

Transforming Cities, Enhancing Well-being: Innovating with Nature-based Solutions



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thinknature



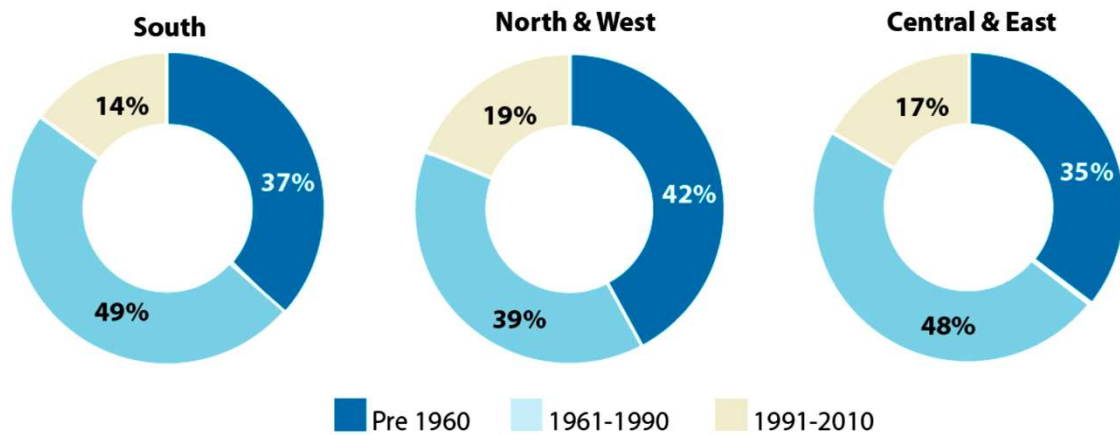
SUSTAINABLE URBANIZATION OF CITIES

SESSION 2: THE ROLE OF CULTURAL HERITAGE IN RENATURING CITIES:
LEARNING FROM THE PAST, DESIGNING FOR THE FUTURE

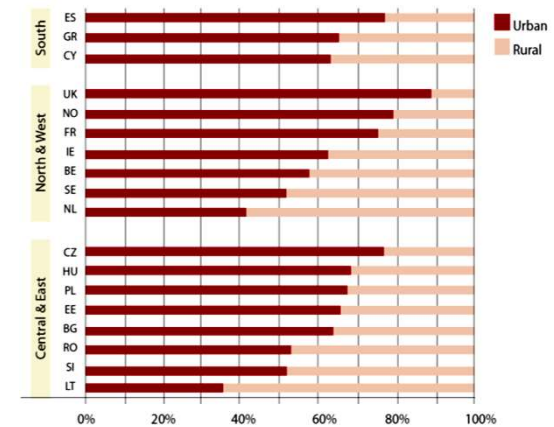


EXERCISE 2

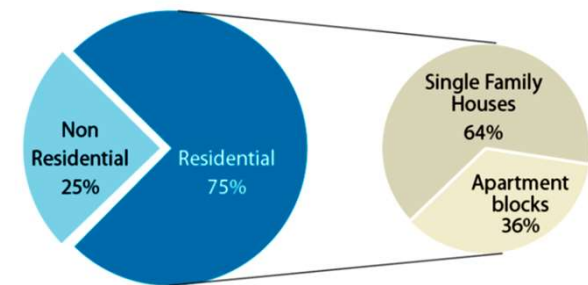
BRAINSTORMING ON THE CHALLENGES FACED WHEN IMPLEMENTING NBS IN HISTORIC DISTRICTS
AND THE STRATEGIES TO OVERCOME THESE (INCLUDING POLICY AND R&I PRIORITIES)



...35-42% is pre-1960



...40-80% urban



...75% residential

Europe's Buildings under the Microscope

Source: (Economidou et al. 2011)

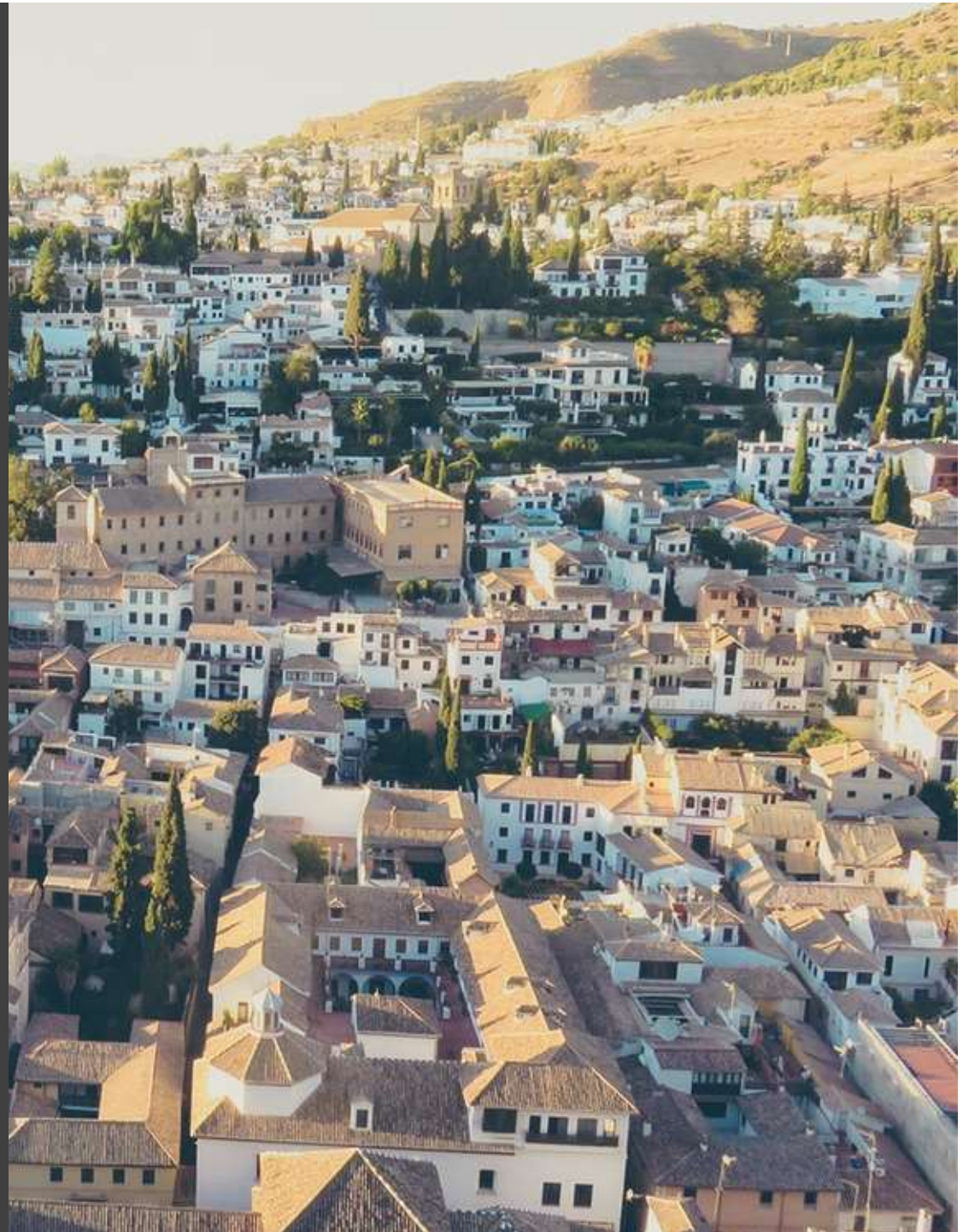
Scope

- ✓ historic urban districts mainly with residential function
- ✓ composed by preindustrial buildings
- ✓ not necessarily protected by heritage legislation

Design principles for an eco-district

(Source: Salat 2011)

1. high density and mixed used
2. walkability
3. short density of strong connections
4. heterogeneous communities
5. public spaces
6. respect for the existing conditions of the site
7. the preservation of the relationship of people to space



"the traditional architecture was bioclimatic by necessity, made by people in direct response to their needs and values, in a time when energy was really a scarce value" (Coch 1998)

Historic Cities have sustainability written in
their genetic code



- ✓ Implementation of NBS in historic environments → could be a matter of **sustainable management of its evolution**



- ✓ **One of the next steps in the continuous evolution** of the historic cities towards the adaptation of their historic fabric to the modern requirements

- ✓ The historic city is a living system → its adaptability is what has ensured its survival



- ✓ But the vulnerability and high cultural values required just highly proven and safe techniques

→ How much are we allowed to innovate in historic cities?

Knowledge barriers

→uncertainty

Operational unknown

Due to the newness of the approach there is a lack of protocols for design, implementation and maintenance for NBS projects

Performance unknown

Lack of evidence regarding the quantitative benefits of NBS, especially from policy makers and citizens' perspective → Designers may encounter difficulties in implementing NBS solutions when compared to traditional solutions → designers are more familiar with them from a technical point of view and with respect to legal compliance



Knowledge barriers

→ Technical inadequacy

Lack of ready-to-apply scientific results, concepts and technologies

The lack of ready-to-use technologies and ready-to-apply scientific results and concepts makes the adoption of NBS more difficult even if a certain policy receptiveness exists



Governance barriers

→ Disconnection between short-term actions and long term goals

Short-term action and decision-making cycles

The usual short-term action and decision-making cycles within municipalities not always match with the long-term requirements of the whole life cycle of NBS projects (planning, implementation, maintenance processes, but also sustainable financing)

Gentrification

The willingness of improve life and urban quality with NBS projects in a short term could lead to risk of gentrification in a long term.



Governance barriers

→ Complexity of governance structure

Goal misalignment → Different goals of stakeholders within partnership arrangements could hinder collaboration.

Apathy → A high number of stakeholders could generate inertia and apathy

Role ambiguity → A high number of involved stakeholders can cancel out some process enablers related with collaboration through unclear stakeholder relationships and lack of clarity in responsibilities within the arrangements.



Governance barriers

→ Institutional barriers

Lack of coordination between city departments → A lack of coordination between traditional structures of city departments makes knowledge to be trapped in "sectorial silos" which could hamper the implementation of NBS, which usually requires transdisciplinary coordination

Lack of flexibility of decision making structures → The decision making structure of municipalities where the different departments have clearly defined responsibilities could not be suitable for multilevel, multiscale and multi-thematic projects as NBS.

Bureaucracy and unsupportive legal frameworks → Lack of knowledge due to the novelty of NBS as concept. Excessive legal rigidity, bureaucracy and lack of specific



Governance barriers

→ Participation and awareness

Perception → The perception of the society of nature as source of problems and nuisances and cultural heritage as a burden → can hinder the participation of the citizens in decision making processes

Lack of participation → Top down processes with no real citizen participation makes the NBS and cultural heritage projects more difficult to accept by the citizens





Economic barriers

→ Perception of the benefits

Under appreciation of non-economic benefits → Benefits of NBS and cultural heritage are perceived as mostly public and 'soft' and not directly related with economic growth-oriented issues as creating jobs and attracting investments

Short term vision → Lack of insight that investment now will prevent costs later → Economic benefits are long term (lack life cycle costing analysis or holistic vision of cost and benefits). Investment to be made versus long term benefits not representing a strong motivation

Risk perception → Lack of incentives and motivation to attract private investment

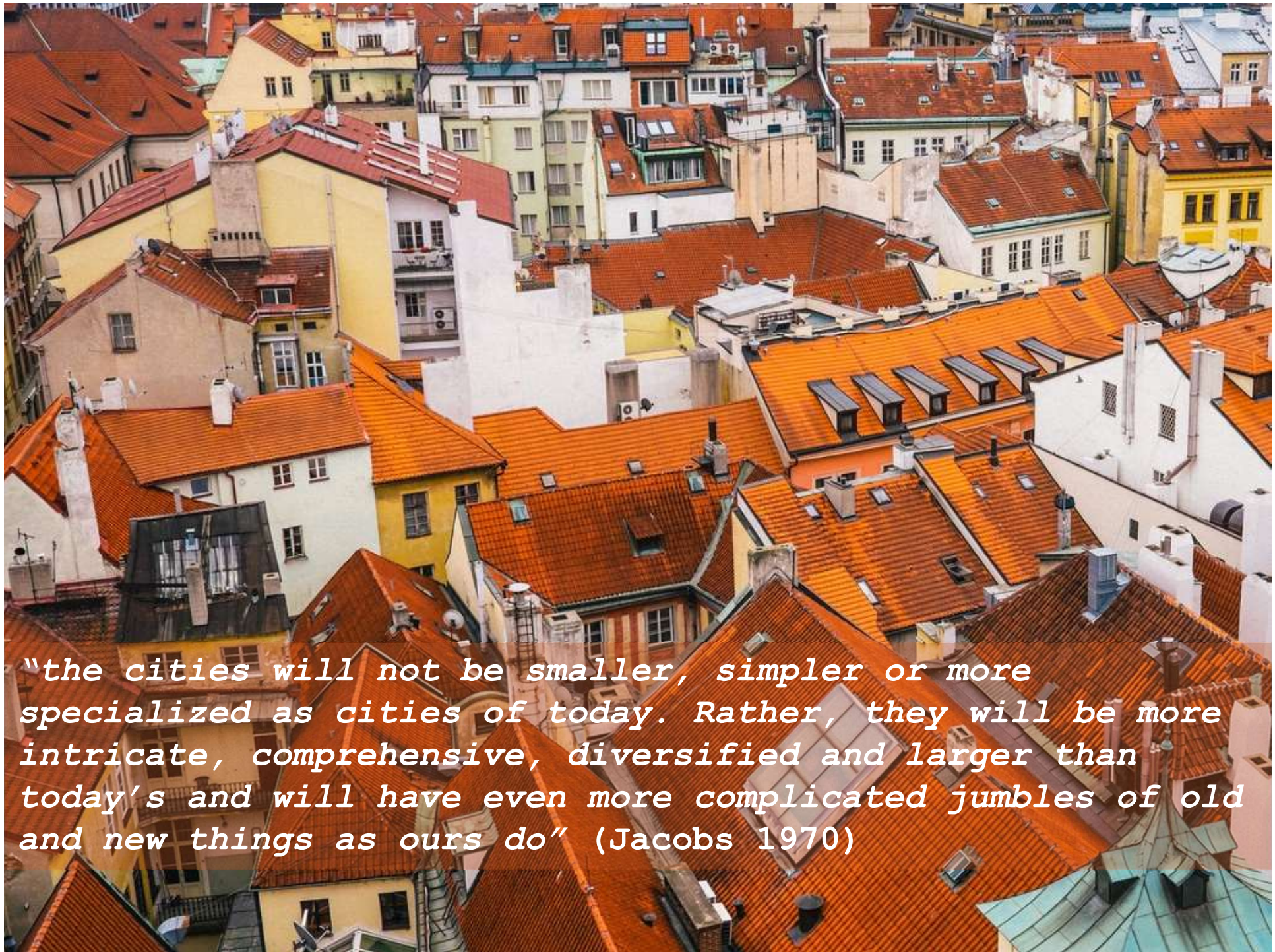


Economic barriers

→ Budget constraints

Not a priority → City budgets for green development, maintenance of green spaces and conservation often face severe budget constraints, while staff and related expertise is decreasing

Lack of funding knowledge → Financing mechanisms (such as EU-funding instruments) are available for cities, but they are complicated to apply for (requiring additional administrative staff and time resources) and, more importantly, require co-financing, which many cities cannot afford.



"the cities will not be smaller, simpler or more specialized as cities of today. Rather, they will be more intricate, comprehensive, diversified and larger than today's and will have even more complicated jumbles of old and new things as ours do" (Jacobs 1970)



THANK YOU !



QUESTIONS

- ✓ What are the main **challenges, barriers and opportunities** from the knowledge, policy, governance and economic spheres for the implementation of NBS projects in historic environments?
- ✓ And what are the **strategies to overcome the barriers** and take advantage of the opportunities?

