



European Bottom-Up Adaptation Case Study Framework

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The research leading to these results has received funding from the European Community's Seventh Framework Programme under Grant Agreement No.308337 (Project BASE)



The BASE project

- The BASE project is a FP7 large collaborative research project
- Total budget is 7.5 mill Euros over 4 years with 16 partner institutions
- From 2012-2016, the BASE project aims to foster sustainable adaptation in Europe by improving the knowledge base on adaptation and making this information easier to access, understand and act upon.



BASE structure

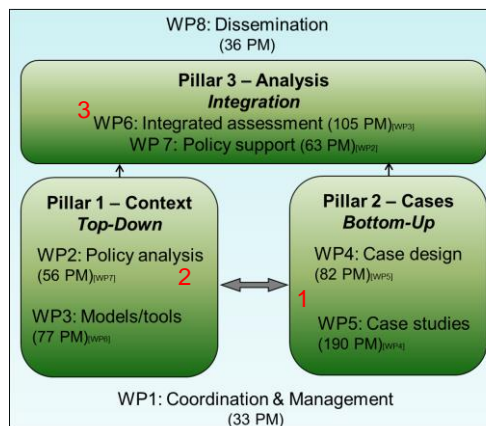
Pillar 1: Provides the policy and tools **context** for the case studies, from primarily a **Top-Down perspective**.

Pillar 2: Consists of the Bottom-Up research. WP4 developed a **case methodology** ensuring **comparability** between the case studies, and WP5 **implemented the methodology in cases**.

Pillar 3: **Integrated** and up-scaled results for economic analysis & **policy support**.

The 3 pillars are **coordinated** by WP1 and **disseminated** via WP8

Project model



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Purpose of WP4 and 5

- Comparability and Upscalability of Case studies (Bottom-Up)
- Clear goals and enough high quality data/information
- Simplify interaction of case studies and all WPs
- Platform to share knowledge, competences and skills
- Promote collaboration and joint publications

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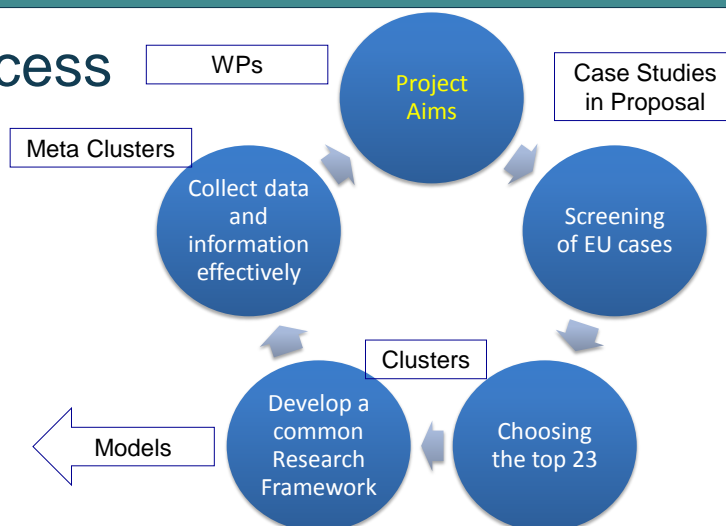
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Process



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Project Aims



Full Economic bottom-up "CBA"



Improve and develop participatory tools/methods



Improve policy coherence and effectiveness

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Screening of Cases

Cases	CC Impacts	Area	Where	Sectors	Retrospective / Prospective	Adaptation (stage and others)
Eg, 1	Floods, Droughts	Urban	Denmark	Infrastructures, Tourism	Retrospective and Prospective	...
Eg, 2	Draughts, Fires	Rural	Portugal	Agriculture	Prospective	...
Eg, 3	Floods, Droughts	Rural	Czech Republic	Biodiversity, Agriculture	Retrospective	...
Eg, 4
Eg, 5

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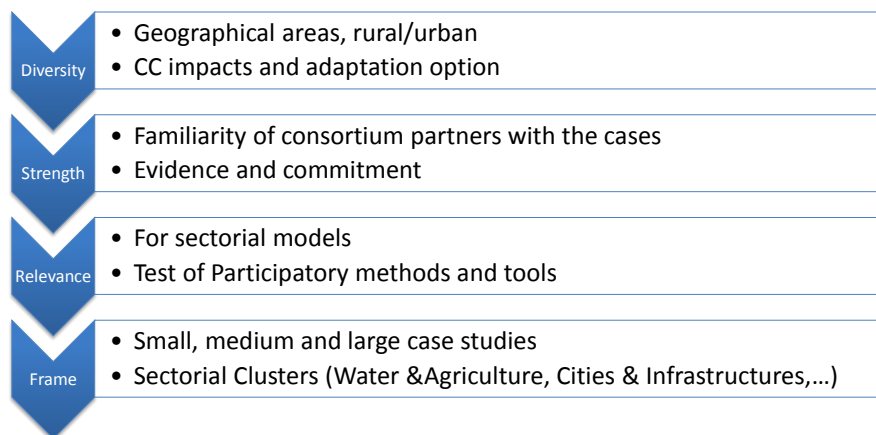
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Choosing Top 23



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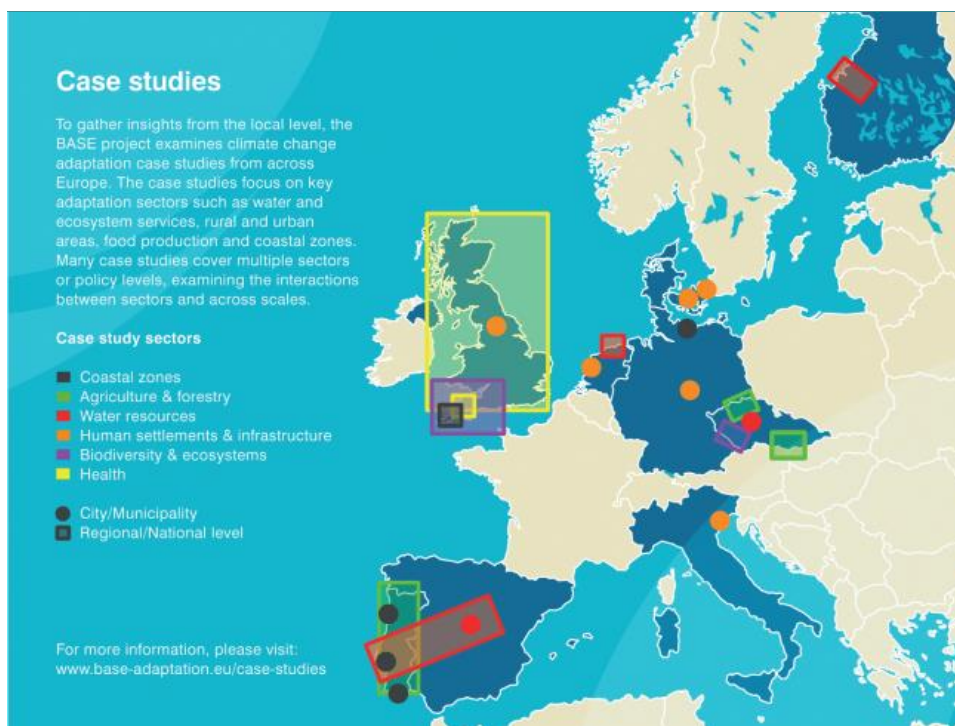
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European case studies (23)

Agriculture and Forestry/Biodiversity and Ecosystem Services

1. Alentejo [Tamera; Convergence Centre of Aldeia das Amoreiras]
2. Holstebro and Lolland
3. Dartmoor
4. Šumava
5. South Moravia
6. Donāna
7. Ústí

Water Resources and Health

19. Cornwall
20. IJsselmeer
21. Kalajoki
22. England
23. Madrid

Coastal Areas/Human Settlements and Infrastructures

8. Cascais
9. Copenhagen
10. Ilhavo and Vagos
11. Jena
12. Kalundborg
13. Leeds
14. Prague
15. Rotterdam
16. South Devon
17. Timmendorfer Strand
18. Venice

**Case studies were aggregated
into 3 Meta-Clusters**



Characterization of Case studies

BASE Case Study	BASE Case Study Typology							
	Main Goal(s)	Specific Focus	Objectives	Category	Territorial Zones	Scale	Process Direction	Temporal Definition
Alentejo	Explores climate adaptation perceptions, responses and innovations against drought in Alentejo (Portugal).	<ul style="list-style-type: none"> Compares bottom-up and top down perspectives on strategies and policies for climate adaptation. Studies innovative adaptation measures and projects in the region. Prioritizes measures to be assessed through cost benefit analysis. 	1,2,3,4,5,7	A,D,E,G, H,I	Rural	Local, Regional	Bottom-Up	Retrospective Prospective
Holstebro and Lolland	Examines agricultural climate change adaptation in two predominantly rural municipalities situated in different regions of Denmark.	<ul style="list-style-type: none"> Analyses autonomous farmers' adaptations and perceptions on climate change. Holstebro analyses "farmer as water manager" climate adaptation measure Lolland assesses the hydrological model developed for the Rødbj Fjord catchment area. 	1,2,3,4,5,7	D	Holstebro: Rural, Urban, River basin Lolland: Rural	Local, Regional, National	Holstebro: Bottom-Up, Top Down Lolland: Top Down (with participatory elements)	Retrospective Prospective



Characterization of Case studies

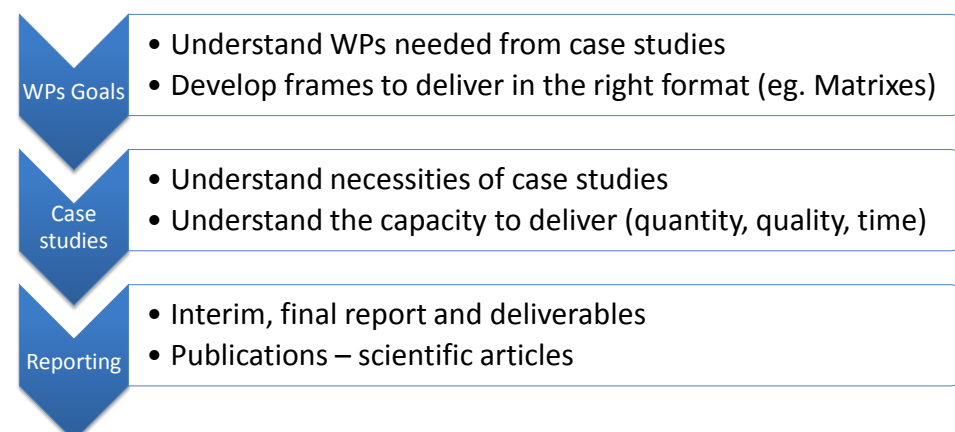
BASE Case Study	Climate Change (CC) & Adaptation					
	Primary CC Impacts (BASE)	Plan/Measure that the case study is based on or contributes towards	Main Driver	Funding of the Measure being studied at the time of the case study	Implemented/ Phase	Climate Adaptation Strategy/Plan/Measure/Initiative (Individual or bundle of measures)
Alentejo	Heat stress, Water Scarcity, Droughts, Soil erosion	Identify and prioritize climate change adaptation measures to drought (to inform climate change policies for the region, such as the National Adaptation Strategy)	Social-ecological vulnerability: Land abandonment, increased soil degradation, droughts and risk of desertification	Regional (no funding), Tamera eco-villa (Private), Centro de Convergencia (Private)	Ongoing/ Assessment & Planning	<ul style="list-style-type: none"> Adaptation measures for agriculture and forests Water retention in the landscape: artificial landscape (Tamera) Social innovation as an initiative against land abandonment and land degradation.
Holstebro and Lolland	Holstebro: Fluvial flooding, Pluvial flooding Lolland: Pluvial Flooding	Climate Adaptation Strategic Plan (2015): - Holstebro the 'farmer as water manager' measure. - Lolland Risk management plan; Climate adaptation plan in progress. Development of a hydrological model. Farmer autonomous climate adaptation analysed in both.	<ul style="list-style-type: none"> EU flooding directive (Directive 2007/60/EC). Municipality identified by the Government as a flood risk prone area. National requirement that Danish municipalities develop plans for how to adapt to climate changes. 	Holstebro 'Farmers as water manager' would need national subsidies to initiate implementation Lolland: No public funding	Holstebro: Ongoing/ Assessment, Planning, Implementation Lolland: No, decision to not implement due to regulatory framework and lack of financial resources	<ul style="list-style-type: none"> The 'farmer as water manager' in conjunction with the construction of a dam to retain water upstream. Farmers' autonomous climate adaptation is analysed in Holstebro, Lolland and nationally.

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Characterization of Case studies

Case Study	Analysis, Models & Tools					
	Climate Change-related Impacts	Participatory Approaches & Social Learning	Economic Assessment	Evaluation/ Prioritization	Sensitivity Analysis	Adaptation Tipping Points & Dynamic Adaptation Pathways
Alentejo	n/a	<ul style="list-style-type: none"> Stakeholder meetings & workshops Questionnaire & semi-structured interviews with farmers Participatory Action-Research PBCA Participatory add-ons to MCDA Systemisation of experiences (results published by Campos et al., 2015) 	CBA (Use of the InVEST Model for the Ecosystems services)	MCA	n/a	n/a
Holtebro and Lolland	Based on existing scenarios (IPCC)	<ul style="list-style-type: none"> National online survey for farmers' CC perception Local stakeholder interviews & survey 	Holtebro: <ul style="list-style-type: none"> Cost effectiveness analysis (CEA) (Choice Experiments (CE)) Simple cost benefit analysis (CBA) Lolland: n/a	n/a	Holtebro: Applied different discount rates Lolland: n/a	Possible tipping point Holtebro: flood protection financial cost. No assessment of when that tipping point would be reached. Lolland: n/a Adaptation pathway: n/a

Develop a common Research Framework





Collect information and data effectively

Case Study Living Document (CSLD) (Word Document)

Climate-ADAPT (EU)



Process was fine-tuned (tests) and continued improvement

Case study characterization, aims and plans

Dissemination, Publications and other impacts

Boxes, Tables and matrixes to feed into other WPs

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Collect information and data effectively

Table 1-1 Structure for the CSLD

Structure for CSLD

Chapter 1. General Case Study Description	Chapter 3. Participation in climate change adaptation
a. Location	a. Process overview
b. Case study summary	b. Participation in the process phases
c. Context	c. Participation experiences
d. Brief general information on climate change and related issues	d. Learning through participation
e. Existing information on case study's adaptation history	Chapter 4. Climate change adaptation measures and strategies
f. Connection with other research projects	a. Adaptation measures under analysis in case study
g. Case ID; typologies and dimensions	b. Adaptation measures selection and data availability prior to BASE
h. Impacts, sectors and implementation	c. Full description of adaptation measures
i. Importance and relevance of adaptation	Chapter 5. Impacts, Costs and Benefits of Adaptation measures
Chapter 2. Case study research methodology	a. Preliminary risk assessment and identification of adaptation tipping points
a. Research goals	b. Identification of adaptation measures
b. Stakeholders involved	c. Evaluation criteria and method
c. Methodology	d. Data collection
d. Case study timeline	e. Net Present Value calculation and discussion of results
e. Collaboration with other partners and case studies	Chapter 6. Implementation analysis – understanding, leadership and governance of the implementation of adaptation measures
f. Research outputs	

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General Feedback

Most case studies were successful

Only a few clusters were full operational

Only a few cases supported sectoral models development

Policy recommendations are now being assessed from the 23 case studies

Several publications are coming out from case studies and some through the clusters

Good "CBA" assessment and testing of innovative Participatory tools/methods

Good Implementation analysis (barriers and enablers)

"OK" to Good evaluation of the CSLD

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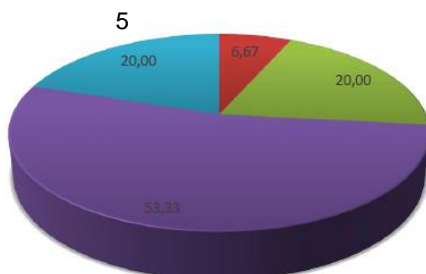
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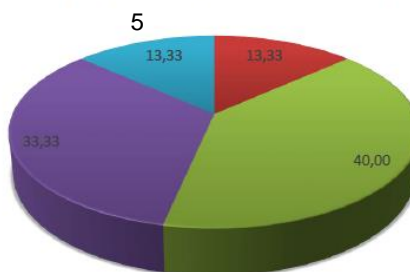
Evaluation Survey of CSLD (by researchers)

Level of comprehensiveness of the CSLD for case study owners



Very Low 1 2 3 4 5 Very High

User-friendliness of CSLD for case study owners



1 2 3 4 5

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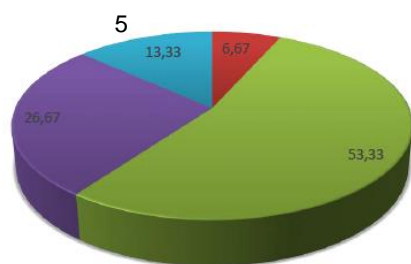
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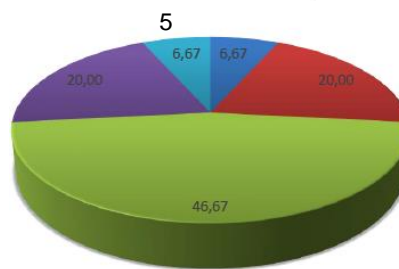
Evaluation Survey of CSLD (by researchers)

Ease of reporting on CSLD for case study owners



Very Low 1 2 3 4 5 Very High

Usefulness of CSLD for case study owners



1 2 3 4 5

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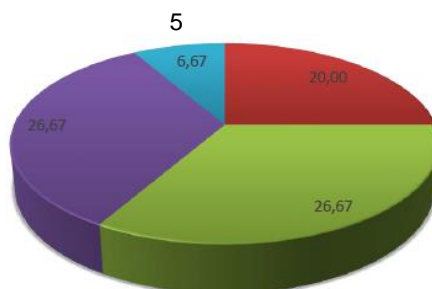
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Evaluation Survey of CSLD (by researchers)

Role of CSLD in supporting case study clusters dynamics



Very Low 1 2 3 4 5 Very High

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Evaluation Survey of CSLD (by researchers)

Strengths	Weaknesses	Opportunities	Threats
<ul style="list-style-type: none"> • ‘CSLD cover all potential research done in case studies.’ • ‘Clearly a tool to monitor progress’ 	<ul style="list-style-type: none"> • “Some sections should link to other sessions” • No section to explain the theoretical framework guiding the study 	<ul style="list-style-type: none"> • “software that allows for distinguishing updates and quicker navigation through the text” • “Cloud version” 	<ul style="list-style-type: none"> • “task leaders missing some new text or the questions not covering all case study findings”

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Summarizing

- Case Study Management is demanding but fundamental
- Comparability and Upscalability of case studies is not an easy task
- Operational Clusters supported knowledge transfer, collaboration and joint publications
- CSLD supported harmonization and coordinated reporting, rigor and objectivity, flexibility and standardization

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Thank you!

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BASE Interactive Policy Workshop | 09 June | Brussels

Objective: The interactive discussion will allow stakeholders to share experiences and knowledge on European adaptation in policy and practice. Objective is to **shape a series of recommendations** to support the review and future format of the European Adaptation Strategy.

Topics: Participants will discuss a range of topics, including the impacts and risks of climate change, the sectoral costs and socio-economic benefits of adaptation and the implications for policy making from EU to municipal level. Focus will be placed on adaptation in **agriculture, cities and water** with practical examples from a range of European case studies.

WHEN Thursday, 9 June 2016, 9:00 – 17:00

WHERE Les Ateliers des Tanneurs, 58-62 Rue des Tanneurs, 1000 Brussels, Belgium

INFO visit www.base-adaptation.eu or contact us at

BASE-policy-workshop@ecologic.eu

Workshop modules include:

Presentations on Climate Adaptation in a European Context

Hans Sanderson, Aarhus University
Marco Gemmer, DG Research and Innovation
Bea Yordi, DG Climate Action

'ConverStations' on Implementing Adaptation

Participatory small table discussions on key challenges and opportunities. Multiple inputs from European case studies on water management, cities and agriculture

Discussion on Tools for Economic Evaluation and Financing

Claus Kondrup, DG Climate Action
Michael Mullan, OECD

Policy Recommendations to Inform the EU Adaptation Strategy

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