

ECONADAPT

The Economics of Adaptation



Policy information and tools

Jenny Tröltzsch
Ecologic Institute

Policy information and tools

- Policy information for climate adaptation prepared by projects/different stakeholders is essential to support policy adjustments and adaptation decision-making processes
- In the last years – many projects developed web-tools/portals/platforms on (economic) assessment of adaptation
- Short overview on a selection of developed products and their aims:
 - General overview on types of tools
 - 5 short descriptions of tools including cost & benefits/economics of adaptation
 - Summary



Overview of different tools/portals

- Brief screening of 14 portals and toolboxes on assessment of climate adaptation, including WeAdapt, CLIMATE ADAPT, MEDIATION, etc.
- Portals have a very broad focus, mainly beyond economic assessment of adaptation, including different steps of adaptation decision making
- Some portals deliver climate data information and the possibility to analyse impacts and suitable adaptation options
- Tools which propose steps which can be taken for adaptation decision making (including assessment of options, but without delivering any data, etc. – e.g. UKCIP Adaptation Wizard)
- Portals which are focused on cost&benefits, methods for economic assessment

ECONADAPT



Overview of different tools/portals

Different types of tools/portals	Examples
Mapping of existing/future impacts/vulnerability	Plan2Adapt, CLIMSAVE, TopDad Data Exploration Tool
Measures/case studies/literature	ADAM, CLIMATE ADAPT, ToPDaD Data Exploration Tool , ECONADAPT-Toolbox, ECONADAPT-Library
Decision-making support	MEDIATION, UKCIP Adaptation Wizard, CLIMATE ADAPT, ECONADAPT-Toolbox, RAMSES
Share experience platform	WeAdapt, CLIMATE ADAPT, Adaptation Learning, Climate Collaborium
Simulate adaptation options	SIMCLIM

ToPDaD Data Exploration Tool

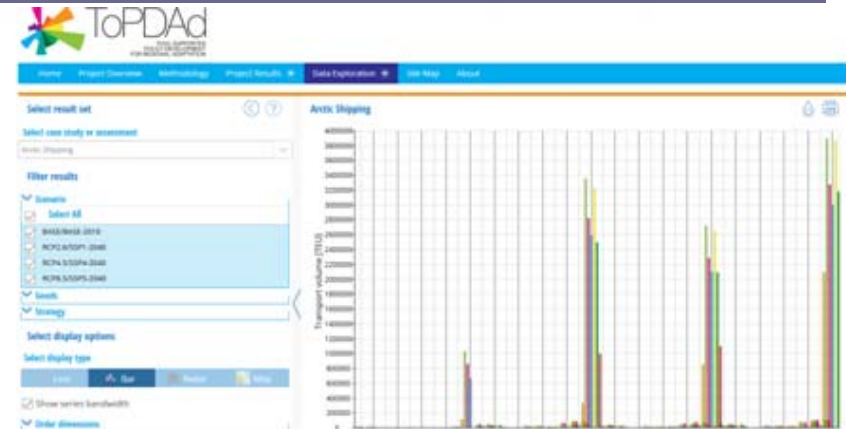
Objective/Content:

- Present assessment results for a variety of case studies over the 3 sectors Transport, Energy, Tourism
- To provide guidance concerning the ToPDaD methodology and comprehensive access to the outcomes at different levels of detail
- It includes damage costs and adaptation costs for the three sectors (graphs, visuals)

Target group: Different stakeholders at different levels: European, national and regional policy and decision makers and adaptation scientists

Access: <http://topdad.services.geodesk.nl/en/web/guest/interactive-tool>

ECONADAPT



RAMSES Audio-visual Guidance

Objective/Content:

- The web-based audio-visual guidance application will provide an application with comprehensive content accessible without personal guidance from experts. The most detailed layer will include target group orientated condensations of the scientific results, background information and links to further reading.



Target group:

- Policy-makers and stakeholders at city level

Access: Will be launched on 4th October 2016



PROVIA/MEDIATION Toolbox

Objective/Content:

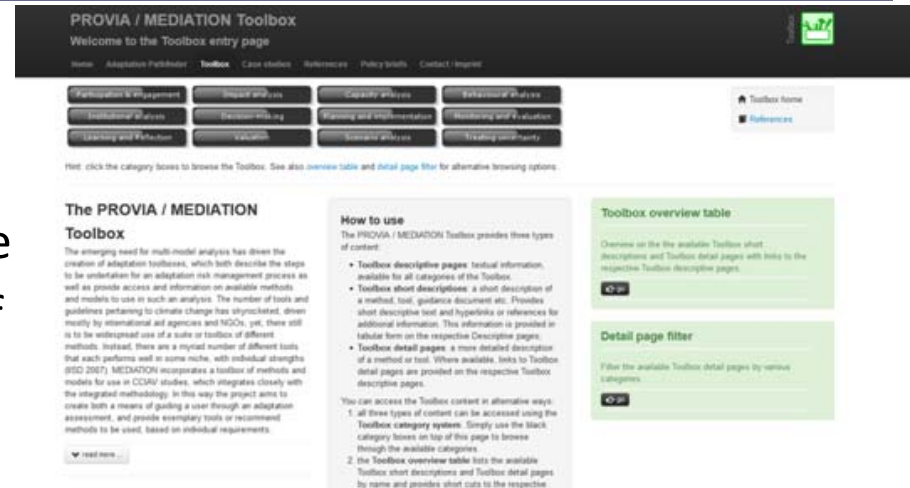
- To provide a structured database of (economic) methods and tools that are available to support the assessment of climate change impacts and vulnerability, and adaptation decision-making
- Linked with Adaptation Pathfinder which provides decision trees for adaptation decision making

Target group:

- scientists, policy advisors or practitioners (technical/scientific background)

Access: <http://www.mediation-project.eu/platform/toolbox/toolbox.html>

ECONADAPT



ECONADAPT Library

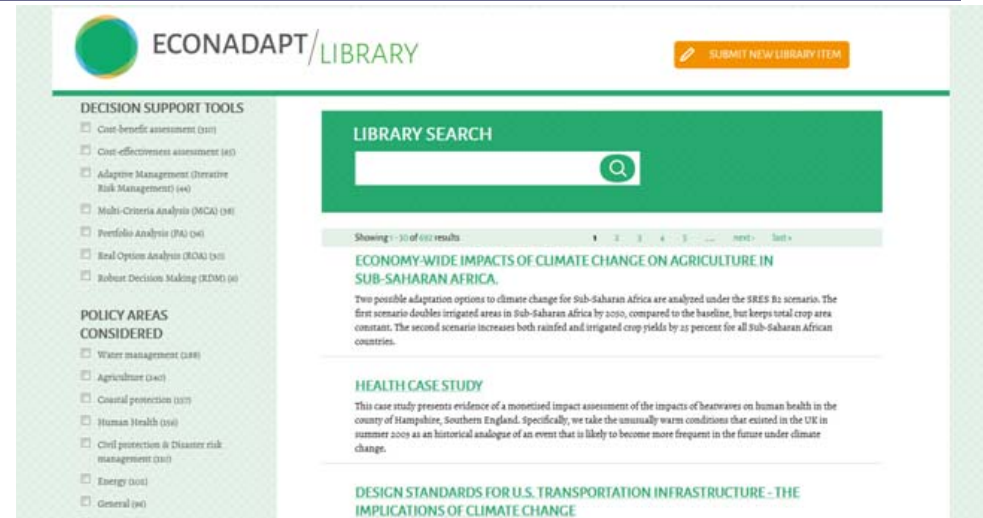
Objective/Content:

- To provide an easy access to a comprehensive overview on literature on costs & benefits of adaptation
- Interactive element of database by adding new articles by authors (at the moment almost 700 entries)

Target group:

- Scientists (mainly with economic background), policy-makers and practitioners on different levels

Access: <http://econadapt-library.eu/>



The screenshot shows the ECONADAPT Library website. The header includes the logo and the text 'ECONADAPT/LIBRARY' with a 'SUBMIT NEW LIBRARY ITEM' button. The main content area is divided into two columns. The left column lists 'DECISION SUPPORT TOOLS' and 'POLICY AREAS CONSIDERED' with checkboxes and counts. The right column features a 'LIBRARY SEARCH' bar and a list of search results. The first result is 'ECONOMY-WIDE IMPACTS OF CLIMATE CHANGE ON AGRICULTURE IN SUB-SAHARAN AFRICA' with a brief description. Below it is a 'HEALTH CASE STUDY' section and another result titled 'DESIGN STANDARDS FOR U.S. TRANSPORTATION INFRASTRUCTURE - THE IMPLICATIONS OF CLIMATE CHANGE'.



ECONADAPT Toolbox

Objective/Content:

- Easy reachable access to information on economic assessment of adaptation, especially on policy challenges, economic methods and practical examples - to help application of the economic assessment of adaptation
- Insights on ECONADAPT results – short summaries
- Includes interlinkages to data sources which include cost and benefit estimates for adaptation measures



ECONADAPT Toolbox

- Includes interlinkages to data sources which include cost and benefit estimates for adaptation measures

Target group: Economists and policy-makers on different levels

Access:

<http://econadapt-toolbox.eu/>

The screenshot shows the ECONADAPT/TOOLBOX website. At the top, there are navigation tabs: POLICY CHALLENGES, METHODS, INSIGHTS, DATA SOURCES, and EASY ACCESS GUIDE. Below this is a 'DATA SOURCES' section with a sub-header 'In the ECONADAPT project, cost and benefit values for 21 adaptation measures were reviewed and are summarized. You can filter the "Adaptation options" using the checkboxes below. Just click on any "Adaptation option" to get a table of the available data source.'

The 'DATA SOURCES' section is divided into two columns: 'POLICY AREA' and 'CLIMATE RISK'. Both columns contain a list of checkboxes for various categories. Under 'POLICY AREA', categories include Agriculture, Biodiversity, Buildings & construction, Civil protection & disaster risk management, Coastal protection, Energy, Finance & insurance, Fisheries, Forestry, Human health, Industry, Other, Regional & urban planning, Tourism, Transport, and Water management. Under 'CLIMATE RISK', categories include Heatwave, Increased storminess, Sea level rise, Water scarcity & droughts, and Flooding.

Below the filterable list is an 'ADAPTATION OPTIONS' section displaying 21 of 21 options, including 'Additional water abstraction and distribution', 'Additional water storage and distribution', 'Assessing rising and reducing consumption water savings', 'Barriers and enablers to improve natural hazards', 'Protection of buildings to flooding', 'Rainwater harvesting', 'Soil restoration', and 'Soft coastal defence'.

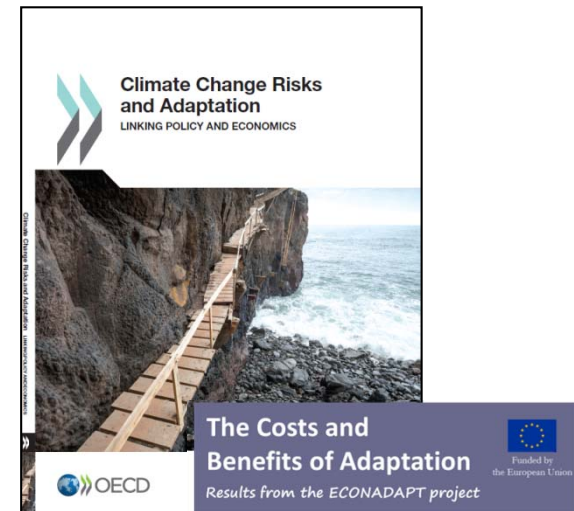
The bottom part of the screenshot shows a detailed view of a data source titled 'ADDITIONAL WATER ABSTRACTION AND DISTRIBUTION'. It includes a description: 'To abstract additional water from the aquatic environments and groundwater in order to meet water demand during whole year and low flows'. Below this is a table with the following columns: Data source, Author, Country, Climate risks considered, and Methodological approach.

Data source	Author	Country	Climate risks considered	Methodological approach
Climate Change Impacts and Adaptation: Quantifying the Cost of Impacts and Adaptation	Metzocanomics	UK	Water scarcity & droughts	Two case studies in SE England and SE Scotland. Net benefits estimated as difference between (a) the economic losses to households of restricted supplies and (b) ...
Economic Impacts of Rapid Climate Warming in the Andes	Vergara, W., Debb, A. M., Valencia, A. M., Bradley, R. S., Franco, B., Zariw, A., Grinwaldt, A., Harmsling, S. M.	Ecuador	Water scarcity & droughts	Cost-benefit analysis for Quito in Ecuador. Using a cost function approach for the next 20 years.
Proactive Method for Adaptation Measures to Climate Change in the Water Sector	Máñez, M., Cerdá, A.	Spain	Water scarcity & droughts	Cost-benefit analysis. Calculates private, environmental and social costs and benefits for a case study on emergency groundwater wells in Valencia. Includes positive and ...
Water resource planning under climate uncertainty in London	Dach, C., Arlett, B., Tadwell, J.	UK	Water scarcity & droughts	Assess effects of long term climate uncertainty on investment planning in London, including impact on reliability of resources, on cost-effectiveness of supply-demand options.

ECONADAPT

Further policy information

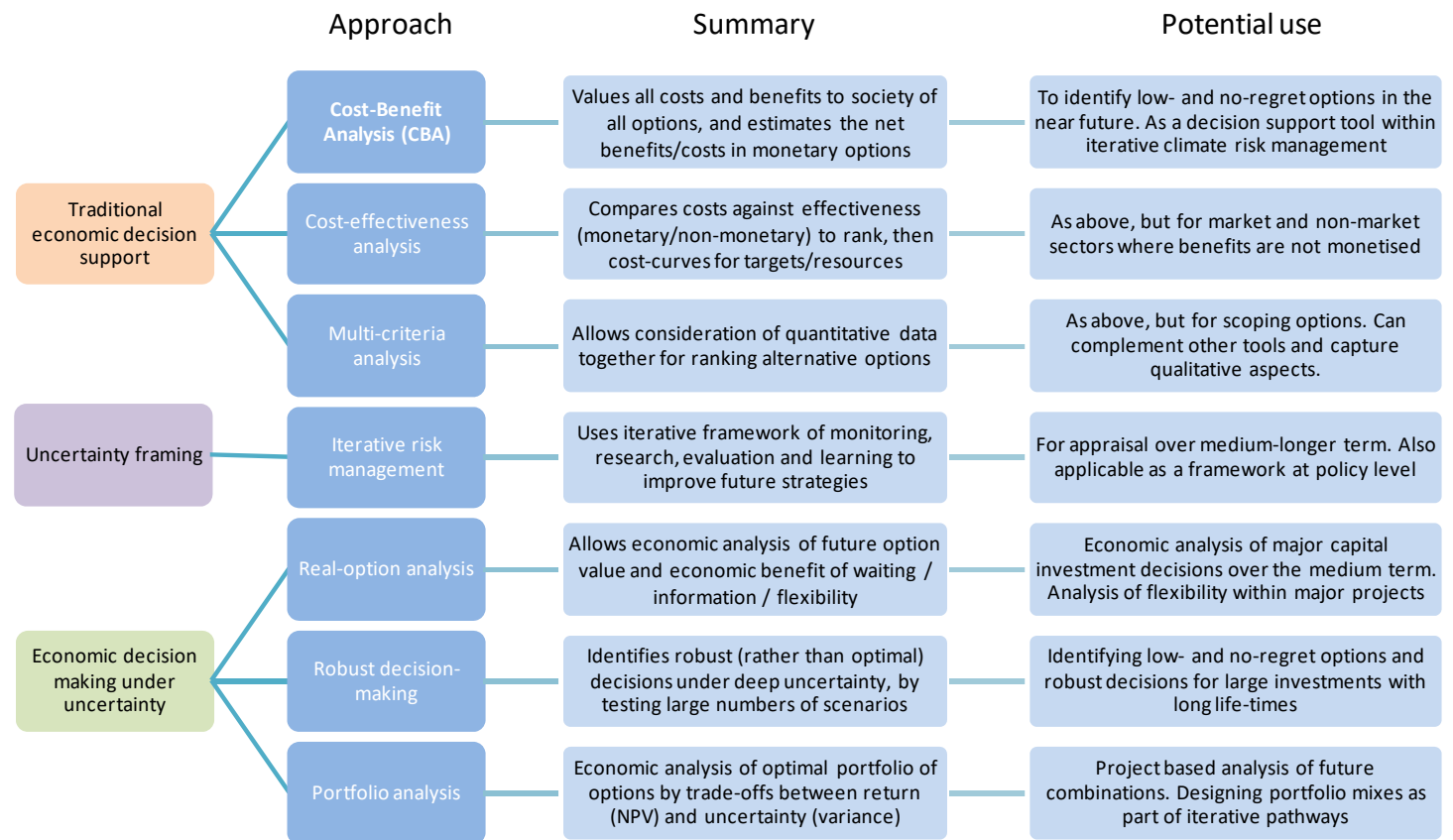
- ECONADAPT Policy briefs
- Review of the costs and benefits of adaptation was published in an OECD book
- Separate detailed ECONADAPT Policy report
- Policy summaries,...



ECONADAPT

Further policy information

- Insight into the economic analysis of climate adaptation decisions – for policy-makers, e.g. including information suitable methods for different policy challenges and information on strengths & weaknesses of methods



Summary

- Different tools/toolboxes/portals to support adaptation decision making available
- General guiding tools including economic information – e.g. RAMSES
- Interactive tools to present data on cost & benefits – e.g. ToPDaD
- Specific up-to-date methodological developments, strengths & weaknesses of methods, case study/examples – e.g. ECONADAPT Toolbox
- CLIMATE ADAPT – main portal which includes interlinkages to many products, tools, examples of projects



Further information:

- Website: www.econadapt.eu
- ECONADAPT Library: <http://econadapt-library.eu/>
- ECONADAPT Toolbox: <http://econadapt-toolbox.eu/>

