

Blue and Green Infrastructure in Oslo, European Green Capital Winner 2019

How do we create sustainable, attractive, livable cities with a strong green-blue connection

Harsha Ratnaweera

Professor, Norwegian University of Life Science

Vice President, European Water Association

Oslo European Green Capital 2019

The European Commission awarded Oslo the prestigious European Green Capital title

The greenest year ever!

Receiving the European Green Capital title recognizes that Oslo, for decades, has delivered on ambitious climate and environment goals. But the title also comes with an obligation to develop further so that we can reach the goals we have set for 2030. We have already come a long way!

When we started planning the European Green Capital Year it was important to get as many people as possible on board. We wanted to show this year we change on what we want to do. I saw look at you who have contributed. You have impressed us!

I want to thank our partners from the business sector, organizations, academic institutions, and the volunteer sector. You stepped up your efforts and contributed to creating a diverse programme for the European Green Capital Year. You have each taken steps – big and small – in a more sustainable direction. Together, all these steps represent a green transition in Oslo.

I also want to thank the municipal staff. You have shown adaptability, creativity, and huge dedication. During 2019, environment and climate have risen on our list of priorities. We have seen a

huge variety of projects: focusing on reducing food waste in kindergartens; emission free transport in the health sector; canteens cutting single-use plastic; pollinator friendly cemeteries and much more.

And, not least, I want to thank our citizens who contribute with their every-day choices and provide the support upon which our ambitious policies depend.

around the world is inspiring.

The European Green Capital Year is over, but there is no time to waste. The work has barely begun. Drastic measures are needed if we are to reach our goal of becoming a zero-emission city by 2030. That is why I am so glad to know that many want to contribute. I am proud of what we have achieved together, and I am looking forward to the work ahead.

Together we will continue to be a green capital!

Raymond Johansen
Governing Mayor



Photo: Thomas Haugen/NTNU

An investment in the future

The City of Oslo has ambitious targets. But the municipality itself is only responsible for a small share of the city's total emissions. Therefore, we need the whole city on board to reach our targets. Together, with more than 350 partners and supporters, we have spent the European Green Capital Year mobilizing to accelerate the pace of the city's green transition. And we are proud of what we have accomplished!

We engaged Oslo citizens in our transition to cemeteries. And, we have supported neighbourhoods, organizations, and associations that are building a greener city from the ground up.

The city's business community has stepped up to the challenge, contributing with green solutions for the future. They have challenged us, but we have also challenged them! We have facilitated new alliances and enabled cooperation across sectors. Throughout 2019, Oslo's innovative climate solutions have reached a worldwide

audience, leading to change far outside the city limits.

As a result of the year, more people are on board taking an active part in the city's green transition. Consequently, we are better equipped to reach our goal of becoming a zero-emission city in 2030. At the same time, the year has not been without debate or discussions, as expected

An effort not only by the municipality but all inhabitants

every detail, but the report provides an overview of the projects and activities accomplished throughout the year. Lessons learned can be found towards the end of the report, together with a financial overview.

Anita Lindahl Trossdahl
Project Manager
Oslo European Green Capital 2019

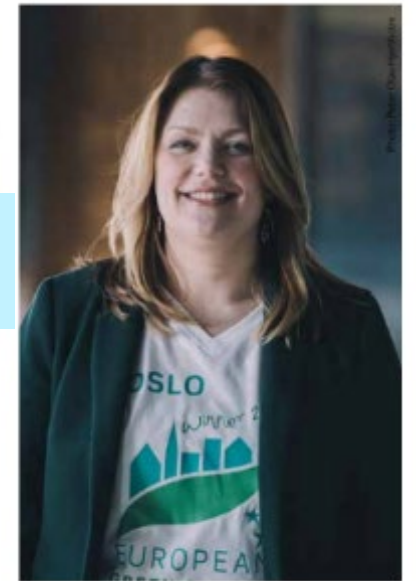


Photo: Thomas Haugen/NTNU

Goals for the European Green Capital Year

Promote the citizens' green transition

- Activate citizens' continued efforts in the green transition and engage the entire population.

Strengthen the green economy

- Take advantage of the spotlight to promote innovative, green companies and stimulate further development of the green economy.

Be a role model for other cities

- Facilitate knowledge sharing; exchange of best practice; and experience, debate, and dialogue to disseminate solutions that promote sustainable urban development. This is to be done in cooperation with Norwegian cities, the Oslo region, and in cooperation with the national government and international cities and networks.

Strengthen Oslo's international profile as a green city

- Communicate the full story of Oslo's green urban city life internationally with the aim to attract the best talents, investments, companies, startups, visitors, and tourists.

Increase support for continued ambitious environmental and climate goals

- Spread knowledge and engage the citizens, organizations, academia, and the business community to reach the target of becoming a zero emission city in 2030

Why did Oslo win?

- 👍 One of the world's most ambitious climate strategies
- 👍 The first city in the world with its own Climate Budget.
- 👍 A world leader on electric mobility.
- 👍 The first city to test Carbon Capture and Storage (CCS) from waste incineration.
- 👍 A pioneer in circular waste management: waste becomes new resources.
- 👍 Using our purchasing power to accelerate the green transition, for example by creating a market for zero emission construction machinery.
- 👍 Large investments in public transportation and bicycle infrastructure.
- 👍 Preserved nature and biodiversity through decades of massive urban development.
- 👍 Reopened waterways that were covered and piped as the city grew.



Project grants

Strengthened municipal action

The Oslo European Green Capital Business Programme

Green Innovations

Regional cooperation

Neighbourhood Programme

The Green Capital Year in Oslo's schools

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Lesson learnt

- Assignment high in the hierarchy provides leverage
- Cross-sectoral cooperation works when it is prioritized – but needs time& ownership
- External factors may be both a strength and a weakness
- Communication is hard – chose target groups and keep it simple!
- We are good at sharing solutions, but should be more open to learning from others
- Hard to preach to the local
- Great expectations make us better!



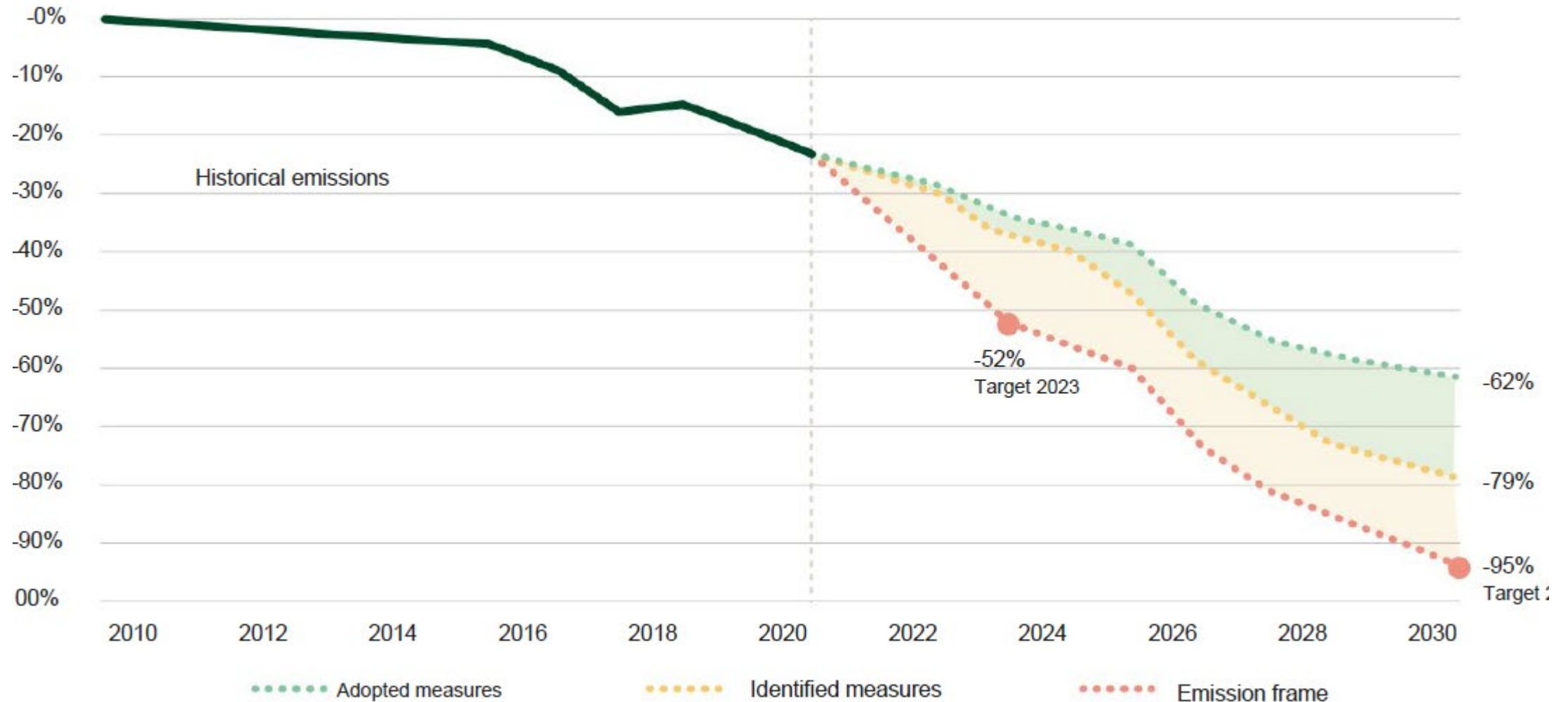
What is next?

Oslo municipality's plans and SDGs

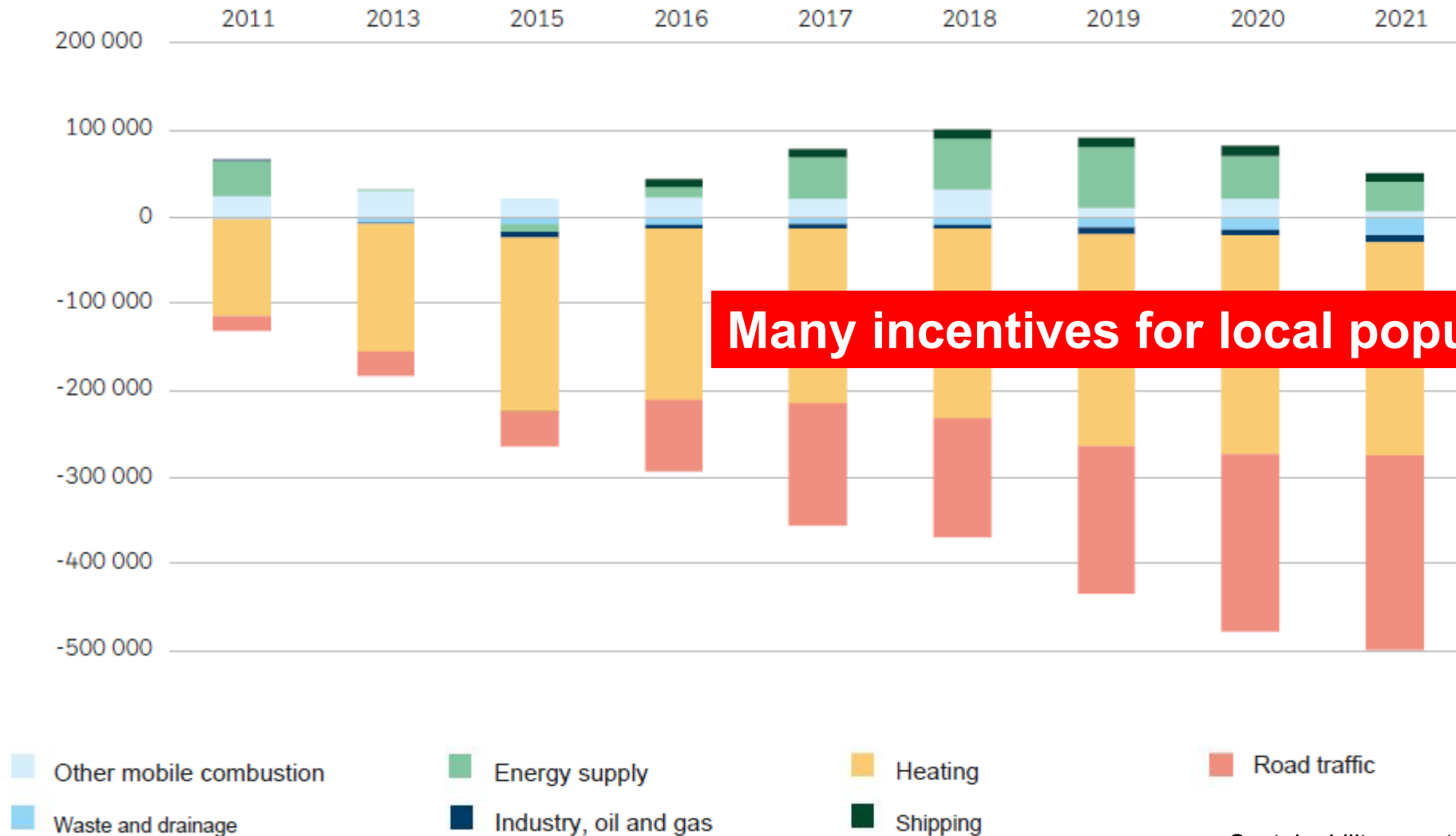
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
The municipal plan's community section 2018	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
The financial plan including the distribution system	●	●	●					●		●	●						●
The procurement strategy								●			●	●	●		●		●
The public health plan	●	●	●	●						●	●						
Strategy for sustainable food		●	●							●		●	●				●
Action plan for gender and sexuality diversity			●		●												●
Action plan against hate-filled expressions and attitudes			●		●												●
Action plan against human trafficking	●		●		●			●			●						●
The Oslo model for a decent working life	●		●	●				●		●					●		
Oslo help	●		●	●						●							●
The school needs plan				●							●						
The campus strategy				●				●	●								
Age-friendly city			●								●						
Climate strategy and climate budget			●				●		●		●	●	●	●	●		●
Car-free city life			●								●		●		●		
Port of Oslo as a zero-emissions port			●				●		●		●		●		●		
Action plan against plastic pollution i Oslo Fjord						●			●		●	●	●	●	●		
Action plan for stormwater management			●			●			●		●		●		●		
Strategy for sustainable and reduced consumption												●	●	●	●		

Estimated emission development towards 2030

Adopted, identified and ambitions - Oslo



Reduction in emissions of greenhouse gases per sector for Oslo, CO₂-tons (base year 2009)





The standard is to be used by developers and the municipality in planning and construction matters to promote blue-green development of Oslo's construction zone.

By stimulating blue-green areas, the standard contributes to a better urban environment with more attractive surroundings, safer handling of extreme weather, cleaner water, cleaner air and a better sound environment.

More green structure can help bind CO₂ and strengthen biological diversity.

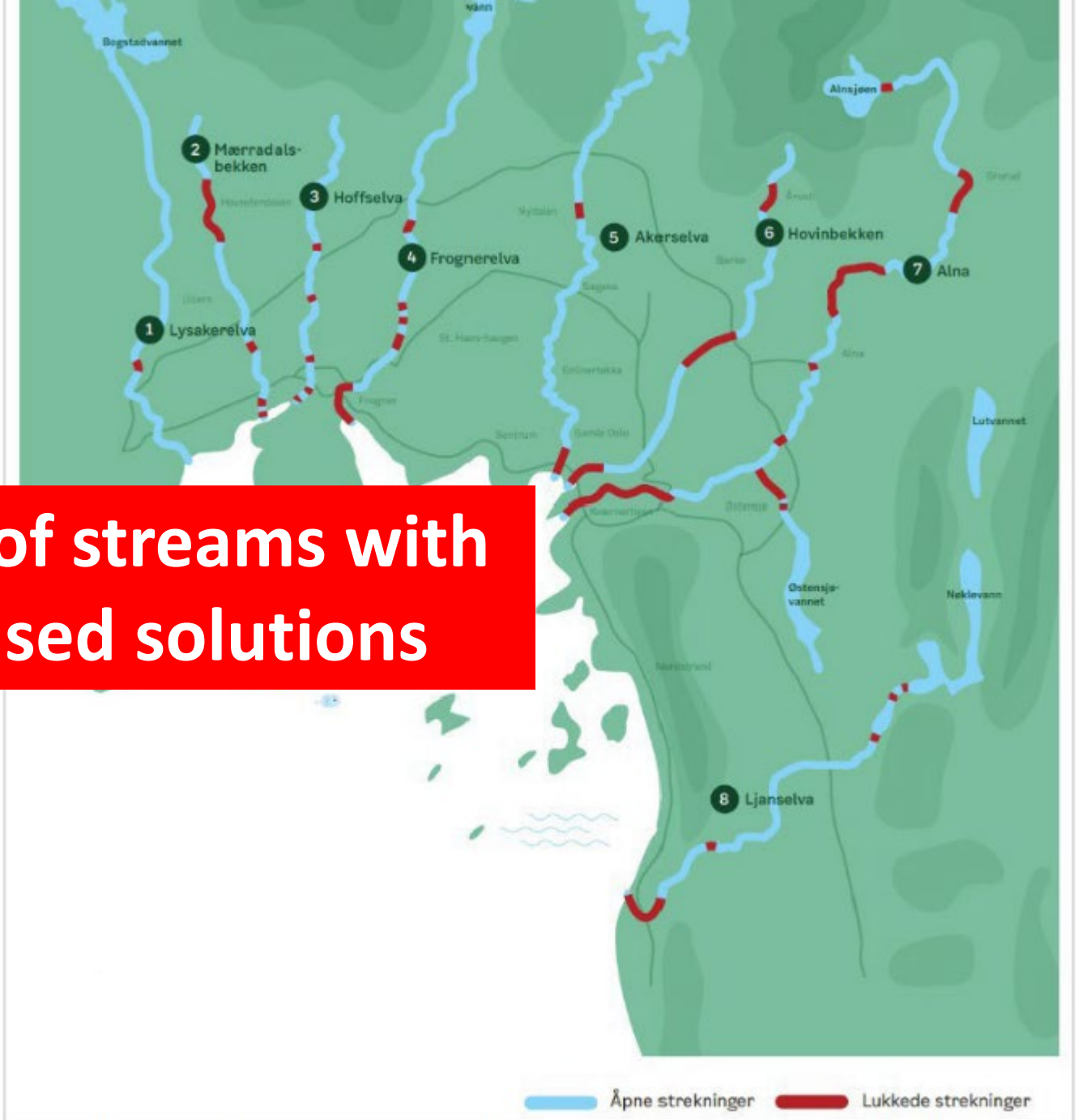
**Norm for vegetasjon
og vannhåndtering**

(blågrønn faktor)

Tatt til
orientering
i bystyret
27.9.2023

Evaluering av bekkeåpningsprosjekter med naturbaserte løsninger i Alnas nedbørsfelt

Reopening of streams with nature-based solutions



Julsbergbekken



Lindebergbekken

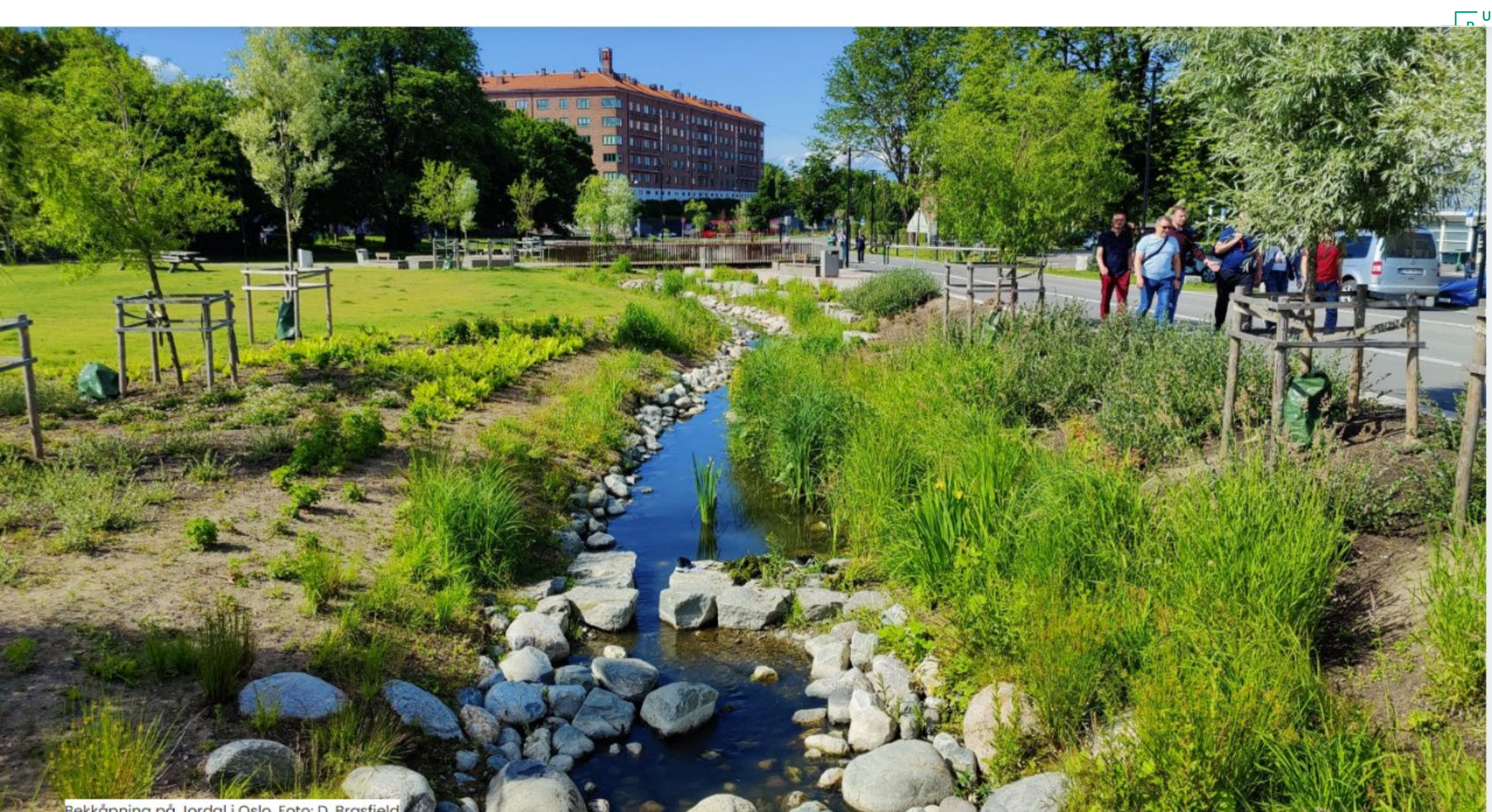


Bakåsbekken (fremtidig trase)

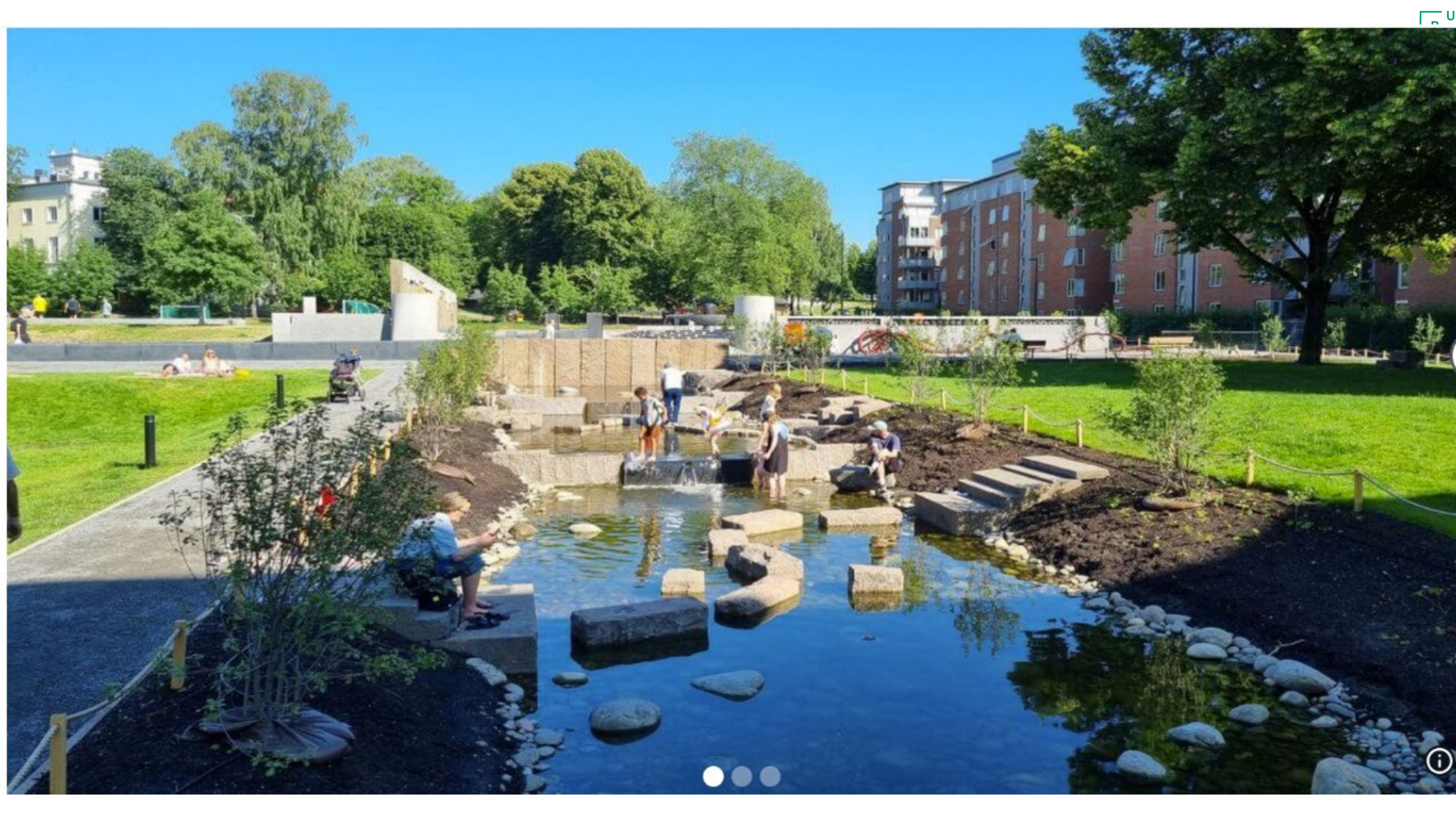


Bakåsbekken (fremtidig trase)

Hovedvassdragene i Oslo kommune (Kilde: Gjenåpning av elver og bekker i Oslo, 2022).



Rekkåpning på Jordal i Oslo. Foto: D. Brasfield





Enghaveparken = 35 000m² stormwater facility with multiple functions:



Clean everyday water is led into buried reservoirs under the rose garden



If there is more rainfall, the hockey pitch is filled, then the surface of the rose garden.



In the event of cloudbursts, the entire park can be flooded. Gates will then automatically close the openings in the concrete wall that surrounds the facility and 22 600 m³ of stormwater can be stored



water can be used for irrigation and in the fountain in the pond



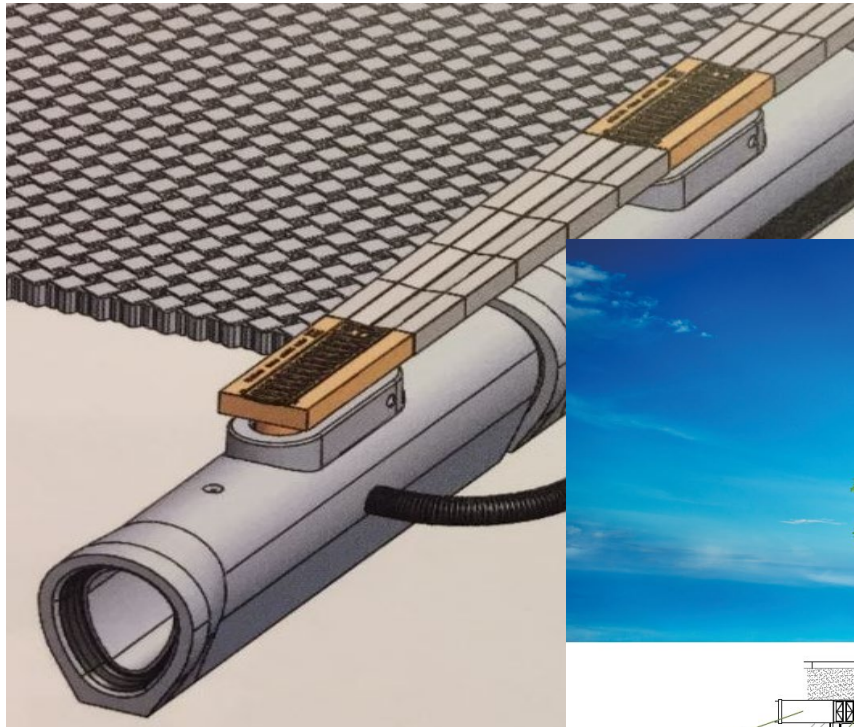
From the wetland/pond system water flows as a stream in between the houses



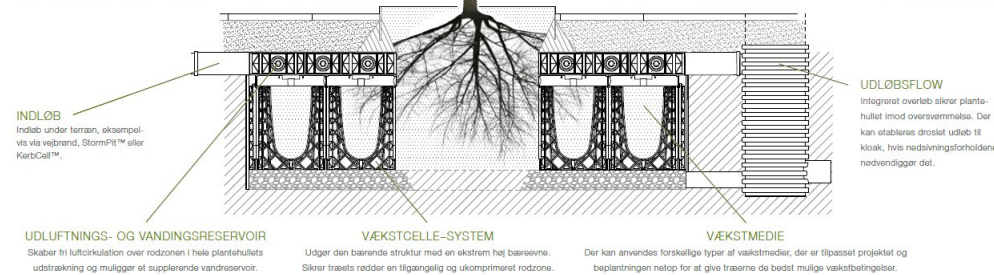
New road and street norm for Oslo

Implement: **Testing of new SUDS**

Permeable pavers and **shallow placed pipes**?



Trees supplied from storm water pipes (Deep Green)?



Raingardens as the new road drain?

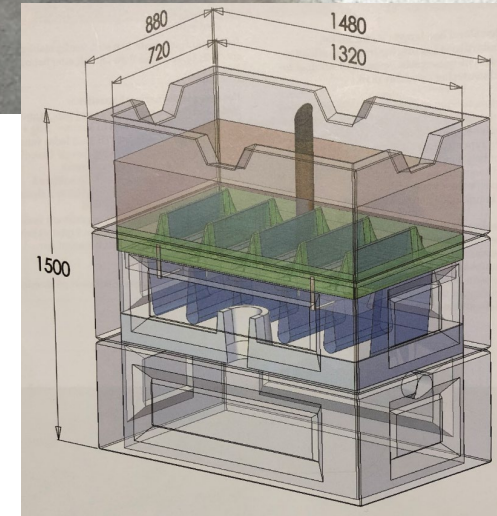
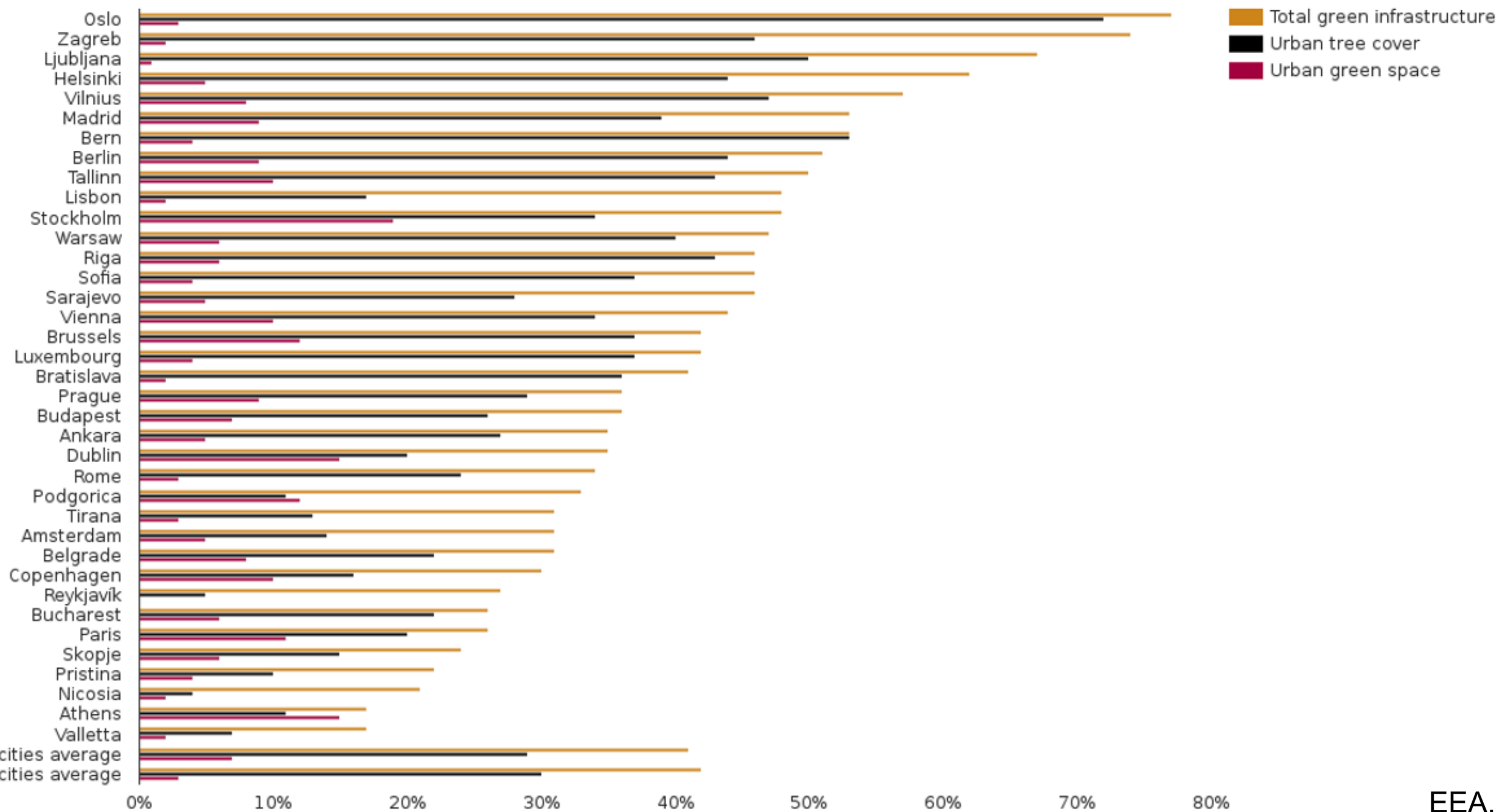
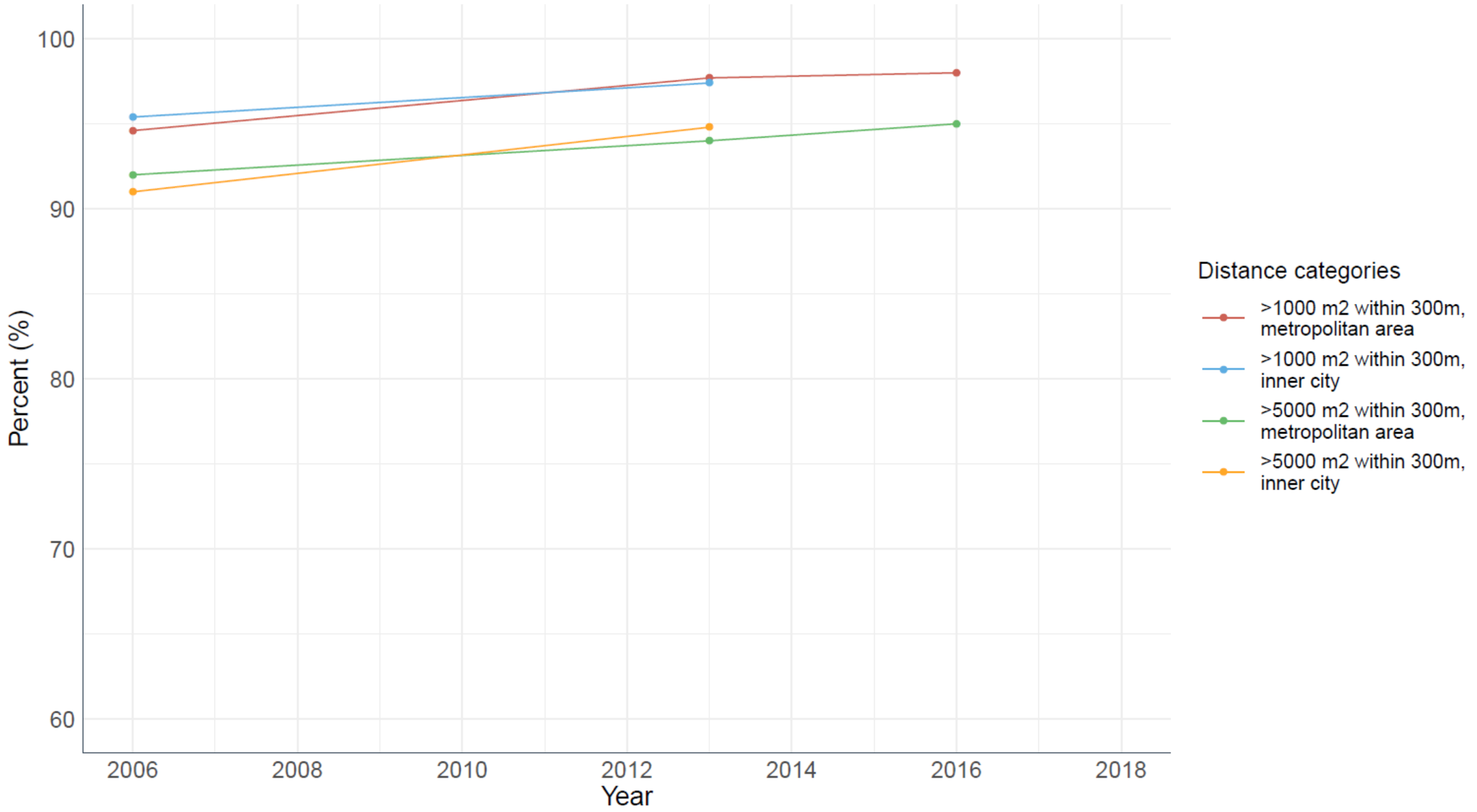


Chart — Percentage of total green infrastructure, urban green space, and urban tree cover in the area of EEA-38 capital cities (excluding Liechtenstein)



Accessibility of green areas for inhabitants in Oslo



The graph shows the percentage of inhabitants that are closer than 300 m to green areas of 1000m² and 5000m², respectively.
 Data source: Agency for Planning and Building Services.

Oslo 1978



“Bar code”



Bar code area: >50% buildings have green roofs





Learning from small scale activities

IDEA **1. Testing a collaborative model for a Circular Resource Centre in the Trosterud District of Oslo**

MAIN OBJECTIVE The SSA aimed to reduce waste by prolonging the life of existing objects and to create an outdoor bench as part of a project- Pilot for Circular Resource Centre at Trosterud District of Oslo. Through the activity the municipality wanted to test the feasibility of carrying out reuse and repair activities in a stable where the circular resource centre will be established, and of collaboration with young people (recruited through the Norwegian Labour and Welfare Administration (NAV) and other local partners.

SSA IDEA **2. TRIALLING THE DEVELOPMENT OF A NEW EMPLOYMENT & TRAINING PROGRAMME FOR YOUNG PEOPLE, IN THE STOVNER DISTRICT, USING THE PRODUCTION OF WOODEN CRATES FROM WASTE PICKED UP AT THE RECYCLING STATION**

MAIN OBJECTIVE The SSA sought to limit waste by developing a circular product and to explore the potential of a market for a circular product. The intention was to design an activity that would encourage young people to feel their value, to feel empowered and to experience that they can have an important role in both society and working life. By making the crates in a circular way, the young people will “learn by doing”, and see that it is possible to create sustainable products while earning an income.





Oslo

Meny ☰

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Thank you

