



**NATURANCE**

# **Integrating Nature and Insurance**

**Climer x Naturance  
workshop**

*29 August 2025*



**Introduction to NbS in insurance and the  
Naturance project** *15 mins*  
(CISL)

**Innovation lab review** *15 mins*  
(VU-IVM)

**Industry Perspective** *15 mins*  
(WTW)

**Activity and Q&A** *35 mins*  
(LSE)



# Introduction

## Nature-based Solutions and Naturance

**Jonathan Middleton and  
Corinne Martin**

**Programme Managers, Nature  
Finance co-leads**

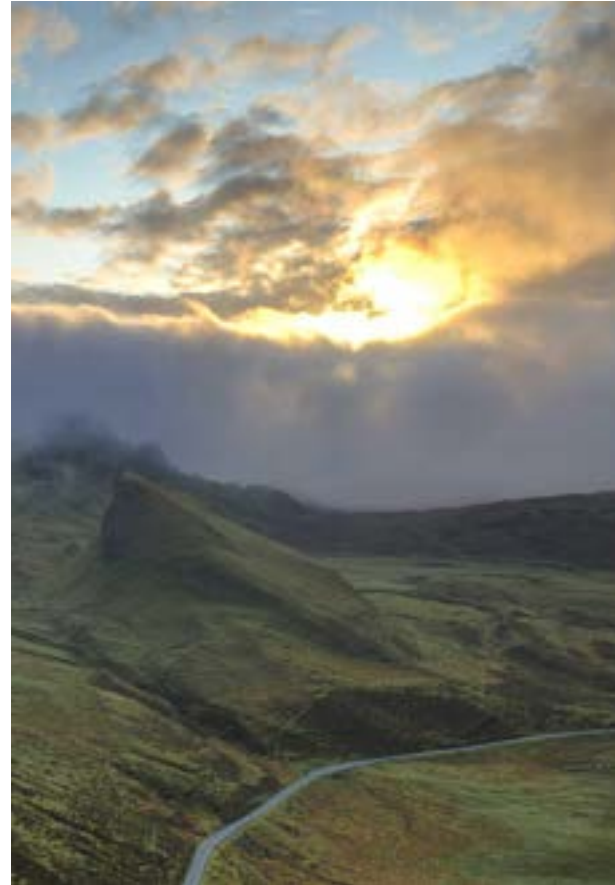
**Cambridge Institute for  
Sustainability Leadership (CISL)**

# Nature-based Solutions

What do you understand by  
***“Nature-based Solutions”*** (NbS)?

<https://www.menti.com/aliwb39wb6h2>

Or got to [menti.com](https://www.menti.com) and use the  
code **7373 4406**



## What do you think of in response to *"Nature-based Solutions"* (NbS)?

solutions to what?

ecosystem-based solutions

Circular Economy

Natural resources giving more benefits to humans

Solutions which are rooted in the nature / ecological environment

working with nature to address societal challenges

Local-scale landscape modifications using natural features to adapt to climate impacts

use of ecosystems to provide services, in this context perhaps to reduce risk

Solutions inspired by nature. Flood protection with mangroves

They are steps taken to preserve natural ecosystems towards climate action.

why does nature need a fancy term?

a comprehensive advantage package for social and environmental challenges without 'reinventing the wheel'

Are they usually for mitigation or adaptation or resilience ?

Using local knowledge to address climate impacts at the small scale



What could be the role of insurance in a nature-based solution? Can you think of an example?

insuring an NbS project to attract investors

Protection of nature form risk exposures

Insuring the ownership of natural resources as an asset?

can protect NbS assets

If you use wetlands to attenuate floods, insurers could price risk as if there was a traditional flood defence

Financing the implementation of nbs and locally led initiatives

Funding NBS

enabling blended finance

Reducing risks through NbS to reduce vulnerability and increase insurability of a highly exposed area

Financial investment to preserve them from being destroyed

Incentivizing green roof adoption by offering premium discounts to households that adopt

Reduce potential future risks brought about by climate disasters

Insurance could help implement extension services (eg education) to learn how to implement nbs

bundling insurance with green loans for NbS to reduce premium and loan interests at the same time

# Nature-based Solutions in insurance

Nature-based insurance and investment solutions integrate nature and ecosystem services and nature-based solutions into financial incentives to mitigate climate risks.

These innovations transform existing financial instruments - such as insurance, bonds, and equity - to leverage the value of ecosystem services.



# Nature-based Solutions in insurance

## Enhanced property or indemnity insurance

- restoration clause in payouts
- premium or deductible incentives for restored ecosystem services
- conditional renewal or coverage continuation based on restoration commitments

## Ecosystem insurance - nature as the insured asset

- reconstruction or reinstatement coverage for ecosystem infrastructure
- investment de-risking for large-scale restoration projects
- performance insurance for NbS

Handout:

<https://docs.google.com/document/d/1yIKWUB1avG9SZZDwJ6nibhZoO-GR8B-P>





## Insurance for nature, and nature for insurance

### Project objectives:

- Connect major knowledge networks and foster knowledge sharing and collaborative marketplace for innovative solutions
- Organise innovation finance and policy labs to assess areas for insurance & investment solutions
- Analyse policy and governance conditions conducive for the solutions
- Analyse models, methods, scenarios, and metrics
- Build capabilities for green financial innovations, and creating conditions for transformative change



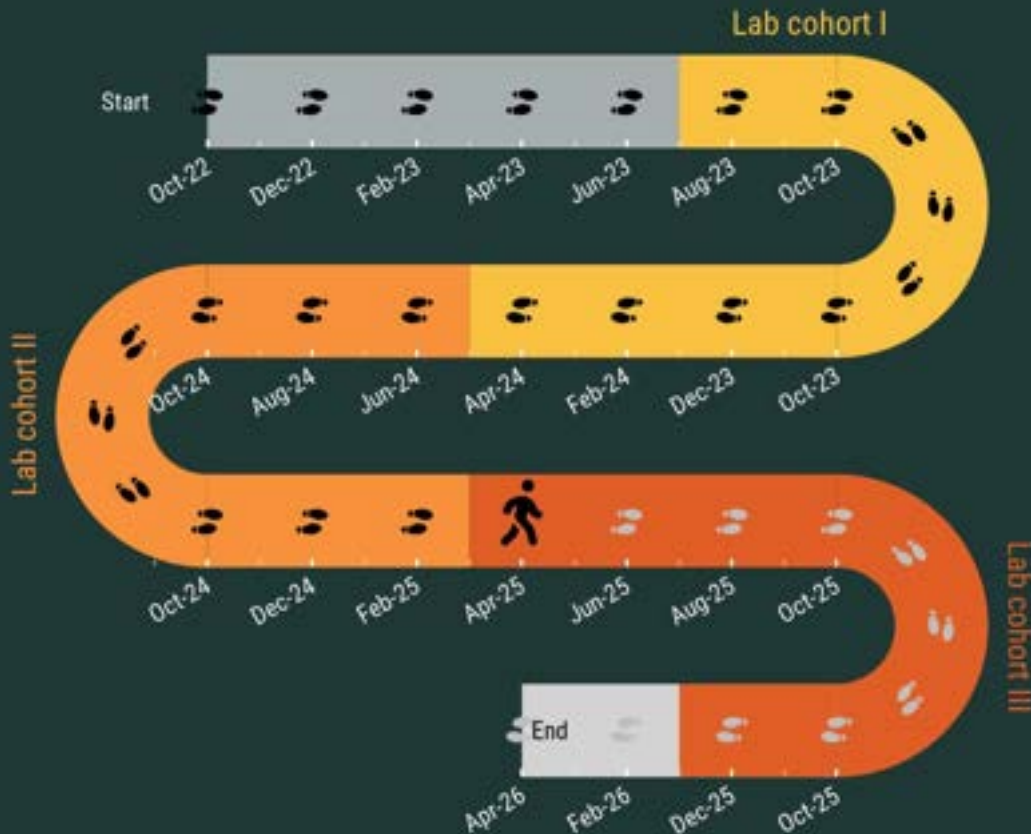
# The NATURANCE Project

**Innovation labs** are creative hubs for developing and testing solutions. They provide a space for experts, entrepreneurs, and policymakers from knowledge networks to collaborate on innovative solutions.

[www.naturanceproject.eu/innovation-labs/](http://www.naturanceproject.eu/innovation-labs/) (to host upcoming “training modules”)



## NATURANCE innovation lab journey



### 3x3 Innovation Labs

Innovation festivals at end of each round of labs

Final phase of innovation labs is currently ongoing

Major remaining activities and outputs:

- NATURETHON citizen engagement campaign
- [Final festival](#) 3-5 February 2026 in Brussels

# NATURANCE's 9 Innovation Labs

**1: Methods to quantify flood risk reduction and co-benefits of NbS in the Netherlands (VU-IVM)**

**2: Harnessing insurance to promote nature-based solutions for wildfire risk management (IIASA)**

**3: Investing in natural flood management in urban areas in the UK (LSE)**

**4: How can insurance be an enabler to catalyse investment into nature-based projects? (CISL)**

**5: Financing for heat action plans at city-level in Europe (WTW)**

**6: Boosting flood resilience in Italy through controlled flooding, community insurance and nature-based solutions (CMCC)**

**7: Promoting a network of protected areas to support biodiversity and ecosystem functioning (KIT)**

**8: Advancing Nature-based Solutions through Innovative Resilience Finance (ICLEI)**

**9: Wetland restoration for protection against floods and drought (SU)**





# **Innovation Labs**

**Methods to quantify flood risk  
reduction and co-benefits of  
NbS in the Netherlands**

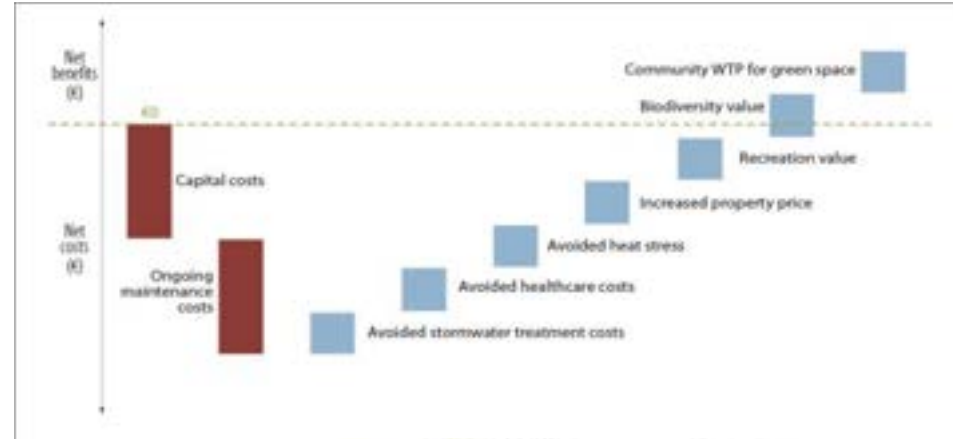
**Guillermo Garcia Alvarez**

**PhD Candidate, VU-IVM**

# Improving methods through co-creation

- NbS have emerged as a potential alternative to mitigate climate risk.
- However, further evidence about the performance of NbS is still needed.

**Aim:** Incorporate stakeholders' feedback to improve risk-reduction and co-benefits modelling



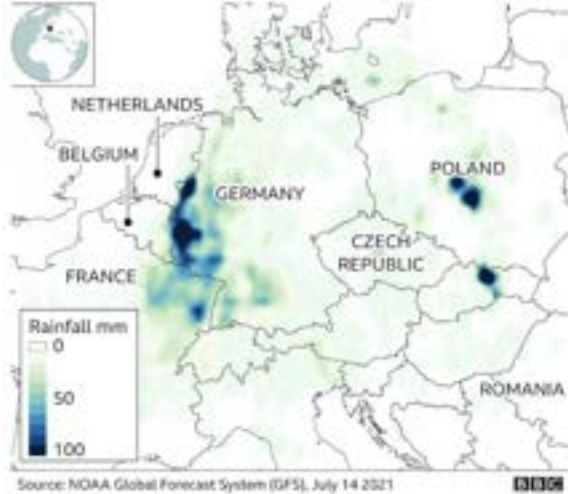
Inventory of methods for  
assessing benefits of NbS

Improved methods for assessment  
of benefits

Recommendations for  
integrating NbS in insurance  
schemes

# The case study: The European floods of 2021

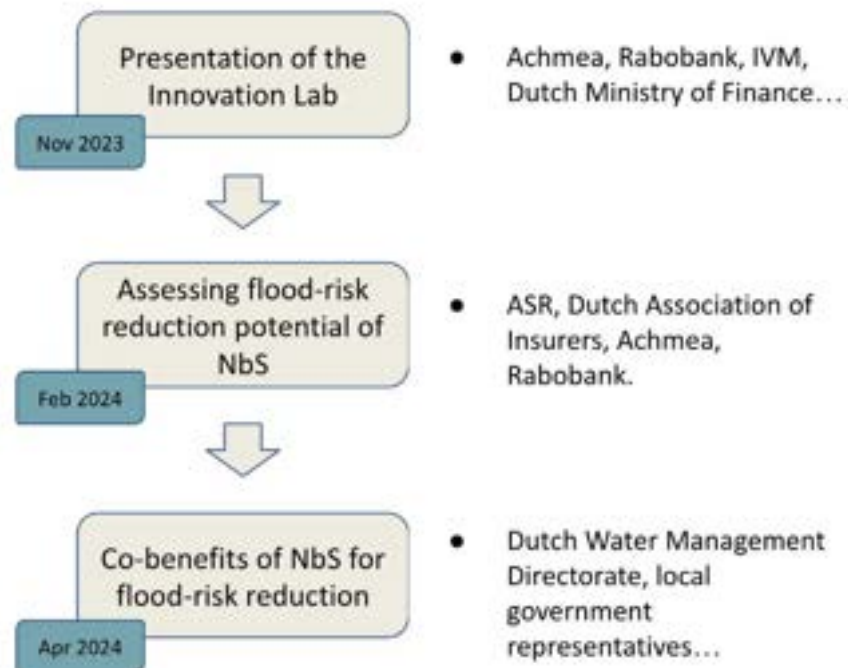
Rainfall over Europe on 14 July (24hrs)



€ 350 – € 600 million in total damage in the Netherlands (Kok et al, 2021)



# Lab structure and stakeholders





# What did we learn?

Change agricultural land to natural grassland on slopes  
(picture from Natuurkracht,



Restore natural floodplain (picture from Natuurkracht, 2023)



Develop storage ponds  
(picture from Province  
Limburg Belgium, 2024)



Re-meandering of rivers  
(picture from Waterschap  
Hunze & Aa's, 2020)

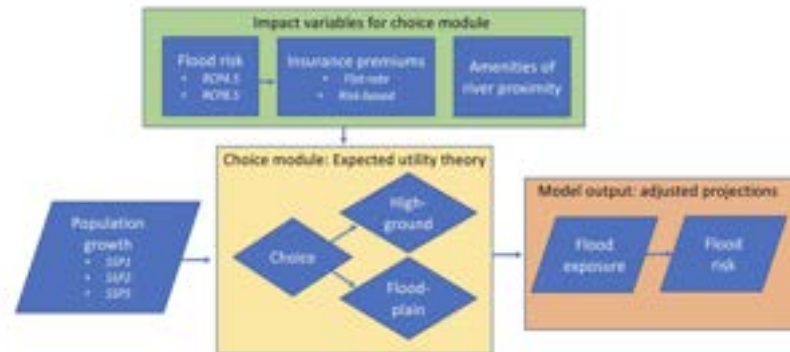
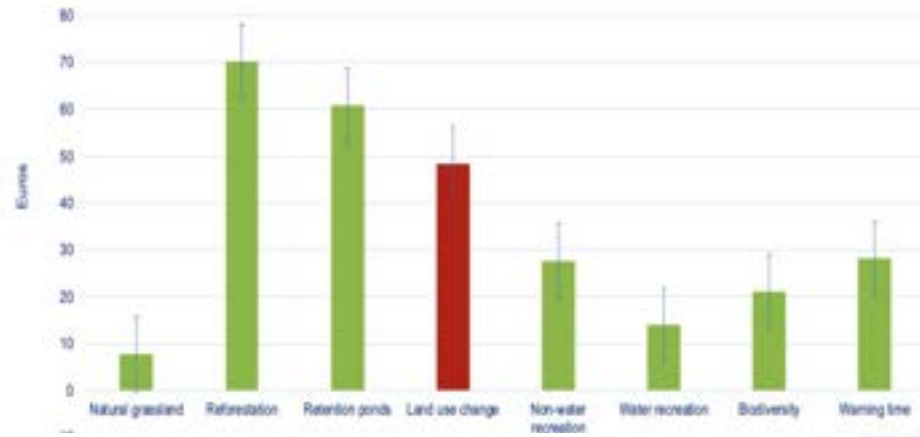


Develop swamps (picture from  
Waterschap Limburg, 2024)

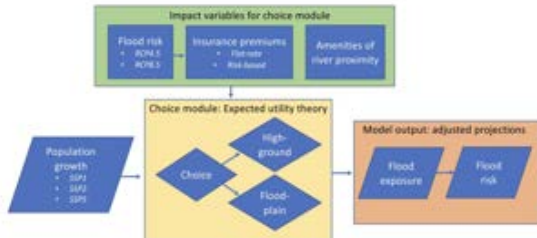
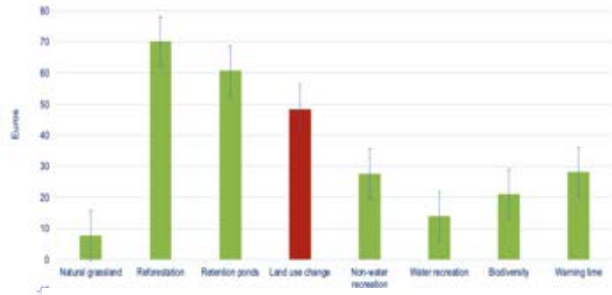
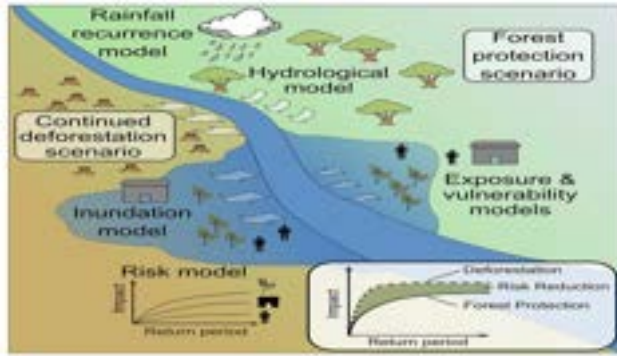


# What did we learn?

- Waterboard authorities indicated the NbS that are being considered for Limburg.
- Stakeholders from the Limburg municipality highlighted that land use constraints are likely to be a key barrier for NbS.
- The competitive market in the NL and the one-year contracts are additional challenges to investment in NbS.
- In competitive private markets, the “co-benefits” may not be valued. Opportunity for PPP, led by public authorities.



# Next steps



Category	CBA Items
<b>CBA – Costs</b>	<ul style="list-style-type: none"> <li>-Capital costs</li> <li>-Maintenance costs</li> <li>-Land use change</li> </ul>
<b>CBA – Benefits</b>	<ul style="list-style-type: none"> <li>-Risk-reduction</li> <li>-Co-benefits</li> </ul>
<b>Insurance Analysis</b>	<ul style="list-style-type: none"> <li>-Premiums</li> <li>-Projected insurance demand</li> </ul>

Recommendations for financing and insurance



Can financial incentives stimulate local NbS (e.g. green roofs)?



# **Insurance Industry Perspective**

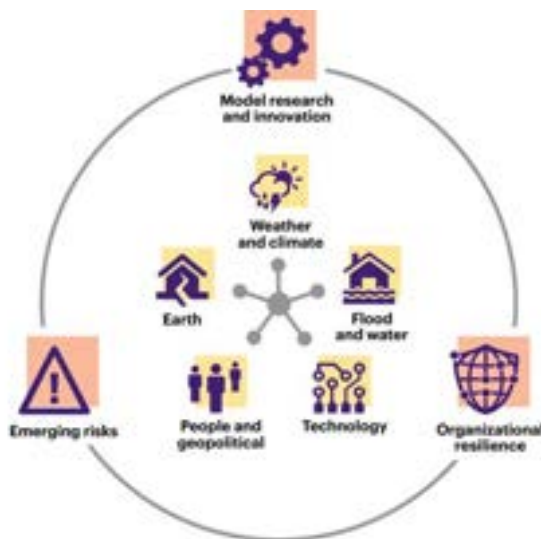
**What now?**

**Neil Gunn**

**Head of Flood and Water  
Management Research  
Visiting Professor of Practice**

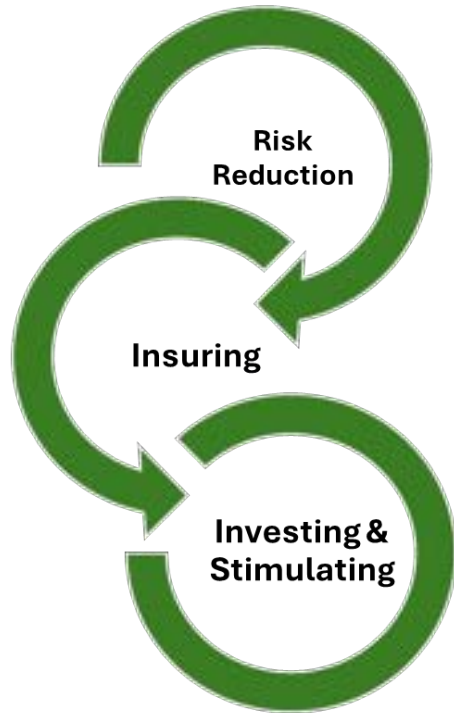
**Willis Research Network**

# Willis Research Network





# An Ecosystem



- Wildfire
- City Heat
- Flood Risk
- Landslide.....

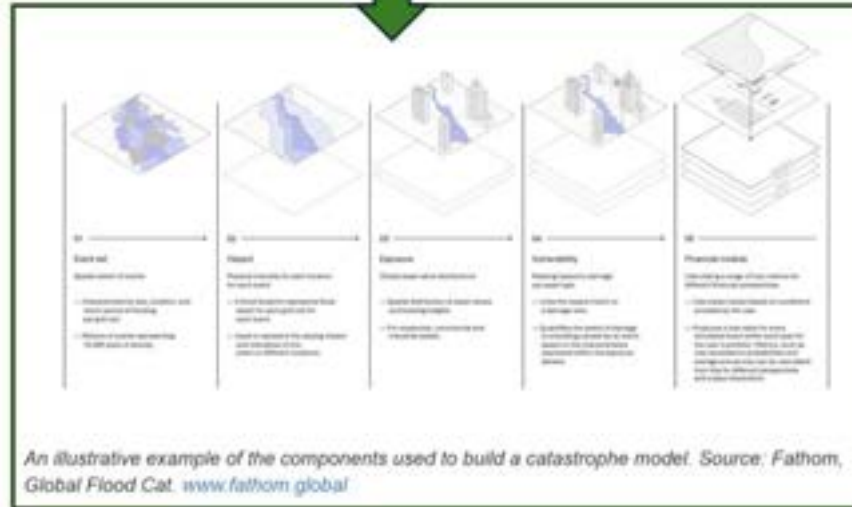
- Mangrove Restoration
- Mesoamerican Reef
- Tahoe Donner Wildfire Parametric.....

- Investing
- Underwriting
- Policy and engagement



# Barriers to Implementation/Integration of NBS

- Technical drawbacks undermine confidence
- Cat Model Adjustments: Integration into Underwriting



- Efficacy
- Often need very large areas to deliver meaningful benefit
- Fragility
- Climate durability
- ROC/BCR unfavourable if Co-Benefits are not sold/funded
- Seasonal variability in SOS

# So, What Now?



Research



Modelling



Underwriting



Investing



Education



Innovation



Regulation



Lobbying

Yes, the insurance industry is a social entity.

But it has a purpose, that is to provide insurance and risk management advice.

Others

Make the rules,

Mitigate risk,

Build new vulnerable assets in areas at risk,

Change the climate







# Activity

## Integrating NbS into Insurance

**Pranav Shankar Kaundinya**  
**Zuzanna Kozłowska**

**Research Assistants**  
**London School of Economics**

## Activity - The Rules

1. **Aim:** To help you think through the ideas and themes you have been exposed to and help you form any questions you have for the Q&A
2. **Format:** Discussion & Sharing
  - a. Deliberate on the question for 7 minutes with your break out room
  - b. Summarise some of the points or key questions that emerge and share it with the entire cohort (~3 minutes total)
  - c. Use the Q&A to follow-up on these points or questions with the NATURANCE team
3. You are encouraged to explore how NbS can be considered in your project work



Using NbS as a risk-reduction tool in insurance vs insuring NbS - Which approach would you use when?



What do you think are some of the key enablers and disablers that could catalyse/inhibit NbS's potential in insurance?

How can we effectively measure and communicate the multiple values of NbS to convince stakeholders of their financial viability?



Q&A





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**THANKS**