



COUNTRY FICHE SWEDEN

SMART SPECIALIZATION

NATIONAL LEVEL

Sweden has one of the longest coastlines in Europe and a strong tradition of maritime activities. Sweden's maritime activities cover a broad spectrum and are conducted throughout the country (1 The Swedish maritime industries (Swedish Agency for Innovation Systems Analysis, 2013). The Government's vision for the development of the maritime sector presupposes environmentally, economically and socially sustainable growth and rests on three equal pillars: a balanced marine environment, competitive maritime industries and attractive coastal areas (Government Offices of Sweden, 2015).

Sweden has a national Maritime Strategy since the end of 2015. The strategy includes six areas of action.

- Healthy and safe sea
- Knowledge and innovation
- Planning with a maritime perspective
- Functional rules and effective licensing processes
- International cooperation
- Prerequisites for business and industry-specific measures

The Swedish Maritime Strategy takes into account several maritime sectors:

- Transport (strengthening the competitiveness of Swedish ports, improving infrastructure in coastal areas, equal competitive conditions)
- Maritime technology and production (development of platforms for marketing and communication for exports, investing in opportunities for new technologies)
- The sea as a natural resource: marine foodstuffs (identifying suitable areas and technologies, investing in farming of micro- and macroalgae)
- Energy (continue investments in marine-based windpower)
- Minerals and bioresources (review prospects and consequences of marine-based extractions, research potential use of bioactive substances for biomedicine and biotechnology)
- Leisure and tourism (product development to prolong the tourist season, invest in collaboration between actors, recreational boating, angling, cultural maritime heritage)
- Service (improve rules that enable companies operating in Sweden to provide services)

REGIONAL LEVEL

Västra Götaland is the centre of the nation's maritime sector, with tens of thousands of people employed across several thousand companies within shipping, marine technology, boat production, the fishing industry and coastal tourism, among other areas. The region also boasts a centre for research and education orientated towards the maritime industry. The region aims to be one of Europe's leading maritime regions with solutions focused on innovation and environmentally compatible growth". (Region Västra Götaland, 2011)

The Västra Götaland Region has a Maritime Strategy, part of its Sustainable Development. Västra Götaland Region supports investments in competitive, innovative and sustainable maritime industries that can contribute to increased employment, reduced environmental impact and an attractive living environment. (Region Västra Götaland, 2011)

The Maritime Action Program is based on the Maritime Strategy for Västra Götaland, which was adopted by the regional council in Västra Götaland in 2015. The Great Lakes of Vänern and Vättern are covered by the maritime strategy and action program. This program has also six areas of actions:

1. MARINE SPATIAL PLANNING
2. MARITIME OPERATIONS AND TECHNOLOGIES
3. SEA FOOD
4. MARINE TOURISM
5. MARINE ENERGY INCLUDING OFFSHORE WIND
6. MARINE BIOTECHNOLOGY

The Maritime Cluster in West Sweden is the platform for the development work within the maritime area and the aim of the cluster is to strengthen the maritime sector through new knowledge, innovation and collaboration. In addition, creating the conditions for Western Sweden to contribute to a sustainable future for people, the sea and its resources. (Västra Götaland region (n.d.-b).

INTELLECTUAL PROPERTY RIGHTS (IPR), REGULATIONS AND STANDARD SUPPORT

| NATIONAL IPR AGENCY | WEBSITE | TELEPHONE NUMBER | EMAIL |
|-----------------------------------|--|------------------|--|
| PRV Patent och registeringsverket | www.prv.se | +46 08-782 28 00 | kundsupport@prv.se |

MARINE SPATIAL PLANNING

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| Policy Document | https://www.havochvatten.se/en/swam/eu--international/marine-spatial-planning.html |
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REGULATION AND STANDARD SUPPORT

AGENCIES

| | |
|------------------|---|
| Name agency | Transportsyrelsen |
| Concerning | Shipping |
| Link to website | https://www.transportstyrelsen.se/sv/sjofart/ |
| telephone number | +46 771-503 503 |
| Name agency | Naturvårdsverket |
| concerning | Public agency in Sweden, responsible for environmental issues |
| Link to website | https://www.naturvardsverket.se |
| telephone number | +46 10-698 10 00 |
| Name agency | Länsstyrelsen |
| Concerning | Shipping |
| Link to website | https://www.lansstyrelsen.se |
| telephone number | +46 10 224 40 00 |
| Name agency | Havs och Vattenmyndigheten |
| Concerning | Sweden's marine spatial planning, the physical planning of the marine environment. |
| Link to website | https://www.havochvatten.se |
| telephone number | +46 10-698 60 00 |

PERMITS AND EXEMPTIONS

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|-------------------|---|
| ISSUING AUTHORITY | LÄNSSTYRELSEN |
| Name permit | Multiple permits |
| Applies to | Multiple permits |
| Link to website | https://www.lansstyrelsen.se |
| Issuing authority | Swedish Agency for Marine and Water Management (Havs och Vatten) |
| Name permit | Fishing license |
| Applies to | Professional fishing in the sea. |
| Link to website | https://www.havochvatten.se |
| Issuing authority | Swedish Agency for Marine and Water Management (Havs och Vatten) |
| Name permit | Special fishing permits |
| Applies to | <p>The fish that require special permit are</p> <ul style="list-style-type: none"> • fishing for northern shrimp • fishing for Norway lobster with cages • fishing for cod in the Baltic Sea • fishing for pelagic species (herring, sprat, mackerel, sandeel, blue whiting and other industrial species) • annual demersal fishing opportunities • fishing in the Norwegian economic zone • fishing for broccoli with trawl • fishing for eels • fishing with cod catching gear in the North Sea • trawl shrimp inside the trawl border north of latitude 58 31, 50 N, so-called Kosterhav state • shrimp trawling in the Gullmarsfjord • fishing in trawl fishing areas • fishing for mussels with towed gear • fishing for seashell with cage • fishing for capelin in Greenlandic zone • fishing for mackerel in Faroese waters • trawling in the occupied areas of the Baltic Sea • permit for mussel scraping |
| Link to website | |
| Issuing authority | Transport Styrelsen |
| Name permit | Several permits and exemptions concerning shipping |
| Applies to | Permits, exemptions and certificates concerning shipping. |
| Link to website | https://www.transportstyrelsen.se |

COMMENTS AND EXPERIENCES

“Länsstyrelsen” is the main Swedish agency for permissions. There is a “Länsstyrelse” in every county. Depending on the type of matter, other authorities may be involved

CROSS BORDER FINANCIAL INSTRUMENTS

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| TYPE OF FINANCIAL INSTRUMENT | Grant |
| ORGANISATION | Vinnova (Sweden's Innovation Agency) |
| DESCRIPTION | Activities eligible to apply for funding must be research and development activities that correspond to the EU definition of industrial research and experimental development. |
| TRANSNATIONAL DIMENSION | Public funding for joint R&D projects between Swedish and German small and medium-sized enterprises. |
| TYPE OF FINANCIAL INSTRUMENT | Grants |
| ORGANISATION | Swedish Institute |
| DESCRIPTION | The Swedish Institute is a public agency that promotes interest and trust in Sweden around the world. They work in the fields of culture, education, science and business to strengthen international relations and development. To this end, they share information, develop skills, promote cultural exchange and cooperation, and provide funding and grants. They support and collaborate with businesses, universities, cultural institutions and Swedish embassies around the world. |
| TRANSNATIONAL DIMENSION | They build lasting relations between Sweden and other countries in order to increase interest in Sweden. |
| TYPE OF FINANCIAL INSTRUMENT | Grant |
| ORGANISATION | Swedish Environmental Protection Agency |
| DESCRIPTION | The Swedish Environmental Protection Agency (Swedish EPA) offers funding for environmental research projects in different areas. |
| TRANSNATIONAL DIMENSION | / |
| TYPE OF FINANCIAL INSTRUMENT | Grant |
| ORGANISATION | Västra Götaland region |
| DESCRIPTION | Västra Götaland region distributes support to projects, companies and organizations that contribute to regional development. |
| TRANSNATIONAL DIMENSION | / |
| TYPE OF FINANCIAL INSTRUMENT | Grant |
| ORGANISATION | Tillväxtverket, The Swedish Agency for Economic and Regional Growth |
| DESCRIPTION | The Swedish Agency for Economic and Regional Growth has a government mandate to manage and distribute funding from the European Regional Development Fund in such a way as to support projects that promote growth and jobs. |
| TRANSNATIONAL DIMENSION | ERDF funding enables international cooperation. |

INNOVATUM STARTUP

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| NAME | Innovatum |
| MAIN TOPICS | General Incubator |
| ADDRESS | Nohabgatan 18a, byggnad 73 461 53 trollhättan |
| WEBSITE | Https://www.innovatum.se |

Startup Sweden

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| NAME | Startup sweden |
| MAIN TOPICS | Startup sweden is a boot camp for the most promising digital startups in sweden. |
| CONTACT | - Tatjana Choudhary Phone: +468681 66 66 - Arash sangari Phone: +468681 65 98 - Andreas ek Phone: +468681 96 05 |
| WEBSITE | Https://tillvaxtverket.se |



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| NAME | rise research institutes of Sweden |
| TYPE OF TECHNOLOGY | Marine, fire, explosives, |
| FACILITIES | a large number of test and demonstration facilities |
| TRL LEVEL | 1-8 |
| WEBSITE | https://www.ri.se |
| TELEPHONE NR. | +46 10 516 50 00 |



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| NAME | SSPA AB |
| TYPE OF TECHNOLOGY | Simulation |
| FACILITIES | Water bassin Testing vessels |
| TRL LEVEL | 1-8 |
| WEBSITE | https://www.sspa.se |
| TELEPHONE NR. | +46 31 772 9000 |



UNIVERSITY OF GOTHENBURG

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| NAME | Sven Lovén centre for marine infrastructure – university of Gothenburg |
| TYPE OF TECHNOLOGY | Comprehensive marine infrastructure, with several research vessels and smaller boats as well as two stations for research and education. Both stations are located in unique environments on the west coast of Sweden: kristineberg by the gullmar fjord and tjärnö by the koster fjord. |
| FACILITIES | Two stations for research and education Research vessels and smaller boats Diving facility Sea water systems |
| TRL LEVEL | 1-8 |
| WEBSITE | https://loven.gu.se/english |
| TELEPHONE NR. | +46 31 786 95 00 |

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| NAME | Swedish Mariculture Research Center (SWEMARC)– university of Gothenburg |
| TYPE OF TECHNOLOGY | SWEMARC's goal is to increase the cultivation of food from the sea in an environmentally smart way through interdisciplinary and community-based research. |
| TRL LEVEL | 1-8 |
| WEBSITE | https://swemarc.gu.se |
| TELEPHONE NR. | +46 317869533 |



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| NAME | KTH Royal Institute of Technology |
| TYPE OF TECHNOLOGY | Underwater technology; research and development in the field of primarily unmanned autonomous vehicles (auv) for environmental probing. |
| FACILITIES | / |
| TRL LEVEL | 1-8 |
| WEBSITE | https://www.kth.se/ |



UPPSALA UNIVERSITET

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| NAME | Uppsala University |
| TYPE OF TECHNOLOGY | Renewable energy |
| FACILITIES | Experimental plant for marine current energy conversion Energy park at lysekil |
| TRL LEVEL | 1-6 |
| WEBSITE | https://www.uu.se/ |

LITERATURE LIST

- Government Offices of Sweden. (2015). A Swedish maritime strategy- for people, jobs and the environment. Geraadpleegd van <https://www.government.se/contentassets/9e9c9007f0944165855630ab4f59de01/a-swedish-maritime-strategy--for-people-jobs-and-the-environment>
- Swedish Agency for Innovation (2013). Systems Analysis.
- Region Västra Götaland. (2011). Maritime Strategy for Västra Götaland. Geraadpleegd van http://www2.vgregion.se/upload/Regionutveckling/Naringsliv/Maritimt/Maritime_Strategy_VastraGotaland-web1.pdf
- Västra Götaland region. (n.d.-b). Sustainable maritime industries. Retrieved February 6, 2019, from <https://www.vgregion.se/regional-utveckling/program/hallbara-maritima-naringar>

