

WP 5.3 Lighthouse of Competences

STAKEHOLDERANALYSIS

CLEAN | NEPTUN

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Introduction

Developing a framework and establishing a Lighthouse of Competence is part of the Interreg 5A NEPTUN project. The overall aim is to create an opportunity for Danish SMEs to develop and present their water and climate adaptation technology and solutions to challenge owners to stimulate business opportunities and support the green transition.

The NEPTUN project is directed at small and medium-sized companies that want to develop – or already have – ideas for greener, more efficient, digital, and resource-saving technological solutions to solve water-related or climate adaptation challenges.

The Lighthouse of Competences is physically established at the site of the project partner Green Tech Center in Vejle, Southern Denmark where the Green Tech Center offers the participating companies: exhibition sites, business development support and marketing opportunities.

The Lighthouse of Competences developed in the NEPTUN project will consist of a physical version in Southern Denmark and a digital version. The purpose of the digital version is to support the cross-border cooperation between SMEs in Schleswig-Holstein, Germany, and SMEs in the region of Southern-DK and Zealand, Denmark within water technology and climate adaptation solutions. This report only describes the interest in establishing a physical Lighthouse of Competences in Southern Denmark via a stakeholder analysis.

The purpose of the stakeholder analysis is to investigate and substantiate the relevance of establishing such a Lighthouse of Competences.

A stakeholder analysis that supports the outline of a digital lighthouse of competences based on Germany stakeholder and SME interest is described in a separate report.

Summary in Danish

Formålet med stakeholderanalysen var at undersøge og underbygge relevansen af at etablere et fysisk Lighthouse of Competence (LoC) hos Green Tech Center i Vejle. Stakeholderanalysen for en digital version af LoC i Tyskland er udarbejdet i en separat rapport. Det overordnede mål med at udvikle et LoC i Danmark og Tyskland, er at promovere innovative virksomheder overfor udfordringshaverne. For at undersøge stakeholderne interesse i at et LoC etableres har vi interviewet vand- og klimatilpasnings aktører og SMV'er i netværket. Ud fra stakeholderne interesser har vi tilpasset LoC konceptet, så det så vidt muligt imødekommer alles interesse. Konklusionen af stakeholderanalysen viste, at der er stor interesse i etablering af et fysisk LoC, for at fremme og øge opmærksomheden af miljøteknologiske løsninger og klimatilpasning indenfor vand relaterede udfordringer. Derudover kan det konkluderes at de danske stakeholdere også har

interesse i at deltage i en digital version af LoC i Tyskland, da det kan medvirke til flere dansk-tyske samarbejder indenfor vandteknologi og klimatilpasningssektoren.

Summary in German

Ziel der Stakeholder Analyse war, die Relevanz der Einrichtung eines physischen Lighthouse of Competence (LoC) im Green Tech Center in Vejle zu untersuchen. Die Stakeholder Analyse für eine digitale Version des LoC in Deutschland wird in einem separaten Rapport erstellt. Das übergeordnete Ziel der Entwicklung eines LoC in Dänemark und Deutschland besteht darin, innovative Unternehmen gegenüber den Herausforderern zu fördern. Um das Interesse der Stakeholder an der Einrichtung eines LoC zu untersuchen, haben wir Wasser- und Klimaanpassungsakteure und KMU im Netzwerk befragt. Basierend auf den Interessen der Stakeholder haben wir das LoC-Konzept so angepasst, dass es den Interessen aller gerecht wird. Der Abschluss der Stakeholder Analyse zeigte, dass großes Interesse an der Etablierung eines physischen LoC besteht, um das Bewusstsein für umwelttechnische Lösungen und Klimaanpassung innerhalb wasserbezogener Herausforderungen zu fördern und zu steigern. Darüber hinaus kann geschlussfolgert werden, dass die dänischen Interessengruppen auch an einer Teilnahme an einer digitalen Version des LoC in Deutschland interessiert sind, da dies zu mehr dänisch-deutschen Kooperationen in der Wassertechnologie und im Bereich der Klimaanpassung beitragen kann.

Purpose of the Stakeholder Analysis and Methodology

The purpose of the stakeholder analysis is two-fold. One is to learn about the general interest among water and climate adaptation actors in the network of the Green Tech Center for the establishment of a Lighthouse of Competences. The other is to identify relevant SMEs to be invited to be part of the Lighthouse of Competences.

The stakeholder analysis is based on a screening of potential water and climate adaptation stakeholders and SMEs, and a prioritization and interviewing of the most relevant stakeholders.

As the ultimate goal of developing and establishing a Lighthouse of Competences is to connect innovative companies and challenge owners, a stakeholder analysis fits this goal very well.

When using the stakeholder analysis, including interviews, we can find out whether it is relevant to create a physical Lighthouse of Competences at Green Tech Center in Vejle. The interviews can support and improve an understanding of what is a relevant design of a Lighthouse of Competences.

To achieve the goals in the Neptun application, certain conditions must be met for the SMEs to be able to participate, i.e., the main focus of the business activities must be related to water and/or climate adaptation activities and the company must be located within the Interreg program area.

It is important to bear in mind that a stakeholder analysis is never a finished product. Often, the distribution of roles or responsibilities of the stakeholders are changing, which means that they can change their position in the stakeholder diagram. It is also possible that new stakeholders need to be added at a later stage in the analysis.

As the goal of developing and establishing a Lighthouse of Competences is to connect innovative companies and challenge owners, a stakeholder analysis fits this goal very well.

Background

Before we started preparing the stakeholder analysis, it was important to define the concept of a Neptun Lighthouse of Competences. The concept is described in the brochure in appendix 2, which describes the activities offered to the companies that enroll in the physical Lighthouse of competences. The Lighthouse of Competences can offer and will consist of the following:

Conferences and exhibition

- Exhibition in Green Tech Park in a new special outdoor exhibition about water and climate adaptation as well as green energy solutions. The park and thus the exhibition has around 10,000 visitors annually and is 16,000 m², so there is a lot of exposure for your company
- Participate in the GTC Innovation Festival in August 2022 together with CLEAN - and get the opportunity to get a stand and possibly also a pitch.
- In the Green Tech House and Resilience House you can exhibit physical products

Business development

- Get competent feedback on business development from Green Tech Center's skilled business developers.
- It is possible to rent a flex space and run and develop your start-up business in a professional setting in the Green Start Up Resilience House – an attractive and unique professional entrepreneurial environment in the Green Tech Center's ecosystem

Marketing

- We can offer media exposure in the form of articles/news on the Green Tech Center's website and posts via SoMe profiles as well as via CLEAN's newsletter, LinkedIn, the NEPTUN website, etc.

At the innovation festival in August 2022, the festival visitors are invited to a guided tour to the permanent exhibition area at GTC, where the company's water and climate adaptation solutions are presented on mock-ups and the company are physically present to present their solutions. At the festival site several of the

companies also demonstrate their solutions at an exhibition area. A site visit to this area is part of the guided tour.

Method

The aim of this stakeholder analysis is to find out how we are reaching the target group of a Lighthouse of Competence, by understanding the interests in it. Before creating this stakeholder analysis, we wanted to find out how we are recruiting stakeholders, who the regular visitor is and how we can upscale the concept by making use of for example LinkedIn.

Procedure:

1. **Identify the stakeholders.**
2. **Prepare a stakeholder diagram.**
 - a. Description of stakeholders
 - b. Rank the stakeholders in order of importance
3. **Interview guide: Entrepreneurs and SMEs (Quantity: 8) and municipalities and utilities (Quantity: 2).**
4. **Evaluate the concept of the Lighthouse of Competences**

Stakeholder Analysis

1. Identify the stakeholders

The target group for the Lighthouse of Competences is entrepreneurs, SMEs, national and international visitors, representatives from universities, Business Hubs, utilities and municipalities

List of identified stakeholders

Supplying companies (Utilities)

- Din forsyning (Esbjerg og Varde)
- Arwos (Aabenraa)

Wastewater treatment plant

- Blue Kolding
- Sønderborg Spildevand
- Vejle Spildevand
- Eventually Fredericia Spildevand

Municipalities

- Vejle Kommune
- Sønderborg Kommune
- Esbjerg Kommune

Knowledge institution partners

- SDU
- VIA University College, Horsens

- KU
- AAU, Esbjerg
- DTU
- Teknological Institute, Høje Taastrup

Entrepreneurs and SMEs

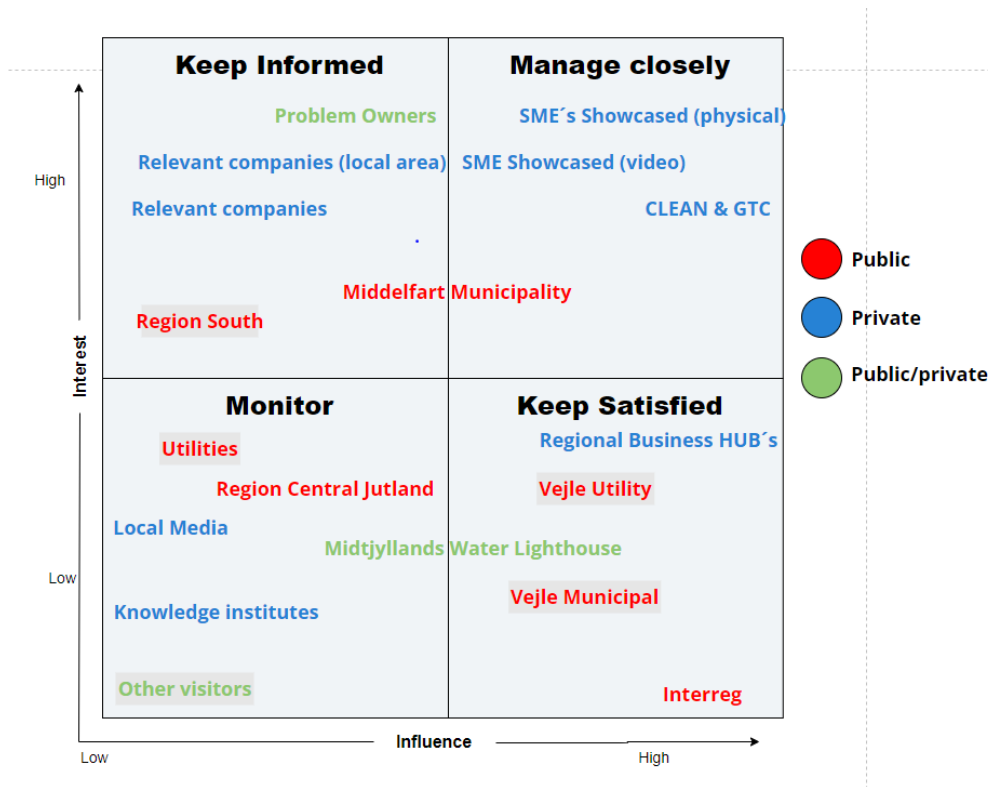
- NATOUR
- Klimalancen
- FlowLoop
- EcoIsland
- Kemic Vandrens
- Aguardio
- Nørgaard Anlæg

Other stakeholders

- Regional Business HUB’s – ‘Erhvervshus Sydjylland’
- Water Vally Denmark (small budget, small role)
- Klimatoriet (important – show center)
- Århus Vand – Showcenter for fyrtårnprojekt (Important! Water technology and purification of water)
- DANVA – Organisation representing Danish water compagnies broadly

2. Stakeholder analysis

Stakeholder diagram



Stakeholder analysis based on stakeholder diagram

<p>Actor very affected and therefore necessary</p> <p>High Interest</p>	<p>Those who will be exposed: The consumers of SME technologies/participants at the exhibition/innovation festival in August.</p> <p><u>Keep informed</u></p> <ul style="list-style-type: none"> • The Region of Southern Denmark • Middelfart municipality • Value chain SMEs (near contact/nearby area) • CLEAN, NEPTUN, Innovation collaboration companies. • Challenge owners in Denmark/Germany (public/private) • Danish companies (special focus on local companies/also German companies could be relevant) 	<p>“Resource persons”</p> <p><u>Manage closely</u></p> <ul style="list-style-type: none"> • GTC • CLEAN • SMEs (Showcased at GTCs headquarter) (physical and video) • Middelfart municipality
<p>Actor slightly affected and therefore not essential but may nevertheless be unavoidable to have to consider.</p> <p>Low Interest</p>	<p><u>"External" (Monitor)</u></p> <ul style="list-style-type: none"> • The region of Central Jutland • Water Valley Denmark • Utility companies • Local media • Knowledge Institutions (VIA, SDU) • Students, visitors • Entrepreneurs, visitors 	<p><u>"Gray Eminences" (Neighboring stakeholders – outreach) ??</u></p> <ul style="list-style-type: none"> • Vejle Municipality and utilities • Klimatorium – DKs International Climate Center • Regional Business Hubs, Vojens • Interreg
	<p>Low Influence</p>	<p>High Influence</p>

a. Description of the stakeholders – The four segments

Keep informed:

This part of the diagram presents the relevant stakeholders that could potentially make value for the SMEs enrolled in the LoC by contributing to create new business opportunities to the SMEs. The stakeholder group is identified in close relation to the enrolled SMEs.

The stakeholder group is a match-making group to the SMEs and is also of high importance for the upscaling of new and innovative technologies and solutions. Furthermore, the stakeholder group could also be relevant to GTC and CLEAN, i.e. importance as a networking group.

The Region of Southern Denmark

The region participates with advice and competent feedback in the DK2020 project regarding the municipalities' preparation of climate plans so that the plans meet international best practice in climate planning.

The overlap between Interreg and region south Denmark's geographical coverage makes this stakeholder relevant as well as the geographical location of GTC.

Middelfart municipality

Middelfart municipality is part of the Neptun project and is regarded as a local actor to GTCs activities. As such it is a very relevant stakeholder for the LoC.

SMEs

The list of companies to consider for an interview is selected from the following criteria:

- Differentiate between the type of company regarding size and geographical location (special focus on local companies/also German companies could be relevant)
- The companies are relevant in every part of the value chain of the companies being enrolled in the LoC.

The listed SMEs are SMEs already being part of the Neptun project and could potentially be relevant as value chain SMEs:

1. Aquasense ApS
2. Wasys A/S
3. Aquagreeen ApS
4. Hydro & meteo GmbH
5. Mattle ApS
6. Grønbech & Sønner A/S
7. HGSim-HydroGeoSimulation GmbH
8. Kalb ApS
9. LNH Water A/S
10. Kratan Ravn Consult
11. Benjamin Refsgaard Consult
12. Vescon Aqua
13. VARYC

- **Challenge Owners in Denmark/Germany (public/private) - Characterization:** The challenge owners can be private or public.
- Challenge owners within the area of water and/or climate adaptation solution that the enrolled SMEs potentially have an innovative and/or green solution that fits the challenge.

Manage closely:

In this part of the Stakeholder diagram, the stakeholders that influence and define the concept of a Lighthouse of Competences in Denmark must be determined. The stakeholders have different interests in a Lighthouse of Competence, and we strive fulfill their interests as good as possible.

SMEs can contribute to Lighthouse of Competences by exhibiting their solutions. The Lighthouse of Competences creates opportunities by generating networking and activity in the region.

GTC (Green Tech Center, Vejle)

- Facilitates and houses the SME displays and also project partners that co-define the framework of the concept.
- GTC might have other concepts that could benefit the Lighthouse of Competences.
- GTC also arranges the 'Klimafolkemøde' (Climate festival) and the displays and SMEs, in general, should be included in this event.

CLEAN

- Facilitates and as project partner co-defining the framework of the concept.
- Organization values and networks will be included in the concept. CLEAN is also a part of the lighthouse of water technology in Central Jutland, experiences from that project might impact this concept or vice versa.

SMEs (Showcased at GTCs headquarter) (physical exhibition and video)

- The invited SMEs who have a physical or video display.
- It will be an advantage that the SMEs are from the local area (physical display) since there is a higher chance that the visitors are within a short distance of the Green Tech Center.
- Variation in types of innovative SMEs, that covers different areas of water tech. This could potentially create synergies between the SMEs and networking with different kinds of challenge owners, potential partners, & knowledge institutes.

Middelfart municipality

Middelfart municipality is part of the Neptun project and is regarded as a local actor to GTCs activities. As such it is a very relevant stakeholder for the LoC.

Monitor:

The monitor group is the minimum effort group, the stakeholders in this group are more "nice to have" than "need to have". These stakeholders should have the opportunity to participate in theLoC?, but there should not be used an extensive effort to include them. However, later in the process, one might reconsider the position of these stakeholders, as their roles can easily shift.

The region of southern Denmark and Central Jutland

- Political interests in attracting business activities to the region
- Public goals (the concept might contribute to reaching regional goals)
- Generate networking and activity in the region that potentially could influence other activities (making opportunities)
- The stakeholder does not have a direct impact on the project
- The stakeholder interest is to be informed about the events in the region
- May contribute to the marketing of the Lighthouse of Competence

Water Vally Denmark (VWD)

- As a partner in the Danish Lighthouse for Water Technology – make them a strong networking partner
- Might get a role in the GTC - Lighthouse of Competences due to their position on the water technology market, i.e. a role at the innovation festival (e.g. panel discussion, giving a presentation)

Utility companies

- As challenge owners, they have an interest in learning about the new and innovative water technology and climate adaptation solutions.

Local Media

- Media coverage that will help get more visitors
- Can potentially create network, funding, and contact to NGOs or other relevant stakeholders

Knowledge institutions

- VIA Horsens
- SDU Esbjerg + Odense
- Danfoss Universe
- The aim is to create innovation between SMEs and knowledge partners. Maybe these stakeholders will have a higher priority in the long run.

Students, visitors

Entrepreneurs, visitors

Keep satisfied:

Inform these stakeholders and talk to them to ensure that no major issues are arising. This group can be essential for defining the concept and might be relevant to the interview. This group is not interested in the details of the concept but wants to be informed and might contribute with ideas and priorities that could benefit the concept. As an example, InterReg is funding the project but is not interested in the details.

Vejle Municipality and utility

- GTC is a privately owned firm but has a very close collaboration with Vejle Kommune. Vejle Kommune is very interested in GTC being successful because it shows that they are a municipality with green entrepreneurship, but Vejle Kommune does not have an active role compared to GTC.
- If Vejle municipality is to have a larger interface/more networking with the Danish Lighthouse of Competences, this must be discussed with GTC, as it is currently not part of the agreement in NEPTUN projects.

Klimatorium

- Maybe include Klimatorium on the 'potential interview stakeholders' list.

Regional Business Hub - Erhvervshus Syd, Vojens

- Visitors

Interreg

- Is the financial contributor
- Is not going to have an important role in the decision-making process

b. A gross list and a ranking of stakeholders in order of importance

The most relevant stakeholders for interview are marked in bold type. The ranking is made by discussion in the project group of the most importance relative to geographical location, knowledge of the stakeholder activities and previous contact to the organizations.

A final list of stakeholders for interview is to be reduced to 10-12 stakeholder interview.

Supplying companies (Utilities)

- **Din forsyning (Esbjerg og Varde)**
- **Arwos (Aabenraa)**

Wastewater treatment plant

- Blue Kolding
- **Sønderborg Spildevand**
- Vejle Spildevand
- Eventuelt Fredericia Spildevand

Municipalities

- **Vejle Kommune**
- **Sønderborg Kommune**
- Esbjerg Kommune

Knowledge institution

- SDU
- **VIA University College, Horsens**
- KU
- AAU, Esbjerg
- DTU
- Teknologisk Institut i Høje Taastrup

Entrepreneurs and SMEs

- **NATOUR**
- **Klimalancen**
- **FlowLoop**
- **EcoIsland**
- **Kemic Vandrens**
- **Aguardio**
- Nørgaard Anlæg

Other stakeholders

- **Regional Business HUB's – 'Erhvervshus Sydjylland'**
- Water Vally Denmark (small budget, small role)
- Klimatoriet
- **Århus Vand**
- **DANVA**

The final list of stakeholders for interview

The final list is prepared as to host 12 stakeholders for qualitative interviews, i.e.:

SMEs

- NATOUR
- Klimalancen
- Eco Island
- Flow Loop

- Kemic Vand

Business Hub

- Erhvervshus Sydjylland

University

- VIA University

Municipalities

- Kolding Kommune
- Odense Kommune
- Sønderborg Kommune

Utilities

- Arwos
- Sønderborg Forsyning

3. Interview guide

All the interview guides are attached in appendix 1. The purpose of the interview was to find out whether there is interest in participating in a physically and/or digital Lighthouse of Competences. In the following section, you can read more about which questions the interview contains.

Presentation of the interview guide

All the interview guides vary depending on the respondent to address the individual stakeholder as specifically as possible. The interview guide is divided into the physical and the online part.

The interview guide consists of four overall questions. The first question consists of an introduction to Lighthouse of Competences, as well as which sub-elements are most relevant for the individual stakeholder and why they are most interesting. The second overall question concerns the professional environment and the geographical location, and whether it will make sense for the individual stakeholder to participate in such an environment. The third question concerns whether the individual stakeholder might be interested in participating in the Lighthouse of Competences. The last part of the interview guide consists of questions about the digital platform and how it must be created so that it makes sense for the stakeholder.

4. Evaluate the concept of the Lighthouse of Competences

Results about the physical part of LoC

Results: SMEs

We have interviewed 5 SMEs in total, which are Klimalancen, EcoIsland, FlowLoop, Kemic Vandrens, and NATOUR. Kemic Vandrens and NATOUR will only participate in the digital Lighthouse of Competences.

Four companies want to participate in the physical Lighthouse of competences in Vejle and the innovation festival in august, which is Aquardio, Klimalancen, EcoIsland, and FlowLoop.

It can be concluded that when you ask the companies, what they think is the most interesting part of the LoC, it is an exhibition (via mock-ups) and marketing. Well-established SMEs have no interest in business development, but start-ups think it is relevant to their company. There is a general interest in participating in the innovation festival. When it comes to suggestion for improvements relating to the LoC, the SMEs think it would be relevant to combine exhibition with video's. In addition, they think it is important to invite the citizens for the LoC to become successful. It is important that the LoC creates a dialogue with German utilities and municipalities. Furthermore, it is highly important that the LoC creates contact to other companies, that also work with water technology, which can lead to future collaborations. Demonstration facilities are interesting for those SMEs who can bring a physical product. According to the geographical location of the LoC, it can be concluded that if the SMEs are interested in being a part of the LoC, the location is appropriate.

Results: University

VIA is interested in participating in the physical part of Lighthouse of Competences and the innovation festival in August.

VIA solves challenges internally but is already connected to the Green Tech Center and collaborates on other projects. The geographical location is good. VIA is most interested in the Lighthouse of Competences in Central Jutland. It is important to think about sustainability, including mobility and transport concerning the location of the LoC, it must be possible to take public transport. VIA university focuses on new solutions and technologies, in that they collaborate with other universities where there is synergy between research and education, but there is a lack according to the supply part, which LoC maybe can help to solve when universities, challenge owners, and companies meet up at GTC.

VIA believes that it could be interesting to have a workshop and experimentation facilities, within rainwater and wastewater. There is a lack of a living laboratory for students at both VIA and GTC.

Results: Business Hub

EHSyd participates in the innovation festival in august, including panel discussions. EHSyd is also interested in visiting the physical LoC in Vejle.

EHSyd is most interested in the possibility of visibility of the company's products and solutions, i.e., both exhibition and marketing. Customers often demand a total solution, so LoC is an opportunity to get help organizing a system solution with companies that work together. The geographical location of LoC is fine.

Results: Municipalities

We have interviewed 3 municipalities, Sønderborg Kommune, Odense Kommune and Kolding Kommune. Two of the municipalities are interested in participating in the physical LoC. All the municipalities are interested in participating in the innovation festival, including panel discussions, workshops, and events.

The municipalities are in contact with professional consultants to develop solutions. In general, municipalities and utilities prefer old-fashioned solutions, but are also appreciating new and innovative approaches. However, there is generally there is not much economic resources for innovation and new solutions. The municipalities did not know that the Green Tech Center exists. The geographical location, however, is good. The municipalities think that the professional environment is very good, as it provides synergy between energy and the water sector. It would make sense to connect it to a knowledge institution, for example, SDU.

It can be concluded that if the LoC is to inspire new solutions, it will require massive marketing, so that awareness of the LoC increases. Important that LoC is something you cannot find anywhere else.

Community and contacts are the alpha and omega for creating projects together.

It is important that there is a lot of information about economic resources, as this is what the municipalities focus on. There must be a collection of solutions that you can choose from, and the municipalities prefer to contact the companies themselves.

Results: Utilities

We have interviewed 2 utilities, Aabenraa Utility and Sønderborg Utility. Both utilities are interested in participating in the physical LoC and the innovation festival, but not in the panel discussions, workshops or events at the festival.

The utilities are in contact with advisors or other utilities when solving a challenge. They never heard about Green Tech Center, Vejle. The geographical location is good. The professional environment is good and the connection between water and energy is relevant. It would be appropriate to invite SDU or other universities. At present, both utilities have a desire for new solutions to be included in their future climate adaptation solutions, but they are only planning at the moment. The utilities focus on using established and traditional solutions. The Lighthouse of Competences could be an inspiration for new solutions It would be relevant with physical visitors and newsletters they can receive. An increased interaction between utilities and companies would be very good. Furthermore, the utilities stated that they prefer to contact the companies themselves.

Conclusion on the establishment of the physical LoC

Finally, it can be concluded that there is a great interest among the interviewed stakeholders to participate in the physical Lighthouse of Competences at Green Tech Center in Vejle, including the innovation festival. Exhibition of new water-related solutions (including videos) and marketing of LoC are important factors when planning and facilitating the LoC. Demonstration facilities are important for those companies that can present a physical product. The location of the Lighthouse of Competences is relevant for all stakeholders. For the university, it is important to connect students with companies, and new solutions. Furthermore, it can be stated that it would be good to collaborate with more universities, to provide matchmaking between all different kinds of stakeholders. The municipalities and utilities are not aware of that existence of Green Tech Center, which is important to consider. The municipalities and utilities are now focusing on established and traditional solutions, but they are in the progress of making more innovative decisions as they are trying to achieve climate adaptation solutions.

It is important that the LoC can lead to future collaborations between companies in Denmark as well as in Germany.

Although the physical Lighthouse of Competence has its own rights, it is through integration with a digital platform that the great potential for cooperation across border, dissemination and up-scaling of solutions are shown by the stakeholder analysis.

Conclusion on the integration of the physical and digital LoC

Results SMEs:

The SMEs state that they would use the platform actively, provided that other stakeholders use it actively as well. However, it is important to recognize that the effort to matchmake utilities and water-related SMEs by establishing a physical exhibition cannot stand alone. Supporting activities is also needed. The Innovation festival is e.g. such an attempt.

The planned version of an interactive platform is to target German as well as Danish water-related challenge owners and solutions providers. However, the platform is also planned to facilitate cross-border matchmaking and cooperations. As such the purpose of the digital platform is to develop a tool for accelerating cooperation across borders as well as accelerating the up-scaling of innovative solutions thereby contributing to the green transition in the water sector on both side of the Danish-German border.

The digital platform may be linked to a German trade association, 'Wasserversorgungsverband'. The SMEs think it gives substance, both some quantity and quality. The moment all the stakeholders from Germany and Denmark are collected on a platform it will be certainly interesting.

Results: University

VIA is interested in participating in the digital platform. VIA states that it is important that the platform is in English or Danish. It could be relevant for students to use the platform, but it must be user-friendly. Students could e.g., be inspired by the posted challenges to work on solutions or to improve posted solutions and improve the innovativeness of the solutions. VIA would like to help spread awareness of the platform. The digital platform has great potential, especially if engineering education programs are moving to Vejle.

Results: Business Hub

EHSyd is interested in participating in the digital platform. EHSyd has a strong focus on supporting Danish companies with exports, and therefore they are also interested in the digital platform which can help to learn more about what solutions are in demand. EHSyd is also interested in match-making opportunities with German challenge owners.

Results: Municipalities

The municipalities are interested in participating in the digital platform. It can be concluded that it is important that the language of the platform is Danish or at least English. It is of no importance to the municipalities that the digital platform will be linked to the German 'Wasserversorgungsverband'. It would be relevant for the municipalities to post their challenges on the platform, and a good opportunity to connect with Germany.

Results: Utilities

One of the utilities is interested in participating in the digital platform, and the other is not because they already have good contact to technology input from their cooperation with the Danish Water Association DANVA. The platform must be in Danish or English, not only German. They prefer to meet up physically, but the digital platform can give rise to contact to the companies. It is not important to the utilities that the digital platform will be linked to the German 'Wasserversorgungsverband', they already have DANVA in Denmark.

Main conclusion

The main conclusion is that there is a broad support for establishing a physical Lighthouse of competences to increase awareness of and promote environmental technology solutions to climate adaptation and water-related challenges.

Although, establishing the Lighthouse of Competences at Green Tech Center is not associated with marketing possibilities, as GTC is not generally known in the region. Among several of the key stakeholders, there is a clear recognition of the value of the LoC.

The promotion of the physical Lighthouse of Competences is strongly supported by the yearly innovation festival at GTC where the SME and their solutions are presented to a targeted audience including utilities and municipalities and other stakeholders.

In addition, it can be concluded that the Danish stakeholders are also interested in participating in a digital version of the LoC in Germany, as it can contribute to more Danish-German collaborations within water technology and the climate adaptation sector.

Appendix

Appendix 1: Interview guide is attached in its original form.

1.0 Interviewguide – SME's

Hvem interviewes?	Fx Kemic Vand
Spørgsmål fra interviewguide	5-10 linjers resumé og 1-2 citater for hvert spørgsmål
Spørgsmål 1:	
<p>Intro – skrevet som talepapir, hvis vi skal ringe direkte til virksomhederne uden nogen indledende kommunikation. Såfremt vi sender en mail/CLEAN har taget den indledende kontakt justeres dette:</p> <p>Vi er, som en del af et EU støttet Interreg projekt (NEPTUN), ved at undersøge interessen i et Syddansk Lighthouse of Competence inden for vandteknologi.</p> <p>Lighthouse of Competence for vandvirksomheder – det betyder basalt set at vi forsøger at lave et setup, hvor vi kan vise nogen af de mest innovative vandteknologier frem for problemejerne, fx forsyningsselskaber og kommuner, som så kan benytte disse nye teknologier når de skal løse deres problemer. Så det vi gerne vil, er at showcase det i kan i jeres virksomhed.</p> <p>Det gør vi igennem tre del-elementer:</p> <ol style="list-style-type: none">1. Konferencer og udstilling. Deltag i innovationsfestivalen (august 2022 beskriv nærmere) Og få mulighed for at din virksomhed udstillet i GTC parken (beskriv nærmere)	

<p>2. Forretningsudvikling hos en af vores dygtige forretningsudviklere vi har i Green Tech Center.</p> <p>3. Markedsføring igennem vores kanaler, fx LinkedIn og nyhedsbreve</p> <p>For at lave det her Lighthouse of Comptences så godt som muligt, vil vi gerne stille jer – virksomhederne, som kunne tænkes at være en del af vores Lighthouse – nogen spørgsmål omkring hvorvidt i kan se værdien i dette. Har du 20 minutter til det?</p>	
<p>1. Hvilke af de tre elementer – altså konferencer og udstilling, forretningsudvikling og markedsføring – vil være mest relevant for dig som virksomhed at deltage i?</p>	
<p>a. Hvordan kan det være at det lige er.....?</p>	
<p>b. Hvad skal der til for at de andre elementer bliver mere spændende?</p>	
<p>c. Hvad skal der til for at I ville betragte det som værende en succes, at have deltaget i dette LoC?</p>	
<p>d. Er andre elementer der ville være mere interessant for jer?</p> <p>i. For eksempel forsøgsfaciliteter/ demonstrationsfaciliteter</p>	
<p>Spørgsmål 2:</p>	
<p>Det her LoC skal placeres i Green Tech Center i Vejle. Green Tech Center er en del af en stor erhvervsark, hvor der samarbejdes mellem både virksomheder, kommuner og universiteter. Årligt er der over 10.000 besøgende, som kommer igennem parken - alt fra kommuner til virksomheder til</p>	

universiteter. Vi arbejder primært med grøn iværksætterier.	
a. Ville det give mening for jer, at være en del af en udstilling i denne type miljø? Hvor du får et direkte udstillingsvindue til mange forskellige aktører	
i. Hvis nej, hvad mangler der så for at gøre det relevant?	
ii. For eksempel: Den geografiske placering, det faglige miljø	
Spørgsmål 3:	
Baseret på den viden I nu har om LoC, lyder det så som noget I ville være interesseret i at deltage i?	
a. Hvis ja, skal vi ikke sætte et møde op og finde ud af hvordan vi får jer inkorporeret i dette LoC?	
Spørgsmål 4:	
4. Så har jeg lige en del 2 af den her spørgeundersøgelse. Vi forsøger at lave en online del /version af vores LoC også. Denne del skal bestå af en 'hjemmeside' side hvor virksomheder og problemejere kan gå ind på et site, hvor de kan skrive/poste om problemer og løsninger. Det skal fungere som en form for virtuel matchmaking, (det er frivilligt hvor meget man vil offentliggøre, men måske en kort efterspørgsel efter fx kompetencer, løsninger eller tilbud om at kunne løse det ene eller det andet problem) og vil altså kunne være en salgskanal for jer. Denne platform vil operere på	

tværs af grænsen, og dermed åbne muligheder for at komme ind på det tyske marked. Sproget på platformen er tysk. Årsagen til det er, at hvis man skal samarbejde med tyske virksomheder, så vil det være nødvendigt at kommunikere på tysk.	
3. Tror du at det ville være et værktøj I ville anvende aktivt? Har I allerede afprøvet en lignende model eller er det en helt ny mulighed?	
4. Hvis nej, hvorfor/hvad skal der til for at gøre dette interessant?	
Platformen kommer muligvis til at hænge sammen med en tysk brancheorganisation – Wasserversorgungsverband – de er ækvivalenten til DanVa (Er det rigtigt eller har jeg digtet det?)	
3. <i>Ville det have nogen betydning for jeres mulige brug af platformen?</i>	

Afslutningsvis? Henvender os direkte efter interviewet og spørger om de har interesse i at deltage.

På baggrund af analyseguiden laver vi nogle samlede pointer fra de forskellige interessenter, dvs. rød tråd for forsyninger, rød tråd fra kommuner osv.

1.1 Interview guide - Business Hub in Southern Jutland

Hvem interviewes?	Erhvervshus Syd
Spørgsmål fra interviewguide	5-10 linjers resumé og 1-2 citater for hvert spørgsmål
Spørgsmål 1:	
Vi vil gerne optage interviewet! Er det OK?	Interviewet blev optaget!

Vi er, som en del af et EU støttet Interreg projekt (NEPTUN), ved at undersøge interessen i et Syddansk Lighthouse of Competence inden for vandteknologi.

Lighthouse of Competence for vandvirksomheder – det betyder basalt set at vi forsøger at lave et setup, hvor vi kan vise nogen af de mest innovative vandteknologier frem for problemejerne, fx forsyningselskaber og kommuner, som så kan benytte disse nye teknologier når de skal løse deres problemer. Så det vi gerne vil, er at showcase det i kan i jeres virksomhed.

Det gør vi igennem tre del-elementer:

1. Konferencer og udstilling. Deltag i innovationsfestivalen (august 2022 beskriv nærmere) Og få mulighed for at din virksomhed udstillet i GTC parken (beskriv nærmere)
2. Forretningsudvikling hos en af vores dygtige forretningsudviklere vi har i Green Tech Center.
3. Markedsføring igennem vores kanaler, fx LinkedIn og nyhedsbreve

For at lave det her Lighthouse of Comptences så godt som muligt, vil vi gerne stille jer – virksomhederne, som kunne tænkes at være en del af vores Lighthouse – nogen spørgsmål omkring hvorvidt i kan se værdien i dette. Har du 20 minutter til det?

Spørgsmål 1

Hvad er jeres umiddelbare respons på dette initiativ – vi/Neptun projektet etablerer det nu, men påtænker løbende at involvere flere virksomheder.

Har i ofte kontakt til vand- og klimaSMV'er, som i vil anbefale dette tilbud til?

Hvilke af de tre elementer – altså konferencer og udstilling, forretningsudvikling og markedsføring – vil være mest relevant for virksomhed at deltage i – set ud fra jeres erfaring?	
Hvordan kunne i forestille jer at Lighthouse of Competence kunne være en inspiration til nye løsninger? Hvordan skal et Lighthouse of Competence udformes for at det kan inspirere de virksomheder i har kontakt med til at finde nye løsninger?	

Spørgsmål 2:	
Vi forsøger at lave en online del En version af vores Lighthouse of Competence. Denne del skal bestå af en 'hjemmeside'/ facebook format , hvor virksomheder og problemejere kan gå ind på et site, hvor de kan skrive/poste om problemer og løsninger. Det skal fungere som en form for virtuel matchmaking, (det er frivilligt hvor meget man vil offentliggøre, men måske en kort efterspørgsel efter fx kompetencer, løsninger eller tilbud om at kunne løse det ene eller det andet problem) og vil altså kunne være en salgskanal for jer. Denne platform vil operere på tværs af grænsen, og dermed åbne muligheder for at komme ind på det tyske marked. Sproget på platformen er tysk. Årsagen til det er, at hvis man skal samarbejde med tyske virksomheder, så vil det være nødvendigt at kommunikere på tysk.	
1. Tror du at det vil anbefale i jeres netværk?	
2. Har I allerede afprøvet en lignende model eller er det en helt ny mulighed?	
2. Hvis nej, hvorfor/hvad skal der til for at gøre dette interessant for jer at bruge som et redskab i jeres arbejde med erhvervsudvikling?	
Platformen bliver muligvis udviklet som en tysk-dansk on-line platform, med det fokus at skabe et	

forum for miljøteknologisk overførsel og øget samarbejde på tværs af den dansk-tyske grænse	
Ville det have nogen indflydelse på hvorvidt i vil arbejde med at anbefale en sådan platform for jeres virksomheder?	Hvad synes du/I om denne placering af et Lighthouse of Competence? Ift. den geografiske placering i DK? Den geografiske placering er god for region syd
Har i anden respons på hvilken betydning og muligheder der ligger for erhvervshus i at deltage i etablering af et fysisk LoC og on-line platform	
Spørgsmål 3:	
Besøger i Green Tech Center eller deltager i events der afholdes der?	
Hvilken interesse har i at deltage i den årlige innovationsfestival?	
Vil I være interesserede i at deltage i paneldebatter/workshops/events på innovationsfestivalen?	

1.2 Interview guide – Utilities

Hvem interviewes?	Fx Din forsyning
Spørgsmål fra interviewguide	5-10 linjers resumé og 1-2 citater for hvert spørgsmål
Spørgsmål 1:	
Lighthouse of Competence skal placeres i Green Tech Center i Vejle. Green Tech Center er en del af en stor erhvervspark, hvor der samarbejdes mellem både virksomheder, kommuner og universiteter. Årligt er der over 10.000 besøgende, som kommer igennem parken (Hr. og fru Danmark, SMV'er, vandvirksomheder, kommuner, forsyninger, virksomheder, universiteter, rådgivere m.fl.). Der arbejdes primært med grøn iværksætteri.	
a) Hvor henvender I jer for at få løst udfordringer?	
b) Indgår Green Tech Center i den proces?	

c) Hvad synes du om denne placering for et Lighthouse of Competence?	
d) Ift. den geografiske placering i DK?	
e) Ift. det faglige miljø?	
Spørgsmål 2:	
Når I har problemstillinger i forsyningen der kræver løsninger indenfor vand og klimatilpasningsløsninger-	
a) Hvordan indgår nye løsninger og teknologier i jeres tilgang til at få løst udfordringer?	
b) eller har i fokus på etablerede løsninger?	
c) Hvordan kunne i forestille jer at Lighthouse of Competence kunne være en inspiration til nye løsninger?	
d) Hvordan skal et Lighthouse of Competence udformes for at det kan inspirere jer til at finde nye løsninger?	
e) Eller hvad skal der til for at I vil besøge Lighthouse of Competences?	
f) Når I skal kontakte virksomhederne (hvis I kan bruge deres produkter), vil I så foretrække at Green Tech Center har en aftale med virksomhederne i forvejen eller foretrækker I selv at kontakte dem?	
Opfølgende spørgsmål - spørgsmål 3:	
a) Er I interesserede i at deltage i dette Lighthouse of Competence?	
B) I så fald, vil i gerne have en invitation til Lighthouse of Competences?	

Spørgsmål 4:	
a) Besøger i Green Tech Center eller deltager i events der afholdes der?	
b) Hvilken interesse har i at deltage i den årlige innovationsfestival?	
c) Vil I være interesserede i at deltage i paneldebatter/workshops/events på innovationsfestivalen?	

Spørgsmål 5:	
Så har jeg lige en del 2 af den her spørgeundersøgelse. Vi forsøger at lave en online del En version af vores Lighthouse of Competence. Denne del skal bestå af en 'hjemmeside' side, hvor virksomheder og problemejere kan gå ind på et site, hvor de kan skrive/poste om problemer og løsninger. Det skal fungere som en form for virtuel matchmaking, (det er frivilligt hvor meget man vil offentliggøre, men måske en kort efterspørgsel efter fx kompetencer, løsninger eller tilbud om at kunne løse det ene eller det andet problem) og vil altså kunne være en salgskanal for jer. Denne platform vil operere på tværs af grænsen, og dermed åbne muligheder for at komme ind på det tyske marked. Sproget på platformen er tysk. Årsagen til det er, at hvis man skal samarbejde med tyske virksomheder, så vil det være nødvendigt at kommunikere på tysk.	
a) Tror du at det ville være et værktøj I ville anvende aktivt?	
b) Har I allerede afprøvet en lignende model eller er det en helt ny mulighed?	
c) Hvis nej, hvorfor/hvad skal der til for at gøre dette interessant?	

Platformen kommer muligvis til at hænge sammen med en tysk brancheorganisation – Wasserversorgungsverband – de er ækvivalenten til DANVA	
d) Ville det have nogen betydning for jeres mulige brug af platformen?	
e) Ville det være relevant for jer at lægge jeres problemer op i denne platform?	

Appendix 2: Brochure on the Lighthouse of Competences approach is attached.



Lighthouse of competence

En del af NEPTUN-projektet

Green Tech Center, Vejle er partner i det dansk-tyske Interreg-finansierede NEPTUN-projekt, der henvender sig til små og mellemstore virksomheder, som ønsker at udvikle – eller allerede har – ideer til grønnere, mere effektive, digitale og ressourcesparende måder at løse de vandrelaterede eller klimatilpasningsmæssige udfordringer på.

Ein Teil des NEPTUN-Projektes

Green Tech Center in Vejle, Dänemark ist Projektpartner des dänischen-deutschen Interreg-finanzierten NEPTUN-Projektes. Das NEPTUN-Projekt richtet sich an kleine und mittlere Unternehmen, die Ideen für grünere, effektiver, digitale und ressourcensparsamen Lösungen in Sachen Wasser-management und der Maßnahmen zur Klimaanpassung entwickeln möchten oder schon haben.

Oversvømmede kældre ...

– overbelastede kloakker, risiko for dårlig vandkvalitet ved stigende grundvand og udfordringer med kystsikringen – det er nogle af de udfordringer, vi ser som følge af klimaforandringer. Dette giver et stort potentiale for eksport af vand- og klimatilpasningsløsninger med ny samlet eksportstrategi indenfor vandområdet i Danmark.

NEPTUN samler små- og mellemstore virksomheder på tværs af den dansk-tyske grænse med formålet om at udløse innovations- og vækstpotalet indenfor vand-, spildevands- og klimatilpasningssektoren og samtidig bygge bro mellem udbud og efterspørgsel gennem vidensoverførsel fra førende universiteter i Tyskland og Danmark

Bag NEPTUN projektet står 20 partnere og netværkspartnere på tværs af den dansk-tyske grænse. CLEAN, Danmarks Miljøklynge er lead på projektet.

Læs mere om aktiviteter og innovationssamarbejder i NEPTUN-projektet her: www.neptun-vand.dk/da/activities

Vil du vide mere om dette konkrete servicetilbud i NEPTUN fra Green Tech Center – kontakt Mie Bjerregaard mb@greentechcenter.dk

Vil du vide mere om NEPTUN projektet generelt, kontakt Lotte Lindgaard Andersen, Projektchef CLEAN, lla@cleancluster.dk

Überschwemmte Keller ...

– überlastete Kloaken, Risiko für eine schlechte Wasserqualität beim steigenden Grundwasser und herausgeforderter Küstenschutz – diese sind nur einige der Herausforderungen, die aus Klimaveränderungen folgen. Und die ein großes Potential für die Auswechslung von Lösungen zum Wassermanagement und Klimaanpassungen im Grenzregion Dänemark-Deutschland enthalten.

Das NEPTUN-Projekt vereinigt grenzüberschreitend kleine und mittlere Unternehmen in Dänemark und Deutschland – die Zielsetzung ist eine Freisetzung von Innovations- und Wachstumspotenzial von Wassertechnologieunternehmen, einschließlich der Förderung von Angebot, Nachfrage, Außendarstellung und Wissen in der Wertschöpfungskette für wasser- und klimarelevante Lösungen.

20 Projektpartner und Netzwerkpartner nördlich und südlich der Grenze nehmen an dem NEPTUN-Projekt teil – CLEAN ist Leadpartner. Lesen Sie hier mehr über die Aktivitäten und innovativen Zusammenarbeiten des NEPTUN-Projektes: www.neptun-vand.dk/da/activities

Für weitere Informationen über die Serviceangebot von Green Tech Center im NEPTUN kontaktieren Sie bitte Fr. Mie Bjerregaard mb@greentechcenter.dk

Für weitere Informationen über das NEPTUN-Projekt kontaktieren Sie bitte Fr. Lotte Lindgaard Andersen, Projektleiterin bei CLEAN, lla@cleancluster.dk

Er din virksomhed beliggende i Region Syddanmark, Region Sjælland eller Slesvig-Holsten

– har vi i NEPTUN´s Lighthouse of Competence et servicetilbud til dig

Konferencer og udstilling

- Udstilling i Green Tech Park i ny særlig udendørs udstilling indenfor vand- og klimatilpasning samt grønne energiløsninger med poster. Parken og dermed udstillingen har årligt omkring 10.000 besøgende og er 16.000 m² stor, så der er stor eksponering af jeres virksomhed
- Deltag i GTC Innovationsfestivalen i august 2022 sammen med CLEAN – og få mulighed for at få en stand og evt. også en pitch.
- I Green Tech House og Resilience House kan du udstille fysiske produkter

Forretningsudvikling

- Få sparring på forretningsudvikling hos Green Tech Centers dygtige forretningsudviklere.
- Mulighed for at leje en flexplads og drive og udvikle din opstartsvirksomhed i professionelle rammer i Green Start Up Resilience House – et attraktivt og unikt fagligt iværksættermiljø i Green Tech Centers økosystem

Markedsføring

- Vi kan tilbyde medieeksponering i form af artikler/nyheder på Green Tech Centers hjemmeside og opslag via SoMe-profiler samt via CLEANs nyhedsbrev, LinkedIn og NEPTUN sitet mv.

NEPTUN Lighthouse of Competence hat eine Serviceangebot für Sie

– wenn sich Ihr Unternehmen in Region Süddänemark, Region Seeland oder Südschleswig befindet

Konferenzen und Ausstellung

- Ausstellen im Green Tech Park in einer neuen Sonderausstellung im Freien über Wassermanagement und Klimaanpassungen sowie grüne Energielösungen mit Poster und evtl. Mockups. Der Park ist 16.000 m² groß, und die Ausstellung hat jährlich 10.000 Besucher
- Im August 2022/2023 zusammen mit CLEAN an GTC Innovationsfestival teilnehmen; hier ist es auch möglich einen Stand und evtl. einen Pitch zu haben
- Ausstellen Ihrer physischen Produkte in Green Tech House und Resilience House, und Videos mit Ihren innovativen Lösungen auf einem Schirm vorzeigen

Geschäftsentwicklung

- Sparring mit Green Tech Center über Geschäftsentwicklung, wenn Sie ein grünes Jungunternehmen haben
- Sie haben die Möglichkeit, einen Schreibtisch im Green Start Up Resilience House zu mieten, und Ihr Jungunternehmen hier in professionellen Rahmen – ein attraktives und fachlich einzigartiges Milieu für Jungunternehmen im Ökosystem von Green Tech Center – zu betreiben und entwickeln.

Marketing

- Wir bieten Berichterstattung in der Form Artikel/Nachrichten an der Green Tech Center Website und den sozialen Medien an, sowie im Newsletter oder LinkedIn von CLEAN und an der NEPTUN Website.



Projektet er finansieret af Interreg Deutschland-Danmark med midler fra Den Europæiske Fond for Regionaludvikling, der har til formål at understøtte videreudviklingen af den dansk-tyske grænseregion.

Das Projekt wird vom Interreg Deutschland-Danmark finanziert, mit Mittel des Europäischen Fonds für regionale Entwicklung (EFRE), der die grenzübergreifende, interregionale Entwicklung im dänischen-deutschen Grenzregion unterstützt.