triangulum

DEMONSTRATE·DISSEMINATE·REPLICATE

How did we create our triple helix cooperation between public sector, research and innovation?

The NTVA Nordic Smart Cities and Communities Conference, 6-7 September 2016

H2020 Lighthouse Project in Stavanger; Gerd Seehuus, local coordinator

This project has received funding from the European Union's Horizon 2020 Research and Innovation Program under Grant Agreement No 646578

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Horizon 2020 – societal challenges

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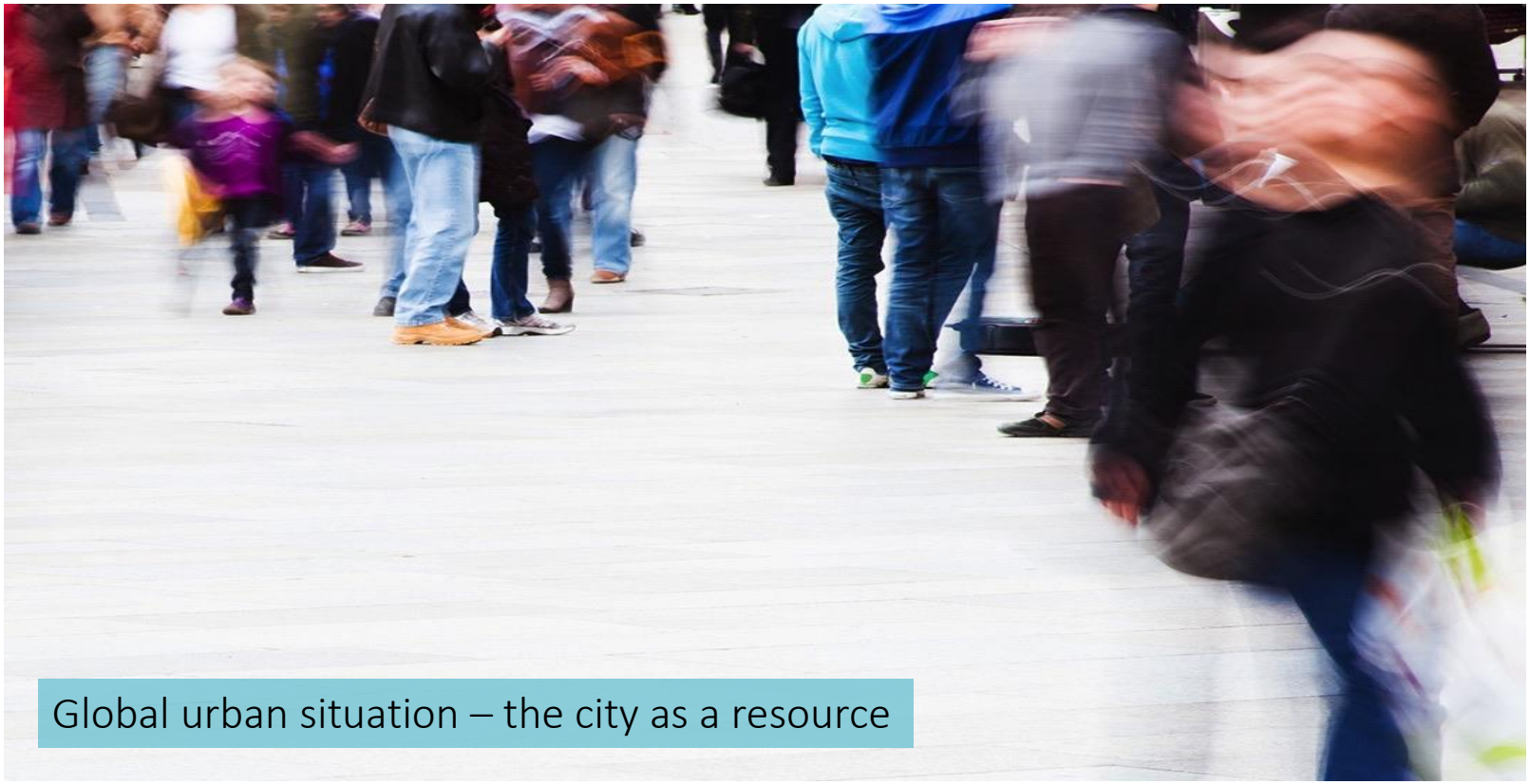

Global urban situation – the city as a resource

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The TRIANGULUM triple helix

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Project Management	Fraunhofer, Universität Stuttgart, Steinbeis-Europa-Zentrum, TÜV SÜD
Manchester	Manchester City Council, Manchester Metropolitan University, Manchester 1824 The University of Manchester, Siemens, Clicks and Links
Eindhoven	Eindhoven, TU/e Technische Universiteit Eindhoven University of Technology, kpn, Woonbedrijf, VolkerWessels
Stavanger	Stavanger Kommune, Lyse, Rogaland Fylkeskommune, Greater Stavanger, Universitetet i Stavanger
Follower Cities	Praha, IPR Praha, Ajuntament de Sabadell, Stadt Leipzig

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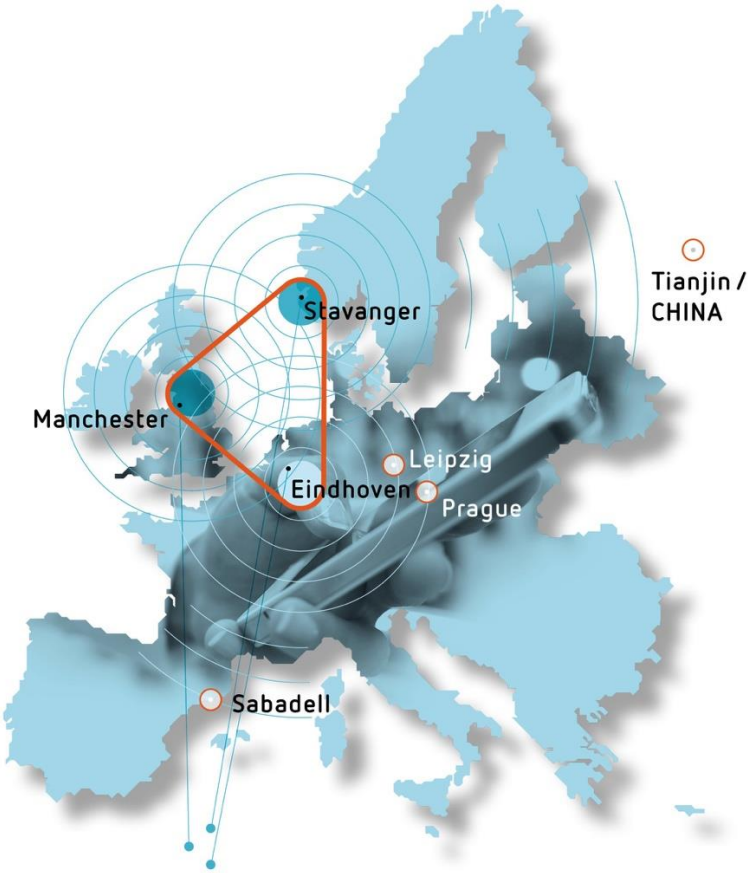
Stavanger Kommune, Lyse, Rogaland Fylkeskommune, Greater Stavanger, Universitetet i Stavanger

3 POINT PROJECT • DEMONSTRATE • DISSEMINATE • REPLICATE



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INTEGRATED DISTRICT SOLUTIONS FOR SMART CITIES

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http://www.wired.com/wp-content/uploads/2015/07/HighRes_LEGO_DUPLO_bricks-story-1024x559.jpg

City + Cooperation + Innovation + Demonstration

=

Sustainable Lighthouse Projects SCC 1

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How we created our triple helix

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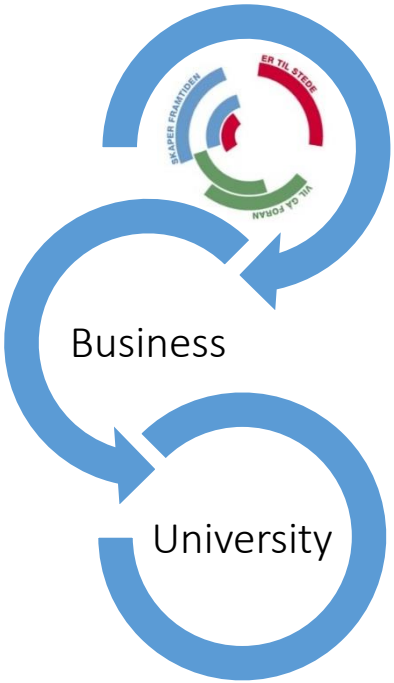
Lyse

ROGALAND FYLKESKOMMUNE

GREATER STAVANGER

Universitetet i Stavanger



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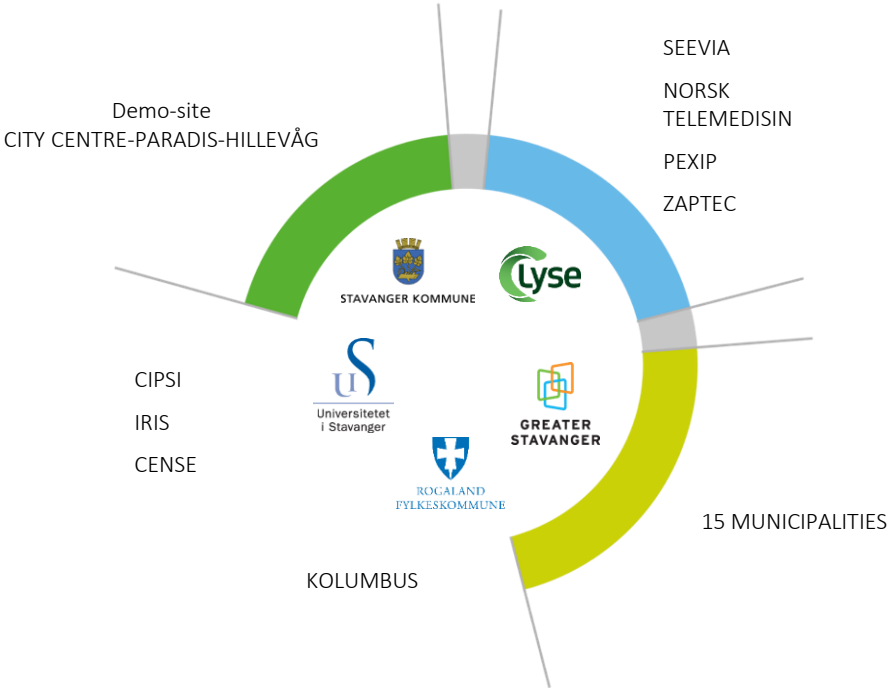
Local lighthouse partners



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- *environment* • *society* • *economy*
- *respect* • *roles* • *responsibility*
- *complexity* • *holistic* • *context*
- *communicate* • *create* • *cooperate*
- *ambision* • *innovative* • *engagement*
- *consequence* • *green growth* • *enjoy*
- *unique* • *overview* • *expertise*

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The process

2012

- Stavanger Regional Brussels Office: strategy 2013-2020, Smart Cities as priority.
- The city decides to start the process towards SCC.

2013

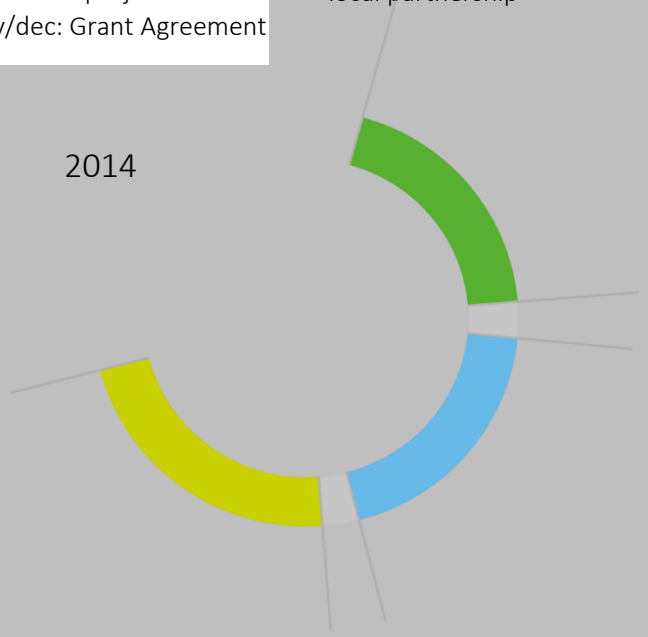
- Stavanger Regional Brussels Office and University EU-resource center facilitates Eindhoven and Stavanger meetings.
- Desember: H2020 SCC1-call lighthouse projects. Local triple helix. Application for proposal formed with Eindhoven and Manchester. Fraunhofer as project manager.

2014

- Application: May 7th
- October: EC selects Triangulum as 1 of 3 lighthouse projects.
- Nov/dec: Grant Agreement

2015

- January: Consortium Agreement
- February: Project starts
- City of Stavanger coordinates local partnership



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Demonstrate, disseminate, replicate

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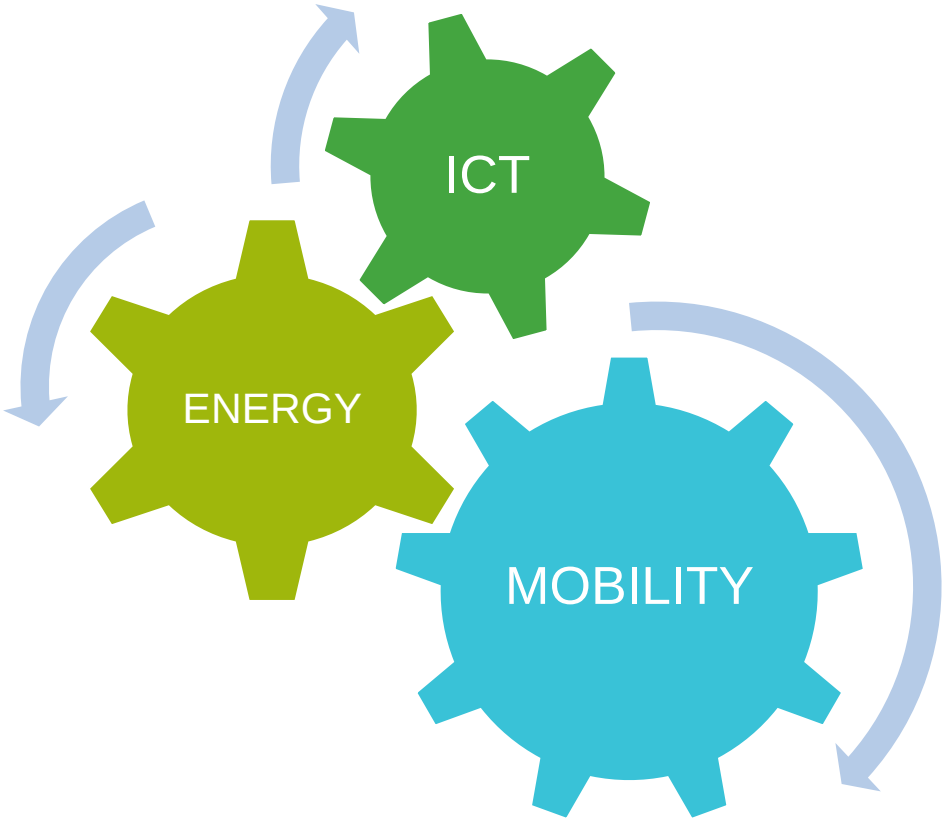
DEMONSTRATE-DISSEMINATE-REPLICATE



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Mobility

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Photos: Elisabeth Tønnesen

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ICT - big data

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Energy

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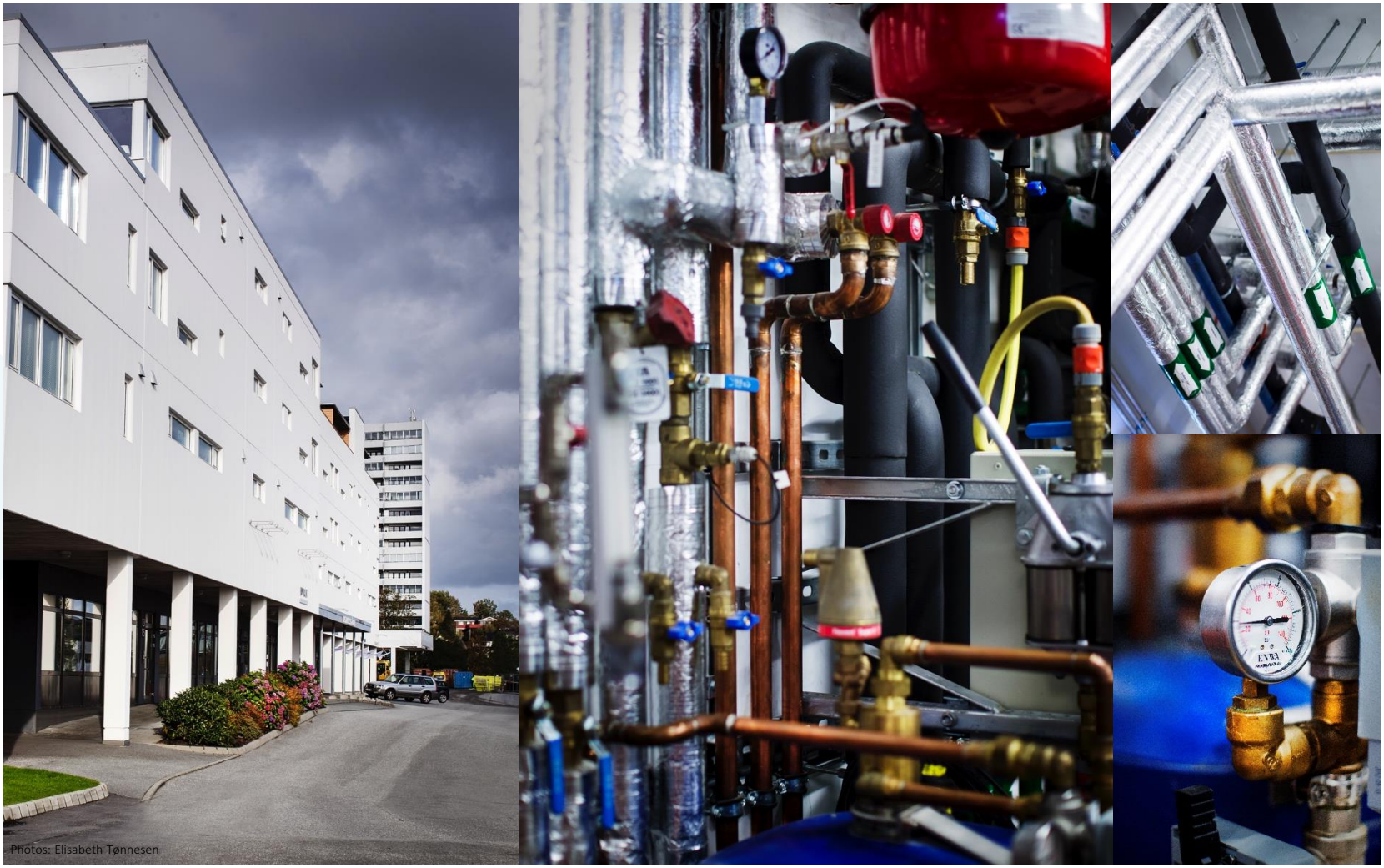

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Smart sustainability vs societal challenges

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«The main goal of Triangulum is to demonstrate that the integration of technologies from the sectors energy, buildings, mobility and ICT *within one district leads to a significant reduction of energy demand and local GHG emissions whilst at by the same time enhancing quality of life, delivering efficient and clean mobility to residents and local workers and providing the basis for economic growth and development*.

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Integrated solutions for tomorrow

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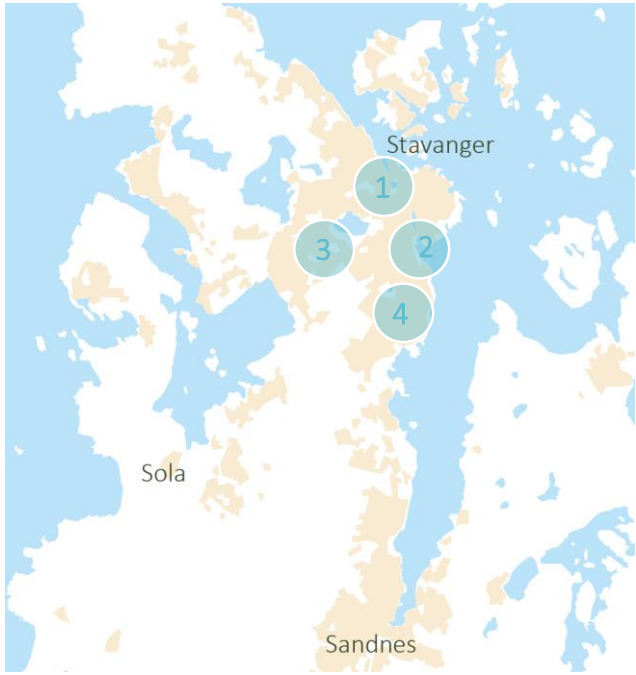
1. Stavanger City Centre
   Energy plant 75 % renewables, reduce CO_2

2. Paradis/Hillevåg
   100 homes, a school and nursery home upgraded with integrated smart solutions, automation and communication

3. University of Stavanger
   Big data

4. Paradis–Hillevåg
   Battery buses, reduce CO_2



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Another triple-helix creation

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NO|RDIC
ED|GE EXPO 2016

6.-7. Oct.
Stavanger

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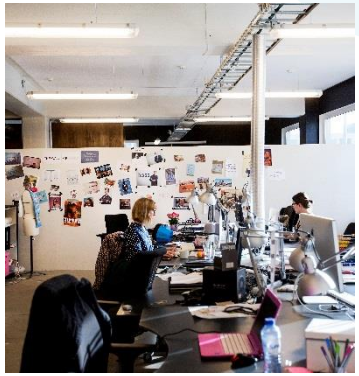
http://triangulum-project.eu/ gerd.seehuus@stavanger.kommune.no



All photos: Elisabeth Tønnesen

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