



## Overview of OPERAs

Operational Potential of  
Ecosystem Research  
Applications

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## What are ecosystem services?

- Ecosystem Services are the benefits that nature provides to people
- That flow from the stock of Natural Capital



## What will OPERAs do?

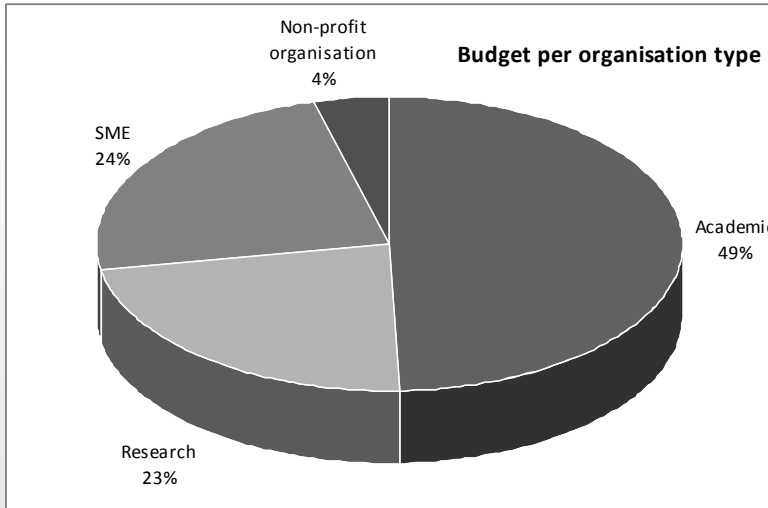
- Moving ES/NC from an academic concept to being operational in practice
- Bringing together science, policy and practice communities
- Developing tools, methods, instruments, data, best practice guidelines, worked examples, training, educational materials, services, events, ...
- Tested in exemplar studies, and ...
- ... delivered through a resource hub (web portal) ...
- ... developed with, and for, a community of practice



## The OPERAs vision

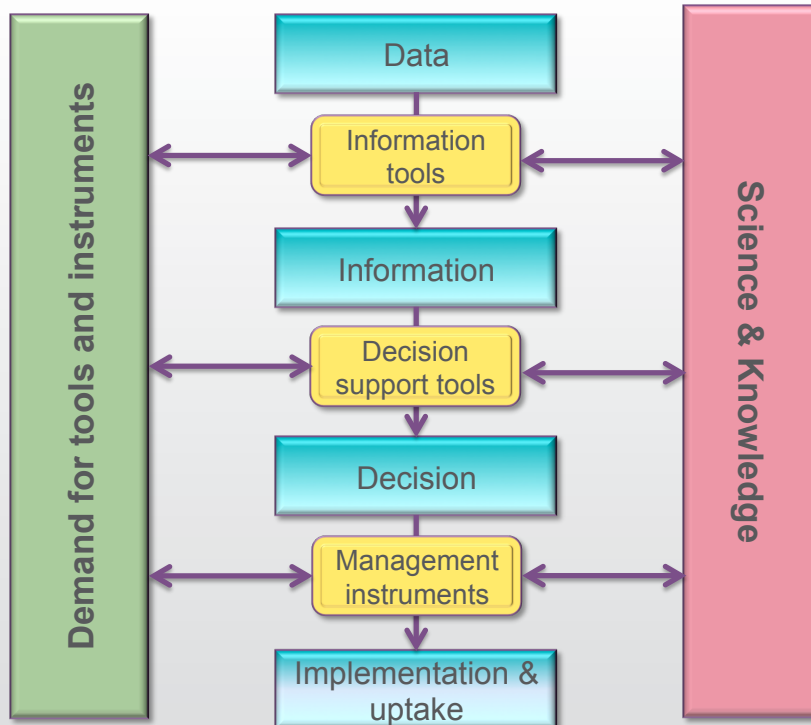
*Applying the ES/NC concepts to enhance the sustainable management of ecosystems, through better knowledge of ecosystem functioning and 'instruments' that operationalize the ecosystem service concept, tested in practice*





## Partnership

Ca. €12M budget  
 27 partners  
 11 European countries  
 1 non-European  
 24% SMEs



## The information chain from data to action

- information tools e.g. databases & visualization;
- decision support tools, including market-based instruments such as auditing, certification, labelling & PES;
- policy instruments



## A process of engagement for the resource hub

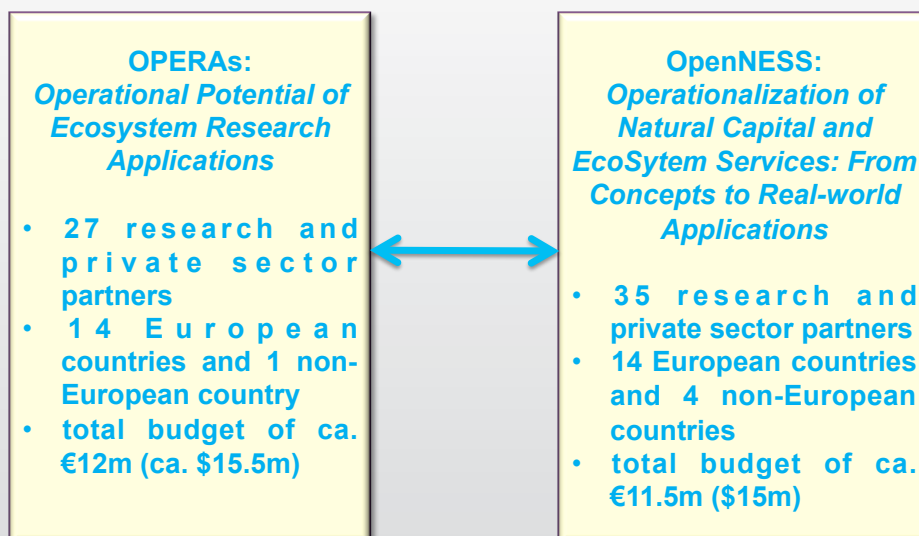


- Engagement: workshops, online surveys, interviews, feedback, iteration, ...
- Outreach: webinars, journalist field trips, videos, training workshops, science-policy-practice conference, ...



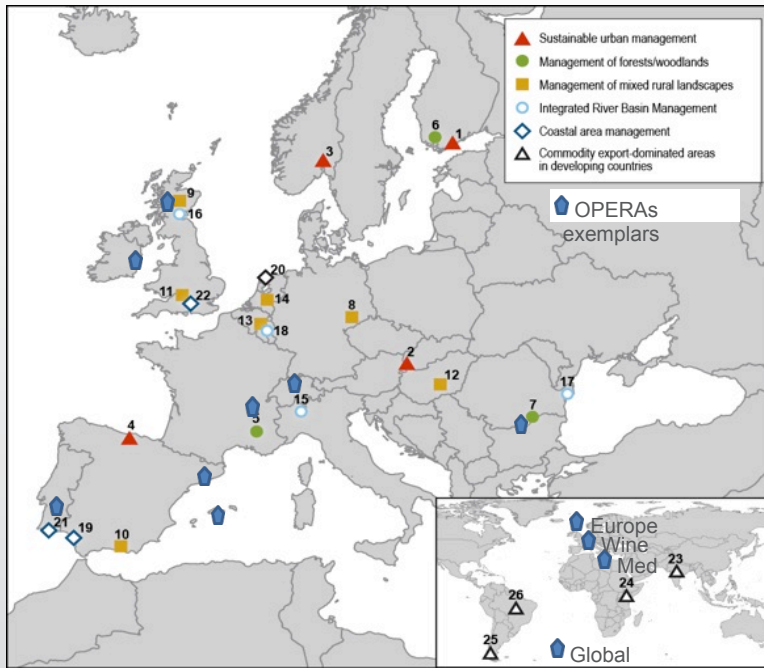
## Collaboration between OPERAs and OpenNESS

- Two projects funded within the same call





# The OPERAs exemplars & OpenNESS case studies



Total of 38 exemplar case studies (12+26)



## Aquatic systems on the edge



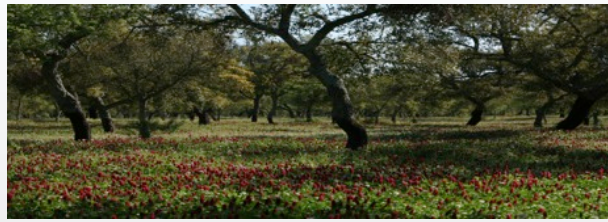
Barcelona Dunes | Baleric Blue Carbon | Lower Danube | Scotland Multiscalar





Dublin's urban-rural fringe

# Local and regional transitions

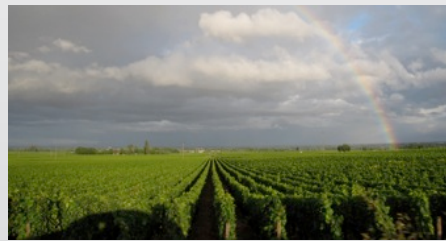


Conserving Montado cultural landscapes, Portugal



Landscape management and infrastructure in the French & Swiss Alps

The wine sector



Multiscale Environmental governance in Scotland



## Pan European Exemplar

- 1) How can a new EU policy instrument for No Net Loss of Biodiversity and Ecosystem Services promote synergies and/or prevent trade-offs between key ecosystem services, and biodiversity?
- 2) (b2) What spatio-temporal trade-offs arise given alternative valuations of ecosystem services, in Europe in a plurimodal world?

### Project Goals

Quantifying synergies and trade-offs between biodiversity, as a result of policy interventions and/or climate change, to provide insight in the potential spatial implications, longer terms, thus assisting decision making and identifying

### Exemplar Team

André van Duinen, Peter Verburg, Nils Gensch, Mark Moran, Robert Vanbergen (TU University Amsterdam, WUR, WPI), Fabien Guiller (Globe, WPI), Patrick van der Kamp, Caroline Lucas (EPF, WPI, WPI), Arno Bakker, Arno Bakker (EPF, WPI)

### Ecosystem Services in this Exemplar

The European Union is developing an initiative for assessing the net loss of biodiversity and ecosystem services (NLEES) in 2030, in line with the EU Biodiversity Strategy, to halt the loss of biodiversity by 2030. It is related to the NLEES (No Net Loss of Ecosystem Services) initiative, which aims to ensure that the net loss of ecosystem services is zero or negative. The NLEES initiative is a key element of the EU Biodiversity Strategy, which aims to halt the loss of biodiversity by 2030. The NLEES initiative is a key element of the EU Biodiversity Strategy, which aims to halt the loss of biodiversity by 2030.

### Stakeholders

Our stakeholders are primarily policy makers at the EU level, but also include scientists, NGOs, and the public. Our stakeholders are primarily policy makers at the EU level, but also include scientists, NGOs, and the public. Our stakeholders are primarily policy makers at the EU level, but also include scientists, NGOs, and the public.

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## Mediterranean Agroecosystems & Ecosystem Services

### Exemplar Goals:

- Model the provision of ecosystem services from Mediterranean agroecosystems under multiple pressures, with a focus on management for sustainable agriculture
- Compare the dynamics in supply and demand for services in ecosystems in the Mediterranean

### Exemplar Team

Yvonne de Gooijer, Corinne Delbecq, and others. The team consists of experts in agroecosystems, ecosystem services, and policy analysis. The team consists of experts in agroecosystems, ecosystem services, and policy analysis.

### Stakeholders

Our stakeholders include policy makers, scientists, and the public. Our stakeholders include policy makers, scientists, and the public. Our stakeholders include policy makers, scientists, and the public.

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# Large scale dynamics



## Global Exemplar

Impacts of Major Global Policy Directions and Pressures on Ecosystem Services

### Project Goals and Key Research Questions

- How do alternative global policy directions compare in a multi-scale EIS assessment?
- What do we miss when investigating EISHC at the global scale versus the regional or local scale?
- How can regional studies be used to inform global decision making, e.g. related to SDG benchmarks, or science policy processes such as IPCC?
- How can we downscale global information to regional scale variations?
- How do global players (international conservation and development NGOs, multilateral organizations, large multinationals and financial groups, etc.) with global profiles, influence global and local biodiversity and EISHC?

### Exemplar Team

André van Duinen, Peter Verburg, Nils Gensch, Mark Moran, Robert Vanbergen (TU University Amsterdam, WUR, WPI), Fabien Guiller (Globe, WPI), Patrick van der Kamp, Caroline Lucas (EPF, WPI, WPI), Arno Bakker, Arno Bakker (EPF, WPI)

### Ecosystem Services

The team is investigating the impacts of major global policy directions and pressures on ecosystem services. The team is investigating the impacts of major global policy directions and pressures on ecosystem services.

### Stakeholders

Our stakeholders include policy makers, scientists, and the public. Our stakeholders include policy makers, scientists, and the public. Our stakeholders include policy makers, scientists, and the public.

### Beyond the Study

The study will inform policy makers and the public. The study will inform policy makers and the public. The study will inform policy makers and the public.

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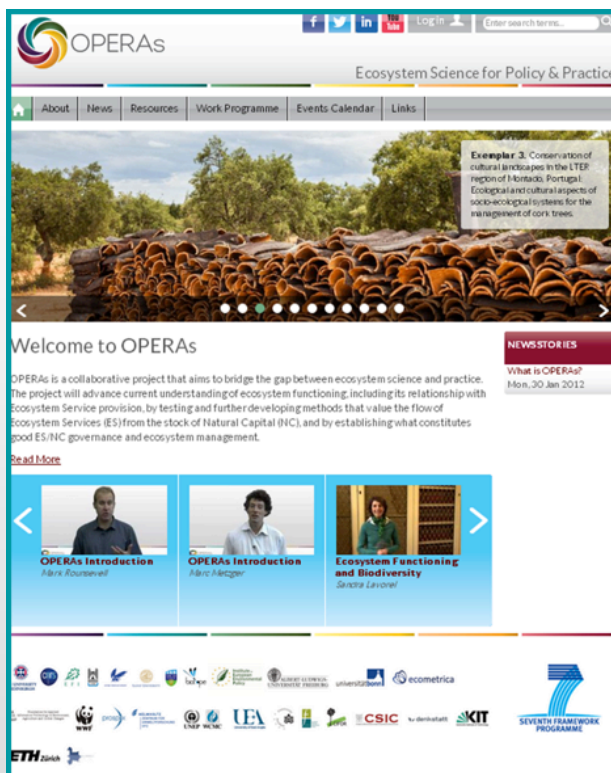
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WPI, KIT, and other partners. The project is supported by the Seventh Framework Programme.



# Example of a Community of practice: ESCom-Scotland

- Ecosystem Services Community – Scotland
- Bringing together the major Scottish research providers with ...
- ... government (national/local), government agencies (SEPA, SNH, FC), research and HEI, NGOs, professional organisations, trade bodies (NFUS, Whisky Association) & SMEs
- Launch and science workshop in Spring 2014



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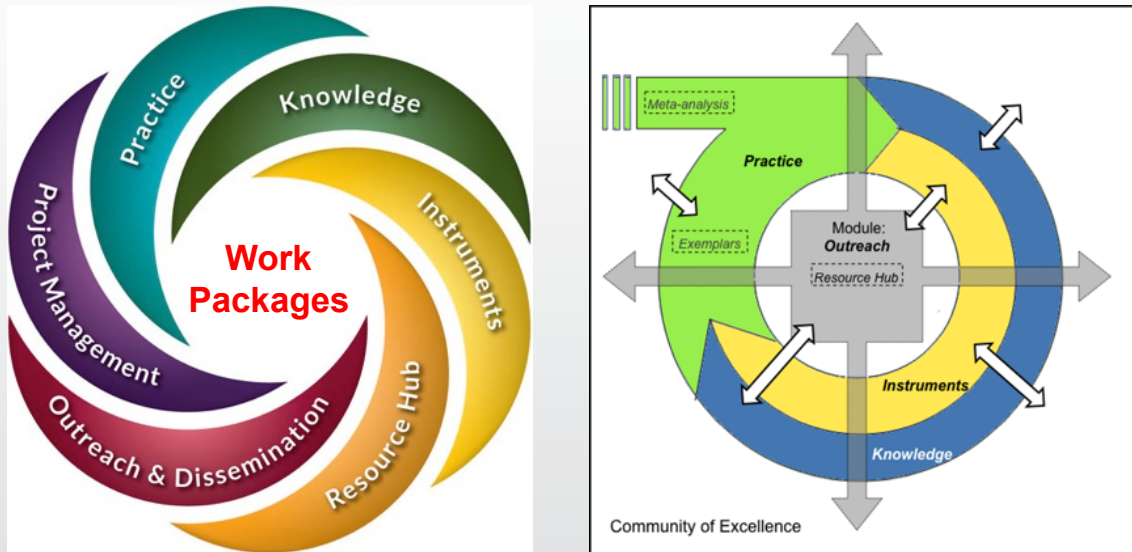


Any questions?





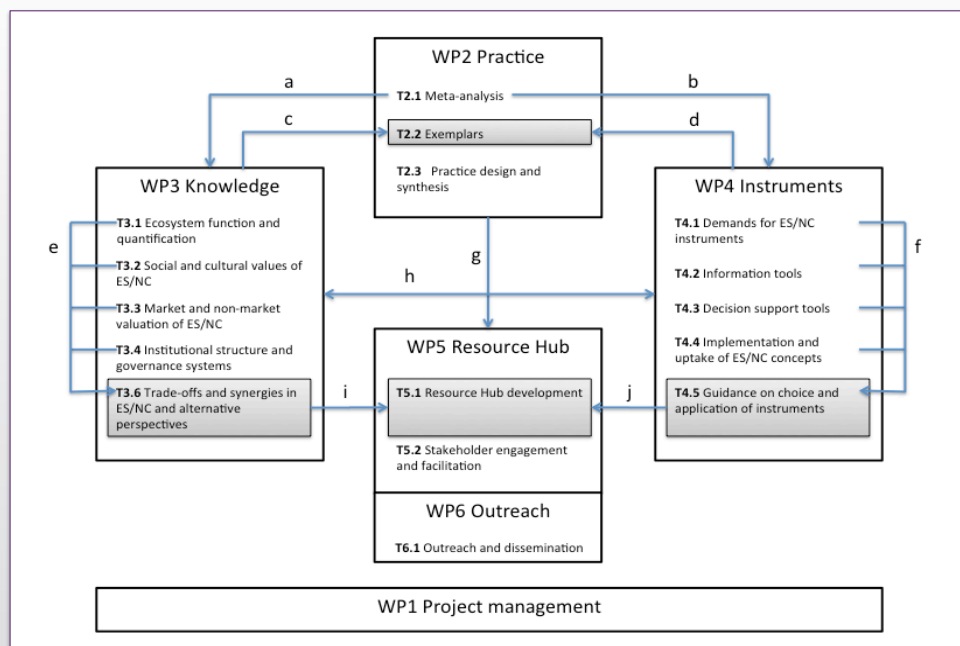
# OPERAs project structure



Applying the ES/NC concepts to enhance the sustainable management of ecosystems, through better knowledge about ecosystem functioning and 'instruments' that operationalize the ecosystem service concept, tested in practice



# WPs and research tasks



# What OPERAs could do for you ...

- Knowledge:
  - Accessible expert knowledge on ES/NC issues
  - Provision of relevant data and maps
- Instruments:
  - tool/instrument provision and application guidelines
- Practice:
  - worked examples of operationalizing the ES/NC concepts
  - best practice guidelines
- Resource Hub:
  - Design and develop a resource hub according to needs
- Outreach:
  - training materials and events
  - peer-to-peer exchange conferences