

Interreg
North Sea Region
Northern Connections

European Regional Development Fund



EUROPEAN UNION



Northern Connections WP6 final report

11-12-2020

Review on transferability of results



Contents

INTRODUCTION TO NORTHERN CONNECTIONS AND THE ROLE OF LIVING LABS.....	3
THE LIVING LAB EVENT APPROACH	4
BALANCED SCORECARDS FOR THE LIVING LAB CASES AND EVENTS	5
Denmark Esbjerg: Sensor technology, Smart homes, Improve consumer green behaviour.	5
Norway Oslo: Sustainable Urban Centre Development.....	6
Sweden Gothenburg: Fossil Free buildings	7
Germany Hamburg: Integrated energy supplies and e-mobility hub infrastructure	8
Netherlands Alkmaar: Techno Economic blue print for 100% hydrogen heat supply to homes, Biomass and gasification technologies, Liquefied Hydrogen for transport	9
Belgium Brussels: Fossil free mobility hub and CO2 neutral thermal grids	10
Scotland Edinburg: Carbon Capture Utilisation and Storage	11
Danish Online Living Lab - Sustainable Hospitals	12
Sweden Malmö Living Lab - Sustainable Construction	13
REFLECTIONS AND EVALUATION ON THE LIVING LAB CASES AND EVENTS.....	14
REVIEW ON TRANSFERABILITY OF RESULTS - ANALYSIS OF THE SURVEYS CONDUCTED	15
CONCLUSIONS AND PERSPECTIVE ON FOLLOW-UP AND FUTURE ACTIVITIES.....	18
ANNEXES.....	19
Survey on review of transferability of value creation schemes in Living Lab Open solution pitches	19
Testimonials.....	20

Introduction to Northern Connections and the role of Living Labs

Northern Connections is a partnership of 22 clusters, cities regions and knowledge institutions, and we work together to create innovation connections between our enterprises and clusters in the energy sector.

We aim to increase the innovation potential across borders. We look into how we involve enterprises from different countries in our Living Labs and we develop tools for our clusters so they can provide the right support for the enterprises.

The joint challenge is to test the use of domestic innovation support measures transnationally and address barriers to competition which exist between clusters and regions. Innovation support is mainly applied within narrow geographies where calls to action are not visible transnationally and cities & clusters lack capacity to involve SMEs broadly.

Our objective is to get more enterprises to participate in transnational innovation collaboration via strengthening transnational cluster and city/region cooperation.

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 in innovation. Develop broader political backing using northern connections to create coherence between political ambitions and cluster potential for innovation support.

Our approach is to provide a bridge between private and public sector on transnational innovation support. This will be achieved through improving/aligning innovation support measures by creating incentives for transnational SME innovation partnerships to collaborate and establish a critical mass of innovation activity on a transnational basis. We will pilot joint transnational innovation support measures aimed at broadening opportunities for SMEs from different NSRs to participate in regional innovation activities, which ultimately will strengthen their ability to take part in global markets and create new value-chains.

Living Labs and the organisation of the events related to the cases have been one of the key activities within the project. In this report we provide some insights on best practices and learnings, what has been achieved during the project's lifetime, how the approach and setup has evolved and how we can continue to apply the same or similar approach in the future.

The Living Lab event approach

The key focus of the activities within Work Package 6 have been centred around the concept of the Living Labs, organising events on the Living Lab cases and bringing together innovation challenge owners with solution providers from all over Europe to try and connect and initiate new business- and innovation collaborations.

There is no standard definition of the concept of a Living Lab. It has been defined as a methodology, an organization, a system, an arena, an environment, and/or a systemic innovation approach. In general, Living Labs deal with user-centered, open innovation ecosystems and often operate in a territorial or regional context. They integrate research and innovation processes for user-driven open innovation, involving companies, researchers, public organizations, users and others.

A Living Lab involves four main activities:

1. Co-creation: co-design by users and producers
2. Exploration: discovering emerging usages, behaviours and market opportunities
3. Experimentation: implementing live scenarios within communities of users
4. Evaluation: assessment of concepts, products and services according to socio-ergonomic, socio-cognitive and socio-economic criteria.

Within Northern Connections our approach on Living Labs is a bit different and very much focused on concrete innovation challenges for which solutions are demanded. We define Living Labs as real life environments, like demonstration and investment projects, that are facing concrete energy related challenges for which innovative solutions are requested and can be provided. The Living Lab should be open to transnational solution providers; have investments already taken place and/or are planned; and there needs to be public and private engagement.

Our main goal has been to bring together these actors in order to stimulate new innovation collaborations on a transnational level. This is done via so called open solution pitches at each Living Lab event where innovative SME's in the North Sea region are engaged by the Northern Connections partners based on the formulated innovation challenges and where direct 1:1 meetings between challenge owners and solution providers are organised and facilitated.

Balanced scorecards for the Living Lab cases and events

During the project, a total number of 9 Living Lab events have been organized. These will not all be elaborated on in detail, but the main setup, topics, key figures and the tools used will be shown by ways of so called balanced scorecards. These provide an instant overview of the essence of each Living Lab case and the event organized. For a thorough insight into each Living Lab, follow the links provided under more information.

DENMARK ESBJERG: SENSOR TECHNOLOGY, SMART HOMES, IMPROVE CONSUMER GREEN BEHAVIOUR.



Living Lab case Syd Energi - Denmark

- Syd Energi, one of Denmark's largest modern energy and telecommunications companies, was in the search for new ideas, technologies or methodologies. Looking for partnerships that could help the company reach the strategic goals; to create more sustainable energy and better digital communication.
- Main themes and topics: Smart Home, Sensor Technology, More Green Behaviour
- 1 Living Lab case with 2 challenge owners involved



Living Lab event - key figures

- 25 participants
- 8 SME's
- 8 solution providers
- 14 meetings
- 8 solution pitches
- 6 countries represented



Tools used

- Podio
- Webinar and video presentations
- Reverse pitching
- Seminars by research institutions
- One-to-one meeting with challenge owner



More info

[The first Living Lab Event was a success!](#)



NORWAY OSLO: SUSTAINABLE URBAN CENTRE DEVELOPMENT.

Living Lab case ØKERN SENTRUM - Norway



- Økern Sentrum is situated in the heart of Hovinbyen, one of Oslo's newest and most ambitious city development areas. The project developers of Steen & Strøm and Storebrand will create an urban, sustainable and innovative 163,000 m² urban centre including an indoor aquapark, a cinema, housing facilities, cultural venues, offices, hotels and a leading commercial centre.
- Main themes and topics: Circular and holistic waste management, Sustainable energy solutions, Green Mobility & Infrastructure for sustainable transport,
- 1 Living Lab case with 2 challenge owners involved

Living Lab event - key figures



- 96 participants
- 35 SME's
- 35 solution providers
- 20 meetings
- 19 solution pitches
- 2 possible new collaborations
- 7 countries represented

Tools used



- Booklet
- Pitching
- One-to-one meeting with challenge owner
- Seminars by research institutions



More info

[A look back at the Living Lab Event in Oslo](#)



SWEDEN GOTHENBURG: FOSSIL FREE BUILDINGS

Living Lab case Hoppet - Sweden



- The Hoppet preschool is a pilot project to be built using fossil-free materials and processes. This cutting-edge project will set the standard for future urban development in the city and will open up a thriving market for sustainable suppliers. Hoppet was seeking solutions and products that was, or have the potential to become, fossil-free through the whole construction process and the operation of the building. Recycled and re-used products was also of interest.
- Main themes and topics: Fossil free and climate neutral building materials and sustainable construction
- 1 Living Lab case with 2 challenge owners involved

Living Lab event - key figures



- 130 participants
- 39 SME's
- 28 solution providers
- 19 meetings
- 17 solution pitches
- 4 possible new collaborations
- 5 countries represented

Tools used



- Podio Platform for Living Lab process
- Webinar and video presentations
- Business matching tool
- Exclusive network meetings and 1:1 meetings
- Pitching and reverse pitching



More info

[Construction boom in Gothenburg creates many business opportunities and a high demand for sustainable solutions](#)



GERMANY HAMBURG: INTEGRATED ENERGY SUPPLIES AND E-MOBILITY HUB INFRASTRUCTURE

Living Lab cases Billebogen and Flensburg - Germany



- The North of Germany is the leading region for renewable and sustainable energy as well as mobility solutions in Germany. Within the Northern Connections project, the City of Hamburg and State of Schleswig-Holstein jointly invited companies to present their innovative ideas regarding an intelligent energy supply and smart mobility solutions for cities as well as a for rural areas.
- Main themes and topics: Distric energy and sustainable mobility
- 2 Living Lab case with 6 challenge owners involved

Living Lab event - key figures



- 90 participants
- 12 SME's
- 13 solution providers
- 23 meetings
- 1 possible new collaboration
- 9 solution pitches
- 7 countries represented

Tools used



- Pitching
- One-to-One Meeting with Challenge Owner
- Podio Platform for Living Labs Process
- Booklet

More info



[Living Labs – Billebogen & Flensburg Fjord Region \(G\)](#)



NETHERLANDS ALKMAAR: TECHNO ECONOMIC BLUE PRINT FOR 100% HYDROGEN HEAT SUPPLY TO HOMES, BIOMASS AND GASIFICATION TECHNOLOGIES, LIQUEFIED HYDROGEN FOR TRANSPORT

Living Lab cases Alkmaar and Hoozeveen- Germany



- InVesta was looking for companies with economic viable technologies (or part of technologies) that lead to a lower cost of sustainable syngas and their applications. Hygro was looking to make decentralized liquifaction of hydrogen costs efficient. The Dutch municipality of Hoozeveen is developing a (techno-economic) blueprint and corresponding technology concept for the heat supply of 80 houses in Nijstad-Oost on 100% hydrogen (H₂).
- Main themes and topics: Biomass, gasification, liquid hydrogen and hydrogen for the built environment
- 2 Living Lab cases with 10 challenge owners involved

Living Lab event - key figures



- 122 participants
- 27 SME's
- 28 solution providers
- 106 meetings
- 6 possible new collaborations
- 13 solution pitches
- 10 countries represented

Tools used



- B2Match matchmaking and event organisation tool
- One-to-One Meetings with Challenge Owner
- Pitching
- Booklet

More info



[Fueling the Future with Renewable Gases](#)

BELGIUM BRUSSELS: FOSSIL FREE MOBILITY HUB AND CO2 NEUTRAL THERMAL GRIDS



Living Lab cases Blue Gate Antwerp & Green Energy Park - Belgium

- Blue Gate Antwerp (BGA) is the climate neutral business park reserved for innovative companies with a well-defined ambition: linear growth through circular operations. The aim is to develop a smart mobility hub to connect Blue Gate Antwerp to the City. On the Green energy park a “CO2 neutral smart multi energy grid” is developed and will consist of a (mainly) low temperature thermal grid and an electric grid.
- Main themes and topics: Smart mobility, heating networks and electric infrastructure.
- 2 Living Lab cases with 4 challenge owners involved



Living Lab event - key figures

- 157 participants
- 14 SME's
- 20 solution providers
- 21 meetings
- 11 solution pitches
- 8 countries represented



Tools used

- Seminars by research institutions
- One-to-One Meetings with Challenge Owner
- Webinar and video presentations
- Pitching
- Booklet



More info

[Brussels pushes innovation power to the next level](#)



SCOTLAND EDINBURG: CARBON CAPTURE UTILISATION AND STORAGE

Living Lab cases Grangemouth Falkirk & Acorn CCS - Scotland



- **Falkirk Council** aims to enable transformation of the Grangemouth industrial complex, into the CCU hub for Scotland. Plans include an Enterprise and Innovation hub, co-location of academic and industry partners. **Acorn CCS** is a low-cost, low-risk carbon capture and storage (CCS) project, aiming to start operations in 2024 looking to initially handle and sequester up to 2mtpa of CO₂ increasing to 16mtpa in Subsequent phases.
- Main themes and topics: Carbo Capture Utilisation and Storage (CCUS)
- 2 Living Lab cases with 2 challenge owners involved

Living Lab event - key figures



- 134 participants
- 21 SME's
- 48 solution providers
- 85 meetings
- 14 solution pitches
- 16 possible new collaborations
- 8 countries represented

Tools used



- B2Match matchmaking and event organisation tool
- One-to-One Meetings with Challenge Owner
- Pitching
- Booklet

More info



Carbon Capture & Utilisation Response to Climate Change & Rise of New Industry



DANISH ONLINE LIVING LAB - SUSTAINABLE HOSPITALS

Living Lab cases Sustainable Hospitals - Denmark



- The hospital owners were searching for innovative companies, ideas, technologies and methodologies in order to identify and form new partnerships within the specified challenge areas of energy and resource efficient in order to implement new and innovative solutions.
- Main themes and topics: Energy and Resource Efficiency
- 2 Living Lab cases with 2 challenge owners involved

Living Lab event - key figures



- 95 participants
- 29 SME's
- 40 solution providers
- 25 meetings
- 12 solution pitches
- 11 possible new collaborations
- 7 countries represented

Tools used



- B2Match matchmaking and event organisation tool
- One-to-One Meetings with Challenge Owners
- Gotowebinar Video and webinar presentations

More info



[Danish Online Living Lab - Sustainable Hospitals](#)

SWEDEN MALMÖ LIVING LAB - SUSTAINABLE CONSTRUCTION

Living Lab cases Sustainable Hospitals - Denmark



- The challenge owners, Skanska and Ikano Bostad, were looking for innovative companies, ideas, technologies and methodologies within the specified challenge areas of climate neutral building, sustainable construction and energy efficiency.
- Main themes and topics: Sustainable Construction and Energy Efficiency
- 2 Living Lab cases with 2 challenge owners involved

Living Lab event - key figures



- 112 participants
- 51 SME's
- 43 solution providers
- 41 meetings
- 8 solution pitches
- 12 countries represented

Tools used



- B2Match matchmaking and event organisation tool
- One-to-One Meetings with Challenge Owners
- Pitching
- Zoom video and webinar presentations

More info



[Malmö Living Lab - Sustainable Construction](#)



Reflections and evaluation on the Living Lab cases and events

As can be seen in the overview of statistical data in the different balanced scorecards, the Northern Connections partners have organised 9 different Living Lab events thus far which took place in each respective participating region. The topics and themes of the different Living Labs cover a broad range of energy related aspects. These include smart grids, mobility, sustainable construction materials and processes, renewable gases like hydrogen and green gas, solar PV, sensor technology, smart homes and buildings, heating networks, and Carbon Capture Utilisation and Storage.

The concept and approach to organise a Living Lab event has been an exciting but also a complex and challenging endeavour for the Northern Connections partners. None of the partners had explicit experience in both understanding exactly what the concept of a Living Lab meant or could mean in the context of the project as well as organising a Living Lab event. However, this has been a key learning point where the project partners shared their experiences, best practices and relevant tools that could be utilized to optimally and most efficiently organise these events. But before any event was to be organised each of the partners had to identify relevant cases, projects and sites which could potentially serve as a Living Lab case. These have been compiled into one large inventory containing 170 potential Living Lab cases for which events could be organised. Subsequently 40 out of these have been preselected as high potentials which met all of the requirements for a Living Lab.

Once the Living Lab cases were selected, it was key to discuss and align with the challenge owners in charge of realising the projects and getting them on board to understand what a Living Lab is and the service Northern Connections could offer them by engaging innovative SME's which could be able to provide solutions.

As project partners we have learned a lot from each other about the whole process from identification to alignment with challenge owners, inviting SME's and organising these events. In the end we have been very successful with 9 Living Lab events where almost 1.000 participated from 16 different countries of whom 200+ SME's, 350+ meetings were pre-arranged, over 100 pitches given and almost 40 new international collaborations have been initiated. One of the key advantages and appreciations mentioned by both challenge owners and participating SME's has been the unique opportunities created in which offerings of innovations and solutions was provided based on clearly formulated demand through innovation challenges in real life energy demonstration- and investment projects.

Review on Transferability of results - analysis of the surveys conducted

As a final step in the process of the activities related to the Living Lab cases and the organisation of the Living Lab events, a survey has been conducted amongst those partners that have been directly and explicitly involved in the action. Both the partners whom have organised as well as those who have supported in engaging SME's for the different transnational Living Lab events. The survey contained questions which are geared towards best practices and experiences; the perceived added values in both participating in the project and organising Living Lab events; and the possibilities for both future collaborations as well as the expected likelihood of applying similar approaches as the Living Lab cases and events into future activities.

The questions that have been sent to the partners can be seen in the Annexes and have been distributed through Podio. In total 12 partners have answered the questions. Below you will find the main take-aways and conclusions that have been extracted and synthesized from the provided answers.

- 100% of the partners arranging Living labs value/rate the experiences with regard to organising and supporting the Living Lab events as Very Valuable (80%) or valuable (20%)
- Feedback on the main take-aways from organising and/or supporting the Living Lab events
 - Great opportunity and efficient to let solution providers meet the public sector
 - Important how you write your challenges to fit SMEs nationally and internationally, that it is clear what is asked for and that the challenge is clear months before the event to be able to find matching SMEs
 - Follow up is critical after the event
 - Make sure that the challenge is for real and it actually can be business after the event
- 90% of the partners in Northern Connections value the sharing amongst partners from Northern Connections in organising and better supporting SME's through international activities as very valuable
- 100% of the partners consider the approach and set-up of the Living Lab concept an added value for its cluster's/organisation's SME's and broader network for future activities
- Can you elaborate, if applicable, on how you have utilized aspects of the Northern Connections LL approach in any of your cluster's/organisation's activities?



- Most partners are planning to use the concept LL or parts of it again in their cluster or even in new project applications.
- Several partners have spread the concept both to colleagues and other departments.
- The LL concept has given a better understanding for the SMEs, the market, new ideas.
- 80% of the partners believe that the Living Lab event tools “Challenge owner project visibility/dissemination through presentations” were very Valuable
- 70% believe that the Living Lab event tool "Pitches to broad audience” have the value Valuable or Very Valuable, while 20% think it is neutral value.
- 100% of the partners believe that One to one (1-1) meetings are very valuable
- 60% of the partners rate the informal meetings as valuable, 40% believe it is very valuable
- How did you experience the process of engaging with and activating SME’s in the process?
 - It took quite some time to engage SMEs that were relevant for the Living labs, due to that it was not always simple to explain the advantages, as it is to be selected. Some clusters have used teams of personnel to call and send personal emails.
 - It has been a challenge for some SMEs to prioritize to go abroad, both for the time and cost. If it would be possible to pay the transport and hotel it would have been easier.
 - The B2match tool has been valuable.
 - A clear and sharp challenge is an advantage for an international SME visiting abroad.
- The partners who have had SME’s involved rated the value the support and approach for the Living Labs as Valuable 67% or very valuable 33%
- How did you experience the process of engaging with and activating challenge owners in the process?
 - Extremely time consuming
 - Extremely important, to have the LL owner early involved.
 - Can be difficult to explain the process, what we mean with Living Lab, the value etc., they must be prepared for international SMEs and include several from their organisation.
- The Challenge owners did value our organisation of the Living Lab events in a scale from little value to very valuable
- Most of the partners rate it as very likely or likely that they will utilize the same or similar approach in the future to add value for your SME’s and network.



- All partners have shared and disseminated the Northern Connections Living Lab approach beyond the project's consortium.
- The partners have rated it as very likely (80%) or likely (20%) that they will share the project's approach for SME support through LL events beyond the scope of the project in the future.
- Can you elaborate on a success case, if applicable, from one of the SME's that has gained significant knowledge, support or started a new collaboration from one of the LL events?
 - 1 of the big CO2 emitter has signed 2 non-disclosure agreements with 2 technology providers. We have linked 4 companies to relevant Horizon 2020 to collaboration on Carbon capture and Utilisation as a result of them taking part in the Scottish Living Lab. We also had a construction company that was selected by challenge owner in Sweden to test their products. Another 3 Scottish companies are currently receiving support from our international networks team as a result of attending the Danish Sustainable Hospitals Living Labs.
 - Powunit AS have gained from the "fueling the future with renewable gases B2B matchmaking" in Alkmaar, but I do not have more details since they now are a part of the Norwegian Hydrogen Cluster.
- All partners would like to participate in a future project with a similar approach as the LL concept in order to further build upon the Northern Connection's results and experiences.
- What could be improved in relation to the LL setup for future activities or similar project?
 - The follow up must be better, several proposals are in the material.
 - Could the Living lab be the first step in a row of activities
 - Awareness of possibilities for the cities/departments
 - If physical event, also possibility to participate digital or financial support for SME
 - Even more standardized LL, to easier promote and arrange.
 - There must be a real business opportunity for the SME
- In which other fields would the Living Lab approach from Northern Connections work well and why
 - In theory all fields where it is possible to get SMEs in from other countries.
 - The interest for internationalisation varies between fields
 - Great to build up supply chains
 - Perhaps combined with Hackathons for students.

Conclusions and perspective on follow-up and future activities

With the Northern Connections project now reaching its very final stages, a couple of main conclusions and take-aways from specifically the Living Lab related activities can be drawn.

First of all, like was already noted in the reflections and evaluations, the whole process from developing the concept of the Living Lab case, selecting potential cases, approaching and aligning with challenge owners up until organising the Living Lab event has been a complex and challenging endeavour. But what can be seen from the main conclusions from the surveys is that this process has been rated as very valuable and collaborating and sharing amongst the partners has been a real benefit in this process. Secondly the approach that has been developed is considered to be a concept which can definitely be implemented in future activities whether it is applied to the energy sector or other sectors. Thirdly the activities can be seen as real added value to the different networks around the North Sea; both for SME's whom have been involved as solutions providers as well as for the challenge owners as project developers. Fourthly best practices and experiences and points of improvement have been put forward like e.g. the fact that business opportunities needs to be real to solve the challenges; it takes considerable time to properly prepare and execute a Living Lab event; in order to better involve SME's, some funding to cover expenses for travelling would be beneficial; organising partly or entirely online events has shown to be a good alternative and should be taken into account for future activities; and finally that the Living Lab events create great opportunities to start new collaborations and therefore an asset in the cluster's activities and services.

So looking back, overall it can be concluded that the concept of a Living Lab and the subsequently organised events is an activity which could and should be part of any future activities and the work done in Northern Connections lays a very good foundation in order to do so quickly and efficiently in any new transnational collaboration between the partners involved.

Annexes

SURVEY ON REVIEW OF TRANSFERABILITY OF VALUE CREATION SCHEMES IN LIVING LAB OPEN SOLUTION PITCHES

1. How do you value/rate the experiences with regard to organising and supporting the Living Lab events? Very valuable – no value
2. Please provide some feedback on the main take-aways from organising and/or supporting the Living Lab events? Open text field
3. How do you value the sharing amongst partners from Northern Connections in organising and better supporting SME's through international activities? Very valuable – no value
4. Do you consider the approach and set-up of the Living Lab concept an added value for your cluster's/organisation's SME's and broader network for future activities? YES/NO
5. Can you elaborate, if applicable, on how you have utilized aspects of the Northern Connections LL approach in any of your cluster's/organisation's activities?
6. Please rate the following mostly used Living Lab event tools (if applicable): from very valuable – no value
 - a. Challenge owner project visibility/dissemination through presentations
 - b. Pitches to broad audience
 - c. 1:1 meetings between solution providers and challenge owners
 - d. 1:1 meetings between any participants
 - e. Informal networking
7. How did you experience the process of engaging with and activating SME's in the process? Open text field
8. How did your SME's involved value the support and approach for the Living Labs? Valuable – no value
9. How did you experience the process of engaging with and activating challenge owners in the process? Open text field
10. How did your challenge owners value the organisation of the Living Lab events? Very valuable – no value
11. How likely is it that you will utilize the same or similar approach in the future to add value for your SME's and network? Very likely – very unlikely
12. Have you shared and disseminated the Northern Connections Living Lab approach beyond the project's consortium? YES/NO
13. How likely is it that you will share the project's approach for SME support through LL events beyond the scope of the project in the future? Very likely – very unlikely
14. Can you elaborate on a success case, if applicable, from one of the SME's that has gained significant knowledge, support or started a new collaboration from one of the LL events?
15. Would you like to participate in a future project with a similar approach as the LL concept in order to further build upon the Northern Connection's results and experiences? YES/NO



16. What could be improved in relation to the LL setup for future activities or similar project? Open text field
17. In which other fields would the Living Lab approach from Northern Connections work well and why? Open text field

TESTIMONIALS

Denmark 1

"The Living lab Event with SE created great opportunities for innovative SMEs from across Europe. It was great to see the commitment and professionalism from SE -and it was also great to see the screened companies' commitment and enthusiasm, when pitching their projects. The selected SMEs were given a unique opportunity to present their technologies. I am excited to follow the development of the potential collaborations that were spurred during this event – and furthermore, I positive sure that this event has facilitated the start of innovative collaborations." says Maria Skotte, who is representing Scale-Up NSR and Head of Department, Environment and Smart City at CLEAN Cluster.

Hanne Skovby, Project Director for District Heating at House of Energy stated the following about the event: *"House of Energy were happy to join the Meet the buyer-event at SE and to give our two companies from our network, Neogrid Technologies and ReMoni, the possibility to pitch their product to SE. It is great that the Northern Connections-project has reached the level, where we bring in companies and give them the possibility to participate in new collaborations and innovative projects. It was a well-organized event, and I have received a lot of positive feedback from the participants".*

Norway:

Kristin Anderssen, Special Advisor at the City of Oslo, who was in charge of structuring the Living Lab Event in Oslo, says the following about the event: *"It was amazing to see different clean technologies from the North Sea Region pitching to the developer of Økern Sentrum, Steen & Strøm, Storebrand. Northern Connections made this possible. OREEC and the City of Oslo are so thrilled that SMEs from North Sea Region came together to Oslo for a day of networking, pitching and hopefully some of the solutions will be getting a contract. This event gave a great view for the developers."*

Einar Kleppe Holthe, who is founder and co-owner of Norwegian Icons AS and a Special Advisor at Oslo Business Region, was also present and giving a speech at the event. Additionally, he was recently in Davos 2019, where he presented the Living Lab Event at Økern Sentrum as an example.

Sweden:

“It was very worthwhile and we’re simply thrilled! Living Lab has been vital in connecting us with suppliers who can help us transition to fossil-free construction. We’re interested in pursuing further discussions with all of the suppliers we met during the day,” says Anders Hall from the Municipal Administration Office, City of Gothenburg.

“We made many new contacts here. It’s been a great event...much larger than I expected too!”, says Kirsten Lynge from the Danish company, Læsø and one of the founders of Læsø Zosteræ.

“This has been an incredibly good day for us. I’ve met with people I wouldn’t easily have gotten the chance to meet otherwise. I’m also very proud that we have something very tangible, available now, that can make a significant difference. Hopefully, for everyone who tested the nozzles here today, it’s given them food for thought,” says Urban Dalhov.

Germany:

“The Living Lab event has been essential in connecting us with companies from Europe showcasing their innovations that we otherwise might not have gotten in touch with. We would highly appreciate if some of these companies would accompany the further development of Billebogen as the future inner city destination for urban production in Hamburg.”

– Hape Schneider, Senior Projektmanager Billebogen, Hafencity GmbH

“Being the challenge owner of the Living Lab Billebogen gave us the opportunity to approach new technologies and see what is feasible. This encouraged us to increase the requirements for potential bidders in the future on a maximum flexibility concept for Billebogen and to set more ambitious targets and an even stronger focus on connecting the power, heating, cooling and mobility sectors.”

– Jürgen Desler, Senior Projektmanager Billebogen, Hafencity GmbH

Netherlands:

“Today’s event was very interesting for me, I met very interesting people from Science, from the industry, People who are just new in this industry, experienced in the industry, People who came mainly from the petrochemical industry, and are into developing a hydrogen infrastructure, which was very interesting to do because these will be let’s say the game changing parties in the future, so I think this was a very successful day to me”. Johannes Lorenz, NPROXX

“The event was very usefull Yes, Thanks!, It’s a great oportunity for solution providers like us, H2 tech, to get in front of people who have got real projects.” Nick Stapley H2tech

Belgium:

Jimmy Vane More, Director Business Development at Green Energy Park, who participated in all of the one-to-one meetings said afterwards: *“The Living Lab Event has just been a start for some possible good matches and a further business process. We also had some really positive talk with some interesting contacts from Sweden. We had a good talk about sharing experiences and knowledge across our two countries.”*

“We would definitely recommend other people to attend an event like this, because it is a great opportunity for your business” said Mario Javier Pérez from FluidTech.

Skoon Energy, which is a scale-up company with the mission to accelerate the energy transition by setting up a network of versatile swappable batteries, to share, rent and lease, was also present and excited to meet the challenge owners and to present them was lori van den Doel. He said after the meeting that: *“I can see the potential in a collaboration, I also think they can. We can work together and create an energy mobility hub and sustainable shipping and distribution. I can only say it was a meeting with big potential. And furthermore, I have really expanded my network and our network at Skoon. It was so great to be a part of.”*

Scotland

Marie- Clare Morgan

Lead officer, climate change, Falkirk council



“An event like this in North sea region is really crucial simply because you do gain exposure, Leading levels of technology being embedded to perform certain functions”

*First of my feelings are that CO2 utilization is truly put on the map within Scotland. CCU is still cottage industry, but certainly got the impression today that we now have the springboard and the platform with which to help that new manufacturing sector from Scotland to get some scale and **mentor ? behind it.***

Tim Dumenil, Pale blue dot.

Denmark 2

Maria Gaden, Chief Project Manager, **Sustainable Hospitals**

“The Living Lab tool has proven itself an effective concept and approach, when searching for solutions outside the national markets. Cooperations with more than one solution provider is in the pipeline”

Sweden 2