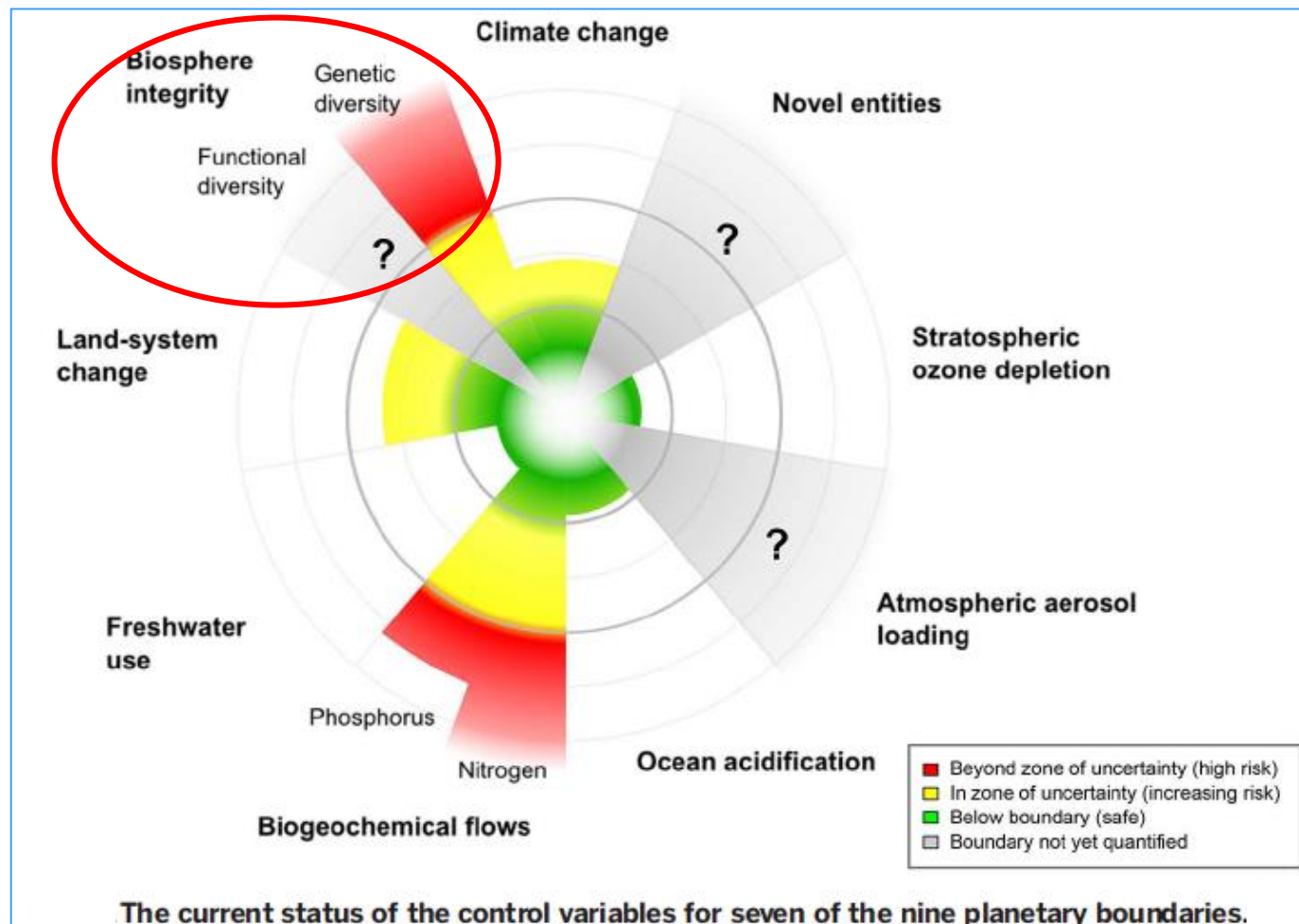


# European Research Area's contribution to Nature-Based Solutions: The view of BiodivERsA

*Xavier Le Roux (French Foundation for Biodiversity Research –  
Coordinator and CEO of BiodivERsA)*

NATURE

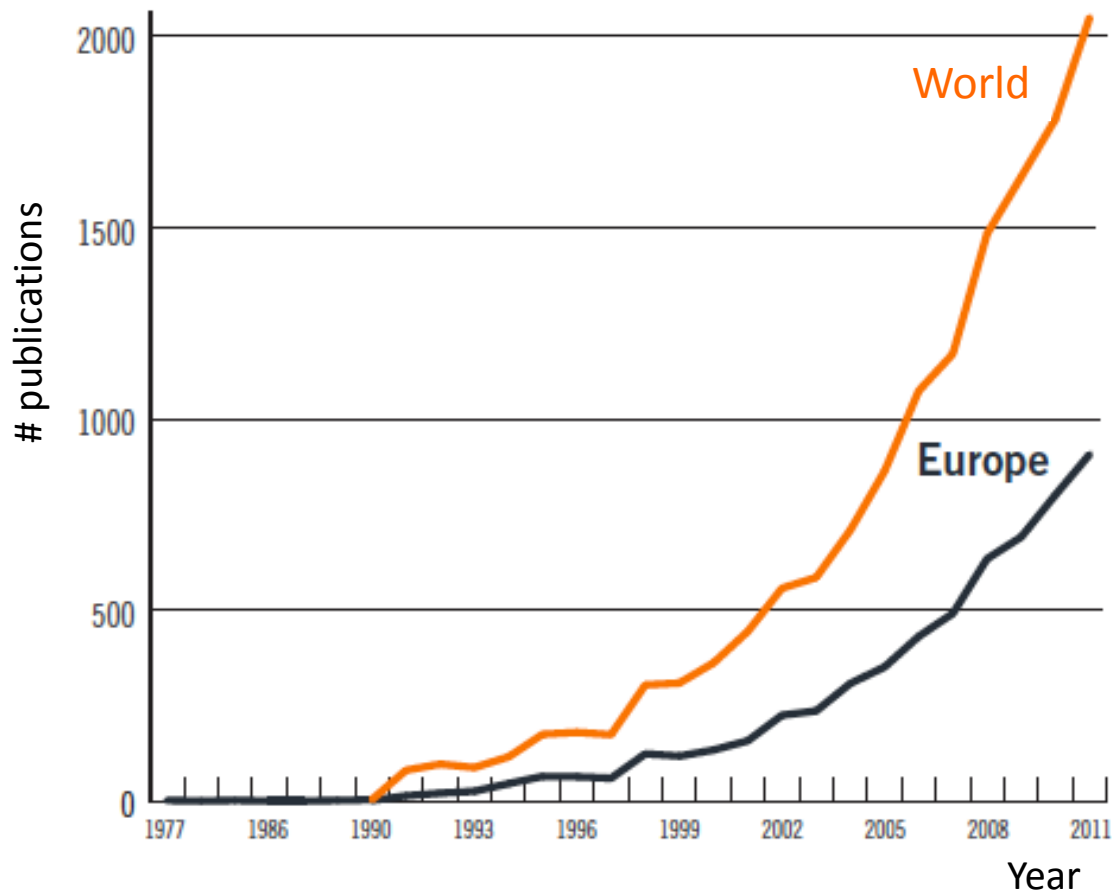
# Preserving Biodiversity & Ecosystem services: a major challenge...



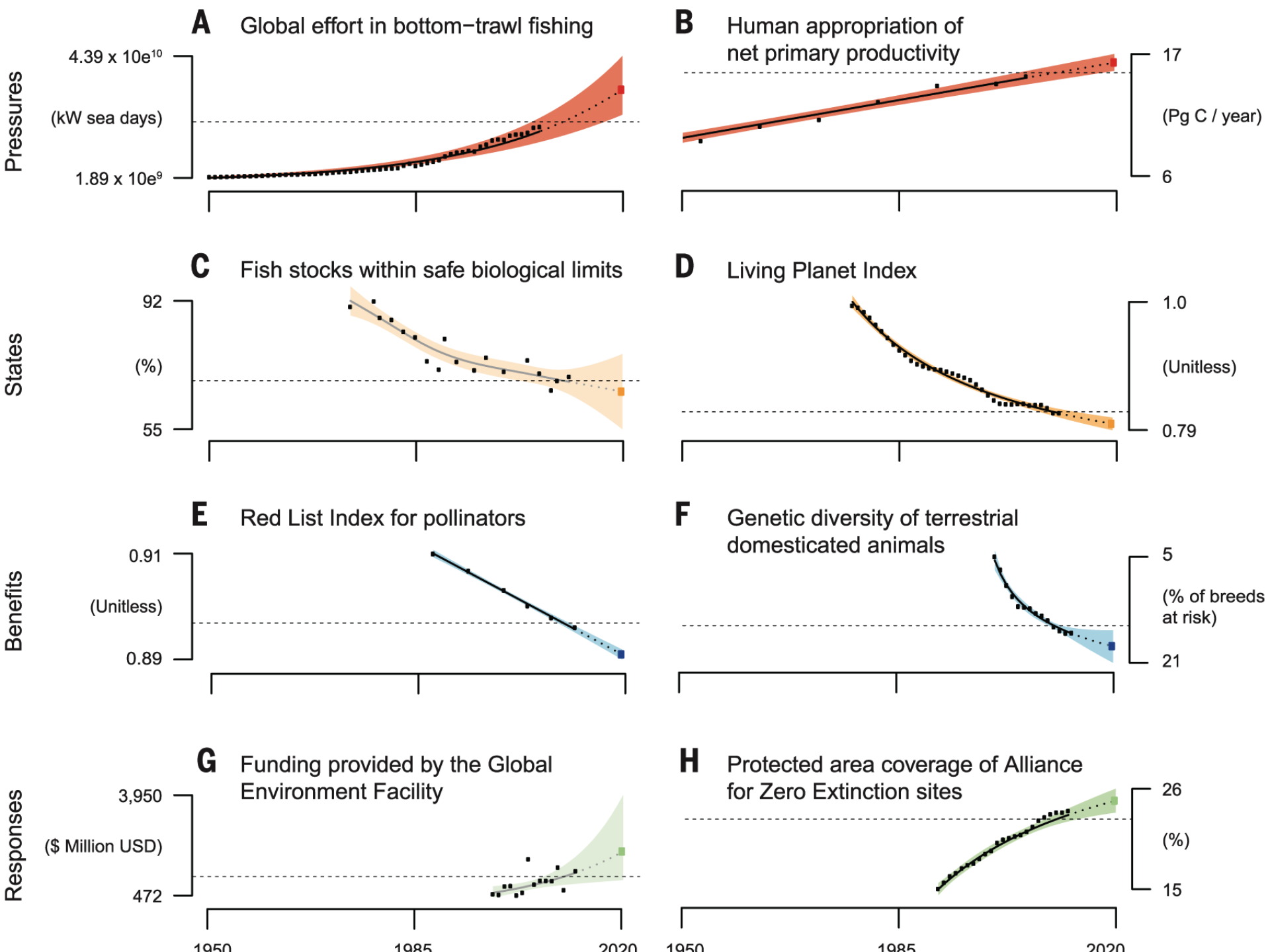
*Steffen et al.  
(Science -  
2015)*

**...which has strongly mobilized research**

Ex: scenarios  
of biodiversity



*FRB report (2013)*



**Preserving biodiversity is still a challenge...  
...but we need to enhance the sustainability of human's  
activities, catalyzing stakeholder mobilization**

**➔ Nature-Based Solutions:**

**Pop up concept that**

- \* still has to be framed**
- \* but may help reach these goals**



A broad range of  
examples popping up

**Different stakeholders  
with different views**

Annually Fox Valley Met



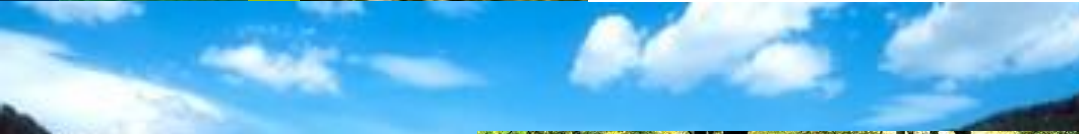
STORMWATER  
RUNOFF  
REDUCTION  
\$1.56 Million



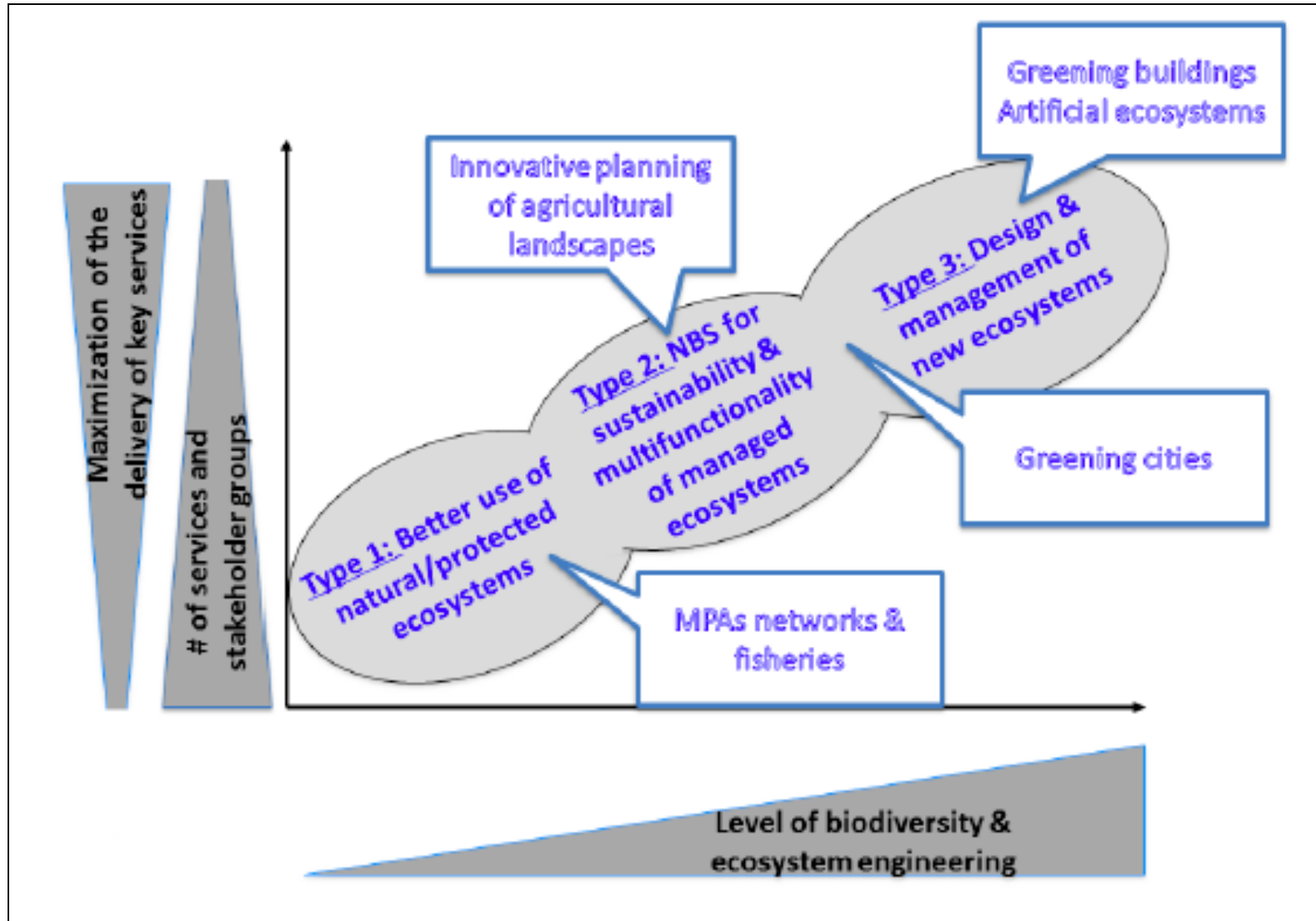
CO<sub>2</sub> REDUCTION  
\$186,480



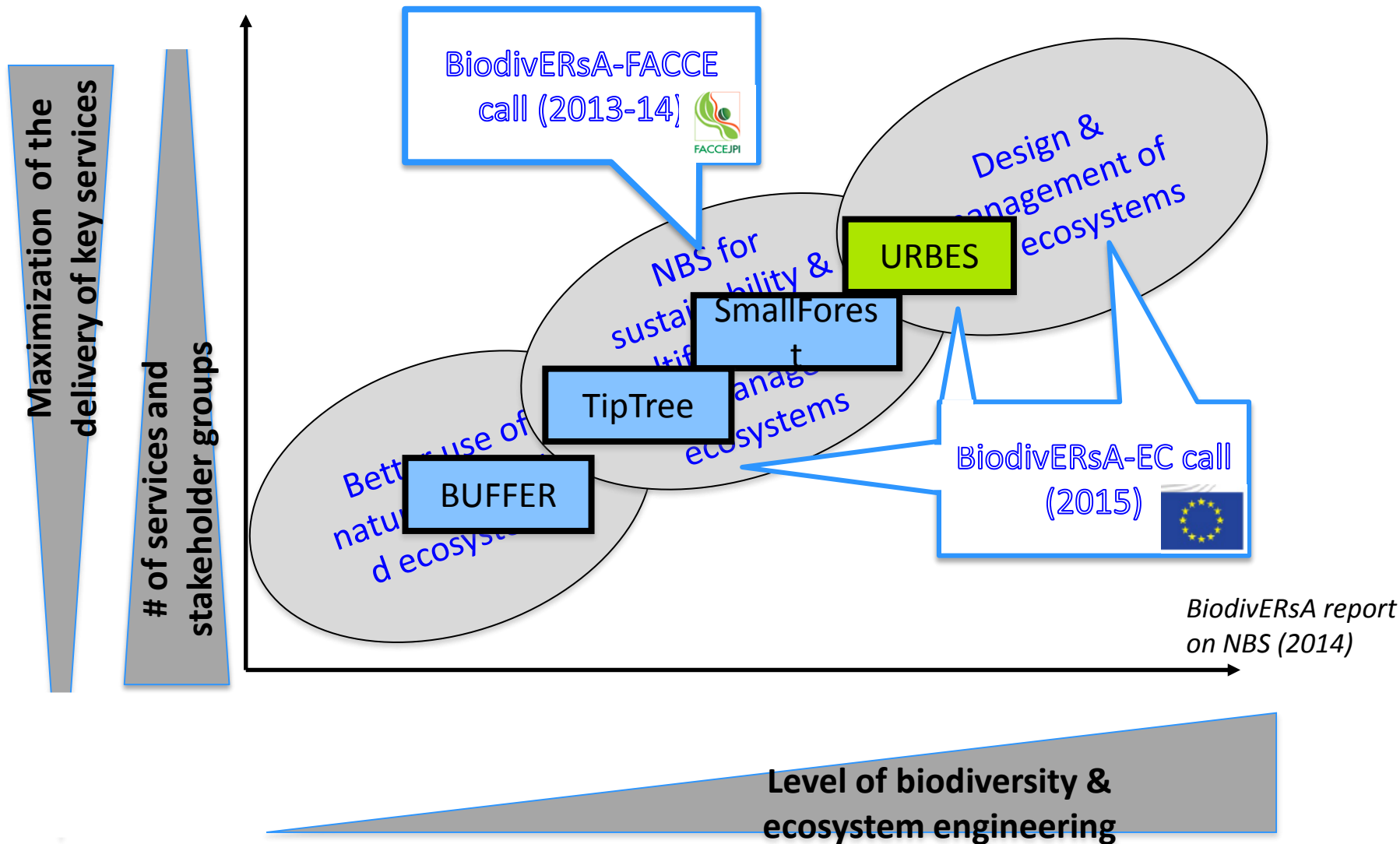
ENERGY SAVINGS  
\$1.40 Million



# NBS typology proposed by BiodivERsA



As others, we discovered that we are supporting research projects on NBS





# The challenge of developing the knowledge base for Biodiversity & Nature-based Solutions

Towards a **Europeanization of research and society across Europe, accounting for the new ERA landscape**

**The view of Biodiversa**

(Aim: key role of the ERA for increasing European competitiveness on Nature-Based Solutions and making Europe a leader for NBS)

# (1) Mobilize all European countries+territories with EC

Ex: Biodiversa

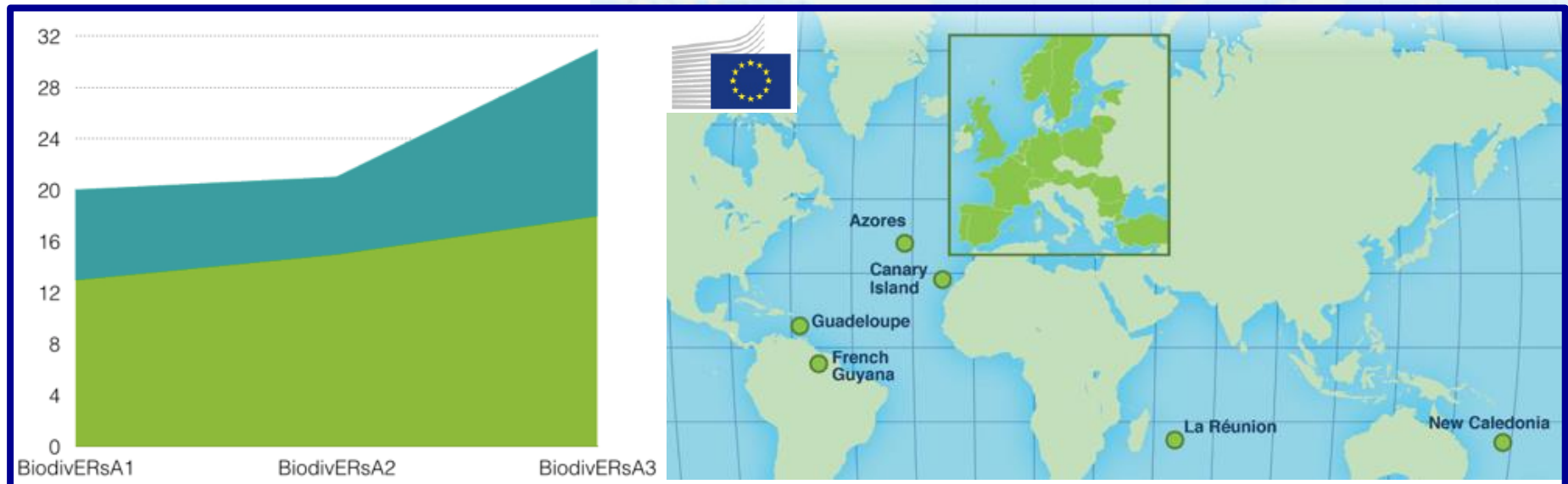
BiodivERsA1: FP6 ERA-net 2005-2010 (13 countries)



BiodivERsA2: FP7 ERA-net 2010-2014 (15 countries)

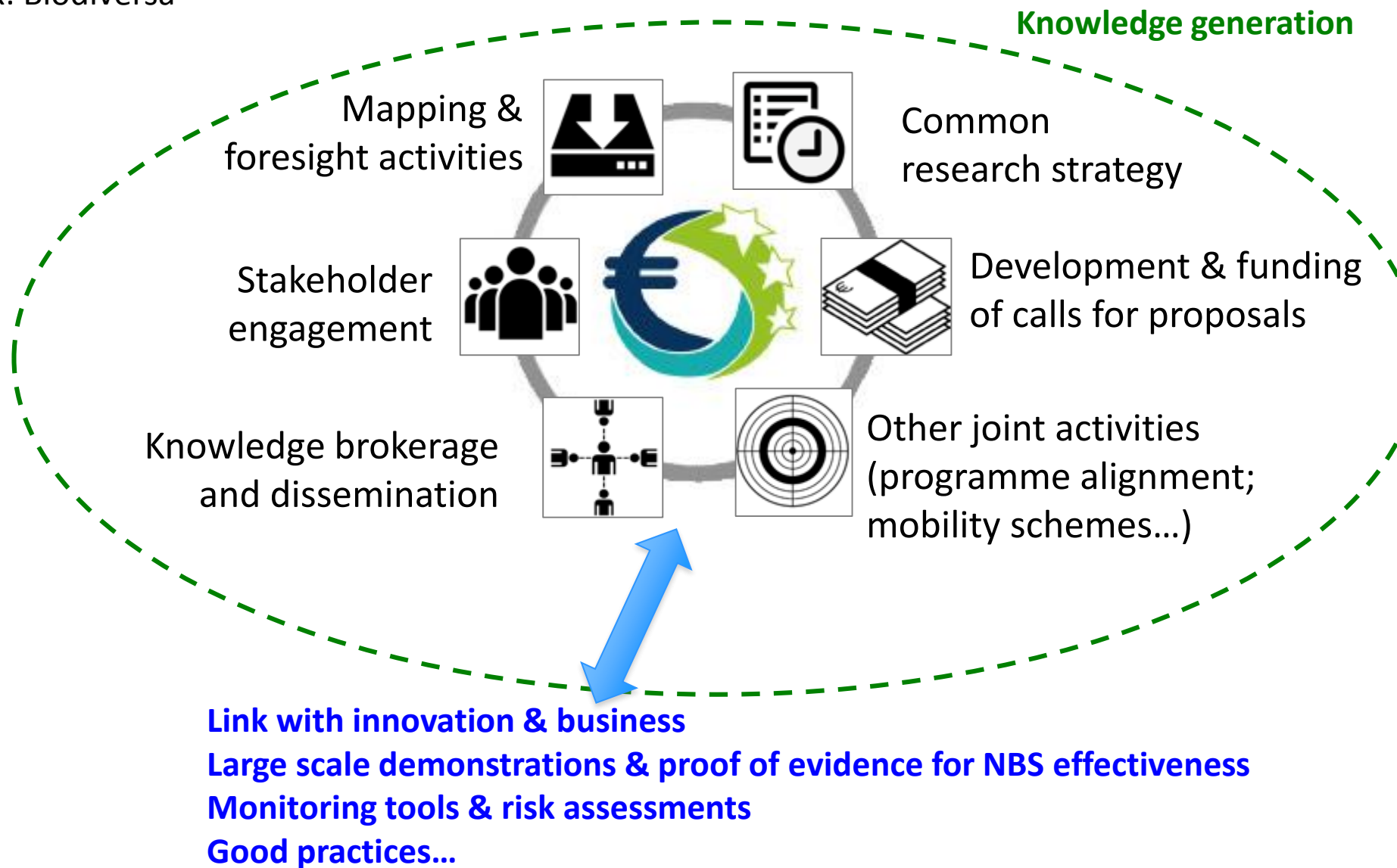


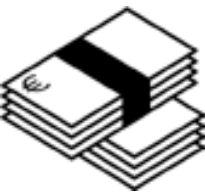
BiodivERsA3: H2020 ERA-net 2015-2019 (18 countries+1 + overseas)



## (2) Integrate a range of activities

Ex: Biodiversa





### (3) Mobilize resources from a range of actors to support knowledge generation



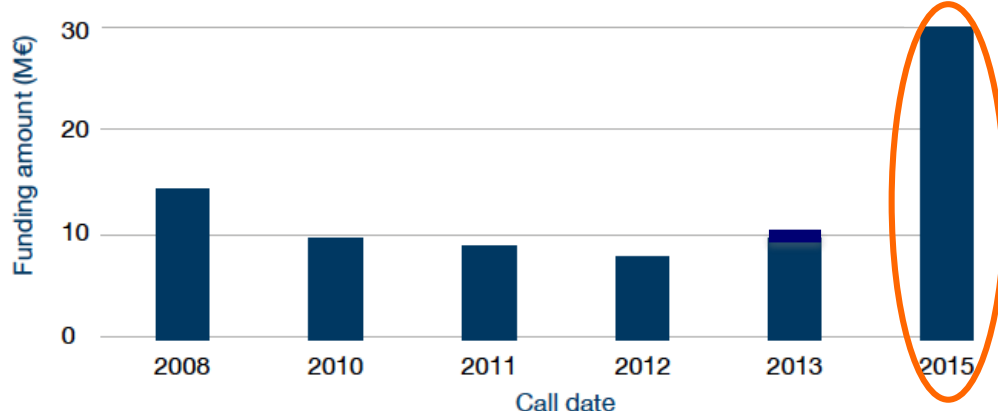
Ex: Biodiversa



for a total amount of



of new money raised by BiodivERsA partners and the EC

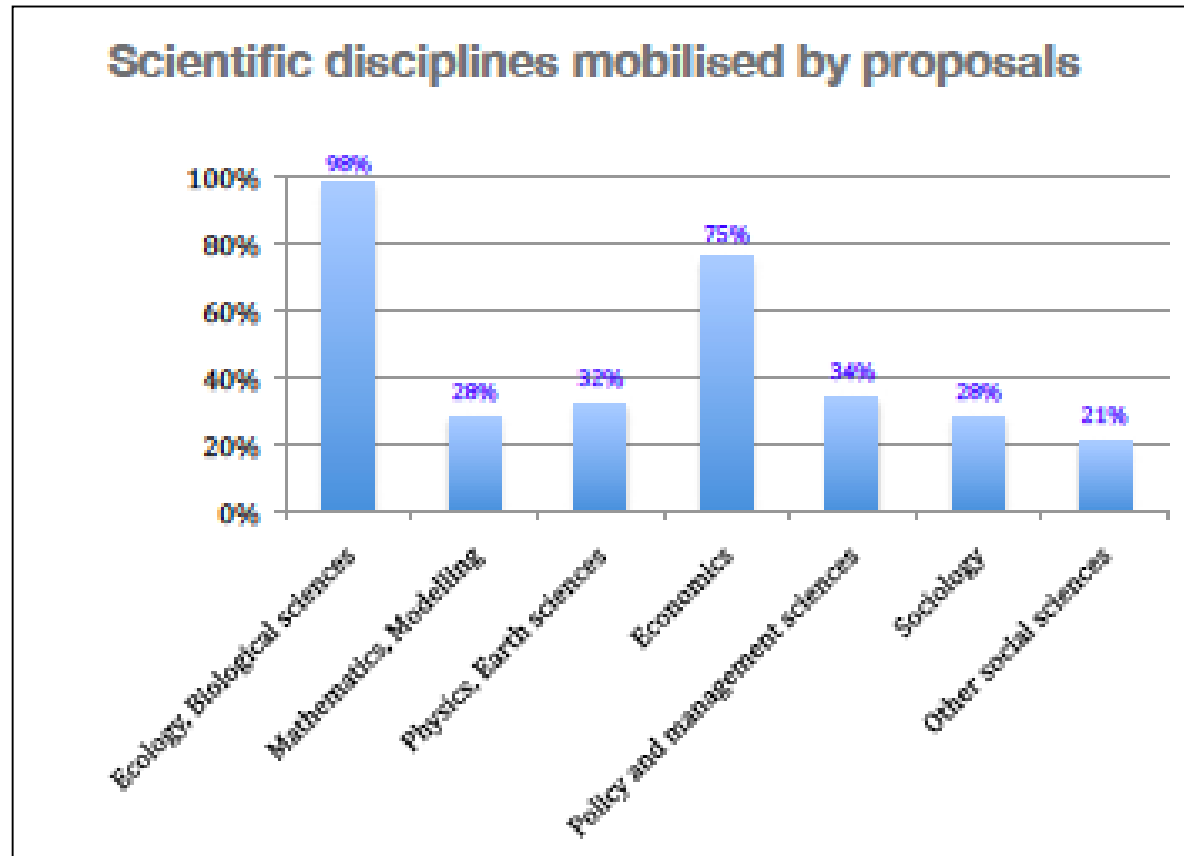


Capacity to implement ambitious joint activities

## (4) Mobilize researchers + promote inter/transdisciplinarity

- Way to shape call texts
  - Selection criteria and processes for research proposals
  - Workshops, connections to other scientific communities
- ... can help

Ex: 2010-11  
BiodivERsA calls





## (5) Stakeholder engagement in the whole research process

Ex: Biodiversa

### Promotion of stakeholder engagement

- *Advisory board that includes scientists and stakeholders*
- *Part of the selection criteria for projects to be funded*

• *Workshops, etc.*

• *BiodivERsA stakeholder engagement handbook*



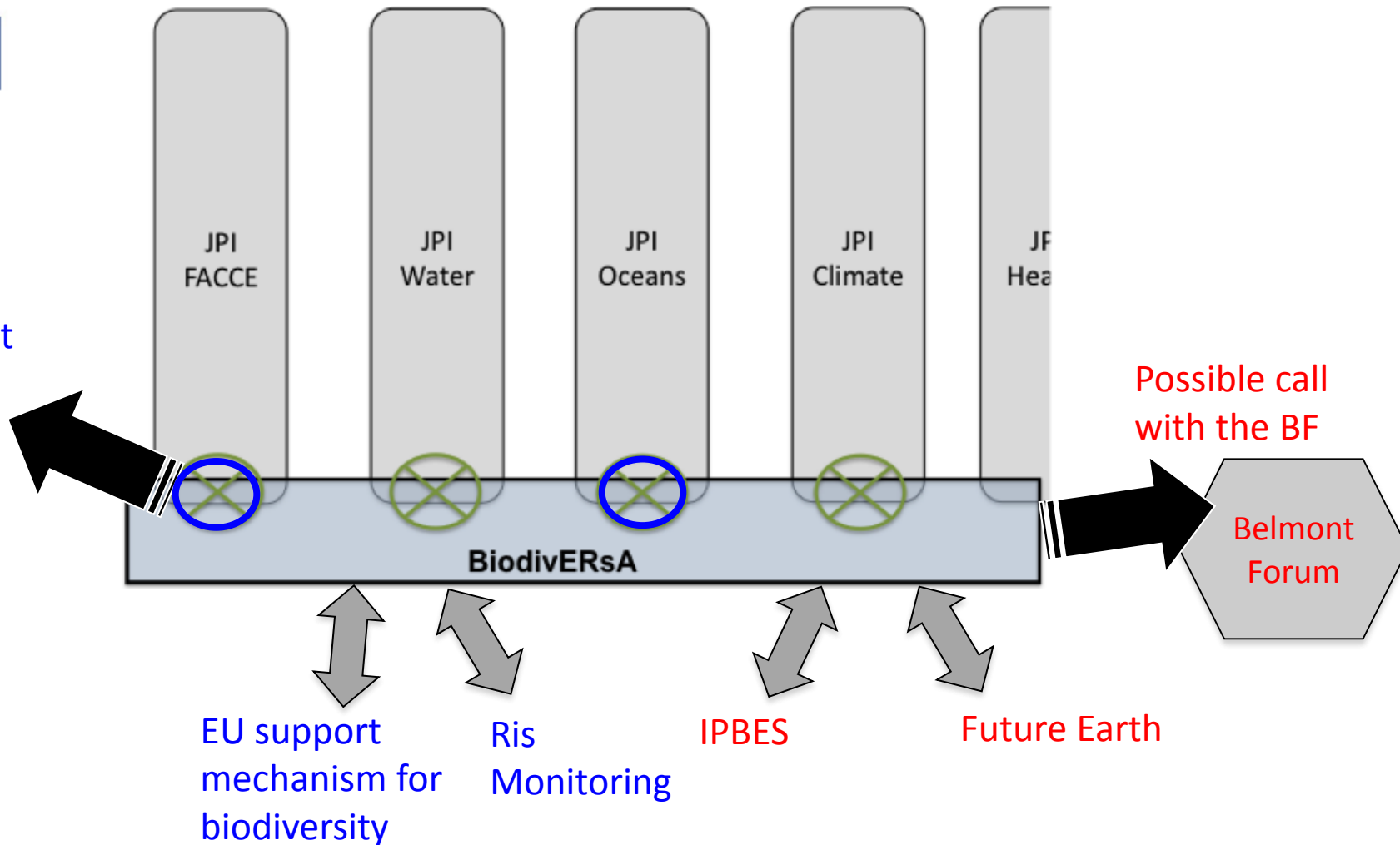
- *90% of projects funded by BiodivERsA involve stakeholders actually engaged in the research process*



## (6) De-siloing & addressing international issues



2013 joint  
call with  
FACCE



# Threat #1

- Threat/Opportunity #1, concerning the TYPE OF KNOWLEDGE GENERATED  
Ex: Develop approaches for greening cities **without** using the potential of biodiversity to deliver multiple services and increase their resilience in a global change context

2 services targeted (cooling; greenness)  
Few stakeholder types  
Short term perspective

Multiple services targeted  
Many stakeholder types  
**Long term** perspective accounting for resilience  
**SUSTAINABILITY**

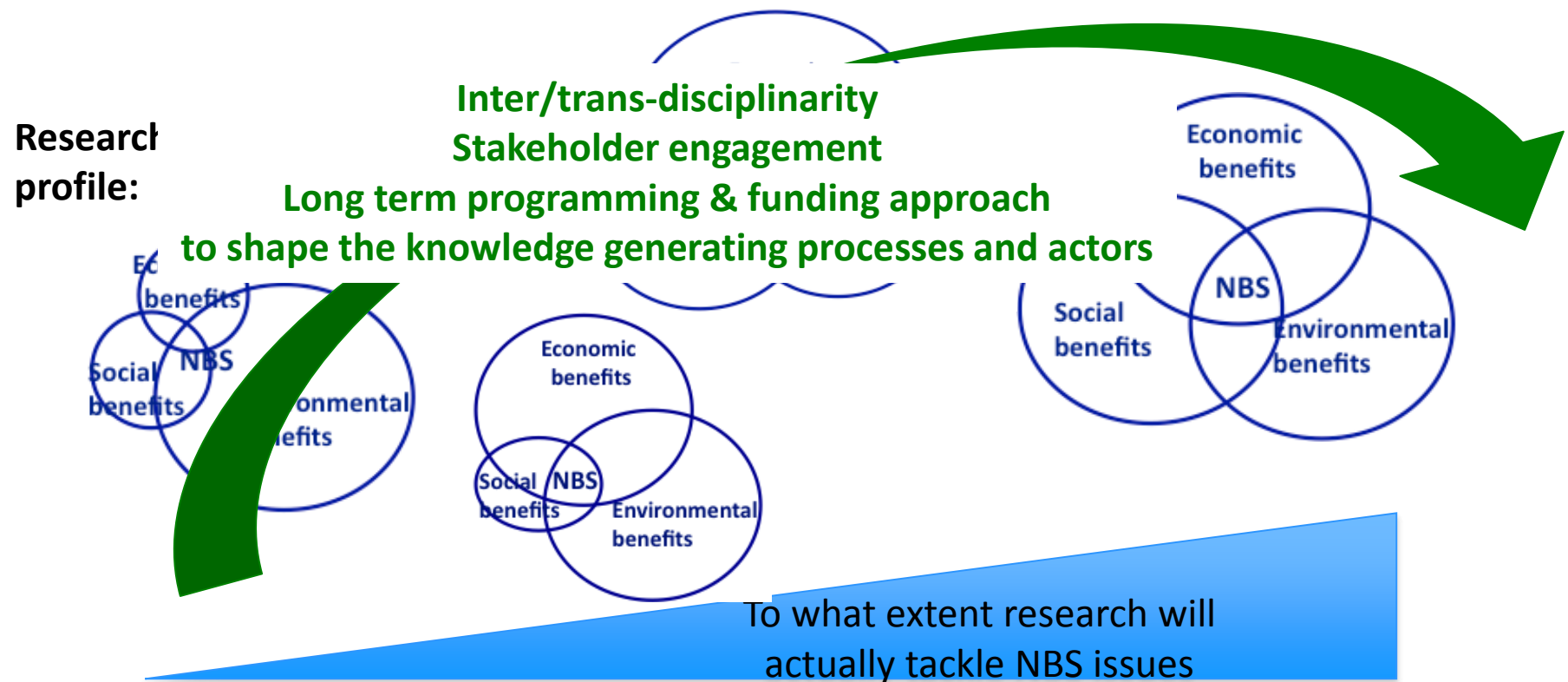
➔ Evaporative surfaces



- ➔ Swards and urban forests with sufficient genetic, taxonomic & functional diversity
- ➔ NBS guided by ecological engineering

## Threat #2

Ex: Develop research approaches **without** proper balance between social, economic & environmental facets





## Conclusions

A change of mindset needed !

Disciplinarity → Inter/Trans-disciplinarity

One vision, one silo → Addressing tradeoffs and underlying conflicts, desiloing

Simplicity → Complexity

Predictibility → Uncertainty

Short term benefits → Long term sustainability

↳ Recognize and tackle these challenges, by calling for more systemic approaches in research and novel approaches to conduct research (**in addition to existing ones**) ... thanks to more systemic approaches in research programming and funding



# Thank you for your attention !

*BiodivERsA is funded by EC  
part of its H2020 programme*

