

# NORDIC CLEAN ENERGY SCENARIOS

Nordic Pathways and key technologies  
to Carbon Neutrality

Kevin Johnsen, Senior Adviser  
Nordic Energy Research



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# Stepping up Nordic Climate Co-operation

*“The aim of the Nordic countries is to be carbon neutral and to demonstrate leadership in the fight against global warming”*



- The Nordic prime ministers in their declaration at the summit in Helsinki 25.01.19



# NORDIC CLEAN ENERGY SCENARIOS

Solutions for Carbon Neutrality



## Nordic Energy Technology Perspectives

Pathways to a Carbon Neutral Energy Future

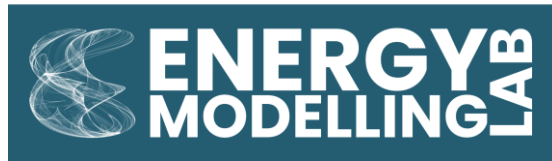


## Nordic Energy Technology Perspectives 2016

Cities, flexibility and pathways to carbon-neutrality



# Project Partners



# Three Storylines

***Carbon  
Neutral  
Nordic  
(CNN)***

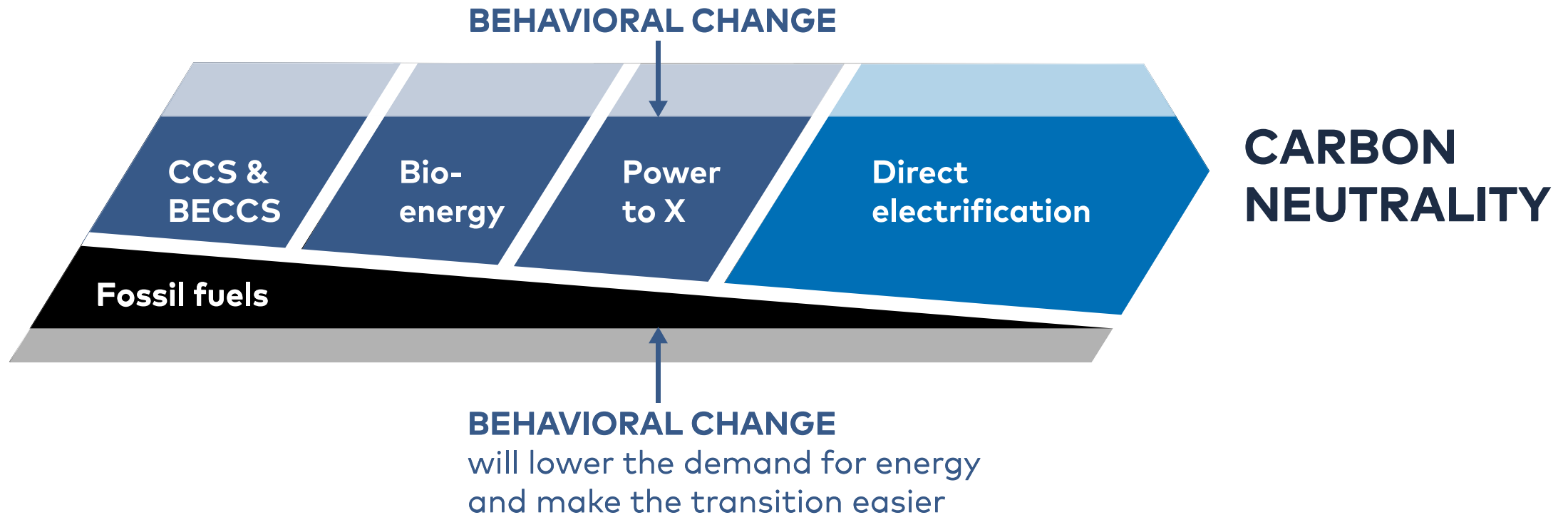
***Nordic  
powerhouse  
(NPH)***

***Climate  
Neutral  
Behaviour  
(CNB)***



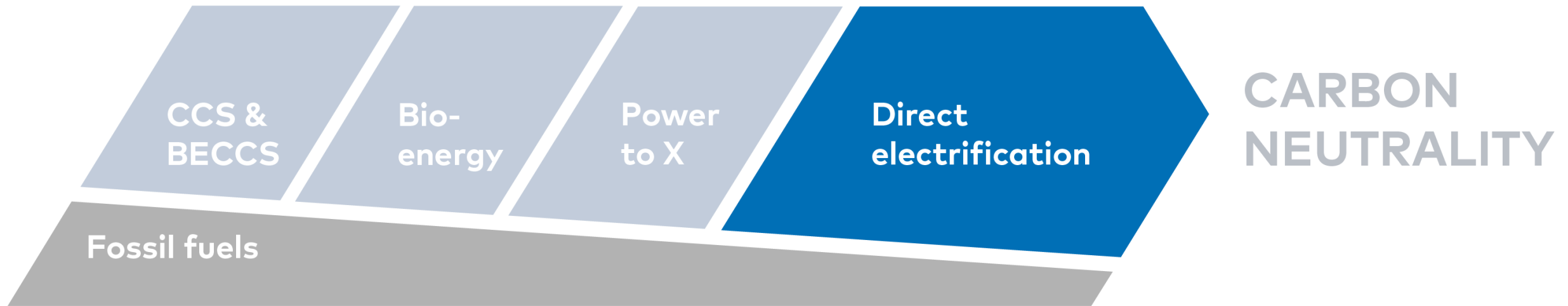
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# Five Solution Tracks to Carbon Neutrality emerge in the scenarios



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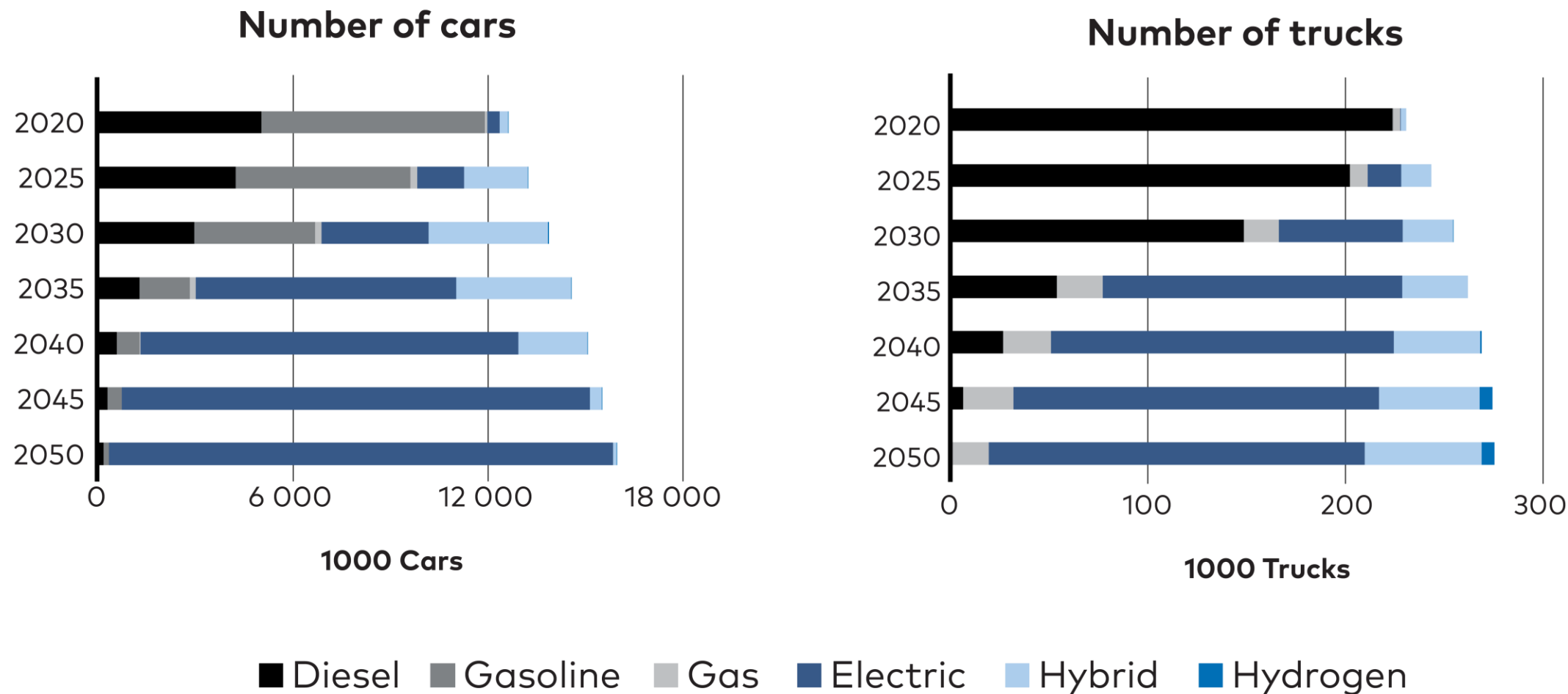
# Direct Electrification is Central to all Decarbonisation Strategies



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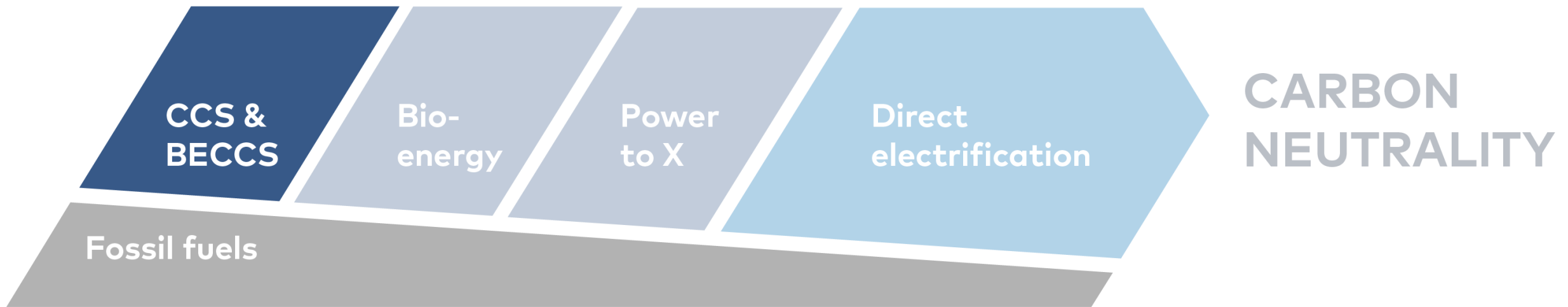
# Direct Electrification is Accelerating in all Transport Modes

Stock of cars and trucks (incl. vans) CNN and NPH scenario



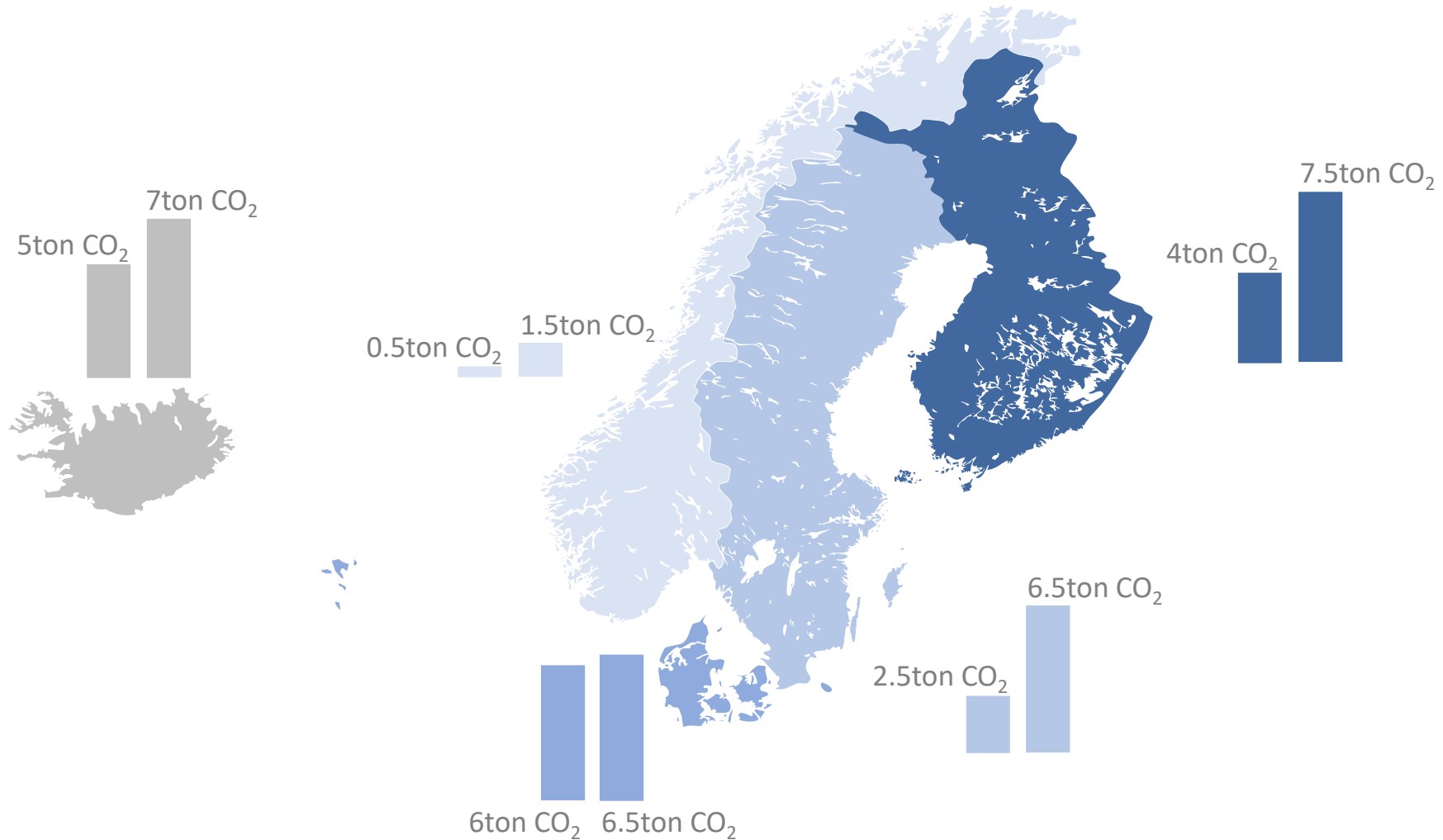


# Carbon Capture and Storage, along with Negative Emissions, are Essential to Reach Nordic Climate Neutrality Targets

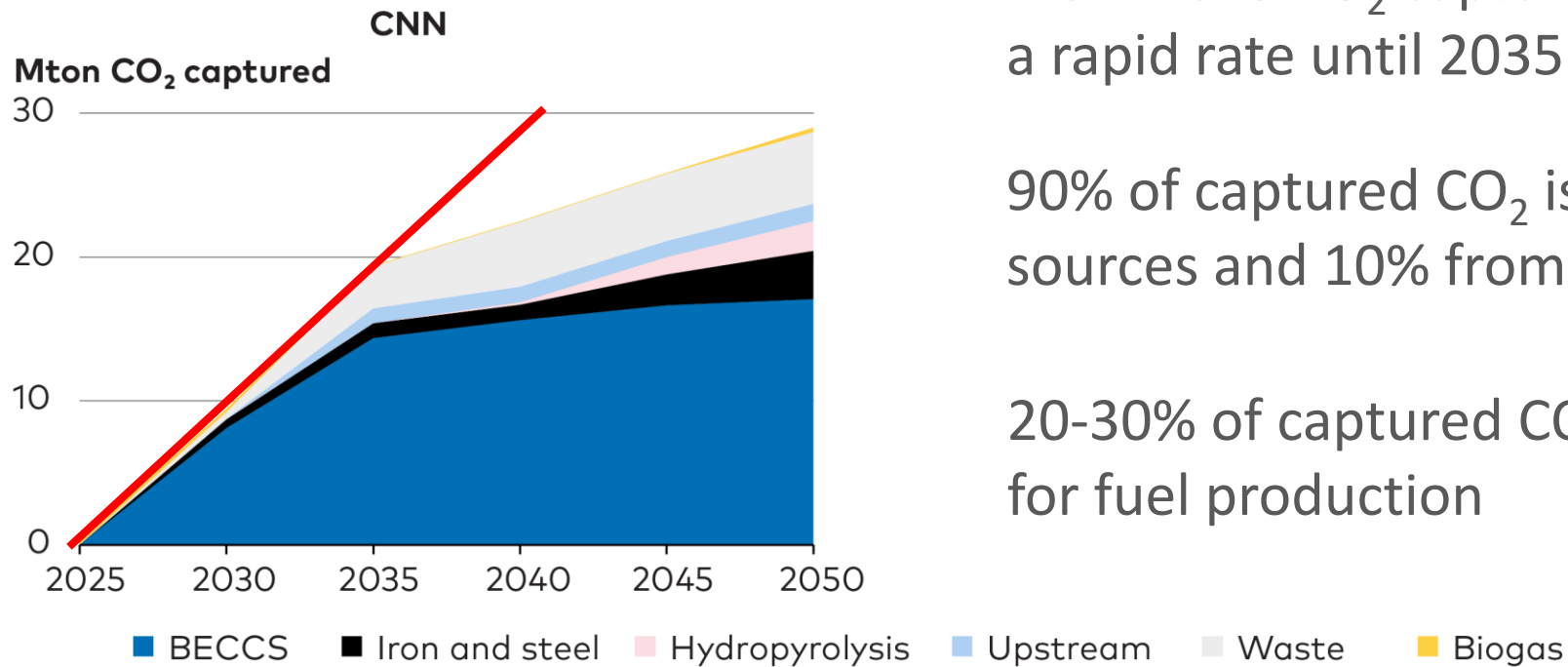


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All scenarios reach national targets but amount of CO<sub>2</sub> captured in 2050 depends on cost and acceptance



# Negative emissions are necessary to reach Nordic national targets



From 2025 CO<sub>2</sub> capture need to increase at a rapid rate until 2035

90% of captured CO<sub>2</sub> is from biogenic sources and 10% from fossil

20-30% of captured CO<sub>2</sub> in 2050 are reused for fuel production



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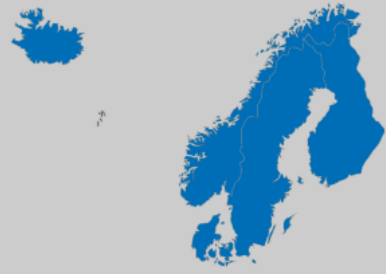
Solutions for Carbon Neutrality















Access the Nordic Clean Energy  
Scenarios report at  
[WWW.NORDICENERGY.ORG](http://WWW.NORDICENERGY.ORG)



Choose Countries



Choose Scenarios

CNN	 
CNN	 
CNB	 
CNB	 
NPH	 
NPH	 

Scenario Difference ☒

This function will calculate the difference in value between the blue and violet model results.

Explore all data and results through NCES  
open access tools

AVAILABLE AT

[WWW.NORDICENERGY.ORG](http://WWW.NORDICENERGY.ORG)

- Open access models
- Nordic energy statistics database
- Complete technology catalogue
- Web tool for scenario results and sensitivity analyses



# Thank you for the attention!

Kevin Johnsen, Senior Adviser

[Kevin.Johnsen@nordicenergy.org](mailto:Kevin.Johnsen@nordicenergy.org)

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 [@kewilikew](https://twitter.com/kewilikew)



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