Welcome to an Espoo-consultation meeting on amended Swedish Marine Spatial Plans

Swedish Agency for Marine and Water Management

Online meeting

December 20th 2023

Swedish Agency
for Marine and
Water Management

WHY this meeting?

» Swedish Espoo-consultation from 28th November 2023 to 20th February 2024 on amended MSP with more potential areas for offshore wind.

» Aim of the meeting: **Information and opportunities to ask questions**

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Agenda

- 13.00-13.05 Welcome and introduction – Ingela Isaksson
- 13.05-13.30 Presentation of the process and proposal for amended Swedish MSP – Joacim Johannesson, Ida Lindbergh
- 13.30-14.00 Presentation of the impact assessment – Jan Schmidtbauer Crona
- 14.00-14.10 Break
- 14.20- 14.50 Time for questions
- 14.50-15.00 Wrap up and end of meeting

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The MSP-process

Government assignment on new areas for energy extraction in the maritime spatial plans

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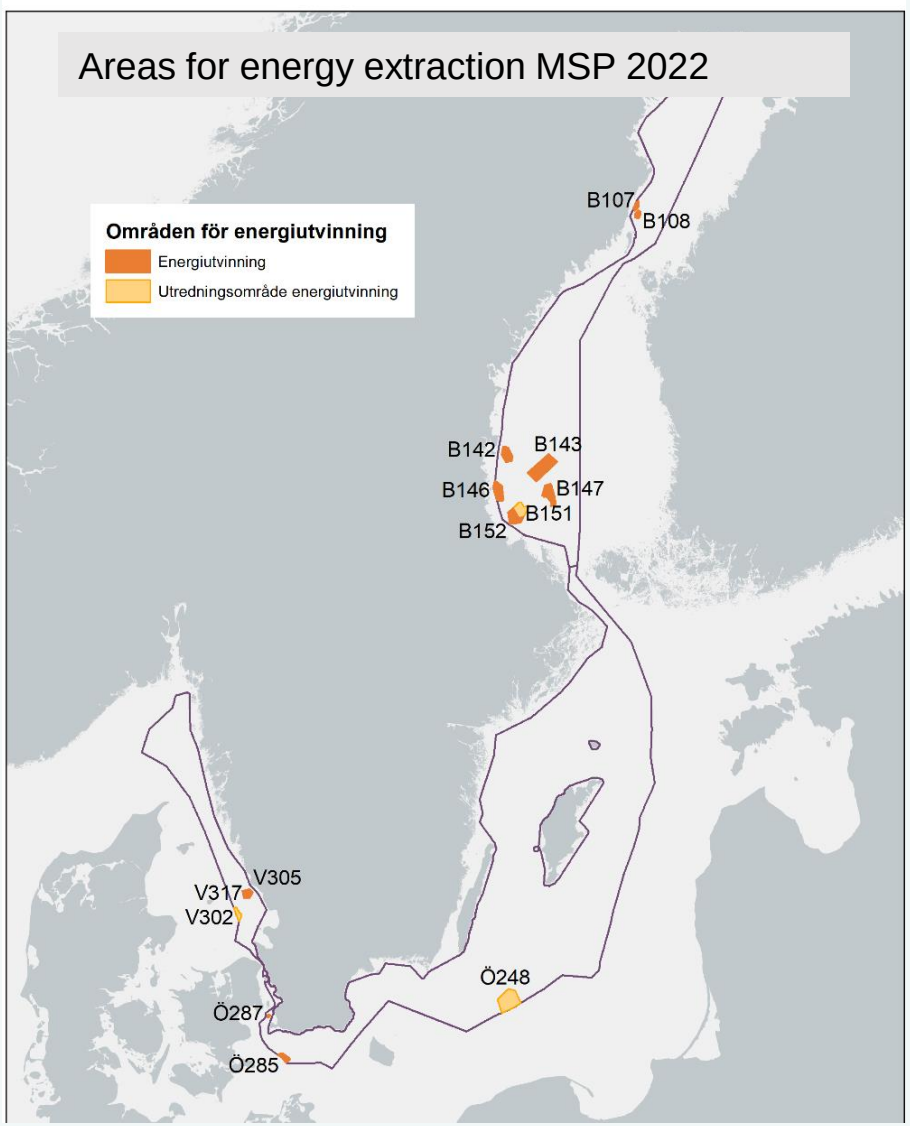
- February 2022 – Decision on Sweden's first maritime spatial plans.
- Designated areas in adopted marine spatial plans corresponding to approximately 60 TWh of annual production. Estimated to provide 20-30 TWh of annual production.
- The maritime spatial plans need to be updated to allow for an additional 90 TWh – in total 120 TWh
- New government assignment to amended MSPs with focus on new areas for offshore wind



Large needs for fossil free energy for climate change mitigation

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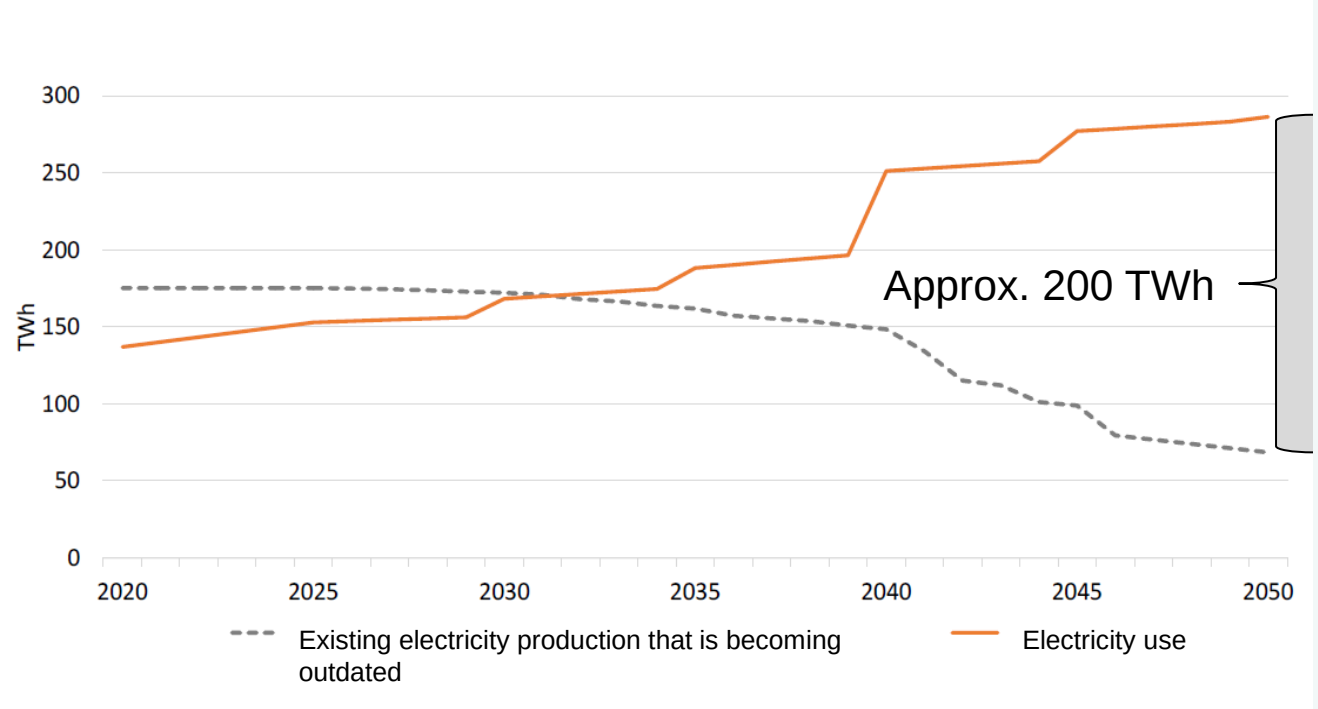
- Climate change and climate policy objectives
- Replacement of outdated infrastructure (repowering)
- Increasing future electricity demand (electrification of industry and transport)
- Security of supply and independence
- NB: Electricity demand to be met by multiple production: nuclear energy, wind and solar energy etc.



Source; Swedish Energy Agency 2022

Step 1 of the assignment – basis for new or changed areas for energy extraction

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- Coordinated by the Swedish Energy Agency
- The Energy Agency reported to the government in March 2023:
  "Proposals for suitable areas for energy in the marine spatial plans".
- 9 authorities participated
- 53 areas are proposed
- Describes in a detailed way the possibilities for coexistence between wind power and other interests in specific areas
- No area without conflicts between interest

Stage 2 of the assignment – proposals for amended maritime spatial plans

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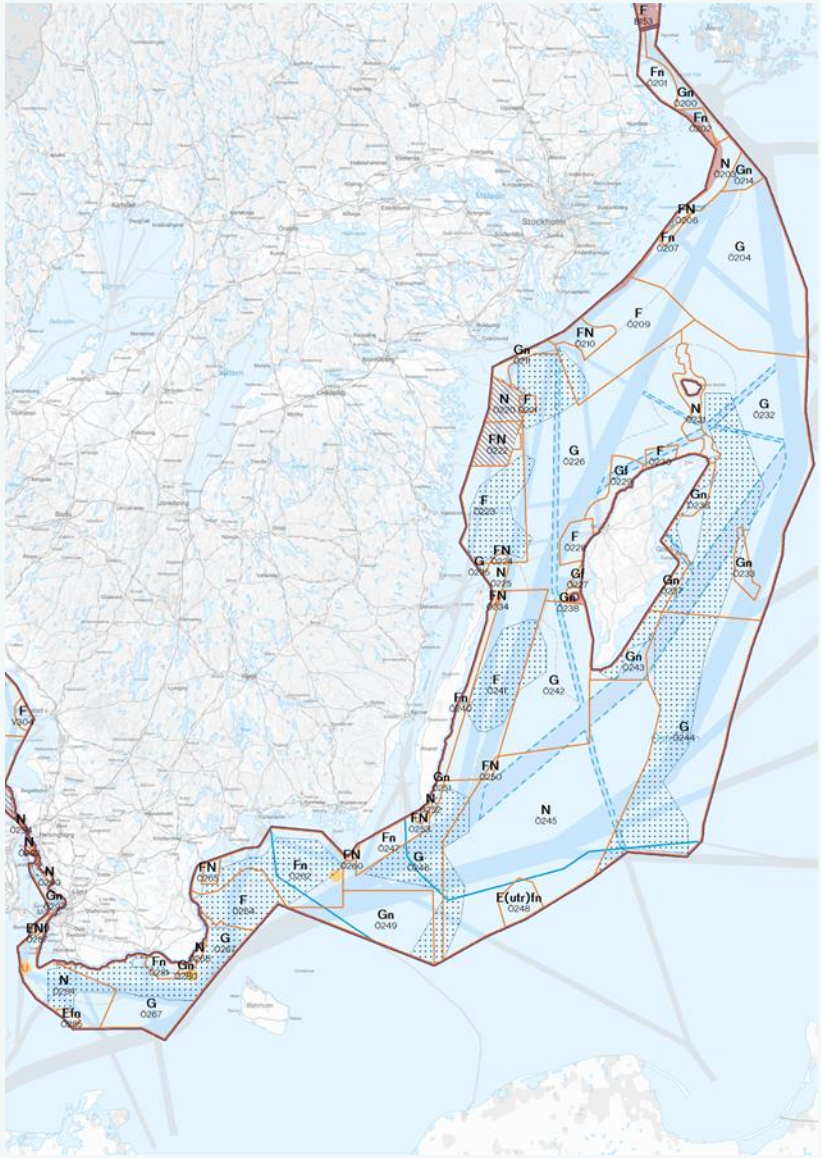

Decided MSP 2022

- SwAM shall develop proposals for amended marine spatial plans with new areas for energy extraction in the sea
- The result of step 1 is an important basis
- The proposals must be presented to the Government as soon as possible or no later than 31 December 2024
- The work is based on the Marine Spatial Planning Ordinance (2015:400)

Overall time schedule

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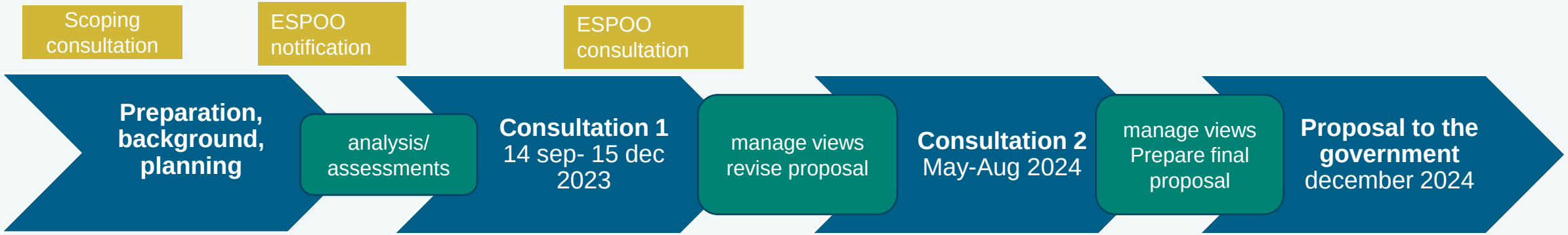

1. Proposal
2. Impact assessment

1. Proposal
2. Impact assessment
3. Compilation of consultation 1

1. Final propsal
2. Impact assessment
3. Compilation of consultations 1 & 2
4. Concluding remarks
5. Other background

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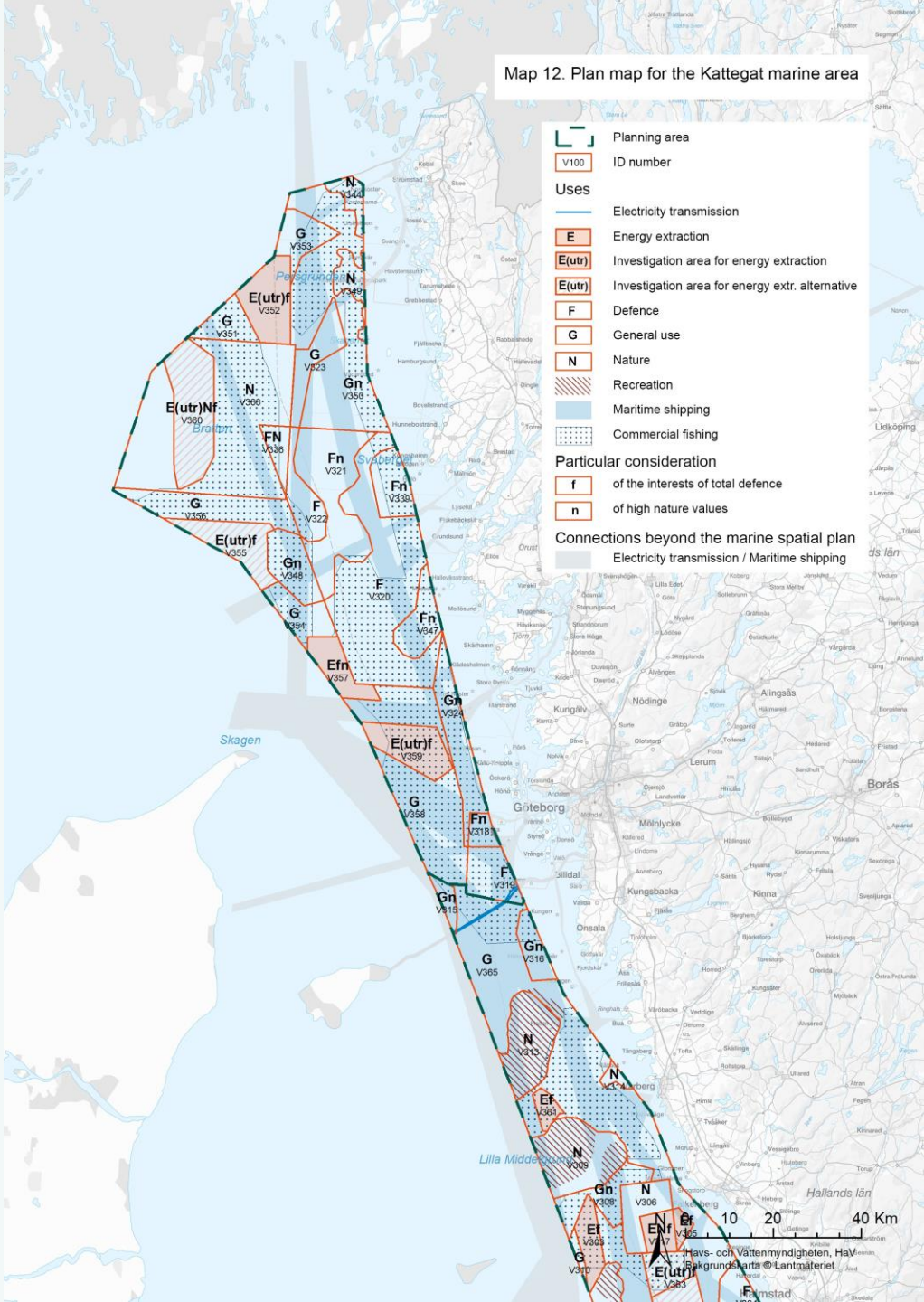
Proposal for amended marine spatial plans

- Focus on Energy extraction, but also some adjustments for areas with particular consideration for high natural values and Nature use
- Plan proposal in seven parts:

1. Mission, Application, Process
2. Overall guidance, vision and goals
3. Gulf of Bothnia
4. Baltic Sea
5. Skagerrak / Kattegat
6. Implications and consequences
7. Planning conditions



Proposals and alternatives for energy extraction

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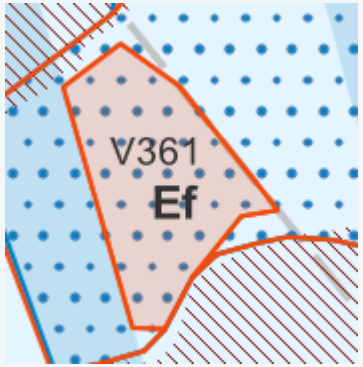
A. Areas of proposal

(24 areas, 101 TWh / 25 GW)

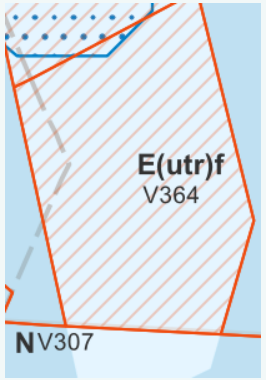
- Proposed areas for energy extraction ex:



B. Alternative areas

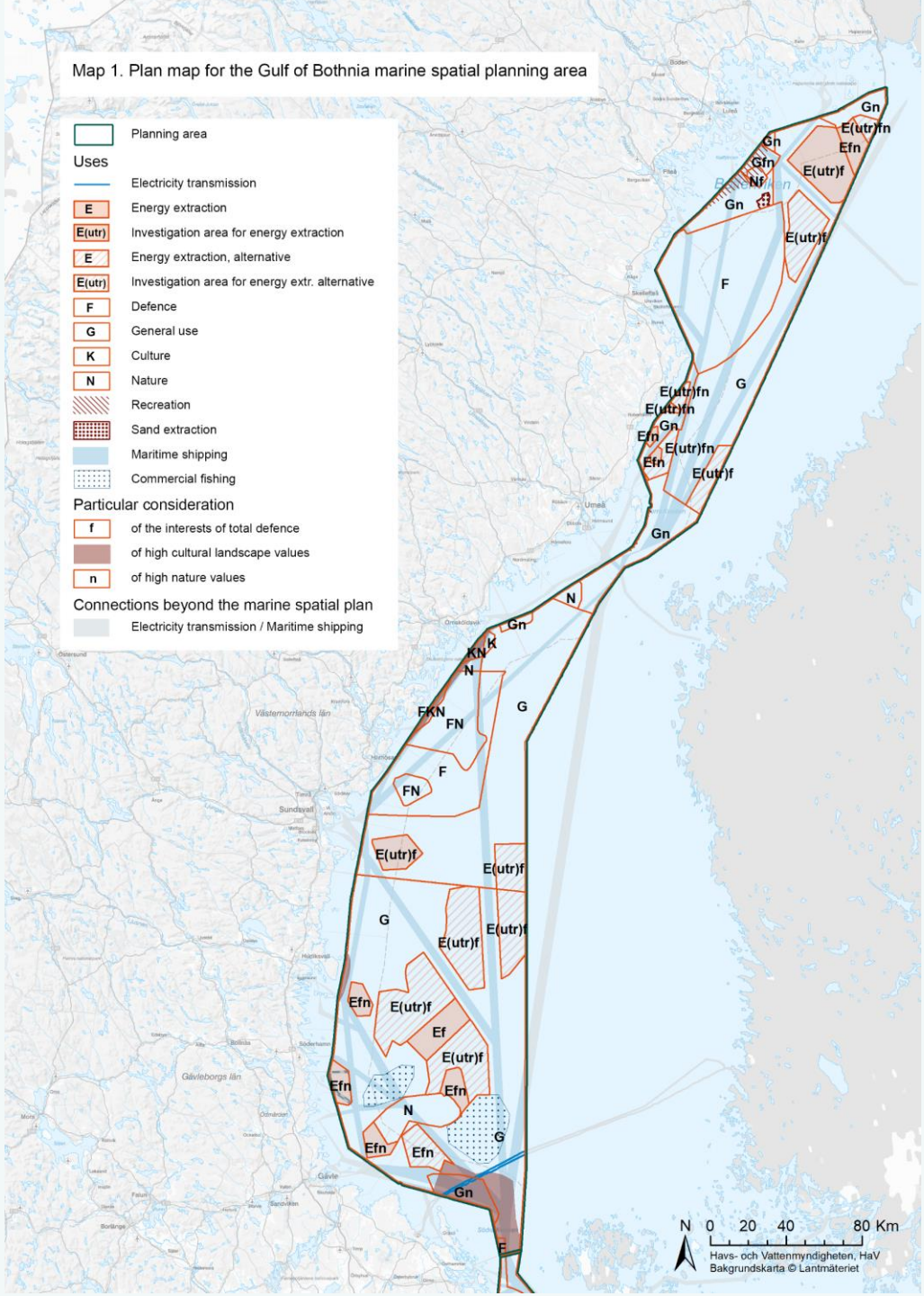
(33 areas, 279 TWh / 70 GW)

- to replace or supplement proposals for areas with energy extraction ex:

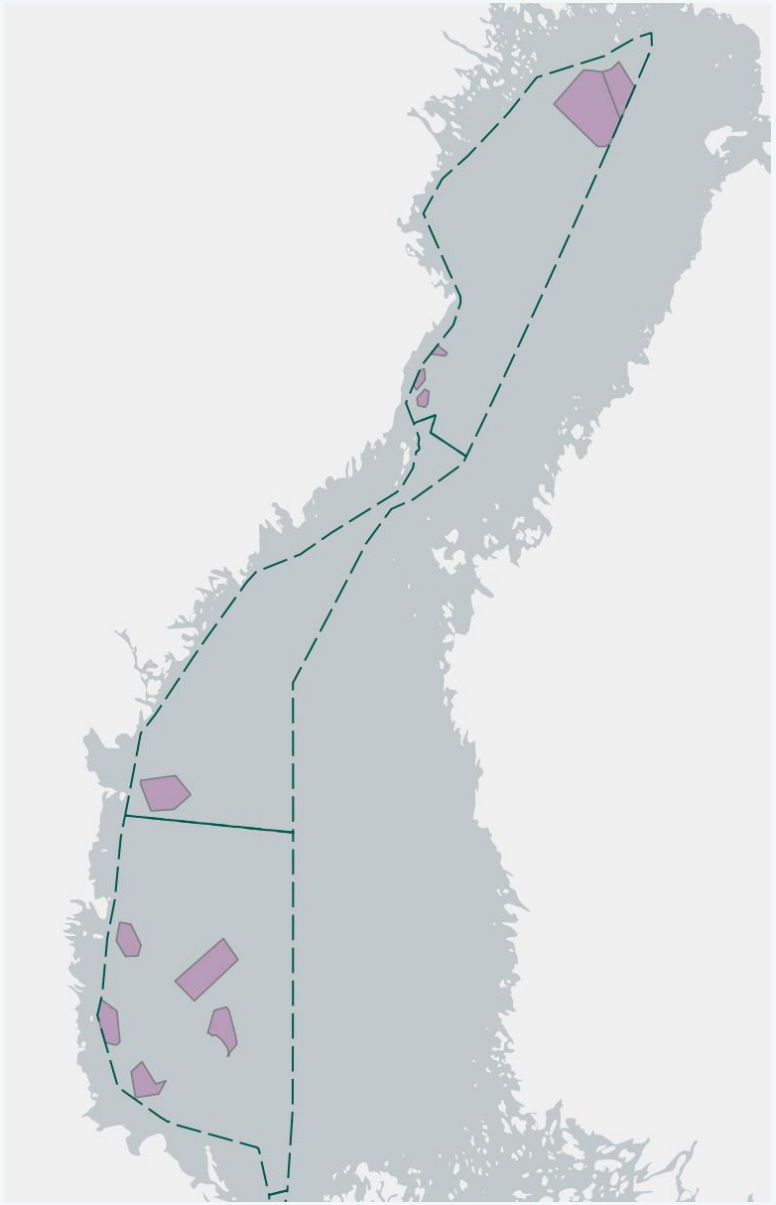


Gulf of Bothnia

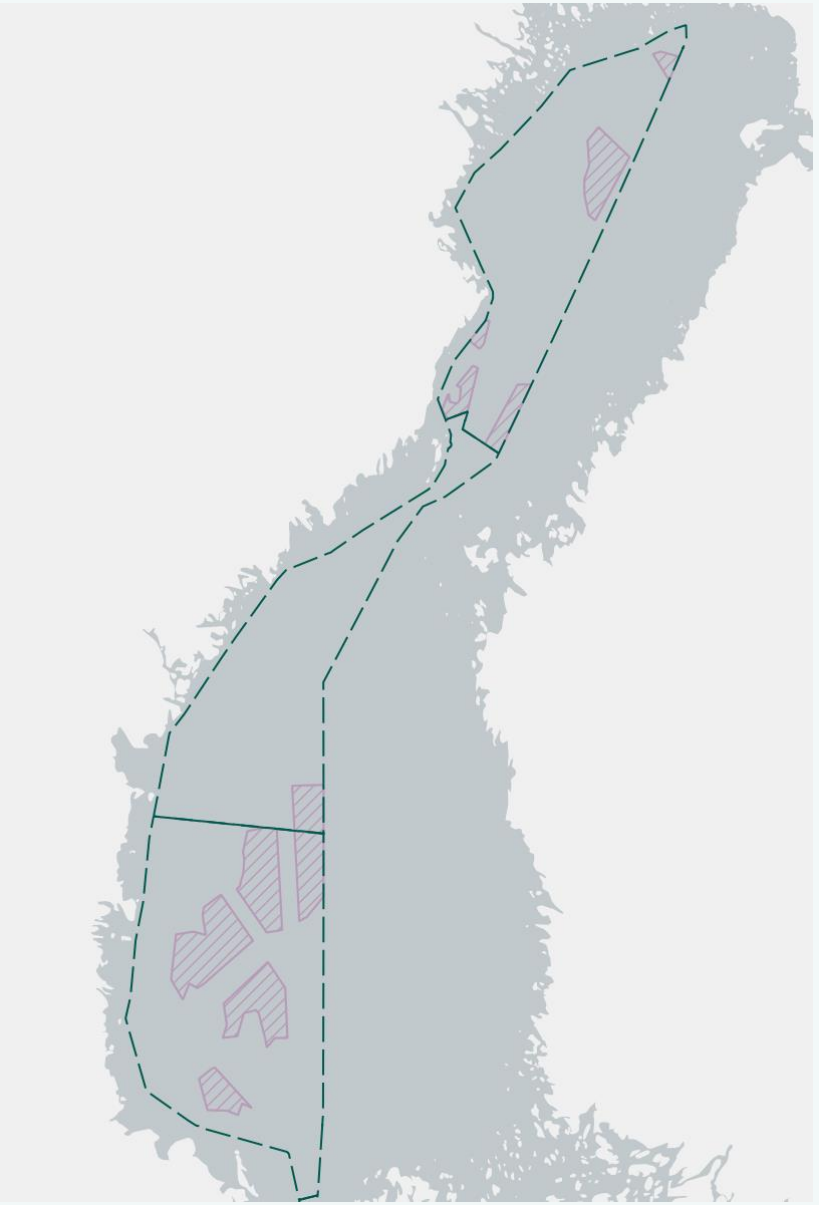
- Good conditions for energy extraction and other activities
- UNESCO World Heritage, small scale fisheries and high nature values
- Ice-formation and winter navigation – need for more knowledge
- 11 proposed energy areas and 11 alternatives
  - In general – less conflicts of interest
  - More proposed energy areas in the territorial sea than other marine planning areas
  - Large parts available for bottom fixed foundations
  - Good conditions for grid connection (after 2033)



Gulf of Bothnia



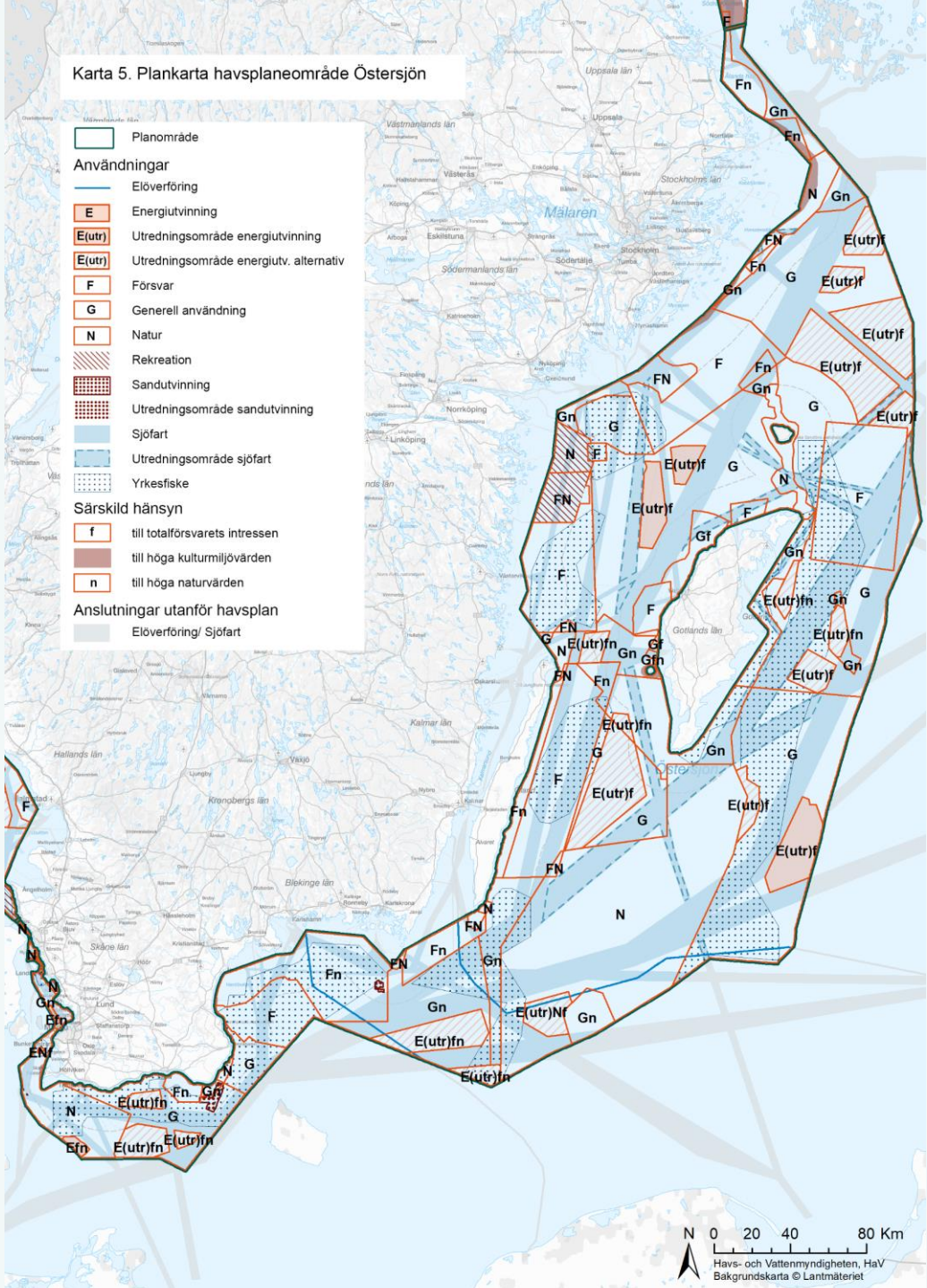
11 areas of proposal.
Corresponding to approx. 55 TWh



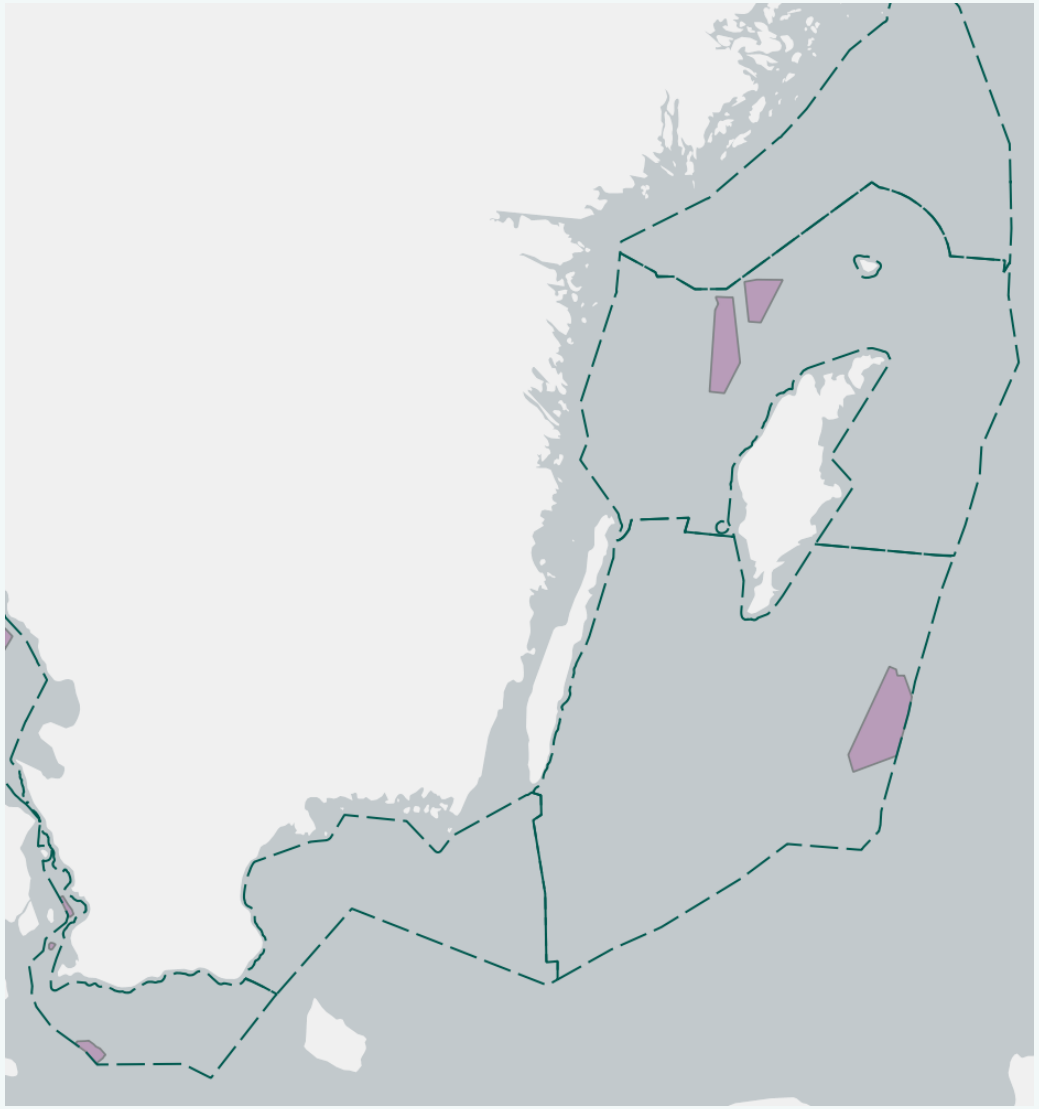
11 alternative areas.
Corresponding to approx. 110 TWh

Baltic Sea

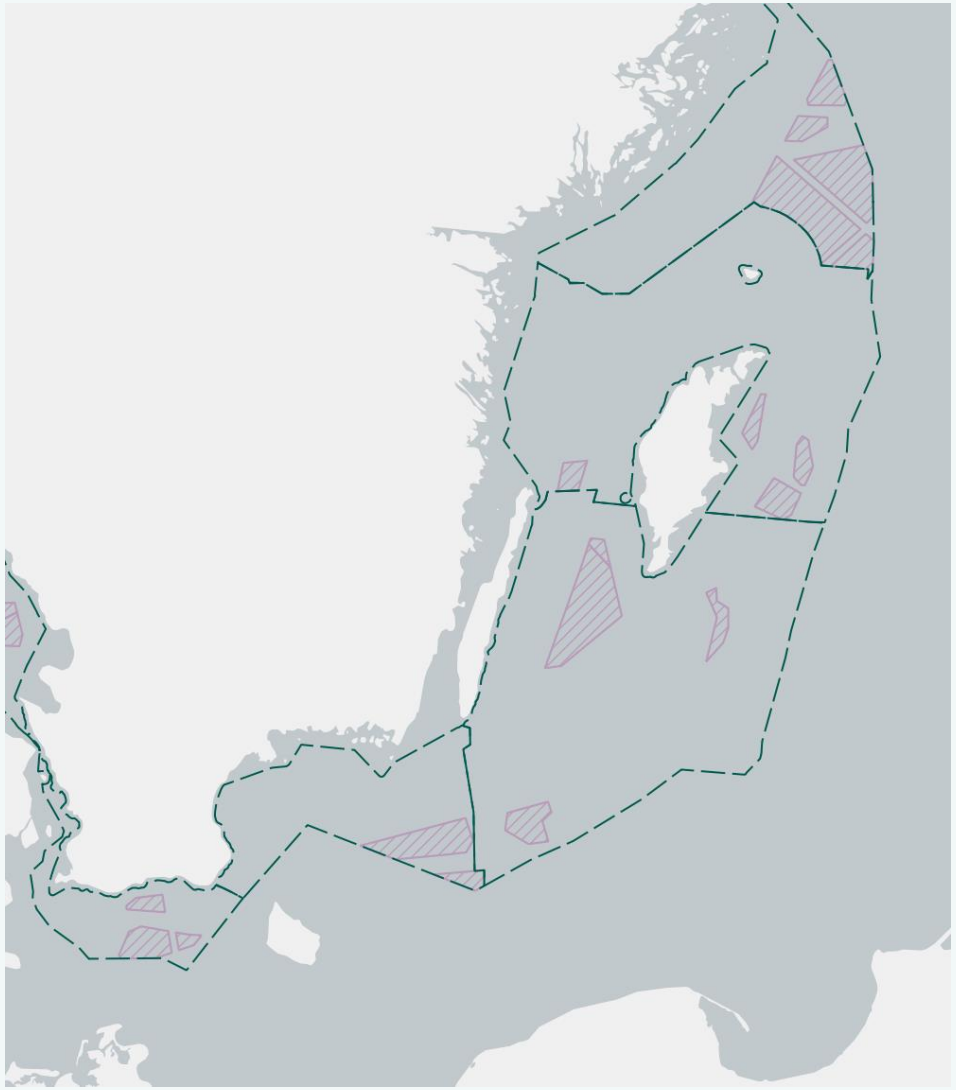
- Extensive national defence interests
- Shipping and fishing
- High nature values (eg. birds and harbour porpoise) and recreational values
- Big electricity demand, uncertainties grid connection
- 6 proposed energy areas and 18 alternatives
  - Some areas with few but intractable conflicts
  - Major uncertainties surrounding the military interests of total defence
  - Natura 2000



Baltic Sea



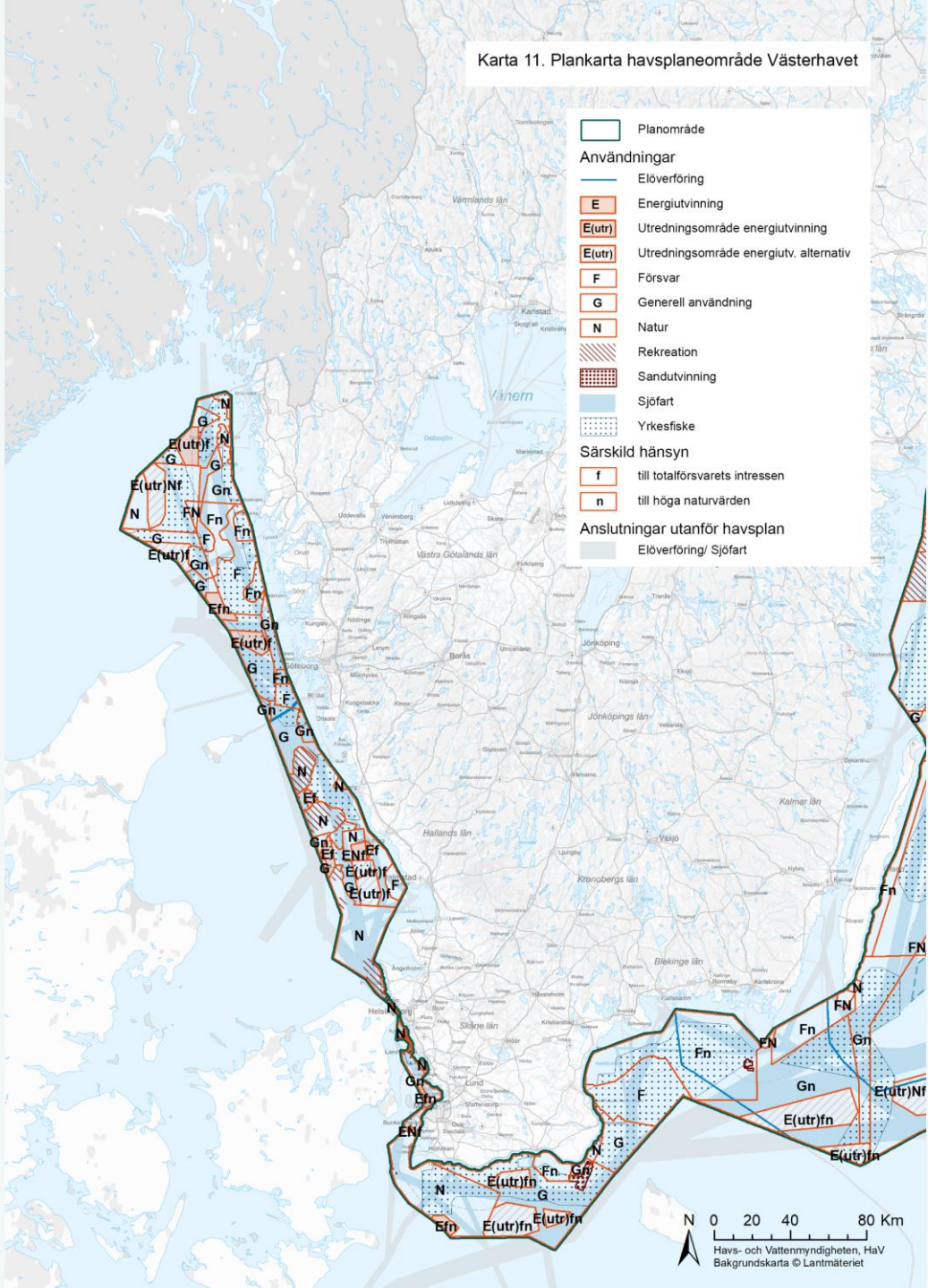
6 areas of proposal.
Corresponding to approx. 33 TWh



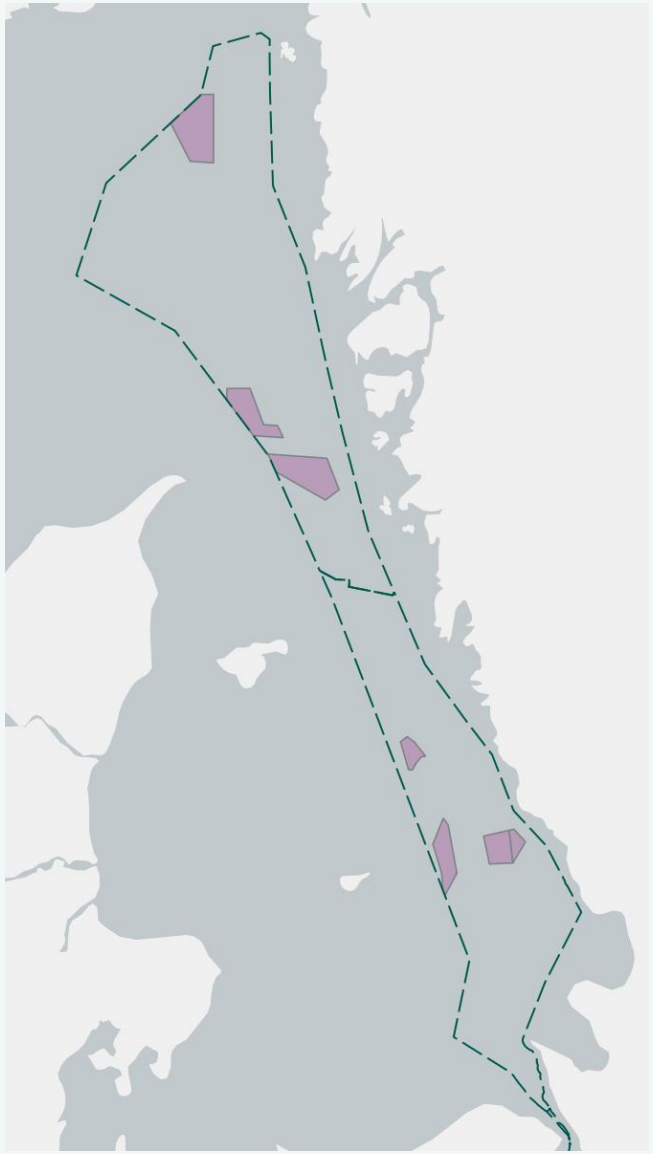
18 alternative areas.
Corresponding to approx. 155 TWh

Skagerrak and Kattegat

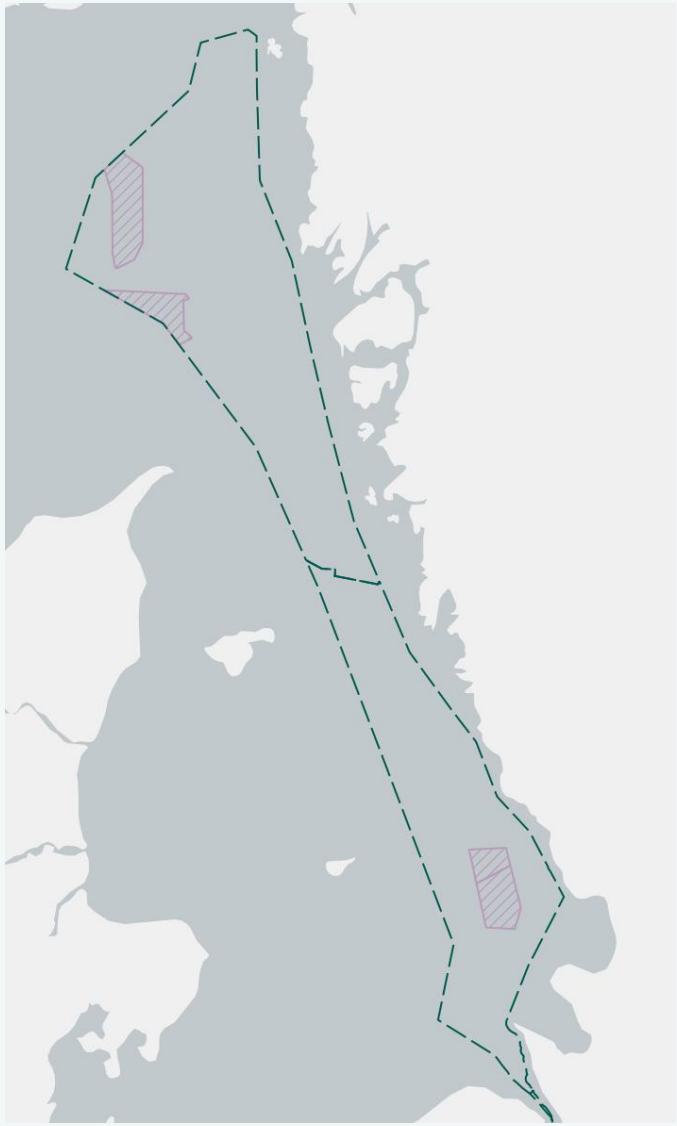
- High nature values, recreation and tourism
- Extensive commercial fishing, large share of the area
- Important area for energy extraction
- 7 proposed energy areas (including 3 existing permits) and 4 alternatives
  - Swedish Armed Forces in general more positive
  - Permits for OW issued in some areas
  - Difficulties or challenges in coexistence with commercial fishing in some areas



Skagerak and Kattegat



7 areas of proposal.
Corresponding to approx. 13 TWh



4 alternative areas.
Corresponding to approx. 14 TWh

Proposed new areas for particular consideration of high nature values (n) and Nature use (N)

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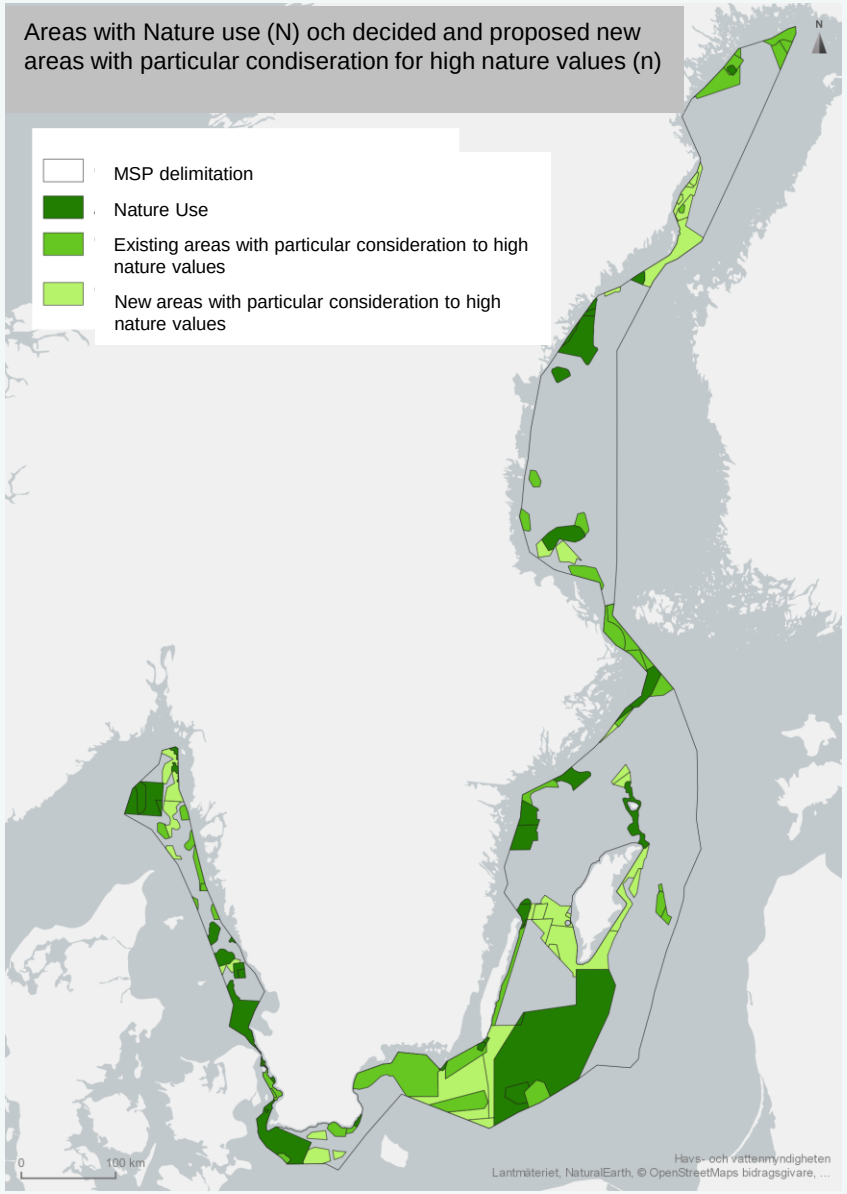

- Proposals developed in dialogue with SwAM's working group for marine protected areas
- Input to proposals from county administrative boards and the Swedish Environmental Protection Agency
- Planned marine protected areas = small n (previously large N)
- The proposals strengthen the maritime spatial plans' guidance on particular consideration for birds, porpoises and sensitive benthic habitats

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Impact assessment

What does the impact assessment contain and how can it be used?

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- The impact assessment describes the environmental, economic and social effects that the proposal for amended maritime spatial plans may give rise to.
- Meet the requirements of the Environmental Code for strategic environmental assessment with an environmental impact assessment.
- The effects from offshore wind power is of particular importance in the impact assessment, given the objective of maritime spatial planning to identify suitable areas for energy production.
- The impact assessment is a basis for the national and international consultations for proposals for amended marine spatial plans.

Impact assessment alternatives

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- In the proposal for amended maritime spatial plans, there are two types of energy areas: proposed energy areas and alternative energy areas. In the impact assessment, these are treated as two plan alternatives assessed against the zero alternative.
- The impact assessment describes the potential effects per energy area for several aspects.
- The reference year for the plan options is 2040.

Zero-alternative	Plan alternative 1	Plan alternative 2
No further expansion of offshore wind	Only proposed energy areas are built on	Proposed and alternative energy areas are being built

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Assessment aspects

Environmental aspects	Economical aspects	Social aspects
• Birds • Marine mammals • Benthic environments • Fish and spawning • Water and air • Climate	• Fishery • Energy extraction • Shipping	• Population and health • Cultural environment • Outdoors and recreation

Birds

» Risk areas:

- Migratory bird routes, bottlenecks
- Coherent areas along the coast
- Displacement from foraging areas

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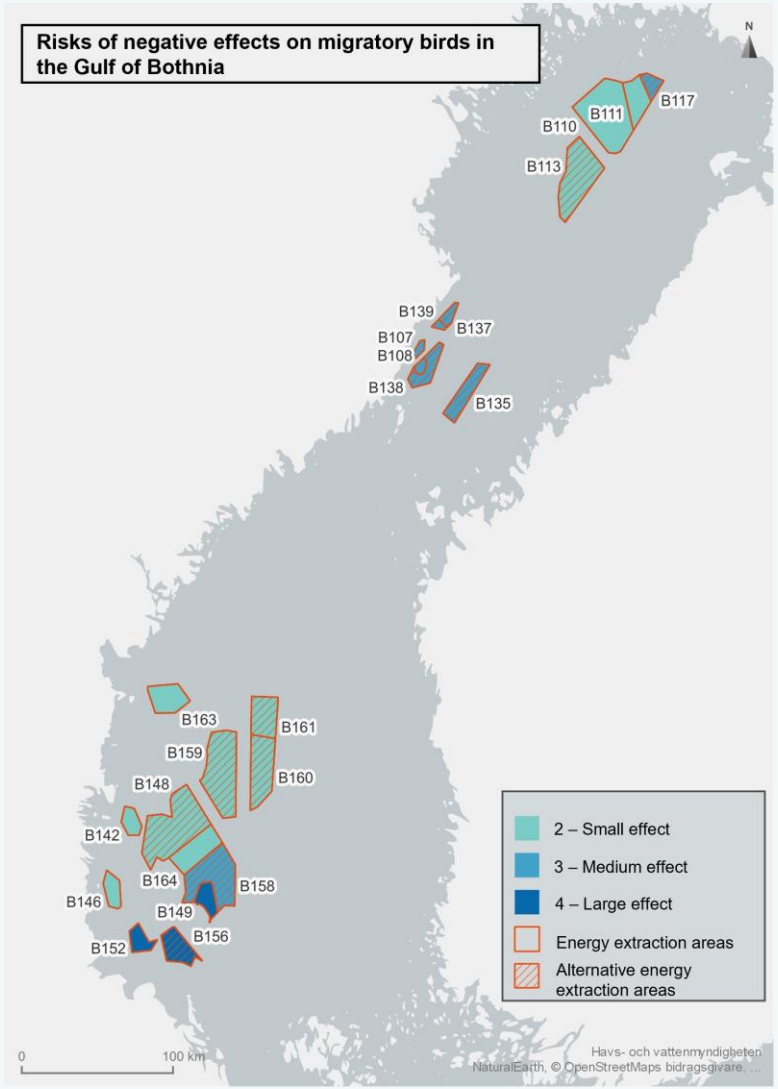

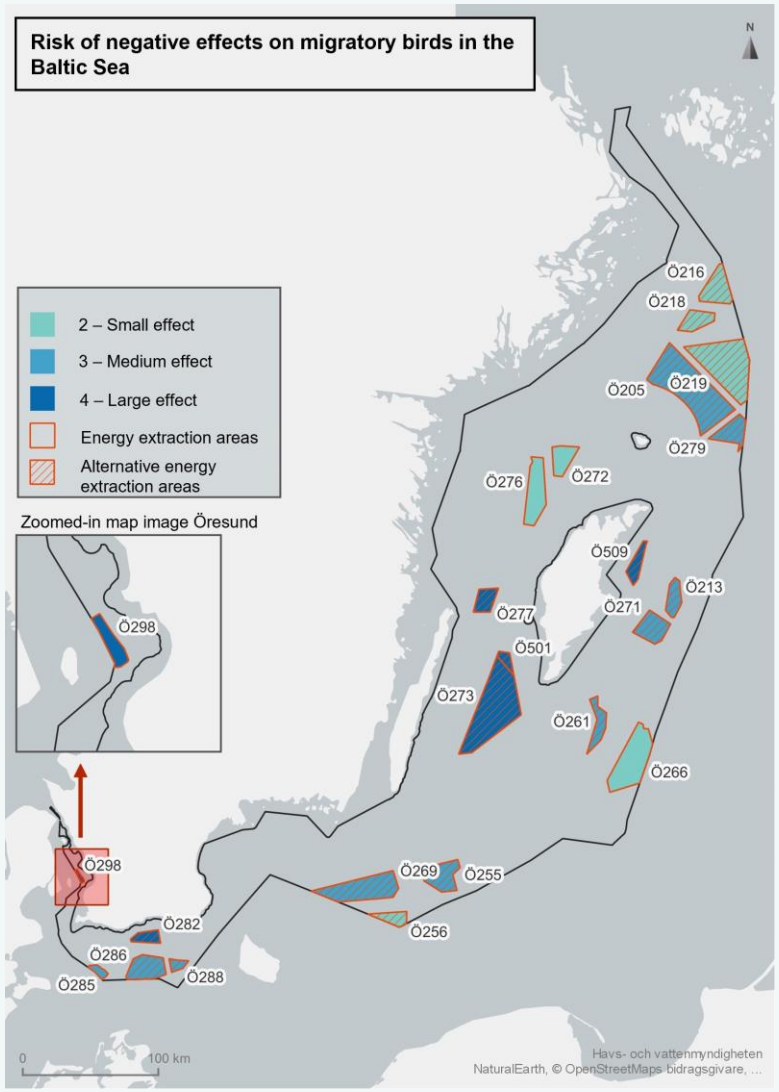

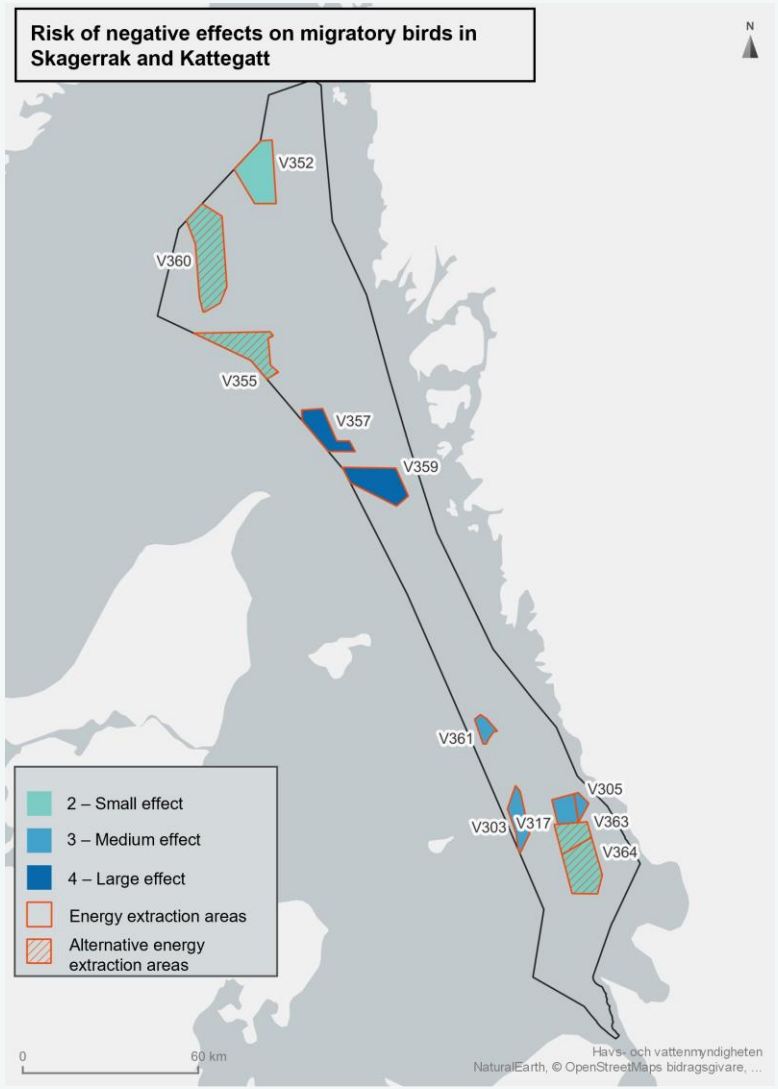

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Marine mammals

- Disturbance in connection with the installation of offshore wind power.
- Greater risk within the Baltic harbor porpoise's distribution area in the south-eastern and central Baltic Sea, given the population's acutely threatened status.
- Negative impacts should in most cases be minimized to acceptable levels by means of noise reduction measures and by avoiding disturbance during sensitive reproduction periods.
- The long-term effects during the operational phase are insufficiently studied → caution in the pace of establishment and avoidance of a large number of wind power projects in important habitats.

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Bentic environments

The seabed is mainly affected by offshore wind power with fixed bottom foundations

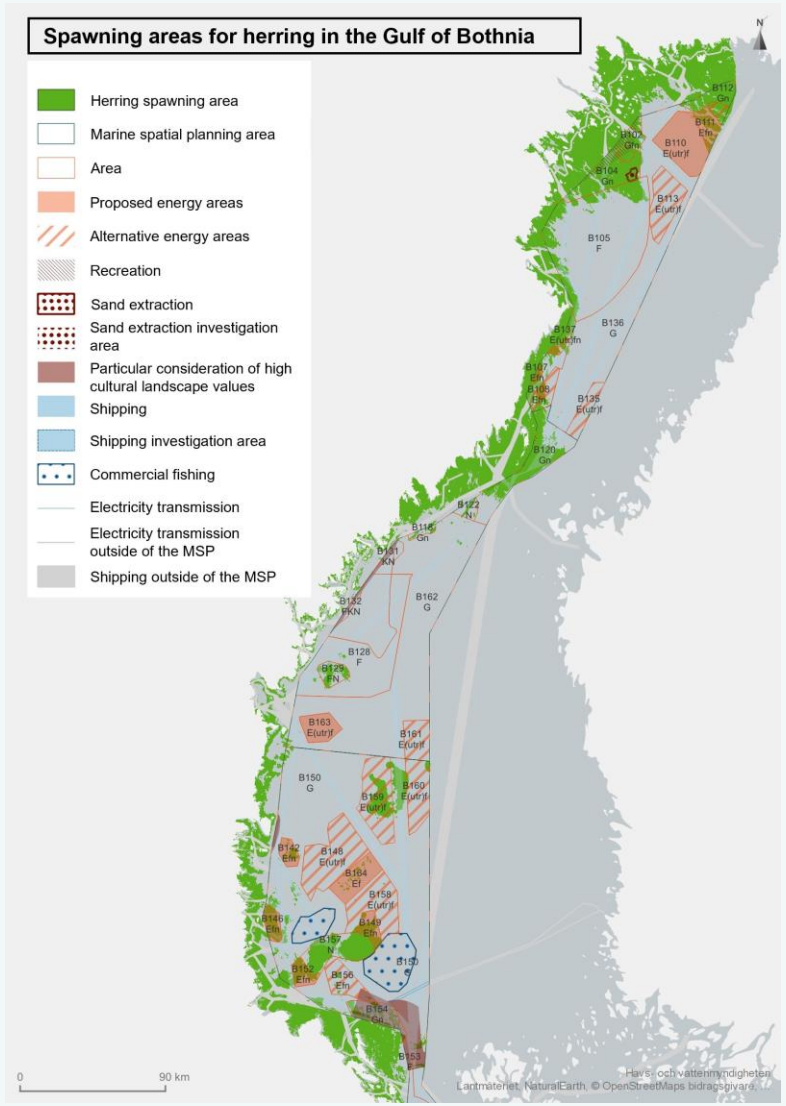
The effects need to be investigated specifically for each site → avoid damage to protected habitats with the help of conservation measures

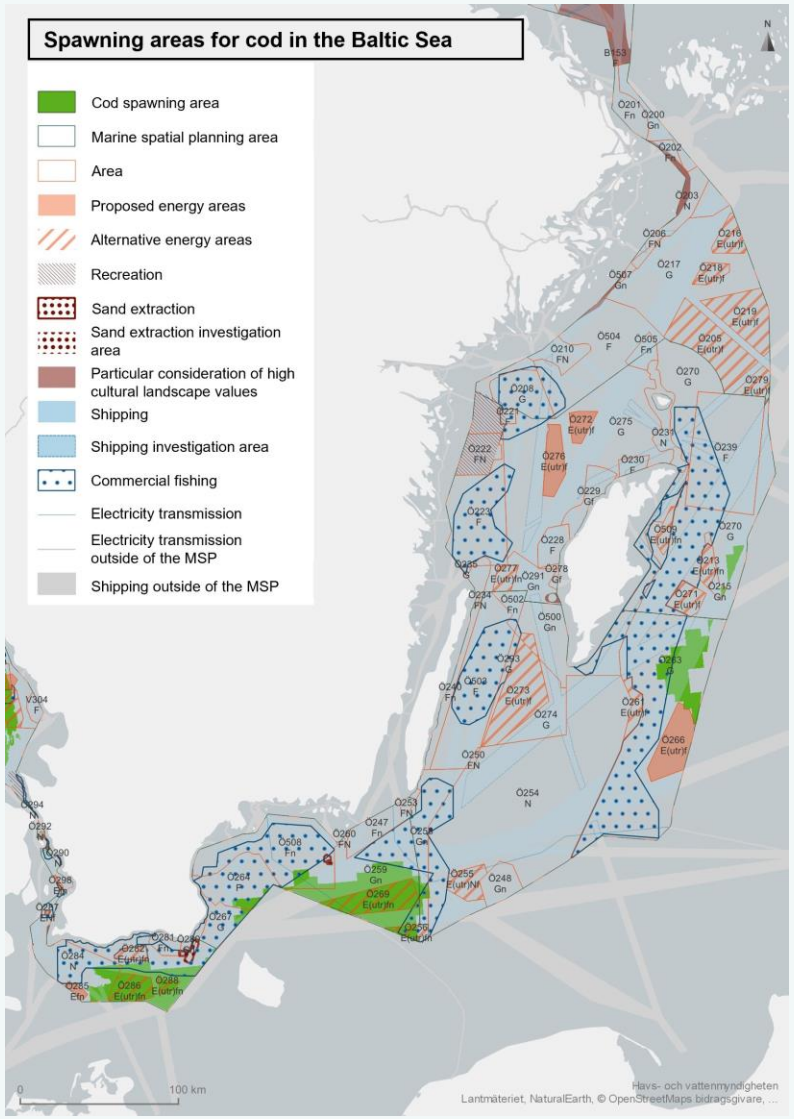
In some environments, the introduction of hard seabed substrates can have positive effects on the marine environment

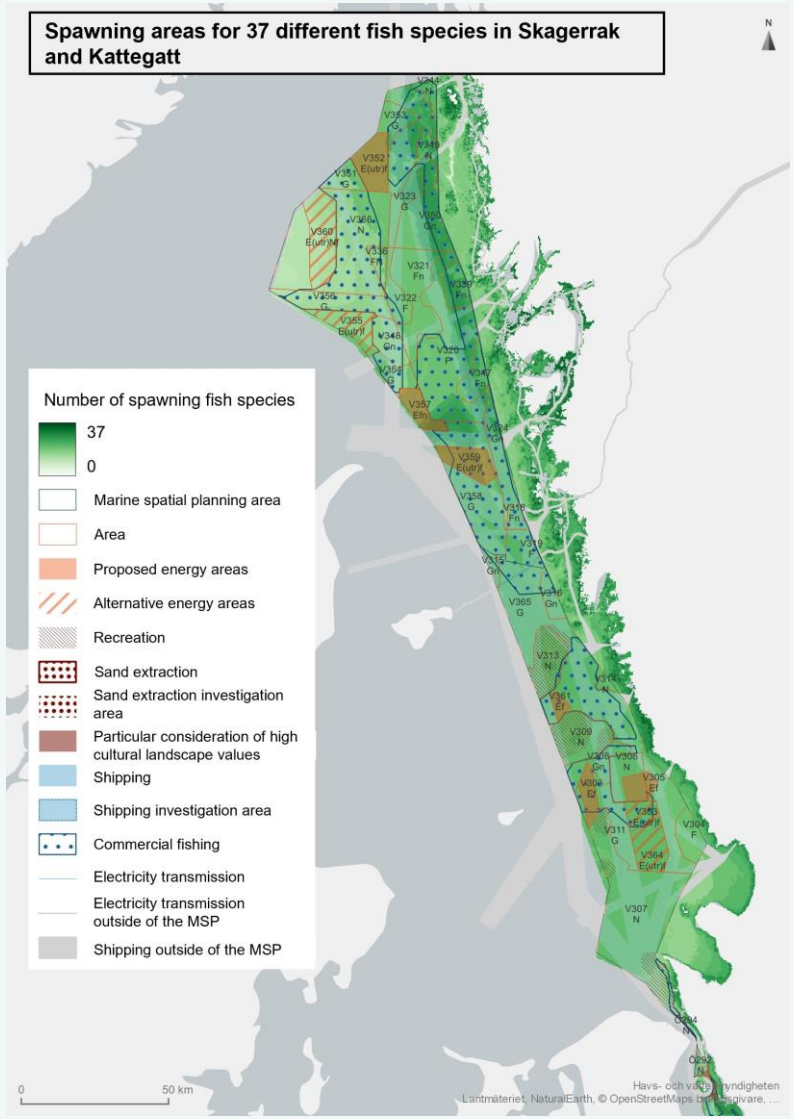
To the extent that energy areas limit bottom trawling, positive effects on bentic environments can occurThe maritime spatial plans' guidance on sand extraction is estimated to have major effects on the local benthic environment

Fish and Spawning

- Offshore wind power does not pose a threat to fish species or fish populations
- Assessment of local effects is necessary, incl. impact on spawning and juvenile phases

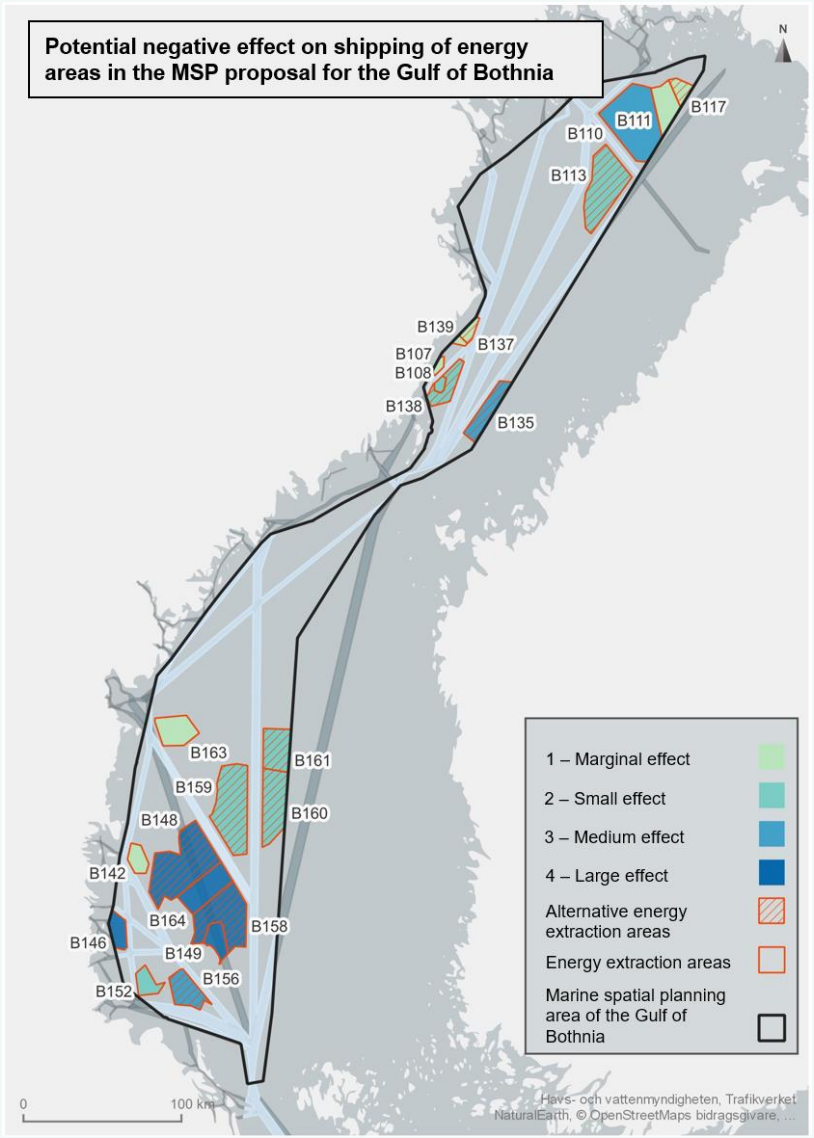


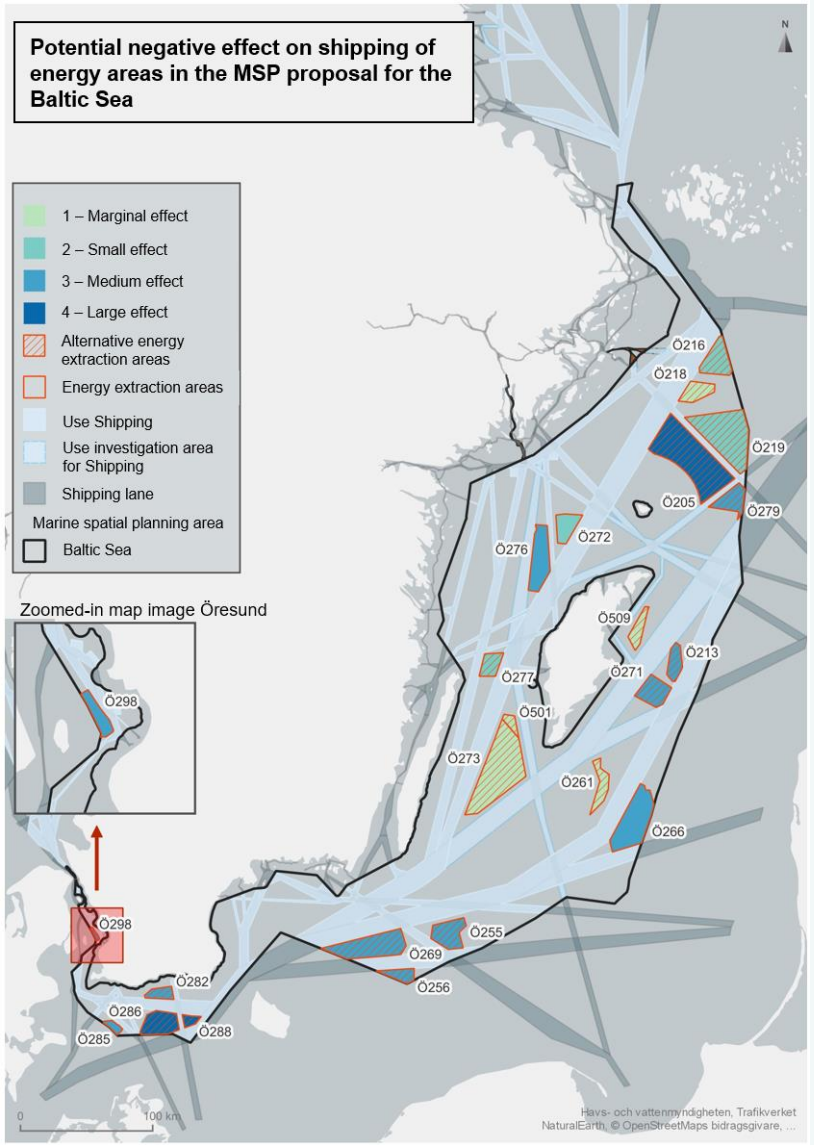


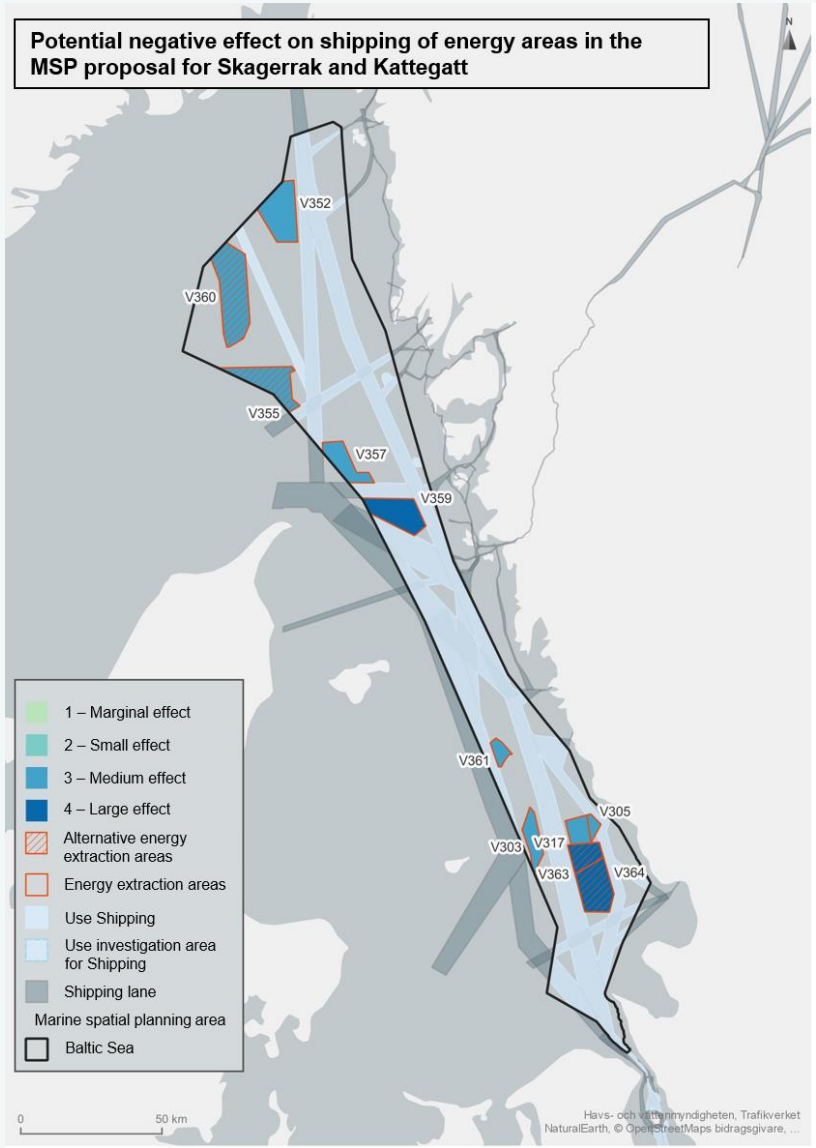


Shipping

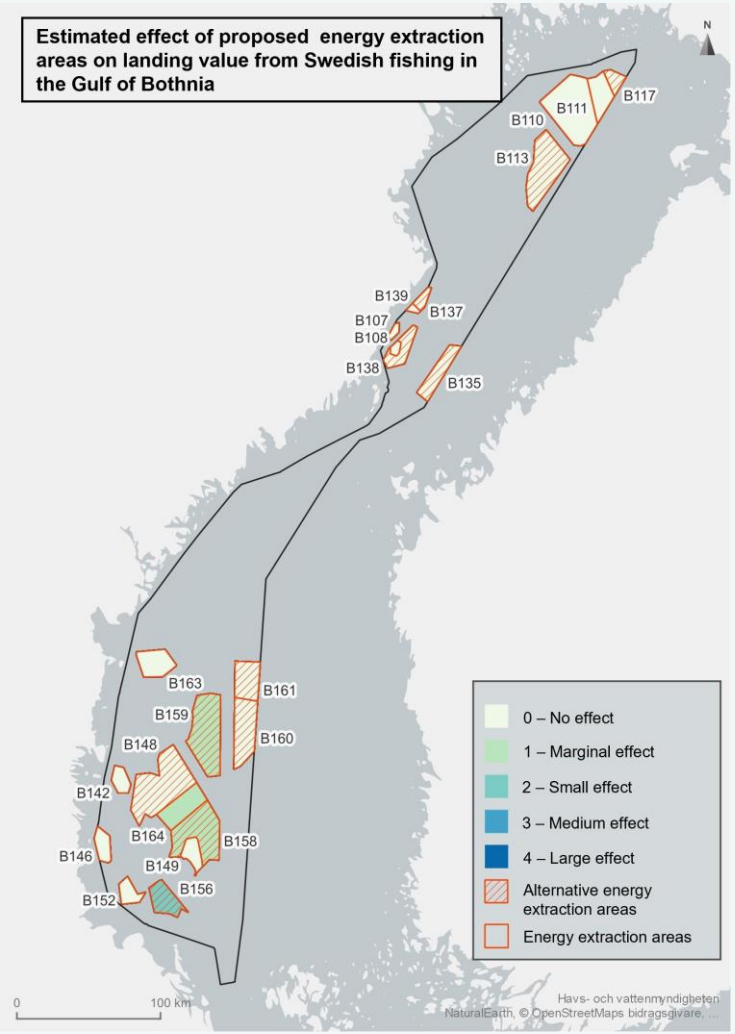
» Parameters for assessing potential impacts: Area within safety distances; %-area energy ranges within safety distances; fairway obstacles, increased mileage; winter navigation; adjoining more shipping lanes; impact shipping lane to neighboring country

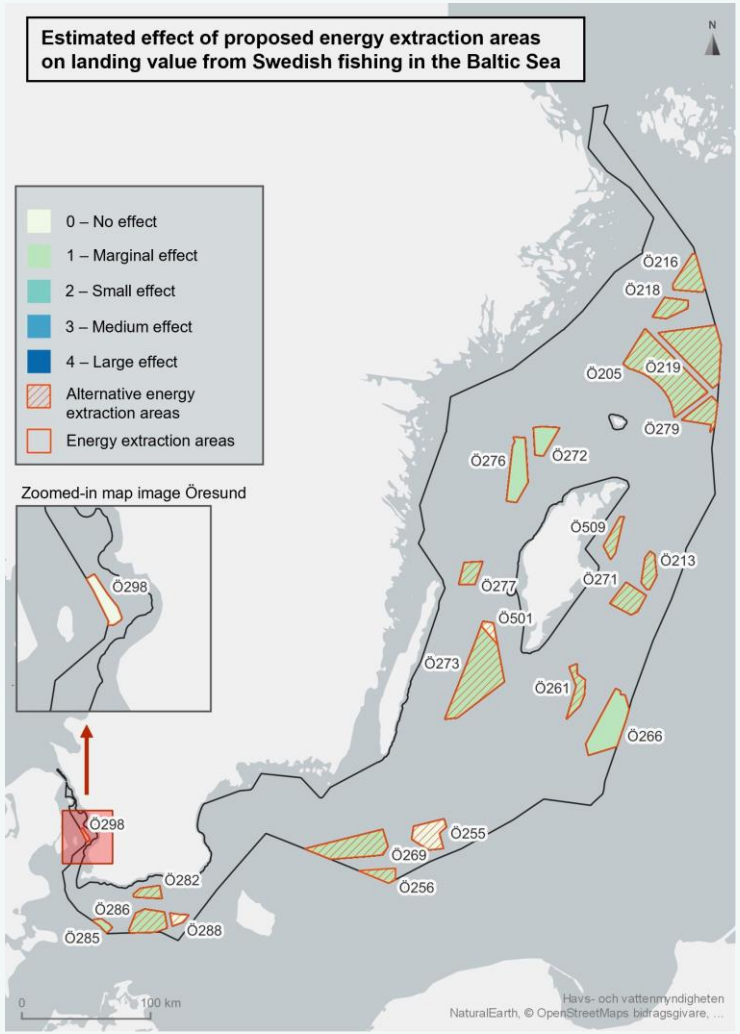


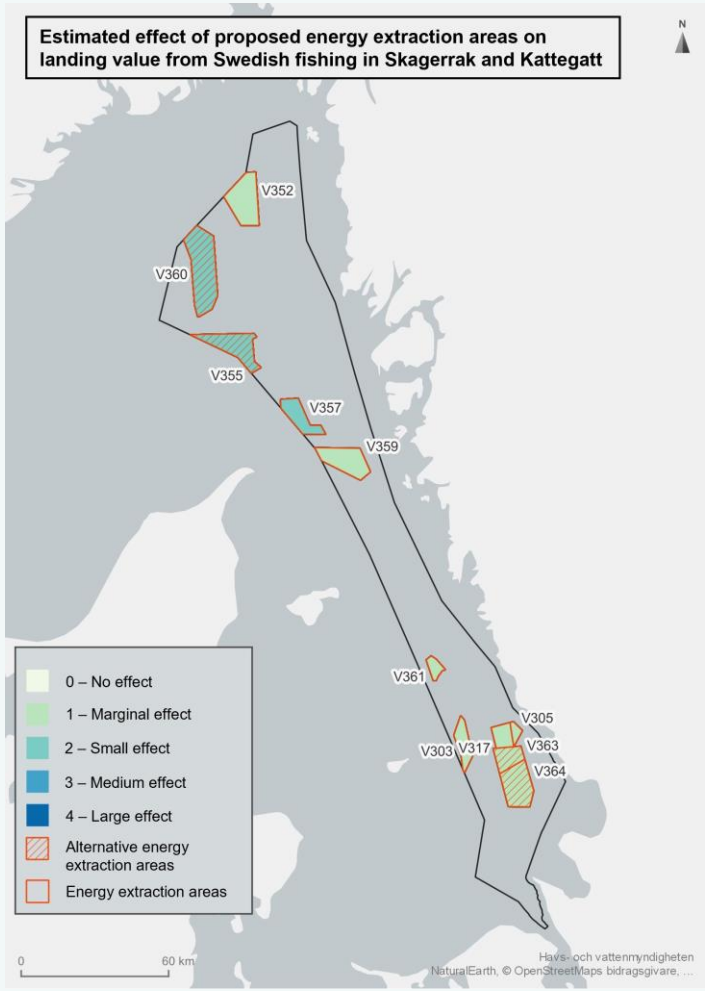




Commercial fishing	Gulf of Bothnia	Baltic Sea	Skagerrak and Kattegat
Areas of proposal	143 tkr (0,02%)	1 195 tkr (0,2%)	6 377 tkr (1,0%)
Proposals and alternatives	1 020 tkr (0,16%)	7 984 tkr (1,2%)	14 002 tkr (2,2%)
Most affected fisheries	Migratory trawls for pelagic species	Migratory trawls for pelagic species	Demersal trawling for shrimp, Norway lobster or fish







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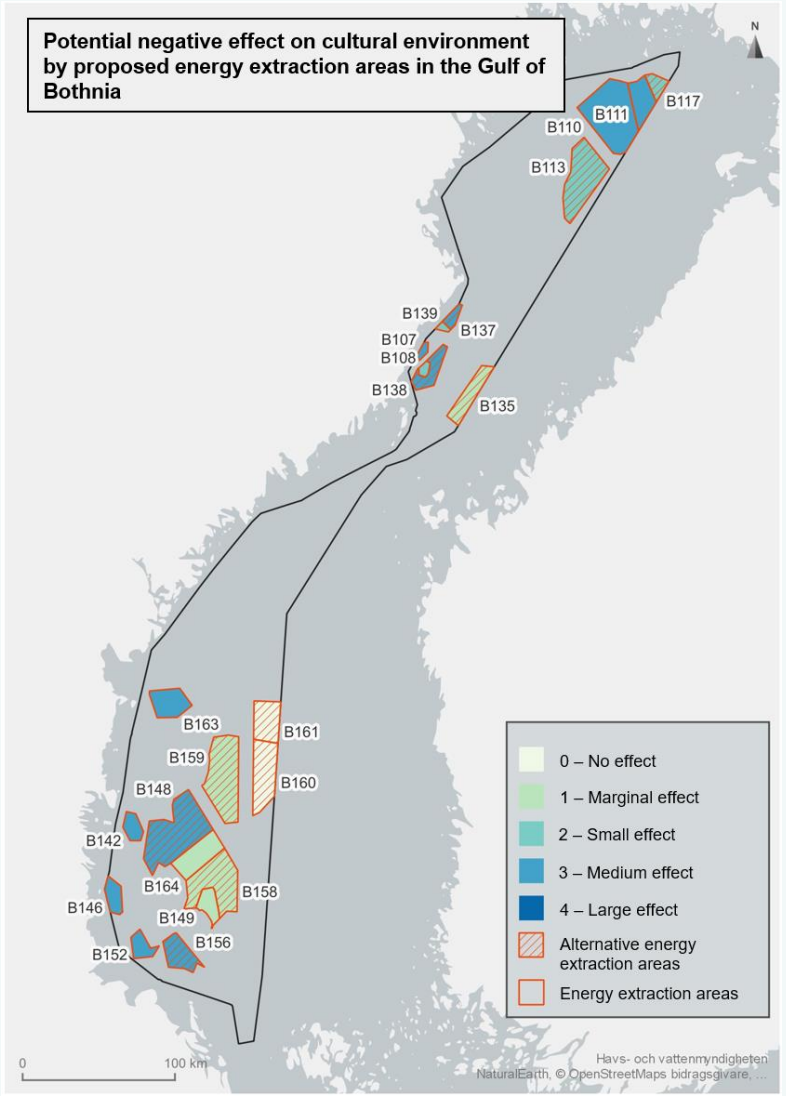
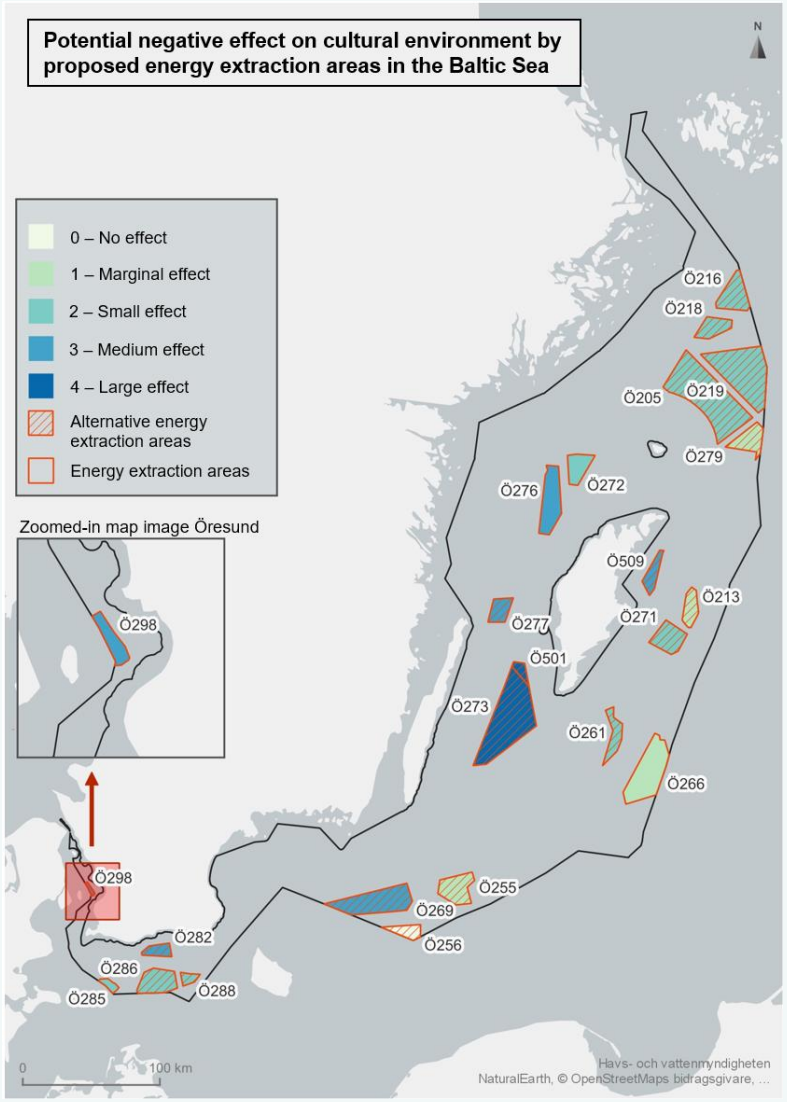
Population and human health

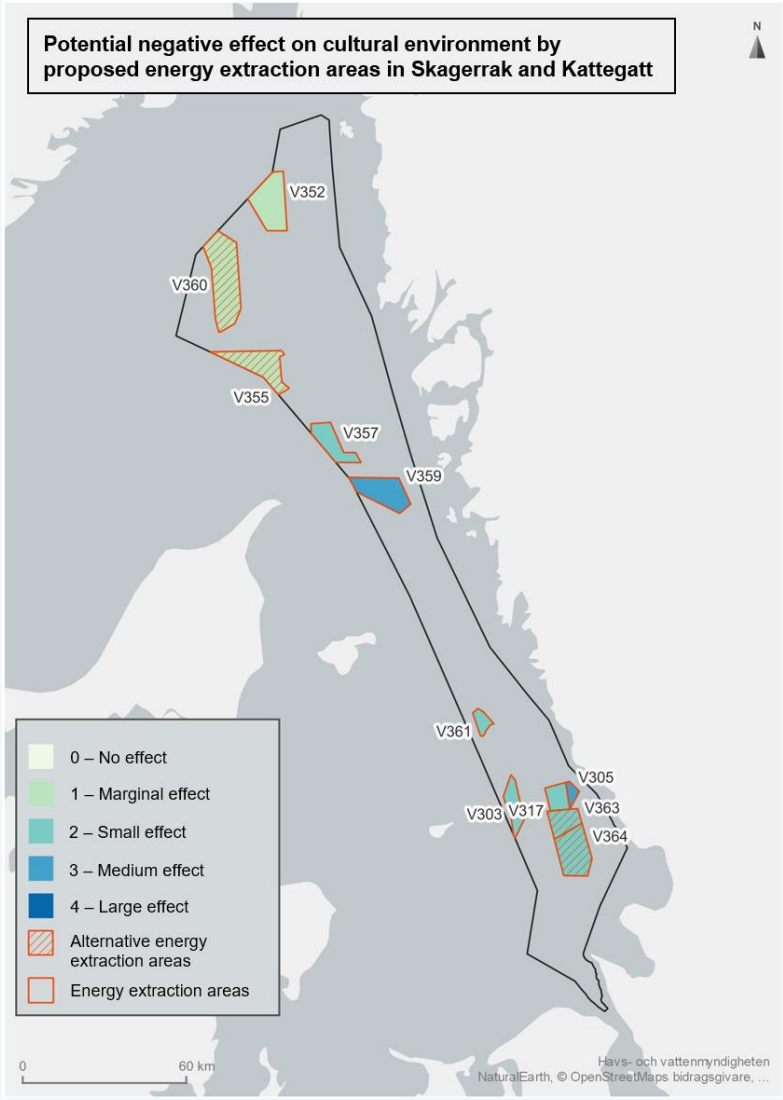
- Areas further away than 5 km are not considered to cause noise disturbance (35 dBA); only Ö298 (Sjollen in Öresund) located 3-4 km, risk needs to be investigated more closely.
- Shading not problematic at distances ≥10x rotor diameter (3.2-3.3 km)
- Unclear effect of warning lights, e.g. sleep problems. Considered unlikely given the distance of the energy areas to built-up environments on the coast
- Emission increases further out to sea, unclear about possible health effects for residents on the coast

Cultural environment

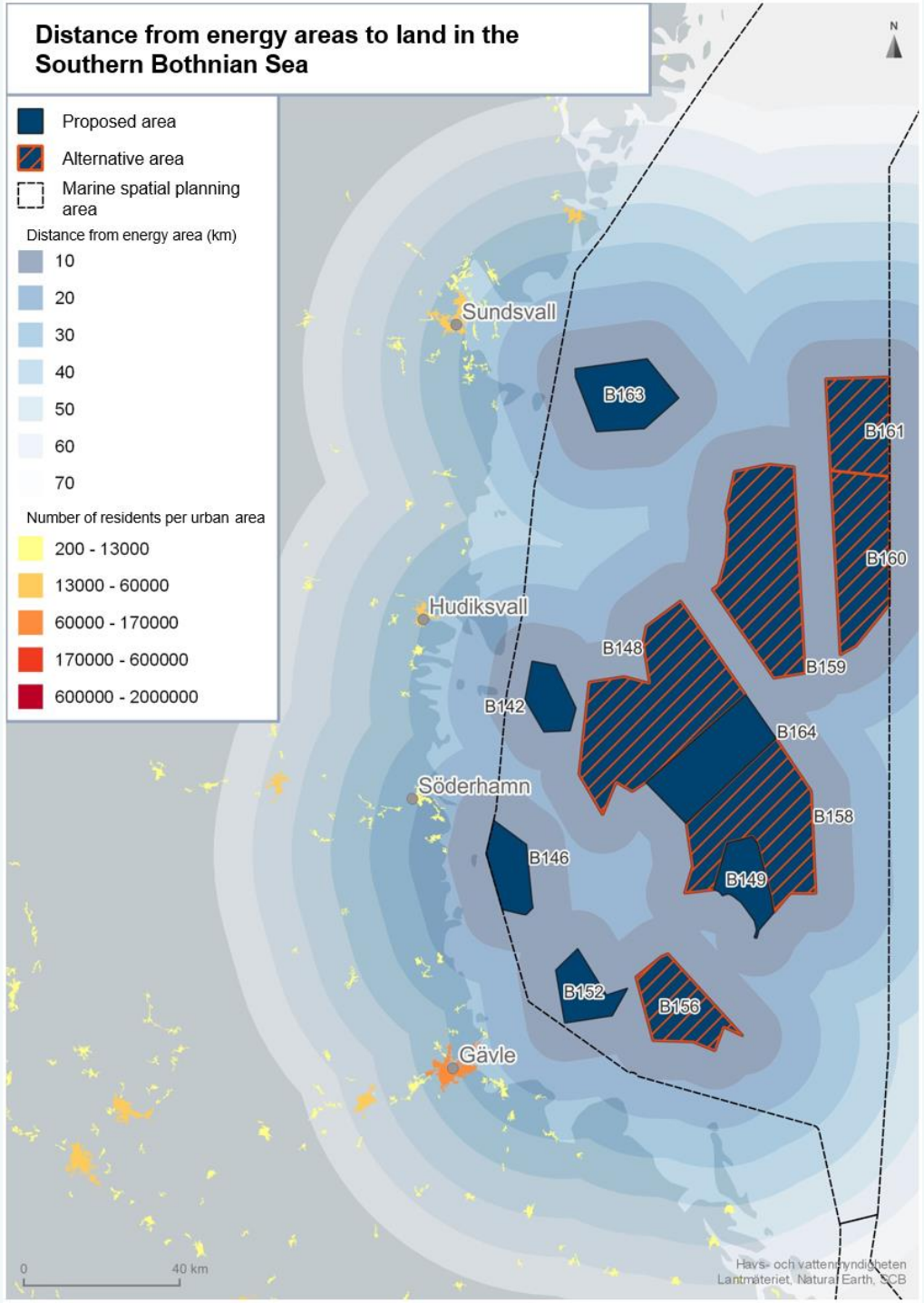
» Parameters for assessing potential impacts on cultural heritage values: Distance to the coast; parallel length exposed to coast; dominance and competition; impact on specific cultural environments







Example of map of distance to land and number of inhabitants



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Cross-border effects

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Birds, fish and marine mammals

The bird, fish and mammal species that are considered to be affected by the maritime spatial plan guidance are in many cases part of transboundary populations.

The migratory bird routes through Swedish waters and offshore banks are used by populations that extend far beyond Scandinavia, and are thus of global importance.

Fisheries and shipping

Most of the maritime traffic to and from the Baltic Sea passes through the North Sea, and the maritime spatial planning area is of global importance for all trade with the Baltic Sea region.

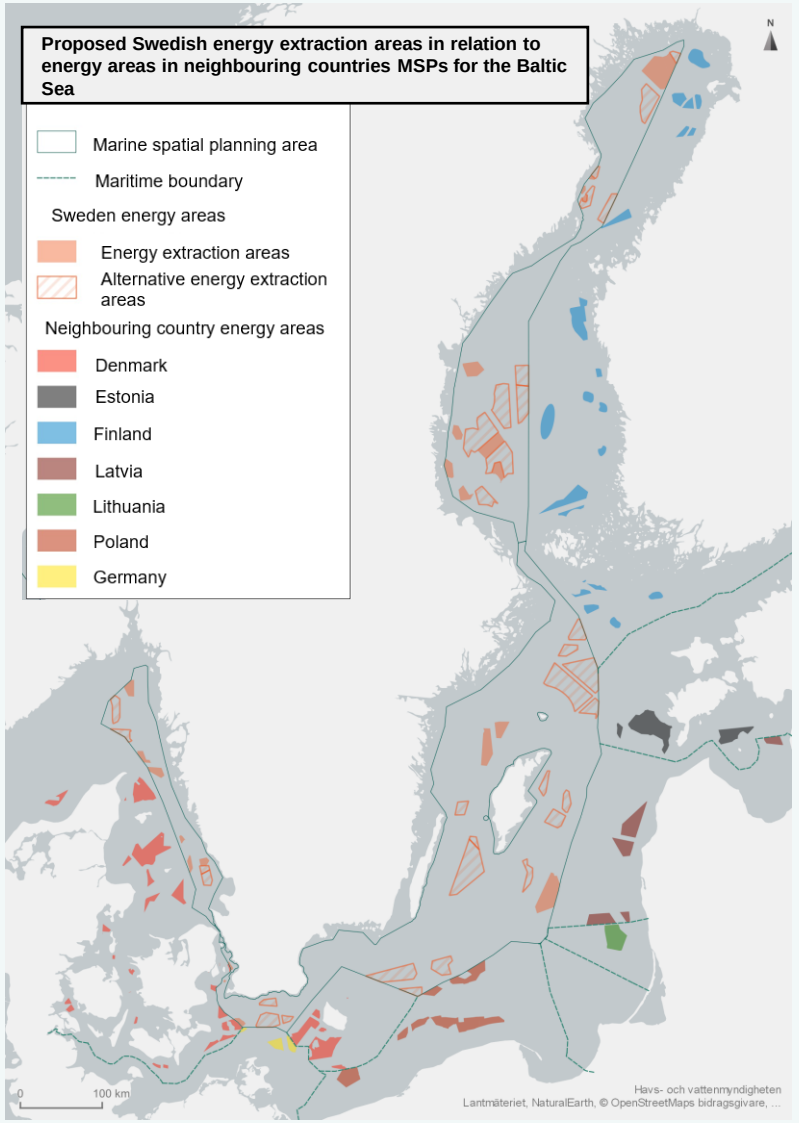
Potential effects on commercial fishing are estimated to be at least as large for foreign fleets as for Swedish fleets.

Energy

Increased production of fossil-free electricity benefits not only Sweden and the countries with which Sweden trades, but also other parts of the world with regard to potential benefits for the climate.

Cultural environment, outdoor life and recreation

Effects on cultural, outdoor and recreational environments in the northern Bay of Bothnia, Hanö Bay, the Öresund Region and most of Skagerrak and Kattegat may affect Finland, Denmark and Norway.



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Submission of responses

Please respond

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- Documentation has been sent to the Points of Contacts for the Espoo protocol.
- Also availble here: https://www.havochvatten.se/planering-forvaltning-och-samverkan/havsplanering/forslag-till-andrade-havsplaner/welcome-to-an-espoo-consultation-meeting/proposal-for-the-swedish-espoo-consultation.html
- Respond no later than 20 Februari 2024 regarding
  - having received the notification,
  - the submission of any comments on cross-border environmental impacts related to the content of the plan proposals,
  - sharing any transboundary planning issues related to the content of the plan proposals,
  - the submission of any comments received from the public in your country
- Send the response to the Swedish Environmental Protection Agency, registrator@naturvardsverket.se

Please indicate the reference number NV-09717-22

Thank you!

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