## ECONADAPT



## The Economics of Adaptation

## **ECONADAPT Toolbox: Summary**

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To find out more about the ECONADAPT project, please visit the web-site: www.econadapt.eu

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## **Executive Summary**

In the ECONADAPT project it was the aim of WP10 (according to the Description of Work (DoW)) to develop a methodological toolbox that provides guidance from the methodological tasks and the case studies to help inform the wider application of the economic assessment of adaptation.

The ECONADAPT Toolbox consists of different products: a web-based version (<a href="http://econadapt-toolbox.eu/">http://econadapt-toolbox.eu/</a>), an Insight document focusing on a general framework for economics of adaptation and examples for different policy challenges, an Insight document discussing suitable economic methods for the economic assessment of adaptation activities and a web-based database of data-sources including cost and benefit estimates for adaptation measures. The ECONADAPT Toolbox is heavily interlinked with the ECONADAPT Library including literature documents on economic assessment of adaptation.

The deliverable 10.4 has the aim to summarize and introduce the ECONADAPT Toolbox to potential users in a clear, brief format. It is a useful document for the wider dissemination of the toolbox.

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### 1 Overview



#### **The ECONADAPT Toolbox**

#### http://econadapt-toolbox.eu

The Toolbox provides easy access to information on the economic assessment of adaptation actions. It is relevant for policy makers and economists looking to implement and adjust methods to their situation or simply for gathering information on how to interpret results and methodological approaches. It provides in particular information on methodologies, data and evidence through case studies (called Insights). While most useful for practitioners and economists, the Toolbox may be of interest to a wider group of experts, stakeholders, and students interested in climate change adaptation.

#### The ECONADAPT Library

#### http://econadapt-library.eu

The library is an online collection of **grey and** academic literature that deals with the economics of adaptation. Visitors can use different search functions to narrow down literature with options to search via decision support tool, relevant sector, governmental scale or year of publication.

The Library is a living database that will continue to accept **submissions from external authors.** In this way, sets out to collect and make accessible **a broad range of literature** on the economics of adaptation.

# 2 ECONADAPT Toolbox for economic assessment of adaptation

With **climate change impacts** becoming stronger and widespread, adaptation is increasingly recognized as an important part of public policy.

Decision makers face **the need to take informed decisions** on the long term costs and benefits of certain actions, such as investing in infrastructure projects or policy programmes.

The recent adoption of national adaptation strategies and plans across the EU, illustrates that decision-makers are looking for guidance on how to assess and make informed decision for actions.

The use of economic analysis can provide valuable information on the value, efficiency and feasibility of adaptation projects and strategies.

The economic assessment of adaptation measures is different from a normal economic appraisal, in that the focus of analysis is on **managing uncertainties and risks**. It must take into account different time-scales, complex systemic relationships and dynamics, and multiple sources of uncertainties.

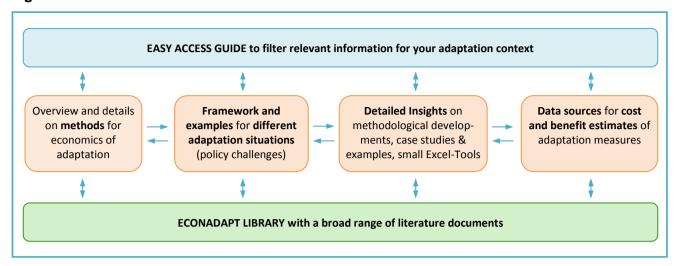
Furthermore, mainstreaming adaptation involves **embedding adaptation decisions within multiple sectors and decision contexts**, which vary in relation to the nature of the intervention, its spatial and temporal scales and its institutional context.

The ECONADAPT toolbox provides **easily accessible information** on the different available options of economic assessment of adaptation.

## What was the FP7 ECONADAPT (2013-2016) project about?

The aim of the ECONADAPT project was to provide user-orientated methodologies and evidence relating to economic appraisal criteria to inform the choice of climate change adaptation actions using analysis that incorporates cross-scale governance under conditions of uncertainty. A critical theme was to support the application of adaptation economics in the period following the publication of the EU's 2013 Adaptation Strategy, focusing on key decision areas that need enhanced economic information, and on the key users of such information. The project has received funding from the EU's Seventh Framework Programmer for research and development and demonstration under grant agreement No. 603906.

Figure 1: Overview of the ECONADAPT Toolbox



#### The ECONADAPT Toolbox consists of:

- Insights into methods, case studies and examples. The user can filter the relevant information for their adaptation context via the <u>Easy Access Guide</u>. Additionally, it includes interlinkages to the ECONADAPT Library.
- A gateway to concrete <u>cost and</u> <u>benefit estimates</u>, including data sources for 44 different adaptation options in several relevant policy areas such as water management, disaster risk management or agriculture.
- An introduction to a general framework for economic assessment of adaptation and examples for different adaptation

- **contexts**, such as project appraisal, policy and strategy assessment, international development support.
- Brief overviews of the **different economic methodologies** suitable for adaptation, their advantages, and challenges as well as examples for their use:
  - traditional economic decision support (e.g. <u>cost-benefit analysis</u>, <u>cost-effectiveness analysis</u>),
  - uncertainty framing (e.g. <u>iterative</u> risk management) and
  - for economic decision making under uncertainty (e.g. <u>robust</u> <u>decision making</u>, <u>real options</u> <u>analysis</u>, or <u>portfolio analysis</u>).

#### The ECONADAPT Library includes:

- More than 700 grey and academic articles on economic assessment of adaptation adaptation economics literature concerning a broad variety of impacts (e.g. flooding, heatwaves,
- water scarcity) and policy areas (e.g. agriculture, health, coastal protection, water management
- Open access for users and the possibility of submission for dissemination of other relevant literature (subject to review).

## 3 Further information

ECONADAPT Toolbox for economics of adaptation http://econadapt-toolbox.eu/

Sources for data on costs and benefits of adaptation <a href="http://econadapt-toolbox.eu/data-sources">http://econadapt-toolbox.eu/data-sources</a>

Library of publications related to adaptation economics http://econadapt-library.eu/

Further policy briefs, video summaries and Deliverables of the project

http://econadapt.eu/

The FP7 Econadapt project was lead by the University of Bath and undertaken by the following consortium of European research organisations:



























