Toolbox of Innovation Support Measures 2.0
Northern Connections 2016-2020
Living Lab Tools
# Table of content

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>How to use the Toolbox</td>
<td>1</td>
</tr>
<tr>
<td>Living Lab Tools</td>
<td>3</td>
</tr>
<tr>
<td><strong>Living Labs - Defining of the concept</strong></td>
<td>11</td>
</tr>
<tr>
<td>Living Lab - Syd Energi (DK)</td>
<td>14</td>
</tr>
<tr>
<td>Tools used for the Living Lab</td>
<td>15</td>
</tr>
<tr>
<td>Living Lab - HOPPET (S)</td>
<td>18</td>
</tr>
<tr>
<td>Tools used for the Living Lab</td>
<td>19</td>
</tr>
</tbody>
</table>
How to use the Toolbox

This Toolbox is a product of concrete experiences from the Northern Connections project. A collection of practical tools used to create successful events aimed at unlocking the potential for transregional – and national collaborations.

The catalogue is aimed at experienced matchmakers as well as someone planning their first matchmaking event, initiating and facilitating innovative collaborations among SMEs and the public sector through the Living Lab Event concept developed in the Northern Connections. In the first part of the catalogue the individual tools are described, followed by a description of on how these were utilized through the coordination process; before, during and after the two Living Lab Events held in Esbjerg (DK) and Gothenburg (SE). The descriptions focus on the thematic challenges defined by the Living Lab owners, in collaboration with local cluster representatives from the Northern Connections partnership.

The catalogue has been developed with inspiration from, and in collaboration, with Cluster Excellence Denmark. If you are interested in learning more about a method or tool, we invite you to contact the partnership behind the Northern Connections Interreg project.

We hope you enjoy!

On behalf of the Northern Connections partnership,

Carina Nowak, Business Region Gothenburg
Leon Aahave Uhd, CLEAN – The Danish Cleantech Cluster
Living Lab Tools

1. Tool: Innovator matchmaking workshop

A method for matchmaking where 6-12 innovators are in the same room for 30-60 minutes depending on the number of participants (8-10 minutes per participant). The goal of the session is to create a setting for matching innovators based on their needs in relation to potential collaborators. The group is put together based on their product range where there is an obvious thematic overlap.

The innovators are asked to pitch their project, what they offer, what type of collaboration or challenge they are facing and what sort of collaboration they are looking for. The format needs to be facilitated extremely strictly. When the innovator has described their needs and offer, the other innovators can ask a maximum of 2 questions and in the end the others are asked to show a number (handed out when the session starts) where they indicate their interest in further talks during the networking session.

The facilitator notes potential interest on a whiteboard, where it is easy for the participants to see who is interested in their solutions or partnership opportunities. The follow up by the facilitator is two fold:

1) Ask the innovators to actively look for each other after the workshop and continue their dialogue
2) Contact the innovators after the workshop with the contact information of the the other innovators, that showed interest.
2. Tool: One-to-one meeting with challenge owner

One-to-one meetings serve as a possibility for the challenge owner and the innovator to enter a more in-depth dialogue about the possibilities to find a collaboration - e.g. joint research or demo projects. This tool based on the learnings from The SCALE-UP project funded by the Inter-reg North Sea Region, who has successfully been using the concept for the last 4 years. The Meet the Buyer events bring large customers with cleantech innovation needs together with SMEs with innovative cleantech products, services and solutions. In the Northern Connections we have decided to apply this approach to the public and public-private sectors instead.

The duration of the meeting should be a minimum of 20 minutes in order for the Innovator to give an in depth presentation of their technology. It is possible to have more than one challenge owner per event and it is recommended to not have more than 15 meetings per challenge responsible due to fatigue.

3. Tool: Reverse pitching

Instead of letting start-ups/SMEs pitch for potential large corporations it is performed the other way around. Large corporations are invited on stage to present, in a short pitch format, the value and offerings that they present for start-ups/SMEs to address the customer base of large corporations needs and challenges.

This can be applied to the public and public-private sector as well, where a city can pitch their offer of collaboration based on challenges identified for new projects. It can be combined with matchmaking sessions and prize award where start-ups/SMEs vote for best pitch/offering.
4. Tool: *Seminars by research institutions*

During the Living Lab Event you can use the knowledge of researchers and teachers from the research institutions in your network in order to pave the road for collaboration and discussion. Use a very charismatic and opinionated researcher who is an expert in his/her field and make sure to underline the opportunities for collaborations. It is essential that the seminar is followed by a setting that gives the participants the possibility to reflect and discuss the ideas and research, presented (e.g. networking session, break or lunch).

5. Tool: *b2match organiser tool*

The b2match is a platform designed to connect people at events with efficient and goal-oriented networking. With the b2match tool you can set up a dedicated page for your matchmaking event quick and easy. With b2match companies arrange their own one-to-one business meetings based on their profiles containing offers and requests relating to business, technology and research.
6. Tool: *Webinar and video presentations*

Closing the gap, when working across border and over far distances, in a project like Northern Connections, is key. Webinars and video presentations has made it possible to improve on the interpersonal relations between the partners in the project. As such introductory videos of challenges and Political Tools, as well as video interviews and promotion videos from our Living Lab events, have made it easier to relate to the output of the project, while - at the same time - improving on the speed of trust between project members and organisations.

7. Tool: *Booklet*

A booklet showing all the information about the participants of the Living Lab Event makes it easy for the participants to find information about participating innovators, presenting solutions to the challenge owner. Additional information from meetings between the different stakeholders can easily be added as a reminder for future potential business dialogues. Furthermore, the booklet should also be found on the event organisers homepage following the event.
8. Tool: *Podio platform for Living Labs process*

By using a collaboration space like the project management and social collaboration tool, Podio (by Citrix) for handling the challenge owners and potential Innovators, the process of matching innovators to challenges, is made simple, and easy. The Innovators are asked to fill out a comprehensive application form for the specific challenges, where they indicate their competencies and product ranges and/or services. This information, which is sent by the applying innovator, makes it easier for the challenge owner, in collaboration with the cluster representatives, to screen for potential matches. The partnership has made their own based on the Podio platform - led by CLEAN.

9. Tool: *Pitching*

In the following context of this toolbox, pitching means presenting an idea which needs further development. The participants are then invited to share ideas, give suggestions and ask questions. Pitching works well as a part of an open event, or as a part of an event with a specific theme, where entrepreneurs and established companies pitch their ideas in front of an expert panel and the other participants.
10. Tool: *Challenge driven innovation*

Demand Driven Innovation denotes finding a suitable match for an innovation network target group with big public investments. Thus, the method consists of a thorough analysis of interested parties, a one-day event and follow-up projects.

First, the project must have the right preparation. Begin six months beforehand by carrying out a screening and analysis of public bodies and funds. Then, carry out a target-oriented screening and contact the public players directly to identify needs and give information about the role of the network. To finish off the preparation, complete a program and the invitations, based on the above mentioned analysis.

Second, the implementation part begins with arranging a one-day event with various talks, international video presentations, workshops and sector-related case studies. Followed by selecting and grouping the participants beforehand, and making sure to manage the day carefully. Furthermore, be sure to have a team of helpers to facilitate the day. Then, the tasks are defined by the innovation network and they can help manage the creativity of the workshops. Third, hand out a contact sheet that allows the participants to indicate their interest in participating in later development, including possible projects.

Lastly, the post implementation should consist of a follow up on declarations of interest and contact those waiting to participate in activities and projects. The way ahead requires involving the network secretariat and partner organizations to ensure that the ideas are converted into actual projects.
11. Tool: *Business matching platform*

A digital business matching site is a powerful tool for ensuring that your challenge owners and innovators can be matched in an effective and co-creative way. Platforms, where the participating actors can have a profile, and define what they are offering or looking for. In the case of Living Lab events it is a great tool for matchmaking between the participating innovators. By having calendar functionality and enabling the companies to actively screen the participant lists for potential collaborators, thereby releasing resources for the organisers to focus on other things.

12. Tool: *Exclusive network meetings*  

Closed, exclusive network meetings for a chosen group of decision-makers from the business life and institutions of knowledge, which gives the participants the opportunity to meet under professional, but also informal circumstances. As an example, it could be an event in the evening with a joint dinner followed by a presentation from a keynote speaker.
13. Tool: *Innovation cup with students*

The method is a concentrated innovation process in which companies and knowledge institutions are matched, based on the companies’ need for new knowledge or product portfolio. For instance the company draws up a theme which is related to its product strategy. The students are then divided into teams which have to solve the given task through an intensive innovation process. The project is held at the educational institution in question.
Living Labs

A Living Lab is a research concept. A Living Lab is a user-centred, open innovation ecosystem, operating in a territorial context, integrating concurrent research and innovation processes within a public-private-people partnership.

The concept is based on a systematic user co-creation approach integrating research and innovation processes. These are integrated through the co-creation, exploration, experimentation and evaluation of innovative ideas, scenarios, concepts and related technological artefacts in real life use cases. Such use cases involve user communities, not only as observed subjects but also as a source of creation. This approach allows all involved stakeholders to concurrently consider both the global performance of a product or service and its potential adoption by users.
**How does it work?**
The Living Lab process, which integrates both user-centred research and open innovation, is based on a maturity spiral concurrently involving a multidisciplinary team in the following four main activities:

**Co-creation:** Bring together technology push and application pull (i.e. crowd-sourcing, crowd casting) into a diversity of views, constraints and knowledge sharing that sustains the ideation of new scenarios, concepts and related artefacts.

**Exploration:** Engage all stakeholders, especially user communities, at the earlier stage of the co-creation process for discovering emerging scenarios, usages and behaviours through live scenarios in real or virtual environments.

**Experimentation:** Implement the proper level of technological artefacts to experience live scenarios with a large number of users, while collecting data which will be analysed in their context during the evaluation activity.

**Organised Living Labs:**
- 07/11 2018: Living Lab Event - Syd Energi (DK)
- 29/11 2018: Living Lab Event - Økern Sentrum (N) - To be added
- 08/05 2019: Living Lab Event - HOPPET (S)
Syd Energi is one of Denmark’s largest modern energy and telecommunications companies. With high environmental ambitions and engagement in innovation, the SE company focus on long-term and societal challenges. The aim of the internal initiatives is to create more diversity and strengthen the company’s sustainability. The strategic external initiatives aim at creating more diversity by focusing on disruptive business models and creating societal impact by collaborating and supporting innovative entrepreneurship.

In order to identify new partnerships, Syd Energi is in the search for new ideas, technologies or methodologies. SE is looking for partnerships that can help the SE company reach the strategic goals; to create more sustainable energy and better digital communication. The SE company is looking for solutions within the field of smart home, sensor technology or more green behaviour.

**Challenge description**

**Smart home**
- Optimising home activities
- Infrastructure monitoring
- Early warning systems
- Infrastructure level solutions
- Usage data and smart home, environment data

**Sensor technology**
- Solutions and sensors for households
- Optimization of the electric grid
- Hardware designed for the living room
- Intelligence across units
- Simple self-learning system

**More green behaviour**
- Nudging consumers
- Empowering consumers
- Making green behaviour
- Greener business models

We were looking to get an outside-in perspective on our business and for new partnerships. We were simply thrilled that so many innovative companies wanted to attend, and the outcome of the event exceeded our expectations.

- Lisbeth Valther, CEO SE Next Step Challenge

**Selected innovators**

- [NEOGRID TECHNOLOGIES](#)
- [UNS](#)
- [KMD](#)
- [FISCHER LIGHTING](#)
- [ReMoni](#)
- [arbncO](#)
- [CarbonCash](#)
- [dlaboratory](#)
**Tool used for**

**Living Lab – Syd Energi (DK)**

**Tool: Podio Platform for Living Lab process**
The Podio platform (Project Management and Collaboration Software) was a central tool in the coordination and planning process, giving the project managers responsible the chance to share documents, produce webforms for registration of applicants and selecting innovators. The processes - and so called 'apps' - has since been used, updated and tweaked, by coordinators of the following Living Lab Events.

**Tool: Webinar and video presentations**
In order to give the communication a more personal character, and draw the potential applicants closer to the Living Lab representative, we took the presentation of the challenges of the Living Lab further than only text. Lisbeth Valther, CEO of SE Next Step & Blue Labs presented the three challenge areas: More Green Behavior, Sensor Technology and Smart Home. Links for the aforementioned challenges was then implemented into the digital version of the invitational material.

**Tool: Reverse pitching**
A central part of the setup of the Danish Living Lab, was the efforts made in order to present an agenda with an obvious value add for innovators, hereby giving potential applicants a clear sentiment for participation. As such, Reverse pitching was an important tool, used when presenting secondary project opportunities, related to the Innovators technological knowledge areas during the event. Additionally, the session was followed by a networking session, giving people a chance to reflect on the presentation given.
Tool: Seminars by research institutions
Cutting edge research and provocative ideas can fuel inspiring conversation. This was the idea behind inviting Steffen Petersen, Associate Professor at Aarhus University to present his take on “Smart Homes of the future - Barriers and possibilities”. It is, however, essential that the invited researcher knows both context (agenda) as well as the technology of the selected applicants participating at the Living Lab, as this provides him with an opportunity to touch upon burning questions, and areas easily relatable for the innovator.

Tool: One-to-one meeting with challenge owner
While simple, by concept, the idea behind adding value to the event, by letting innovators present their selected technology to the challenge owner, in a closed setting, gave both parties the chance to move closer to each others, than when using pitches in a larger setting. In this case we gave every selected innovator 25 minutes to pitch their technology and build on the presented material, introduced in their application form. As the Danish Living Lab owner had already analyzed the basic aspects of their innovative tech or service, the meeting made it possible to make an important leap in relation to trust and the professional relationship between innovator and challenge owner. The meetings were facilitated as a parallel track, alongside the plenary session.
Challenge description

Gothenburg, the second largest city in Sweden, is undertaking its greatest development in modern history and will grow by nearly a third by 2035. The City of Gothenburg plans to invest €600 million a year in new schools and housing projects, all of which must meet strict sustainability criteria. The Hoppet preschool is a pilot project for these future developments and will 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 is seeking solutions and products that are, or have the potential to become, fossil-free through the whole construction process and the operation of the building. Recycled and re-used products are also of interest. Selected suppliers may have the opportunity to see their solutions implemented as soon as this year. The goal is to start the construction phase in 2019 and complete the project by December 2021.

Fossil-free and climate-neutral building materials for
- Electrical installations
- Heating, ventilation and air conditioning products
- Sealants and waterproofing
- Foundation
- Insulation
- Wall constructions
- Paints and adhesives

Construction phase
- Transport
- Work vehicles
- Dehumidifiers
- Energy consumption
- Temporary facilities

It was very worthwhile, and we are simply beyond happy! The event has been vital in connecting us with suppliers who can help us transition to fossil-free construction. We are interested in pursuing further discussions with all of the suppliers we met during the day.
- Anders Hall, Project Manager HOPPET
**Tool used for**

**Living Lab – HOPPET (S)**

**Tool: Podio Platform for Living Lab Process**
The Podio platform (Project Management and Collaboration Software) was a central tool in the coordination and planning process, giving the project managers responsible the chance to share documents, produce webforms for registration of applicants and selecting Innovators.

**Tool: Webinar and video presentations**
In order to give the communication a more personal character, draw the potential applicants closer to the Living Lab representative and make the challenges easier to understand for the applicants, we took the presentation of the challenges of the Living Lab further than only text. Anders Hall, project leader for the preschool Hoppet presented the challenges in a short film which was enclosed in the invitation.

**Tool: Business matching tool**
When going into the screening process to find companies matching the communicated challenges the tool EEN Match was one of the tools used. Unfortunately, the matches we got were not exactly in line with the challenge owner's needs.

**Tool: Booklet**
The booklet was an item produced for the participants at the Living Lab, containing a short presentation of the selected participating innovators with contact information, making it easy to remember their specific products and an opportunity of contacting them. Information about Northern Connections and contact details to project members responsible for Living Labs were also included.
Living Lab – HOPPET (S)

**Tool: Exclusive network meetings**
As a preparation for the Living Lab and a possibility for the Living Lab owner to meet with the innovators and Northern Connection partners on a more informal basis a dinner was arranged the evening before the Living Lab.

**Tool: Pitching**
Pitching is a very attractive tool for companies reaching out with their products to an audience, independent of size. By delivering clear guidelines and objectives to the solution suppliers beforehand the pitching had a consistent format.

**Tool: Reverse pitching**
A main goal was to give the innovators a view of the large market potential. Therefore, representatives for larger real estate projects were invited to conduct reversed pitches, herby providing additional business opportunities for the selected innovators.

**Tool: One-to-one meetings**
For the solution suppliers to get a fair chance to, more in-depth, present their solutions, one-to-one meetings with the challenge owner were conducted parallel to the plenary sesson. The meetings lasted approximately 20-30 minutes which was sufficient time for both parties to receive relevant information.
Northern Connections

We are a partnership of 21 clusters, cities, regions and knowledge institutions, and we work together to create innovation connections between our enterprises and clusters in the energy sector.

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. 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. Our approach is to provide a bridge between private and public sector on transnational innovation support.

Read more on our webpage: www.northsearegion.eu/northern-connections/living-labs

Follow us on Twitter: @NorthseaConnect