



# Insights into governance from the UNaLab Project

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# UNaLab: Our Partner Cities

**28 partners** & **2 observers** from industry, research and public organisations.

**10 cities** with a balanced geographical spread, diversity in size and climate conditions.

**Front-runner Cities:** Eindhoven, Genova & Tampere

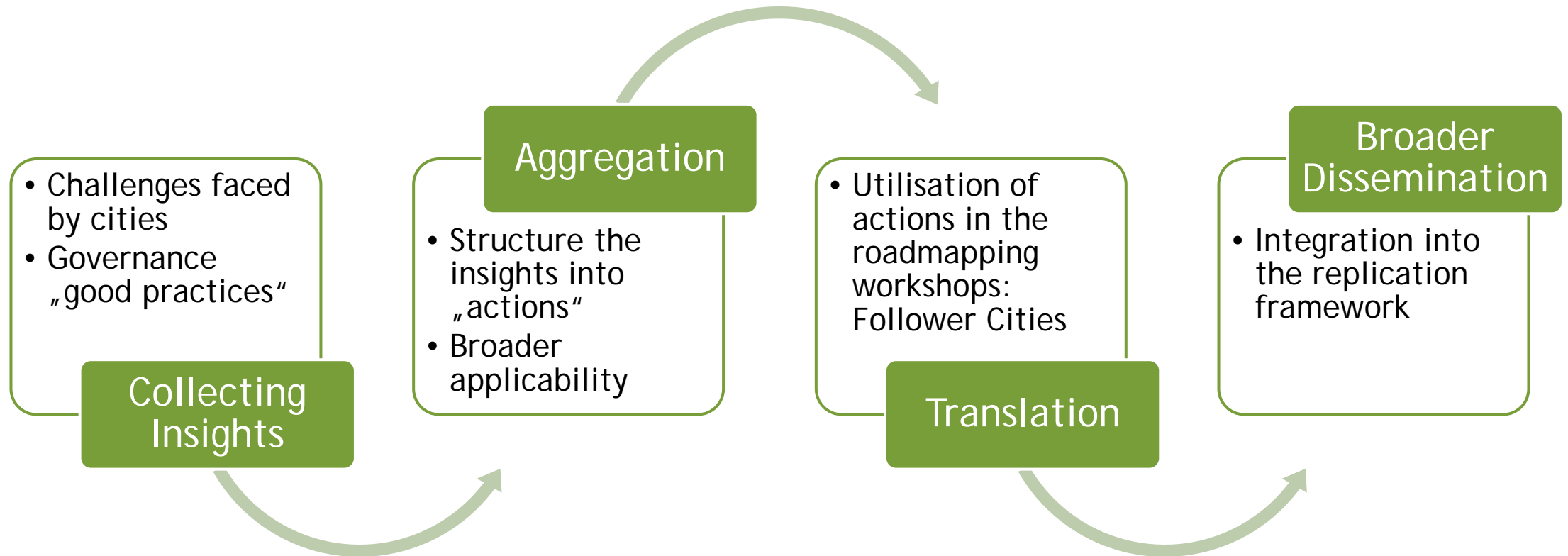
**Follower Cities:** Başakşehir, Cannes, Castellón, Prague, Stavanger, Buenos Aires & Hong Kong

**Observers:** Guangzhou (CN) & Brazilian Network of Smart Cities

 = Front-runner City     = Observer City  
 = Follower City



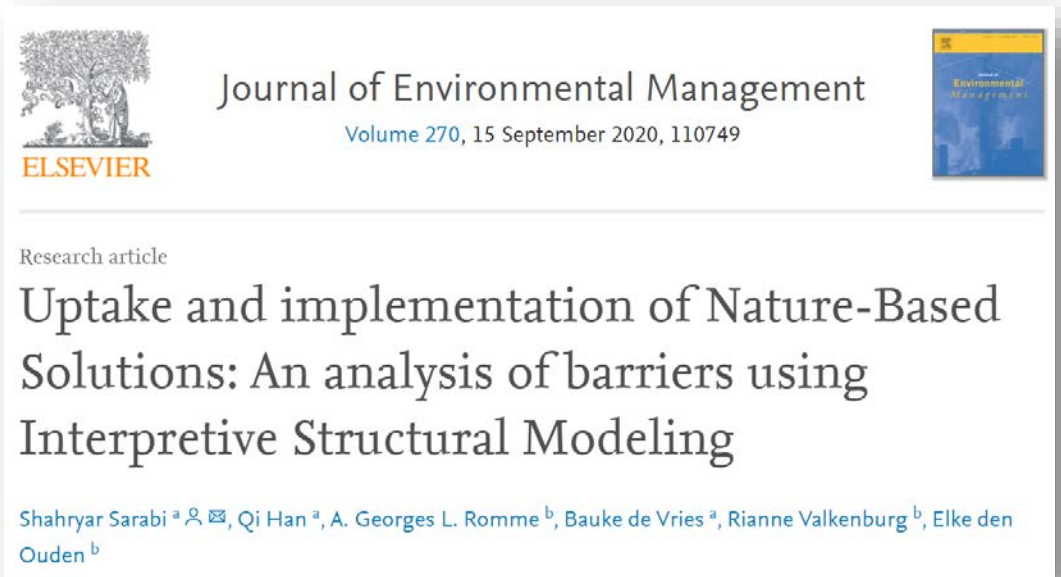
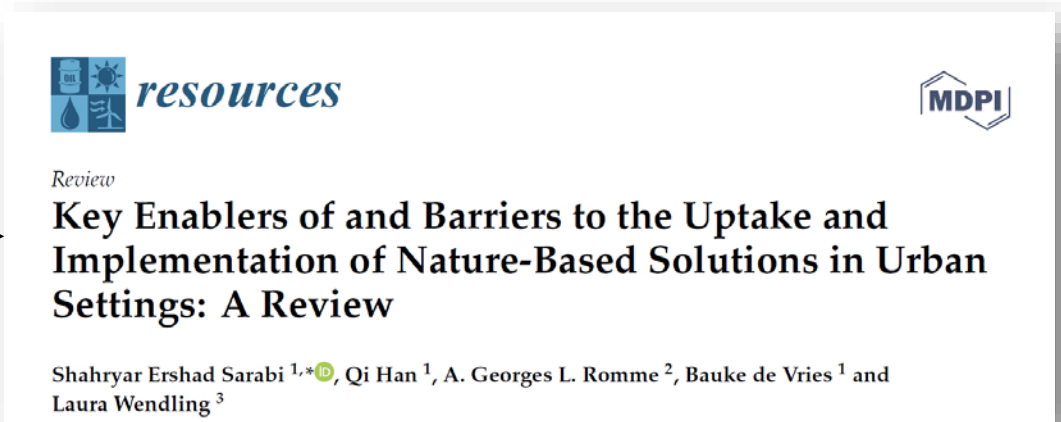
# Stages of development of the governance perspective



# Governance-related Challenges



More Comprehensive perspectives!





# Governance-related Challenges

Lack of  
knowledge and  
awareness



- ▶ Amongst municipal workers
- ▶ Amongst decision makers
- ▶ Amongst local businesses and citizens
- ▶ About the potential of NBS to address challenges, their co-benefits and the suitable types to employ
- ▶ About the functions nature provides to cities
- ▶ About the technical aspects of planning, building, and maintaining NBS
- ▶ ...

Political  
commitment



Organisation



Perceived cost  
and benefits and  
financing



Social and  
environmental  
justice and land  
use trade-offs



# Governance-related Challenges



- ▶ local governments often are subject to short-term actions and decision-making cycles (Kabisch et al., 2016)
- ▶ Shifting priorities between administrations
- ▶ Often low on the political agenda: “more pressing issues”
- ▶ Trade-offs can be politically difficult: e.g. competition for urban space

# Governance-related Challenges

Lack of knowledge and awareness



- ▶ NBS tend not to be ad hoc - they are not developed to address one specific problem, but a range of interconnected challenges

Political commitment



- ▶ Require the cooperation of a range of actors who typically may not have worked effectively together in the past

Organisation



- ▶ NBS often contribute a high degree of public (rather than private) goods; therefore, these dispersed benefits cannot be easily allocated to one department or actor, but multiple departments and actors

Perceived cost and benefits and financing



- ▶ At times unclear responsibilities

Social and environmental justice and land use trade-offs



- NBS as a boundary object to improve cross departmental cooperation?

# Governance-related Challenges



- ▶ Some of the ecosystem services provided by NBS are intangible public goods → Payoffs not easily measurable as financial streams to investors (Toxopeus and Polzin, 2017)
  - ▶ Budgetary constraints might imply prioritising other policy areas for funding that have more readily quantified and articulated benefits
- ▶ Difficult to demonstrate cost effectiveness when compared to conventional solutions with traditional cost benefit models
- ▶ On private land: private costs for often public goods



# Governance-related Challenges



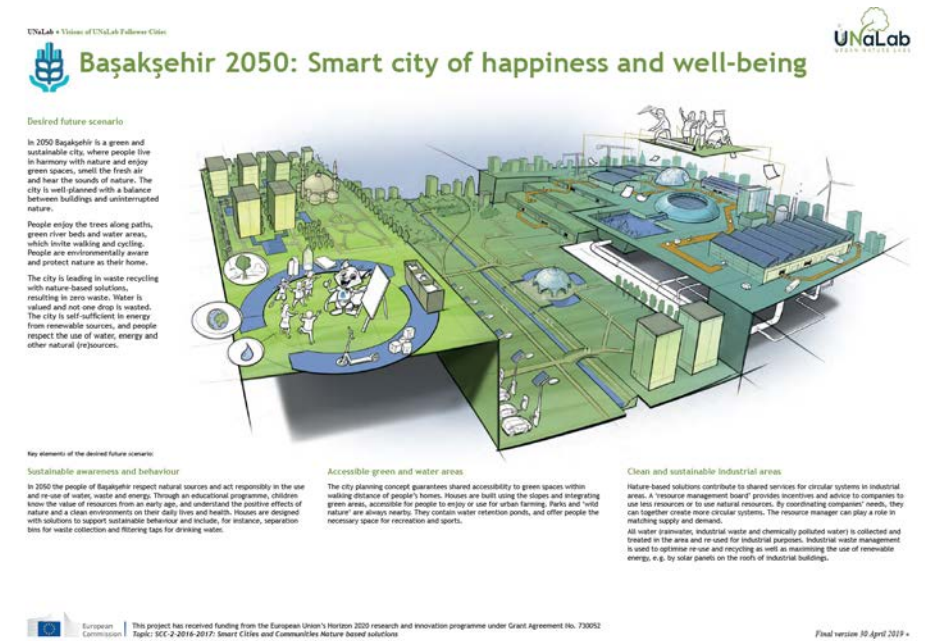
- ▶ Green gentrification: Increasing attractiveness → increasing demand for housing and housing prices, potentially pushing certain groups out
  - ▶ See Lene-Voigt-Park in Leipzig and the “High Line” project in New York (Haase et al. 2017)
- ▶ Uneven distribution: need to utilise mechanisms to support more even green space accessibility
- ▶ Building compact cities vs green space accessibility → building density can come at the expense of space for nature

# Governance interventions: visions and guiding principles

- ▶ Bringing actors together to work towards a common ambition
- ▶ Potential to break down the vision into goals and performance indicators



Source: Shuyang Xu. From Chan et al (2018)



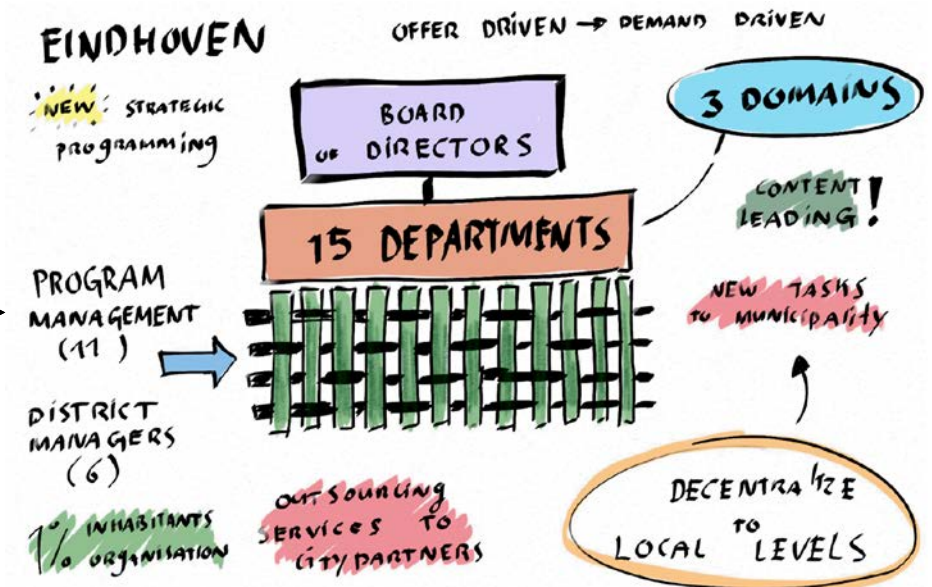
# Governance interventions: Fostering cross-sectoral exchange

- ▶ Providing institutional (and physical) space for exchange between actors
- ▶ Working on common projects
- ▶ Development of informal networks
  - ▶ Presentations/bar camps/workshops/etc.
- ▶ Beyond the „usual suspects“
  - ▶ Health? Transportation? Maintenance?

Program: “High-quality public spaces”

Program: “Climate adaptation and health”

	Strategic Urban Development Programmes
Director, Strategic Urban Development Programmes	
Mr. Tero Tenhunen	
	HIEDANRANTA DEVELOPMENT PROGRAMME
	FIVE STAR CITY CENTRE PROGRAMME



SMART IMPACT (Radecki et al 2017)



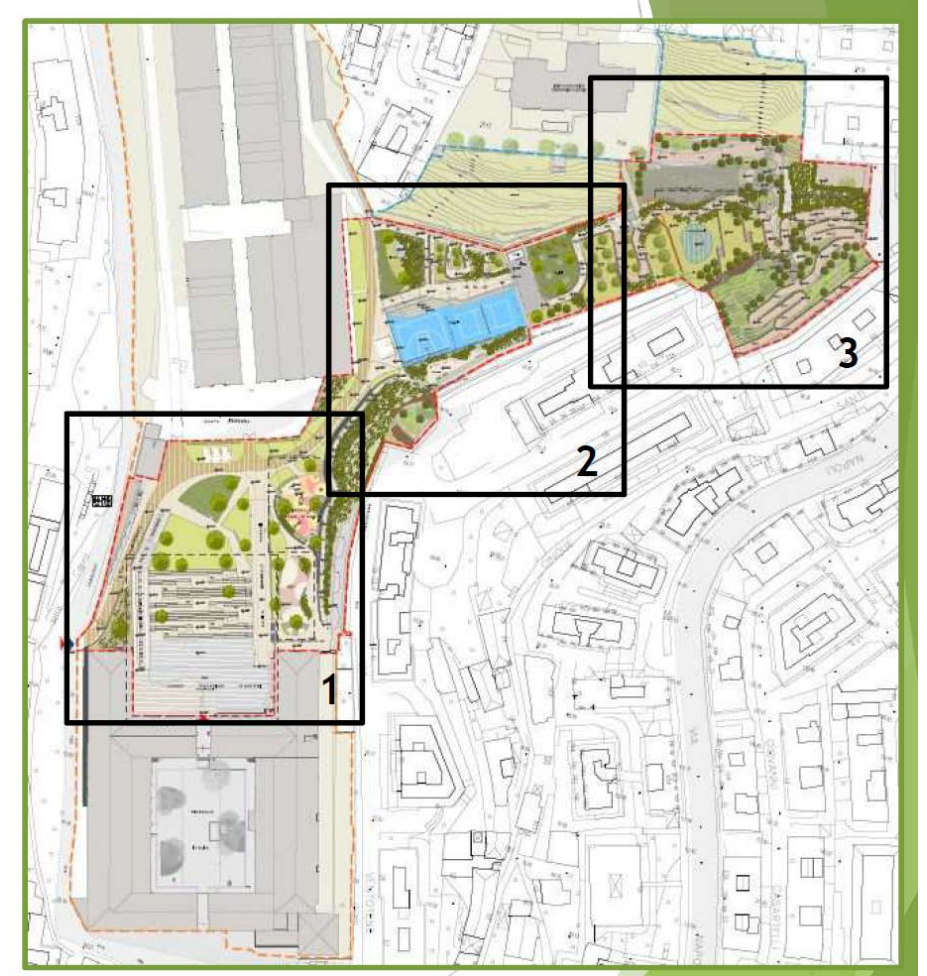
# Governance Interventions: Regulations and incentives

- ▶ Carrots and Sticks to steer development
  - ▶ Hamburg and Basel: Green roof requirements embedded into building law and subsidies; award for the „best looking green roof“
  - ▶ Stuttgart: Green roof requirements embedded into building law
  - ▶ Tampere: Grants for NBS; “Green factor” to guide development projects: taking into account blue green elements
- ▶ Payment for ecosystem services



# Governance Interventions: Inclusive urban development

- ▶ Genova: Re-connecting the Gavoglio Barracks area to the local neighbourhood
- ▶ Improving green space accessibility and flood protection
  - ▶ A park for all → Access to new functional areas and paths for local residents
  - ▶ Spaces for socializing to reconnect people with nature
  - ▶ Bottom up initiative: Driven by diverse local and community organisations
  - ▶ Participatory process involving citizens' cooperatives, builders' groups and more than 30 local associations → co-designing their public spaces



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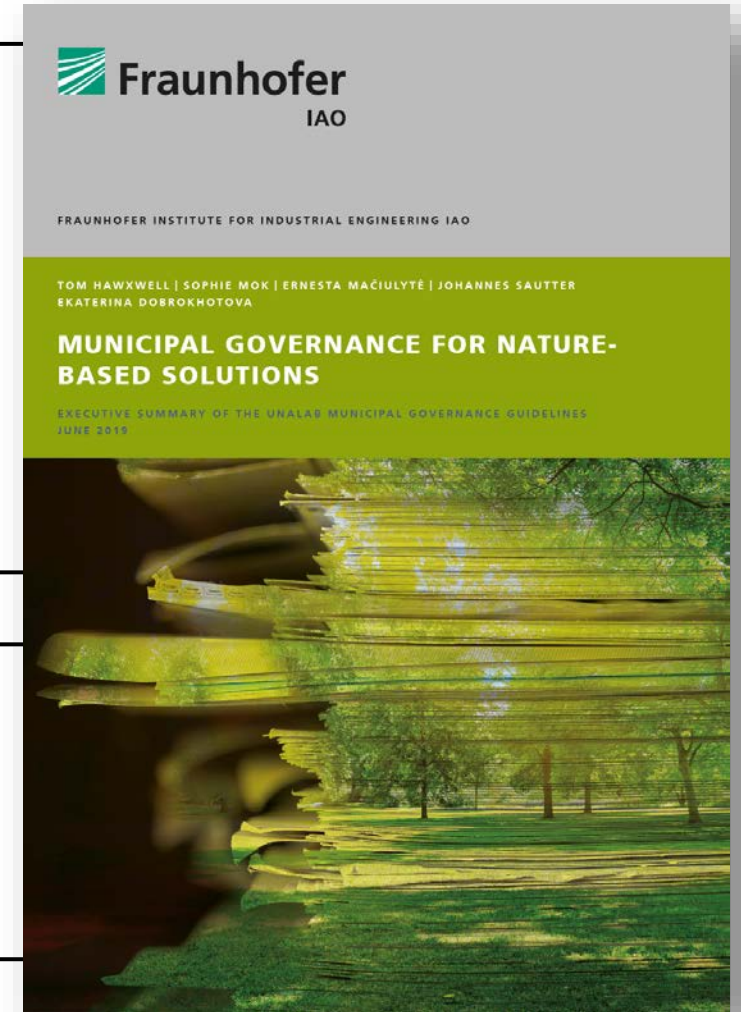
# Aggregating the findings: Governance Actionfields

## Municipal Strategy and Planning

- MP1 Development of shared visions
- MP2 Embedding NBS in existing plans and strategies
- MP3 Experimental areas for pilot projects
- MP4 Utilising environmental and sustainability management systems
- MP5 Development of a resilience strategy
- MP6 Awareness campaigns
- MP7 Use of Blue-Green Factors

## Organisation and Structure

- OS1 Structures for cross-sectoral cooperation
- OS2 Fostering of informal networks
- OS3 Training of administrative staff in cross-cutting issues
- OS4 Central contact point for NGOs



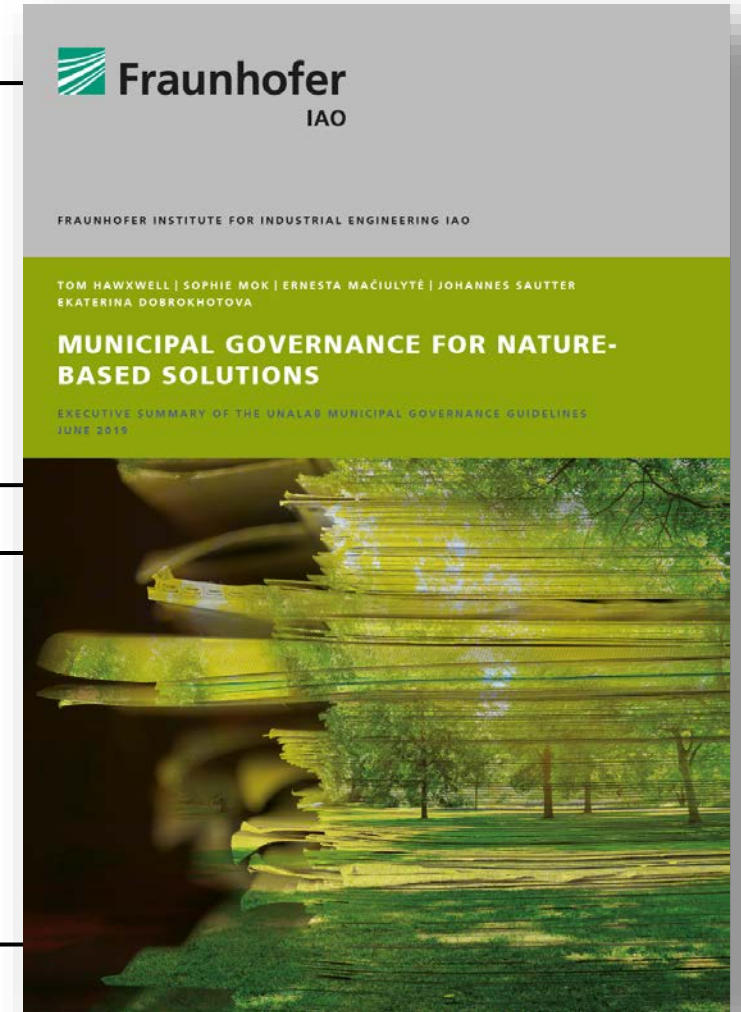
# Aggregating the findings: Governance Actionfields

## Regulations and incentives

- RI1 Review of the existing policy framework
- RI2 Introducing NBS-supportive building regulations
- RI3 Introducing NBS-supportive zoning regulations
- RI4 Introducing incentives to enhance private sector engagement
- RI5 Use of compensation schemes
- RI6 Use of certification schemes and sustainability programs

## Data Governance

- DG1 Data management strategy
- DG2 Data governance and management inside departments
- DG3 Data governance and management between municipal departments
- DG4 Data as an instrument for governing external agencies and contractors



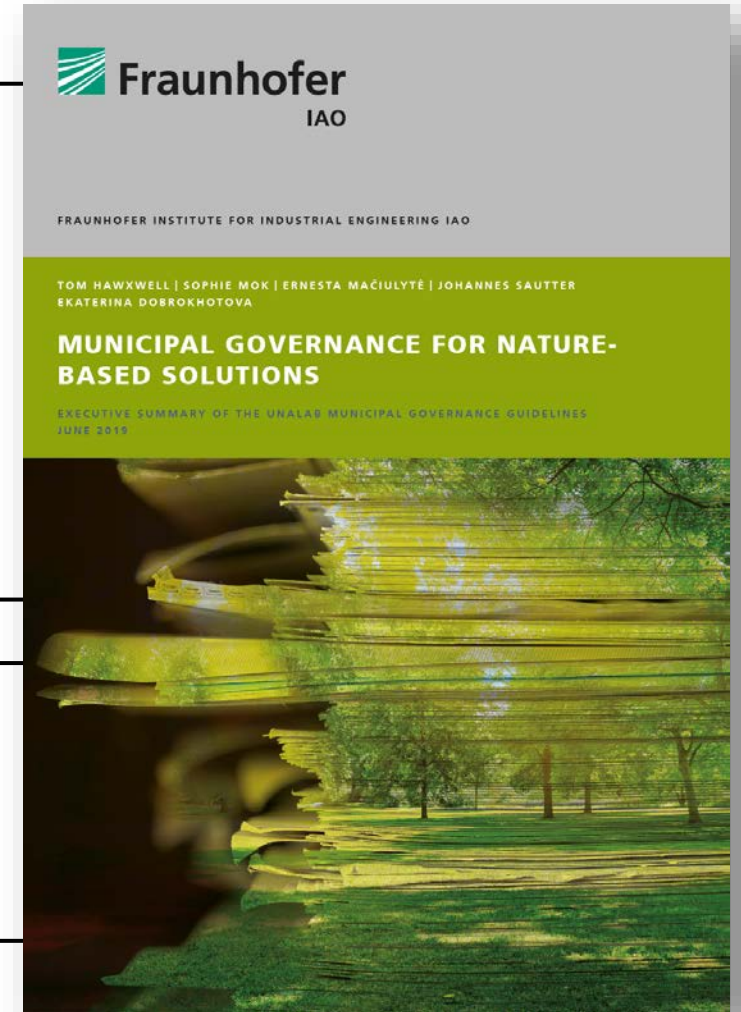
# Aggregating the findings: Governance Actionfields

## Finance and procurement

- FP1 Including the Total Economic Value Framework (TEV) in Cost Benefit Analysis
- FP2 Investigating the opportunities for additional internal revenue sources
- FP3 Issuing green bonds
- FP4 Engaging in public-private partnerships
- FP5 Introducing MEAT award criterion in public procurement
- FP6 Evaluate the possibilities for applying for EU and other Donor-funds
- FP7 Coordination across multiple departments

## Inclusive urban development

- ID1 Integration of social inclusion into green space planning
- ID2 Mechanisms to influence housing prices
- ID3 Establish a “Just green enough” approach
- ID4 Quantitative and qualitative assessment tools and standards





100%

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# Question for the Audience: Menti

In your opinion, what is the most important governance challenge to address to improve the uptake of NBS in cities?



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