

Building the STRING megaregion as a Green Hub in the wake of COVID-19

STRING is a political cross-border organisation spanning five cities (the Free and Hanseatic City of Hamburg, Copenhagen, Malmö, Gothenburg and Oslo) and eight regions (Schleswig-Holstein, Region of Southern Denmark, Region Zealand, Capital Region of Denmark, Region Skåne, Region Halland, Västra Götalandsregionen and Viken County) across Germany, Denmark, Sweden and Norway. Home to around 14 million inhabitants, STRING has strong potential to become a leading European megaregion and an internationally acknowledged Green Hub if governments “think big” and work together beyond their own boundaries. Building on its green expertise and high levels of innovation and quality of life, STRING could take advantage of current opportunities such as the construction of the Fehmarn Belt Fixed Link to further reap the benefits of agglomeration economies and establish itself as a sustainable megaregion, and capitalise on the strong political momentum, and public funding available to support a green and resilient recovery from COVID-19.

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This policy paper builds on recommendations from previous OECD reports and insights from a series of four interactive, multi-stakeholder seminars to identify the main challenges and opportunities for the future of STRING (Norway, 16 November 2020; Sweden, 17 November 2020; Denmark, 24 November 2020; Germany, 25 November 2020 – see detailed agendas in Annex B).

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Preface

We, the representatives from local and regional governments forming STRING, are delighted to introduce this OECD-STRING Strategic Paper, which stems from a year-long dialogue within the framework of the OECD-STRING partnership. As local and regional decision-makers, we are all facing challenges related to addressing climate change and the economic and social consequences of the ongoing COVID-19 crisis. In order to overcome these challenges, we are committed to building a more sustainable future for Northern Europe

We believe that STRING has strong potential to become a leading megaregion in Europe and an internationally acknowledged Green Hub, if we “think big” and work together beyond our individual local and regional boundaries. In particular, we are committed to strengthening sustainable transport infrastructure and to developing, testing, and exporting green technology solutions to the world.

However, we recognise that time is of the essence. The COVID-19 crisis has drastically accelerated the shift toward alternative transport solutions and a greener economic model. In parallel, the construction of the Fehmarn Belt Fixed Link is opening a unique window of opportunity to support a low-carbon transition, increase labour mobility throughout the megaregion and strengthen cross-border innovation.

To build a sustainable future for all, we strive to implementing the OECD recommendations found in this paper and to monitoring their implementation on a regular basis, around three key domains:

1. Using sustainable transport infrastructure to reach climate goals and create a connected, accessible megaregion
2. Positioning STRING as a global Green Hub
3. Building a cohesive and inclusive megaregion



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Key messages

STRING¹ is a political cross-border organisation spanning five cities (the Free and Hanseatic City of Hamburg, Copenhagen, Malmö, Gothenburg and Oslo) and eight regions (Schleswig-Holstein, Region of Southern Denmark, Region Zealand, Capital Region of Denmark, Region Skåne, Region Halland, Västra Götalandsregionen and Viken County) across the four countries of Germany, Denmark, Sweden and Norway. It is now home to around 14 million inhabitants. STRING has strong potential to become a leading European megaregion and an internationally acknowledged Green Hub if governments “think big” and work together beyond their own boundaries. Building on its green expertise and high levels of innovation and quality of life, STRING could take advantage of current opportunities such as the construction of the Fehmarn Belt Fixed Link to further reap the benefits of agglomeration economies and establish itself as a sustainable megaregion, and capitalise on the strong political momentum, and public funding available to support a green and resilient recovery from COVID-19.

In order to achieve these goals, STRING must leverage its sustainable transport infrastructure, further develop and exploit its expertise in green solutions, and strengthen the megaregion, through the following recommendations: :

Use sustainable transport infrastructure as a tool to reach climate goals and create a connected, accessible megaregion:

At the megaregion level, by:

1. Strengthening cross-border transport planning and governance, by creating a cross-border transport commission with representation from the national and regional level in all four STRING countries.
2. Electrifying fuel cell freight traffic by strengthening the existing STRING hydrogen corridor project to create an interconnected hydrogen infrastructure across the megaregion, to deliver one EU climate targets and regional implementation of the EU Alternative Fuels Directive.
3. Developing a joint action plan assessing and developing alternative financing opportunities for cross-border transport infrastructure.
4. Leveraging the Fehmarn Belt Fixed Link to reduce transport bottlenecks, by constructing double tracks and electrifying the Oslo-Gothenburg railway and through the establishment of further fixed links across the Öresund.

At the local/regional level, by:

¹ The original acronym of STRING stands for “South Western Baltic Sea Transregional Area – Implementing New Geography”.

5. Implementing short-term sustainable transport solutions (in addition to medium- and long-term projects to facilitate cross-border transport and to improve the accessibility of smaller cities and regions, for example by harmonising ticketing across borders and extending rail lines to smaller cities).
6. Using the potential of European railway transport to scale up circular economy initiatives, for example by mapping the routes of empty returning trucks and trains and matching them with corresponding circular economy initiatives.
7. Co-operating at the EU level on topics of importance to STRING, for example by forming an interregional group to contribute to the Committee of Regions debate.

Position STRING as a global Green Hub:

At the megaregion level, by:

8. Scaling up existing green companies, innovation infrastructures and technologies to attract new business, a qualified workforce, and investments, and increase international visibility by developing partnerships and uniting existing cluster organisations; increasing public investment in universities and business development parks, notably for university based start-ups.
9. Institutionalising green investment in STRING in order to better coordinate investments across levels of government and maximise outreach and international visibility, for example by establishing a STRING green investment agency.
10. Bringing the four national governments (Sweden, Norway, Denmark and Germany) together to jointly appoint STRING as a 'Green Hub' and developing a policy agreement to establish a common market for the development, testing, implementation and export of green technologies.

At the local/regional level, by:

11. Increasing dialogue between stakeholders in the penta-helix framework (public sector, private sector, academia, civil society, citizens and social entrepreneurs) through policy fora on public procurement to steer green investments.
12. Investing in attracting and retaining green tech companies and skilled workers in the region by using strategic mechanisms, such as tax benefits and subsidies in conformity with EU State aid rules, and by increasing labour and residential mobility.
13. Distributing and linking facilities to test green innovations throughout the entire megaregion by increasing their access for firms and researchers throughout STRING.
14. Creating more green jobs by offering retraining programmes and incentives for workers in declining and polluting industries.
15. Continuing to implement sustainable development initiatives at regional and local level.

Build a cohesive megaregion around the common goal of establishing a green economy:

At the megaregion level, by:

16. to Building a joint brand around the Green Hub by strengthening the sense of a shared Northern European identity, including through flagship projects to collectively increase international visibility, export and attract skilled labour and investment.
17. Engaging residents in the benefits of the megaregion by organising joint cultural and tourist events and developing cross-border education and learning opportunities.
18. Ensuring that cities and regions of all sizes and different stakeholders can participate in the STRING megaregion and determine each place's strengths and opportunities.
19. Monitoring progress on the extent of integration at the megaregion level and progress on sustainable development goals locally.
20. Increasing STRING's presence at the EU and national level, for example by making STRING a permanent adviser to national governments to enhance their cross-border perspective and raise commitment of national governments at the EU level.
21. Considering enlarging STRING membership to build an even stronger megaregion and help tap into further economic linkages, manufacturing capacity, and universities to become even more competitive.

At the local/regional level, by:

22. Building further political ownership and buy-in from all stakeholders, for example by formalising co-operation through a European Grouping for Territorial Co-operation (EGTC).
23. Implementing green financing instruments at the local scale to raise funds for greening projects locally.

About STRING

STRING² is a political cross-border organisation spanning five cities (the Free and Hanseatic City of Hamburg, Copenhagen, Malmö, Gothenburg and Oslo) and eight regions (Schleswig-Holstein, Region of Southern Denmark, Region Zealand, Capital Region of Denmark, Region Skåne, Region Halland, Västra Götalandsregionen and Viken County) across the four countries of Germany, Denmark, Sweden and Norway. Initially founded in 1999 as an EU INTERREG collaboration to promote the Fehmarn Belt Fixed Link between Germany and Denmark (Box 1), STRING broadened its vision towards developing the corridor from Hamburg to the Öresund, and the addition of six new members between 2018 and 2020 saw the STRING corridor expand northwards along the western part of Denmark and the western Swedish coast to Southern Norway and Oslo. STRING is now home to around 14 million inhabitants (STRING Network, n.d.^[1]).

² The original acronym of STRING stands for "South Western Baltic Sea Transregional Area – Implementing New Geography".

Figure 1. Map of STRING



Source: STRING Network (n.d.^[1]), *STRING*, <https://stringnetwork.org/> (accessed on 26 January 2021).

1 Introduction

As a political cross-border organisation spanning five cities and eight regions across the four countries of Germany, Denmark, Sweden and Norway, STRING aims to become a leading sustainable megaregion in Europe by joining forces beyond local, regional and national borders. While STRING is a pioneer in the development, implementation and export of green solutions in Europe and beyond, it is not necessarily widely known. To build on these strengths of each of its members such as high levels of innovation, quality of life, proactive policies to support the green transition and green expertise, STRING needs to position itself as a globally acknowledged Green Hub.

As cities become economically and physically more interdependent with their surroundings through transport infrastructure, new challenges that might be best solved at the megaregion scale arise. These include the efficient provision of infrastructure and services, enabling economic development and creating inclusive and resilient regions, protecting natural resources across multiple administrative boundaries, and moving goods (Glocker, 2018^[2]). Indeed, mobility of goods, people and ideas, underpinned by a modern and well-functioning transport system, is a pillar of economic and social integration, sustaining business, trade, travel and tourism. The potential for economies of scale therefore includes shared transport infrastructure, coordinated land use planning, joint economic development strategies, and pooling resources to increase global visibility.

The COVID-19 crisis has drastically accelerated the momentum to shift toward a more long-term sustainable future, with many cities and regions around the world putting in place alternative transport solutions to polluting modes of transportation such as individual cars and seeking a greener recovery (OECD, 2020^[3]). Seizing this political momentum will be critical to advance the STRING vision and shape a future-proof economic model. Before the pandemic, the EU goals of cutting carbon emissions by 55% by 2030 and transport-related emissions by 60% by 2050 and European Green Deal were already offering a valuable framework for STRING to leverage its green credentials. Albeit decided long before the pandemic, the construction of the Fehmarn Belt Fixed Link is opening a unique window of opportunity for STRING to provide sustainable transport infrastructure that will be central to a low-carbon transition (e.g. electrified rail tracks), increasing labour mobility throughout the megaregion and strengthening cross-border innovation. The Fehmarn Belt Fixed Link (see Box 1) holds great potential to empower STRING as a megaregion. This cross-border infrastructure is expected to facilitate knowledge spillovers and cross-cultural exchange, thereby contributing to increasing the region's growth potential. It should also provide the missing link in transport infrastructure to further integrate the STRING corridor.

At the same time, there are concerns that the Fehmarn Belt might have adverse effects on some firms and commuters, for example by increasing property prices and reconfiguring logistics of air traffic (Lundhus and Wichmann Mattheissen, 2011^[4]). A concerted effort from all STRING stakeholders will therefore be needed to anticipate such potential negative externalities and take advantage of the Fehmarn Belt Fixed Link to shape a prosperous and sustainable megaregion. Building ownership of the project from an early stage will be critical to leverage the Fixed Link as a key driver of the STRING Green Hub.

Establishing sustainable infrastructure for interconnectivity is therefore a key factor for further development of the megaregion. This includes fostering sustainable transport alternatives, such as electrified railways

and a hydrogen corridor for heavy duty vehicles. Doing so requires thinking and acting beyond local, regional and national boundaries, while reinforcing collaboration between knowledge institutions and firms.

Box 1. The Fehmarn Belt Fixed Link

The history of the Fehmarn Belt Fixed Link dates to March 1991, when Denmark started studying the potential for building a fixed link to connect the Danish island of Lolland with the German island of Fehmarn across the 18km-long Fehmarn strait. In 2008, the Transport Ministers of Denmark and Germany signed a State Treaty on a fixed link across the Fehmarnbelt, and the option of building an immersed tunnel was chosen as the preferred technical solution in 2011. In November 2020, the highest administrative court in Germany gave consent to start the construction of the German part of the tunnel. The tunnel is expected to open in 2029 and will consist of a four-lane motorway and two electrified rail tracks.

The construction budget for the Fehmarn link is EUR 7 billion. The European Commission has designated the Fehmarn link as a priority project, by allocating DKK 1.7 billion in support of design costs and DKK 5.3 billion for construction costs. Like the Great Belt Storebælt and Öresund links, the Fehmarn Belt Fixed Link will be user-financed, i.e. future revenue from tolls will repay the loans that financed construction, and co-financed by the EU. The project has a repayment period of 36 years, including upgrades to the railway between Ringsted and Rødby, which will also be funded by the profit from the tunnel in the form of toll fees. The project is managed by Femern A/S, a subsidiary of the Danish state-owned Sund & Bælt Holding A/S.

By providing a direct link between northern Germany and southern Denmark, the Fehmarn Belt Fixed Link is expected to bring about several benefits, including new markets, jobs, and tourism and education opportunities (Femern A/S, n.d.^[5]). The fixed link should considerably reduce the travel time between continental Europe and Scandinavia, from 45 minutes currently (by ferry) to 7 minutes for train passengers and 10 minutes for drivers (Lundhus and Wichmann Mattheissen, 2011^[4]).

Previous OECD Territorial reviews in select cities and regions composing STRING called for strengthened collaboration across national, regional and local administrative boundaries (Box 2 and Annex A). To support the implementation of this recommendation, a year-long, multi-stakeholder policy dialogue was organised through four seminars to identify the main challenges and opportunities for the future of STRING³. The findings outlined in this paper were validated by the STRING Political Forum.

This policy paper summarises the key findings and outcomes of such a policy dialogue, and provides i) a brief overview of STRING's potential as a megaregion; as well as ii) a set of policy recommendations on how to anchor STRING as a competitive, sustainable and attractive Green Hub.

Box 2. Past OECD publications and projects targeting part of the STRING area

- OECD Territorial Reviews: Öresund, Denmark/Sweden (2003^[6])
- OECD Territorial Reviews: Copenhagen, Denmark (2009^[7])
- OECD Territorial Reviews: Skåne, Sweden (2012^[8])

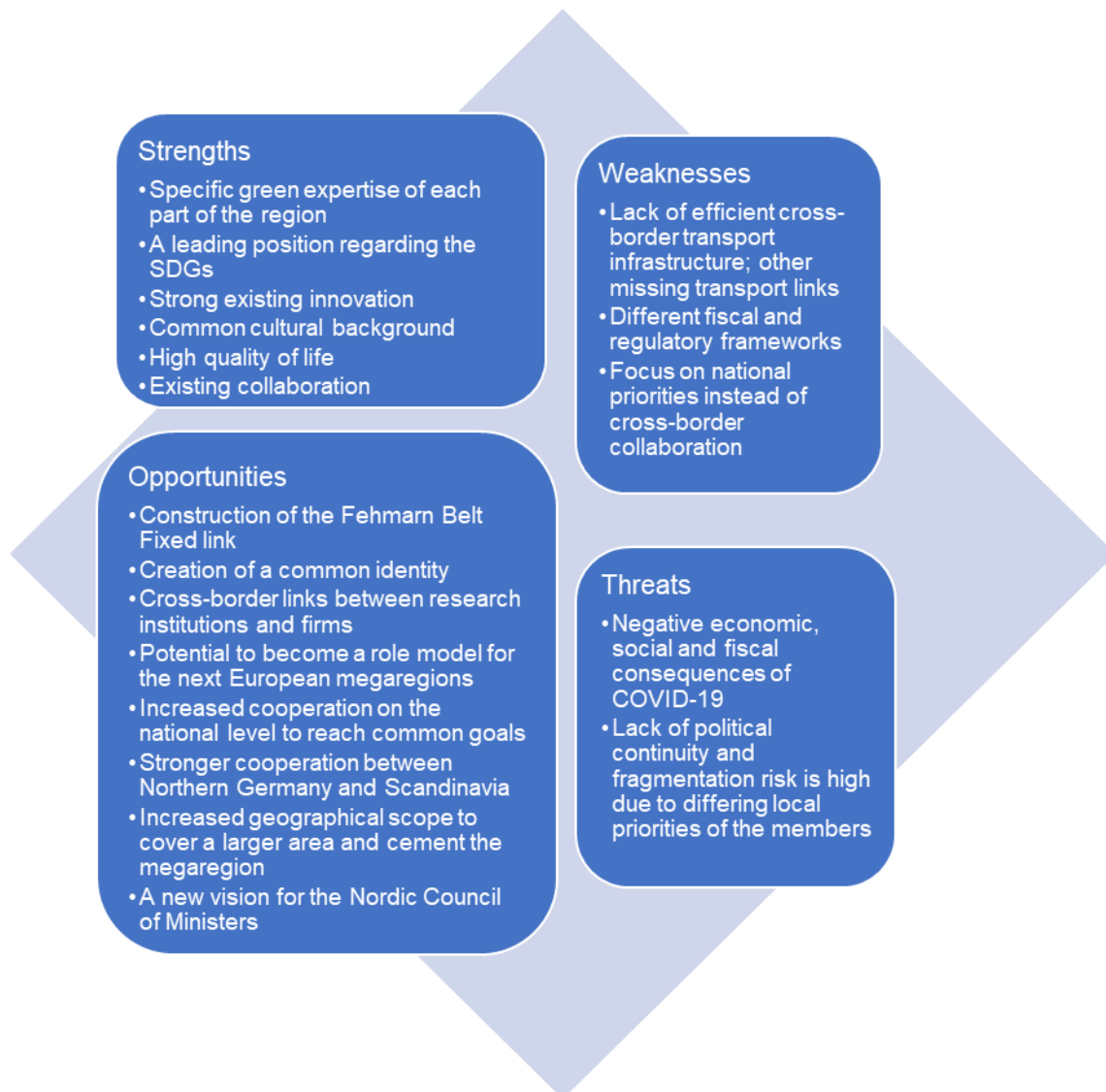
³ (Norway, 16 November 2020; Sweden, 17 November 2020; Denmark, 24 November 2020; Germany, 25 November 2020 – see detailed agendas in Annex B).

- OECD Territorial Reviews: The Megaregion of Western Scandinavia (2018^[9])
- OECD Territorial Reviews: Hamburg Metropolitan Region, Germany (2019^[10])
- A Territorial Approach to the Sustainable Development Goals in Viken, Norway (2020^[11])
- A Territorial Approach to the Sustainable Development Goals in Southern Denmark, Denmark (2020^[12])

2 Assessment of the potential of STRING

When considered individually on a global scale, even the largest cities within the STRING area remain relatively small in population size, ranging from around 670 000 people in Malmö to around 3.3 million people in Hamburg (as defined in the OECD Metropolitan Database on Functional Urban Areas) (OECD, 2021^[13]). However, the STRING area constitutes a major economic hub in Northern Europe. For example, Copenhagen and Oslo generate 39.5% and 28.5% of their national GDP, respectively (OECD, 2021^[13]). When connected through transport and economic linkages to each other and to their surrounding territories, including through the Fehmarn Belt Fixed Link, these individual territories can reach a critical mass and achieve economies of scale that are typical of a megaregion. Yet, simply adding up population or GDP numbers does not automatically generate agglomeration benefits. Unlocking agglomeration benefits requires a proactive and collective strategy grounded in a clear understanding of the territory's comparative advantages and value-added. In order to position itself as a leading megaregion in Europe, STRING – both as an area and an organisation – must therefore build on its strengths and be prepared to embrace new opportunities, while working on its weaknesses and overcoming threats (Figure 2.1).

Figure 2.1. SWOT of the STRING area and organisation



Source: OECD

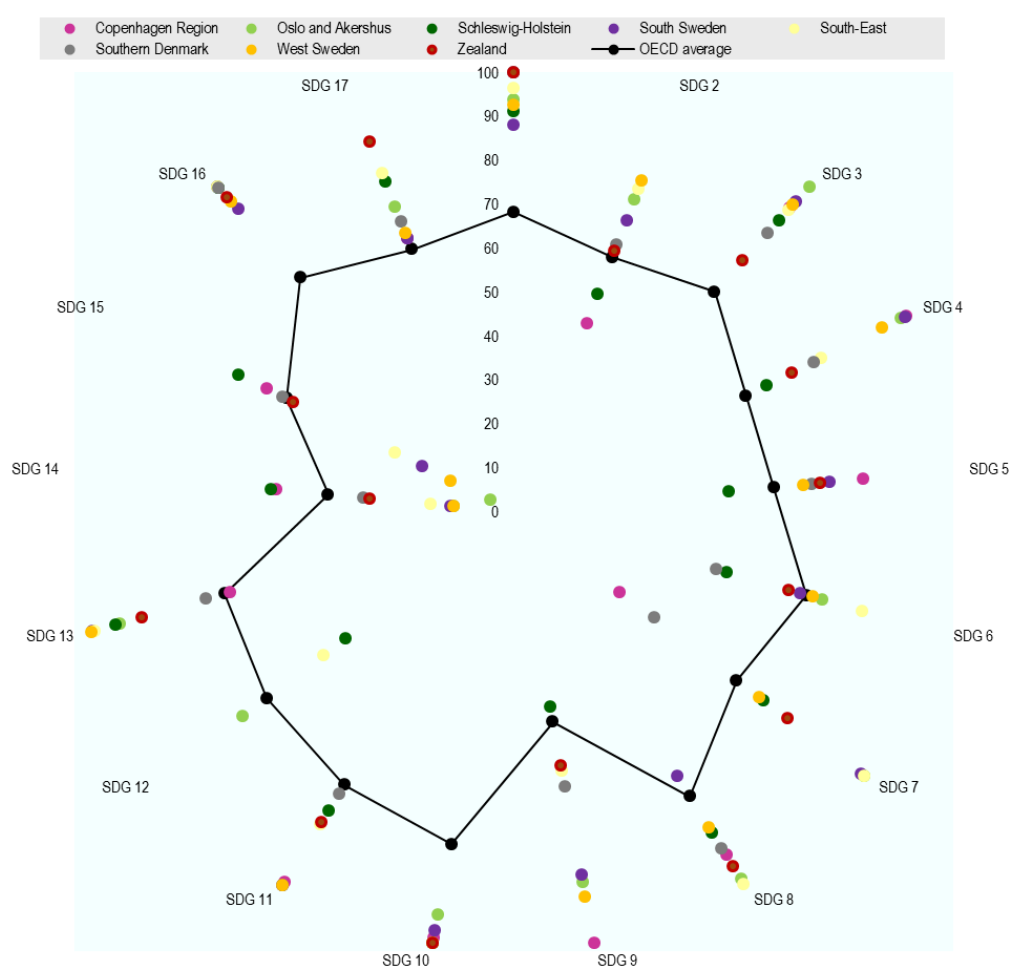
Strengths

- **Expertise in green technology and green solutions.** Each of the four countries covered by STRING exhibits a specific expertise in green technology, including wind energy in Northern Germany, bioenergy in Sweden, city planning in Denmark and electricity in Norway. A comprehensive mapping of the Green Tech Sector in STRING by the Danish Technological Institute shows an abundance of institutions (both knowledge institutions and firms) working on green solutions that complement each other throughout the region (Danish Technological Institute and STRING, 2021^[14]). In particular, STRING is home to many leading companies in the field of renewable energy, followed by biotechnology. Examples of clusters and networks working on green solutions include Energy Cluster Denmark (Denmark), Renewable Energy Hamburg Cluster (Germany), Energy Valley (Norway) and Swedish CleanTech (Sweden).

- **A leading position regarding the sustainable development goals (SDGs).** On most SDGs, STRING member regions are closer to reaching the goals than other OECD regions on average (Figure 2.2), including SDGs 1, 3, 4, 10, 11, 16 and 17 for which all STRING member regions are closer to reaching the goals than the OECD average. However, some regions show potential for improvement on several SDGs, including SDGs 7, 14 and 15. Although there is room for improvement at urban level (especially on SDGs 7, 14 and 15), most cities in STRING are ahead of the average city in the OECD in reaching the SDGs (Figure 2.3). This is especially visible in SDGs 8-12 and 17. Local and regional governments within STRING therefore have strong potential to jointly lead the way as a sustainable megaregion.

Figure 2.2. STRING Member regions' distance to the SDGs

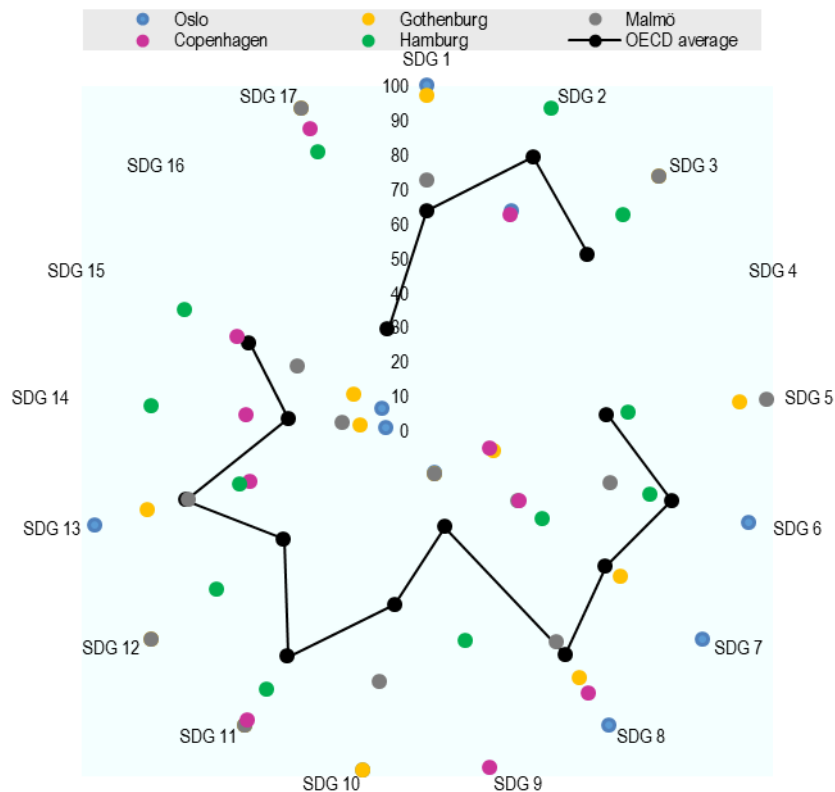
Distance of regions to SDGs, where 100 is the suggested end value of an indicator to be achieved by 2030



Note: In Sweden and Norway, NUTS-2 level regions do not correspond to STRING member regions. Viken County is made up of Oslo and Akershus and South-East Norway; West Sweden contains both Västra Götaland and Region Halland; South Sweden contains the region Skane. Source: OECD (2020_[15]), *Measuring the distance to the SDGs*, <https://www.oecd-local-sdgs.org/data.html> (accessed on 19 February 2021).

Figure 2.3. STRING member cities' distance to the SDGs

Distance of cities to SDGs, where 100 is the suggested end value of an indicator to be achieved by 2030



Source: OECD (2020_[15]), *Measuring the distance to the SDGs*, <https://www.oecd-local-sdgs.org/data.html> (accessed on 19 February 2021).

- **Existing innovation.** STRING member regions such as the Capital Region of Denmark (Denmark), West Sweden (which is part of Region Västra Götaland) (Sweden) and the former Akershus, now part of Viken (Norway), have consistently ranked as “leaders” on the Regional Innovation Scoreboard (RIS), with several other member regions ranking as “strong” innovators (European Commission, 2019_[16]). STRING also hosts major research institutions, such as the European Spallation Source (ESS) and MAX IV Laboratory in Skåne (Sweden), the European X-Ray Free-Electron Laser Facility (XFEL) and German Electron Synchrotron (DESY) in Schleswig-Holstein (Germany) and Hamburg (Germany). Research capacity is particularly strong on renewable energy, environmental technologies, and transport and logistics. For example, many clusters, science parks and testbeds on renewable energy are located around the Capital Region of Denmark, Copenhagen and Hamburg. Research on environmental technologies, including the circular economy and wastewater management, among others, has also developed in the Copenhagen/Malmö region and around Gothenburg, while Hamburg, Copenhagen and Gothenburg are very active in transport and logistics research. Innovation capacity is also strong at firm level: a total of 2,347 companies throughout STRING applied for 18,177 green patents (Danish Technological Institute and STRING, 2021_[14]).
- **Common cultural background.** While diverse, the various territories composing STRING share a history and culture which have formed a solid basis for co-operation (e.g. as illustrated in the creation of the Nordic Council), and can help provide a shared understanding of the actions and ambitions needed in the present.

- **High quality of life.** STRING generally offers a high quality of life and wellbeing to its residents. While there is no comparable data on all members of STRING, those STRING member regions that are included in the OECD Regional Wellbeing Database score high, on a scale from zero to ten, in key dimensions of well-being such as safety (10 both in Zealand and in the Oslo Region), life satisfaction (9.6 in the Denmark Capital Region), accessibility to services (9.2 in the Denmark Capital Region) and jobs (9 in Schleswig-Holstein). High quality of life and high levels of wellbeing constitute good assets to attract skilled labour and raise the profile of STRING as an attractive region to live in.
- **A strong history of collaboration.** As underlined in the OECD Territorial Reviews of Öresund (2003), Western Scandinavia (2018) and Hamburg (2019), the STRING area has developed a long and solid experience of collaboration at various scales. Throughout the years, STRING has grown and established itself as a strong political organisation that promotes a shared agenda and ambitions on infrastructure and green development, which serves both as a commitment from political leaders and a basis for future action. Its 2030 Strategy maps out its planned focus for the years 2020-2030, including two priority areas that complement each other:
 - Clean, Green Economy: To become a globally acknowledged Green Hub
 - Transport and infrastructure connectivity: To assure high-quality sustainable transport connectivity from Hamburg to Oslo (STRING Network, 2019^[17])

These two priorities go hand in hand. Sustainable transport and infrastructures connecting the region and the removal of bottlenecks, i.e. points of congestion, will be crucial for creating an open and accessible region for residents, firms and investors. Improved connectivity across borders will also facilitate the positioning of STRING as a green hub, since research, innovation and testing will be more easily accessible. Positioning STRING as a Green Hub can help define the region's specialisation in the years to come and provide a sustainable economic model for the region. In order to become a global Green Hub, STRING and its members must leverage both sustainable transport infrastructure and existing competencies in the green sector. Increasing the region's international visibility is also key to attract international investment for green technologies and research, which would increase economic growth overall. While other co-operation platforms across administrative boundaries are already established within STRING (e.g. Greater Copenhagen, Hamburg Metropolitan Region), they do not have the necessary critical mass.

Weaknesses

- **Lack of efficient transport infrastructure and missing links.** While transport infrastructure is a focal area for STRING, some transport links remain missing, and there is a lack of efficient transport infrastructure between the various countries covered by STRING, notably connecting border regions. This limits both accessibility from the outside and connectivity within the region, especially to smaller cities and between hinterlands.
- **Discrepancies in fiscal and regulatory frameworks.** Differences in fiscal and regulatory frameworks across the four countries can restrain or complicate collaboration on key issues, such as transport and energy efficiency. Not only do these differing frameworks complicate political co-operation at the megaregion scale, but they may also constrain labour and residential mobility, limiting the exchange of skilled workers and the potential of innovation throughout the megaregion.
- **Narrow focus on national, regional or local priorities.** Policies and strategies are often driven by national, regional or local individual priorities, which often lead to missed opportunities to yield broader benefits through cross-border collaboration. Strengthening the megaregion helps strengthen individual countries, regions and cities. While individual territories may face increasing pressure to

remain visible and competitive, they can become globally more visible and successful through co-operation and pooling of resources (Glocker, 2018^[2]).

Opportunities

- **Construction of the Fehmarn Belt Fixed Link.** STRING's 2030 strategy lists four infrastructure initiatives to achieve high-quality sustainable transport and connectivity: (i) Mapping bottlenecks; (ii) the Oslo-Gothenburg Railway; (iii) Fixed links across the Öresund; and (iv) the construction of the Fehmarn Belt Fixed Link. The construction of the Fehmarn Belt Fixed Link holds potential to build collective ownership and chart the way forward to establish STRING as a megaregion. Despite the prospect of increased integration, bottlenecks must be eliminated throughout the Northern part of the ScanMed corridor to fully reap the benefits of the Fixed Link.
- **Creation of a common identity.** With a shared history, geographic proximity and culture, STRING has the potential to shape a common identity to increase both internal co-operation between members and international visibility. In previous analysis, the OECD underlined the potential to valorise and mobilise common ground, work jointly on “flagship” projects, and develop a joint “brand” to boost international attractiveness (Megaregion of Western Scandinavia (OECD, 2018^[9]) and Hamburg Metropolitan Region (OECD, 2019^[10])).
- **Cross-border links between research institutions and firms.** STRING members have specific strengths and expertise in green solutions (e.g. wind energy in Northern Germany, bioenergy in Sweden, city planning in Denmark and electricity in Norway). A major opportunity for STRING is to establish cross-border links between research institutions and firms to take advantage of the existing innovation ecosystem that do not already co-operate. Past OECD Territorial Reviews conducted in various parts of the STRING area recommended better co-ordinating innovation and entrepreneurship policies across borders by strengthening regional innovation systems (Öresund (OECD, 2003^[6]), Copenhagen (OECD, 2009^[7]) and Skåne (OECD, 2012^[8])), or in some cases, establishing a dedicated regional innovation agency (Hamburg Metropolitan Region (OECD, 2019^[10])).
- **Potential to become a role model for other European megaregions.** While several megaregions are currently in the making within Europe (e.g. Strategic Urban Region Eurodelta (SURE)), STRING had an early start in setting its vision as a green megaregion and could serve as an inspiring example for others. Common opportunities paving the ground for megaregions relate to integrating infrastructure and spatial planning beyond administrative boundaries to better match housing supply and demand, promoting more sustainable transit-oriented development, and co-ordinating housing and transport planning.
- **Increased inter-governmental co-operation to reach common goals.** Stronger co-operation between national governments engaged in STRING would be particularly beneficial, for example on legislation regarding the development and export of green technology. It would provide additional impetus for co-operation across levels of government for STRING to reach its potential.
- **Stronger co-operation between Northern Germany and Scandinavia.** The construction of the Fehmarn Belt Fixed Link can serve as an impetus to increase and strengthen co-operation between Northern Germany and Scandinavia. Although outreach to Germany remains relatively recent, both Scandinavia and Northern Germany would benefit from increased bilateral co-operation to achieve a larger critical mass and to leverage further economic opportunities, especially in the field of renewable energy and other green solutions.
- **Increased geographical scope to cover a larger area and cement the megaregion.** Enlarging STRING (e.g. via Aalborg-Aarhus and Central Denmark Region (Denmark), Kiel/Lübeck (Germany),

Helsingborg (Sweden) and Aust-Agder and Kristiansand (Norway)) to cover a larger area could benefit both current and future STRING members by helping expand economic linkages and tapping into further manufacturing capacity.

- **A new vision for the Nordic Council of Ministers.** The Nordic Council has developed an ambitious vision to become the most sustainable and integrated region in the world by 2030. The vision sets 12 goals for 2024 within the areas of environmental sustainability, competitiveness, and social sustainability, including carbon neutrality and climate adaptation in the field of transport, and involving all Nordic citizens in the green and digital transitions. This commitment from the national governments within the Nordic Council of Ministers represents an opportunity for STRING to voice its own agenda and engage further stakeholders at the national level.

Threats

- **The economic impact of COVID-19.** The full impact of the COVID-19 crisis is still unfolding, both in terms of health outcomes and economic, social and fiscal effects. According to the latest OECD data available, GDP fell by 3.2%, 4%, 5.5% and 3.2% in Sweden, Denmark, Germany and Norway respectively (OECD, 2020^[18]). Both the regional effects and the capacity to rebound differ across and within member countries. For example, the Oslo and former Akershus region, now part of Viken (Norway) and the Capital Region of Denmark (Denmark) register the highest share of jobs amenable to remote working within their respective countries, with 48% and 47% respectively (OECD, 2020^[19]). Although the full extent of the COVID-19 crisis remains to be seen, it may result in shifting priorities domestically that could threaten the megaregion project.
- **Vulnerability to political fragmentation.** As an organisation spanning five cities and eight regions across four countries, STRING is constantly challenged to secure political commitment and buy-in from its members throughout political cycles and differing priorities to ensure its longevity as a cross-border organisation.

3 The way forward: Recommendations for a sustainable future for STRING

At a time when the COVID-19 crisis has accelerated a willingness to change behaviours and put ambitious policy reforms in place for a more sustainable future, leveraging the full potential of the Fehmarn Belt Fixed Link should not only help facilitate passenger and freight flows between Scandinavia and Germany, but can also advance STRING's vision as a Green Hub now and in the future.

Co-operation between all levels of government will be essential to reach STRING's goals and creating a future-proof megaregion that is able to foster investments, attract skilled labour, and maintain a high level of quality of life. While local and regional governments tend to be closer to their residents and can thus engage them more directly in the megaregion, the national level also has a key role to play in unlocking the potential of STRING and leveraging its benefits. The following policy recommendations aim to enable a sustainable future for STRING across all three levels: individual members (local and regional governments), the STRING megaregional level, and national governments.

Use sustainable transport infrastructure as a means to reach climate goals and create a connected, accessible megaregion

While transport infrastructure is only one of several dimensions that constitutes a megaregion, it is an important one, particularly given the major investment made in building the Fehmarn Belt Fixed Link and the urgent need for a shift towards low-carbon transport infrastructure worldwide. Pre-pandemic projections had suggested that passenger transport would increase nearly three-fold between 2015 and 2050 (ITF, 2019^[20]). While the effect of the COVID-19 crisis on demand for passenger transport has yet to be fully gauged, global freight transport is now projected to fall by up to 36% in 2020 (ITF, 2020^[21]) and international tourism is expected to decrease by around 80% (OECD, 2020^[22]). Still, total emissions from transport must fall to approximately 3 000 million tonnes per year by 2050 in order to achieve the goal set out in the Paris Agreement to limit average global temperature increase to well-below 2°C above pre-industrial levels (ITF, 2019^[20]). STRING has a unique potential to contribute to global and EU goals to reduce greenhouse gas emissions to at least 55% below 1990 levels by 2030.

In order to use sustainable infrastructure to reach climate goals and create a connected, accessible megaregion, STRING may consider:

1. **Strengthening cross-border transport planning and governance at the megaregional level through the creation of a cross-border transport commission.** More systematic co-operation could take place through a cross-border transport commission with representation from the national and regional level from all four STRING countries. This could help reach a unified strategy shared by all members regarding the purpose and potential of transport infrastructure in the area and develop a joint infrastructure

plan for 2030, and help minimise the risk of diluting resources across fragmented transport initiatives and increasing carbon emissions.

2. **Electrifying fuel cell freight traffic by strengthening the existing STRING hydrogen corridor project and enabling the use of fuel cell vehicles for road freight transport.** STRING is currently establishing a hydrogen corridor with refuelling stations for hydrogen heavy duty vehicles from Hamburg to Oslo along the EU ScanMed TEN-T corridor. This project is expected to serve as an innovative flagship that will engage all STRING members and span firms, governments and universities as a public-private partnership along the hydrogen value chain. Scaling up this initiative requires co-ordinating production, equipment, and regulations to meet strong market demands. The project aims to contribute to the reduction of CO₂ emissions from heavy duty transport for achieving the EU climate targets and the regional implementation of the EU Alternative Fuels Directive. STRING can play a pivotal role in facilitating interconnectivity on the entire stretch from Oslo to Hamburg when it comes to operations, distribution outputs, grids, charging opportunities and the entire value chain by co-ordinating and harmonising hydrogen strategies and initiatives in the STRING geography.

3. **Developing a joint action plan assessing and developing alternative financing opportunities for cross-border transport infrastructure.** In order to ensure a sustainable financing model for large scale infrastructure projects, STRING could develop an assessment and action plan including a catalogue of existing alternative financing methods available, new methods to be explored, and the various prerequisites needed to access these funds. For example, the Danish State Guarantee model for infrastructure investment has the advantage of making end users pay for the project costs, lower financing costs and more efficient project management, and could serve as a benchmark for other countries. Additionally, it could stipulate conditions to earmark funds for cross-border infrastructure projects. This can decrease STRING's dependence on national funding by facilitating other types of public and private infrastructure investments.

4. **Leveraging the Fehmarn Belt Fixed Link to reduce transport bottlenecks.** In particular, action is needed to:

- a. **Improve the Oslo-Gothenburg railway.** Upgrading the railway stretch between Oslo and Gothenburg into a double track railway and deploying high-speed rail services can help better connect Northern Europe physically and reduce freight emissions by moving freight from road to rail. STRING should make a concerted effort to raise awareness about, and gain support for this priority with national governments in all four countries. It will be important to underscore the effect of this infrastructure on emissions while also exploring alternative financing mechanisms, including EU-CEF (Connecting Europe Facility) funding.
- b. **Increase the number of fixed links across the Öresund.** With the Fehmarn Belt Fixed Link expected to open in 2029, there will be a significant increase in both freight and passenger transport between Germany and Scandinavia, which will result in capacity challenges on the Öresund Bridge and its hinterland connections. Connectivity in the entire ScanMed section of the TEN-T corridor would be affected by such a bottleneck, making this a concern for all of STRING. Further fixed links across the Öresund between Sweden and Denmark (such as an Öresund Metro between Copenhagen and Malmö and a tunnel between Helsingborg and Helsingör) could therefore help meet capacity issues and avoid bottlenecks, while also supporting a shift from road to rail, and making travel by rail faster, more attractive and accessible. STRING can raise awareness around this issue by engaging national governments, showing that this goes beyond a simple regional

issue and affects the whole ScanMed corridor, which should be addressed in the EU ScanMed Forum.

- c. **Improve the rail link from the Fehmarn Belt onward to Hamburg.** Bottlenecks may also arise on the other end of the Fehmarn Belt Fixed Link, with the central rail station in Hamburg already facing capacity issues. STRING would benefit from increased investment in rail links between Hamburg and the Fehmarn Belt. For example, to relieve existing bottlenecks in Hamburg and the ones expected to arise between Hamburg and Lübeck once the Fehmarn Belt Fixed Link is complete, a project is currently underway to build the S4 S-Bahn between Hamburg and Bad Oldesloe.

STRING members may consider:

5. **Implementing short-term sustainable transport solutions in addition to medium- and long-term projects.** These include facilitating cross-border transport by integrating ticketing across borders, stimulating demand for train-based solutions by extending rail lines to smaller cities, eliminating bottlenecks and increasing reliability of railway transport by improving maintenance of existing railway lines to increase efficiency at a low cost relative to large, long-term infrastructure projects.

6. **Using the potential of European railway transport to scale up circular economy initiatives.** In the medium term, STRING members can work toward utilising empty returning trucks and trains by mapping on which routes they exist and which circular economy initiatives they could be matched with. This could include constructing regional recycling plants and loading empty returning trucks and trains in order to decrease emissions from empty trucks and trains, while boosting circular economy initiatives. To target trucks specifically, implementing charges based on vehicle-kilometres travelled (vkm) would provide a strong incentive to consolidate loads. STRING members may also consider constructing a web platform for load consolidation.

7. **Co-operating at the EU level on topics of importance to STRING.** Members of local and regional governments within STRING could work together to raise their collective profile and advance their strategic priorities together, for example by forming an interregional group within the Committee of the Regions to contribute to the Committee's debate on topics of importance to STRING.

Position STRING as a global Green Hub

With its expertise in developing, producing and exporting green technologies and its head start towards achieving the SDGs, STRING can position itself as a Green Hub if it strengthens its international visibility and attracts skilled workers and firms. Furthermore, the benefits of investing in transport infrastructure will only fully deliver if integrated with the kind of investments in business development, research and education that are central to positioning STRING as a Green Hub.

In order to position STRING as a global Green Hub, STRING may consider:

8. **Scale up existing green companies, innovation infrastructures and technologies.** STRING could strengthen green innovation by developing partnerships between firms and knowledge institutions and organising collaborations between green clusters (e.g. those identified in the mapping of the Green Tech Sector by the Danish Technological Institute) and fund opportunities to scale up existing firms. These could take the form of more or less institutionalised networks with a focus on creating high-profile co-operative projects to help research institutions and firms across STRING attract new business, a qualified workforce, investments, and increase international visibility. STRING would also benefit from increased public investment in universities and business development parks for university based start-ups.

9. **Institutionalising green investment in STRING, for example by establishing a STRING green investment agency.** It is estimated that 30% of the green investments from investors located in STRING is actually placed in companies outside the STRING area (Danish Technological Institute and STRING, 2021^[14]). This may be due to internal competition within the STRING area, whereby individual members seek the same investments. Furthermore, there is no unified overview of green innovation. There is a lack of investments in the phase between innovation/start-up and production/operation, even though green investment funding at national and EU level has increased to support a sustainable recovery from COVID-19. Creating a professional STRING green investment agency, which could be part of the STRING Secretariat and be financed by members and private actors, may be an option to better co-ordinate investments and maximise outreach and international visibility. This agency could advise start-ups and firms on which investments to aim for, connect investors and firms and provide funding support in the development phase.

10. **Bringing the four national governments together to jointly appoint STRING as a ‘Green Hub’ and developing a policy agreement to establish a common market for the development, testing, implementation and export of green technologies.** This agreement could also include stipulations to increase labour mobility throughout STRING by harmonising regulations in the four countries. The ultimate aim of the policy agreement would be to improve the region’s ability to compete internationally in the green sector by pooling the region’s strengths together.

STRING members may consider:

11. **Increasing dialogue between stakeholders in the pentahelix framework (public sector, private sector, academia, civil society, citizens and social entrepreneurs) through policy fora.** This includes fostering cross-border collaboration on public-private partnerships (PPPs) by aligning national governments’ standards and policies. For example, public procurement can help steer investment in green technologies. Harmonising the way sustainable standards are included in public procurement could also be a driving force for sustainability.

12. **Investing in attracting and retaining green tech companies and skilled workers.** STRING member countries could consider using strategic mechanisms such as tax benefits and subsidies (in accordance with EU State aid rules) to attract and keep green tech companies in the region, while also improving location factors by investing in social infrastructure and quality of life where needed. They may also consider promoting further labour and residential mobility by launching information campaigns on how to live and work in different parts of the STRING area. A common job portal could be set up to advertise career opportunities throughout the entire megaregion.

13. **Distributing and linking facilities to test green innovations throughout the entire megaregion by increasing access to these for firms and researchers throughout STRING.** Test facilities are currently concentrated in the Capital Region of Copenhagen and around Gothenburg. Distributing green tech test facilities in all industries more evenly across the STRING region and better disseminating information on how to engage in testing could help improve testing infrastructure by increasing access to firms and researchers throughout STRING. Providing specific funding for testing opportunities in regions currently lacking these could help solve the regional imbalance, while earmarking a certain number of test facilities for specific technologies could ensure a more balanced development. In addition, test facilities throughout STRING could be better linked to enable researchers and firms from different parts of the STRING area to take advantage of facilities. While collaboration on test facilities between Sweden, Norway and Denmark is already strong, further collaboration with Northern Germany could help improve research and innovation infrastructure.

14. **Creating more green jobs.** Growth of the green sector and increased labour mobility with faster and cheaper transport would help accelerate the creation of green jobs. STRING member countries and regions should set goals for the number of green jobs they want to create by 2030. A successful transition

towards a greener economy will entail new opportunities for workers, but may also displace workers in declining and polluting industries. In order to support a smooth transition of workers from declining to growing sectors, the adjustment costs borne by displaced workers should be reduced by offering retraining programmes and incentives. STRING members could analyse the effects of investments and policies on labour markets and households at the local level in order to inform planning and coordination, including for universities, schools, businesses, and citizens. Analyses could cover expected changes in jobs, skills demand, and transport opportunities, for example.

15. Continuing to implement sustainable development initiatives at regional and local level. Cities and regions across STRING can contribute to the Green Hub agenda by continuing to implement sustainable urban and regional planning. Such initiatives could help create a tangible connection to STRING for residents and contribute to the megaregion's green brand building.

Build a cohesive megaregion around a common goal

Megaregions can help deliver agglomeration benefits and greater visibility while avoiding the negative externalities that may come with megacities, such as higher housing costs, congestion and pollution. Constructing an integrated, sustainable and beneficial megaregion for all involves thinking and acting beyond local, regional and national boundaries.

In order to build a cohesive megaregion, STRING may consider:

16. Building a joint brand around the Green Hub by strengthening the sense of a shared Northern European identity. Bringing Nordic countries (which already have a common history of co-operation and relatively “close” languages) and Northern Germany closer together around the goal of reaching a critical mass will be essential to develop a common STRING brand to increase international visibility. Flagship or “lighthouse” projects (e.g. hydrogen initiative, green hub) will provide concrete examples of what STRING can achieve collectively, while raising the profile of these projects under a common brand (for example through a joint investment agency) could increase export and attract skilled labour and investment. Individual cities, regions and countries could also consider aligning their tourism and investment campaigns and mainstream the STRING vision.

17. Engaging residents in the benefits of the megaregion. This could include leveraging the common history and natural assets of the area, for example by organising joint cultural and tourist events and developing cross-border education and learning opportunities (e.g. internships in innovative companies in the four countries), potentially organised by the STRING Secretariat.

18. Ensuring that cities and regions of all sizes and different stakeholders can participate in the STRING megaregion. It is important to make the benefits of the megaregion tangible for cities and regions of all sizes and diverse stakeholders to avoid a “winner takes it all” approach whereby the largest cities reap all the benefits. Stakeholders may include chambers of commerce, academia, firms, investment organisations etc., who could for example be involved in workshops to determine each place's strengths and opportunities to participate in the STRING megaregion.

19. Monitoring progress on the level of integration at the megaregion level and progress on Sustainable Development Goals locally. It is important to monitor the level of integration at the megaregion level to ensure that initiatives are having the desired effect on the STRING geography, organisation and residents. Actively tracking progress can also enable STRING to ensure that its efforts are directly contributing to the overarching goals for the area, for example by increasing the sustainability of the region. Monitoring local progress using the Sustainable Development Goals (for example through the OECD web tool to measure the distance to the SDGs in regions and cities) would help STRING track its own progress and identify areas for improvement. An annual report or conference could be created to

review progress and could involve all STRING stakeholders such as the members, national governments, the private sector, academia and civil society.

20. **Increasing STRING's presence at the EU level and speaking with a single voice to elevate the standardisation agenda.** Further harmonisation and standardisation at the EU level will be critical to build a more connected and sustainable future in STRING. In order to raise commitment at the EU level, STRING should become a permanent adviser to the national governments to enhance their cross-border perspective. Examples of specific topics in need of standardisation that STRING could campaign for at the EU level include:

- a. **Harmonising regulations for road and rail freight.** Discrepancies between regulations on freight depending on the means of transport undermine the potential of rail to offer a cost-effective and efficient alternative to trucking. Harmonising regulations between rail and road will offer a major incentive to promote the more sustainable alternative of railway freight transport.
- b. **Strengthening EU railway standardisations.** Strengthening the European Railway Agency (ERA) to better co-ordinate regulations, mandates and resources across member states would facilitate cross-border railway infrastructure. This includes deploying the ERTMS (European Railway Traffic Management System), which aims at replacing the different national train control and command systems in Europe by one standardised system. More joint standards would enable railway to be more competitive relative to road transport, increase capacity and ensure higher reliability.

21. **Considering enlarging STRING membership to build an even stronger megaregion.** Enlarging STRING (e.g. via Aalborg-Aarhus and Central Denmark Region (Denmark), Kiel/Lübeck (Germany), Helsingborg (Sweden) and Aust-Agder and Kristiansand (Norway)) could help tap into further economic linkages, manufacturing capacity, and universities to become even more competitive.

STRING members may consider:

22. **Building further political ownership and buy-in from all stakeholders.** In a longer term perspective, the option of formalising co-operation could be further explored, for example through a European Grouping for Territorial Co-operation (EGTC). Members of this legal instrument can be EU member states, regional or local authorities, associations and any other public body. As states must agree to the participation of potential members in their respective countries, a first step toward formalising co-operation through this instrument would be approaching the national level and gauging interest.

23. **Implementing green financing instruments at the local scale.** Local and regional governments have a pivotal role to play in supporting climate objectives, for example by developing a green fiscal strategy that integrates green priorities in budgeting and procurement. This should also make the most of taxes, user charges and fees, property income and land-value capture instruments to support climate objectives. In some cases, instruments such as congestion charges and eco-taxes and other tools such as PPPs could be applied at the local scale to raise funds for greening projects locally. Where appropriate, these could be applied at the regional/metropolitan scale (OECD, 2019^[23]).

Conclusion

STRING has good potential to become a leading megaregion in Europe, by strengthening a sustainable economic model that it can live off in the future and exporting its innovative green solutions worldwide. In order to reach these goals, STRING must seize the current momentum and act now. This entails action

from all, i.e. from STRING as an organisation, its individual members, national governments and the EU level.

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Annex A. Select OECD recommendations from Territorial Reviews

Table A A.1. Overview of recommendations put forward in previous OECD publications covering the STRING area

Name of review	Year	Main recommendations
OECD Territorial Reviews: Öresund, Denmark/ Sweden	2003	<ul style="list-style-type: none"> • Infrastructure and spatial planning: assessing the long-term consequences of the bridge and toll policy, and perhaps rethinking the high tolls which seem to discourage frequent use of the bridge. There should also be a reconsideration of the performance and pricing of existing infrastructure • Labour market: Labour mobility within the Öresund region is likely to increase, and facilitating the cross-border labour market entails reducing bureaucratic and legislative obstacles to mobility by providing more information on how to navigate it • Networking and knowledge diffusion: trans-border cooperation between firms and institutions should be promoted in order to establish and strengthen networks which stimulate innovation and the better use of skills and knowledge. • Taxation: asymmetries of the two financial systems necessitate a new tax agreement. Specifically, the current system involves a net decrease in resources for Swedish municipalities, so pragmatic tax sharing agreements between the two countries are needed. • Governance: The current cross-border cooperation structure should be re-evaluated to address areas of weakness, for example by including private actors in the Öresund Committee, encouraging the participation of citizens by developing an Öresund identity or brand and considering mechanisms of "light institutionalisation" of cross-border relations
OECD Territorial Reviews: Copenhagen, Denmark	2009	<ul style="list-style-type: none"> • Skills: addressing the late entry of students into the workforce, integrating immigrants into the labour market, attracting talent from abroad (potentially through tax accommodations for skilled foreign workers), attracting more international firms and international students • Innovation: increasing links between higher education institutions and firms, coordinating entrepreneurship policies • Infrastructure, Housing and Environment: leveraging the attractiveness of Copenhagen by improving external accessibility and potentially implementing a congestion charge, densifying and increasing housing production in a regional approach • Governance: creating a common agenda for Copenhagen supported by all stakeholders, strengthening metropolitan coordination
OECD Territorial Reviews: Skåne, Sweden	2012	<ul style="list-style-type: none"> • Innovation: using innovation strengths to enhance growth and employment generation, promoting trans-cluster and trans-border innovation, including the private sector to a greater extent • Labour market: integrating migrants into the labour market, facilitating school-to-work transitions among youth, integrating innovation, labour market and business environment policies

OECD Territorial Reviews: The Megaregion of Western Scandinavia	2018	<ul style="list-style-type: none"> • Megaregion governance: valorising and mobilising common ground, working jointly on key themes, such as climate and sustainability or health and well-being, improving horizontal and vertical coordination of public investment, investing in a joint branding strategy • Oslo, Akershus and Østfold: fostering job creation, innovation and entrepreneurship and upgrading skills • West Sweden: improving productivity growth and strengthening regional attractiveness • Skåne. creating more inclusive labour markets, improving transport infrastructure and accessibility
OECD Territorial Reviews: Hamburg Metropolitan Region, Germany	2019	<ul style="list-style-type: none"> • Governance and collaboration: strengthening collaboration across local, state, and national boundaries – notably with Scandinavia – to raise HMR's international profile • Innovation: Developing an integrated regional innovation strategy and establishing a regional innovation agency could be established for this purpose with adequate capacities and resources. • Human capital: Investing in strengthening education and human capital. By increasing the low level of R&D while strengthening science-industry linkages and exploiting the full potential of new research facilities. • Regional planning: adopting a more coherent and integrated approach to innovation, planning of transport and housing, and branding to offer a powerful tool to boost productivity, reconcile competing objectives for land, respond more effectively to demographic pressure, improve quality of life both for residents and for visitors, and raise the national and international profile of HMR.
A Territorial Approach to the Sustainable Development Goals, Case Study of Viken, Norway	2020	<ul style="list-style-type: none"> • Promoting a functional approach to address Viken's key development challenges related to public transport, housing and industry cluster policies, and to ensure balanced regional development. • Securing adequate convening power and resources to the newly created SDG co-ordination mechanisms for the implementation of the SDGs in Viken. • Engaging in dialogues with the national government, as well as with other Norwegian counties, to advance the SDGs in Norway. • Working further with the national government to mainstream local action into the national SDGs implementation framework. • Analysing synergies and trade-offs across SDGs targets to make the most of the holistic and transformative nature of the 2030 Agenda. • Raising further awareness among civil society and the general public to operationalise the planning strategy, develop new regional plans and promote continued engagement. • Mobilising the private sector on the SDGs through public procurement and clusters policy.

Source: OECD (2020), *A Territorial Approach to the Sustainable Development Goals in Viken, Norway*, <https://www.oecd-ilibrary.org/docserver/dc1b182d-en.pdf?expires=1610703438&id=id&accname=ocid84004878&checksum=836893417871108A1F3E48FE278720C6> (accessed on 15 January 2021); OECD (2019), *OECD Territorial Reviews: Hamburg Metropolitan Region, Germany*, OECD Territorial Reviews, OECD Publishing, Paris, <https://dx.doi.org/10.1787/29afa27f-en>; OECD (2018), *OECD Territorial Reviews: The Megaregion of Western Scandinavia*, OECD Territorial Reviews, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264290679-en>; OECD (2012), *OECD Territorial Reviews: Skåne, Sweden 2012*, OECD Territorial Reviews, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264177741-en>; OECD (2009), *OECD Territorial Reviews: Copenhagen, Denmark 2009*, OECD Territorial Reviews, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264060036-en>; OECD (2003), *OECD Territorial Reviews: Oresund, Denmark/Sweden 2003*, OECD Territorial Reviews, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264100800-en>.

Annex B. Agendas and list of participants of the four OECD-STRING seminars

Norway, 16 November 2020

Table A B.1. Agenda of the Norwegian OECD-STRING seminar

09:00 – 09:10	Welcoming remarks
09:15 – 10:00	Session I Transport infrastructure for a connected, accessible and sustainable region
10:00 – 10:20	Session II STRING as a green hub: creating a sustainable future the region for the region
10:20 – 11:05	Session III Making the megaregion happen: planning, financing and collaborating across borders
11:05-11:15	Wrap-up and next steps: How can the OECD action plan help build a shared identity and cement STRING's vision for the future?

Moderator

- Connie Hedegaard, Former EU Commissioner for Climate Action

Speakers

- Soo-Jin Kim, Head of Urban Policies and Reviews, OECD
- Knut Arild Hareide, Minister of Transport
- Anne Beathe Kristiansen Tvinneim, Vice Mayor for Planning, Climate and Environment
- Victoria Marie Evensen, Vice Mayor for Business Development and Public Ownership in the City of Oslo
- Vegar Andersen, Political Adviser to the Vice Mayor for Business Development and Public Ownership in the City of Oslo
- Gøran Andreassen, Managing Director, Bring
- Preben Strøm, Managing Director, Energy Valley

- Svein Berg, Managing Director, Nordic Innovation
- Ola Elvestuen, Deputy Party Leader Venstre
- Pat Cox, Scandinavian-Mediterranean TEN-T Coordinator

Sweden, 17 November 2020

Table A B.2. Agenda of the Swedish OECD-STRING seminar

09:00 – 09:20	Welcoming remarks
09:20 – 09:50	Session I STRING as a green hub: creating a sustainable future the region for the region
09:50 – 10:30	Session II Transport infrastructure for a connected, accessible and sustainable region
10:30 – 10:45	Coffee break
10:45 – 11:45	Session III Making the megaregion happen: planning, financing and collaborating across borders
11:45-12:00	Wrap-up and next steps: How can the OECD action plan help build a shared identity and cement STRING's vision for the future?

Moderator

- Connie Hedegaard, Former EU Commissioner for Climate Action

Speakers

- Soo-Jin Kim, Head of Urban Policies and Reviews, OECD
- Anna Hallberg, Minister for Foreign Trade and Nordic Affairs
- Johan Büser, Member of Swedish Parliament and Member of the Transport Committee
- Axel Josefson, Mayor of the City of Gothenburg
- Mikaela Waltersson, Chair of the Regional Council, Region Halland
- Kristina Jonäng, Member of Regional Executive Board, Region Västra Götaland
- Louise Eklund, First Vice Chair of the Regional Development Board, Region Skåne
- Andreas Schönström, Chair of the Technical Services Committee, City of Malmö
- Mattias Goldmann, Head of Sustainability, Sweco
- Martin Lundstedt, CEO, Volvo

- Jakop Dalunde, Member of European Parliament and Member of the Committee on Transport and Tourism

Denmark, 24 November 2020

Table A B.3. Agenda of the Danish OECD-STRING seminar

13:00 – 13:20	Welcoming remarks
13:20 – 14:00	Session I STRING as a green hub: creating a sustainable future the region for the region
14:00 – 14:40	Session II Transport infrastructure for a connected, accessible and sustainable region
14:40 – 14:50	Coffee break
14:50 – 15:50	Session III Making the megaregion happen: planning, financing and collaborating across borders
15:50-16:00	Wrap-up and next steps: How can the OECD action plan help build a shared identity and cement STRING's vision for the future?

Moderators

- Connie Hedegaard, Former EU Commissioner for Climate Action
- Sophie Hæstorp Andersen, Chair of the Regional Council, Capital Region of Denmark

Speakers

- Soo-Jin Kim, Head of Urban Policies and Reviews Unit, OECD
- Dan Jørgensen, Minister of Climate, Energy and Utilities
- Benny Engelbrecht, Minister of Transport
- Katarina Ammitzbøll, Member of the Danish Parliament for the Conservative People's Party
- Jan E. Jørgensen, Member of the Danish Parliament for Denmark's Liberal Party
- Lars Weiss, Lord Mayor of Copenhagen
- Tommy Petersen, Member of the City Council, Copenhagen
- Stephanie Lose, Chair of the Regional Council, Region of Southern Denmark
- Heino Knudsen, Chair of the Regional Council, Region Zealand
- Lizette Risgaard, Chair of the Danish Trade Union Confederation
- Thomas Woldbye, CEO of Copenhagen Airports
- Friis Arne Petersen, Former Danish Ambassador to Germany

Germany, 25 November 2020

Table A B.4. Agenda of the German OECD-STRING seminar

09:30 – 09:50	Welcoming remarks
09:50 – 10:20	Session I STRING as a green hub: creating a sustainable future the region for the region
10:20 – 11:00	Session II Transport infrastructure for a connected, accessible and sustainable region
11:00 – 11:15	Coffee break
11:15 – 12:15	Session III Making the megaregion happen: planning, financing and collaborating across borders
12:15-12:30	Wrap-up and next steps: How can the OECD action plan help build a shared identity and cement STRING's vision for the future?

Moderator

- Connie Hedegaard, Former EU Commissioner for Climate Action

Speakers

- Soo-Jin Kim, Head of Urban Policies and Reviews Unit, OECD
- Petter Ølberg, Norwegian Ambassador to Germany
- Susanne Hyldelund, Danish Ambassador to Germany
- Per Thöresson, Swedish Ambassador to Germany
- Almut Möller, Head of the State Office, Free and Hanseatic City of Hamburg
- Claus Christian Claussen, Minister of Justice, Europe and Consumer Protection, State of Schleswig-Holstein
- Monica Schofield, Head of the EU Office at TuTech Innovation GmbH
- Jens Peter Saul, CEO Rambøll & HamburgAmbassador Denmark
- Jens Meier, CEO Hamburg Port Authority
- Gabriel Felbermayr, President of the Kiel Institute for the World Economy
- Andreas Hein MdL Schleswig-Holsteine, Energy policy spokesman of the CDU fraction