

# Implementing the EU Biodiversity Strategy 2020:

*Comparing arguments used in Member State Policies and at EU level*

*Dieter Mortelmans, Esther Carmen, Ann Van Herzele  
BESAFE & BIOMOT conference, Brussels, 2015.*

RESEARCH INSTITUTE  
NATURE AND FOREST



# Contents

- ▶ What is argument mapping? Why do we use it?
- ▶ How did we apply it in BESAFE?
- ▶ Results & general conclusions
- ▶ Policy relevance



# What is argument mapping?

- ▶ A **schematical representation** of argumentation aiming to tackle complex debates.
- ▶ Aim?
  - increase our intellectual effectiveness
  - getting a feel how different ideas fit together (or are contradicting)
  - expose the unclarity in arguments

## Walking directions



 via Infante Isabellastraat/Rue Infante Isabelle 4 min

[Show terrain](#)

350 m

Use caution - may involve errors or sections not suited for walking

### Gare de Bruxelles-Central

1000 Bruxelles

-  Head south  
8 m
-  Turn right toward Infante Isabellastraat/Rue Infante Isabelle  
65 m
-  Turn right onto Infante Isabellastraat/Rue Infante Isabelle  
110 m
-  Slight left onto Rue du Marché aux Herbes/Grasmarkt  
58 m
-  Turn left onto Bergstraat/Rue de la Montagne  
29 m
-  Turn left onto Rue de la Colline/Heuvelstraat  
73 m
-  Slight left onto Grand Place/Grote Markt  
23 m





# From prose...

## TARGET 2 Maintain and restore ecosystems and their services

### A strategic approach to restoring Europe's ecosystems

The second target focuses on maintaining and enhancing ecosystem services, and restoring degraded ecosystems across the EU, in line with the global goal set in 2010 to restore at least 15% of degraded ecosystems.

Healthy ecosystems provide a stream of goods and services vital to society, such as food, fibres, clean water, healthy soils, protection against floods and erosion. Unfortunately, many of Europe's ecosystems are now heavily degraded which drastically reduces their ability to deliver these valuable services. The problem is further exacerbated by the fact that these services are often public goods, and their economic value is not recognised by the markets; consequently their true economic worth is not reflected in society's decision-making and accounts.

The study on The Economics of Ecosystems and Biodiversity (TEEB), co-financed by the Commission, provides real-world examples of the cost of biodiversity loss. For example, the

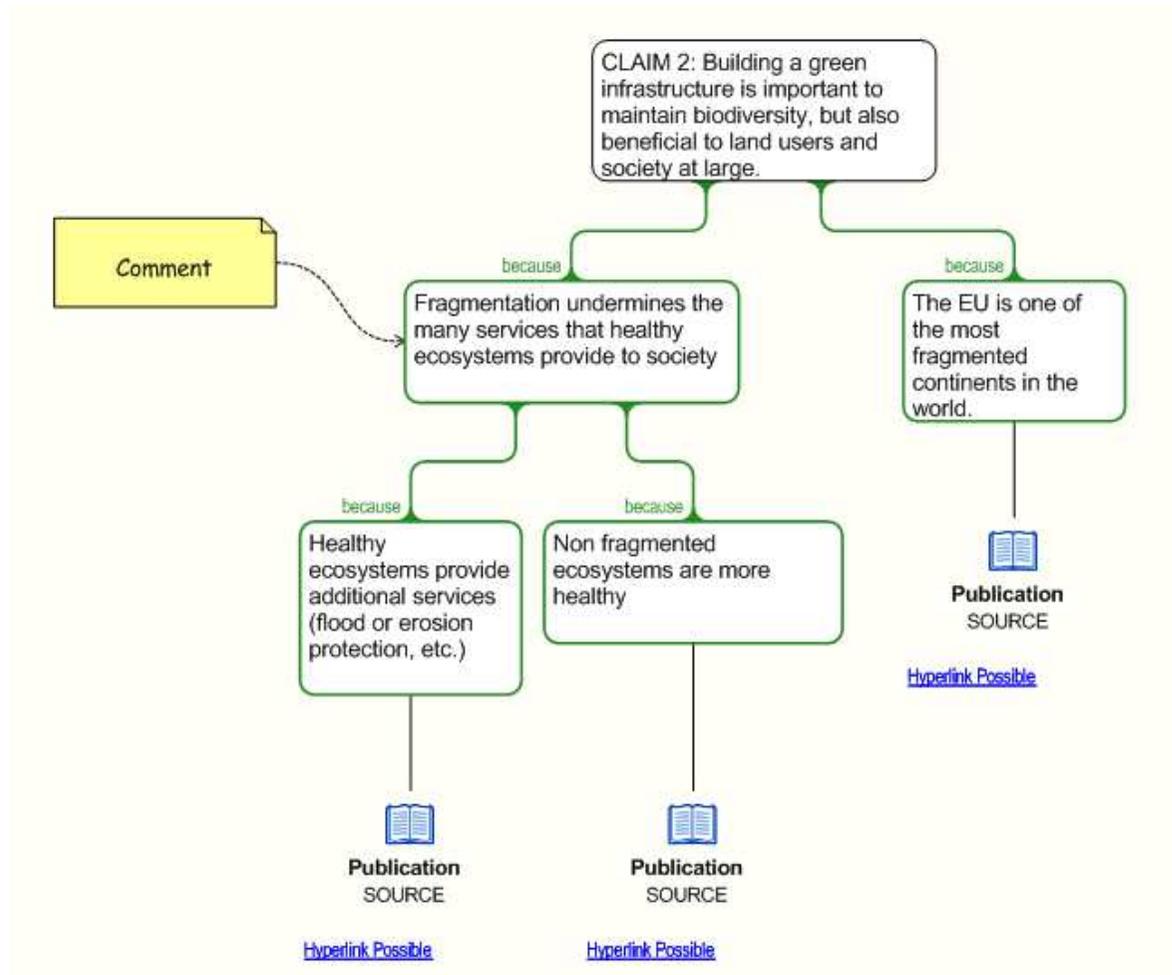
### Promoting a European green infrastructure

The strategy also calls for the development of a green infrastructure for Europe. The EU is one of the most fragmented continents in the world. Thirty percent of the land is moderately to highly fragmented due to urban sprawl, infrastructure developments and changing land uses. This not only affects biodiversity but also undermines the many services that healthy ecosystems provide society, such as a clean water supply, protection against floods and erosion etc.

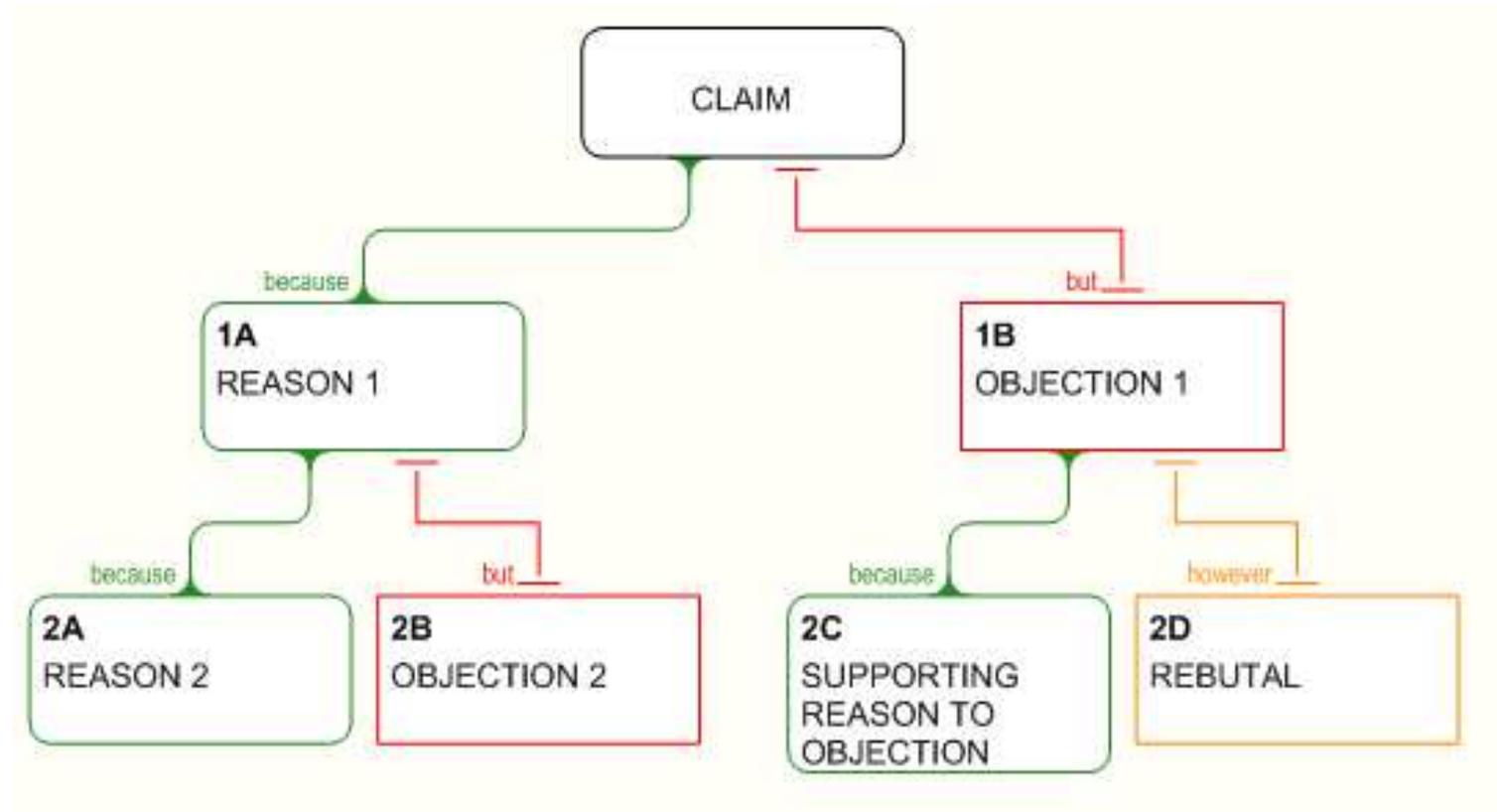
Building a green infrastructure can help overcome many of these challenges. It can reconnect fragmented natural areas and improve their functional connectivity within the wider countryside. It can also encourage a better use of nature-based approaches to tackle climate change and to improve resource efficiency, for instance through more integrated spatial planning and the development of multifunctional zones that are capable of delivering benefits to both biodiversity, the land user, and to society at large. The Commission intends, therefore, to put forward a new strategy on an EU-wide green infrastructure by 2012.

**BESAFE**

# ...to argument map.

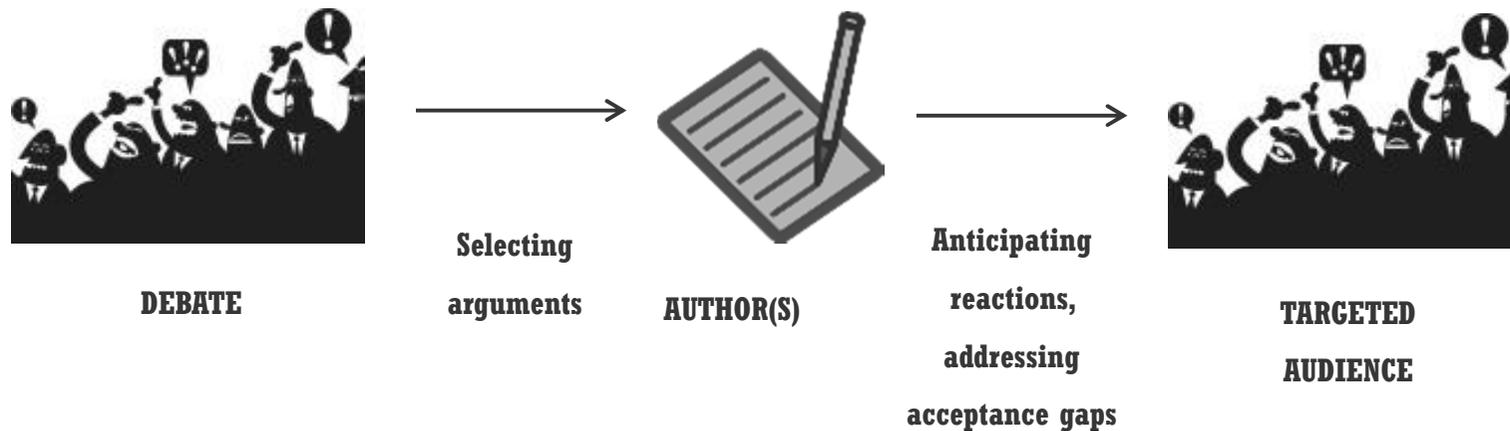


# Building blocks of an argument map



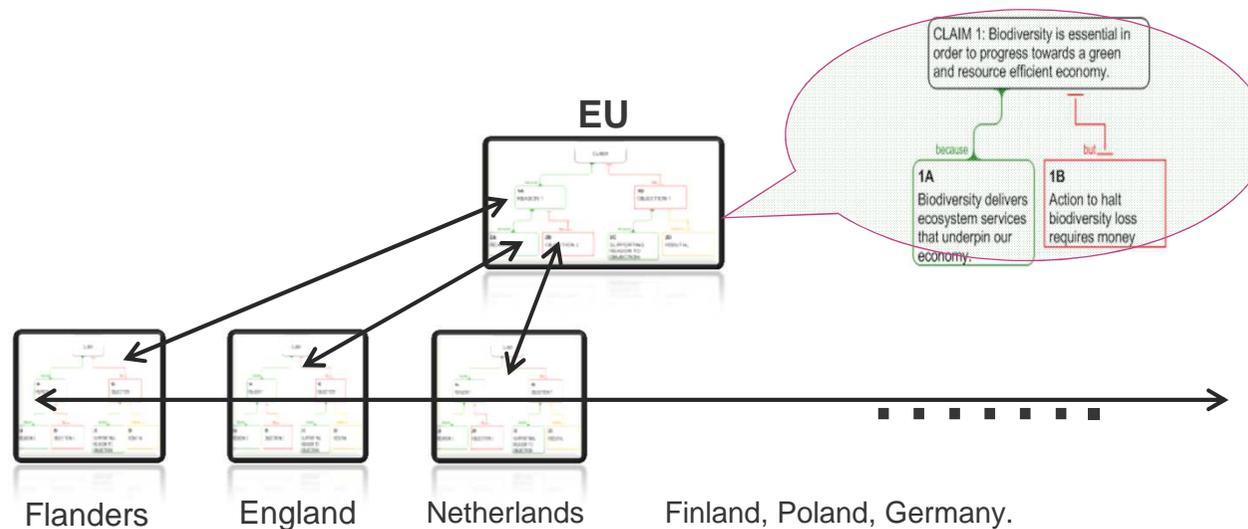
# How did we use it in BESAFE?

- ▶ Focus: Biodiversity strategy 2020 and its implementation
  - Policy documents
  - Relevant and formal



# How did we use it in BESAFE?

- ▶ Focus: Biodiversity strategy 2020 and its implementation
  - Policy documents
  - Relevant and formal
  - **EU & Member States: Germany, Poland, Finland, Netherlands, England, Flanders**



# How did we use it in BESAFE?

- ▶ Focus: Biodiversity strategy 2020 and its implementation
  - Policy documents
  - Relevant and formal
  - EU & Member States: Germany, Poland, Finland, Netherlands, England, Flanders
- ▶ **Starting point: 3 Key messages from the EU Biodiversity Strategy 2020**
- ▶ Software (Rationale)

# Key Messages

- ▶ *“Biodiversity is essential in order to progress towards a green and resource efficient economy”*
  - *Economical dimension of biodiversity*
  - *Link with EU-flagship on resource efficiency*
- ▶ *“Building a green infrastructure is important to maintain biodiversity, but also beneficial to land users and society at large”*
  - *Benefits of green infrastructure beyond biodiversity*
  - *Ecosystem Services*
- ▶ *“The EU needs to mainstream Biodiversity into major forestry, agriculture and aquatic/fisheries policies”*
  - *Move from standalone to integrated strategy for biodiversity*



claim\_1\_green\_economy4.rtl - Rationale [modified]

Home Evaluate View Output Help

File Delete All Undo Redo Trim Hyperlink Insert Image Font Size Spelling Copy Paste Repeat Stamp Colour Type Grouping Reasoning Jumble Profile

Start Edit Clipboard Change Box Change Map Profile

Building Panel

- Grouping
- Reasoning
  - Contention
  - Reason
  - Objection
  - Quick Start
  - Example
  - Legend
- Advanced Reasoning
- Basis Boxes
- Essay Planning
- Teacher Tools
- Extras

Close Building Panel

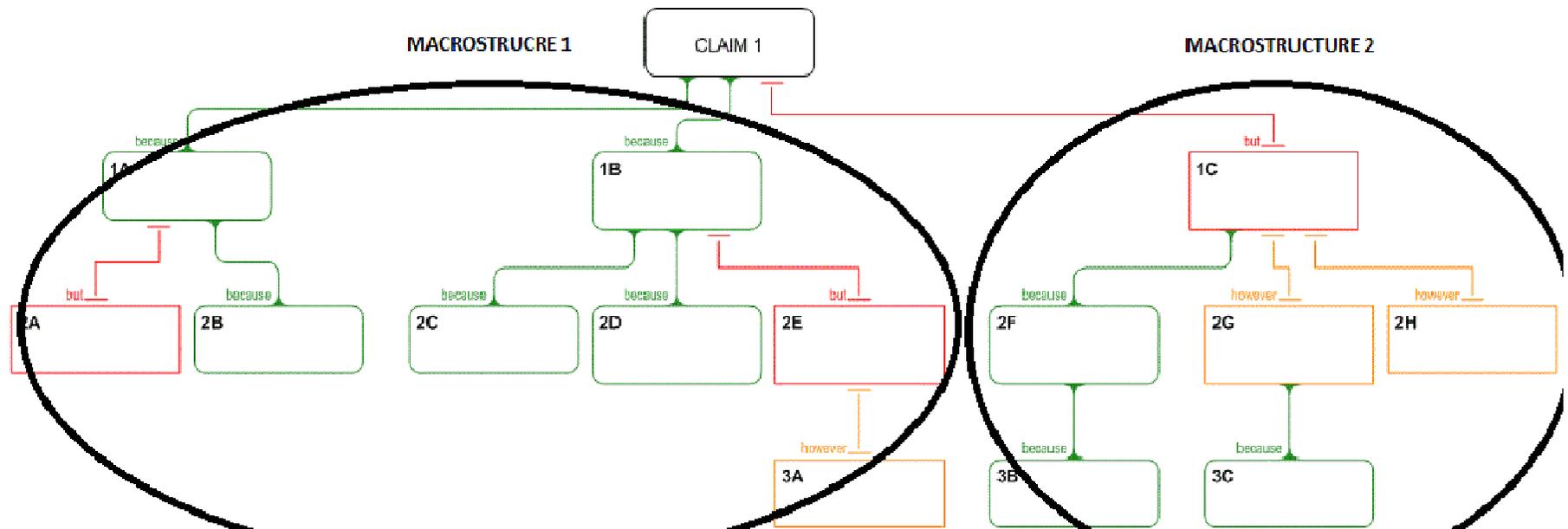
Windows Show All Show Map Next Map

30%

Open Text Panel



# Grouping arguments...

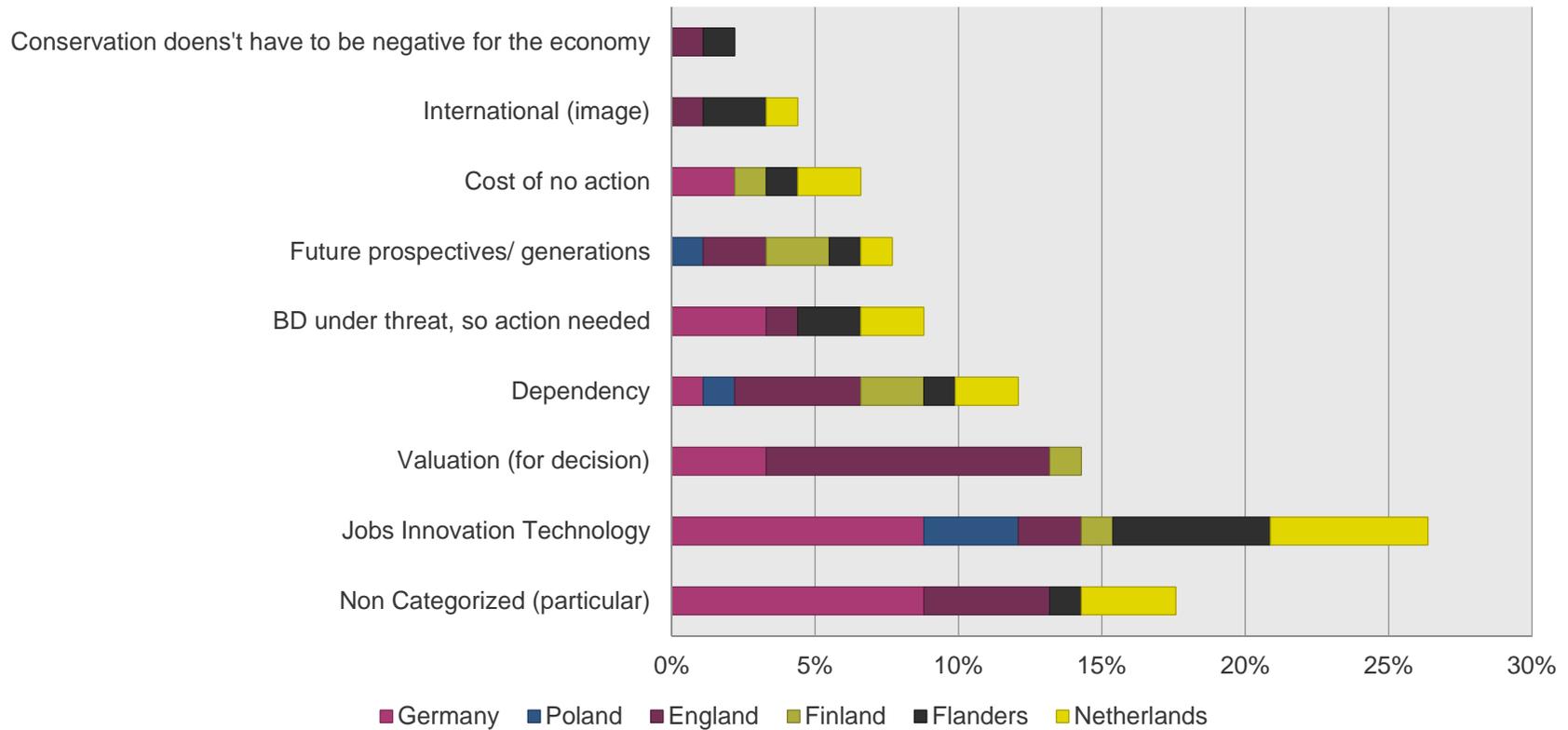


## ...into categories.

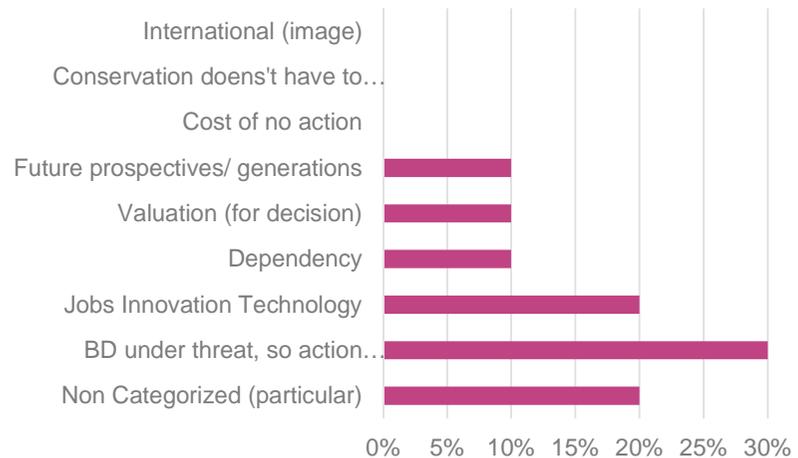
- ▶ Not predefined
  - Thematic keywords
  - Rationalities
- ▶ Rationalities:
  - Technical-scientific (economic)
    - eg 'The EU is one of the most fragmented continents of the world'*
  - Juridical and political
    - eg 'There is a political consensus about the importance of sustainability'*
  - Moral
    - eg 'We have a responsibility towards future generations'*



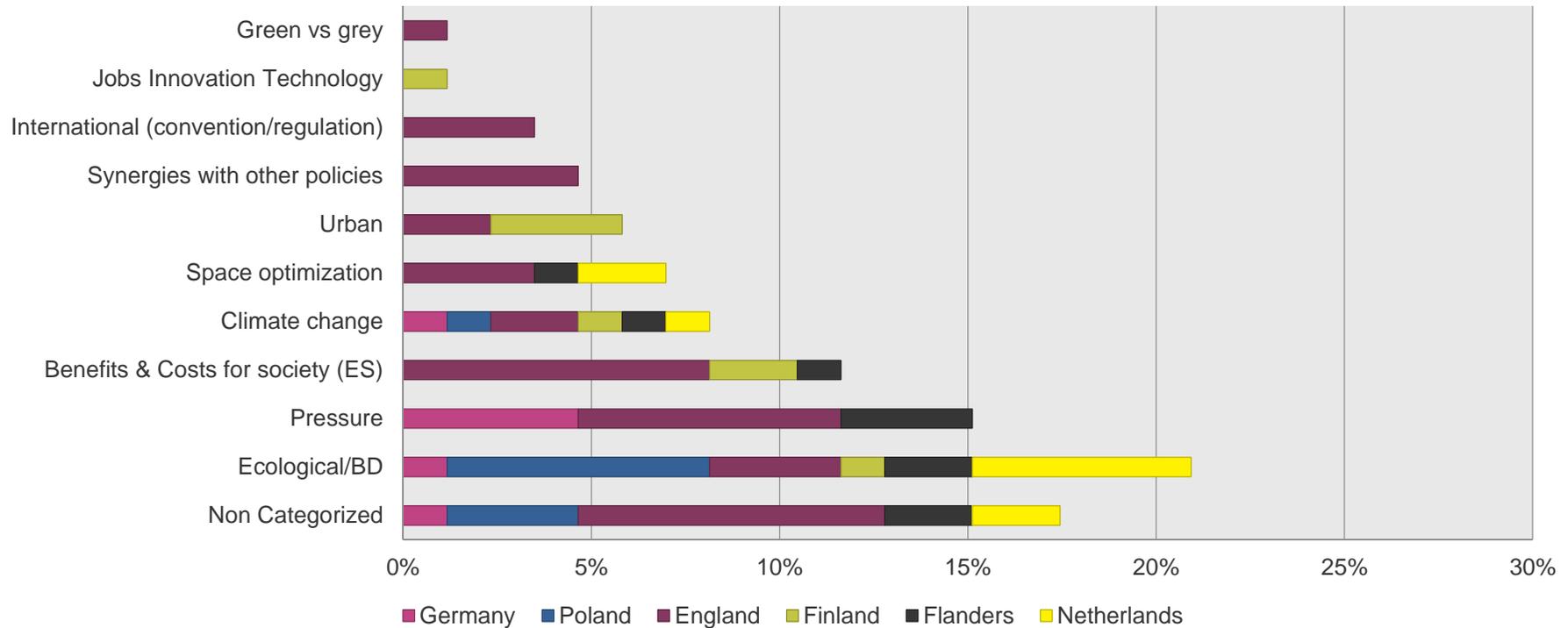
# Claim 1: "Biodiversity is essential in order to progress towards a green and resource efficient economy"



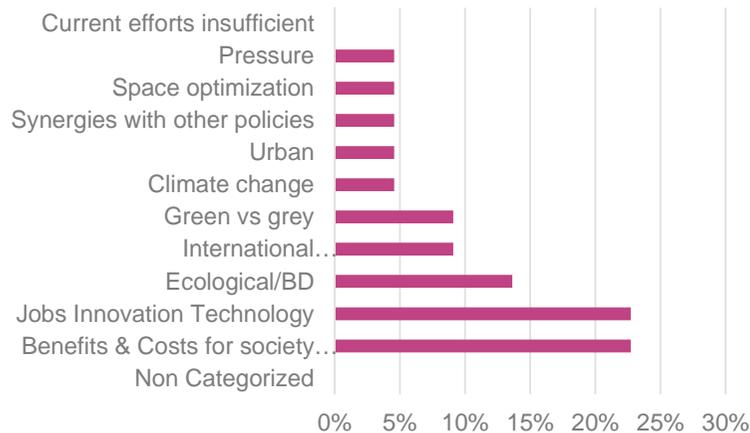
Total number of argumentation lines: **91**



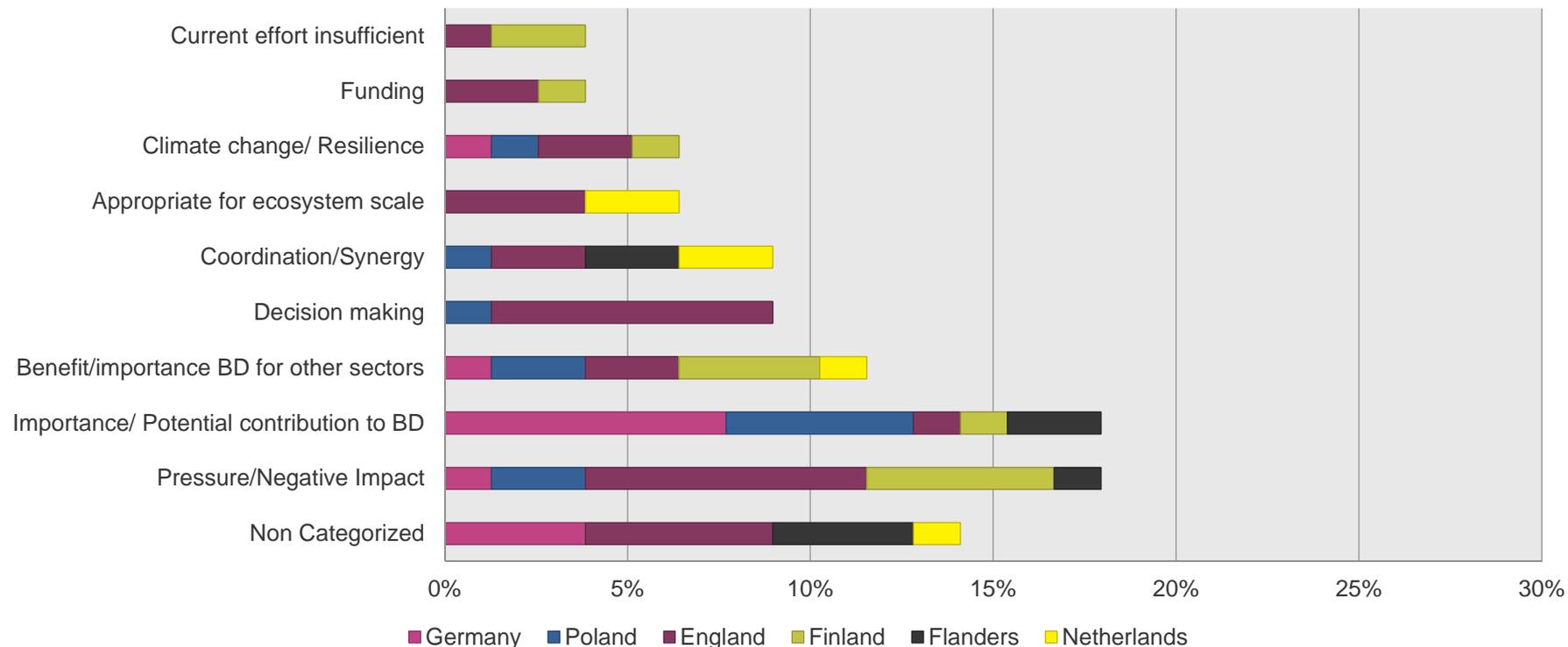
## Claim 2: "Building a green infrastructure is important to maintain biodiversity, but also beneficial to land users and society at large"



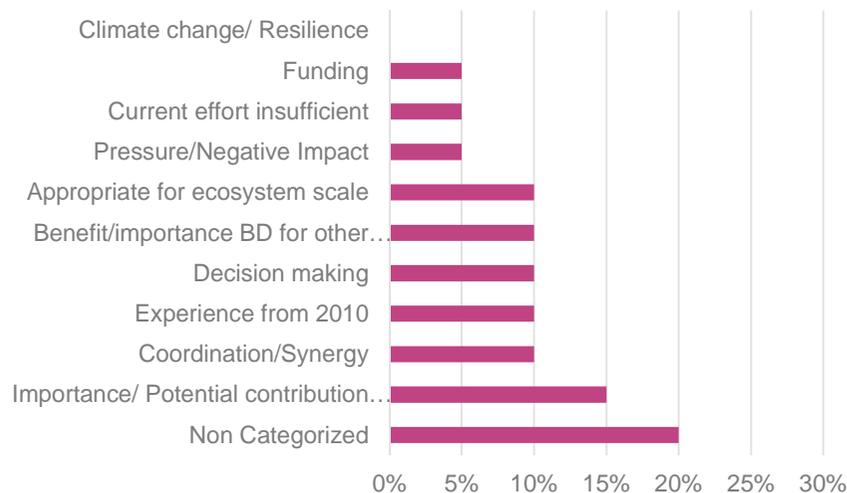
Total number of argumentation lines: **86**



### Claim 3: "The EU needs to mainstream Biodiversity into major forestry, agriculture and aquatic/fisheries policies"



Total number of argumentation lines: **78**



# General Conclusions

- ▶ All three EU claims represented in Member States,
  - important differences between Member States.
- ▶ No big differences between the average occurrence of argumentation lines in Member States and the EU.
  - focus of certain Member States on specific argumentation lines best explained by context (e.g. population density, political ideology, etc...)
- ▶ Some argument categories strongly related to claim, but some could be found across all claims.
  - eg 'threats for biodiversity' and 'climate change'
- ▶ important role of document type.
  - binding documents contained much less argumentation
  - eg a policy plan versus a political brief. Advisory reports, scientific assessments (e.g. UK NEA) and Government White papers having the broadest range of argument categories.



# General Conclusions

- ▶ Strong emphasis on arguments from from the technical-scientific rationality and specifically on the ***economy-nature relationship***
- ▶ A lower emphasis was found on arguments issued from the juridical-political rationality
  - Interesting examples: ‘international agreements’ & ‘image’
  - Jobs as economic-political
- ▶ Arguments issued from a moral rationality are poorly represented
  - Exception: ‘responsibility towards future generations’
  - but tacit references to moral aspects (eg ‘responsible economic growth’, ‘fair prices’)



# Policy Relevance

- ▶ Overview of large and complex debates
  - Quickly identify conflicting views
  - Increased understanding
- ▶ Identify discrepancies between EU – Member states
  - Match debates on different governance levels
  - Focus argumentation where it is needed, using the right types of arguments (eg economic, political, moral, ...)
- ▶ Particularities of Member states
  - Identify specific issues at member state level
- ▶ Identify different interpretations of concepts
  - eg ‘Green Infrastructure’, difference between ‘biodiversity’ and ‘ecosystem services’



# Questions?

“ Can you think of other ways how these results could affect policymakers?”

Can you think about other potential applications for argument mapping that could improve decision making?”

# Thank you for your attention

## ► Research Team

Dieter Mortelmans

Esther Carmen

Ann Van Herzele

Malgorzata Blicharska

Ulrich Heink

Tiina Jääskeläinen

Marion Bogers

Ingrid Coninx

Kees Hendriks

