







To:

Partners in Northern Connections

Welcome to Oslo and Økern Sentrum living lab



Økern Sentrum is situated in the heart of Hovinbyen, one of Oslo's newest and most ambitious city development areas. Økern Sentrum has a potential growth of 30-40,000 new residents and will accommodate a total of 100,000 people in addition to its 2.5 million m2 area for industry and trade.

From 2020 the developers <u>Steen & Strøm</u> and <u>Storebrand</u> will create an urban, sustainable and innovative 163,000 m2 urban centre including an indoor aquapark, a cinema, a substantial amount of housing facilities, cultural venues, offices, hotels and a leading commercial centre in Økern Sentrum. With this living lab we invite companies, businesses and SMEs and partners in Northern Connection to help us develop Økern Sentrum with clean-tech solutions, innovations and services.



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Oslo Living lab Innovation Award

We hope to be able to sign contracts with many of the participants under the Økern Sentrum - Oslo Living lab. In addition we will provide an innovation award - 50 000 NOK,- (5200 Euro) to the company who provides the best contribution to our project. The award ceremony will take place at Stratos Roof-top Bar Thursday 29th of November, directly after the innovation lab.

The jury will consist of

- Robert Steen, Vice Mayor The City of Oslo (TBC)
- Mali Hole Skogen, director OREEC
- Thomas Holth, Project Director Steen&Strøøm
- Unn Hofstad, Sustainability Director Storebrand ASA

We're looking forward to meet with you and your company in Oslo in November. Please Contact <u>mali.skogen@oreec.no</u> if you have any questions.

Best regards

Pål Samuelsen

Head of development Steen&Strøm

Mali Hole Skogen

Director OREEC



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What and who are we looking for?



TECH SOLUTIONS & use of new products in all phases of the project, but especially for the underlying for categories.

Circular and holistic waste management

Waste management - Under ground waste management opportunity

- vacuum systems
- central systems for waste management
- smart handling of public waste
- food waste programs and circular waste management
- ...And what we don't know

Sustainable energy solutions

Heating & cooling

- Energy wells
- Battery/storage technology

Electrical production

- Solar panels on all surfaces
- Wind power, wind trees, movement etc
- Hydroelectric plants in the sewage system etc.
- ...And what we don't know



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Green Mobility & Infrasructure for sustainable transport

- Smart transport of goods
- Fossil free private car, cycle parking & pooling
- Car/Ridesharing.

Construction period / Execution

- On site circularity & re-use of materials
- Co2 emission free construction site
- Energy consumption & usage during construction period
- Re-use & circularity of materials cradle 2 cradle.

If you have any questions, please contact <u>einar@fuglen.no</u> and <u>mali.skogen@oreec.no</u>





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Program Living Lab Økernbyen

- Organizer: OREEC, City of Oslo, Steen og Strøm/ Storebrand and Interreg North Sea Region
- Place: SALT Langhuset, <u>Adresse</u>: Operatunnelen, 0150 Oslo Langhuset rises 12m above the ground underneth a gigantic fish rack.
- Time: November 29th 2018 09:00 -15:00

Registration: https://kunnskapsbyen.hoopla.no/sales/3026199019



Dinner and presentations of companies will take place at Stratos Roof-top bar from 17:00

- 09:00 Welcome to Oslo <u>European Green Capital 2019</u> Vice Mayor The City of Oslo, Lan Marie Berg
- 09:10 Oslo world class arena for renewable energy

Mali Hole Skogen, director OREEC

09:30 Presentation: Økern Sentrum living lab – Who and what are we looking for?

Pål Samuelsen Project manager - Økernbyen

09:50 Let's bring the best and newest solutions to Oslo Thomas Bermann Director <u>Pådriv</u>











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- 10:10 Introduction to innovation labs
- 10:15 **Innovation lab 1** Open sessions round table questions and discussions.

At this session the companies will have the opportunity to speak directly with the developers of Økernbyen. Here you can ask questions and immerse yourself in the project and get guidance directly from the developers of Økernbyen. The session will be organized as a group discussion

- 1) Circular and holistic waste management
- 2) Sustainable energy solutions
- 3) Green Mobility & Infrasructure for sustainable transport
- 4) Construction period / Execution
- 11:00 Break
- 11:15 Innovation lab 2 1-1 sessions

At this session the companies will have the opportunity to speak directly with the developers of Økernbyen. Here you can ask questions and immerse yourself in the project and get guidance directly from the developers of Økernbyen. The session will be organized as 1-1 meetings between the companies and Økernbyen. 5 meetings of 10 min.pr. topic

- 1. Circular and holistic waste management
- 2. Sustainable energy solutions
- 3. Green Mobility & Infrasructure for sustainable transport
- 4. Construction period / Execution
- 12:05 Summary Innovation labs
- 12:15 Lunch
- 13:15 Prepearations for presentations

Companies work on the presentations. Representatives from Økernbyen will be available for questions and guidance the whole session.



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Oslo Living lab mingle dinner party and company presentations



Place:	Stratos Roof-top bar	
Time:	November 29th 2018 17:00 -22:00	
Target group:	All participants at the political conference, the living lab and Transnational Working day, guests and friends of NoCo	
Registration:	https://kunnskapsbyen.hoopla.no/sales/3465097159	
Dinner:	Bar will be open all night and dinner will be served from 18:00	
17:15	Welcome to Oslo by Mali (OREEC), Pål (STEEN& Strøm) Presentation of the jury	
	 Robert Steen, Vice Mayor – The City of Oslo (TBC) Unn Hofstad, Sustainability Director Storebrand ASA Thomas Holth, Project Director Steen&Strøm Mali Hole Skogen, director OREEC 	
17:45	Presentation of companies - living lab pitches	
	7-10 slots of 7 min each	
19:30	New deals -Presentation of other development projects in Økern/Hovinbyen. Several development projects is live and operational Økern. Many of the developers have shown interest in the NoCo Oslo living lab. A few of them have also expressed interest in meeting the the companies.	
	Obos: Construction City Director– Benedicte Økland	

Pådriv: Thomas Bermann



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9. UKS KUNSTNERBOLIGER

3. INTERREC

LIVING LAB

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12. TELIA / ØKERN PORTAL

5. BETABYEN PA

2. HOVINBYEN

SENTER FOR NY

BYUTVIKLING

North Sea Region Northern Connections



- 1. INNOVASJONSDISTRIKTET HOVINBYEN Byråd for Næring
- 2. HOVINBYEN SENTER FOR NY BUTVIKLING PBE
- 3. INTERREG LIVING LAB ØKERN SENTRUM North Sea Connection Intereg / OREC / Byrådet for Næring og Økern Sentrum
- 4. CONSTRUCTION CITY, ULVEN OBOS / AF-gruppen
- 5. BETABYEN PÅDRIV
- 6. TÅRNET KULTURARENA Oxer Eiendom
- 7. KABELGATA KULTURFABRIKKER Oxer Eiendom
- 8. KUBEN YRKESARENA Oslo Kommune
- 9. UKS KUNSTERBOLIGER Hasle kunstnerboligprosjekt fragment
- 10. VOLLEBEKK FABRIKKER OBOS og Aspelin Ramm
- 11. NORSK GJENVINNING Oslo Kommune

10. VOLLEBEKK FABRIKKER

12. TELIA + ØKERN PORTAL Telia og KLP

HOVINBYEN – SENTER FOR NY BYUTVIKLING

ET KULTURAREN

1. INNOVASJONSDISTRIKTET HOVINBYEN

STRUCTION CIT

8. KUBEN YRKESARENA

11. NORSK GJENVINNING

ULVEN

7. KABELGATA

KULTURFABRIKKER

19:00	Presentation of companies - living lab pitches
	7-10 slots of 7 min each
21:00	Award ceremony





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About the organizers:

Oslo Renewable Energy and Environment Cluster (OREEC)

OREEC is a network with businesses, research institutes, education and public actors within the field of renewable energy and environment in the Oslo region. OREEC's purpose is to contribute to increased innovation, increased business opportunities and increase value creation for our partners.

OREEC's aim is to make Norwegian businesses world leading within their fields. We do this with close collaboration with local governments and other public and private actors so that we can create a market for technology and competence from the regions tech companies and service providers. We promote our partners through our extensive international network. We believe that this will give OREEC's partners increased exposure and opportunities both abroad and domestic.

We believe that innovation is a result of collaboration between the private sector, governments and the research and educational institutions. Forward - looking solutions requires holistic thinking and collaboration between different focus areas. OREEC has a holistic approach and facilitates dialogue and greater interaction between the different actors across the thematic focus areas. We also work for better conditions for business in certain areas.

OREEC contributes to the establishment of new partnerships between businesses and between businesses and research. More and more companies are joining as a partner in OREEC. Many of the partners actively participate in ORREC's projects, others attending various meeting places or engage in OREEC's work in other ways.

City of Oslo

Making Oslo region attractive for innovation and transforming it into the world's most sustainable, smart and innovative region will require collaboration efforts. Tackling climate change is a high priority for Oslo. That is one of the reasons why City of Oslo is partner in North Sea Region EU project Northern Connections (Interreg 2016-2020). Main output is building capacity and transnational relations of sustainable energy clusters to provide demand-led innovation support. This creates the foundation for involving more SMEs and startups in innovation. Develop broader *political* backing using Northern Connections to create coherence between political ambitions and cluster potential for innovation support.

The Partnership consists of 21 clusters, cities, regions and knowledge institutions. The main goal is to unlock the potential for sustainable energy clusters across the borders in the North Sea Region. As the pollutions know no boarders so should the clean tech solutions –the key here being best practice sharing, both on policy and on concrete solutions and new



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innovation. It is going to be two political conferences, one in 2018 and the closing conference in Goteborg in 2020.

The city of Oslo aims to cut emissions by 50% by 2020 (compared to 1990) and to be carbon neutral by 2050. Oslo has introduced a range of integrated measures to achieve these ambitious targets, for example, by promoting zero emissions transport. The city has become the 'Electric Vehicle Capital of the World' with 30% of all vehicles now sold in the city being electric.

In 2016, the city introduced a 'Climate Budget', an initiative consisting of 42 separate measures across three sectors: energy and the built environment, transport, and resources. Carbon Dioxide emissions are now being counted in the same way a financial budget would account for funding. The unique 'Climate Budget' is one of the main initiatives that the City of Oslo is driving to reach its goal of 50% emissions reduction by 2020

Innovation and the promotion of new jobs in the circular economy is a priority for Oslo and the city is at the forefront of circular use of available resources. Biogas produced from biowaste and city sewage is used to fuel city buses and waste trucks.

The City of Oslo aim to be a part of how can Cities can unlock the potential for regional innovation across borders.



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