JOURNÉES SCIENTIFIQUES

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SERVICES ÉCOSYSTÉMIQUES
CONTRIBUTION DE LA NATURE À L'HOMME

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SOLUTIONS FONDÉES SUR LA NATURE

Journée SFN organisée en partenariat avec :

SOLUTIONS FONDÉES SUR LA NATURE

NATURVATION

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Content

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- Selected NBS examples from other cities
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The project & aims

- ***NATure-based URban innoVATION***
- 4-year project, funded by the European Commission (Horizon2020)
- Involved 14 institutions across Europe in the fields of urban development, geography, innovation studies and economics
- **Aims:**
  - develop understanding of what NBS can achieve in cities
  - examine how innovation can be fostered
  - contribute to realising the potential of NBS by working with communities and stakeholders

NBS in Montpellier

Why Montpellier?

- French city
- Size comparable to other case studies
- Geographical situation
- Many challenges
- Highest population growth in France <—> biodiversity hot spot

NBS 1: Parc Marianne

- **Governance Strategies:** control of land prices, collaboration between City, SERM, master architects and developers, pre-set requirements
- **Participation:** Information
- **Obstacles:**
  - Trade-offs between ecology, economy and sociology
  - Biodiversity aspect underrepresented, focus on water, waste and energy
  - Social equality

NBS 2: Trame verte et bleue

- **Governance Strategies:** Land use rights: If City/Metropolis has rights, land use can be implemented; Flooding program can be supporting
- **Participation:** Unclear
- **Measures:** Unclear
- **Obstacles:**
  - Urban sprawl
  - Priorities of City/ Metropolis unclear
  - Land use rights -> money
  - Promotion of urban agriculture
  - Being a biodiversity hot-spot
  - French / human mentality of Western civilization: Nature seen as risk

NBS 3: The Building that Grows

- **Governance Strategies:** Incentive by City: Local specifications (ZAC) for Berges du Lez; Financed by private investor; Persistence of architect
- **Participation:** None
- **Measures:**
  - First gabion building, one of first houses with vegetal façade
  - Led to construction of similar buildings in neighbourhood
  - Inspired other architects to design like that
- **Obstacles:**
  - Irrigation system was not maintained
  - Greening of building depends on people living there
  - People with low income cannot afford to live there

Lessons learnt in Montpellier

- Challenge has to be identified as such
  - Often not the case: human brain is limited, does not relate to results in a far future, results not concerning them directly, or in general: When there is no clear cause-effect-relation
- Human desires function as incentives for change or no change
  - Habits play a role
- Tradition or culture in the region

Lessons learnt in Montpellier

- Economic system forms framework within which decisions are made
- Prioritization of topics by decision makers (mostly City) and every single actor related to them (e.g. farmers, developers, architects, people living in a district or house) -> their willingness to spend money, time and effort in them
- Land use rights = right to implement NBS
- Rules, regulations and policies

Selected examples of NBS from other cities

Leipzig: Green Infrastructure

- ***"Urban reconstruction Leipzig East"***
- **Aim:** creation of green public places and corridors
- **Key success:** bottom-up initiative, uptake of idea by City, creation of master plan for district; collaboration between City & civil society

Mexico City: Water management

- ***"Water Forest"***
- **Aim:** Develop and implement regional conservation strategy & sustainable livelihoods to provide water and ecosystem services to Mexico City, the State of Mexico, and State of Morelos
- **Key success:** state governors have proclaimed Water Forest issue of national security

Malmö: Ecodistrict

- ***"Augustenborg EcoCity"***
- **Aim:** transform a run-down neighbourhood into a more sustainable and attractive place to live
- **Key success:** collaboration between City, stakeholders and residents

Further outputs

Further outputs

- **Urban Nature Atlas:** https://una.city/
  - Most comprehensive database of NBS for cities created to date
  - Result of systematic survey of NBS in 100 European cities
  - Basis for analysis of socio-economic and innovation patterns associated with urban NBS
  - Is going global

The NATURVATION project: Outputs

- **Urban Nature Navigator:** https://naturvation-navigator.com/
  - Tool to assess the potential contributions of NBS to meet various urban sustainability challenges
  - Can be used with stakeholders in urban planning processes
- **Urban Nature Explorer:** https://www.urbannatureexplorer.com/#/
  - aims to support development and the visualization of alternative NBS scenarios and assess their costs, benefits, and impacts on selected urban sustainability challenges
  - Can be used in early visioning stage of urban planning processes

The NATURVATION project: Outputs

- **Briefings and manuals:**
  - On mainstreaming, pathways to sustainability and key stepping stones: https://naturvation.eu/mainstream.html
  - On navigating innovation pathways, developing policy, engaging citizens, creating business models and enabling finance: https://naturvation.eu/action.html
- **MOOC:** https://www.coursera.org/learn/urban-nature
  - *"Urban Nature: Cities, Sustainability and Innovation"*
- **Podcast:** https://naturvation.eu/learn/podcast.html
  - *"Creating Green Cities"*

The NATURVATION project: Outputs

- **URIPs: urban-regional innovation partnerships**
  - 6 cities (Barcelona, Utrecht, Leipzig, Malmö, Győr and Newcastle) were partners in NATURVATION
  - Provided insights into ways in which NBS are being used
- **Case Studies**
  - In 6 cities in Europe and 6 cities around the world:
    - Melbourne, Athens, Tianjin, Sofia, Edinburgh, Mexico City, Boston, Cape Town, Athens, Dublin, Montpellier, and Winnipeg

Thank you!

- Questions, feedback, networking:
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