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# European Socio-Technical Wind Atlas

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Based on Enevoldsen et al. (2019)

[/HTTPS://WWW.SCIENCEDIRECT.COM/SCIENCE/ARTICLE/PII/S0301421519304343](https://www.sciencedirect.com/science/article/pii/S0301421519304343)



# METHODOLOGY



Wind Resources

Wind speed (m/s) defined by The Global Wind Atlas, and verified using Met. Masts across Europe

Restrictions

Download and specification of Social, Environmental and Technical restrictions

Geoprocessing

Preparing layers using GIS, and buffering according to local distance demands. Raster calculation to determine areas

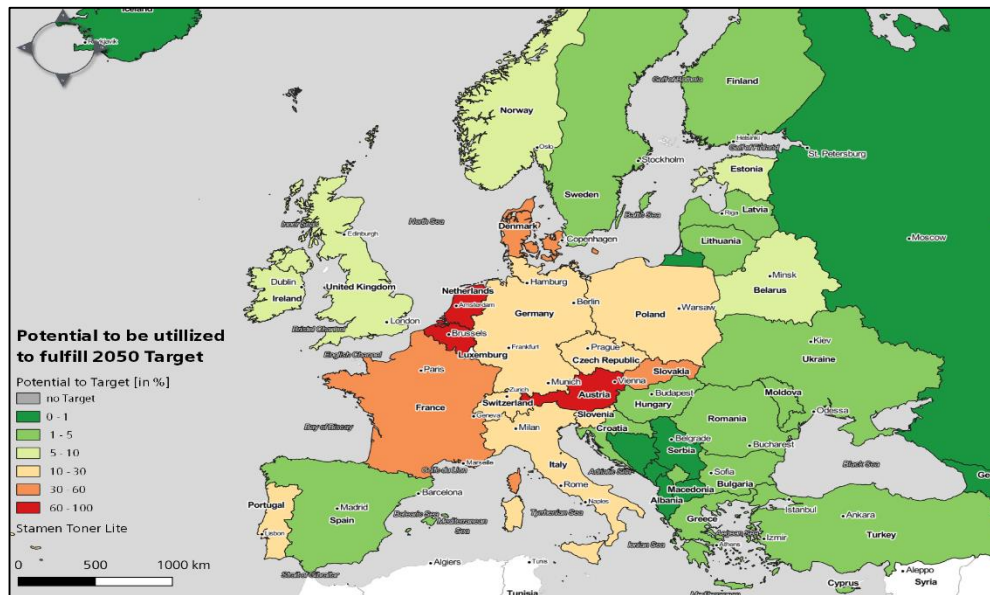
STWA

Available Areas and Map Layout



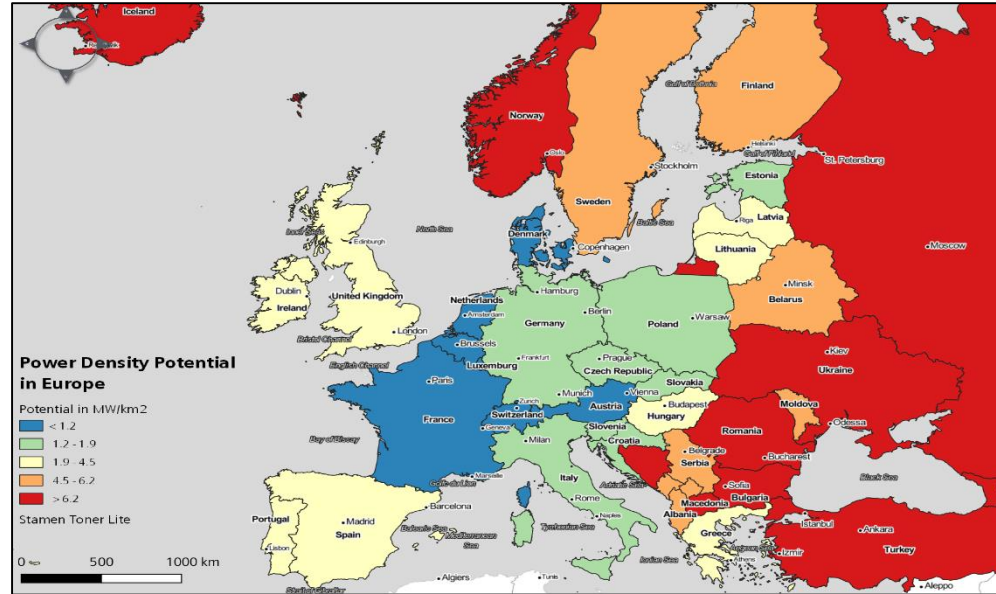
# THE EUROPEAN POTENTIAL

- In theory, it is only The Netherlands, Belgium, Luxembourg, Austria, and Malta that will face problems meeting the onshore wind targets for 2050.



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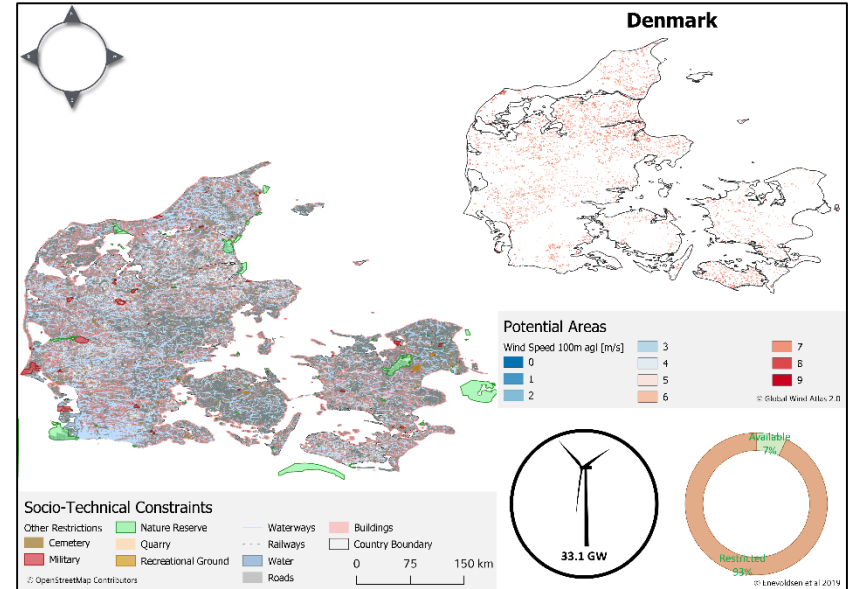
- In theory, it is only The Netherlands, Belgium, Luxembourg, Austria, and Malta that will face problems meeting the onshore wind targets for 2050.
- We generally find the greatest potential per km<sup>2</sup> in Eastern Europe.





# COUNTRY-SPECIFIC POTENTIALS

- Country-specific maps for all countries
- Future study will perform micro-assessments revealing where to locate the wind turbines
- A similar study is being carried out for the US.
- The first step to ensure a better planning process!!





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