



SITRA

Nordic climate
solutions can help
other countries
cut emissions.

*Green
to
Scale*

LOW-CARBON SUCCESS STORIES
TO INSPIRE THE WORLD

It can be done

We already have many tools available to cut emissions – as demonstrated by the results in the Nordic countries.

We have solutions

Scaling up just 15 Nordic climate solutions could cut global emissions annually by 4 gigatonnes by 2030. This is equal to the current total emissions of the European Union.

Countries can do more

The results of this project show how implementing existing low-carbon solutions can take us a long way in tackling the climate crisis. Countries around the world have a range of proven and attractive Nordic solutions to choose from.

Nordic partnership

Organisations from all five Nordic countries have partnered with the Finnish Innovation Fund Sitra and the Nordic Council of Ministers to produce the Nordic Green to Scale study.

NEW NORDIC CLIMATE SOLUTIONS



ENERGY

1 Combined heat and power production

If other countries used CHP like Finland and Denmark do, it would reduce emissions by almost as much as Japan produces in a year.

Save
1,171
MtCO₂/year

2 Onshore wind power

If all countries used their onshore wind potential like Denmark does, it would reduce emissions by more than Australia produces in a year.

Save
695
MtCO₂/year

3 Offshore wind power

If other countries used offshore wind power like Denmark does, it would reduce emissions by almost as much as Panama produces in a year.

Save
22
MtCO₂/year

4 Geothermal power

If countries with significant geothermal potential used it like Iceland does, it would reduce emissions by more than Denmark produces in a year.

Save
55
MtCO₂/year



INDUSTRY

5 CCS in oil and gas production

If all countries used carbon capture and storage (CCS) in oil and gas production like Norway does, it would reduce emissions by as much as Hungary produces in a year.

Save
63
MtCO₂/year

6 Reducing methane in oil and gas production

If all countries reduced the methane intensity in oil and gas production like Norway has done, it would reduce emissions by almost as much as Ukraine produces in a year.

Save
357
MtCO₂/year

7 Low-carbon energy in industry

If all countries reduced the carbon intensity of their industry like Finland and Sweden have done, it would reduce emissions by more than Singapore produces in a year.

Save
57
MtCO₂/year



TRANSPORT

8 Electric vehicles (EVs)

If other wealthy countries used as many EVs as Norway does, it would reduce emissions by almost as much as Denmark produces in a year.

Save
50
MtCO₂/year

9 Biofuels in transport

If other countries used biofuels to the extent that Sweden and Finland do, it would reduce emissions by almost as much as Italy produces in a year.

Save
423
MtCO₂/year

10 Cycling in cities

If other countries followed the example of Denmark and promoted cycling in cities, it would reduce emissions by almost as much as Slovakia produces in a year.

Save
37
MtCO₂/year



BUILDINGS AND HOUSEHOLDS

11 Energy efficiency in buildings

If other countries cut energy use in buildings by as much as Sweden has done, it would reduce emissions by almost as much as Spain produces in a year.

Save
430
MtCO₂/year

12 Residential heat pumps

If selected European countries used as many heat pumps as Sweden already does, it would reduce emissions by almost as much as Cuba produces in a year.

Save
64
MtCO₂/year

13 Bioenergy for heating

If Canada, Mongolia and Russia used as much bioenergy for heating as Finland already does, it would reduce emissions by more than Bangladesh produces in a year.

Save
193
MtCO₂/year



AGRICULTURE AND FORESTS

14 Reforestation and land restoration

If other wealthy countries reforested and restored lost vegetation like Iceland does, it would reduce emissions by more than Panama produces in a year.

Save
21
MtCO₂/year

15 Manure management

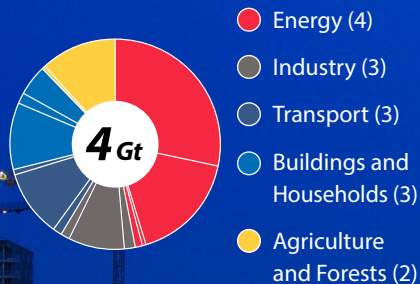
If all countries cut nitrous oxide emissions in manure management like Denmark does, it would reduce emissions by more than Nigeria produces in a year.

Save
478
MtCO₂/year

Emission targets today fall short of what is needed to limit global warming to well below 2°C. Countries need to do more than they have committed so far.

There is no need to wait. The time for climate action is now.

Scaling up 15 existing Nordic low-carbon solutions would reduce global emissions by 4 Gt by 2030.



Read more at
greentoscale.net/nordic
Contact: greentoscale@sitra.fi
Engage: #GreenToScale

In co-operation with the Climate and Air Pollution Group of the Nordic Council of Ministers | Center for International Climate and Environmental Research (CICERO), Norway | CONCITO, Denmark | Stockholm Environment Institute (SEI), Sweden | University of Iceland Institute for Sustainability Studies, Iceland.



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