

# **Societal Challenges 5: Growing a low carbon, resource efficient economy with a sustainable supply of raw materials**

**10b-2014: Structuring research  
on soil, land-use and land  
management in Europe**



# Objectives of Call SC5-10b-2014

- Better **coordination** of often **fragmented research**
- Innovative ways to **mobilise** all relevant **actors**, **increase policy coherence**, resolve trade-offs, manage conflicting interests, increase participation of citizens in decision-making and improve public awareness and business uptake of research results.
- **Creation of European networks to facilitate dialogue among the relevant scientific communities, funding bodies and user communities in Europe**

# Objectives of Call SC5-10b-2014

- Clustering, coordinating and creating synergies between international, European and nationally funded research and innovation actions,
- Developing **joint programmes and projects**,
- Creating links with related international programmes,
- Improve science-policy interface
- Aligning research with decision-making requirements.



# SC5-10b-2014: Expected Products & Impacts

- **Network** of funding agencies and other key players in Europe
- **Strategic Research Agenda (SRA)**
- Evidence-based policy and appropriate, cost-effective management, planning and adaptation decisions



# SC5-10b-2014: Expected Products & Impacts

- Enhanced impact of research and innovation activities through
  - better identification of R&I priorities,
  - improved coordination of EU and Member State/Associated Country research and innovation programmes and funded activities,
- Synergies with international research and innovation programmes.

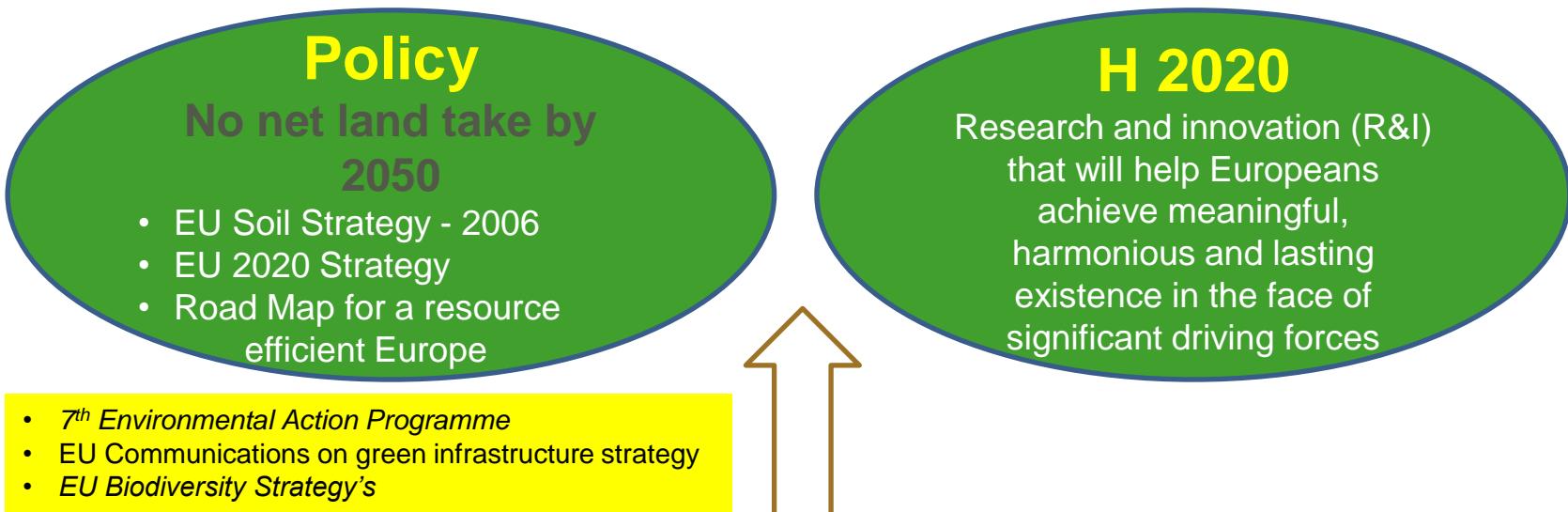


# INSPIRATION Key Challenges

INtegrated Spatial Planning, land use and  
soil management Research ActTION

1. Identify **societal challenges** related to soil, land use and land management
2. Identify **research and stakeholders** for structuring
3. Contribute to **EU policy and research**

# EU Policy and Research



## Research on soil and land issues

- Contribute to food security and food safety
- Ensure secure supplies of safe drinking water
- Secure energy supply and distribution

- Reduce Raw material and resource consumption
- Ensure efficient use of natural resources
- Contribute to climate change mitigation and societal adaptation.

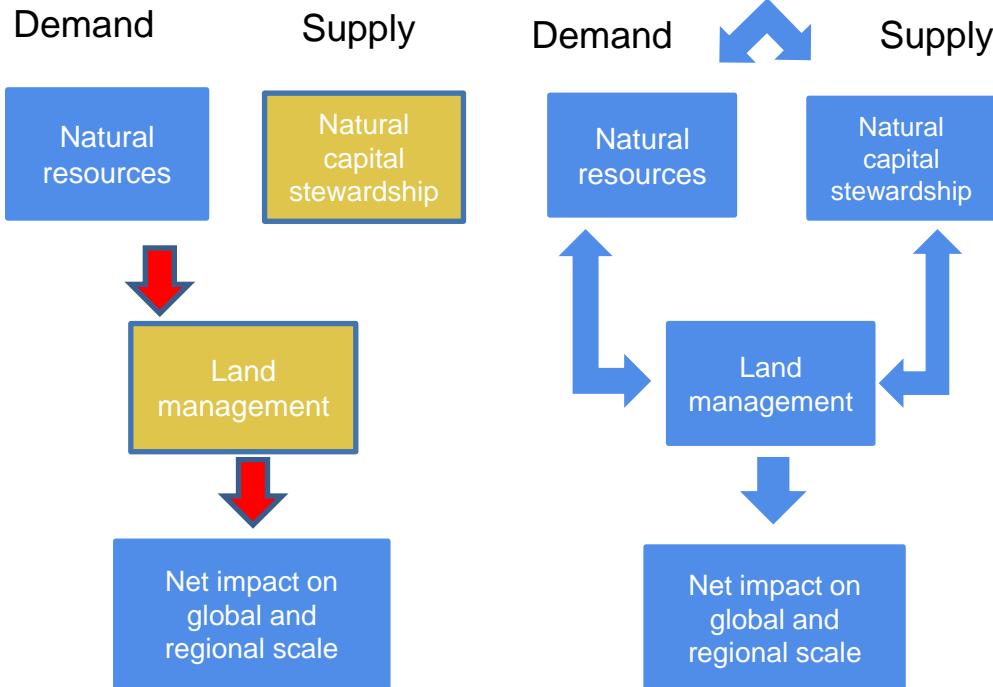
# Our Conceptual Model

## Our Premises

- Improve efficient use of knowledge by a **demand driven** SRA
- Ensure success in addressing **societal challenges** by broad **Policy - Science Interaction**
- Establish a **transnational network** of funding bodies and cooperating industries/regions by recognition of **individual demands** in the SRA

## Current situation

Imbalance of  
Demand and Supply



# Our Work Packages

WP1: Project management

WP2: Demands of research from industry, end-users and funders

## **National Focal Points for 16 countries**

approx. 20 external key stakeholders per country  
in national WS

WP 3: Transnational commons aggregated under 4 integrated  
themes / 8 thematic issues

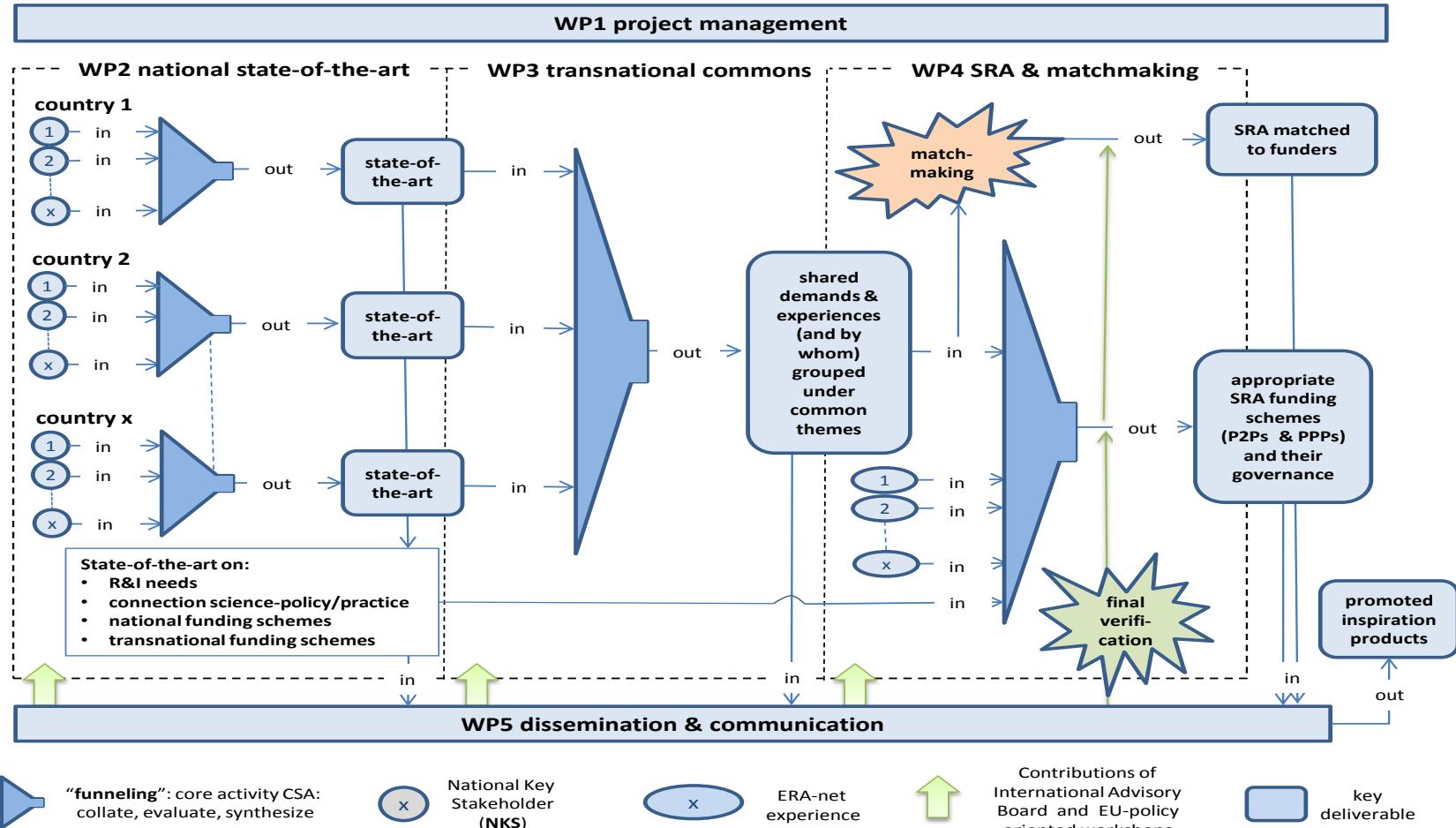
**4 Theme leaders**, one per integrated theme

**4 key stakeholders**, 1 per theme

WP 4: Developing, Delivering and **Match-Making of a Strategic  
Research Agenda**

WP 5: International Dissemination and Communication

# Our workflow



# Societal challenges: Urban sprawl

## Land

- Biodiversity
- Renewable energy production
- Climate adaption area (flooding)

## Agricultural land

- food and or biomass production capacity

## More traffic

- more Infrastructure needed

## Soil Sealing

- loss of water infiltration capacity
- adverse climate change effects
- diminishing drinking water supply

## Loss of soil

- ecosystem services (e.g. carbon storage)
- Less organic matter leads to desertification (requiring extra fertilizer & pesticides)



# INSPIRATION Baseline

## Land and Soil services are fundamental for:

- Meeting **societal needs** (food, drinking water, energy production, shelter, infrastructure)
- Overcoming **societal challenges** (climate change mitigation and adaptation, increasing demands on non-renewable natural resources, environmental justice)

## Our Premises

- Improving efficient use of knowledge by a demand driven and **bottom up** SRA
- Ensuring success in addressing **societal challenges** by a **Policy Science** Interaction and interaction with **stakeholders**
- Establishing a **transnational network** of funding bodies and cooperating industries/regions by recognition of **individual demands** in the SRA



# Our Conceptual Model

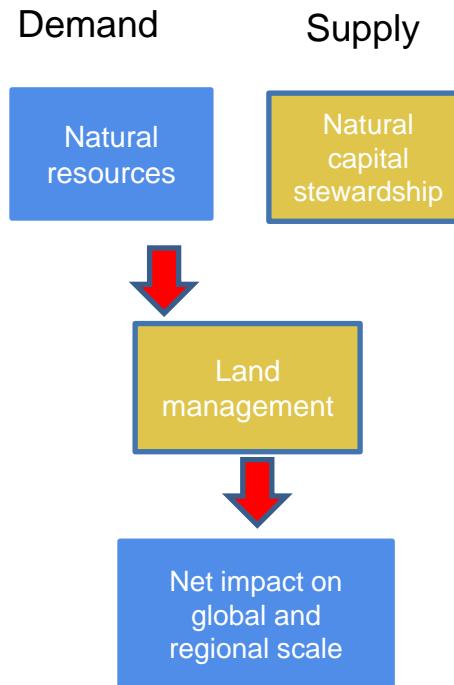
## Land / Land Use / Land Management

### Integrated themes

- Natural resources
- Natural capital stewardship
- Land management
- Net impact on global and regional scale

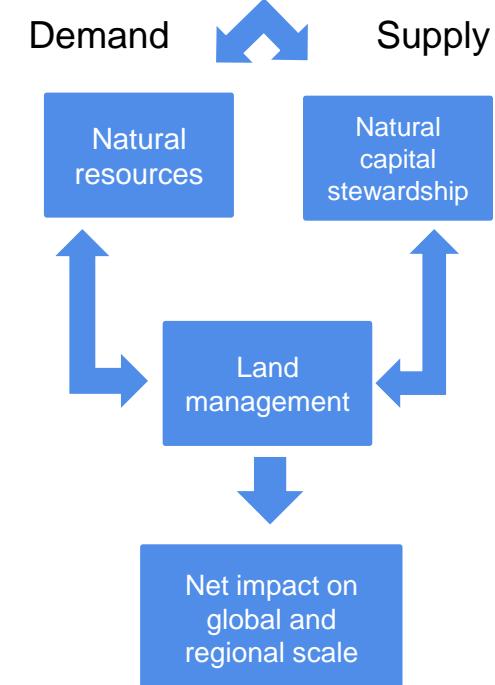
### Current situation

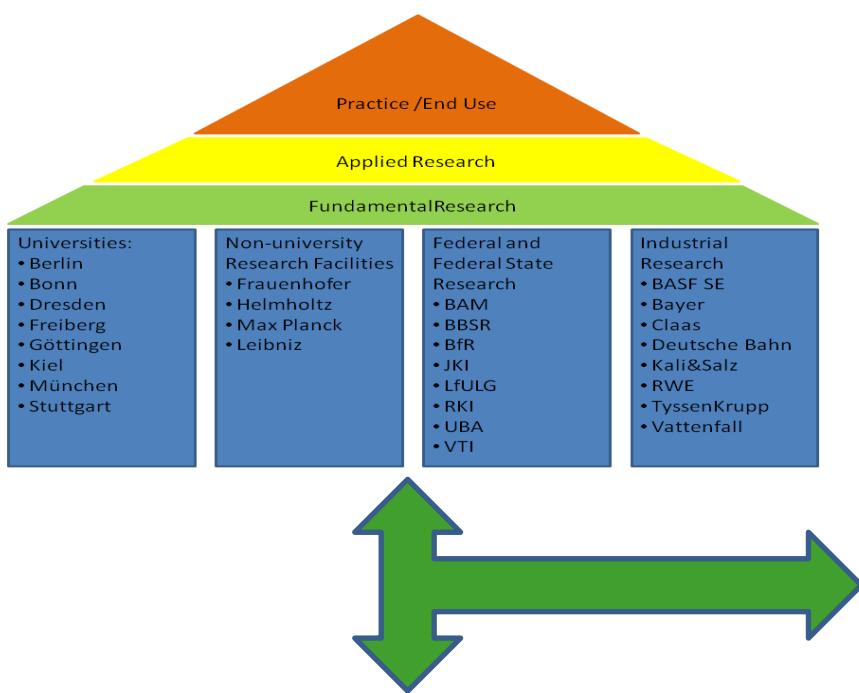
Imbalance of Demand and Supply



### Objective

Balance of Demand and Supply





- Funders (public and private)
- End Users
- Knowledge producers

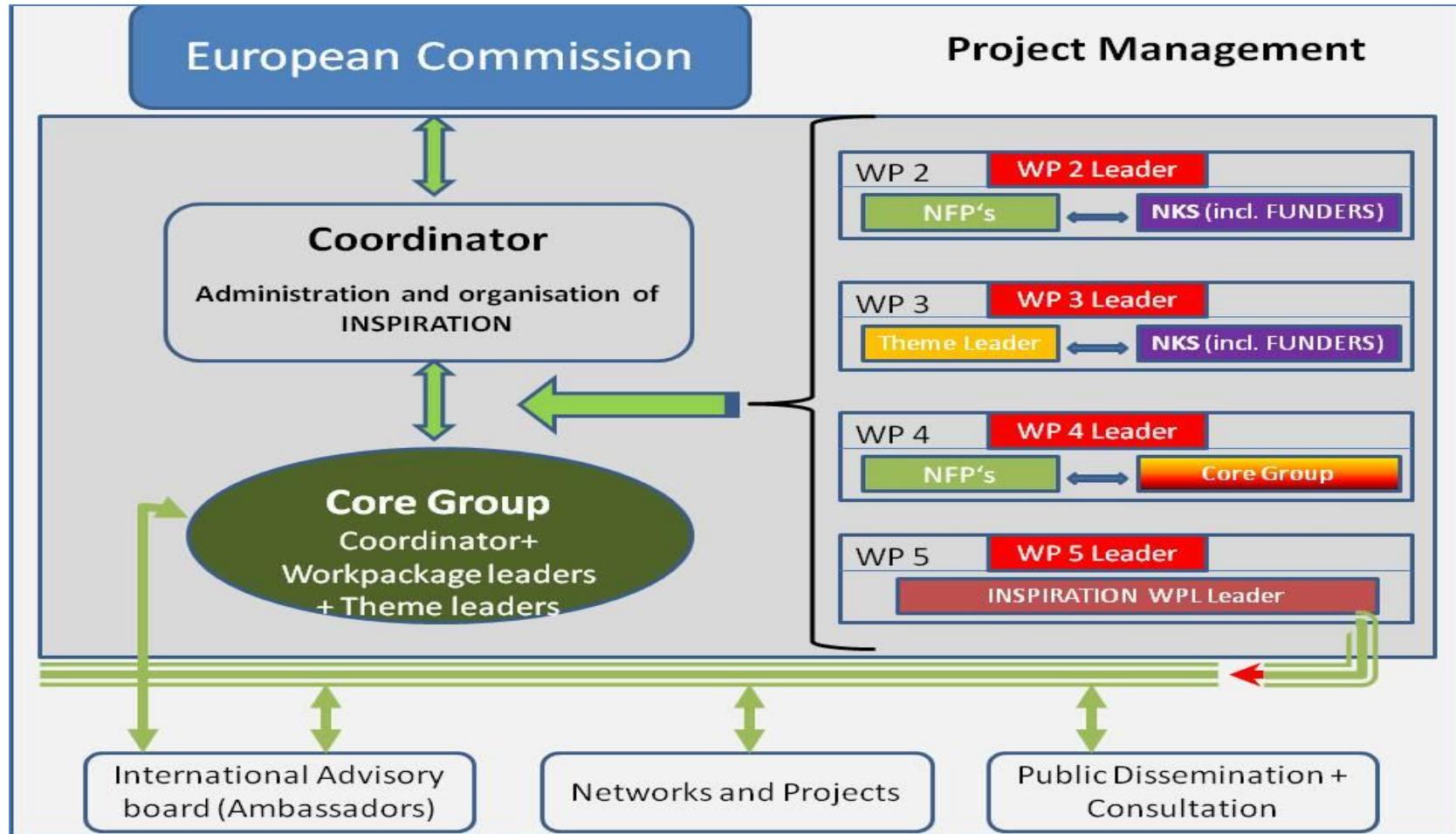
## Stakeholder

- Developers and construction companies (builders of houses and infrastructure, dredging companies)
- Food producers; Farmers, agro and food companies
- Bankers (including (re)insurance)
- NGOs
- Policy makers on different levels (national / regional / local), Policy implementers
- Entrepreneurs, using or affecting land and resources (large, small and medium enterprises)
- Drinking water and energy producers, distributors and suppliers
- Spatial planners (at national, regional and local levels)
- Landscape stewards, such as forest or nature managers

# Thematic issues

- Assessment of land resources
- Potential productivity of land and soils
- Demand for soil/land resources, imports and exports
- Competition between land uses (land use conflicts)
- Concepts to identify and quantify relevant impacts
- Instruments to avoid / minimize impacts (feedback to decision-making process)
- Opportunities of innovative land use technologies
- Resource-oriented land management systems

# Our Work Packages



# Horizon2020 INSPIRATION

## UK Workshop: Room A2

*Call/ SMS Paul Nathanail 07970 843 061 if you need anything*