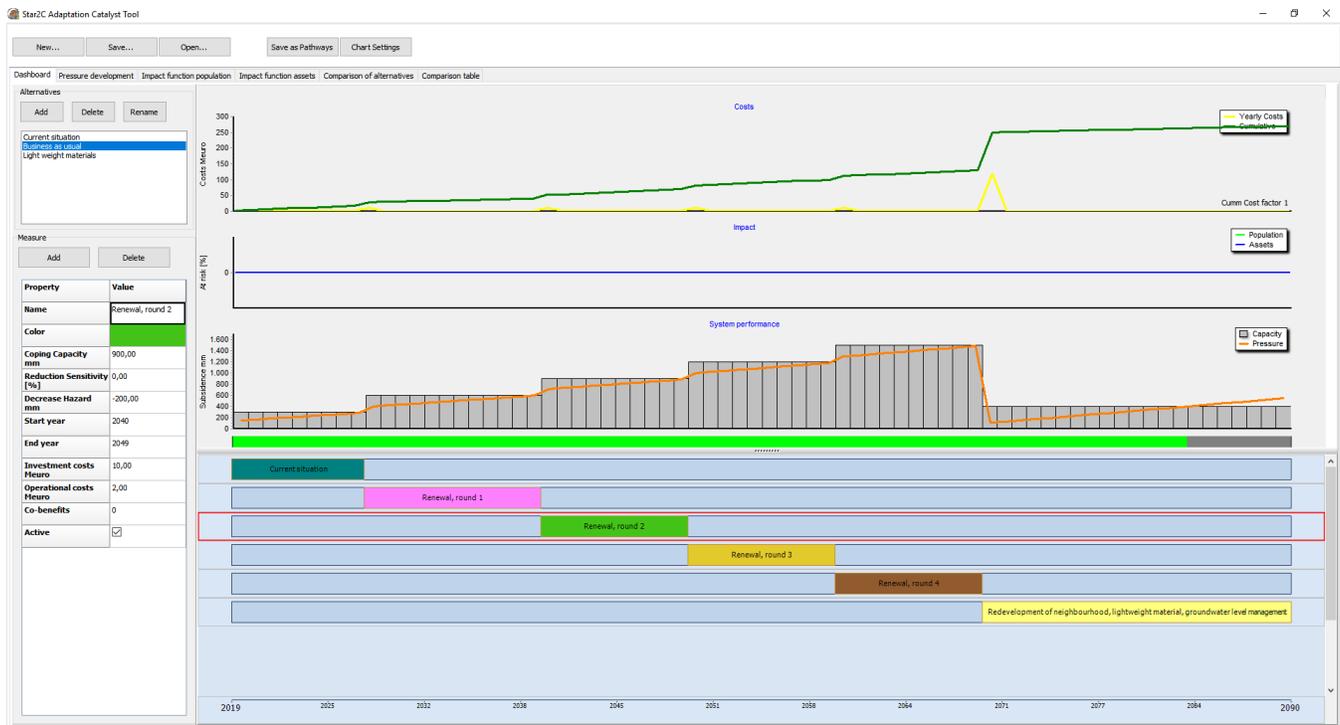
### Functional requirements and objectives of the application of the tool

The Adaptation Catalyst was developed based on the following guiding principles and requirements:

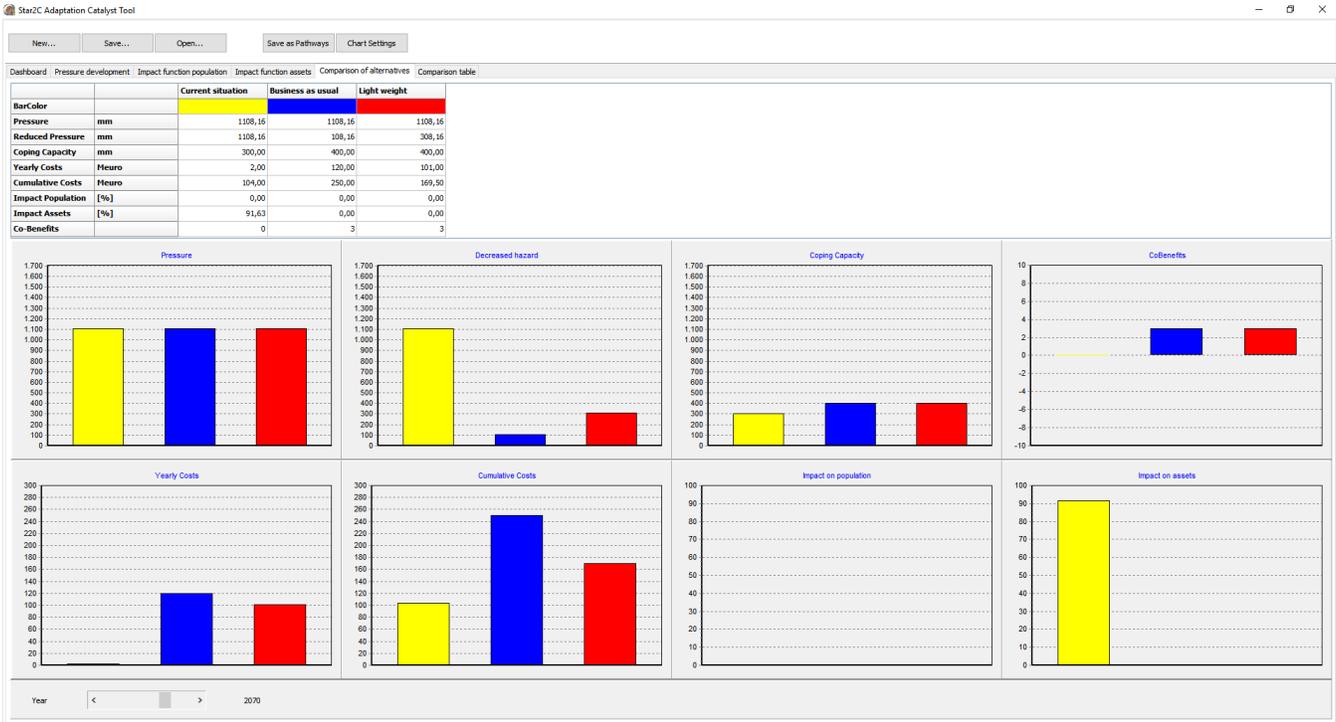
- Target group: primarily within own organization and stakeholders (professionals, but non-experts)
- Brings together results from preliminary research effects, impacts and measures
- Creates insight through visualization of the effectiveness of different adaptation options through time, under different future scenarios, on long(er)-term
- Use of adaptation pathways method to visualize adaptation options and limitations of these options, to support decision making
- Usable for all kinds of climate effects and adaptation actions
- Insight in drawbacks of restoration without adaptation to climate change
- Insight in how/if adaptation can be planned in sync with regular asset management
- Insight into the choices that can be made between different types/packages of adaptation measures
- Provide insight in choices (actions) that have to be made now
- Use (not calculate) qualitative costs/benefit data and show cost/benefit differences between adaptation measures
- Show effectiveness of measures and tipping points (moment when measures are no longer effective)

The Adaptation Catalyst software and user guide can be downloaded with the links on this wiki page and can be used free of charge.

Example of the AC dashboard that provides an overview of the sequence of adaptation measures, their costs and effectiveness

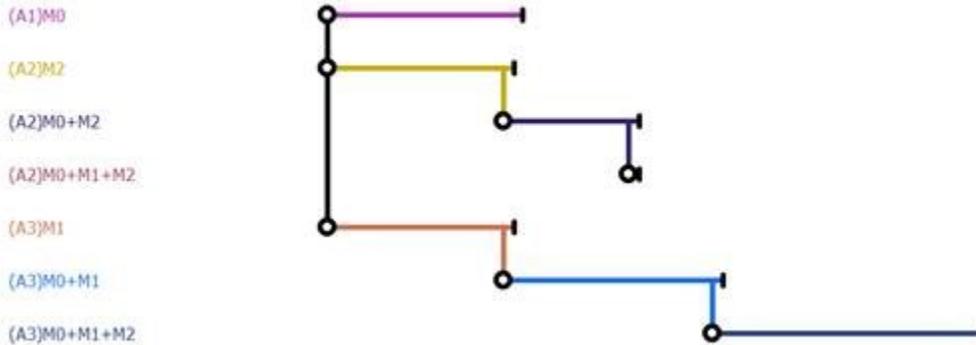


Example of the Comparison screen in the AC that enables a user to quickly compare adaptation alternatives (combinations of measures) on their effectiveness, co-benefits and costs

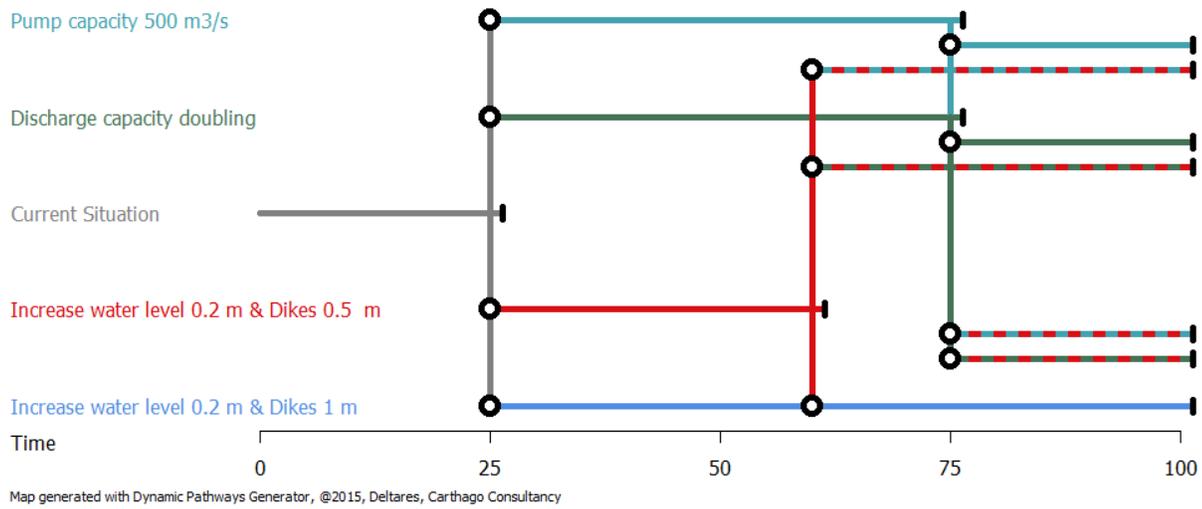


Adaptation alternatives that are constructed with the AC can be saved and exported in a file format that enables further processing with the Pathways Generator software ([Pathways Generator](#)).

*Example of visualization of adaptation pathways, in the layout that can be exported from the AC to the Pathways Generator*



*Exmple of adaptation pathways that have been refined with the Pathways Generator*



You can download the **Adaptation Catalyst software** with the link underneath. Just download the zip file, unzip it and start the AC by double clicking the executable. It is not necessary to install the AC.



This link allows you to download the report, that contains theoretical background information and an extensive **user guide** with example cases.



Some **predefined example cases**, that can be opened in the AC and used to get acquainted with the functionality, can be downloaded with this link.



Adaptation Catalyst **poster**



The Adaptation Catalyst was developed as part of the STAR2Cs project, which is funded by the European Regional Development Fund – Interreg VA 2 Seas Program (<https://www.interreg2seas.eu/en/star2cs>).



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