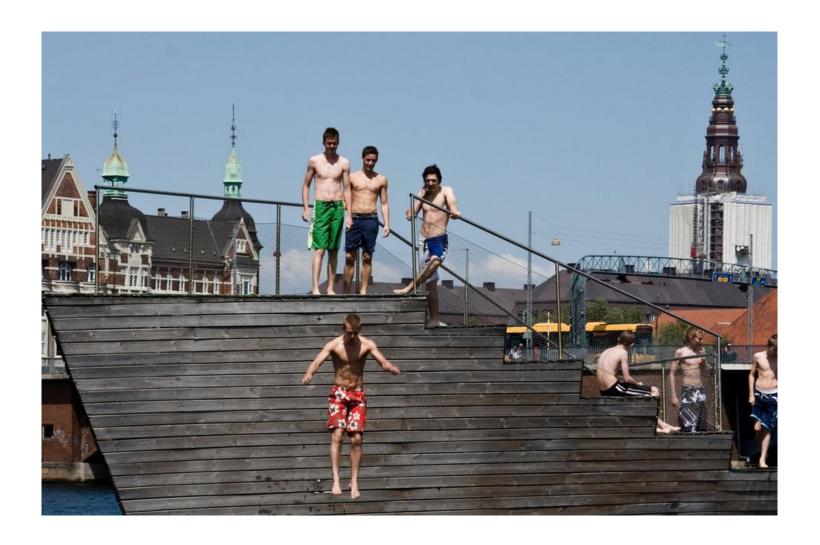
Copenhagen's climate ambitions: investigating the role of urban nature

Natalie Gulsrud and Anton Stahl Olafsson
University of Copenhagen
Department of Geosciences and Natural Resource Mangement
Section of Landscape Architecture and Planning

Main take away













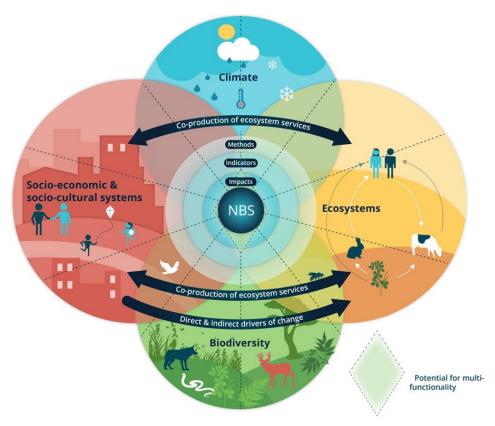


Cities as critical sites of environmental challenges and solutions (Bai et al, 2018)



Bai et al (2018) *Nature* **555**, 23-25 (2018) *doi:* 10.1038/d41586-018-02409-z

Integrated approaches to nature-based solutions

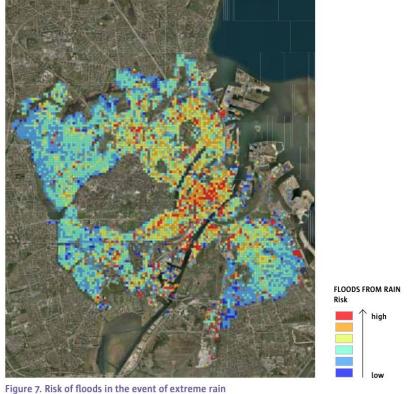


Raymond, C.M., Berry, P., Breil, M., Nita, M.R., Kabisch, N., de Bel, M., Enzi, V., Frantzeskaki, N., Geneletti, D., Cardinaletti, M., Lovinger, L., Basnou, C., Monteiro, A., Robrecht, H., Sgrigna, G., Muhari, L. and Calfapietra, C. (2017) An Impact Evaluation Framework to Support Planning and Evaluation of Nature-based Solutions Projects. Report prepared by the EKLIPSE Expert Working Group on Nature-based Solutions to Support Climate Resilience in Urban Areas. Centre for Ecology & Hydrology, Wallingford, UK.

Urban green infrastructure in focus





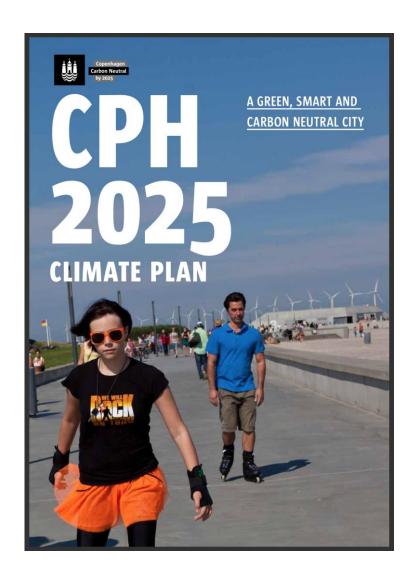


Climate adaptation and urban nature

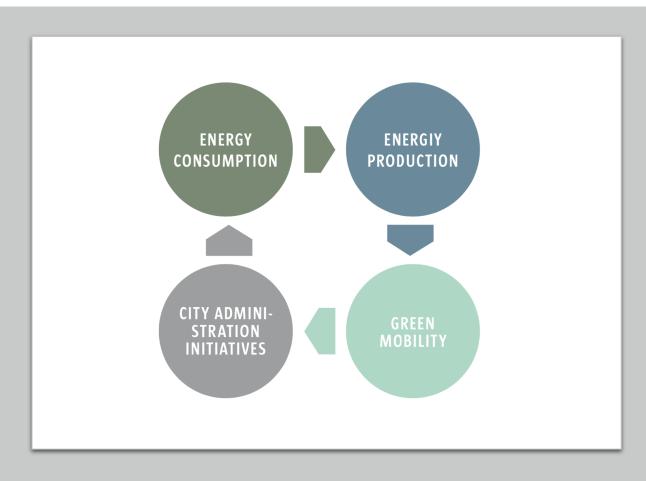


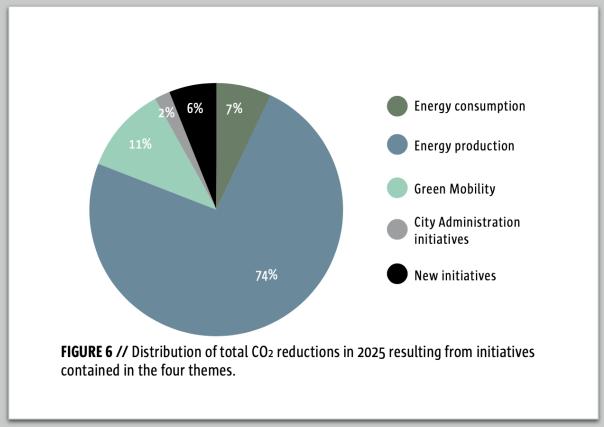


Climate adaptation to carbon neutrality (2016)



Carbon neutrality and Green Growth





Many green visions and administrative tools









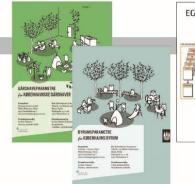


Kommende Prioriteringspolitik for byrum















Copenhagen Municipal Plan 2019

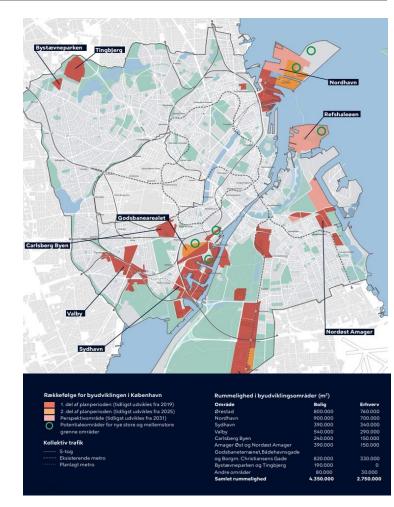
REKREATION OG NATUR

Københavns Kommune har som mål:

- At kommunens rekreative tilbud og områder imødekommer befolkningens behov.
- At adgangen til og interessen for at bruge byen som helhed til fritidsaktiviteter styrkes.
- At der skabes rammer for at indpasse faciliteter til fritidsaktiviteter i både nye og eksisterende byområder.
- At nye grønne områder og friarealer til nyt byggeri bidrager til at gøre byen mere grøn til gavn for borgernes livskvalitet, biodiversiteten og for at tilpasse byen til fremtidens klima.
- At kvaliteten af byens eksisterende grønne områder øges til gavn for borgernes livskvalitet, biodiversiteten og for at tilpasse byen til fremtidens klima.
- At adgangen til fysiske og sociale aktiviteter såvel som ro og naturoplevelser udvikles i byens rekreative og grønne områder.
- At kvaliteten af byens vandområder og adgangen til at bruge dem forbedres.
- At udviklingen af byens rekreative faciliteter og grønne områder ses i sammenhæng med befolkningsudvikling og -sammensætning.
- At adgangen til havnen, kysten og vandområderne forbedres, navnlig som led i byomdannelse

Copenhagen has green goals that benefit citizens' quality of life, biodiversity and the climate of the future.

Great need for outdoor activity for Copenhageners!



Green Capacity Plan – Four general solutions

1

New green areas

2

Green connections and access to the green areas

3

Upgrade Green areas 4

From gray to green









Sidehoved 6

URBAN NATURE IN COPENHAGEN 2015-2025

The Strategy was approved by The City Council 2015

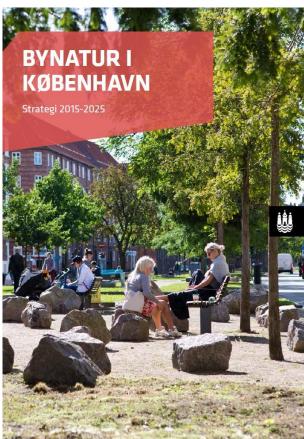
With this strategy, we have an ambitious policy that defines the specific effects, goals, efforts and conditions that we need to implement in order to achieve our common visions:

URBAN NATURE IN COPENHAGEN 2015-2025

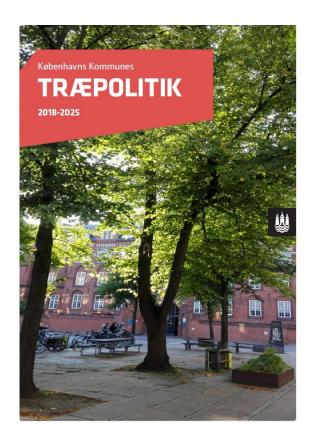
VISION #1: Creating more Urban Nature in Copenhagen

VISION #2: Improving the quality of the Urban Nature in Copenhagen

Measurement: Citizens' experience of a greener city



COPENHAGEN TREE POLICY



The Tree Policy was approved by the City Council in May 2016. I 2018 minor changes has been made to the policy and approved by the City Council.

#1 Existing trees in Copenhagen will as a rule be preserved

#2 Existing trees that are cut down must be replaced

#3 More trees are to be planted in Copenhagen

#4 Good growth conditions must be ensured for both new and existing trees in Copenhagen

#5 There must be a varied choice of tree species in Copenhagen

Measures: Canapy cover - City level and district

Green to gray continuum







Social and economic restructuring







Gulsrud, NM, Hertzog, K & Shears, I 2018, 'Innovative urban forestry governance in Melbourne? Investigating "green placemaking" as a nature-based solution', *Environmental Research*, vol. 161, pp. 158-167. https://doi.org/10.1016/j.envres.2017.11.005

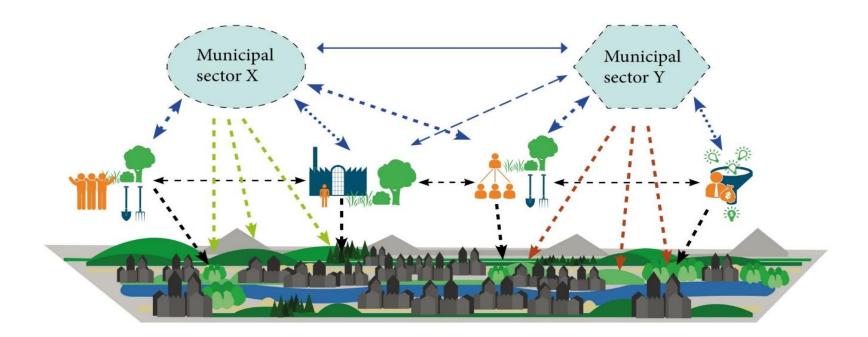
Transformation of urban landscapes



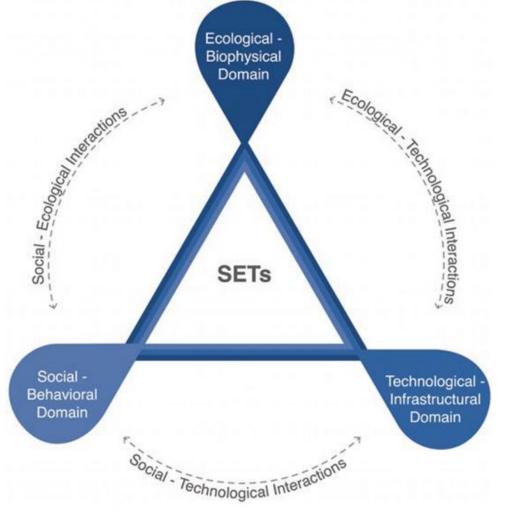




'Mosaic governance'



Socio-ecological-technical assemblages



Depietri Y., McPhearson T. (2017) Integrating the Grey, Green, and Blue in Cities: Nature-Based Solutions for Climate Change Adaptation and Risk Reduction. In: Kabisch N., Korn H., Stadler J., Bonn A. (eds) Nature-Based Solutions to Climate Change Adaptation in Urban Areas. Theory and Practice of Urban Sustainability Transitions. Springer, Cham

Plantning af CO2-byskov på volden ved Motorbanen Ved Slusen, Amager Øst

Se alle bilag

Teknik- og Miljøudvalget skal tage stilling til plantning af byskovtræer på volden ved Motorbanen Ved Slusen som kompensation for Københavns Kommunes CO2-forbrug fra flyrejser i 2017.

https://www.kk.dk/dagsordener-og-referater/Teknik-%20og%20Milj%C3%B8udvalget/m%C3%B8de-23092019/referat/punkt-7#agenda-element-appendices

https://www.dr.dk/nyheder/detektor/detektor-koebenhavn-vil-kompensere-1008-flyrejser-med-262-co2-traeer-i-byen

Detektor: København vil 'kompensere' for 1.008 flyrejser med 262 CO2-træer i byen

Det svarer til 0,35 procent af CO2-udledningen fra flyrejserne i 2019, viser kommunens egne tal.

