



Norwegian
Environment
Agency

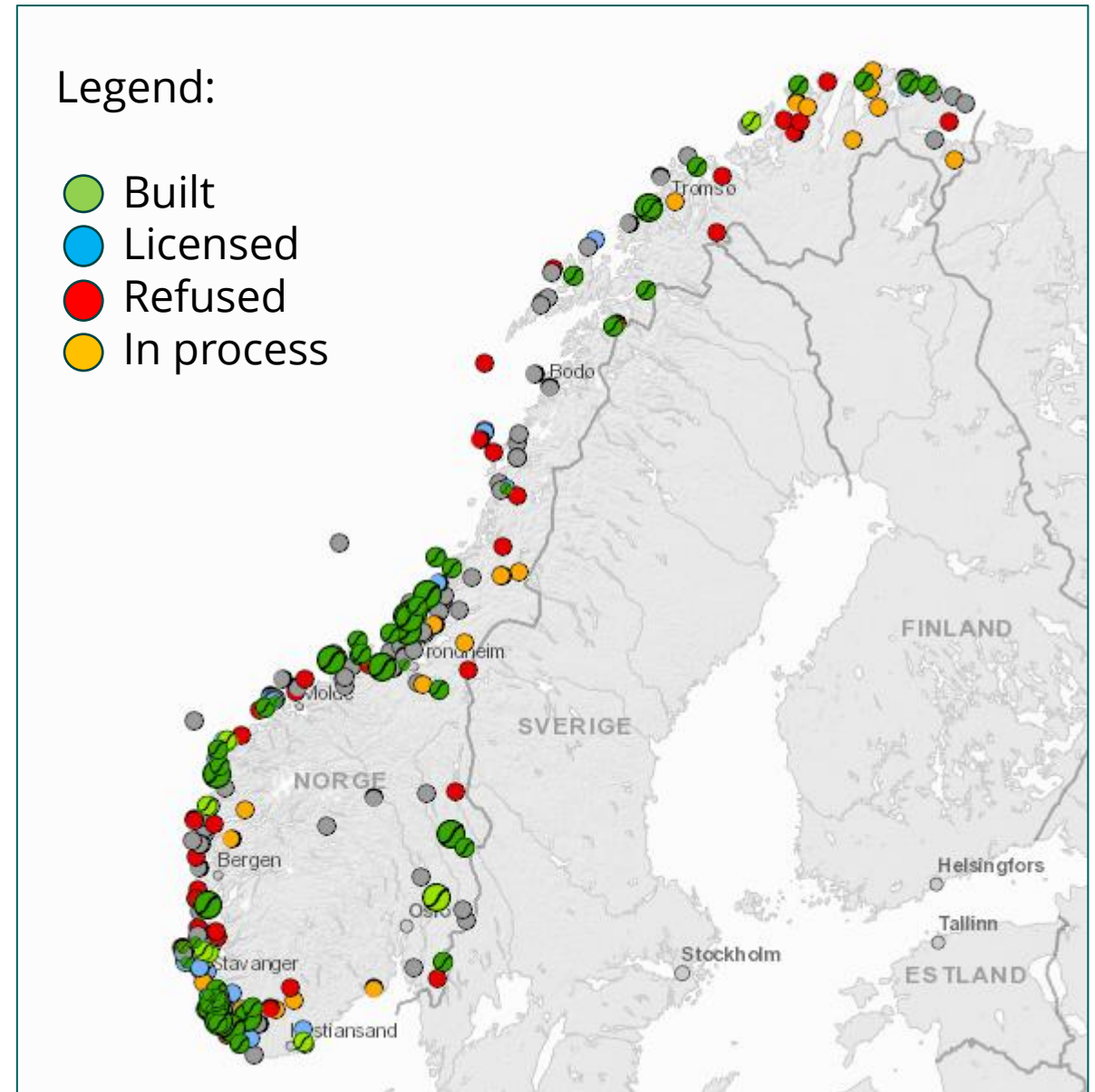
Kopperaa wind power plant, Norway

Meaningful, adaptive engagement and a good knowledge base
to support the decision process

Mari Lise Sjong, Norwegian Environment Agency,
2nd December 2021

Context

- Drive to install wind power
 - Joint certificate market Sweden-Norway
- Installation as of 2020:
 - 9,9 TWh production
 - 1164 turbines
 - 6 % of national electricity production
- High conflict potential



Source: NVE Vindkraft

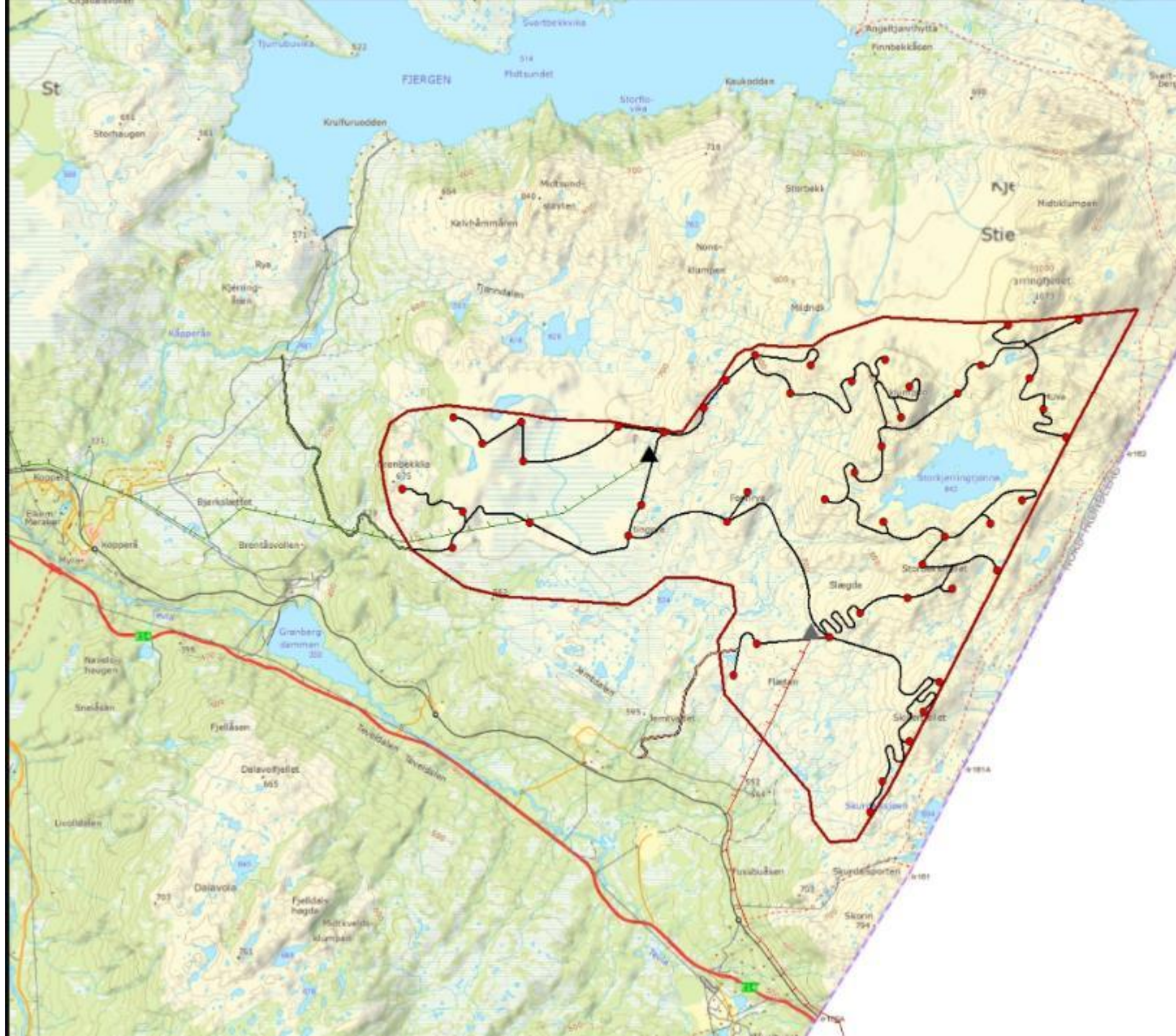
The project

- Developer: EON Wind Sweden
- App. 50 turbines 2-5 MW
- 180 MW - 612 GWh
- Internal roads
- Access roads
- Grid connection (132 kV)
 - Norway or Sweden



Photo: Mari Lise Sjong





- Planområde vindkraftverk
- Turbiner
- Adkomstvei alt 1
- Adkomstvei alt 2
- Internveier
- ▲ Trafo alt 1
- ▲ Trafo alt 2
- +— Nettilknytning alt 1
- +— Nettilknytning alt 2

Kopperaa vindkraftverk Situasjonskart

0 1,25 2,5
km

RAMBOLL

9120048/LHNTRH/24.01.2013



The process

- 2012: Notification and proposed ToR
 - Sweden notified shortly after Norwegian parties
 - Public consultation, Sweden asked for more time, which was granted
 - Information meeting on Swedish side
 - Input from Sweden to ToR
- 2013: Application and EIA
 - Public consultation
 - Joint information meeting Norwegian side
 - Sweden requests additional studies on impacts in Sweden
- 2014: Public consultation on additional studies

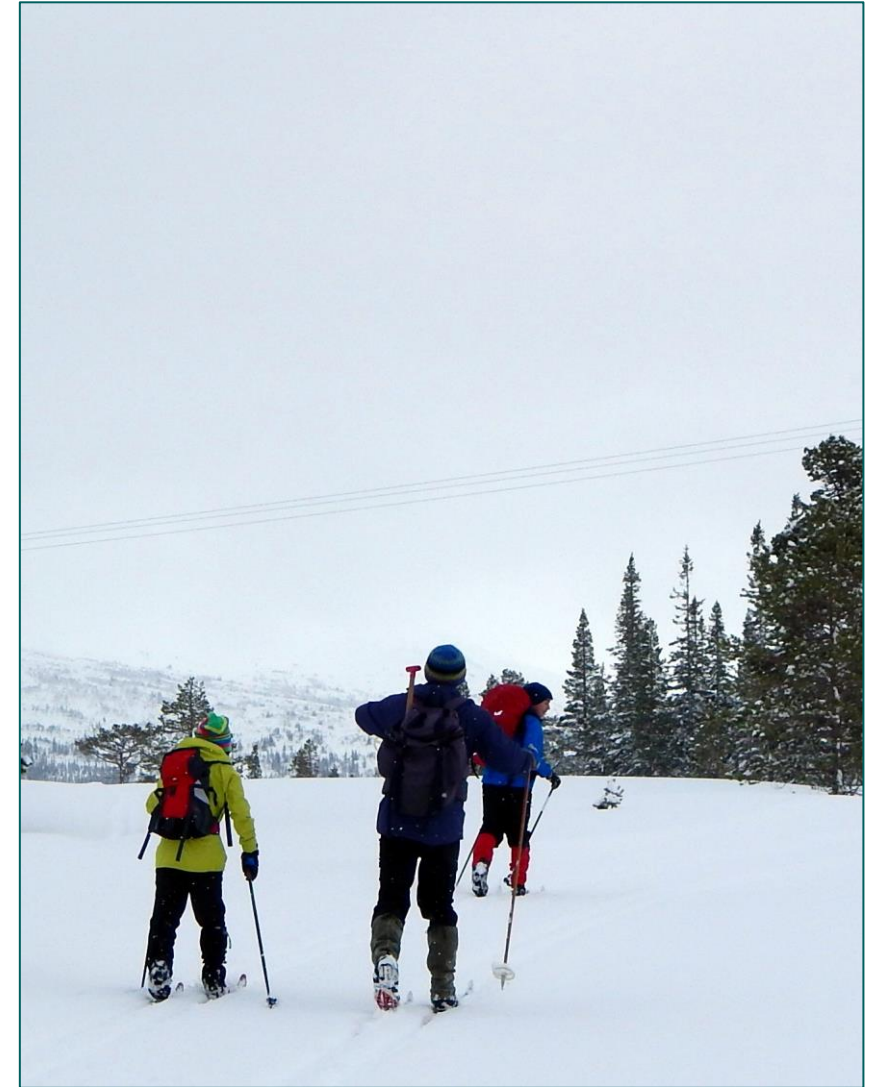


Photo: Mari Lise Sjong

Transboundary issues

- Sensitive area on both sides: Open mountain landscape, moorland, lakes
 - Biodiversity issues
 - Plans for new national park
 - Areas with «scenic beauty» protection
 - Mapped areas of national interest for «undisturbed mountains», «nature protection» and «outdoor recreation»
 - Area designated as no-go for wind power in Sweden
- Sami interests – reindeer husbandry
 - Swedish national interest area



Photo realistic visualization – viewpoint Koltjønndalen nature reserve
Rambøll 2013: Kopperaa vindkraftverk, Konsekvensutredning landskap

GIS support

- Nature reserves
- Scenic beauty areas
- Planned national park
- National interest areas for
 - Outdoor recreation
 - «Unbroken» mountains

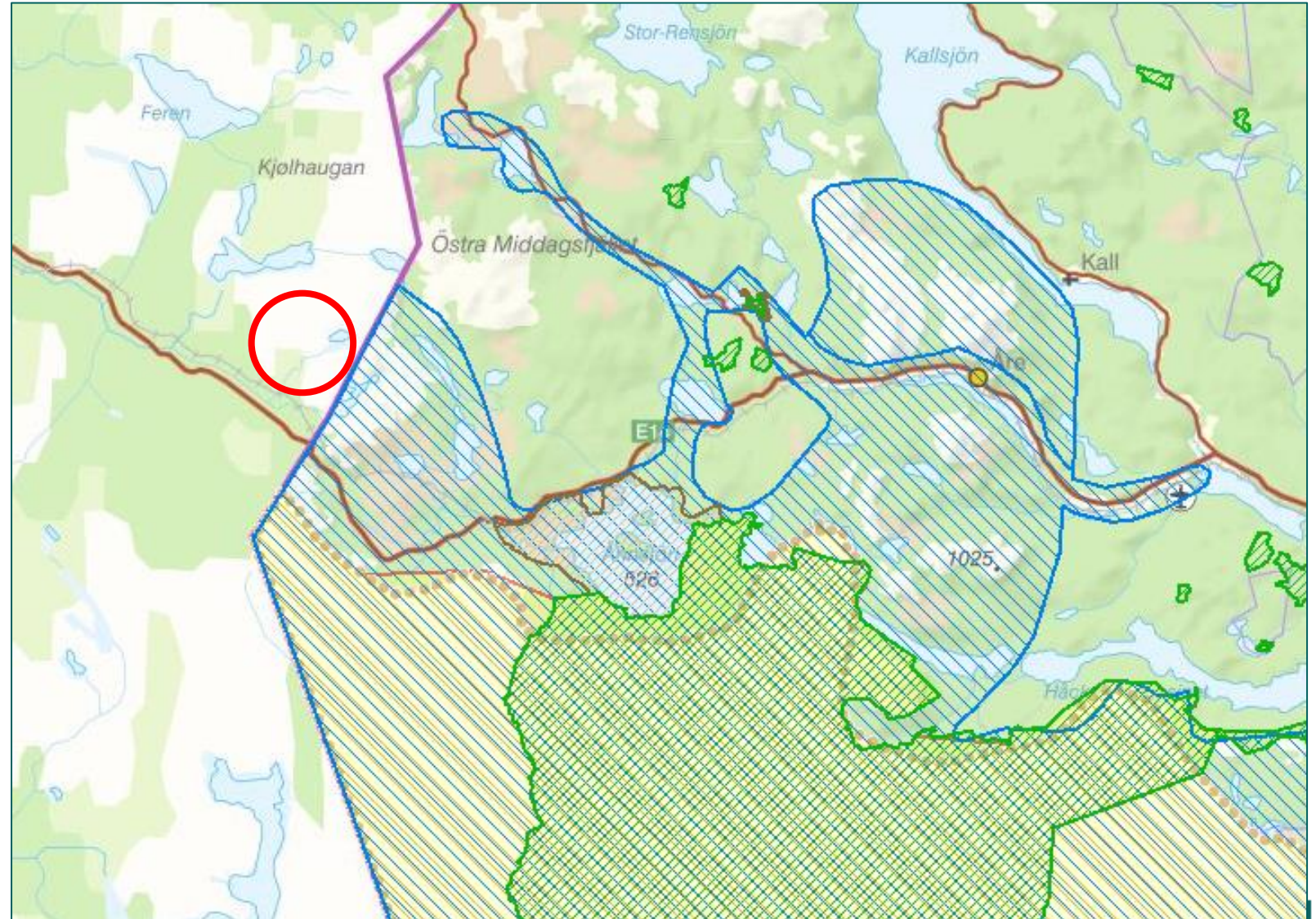
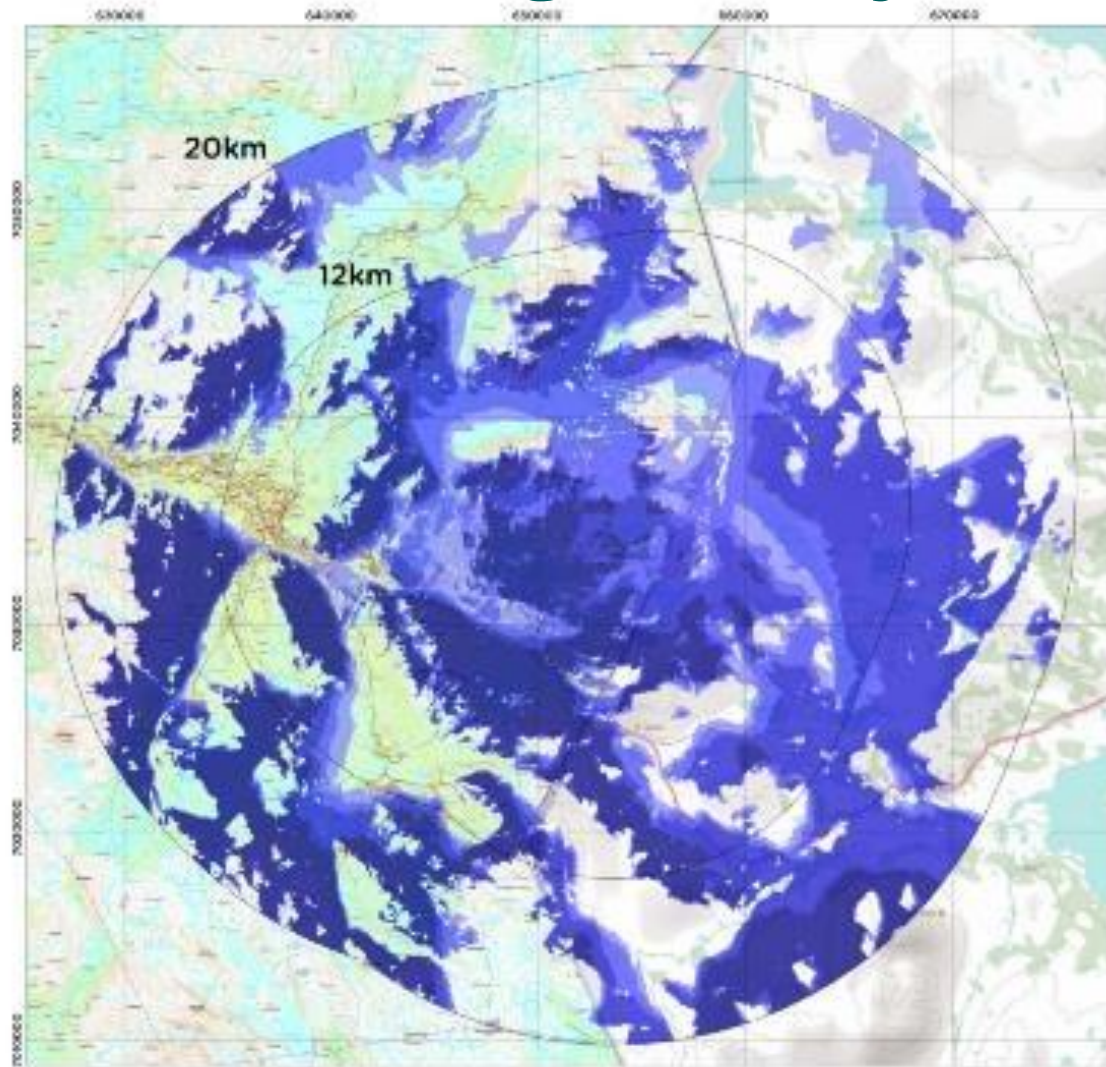


Photo realistic visualizations



Visual range analysis



Rambøll 2013: Kopperaa vindkraftverk, Konsekvensutredning landskap

Number of turbines visible:

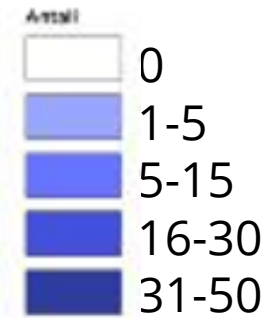


Photo: Mari Lise Sjong



Impact studies

- Significant negative visual impacts for
 - open, «untouched» landscape, and planned NP and areas of national interest in Sweden
 - one of Swedens most attractive recreation/skiing areas
- Wind turbines, including noise, dominate the gentle landscape and outdoor activities
- Sami interests/reindeer husbandry – precautionary principle

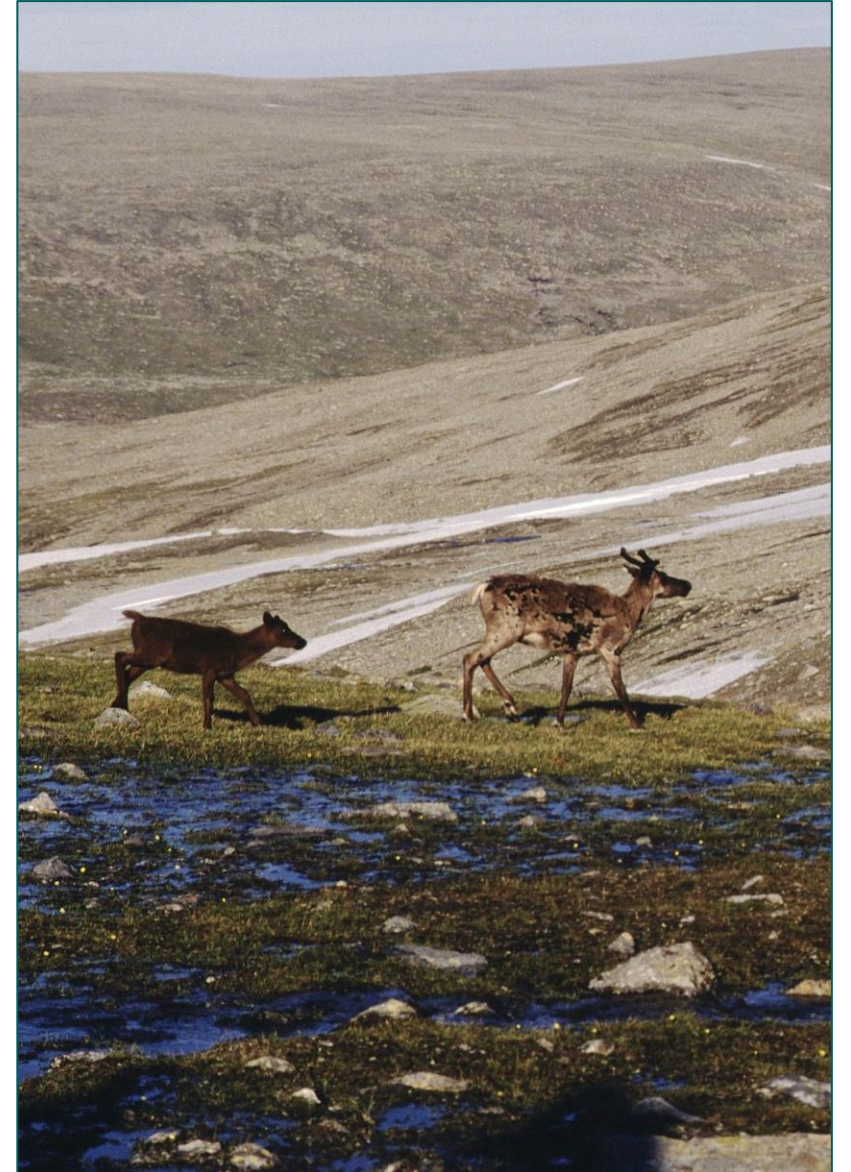


Photo: Mari Lise Sjong



Strong opinions

- Local authority in Norway positive
- Regional and national environmental authorities in Norway negative
- NGOs in Norway negative
- Local, regional, national authorities and interest groups in Sweden negative
- Sami interests in both countries negative



Photo: Mari Lise Sjong



Photo: Mari Lise Sjong

The process cont.

- April 2015: Decision by Norwegian Water Resources and Energy Directorate
 - Application refused
- November 2015: Complaint from developer EON
 - Reduced number of turbines, increased distance to border
- September 2017: Final decision by Ministry of Oil and Energy
 - Refusal upheld

Decision

- Despite Kopperaa windfarm being a good project, and
- Despite positive attitude from the local municipality
- The disadvantages are greater than the advantages: negative impacts for sami interests, outdoor recreation, nature based tourism and landscape
- «The Ministry also emphasizes the request from Swedish authorities that licence to the wind farm should not be granted.»



Lessons learned

- Look beyond the “blanks” on the map on the other side of the border.
- Being attentive to the other party’s need for more time, or new studies, builds trust in the process.
- Engaging stakeholders through transboundary information meetings and using support tools like visualizations helps build common ground.
- Sustainability in the energy sector is not just about emission free energy. It’s also about balancing this against impacts on other environmental interests.



Thank you!

