



SITRA

Scaling up just 17
low-carbon solutions
can go a long way
towards closing
the emissions gap.

*Green
to
Scale*

LOW-CARBON SUCCESS STORIES

TO INSPIRE THE WORLD

It can be done

We already have the tools available to cut emissions – the know-how and experience of 36 countries that have successfully reduced emissions.

We have the solutions

Scaling up just 17 climate solutions could cut current global emissions by a quarter by 2030. This is equivalent to the total emissions of China and Japan combined.

Global partnership

Organisations from 10 countries have partnered with the Finnish Innovation Fund Sitra. The project Green to Scale has uncovered proven and attractive solutions to tackle the climate crisis.

Countries can do more

The results of the project can help countries to meet, improve and go beyond their national climate commitments – and at the same time lead to better health, more jobs and improved energy access.



RENEWABLE ENERGY

1 Solar water heating in China

If similar countries used solar water heating as much as China already does, it would reduce emissions more than Belgium produces in a year.

Save
136
Mt CO₂/year

2 Grid solar power in Germany

If all countries used solar power as much as Germany already does, it could reduce emissions more than Russia and Canada combined produce in a year.

Save
3,197
Mt CO₂/year

3 Off-grid solar power in Bangladesh

If similar countries used off-grid solar power as much as Bangladesh has already done, it would reduce emissions as much as Malta produces in a year.

Save
3
Mt CO₂/year

4 Wind power in Denmark and Brazil

If all countries used wind power as much as Denmark and Brazil already do, it could reduce emissions more than the UK and France combined produce in a year.

Save
1,018
Mt CO₂/year

5 Bioenergy for heating in Finland

If similar countries used bioenergy for heating as much as Finland already does, it could reduce emissions more than Bangladesh produces in a year.

Save
193
Mt CO₂/year



TRANSPORT

6 Vehicle fuel efficiency in the EU

If all countries improved car fuel efficiency as much as the EU has already done, it would reduce emissions almost as much as Saudi Arabia produces in a year.

Save
525
Mt CO₂/year

7 Bus rapid transit in Colombia

If similar countries used bus rapid transit as much as Colombia already does, it could reduce emissions as much as Norway produces in a year.

Save
24
Mt CO₂/year



BUILDINGS AND HOUSEHOLDS

8 Building efficiency in Germany and Mexico

If similar countries improved building efficiency as much as Germany and Mexico have already done, it could reduce emissions as much as the Netherlands produces in a year.

Save
206
Mt CO₂/year

9 Improved cook stoves in China

If similar countries used efficient cook stoves as much as China already does, it could reduce emissions more than the UK and France combined produce in a year.

Save
985
Mt CO₂/year

10 Appliance efficiency in Japan

If all countries improved appliance efficiency as much as Japan has already done, it could reduce emissions more than Turkey produces in a year.

Save
401
Mt CO₂/year



INDUSTRY

11 Industry energy efficiency in China

If similar countries improved industry efficiency as much as China has already done, it could reduce emissions more than Canada produces in a year.

Save
879
Mt CO₂/year

12 Industrial electric motors in the US

If similar countries improved the efficiency of industry motors as much as the USA has already done, it could reduce emissions more than Romania produces in a year.

Save
112
Mt CO₂/year

13 Reducing fossil fuel methane in the US

If similar countries cut emissions from oil and gas production as much as the USA has already done, it could reduce emissions as much as Turkey produces in a year.

Save
388
Mt CO₂/year



AGRICULTURE AND FORESTS

14 Low-carbon agriculture in Brazil

If similar countries used low-carbon agriculture as much as Brazil already does, it could reduce emissions more than Peru produces in a year.

Save
165
Mt CO₂/year

15 Cutting food waste in Denmark

If similar countries cut food waste as much as Denmark has already done, it could reduce emissions more than the Netherlands and Luxembourg combined produce in a year.

Save
238
Mt CO₂/year

16 Reducing deforestation in Brazil

If similar countries cut deforestation as much as Brazil has already done, it could reduce emissions nearly as much as India produces in a year.

Save
2,782
Mt CO₂/year

17 Reforestation and afforestation in Costa Rica

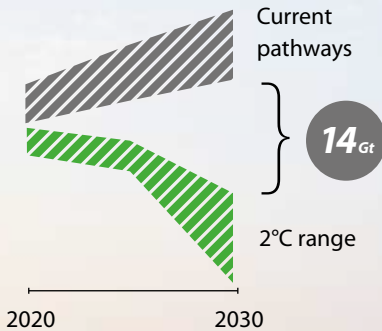
If similar countries restored forest cover as much as Costa Rica has already done, it could reduce emissions nearly as much as Canada produces in a year.

Save
882
Mt CO₂/year

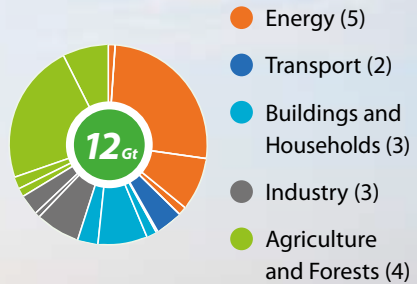


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Emission targets fall short of what is needed to limit global warming to below the risk limit of 2°C



Scaling up 17 proven low-carbon solutions would reduce global emissions by 12 Gt by 2030



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



In co-operation with Alberto Luiz Coimbra Institute for Graduate Studies and Research in Engineering (COPPE), Brazil | Centro Mexicano de Derecho Ambiental (CEMDA), Mexico | Ethiopian Development Research Institute (EDRI) | European Climate Foundation (ECF), the Netherlands | Institute for Global Environmental Strategies (IGES), Japan | International Finance Corporation (IFC) of the World Bank Group | Masdar Institute, the United Arab Emirates | Renmin University of China | Stockholm Environment Institute (SEI), Sweden | UNEP DTU Partnership, Denmark | World Resources Institute (WRI), USA

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