







Enabling the mainstreaming of nature-based solutions into policy-making and governance: Holistic and systemic approach and coherence across policies to build a sustainable, circular and resilient planet and tackle societal challenges

by Maria Carmen Garcia Mateo and Nico Tillie

^a MCG Research & Innovation Sustainability Architecture /Urban Planning, N1, 1A, 30004, Murcia, Spain (maricarmengarcia.archt@gmail.com)

Presentation: EGU22-10493

Garcia Mateo, Maria Carmen

Principal creative founder MCG Research & Innovation Sustainability Architecture / Urban Planning,



Session ITS4.4/ERE1.10 –

Nature-Based Solutions and Climate Engineering in Climate Governance, room N1 on Tuesday, 24 May 2022,



^b Urban Ecology & Ecocities Lab Faculty of Architecture and the Built Environment TU Delft, The Netherlands



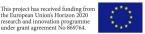




Aim of the Paper

Firstly, to stimulate further discussion with and for nature-based solutions planning and design practice and facilitate the mainstreaming of NBS at strategic and operational urban or territorial level, enhancing the research and innovation agendas at European and global levels and highlighting nature-based solutions in political agendas in a broader scientific forum, will the aim to reach sustainable, resilient and circular cities.







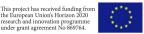




Aim of the Paper

And secondly, to foster the debate in aligning science, policy and society goals to reach sustainability and urban regeneration with the key role of nature-based solutions embedded in design and planning cities, urban planning and urban design, strategies, action plans of cities and regions.











Aim of the Paper

Broad the discussion of Nature-Based Solutions (NBS) to help provide in the evidence base information that can be used to support decisions in design, developing, implementing and evaluating policy, operations and services in cities and regions







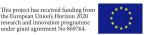




Main expected impacts

- (i) *Contributing* to the progress towards mainstreaming nature-based solutions into urban planning and urban design, planning policies, strategies and action plans and policy agendas.
- (ii) Fostering adaptation to climate change with nature-based solutions implementation.
- (iii) Enhancing and delivering the EU Green Deal.







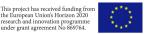




Main expected impacts

- (iv) *Encouraging* a holistic and systemic approach to reach Urban regeneration and Sustainable Urban Development through nature-based solutions.
- (v) Likewise, helping shape the future of research and innovation in Europe and beyond with a cross cutting integration of nature-based solutions.











Highlights

- The way forward to tackle Unsustainable
 Urbanization while boost ecological, human and
 economic growth and enhance urban regeneration
 with Nature-based solutions (NBS)
- Key role of envisioning and foresight nature-based planning and design in cities and regions.









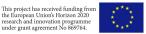




Methodology

Fisrrtly, we conduct a EU policy review where nature-based solutions could play a key role in sustainable urban planning and design, hence, urbanization and urban regeneration. Secondly, the literature review process where we analyze the state of the art of current key publications with the following keywords; "nature-based solutions" "mainstreaming" "holistic approach" "sustainable urbanism" "resilient" "societal challenges" "urban planning".











Methodology

The system engine used was Google scholar. And last but not least, gray literature articles based on authors' know-how and evidence based practice experience key references were added to further review key discussion concepts.













EU policies/ strategies EU Green Deal

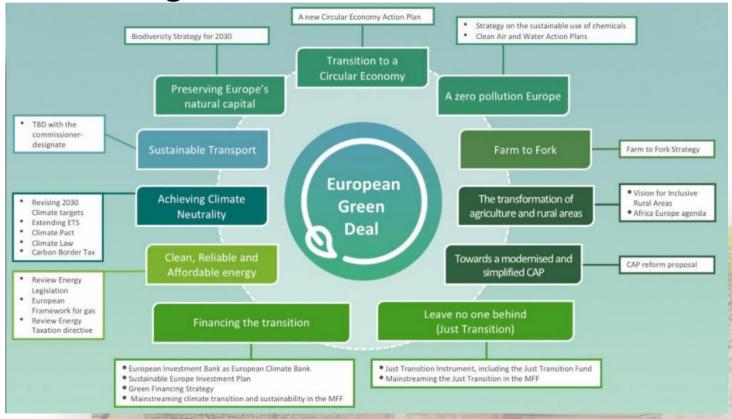




Fig1: European Commission Grean Deal





International Agendas

INVERTED SDG ICONS FOR WEB AND PRINT



















































Fig3 Un Paris Agreement:

Fig2:UN SDGs



Convention on **Biological Diversity**

Fig4Convention of biological diversity





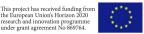




Take home messages

- The way forward to tackle Unsustainable Urbanization while boost ecological, human and economic growth and enhance urban regeneration with Nature-based solutions (NBS)
- Key role of envisioning and foresight nature-based planning and design in cities and regions.











Take home message

We find clear evidence that EU policies and global agendas should guide and have a KI in environmental, social and economic challenges. The EC planning programmes advocates for underpin further research and innovation support in the framework programme 2021-2027 in nature-based solutions and call for more evidence practice to feed into policy implementation to have a high impact and facilitate the mainstreaming of NBS.









Take home message

• The relevance of the integration of nature-based solution implementation towards a Sustainable Urban/Territorial planning and Design to tackle societal challenges and achieving the European Green Deal and Policy Agendas.







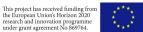




Conclusion

• Considerations should be given to the fact that enhancing locally transformation to an integrated and comprehensive nature-based planning and design in cities and regions is not integrated.













Conclusion

- Capacity building and awareness, guidelines on the key role of nature as a comprehensive and integrated way of design and envisioning cities at different scales in the urban and built environment; namely building design, neighborhood or city planning need to be further implemented opportunities need further studies.
- More steps need to be taken to achieve sustainability and equal balance in environmental, economic and social aspects











Many thanks for attending!

Presentation: EGU22-10493

Garcia Mateo, Maria Carmen

Principal creative founder MCG Research & Innovation Sustainability Architecture /Urban Planning,

contact: maricarmengarcia.archt@gmail.com

Session ITS4.4/ERE1.10 –

Nature-Based Solutions and Climate Engineering in Climate Governance, room N1 on Tuesday, 24 May 2022,

