



# EKLIPSE

Knowledge & Learning Mechanism  
on Biodiversity & Ecosystem Services

## **Towards an improved science- policy-society interface for Green Infrastructure**

Green Infrastructure: Nature Based Solutions for  
Sustainable and Resilient Cities  
April 2017, Orvieto, Italy

*Allan Watt, CEH Edinburgh*

[www.eclipse-mechanism.eu](http://www.eclipse-mechanism.eu)







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## Talk outline

**Towards an improved  
science-policy-society  
interface...**

**...the need for an improved  
science-policy interface**

**...lessons from the SPIRAL  
project**

**...the EKLIPSE project:  
building a mechanism for  
evidence-informed policy**

**...case example: how to  
assess Nature-Based  
Solutions projects**



## Environmental records shattered as climate change 'plays out before us'

Temperatures, sea levels and carbon dioxide all hit milestones amid extreme weather in 2015, major international 'state of the climate' report finds



## Air Pollution Is Ravaging Plant Life

© 13/03/2017 11:17



Like 13

 **Dr Trevor Dines**  
Botanical Specialist, Plantlife



## Flood warning issued for Tweed Valley

By **Jonathon Howard** - March 28, 2017



## Biodiversity is below safe levels across more than half of world's land - study

Habitat destruction has reduced the variety of plants and animals to the point that ecological systems could become unable to function properly, with risks for agriculture and human health, say scientists



## Revealed: thousands of children at London schools breathe toxic air

**Exclusive:** 802 schools, nurseries and colleges are in areas where levels of nitrogen dioxide breach EU legal limits

● How have you been affected by air pollution?

LIFESTYLE, PETS AND ENVIRONMENT

## Hyderabad: Where have all the birds gone?

DECCAN CHRONICLE. | ANUSHA PUPPALA

Published Mar 24, 2017, 1:39 am IST

Updated Mar 24, 2017, 1:41 am IST



## Climate Change May Be Intensifying China's Smog Crisis

By JAVIER C. HERNÁNDEZ MARCH 24, 2017



ve been felled in many parts and the natural dwellings of  
 n disturbed.



RELATED



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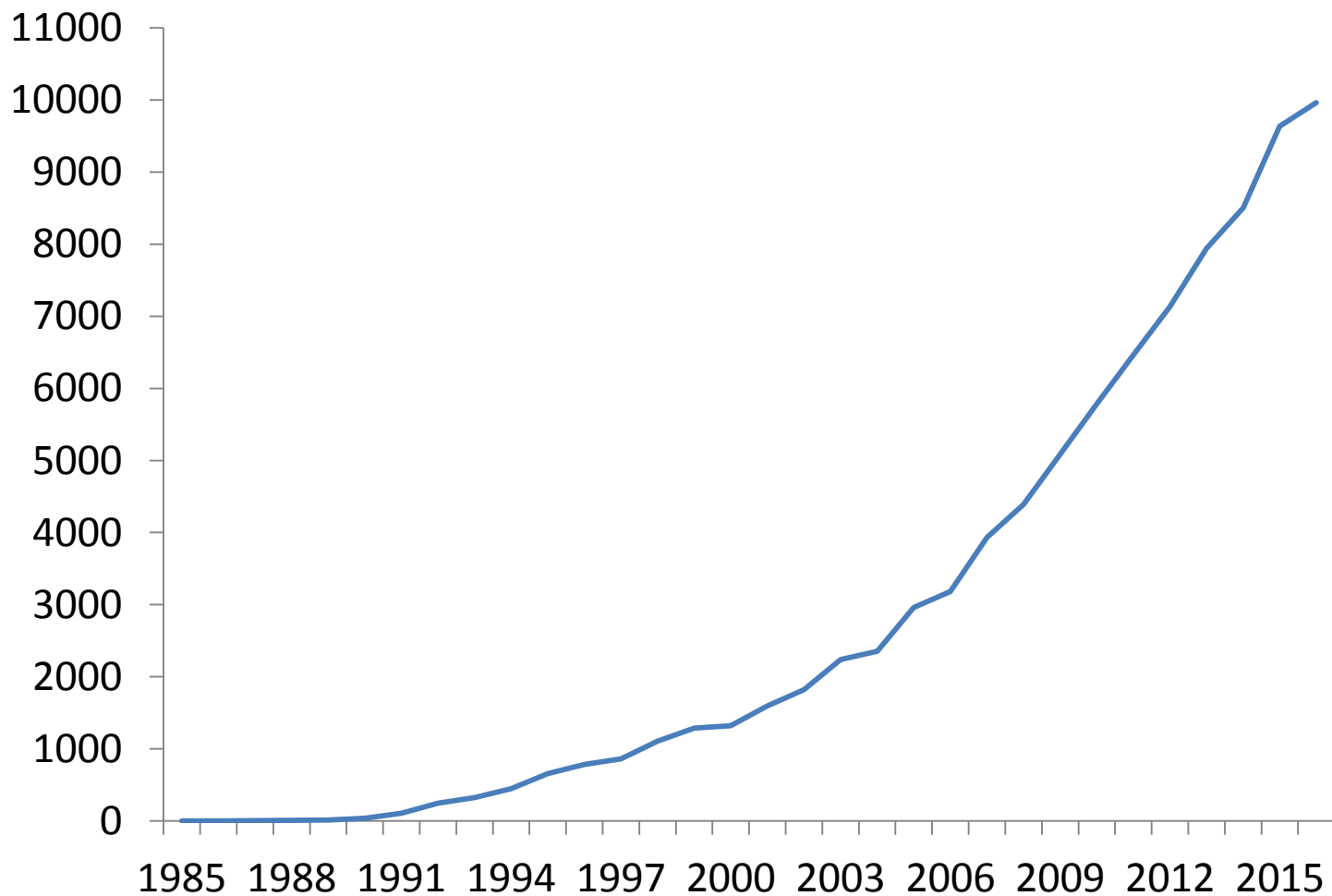


# Nomads no more: why Mongolian herders are moving to the city

Climate change and the end of Soviet state support have forced 600,000 to migrate to the capital, leaving it struggling to cope

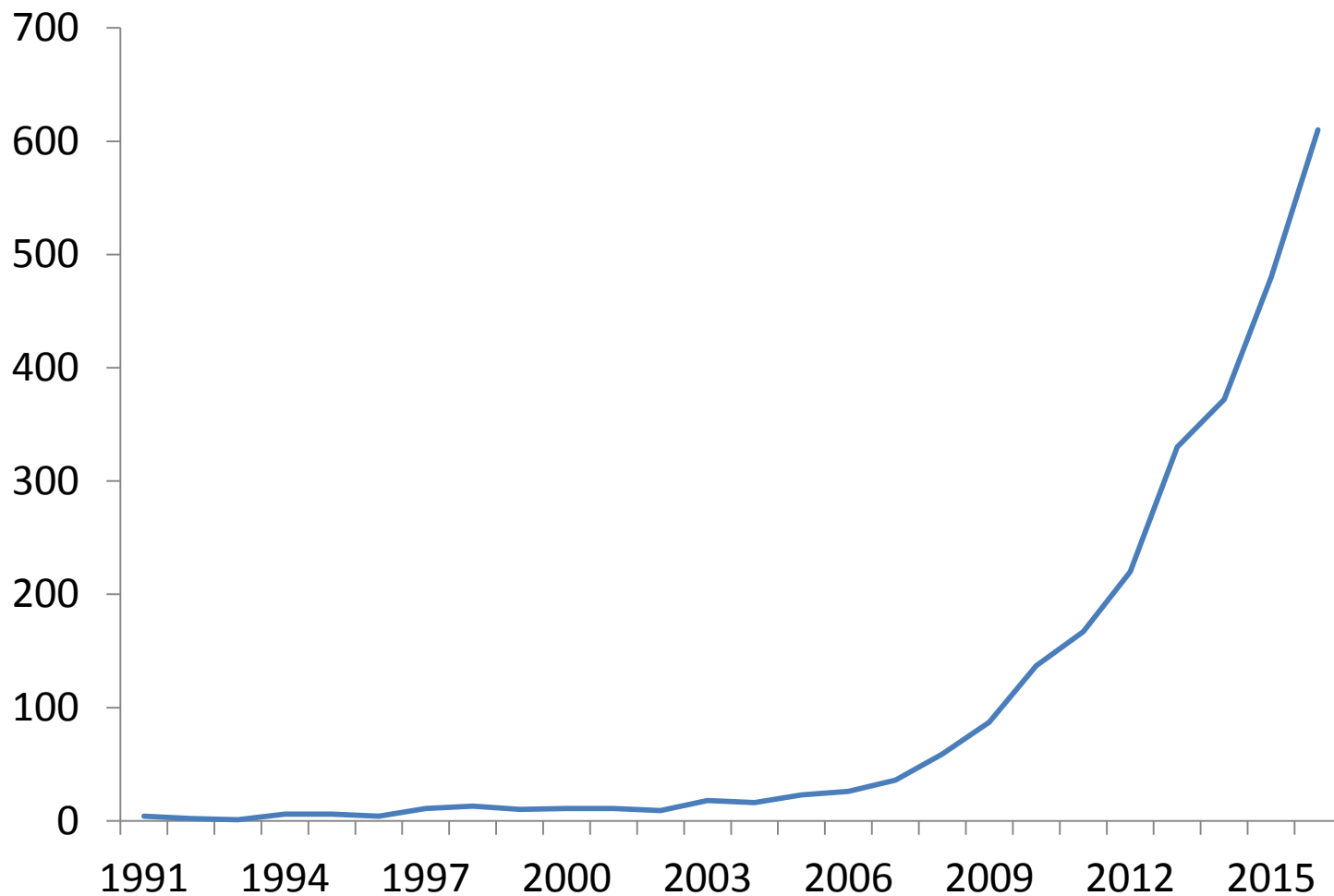
by Patrick Kingsley in Mongolia, with photographs and videos by David Levene

## Increasing knowledge: ISI papers on biodiversity (topic)





## Increasing knowledge: Green infrastructure (topic)





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## Are researchers producing the necessary knowledge?



EKLIPSE is a CSA funded via H2020  
(No. 690474), duration Feb 2016-  
Jan 2020





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## Are policy makers receiving the necessary knowledge?



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# EKLIPSE

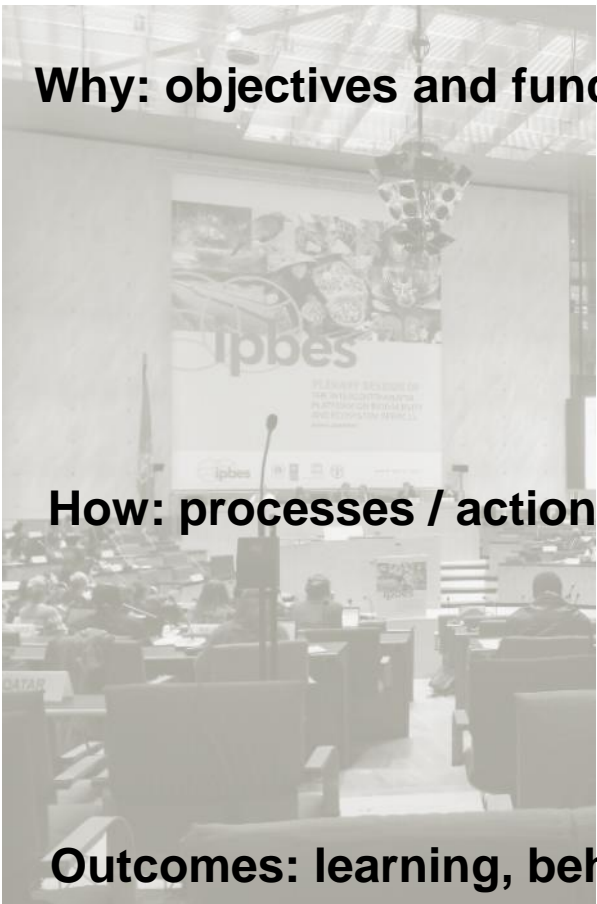
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## The science-policy interface



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**Why: objectives and functions / stated and realized aims**



**How: structures / institutional arrangements**

**How: processes / actions and interactions to produce outputs**

**What: outputs / specific products**

**Outcomes: learning, behavioural and policy change; improved governance**

**Why: objectives and functions / stated and realized aims**

**credibility**

**How: structures / institutional arrangements**

**relevance**

**How: processes / actions and interactions to produce outputs**

**legitimacy**

**What: outputs / specific products**

**Outcomes: learning, behavioural and policy change; improved governance**



# EKLIPSE

Knowledge & Learning Mechanism on Biodiversity & Ecosystem Services

# A more effective science-policy interface



### A beginner's guide to understanding challenges of communicating about biodiversity

Johnnie Young, Kerry Waylen

This brief aims to provide a starting point for those who are interested in understanding the challenges of communicating about biodiversity. It is intended as a guide for those who are new to the field and who are looking for a starting point for their own research or practice.



### Recommendations for improving science-policy communication at the level of organisations

Kerry Waylen, Juliette Young (CEH)

In this brief we suggest recommendations for how to improve science-policy communication at the level of organisations. It is intended as a guide for those who are new to the field and who are looking for a starting point for their own research or practice.



### Reflecting on the challenges of communicating about biodiversity

Kerry Waylen

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## Effective interfaces between science, policy and society

# THE SPIRAL PROJECT HANDBOOK



### Recommendations for improving science-policy communication for individuals

Kerry Waylen, Juliette Young

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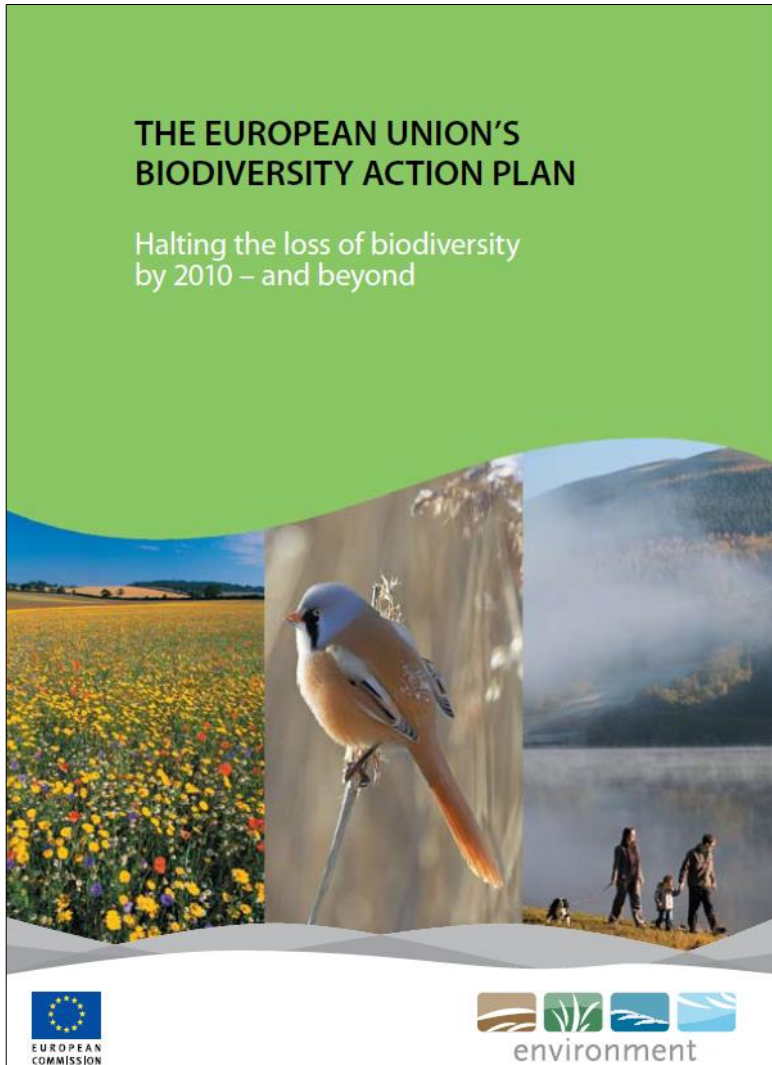
**Many diverse science-policy-society interface activities exist, but...**

**...gaps in knowledge persist...**

**Innovative approach where relevant expertise from the  
whole knowledge community is identified & integrated  
to answer knowledge needs**

**...and knowledge generated is  
often not perceived as credible,  
relevant or legitimate**





“...the Commission will establish an **EU mechanism for independent, authoritative research-based advice** to inform implementation and further policy development...” COM COM(2006) 216 final



Developing a mechanism for supporting better decisions on our environment based on the best available knowledge.

THE DIFFERENCE WE WANT TO MAKE

HOW CAN WE MAKE A DIFFERENCE?

HOW TO GET INVOLVED?

ACTIVITIES

The aim of the EKLIPSE project is to build an innovative, light, ethical and self-sustainable EU support mechanism for evidence-informed policy on biodiversity and ecosystem services, and to hand over this mechanism to the wider community once established.



### Open calls

#### Call for knowledge

Call for Knowledge on the effects of **CAP greening measures** on biodiversity and Ecosystem Services

#### Call for knowledge

Call for Knowledge on **health impacts** of biodiversity and Ecosystem Services

#### Call for knowledge

Call for Knowledge on effects of **electromagnetic radiation** on wildlife

#### Call for knowledge

Call for Knowledge on supporting **business to go beyond regulation** for biodiversity

### News from the Network

- EKLIPSE has just published the report from its first request for synthesizing available knowledge from policy makers. [+]
- Draft report of the Joint EKLIPSE/EPBRs/BiodiverSA foresight workshop "Social Innovation and Nature-based-solutions" is available for comments [+]
- Call for Papers - 5th Green Growth Knowledge Platform (GGKP) conference on Sustainable Infrastructure, hosted by the World Bank. Deadline: 15 June 2017 [+]



- How would you describe EKLIPSE in three words ?

### EKLIPSE knowledge synthesis





# EKLIPSE

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## Project functions

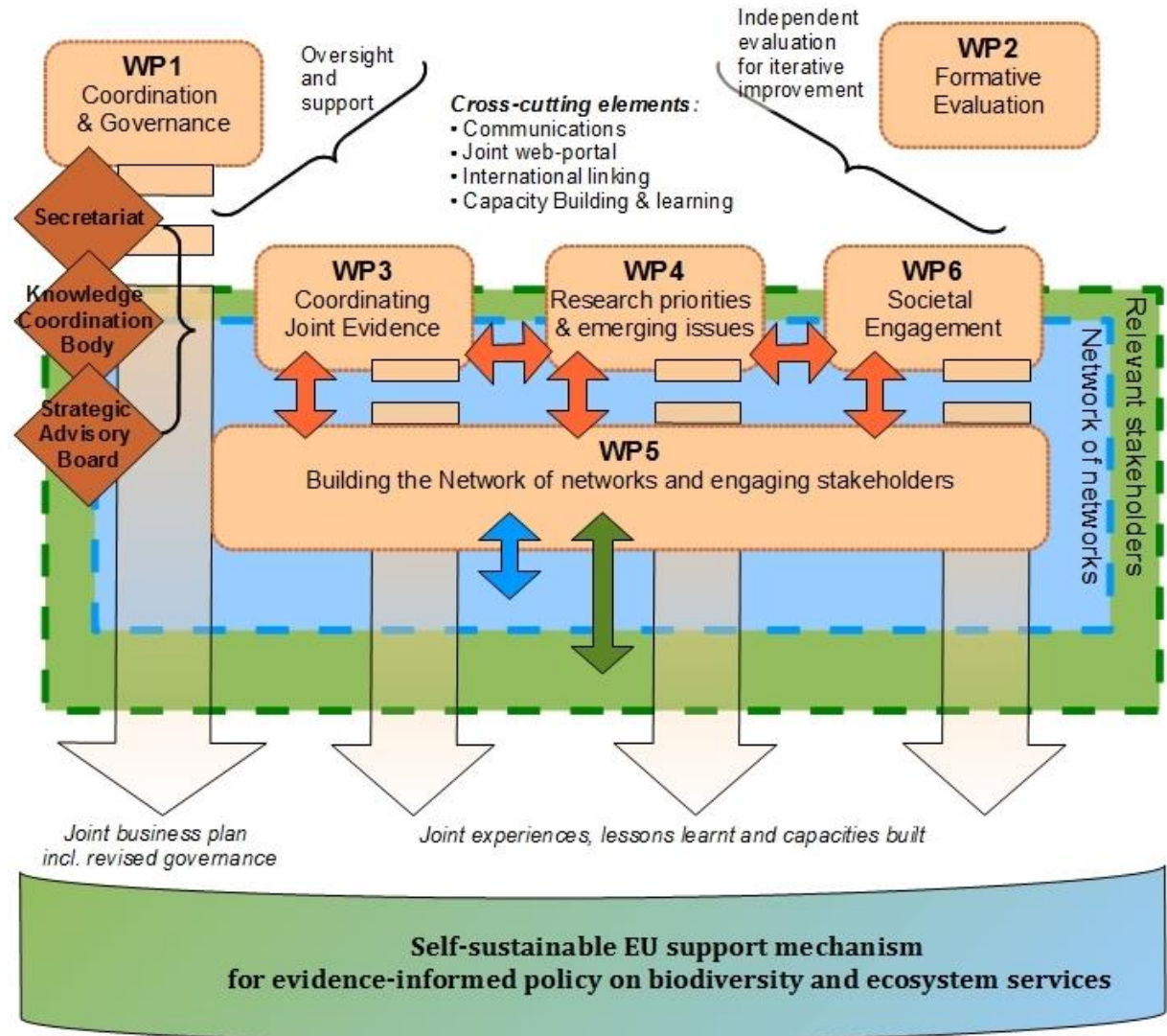
Setting up a governance structure

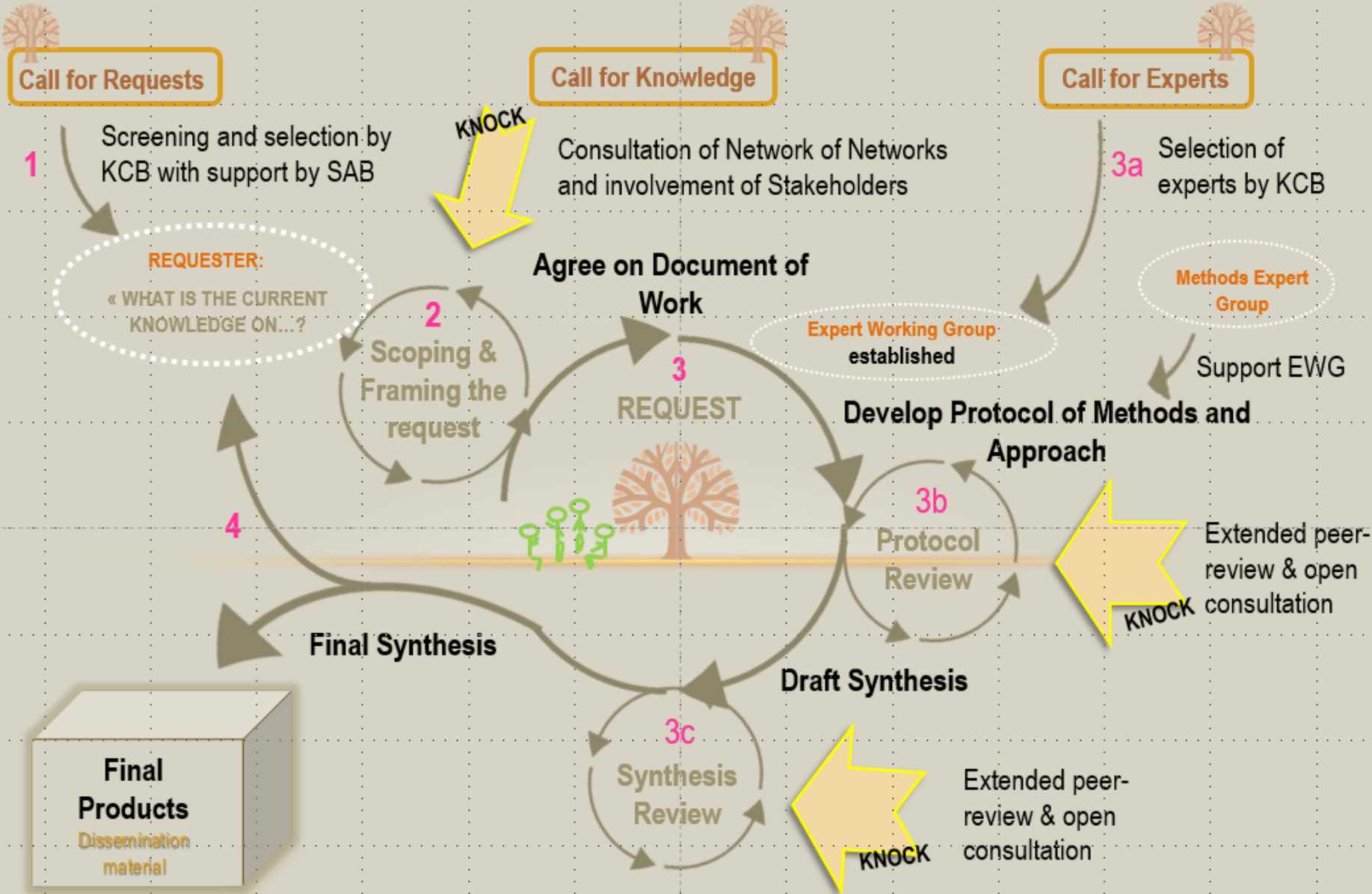
Answering policy questions (EU focus)

Identifying research needs and emerging issues

Further building the Network of Networks

Ensuring Societal Engagement





KCB: Knowledge Coordination Body

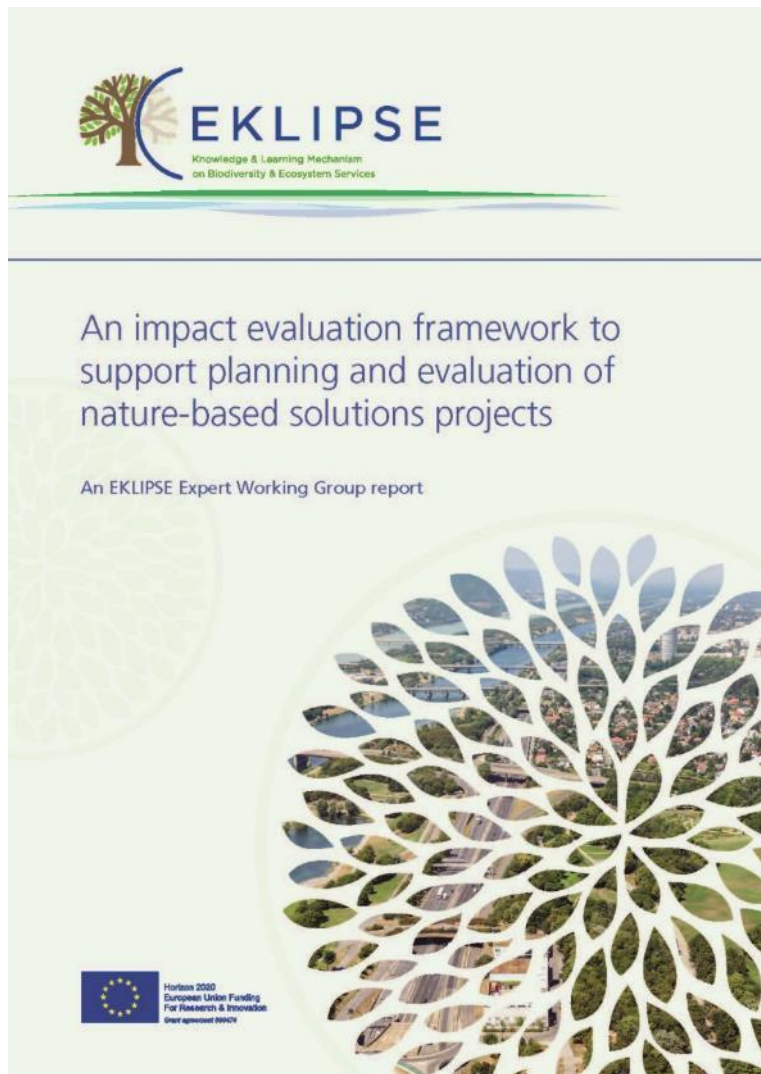
SAB: Strategic Advisory Board

KNOCK: Knowledge Network and Open Community Forum

## Request topic: Nature-Based Solutions to Promote Climate Resilience in Urban Areas – developing an impact evaluation framework

### Expert Group Co-Chairs:

- Christopher Raymond (Swedish University of Agricultural Sciences),
- Carlo Calfapietra (National Research Council, Rome)
- Niki Frantzeskaki (Erasmus University Rotterdam).
- With Corina Basnou (Centre for Ecological Research and Forestry Applications (CREAF), Barcelona), Mark de Bel (Deltares, Utrecht), Pam Berry (University of Oxford), Margaretha Breil (Fondazione Eni Enrico Mattei (FEEM) and the Euro-Mediterranean Centre on Climate Change (CMCC)), Marco Cardinaletti (EUROCUBE srl), Vera Enzi (European Federation of Green Roof and Wall Associations), Davide Geneletti (University of Trento), Nadja Kabisch (Humboldt-Universität zu Berlin), Leor Lovinger (International Federation of Landscape Architects Europe), Ana Monteiro (University of Porto), Mihai Razvan Nita (University of Bucharest), Holger Robrecht (Local Governments for Sustainability, European Secretariat)



### An impact evaluation framework to support planning and evaluation of nature-based solutions projects

An impact evaluation framework to support planning and evaluation of nature-based solutions projects

An EKLIPSE Expert Working Group report

**GET**



**Scale:**  
National  
Subnational  
Local

**License:**  
Open source (specify licence type)

**Development stage:**  
Full, working product

**Publication date:**  
23 February 2017

**Primary language:**  
English

**Professional indemnity:**  
None

**Implementation time:**  
Not applicable

Nature-Based Solutions (NBS) are solutions to societal challenges that are inspired and supported by nature. The European Commission requested the EKLIPSE project to help building up an evidence and knowledge base on the benefits and challenges of applying NBS. In response to the request, the EKLIPSE Expert Working Group on Nature-based Solutions to Promote Climate Resilience in Urban Areas (EWG) devised the following objectives: 1) To develop an impact

Comment via oppla platform:  
<http://oppla.eu/product/17511>

Links also available in the Green  
Infrastructure Partnership March 2017  
News

## Methods expert group and report on Knowledge Synthesis methods

1. Systematic review .....	22
2. Solution scanning .....	25
3. Synopses and summaries .....	27
4. Meta-analysis .....	29
5. Rapid evidence assessment.....	31
6. Scoping review .....	34
7. Systematic map .....	37
8. Vote-counting.....	40
9. Non-systematic literature review.....	42
10. Expert consultation .....	43
11. Multiple expert consultation with formal consensus method such as Delphi.....	46
12. Causal Criteria Analysis .....	48
13. Bayesian Belief Networks.....	51
14. Focus groups .....	55
15. Discourse analysis .....	57
16. Joint Fact Finding.....	59
17. Scenario analysis .....	62
18. Structured Decision Making.....	66
19. Collaborative Adaptive Management .....	70
20. Participatory mapping.....	73
21. Multi-Criteria Decision Analysis .....	76

Knowledge synthesis for environmental decisions:  
an evaluation of existing methods, and guidance  
for their selection, use and development

A report of the EKLIPSE project

Dicks LV, Haddaway N, Hernández-Morcillo M, Mattsson B, Randall N, Failler P, Ferretti J, Livoreil B, Saarikoski H, Santamaria L, Rodela R, Velizarova E, and Wittmer H. (2017). *Knowledge synthesis for environmental decisions: an evaluation of existing methods, and guidance for their selection, use and development – a report from the EKLIPSE project*







### Call for knowledge

Call for knowledge: Which types of urban and peri-urban natural spaces (blue and green) and which characteristics (components) of such spaces have a significant impact on human mental health and well-being?

Responses by 18 April 2017

[www.eclipse-mechanism.eu](http://www.eclipse-mechanism.eu)



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Call for knowledge: What are the advantages and disadvantages of existing approaches that environmental regulators can use to enhance environmental sustainability and improve outcomes for biodiversity of small and medium-sized enterprises in the food and drink sector of Europe?

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This question was proposed by:

- Working Group Biodiversity & Health of the French National Action Plan Health & Environment, at the French ministry of Environment.

Participate in Call for Knowledge:

- <http://www.eclipse-mechanism.eu/home>

Find out more about EKLIPSE:

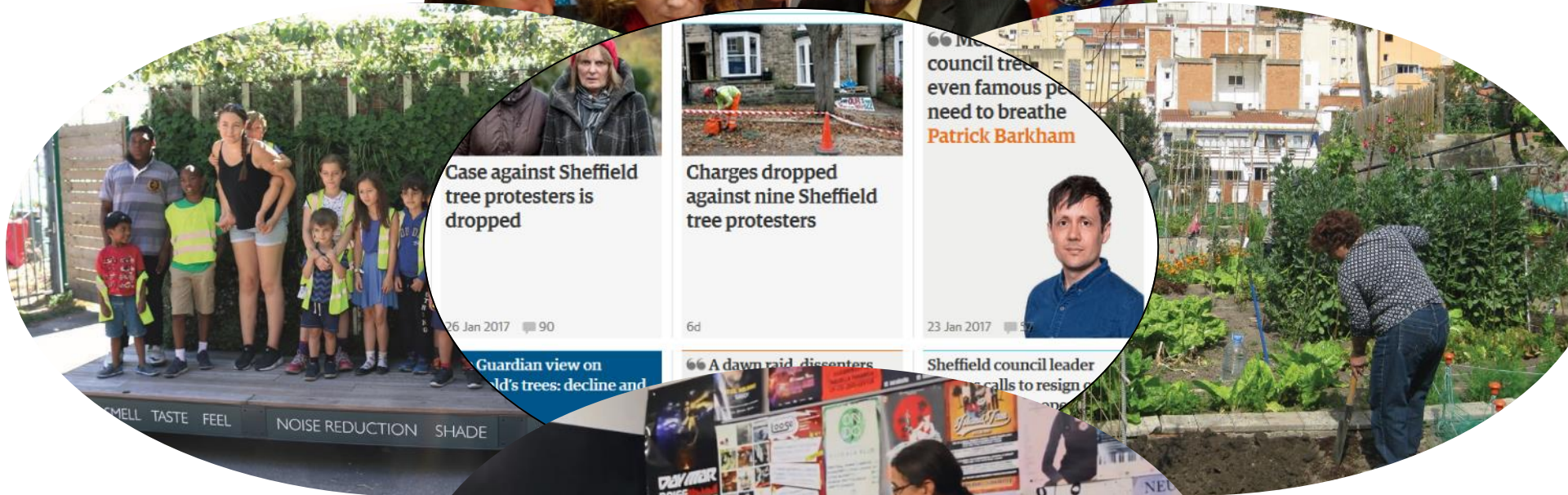
- <http://www.eclipse-mechanism.eu/home>
- @EKLIPSE\_project



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## Final remarks



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[www.eclipse-mechanism.eu](http://www.eclipse-mechanism.eu)

[secretariat@eclipse-mechanism.eu](mailto:secretariat@eclipse-mechanism.eu)

[@EKLIPSE\\_project](https://twitter.com/EKLIPSE_project)

**And thanks to the EKLIPSE  
consortium, the NBS Expert Working  
Group and many more people.**