Greenhouse gas emissions in Minnesota

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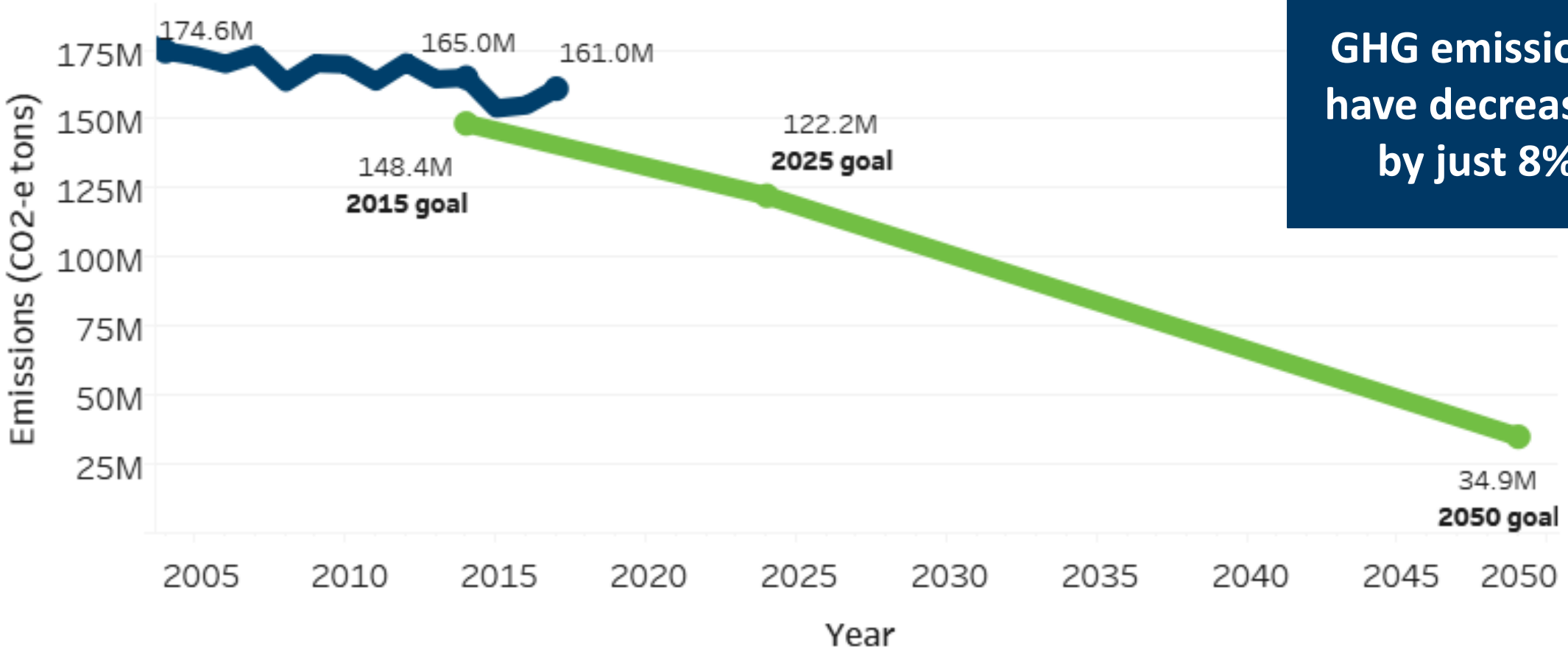
MINNESOTA POLLUTION CONTROL AGENCY

Minnesota is not on track to meet its goals



GHG emissions have decreased by just 8%

Minnesota's actual GHG emissions, compared to the Next Generation Energy Act goals

Greenhouse gas emissions by sector

Emission change 2005 to 2018	-3.27M -7%	-16.40M -29%	-0.76M -2%	3.22M 18%	2.83M 32%	1.05M 15%	-0.24M -11%

Over 70% of total GHG emissions

Transportation

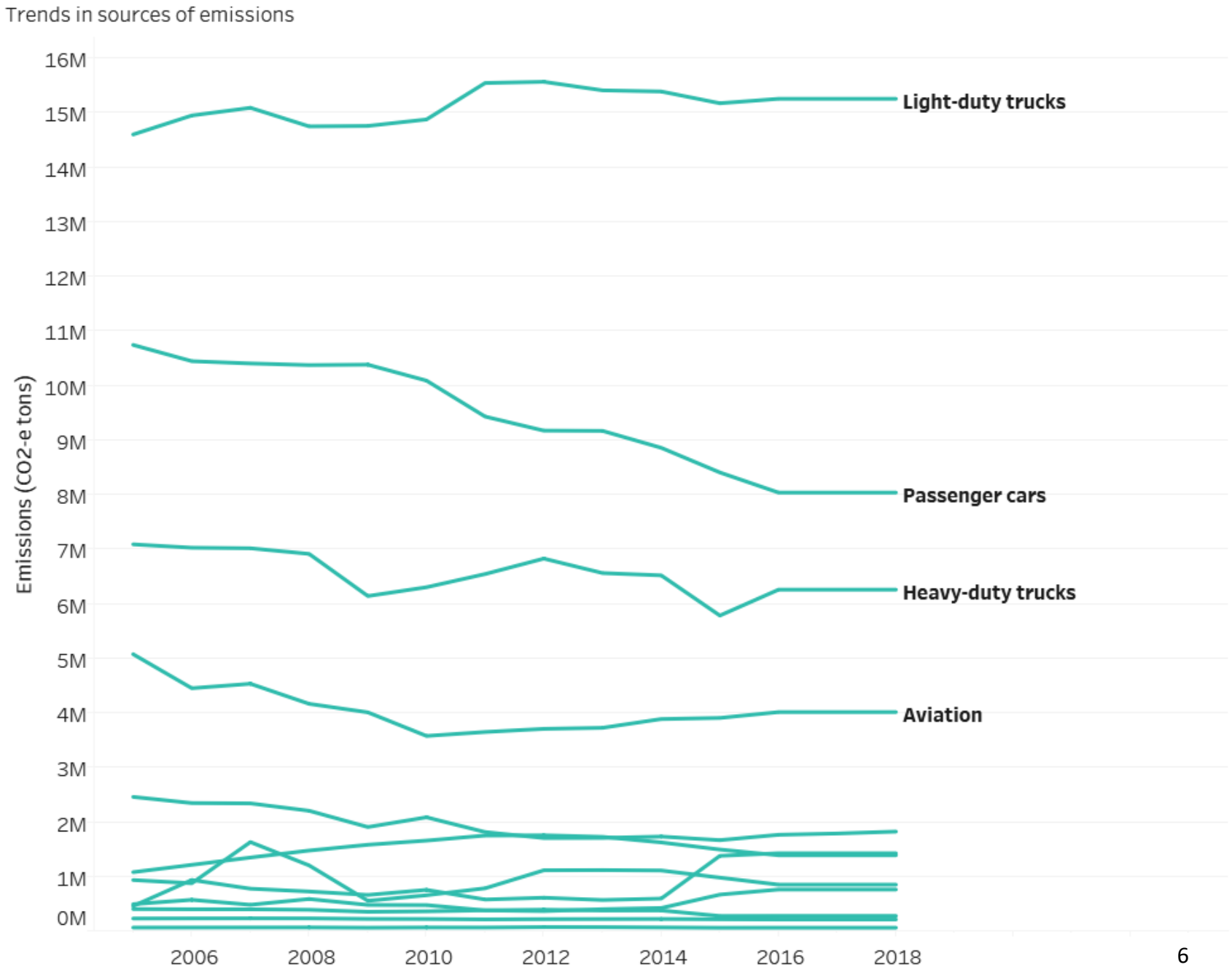
Electricity generation

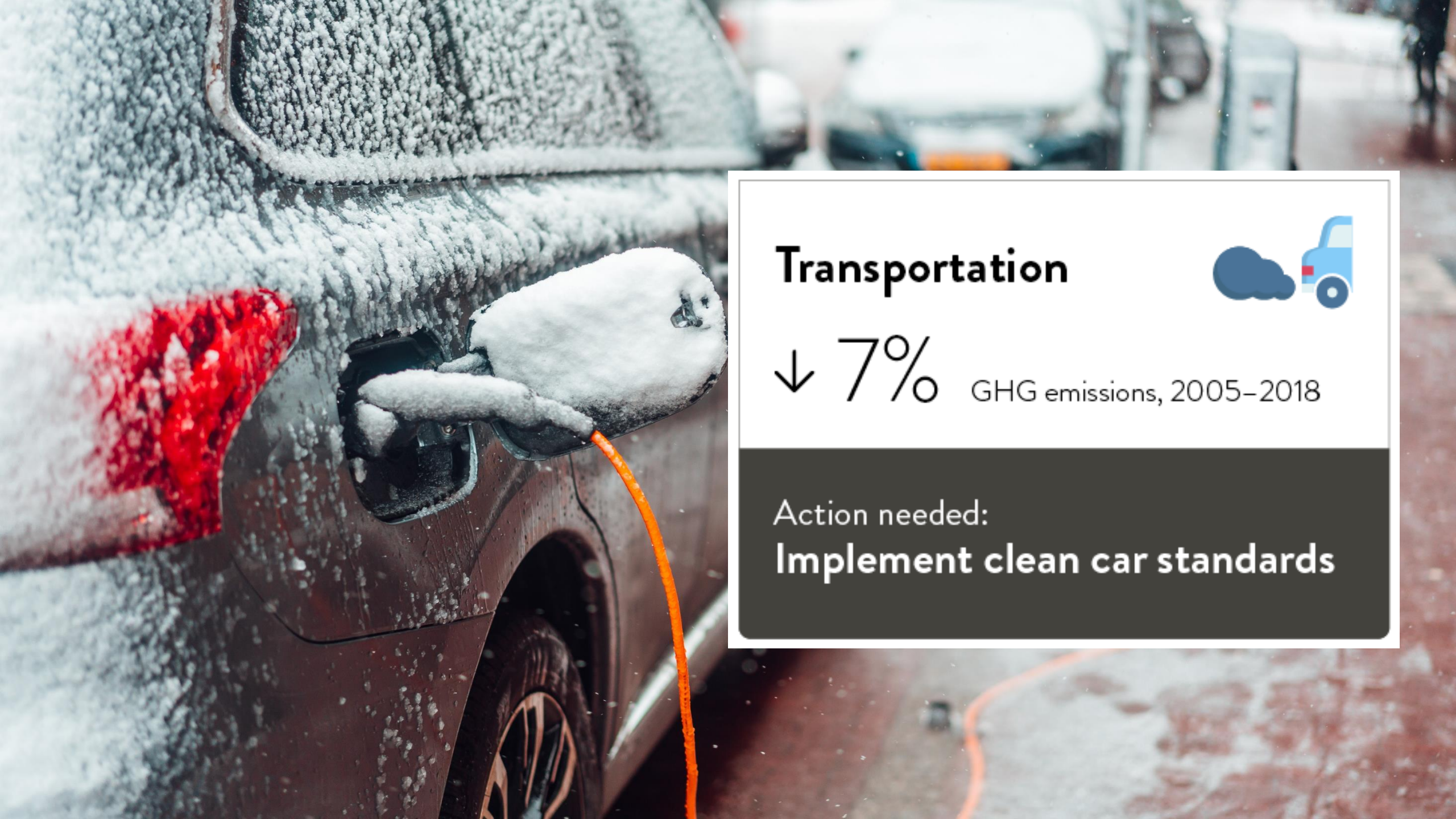
Agriculture, forestry and land use

Transportation

- Largest source of emissions
- Most in need of swift action
- Light-and medium-duty vehicles make up **more than half** of all transportation emissions

Transportation emissions

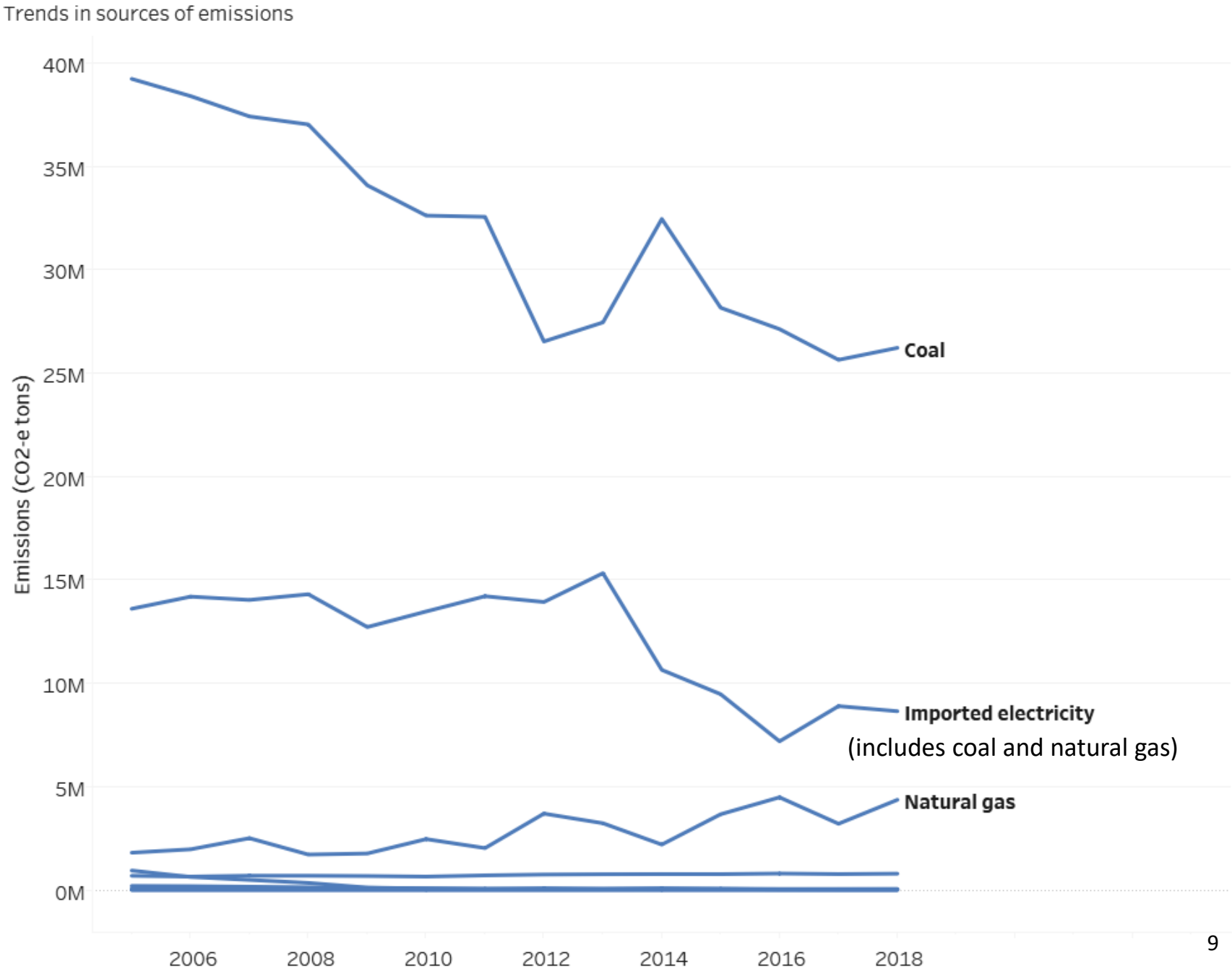


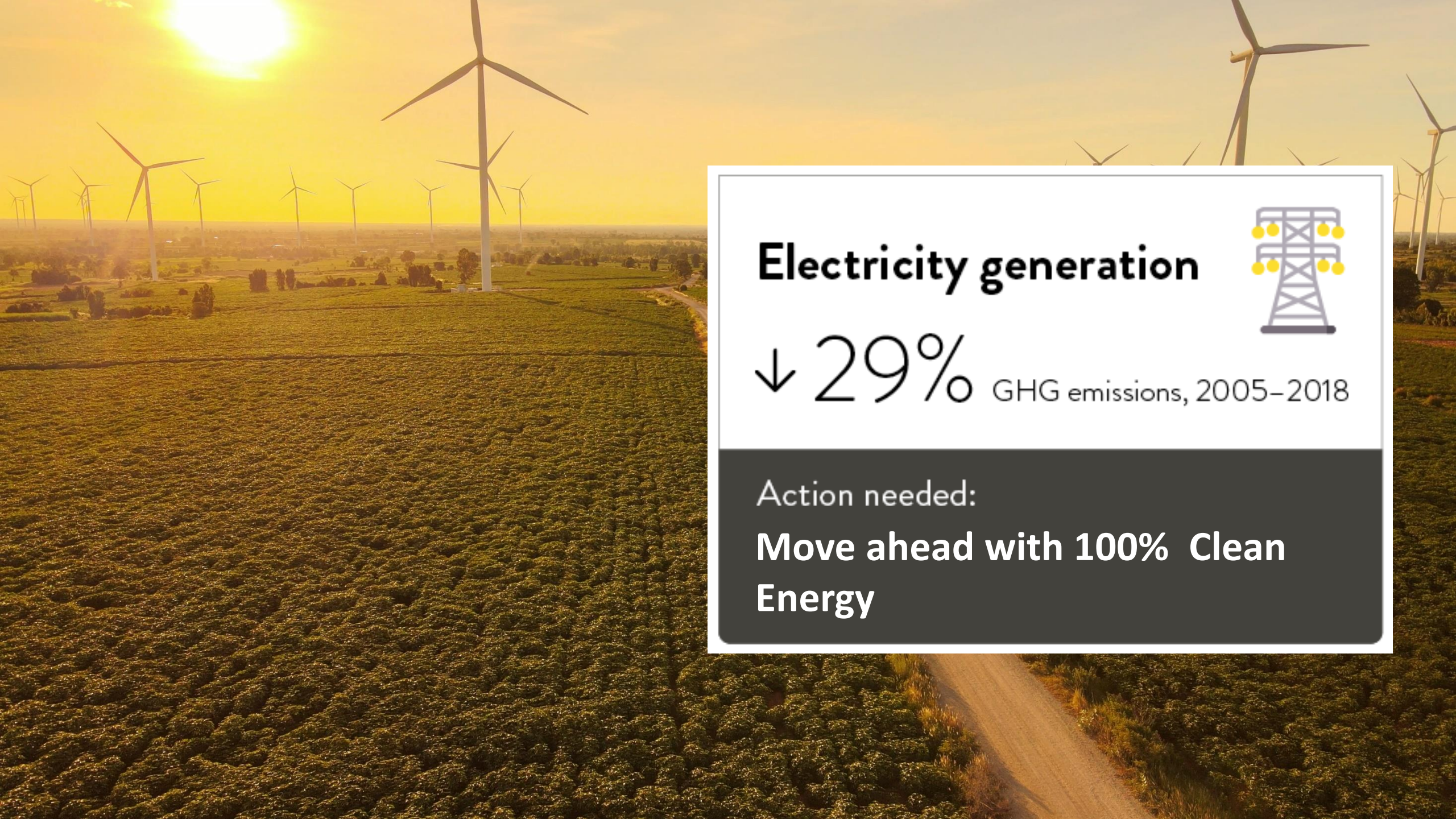

Transportation
↓ 7%
GHG emissions, 2005–2018
Action needed:
Implement clean car standards

Electricity generation

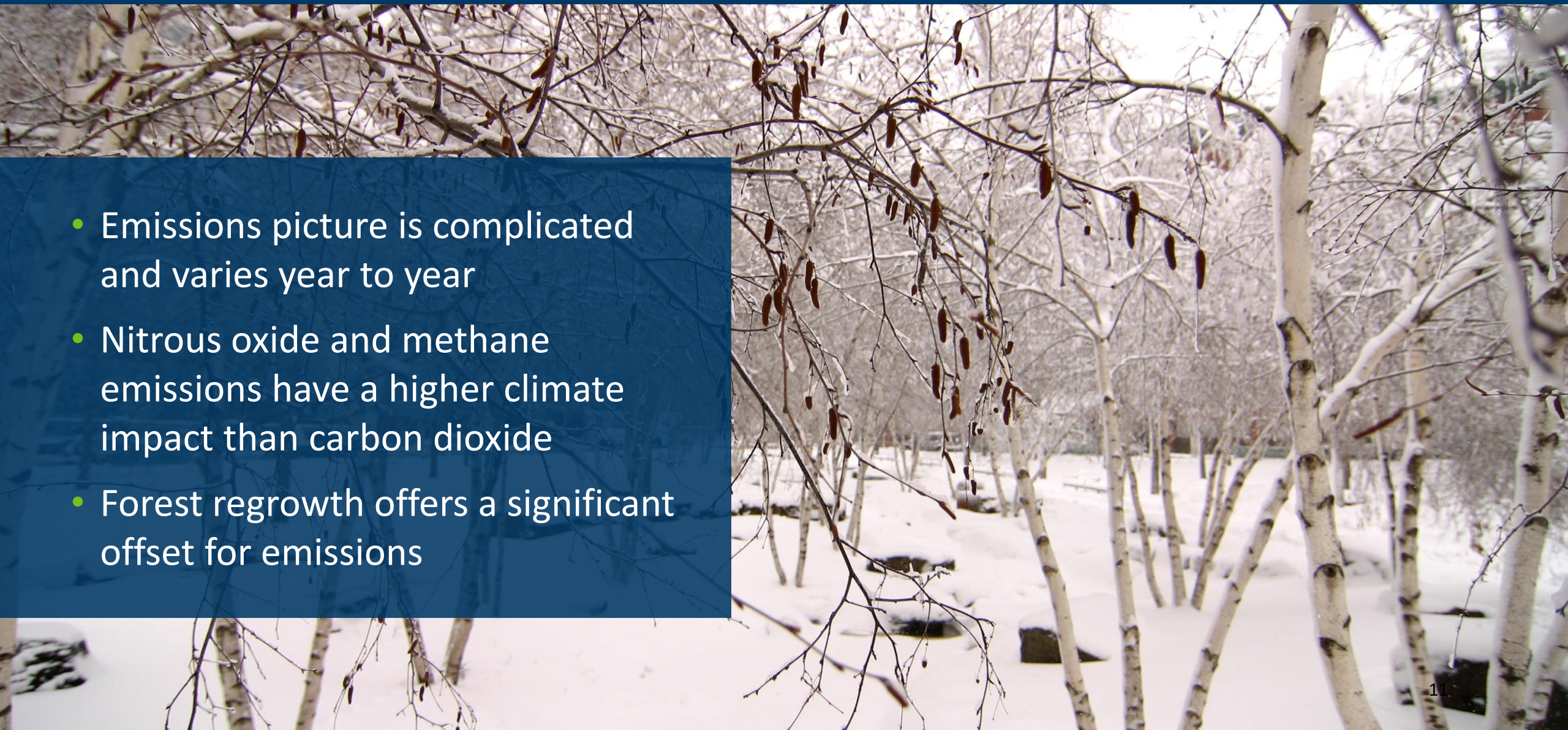
- Close second to transportation sector
- Positive progress so far has been concentrated here
- Only sector that is on track to meet NGEA goals

Electricity generation emissions



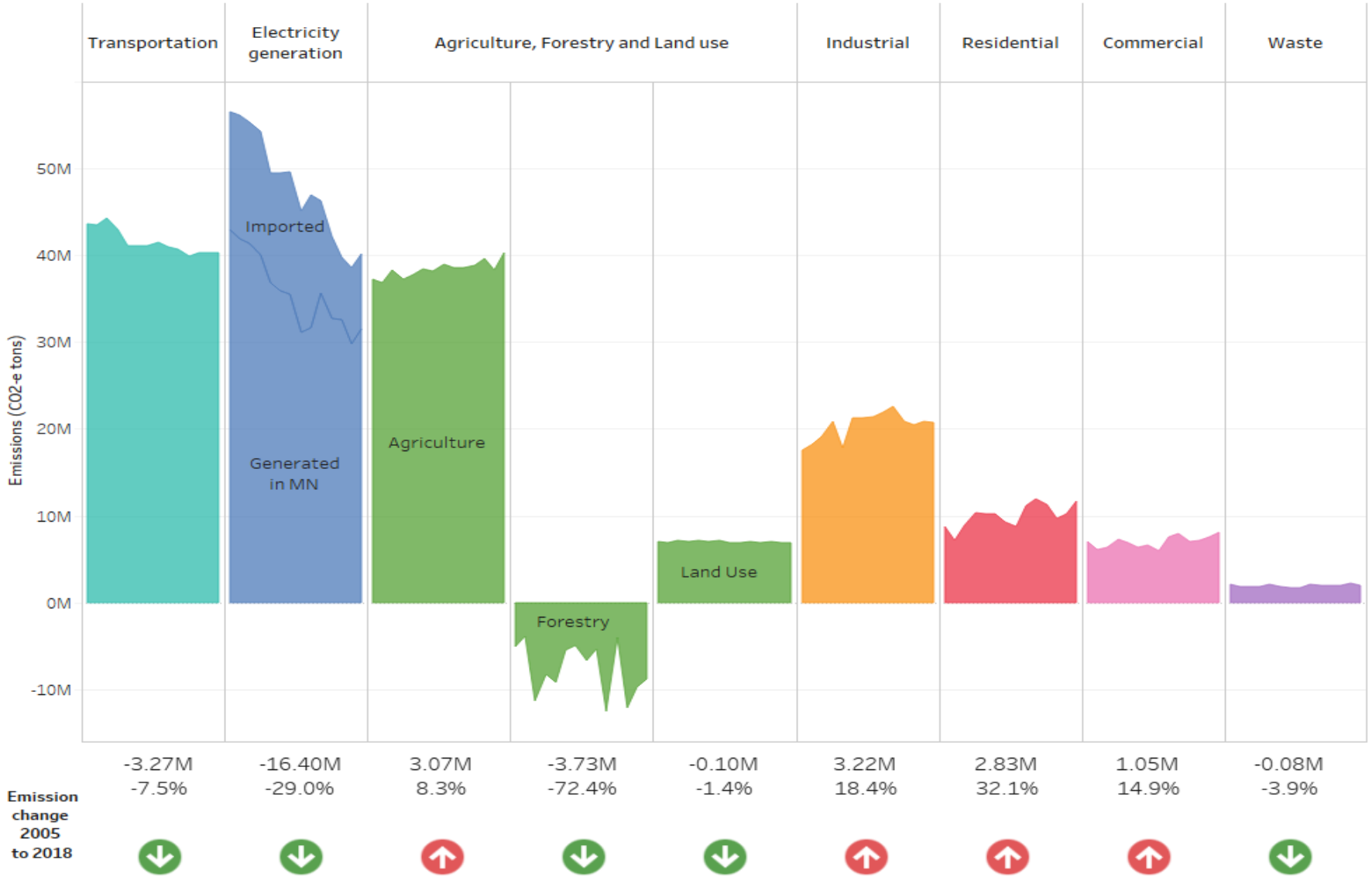

Electricity generation
↓29% GHG emissions, 2005–2018
Action needed:
Move ahead with 100% Clean Energy

Agriculture, forestry, land use

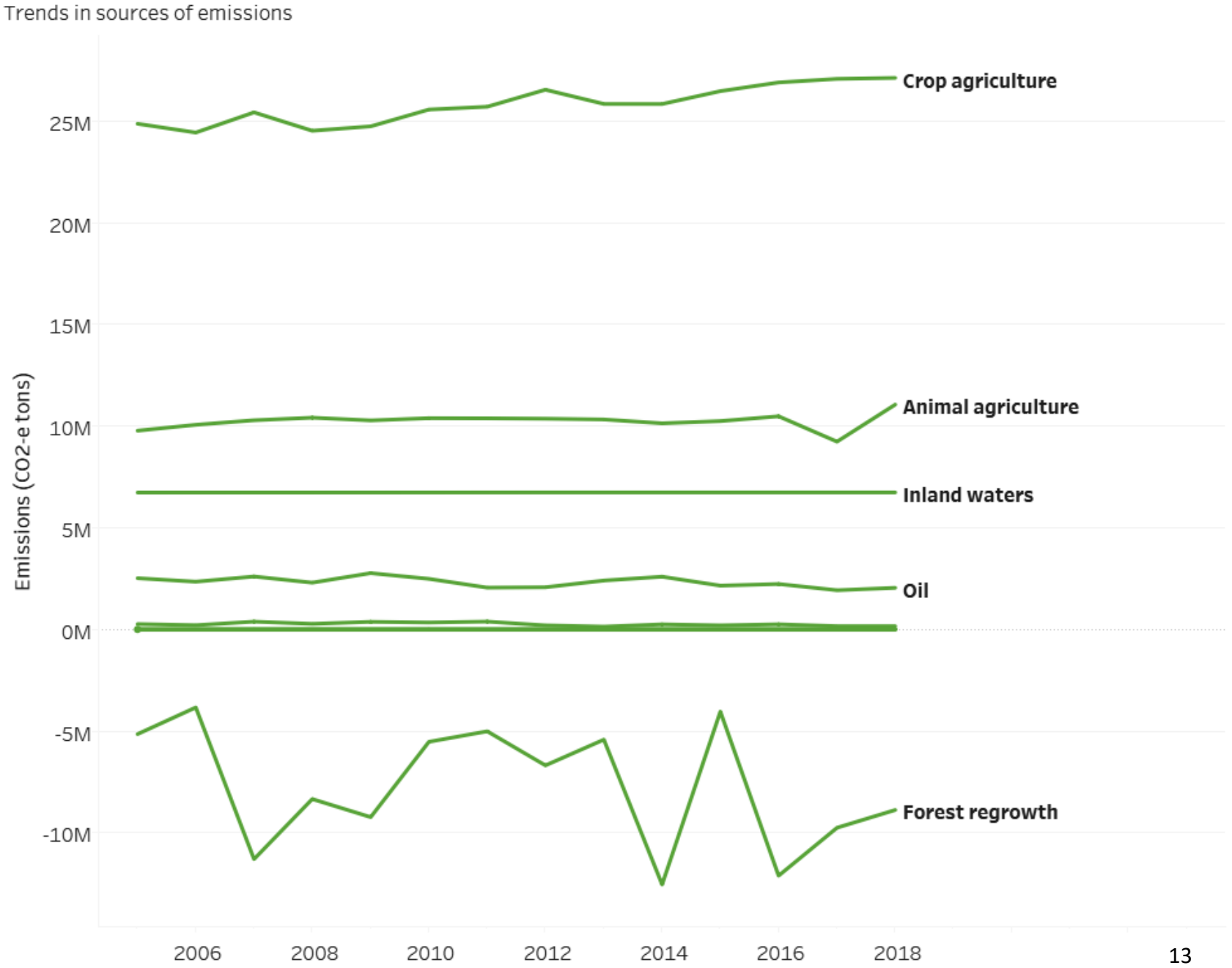


- Emissions picture is complicated and varies year to year
- Nitrous oxide and methane emissions have a higher climate impact than carbon dioxide
- Forest regrowth offers a significant offset for emissions

Greenhouse gas emissions by sector

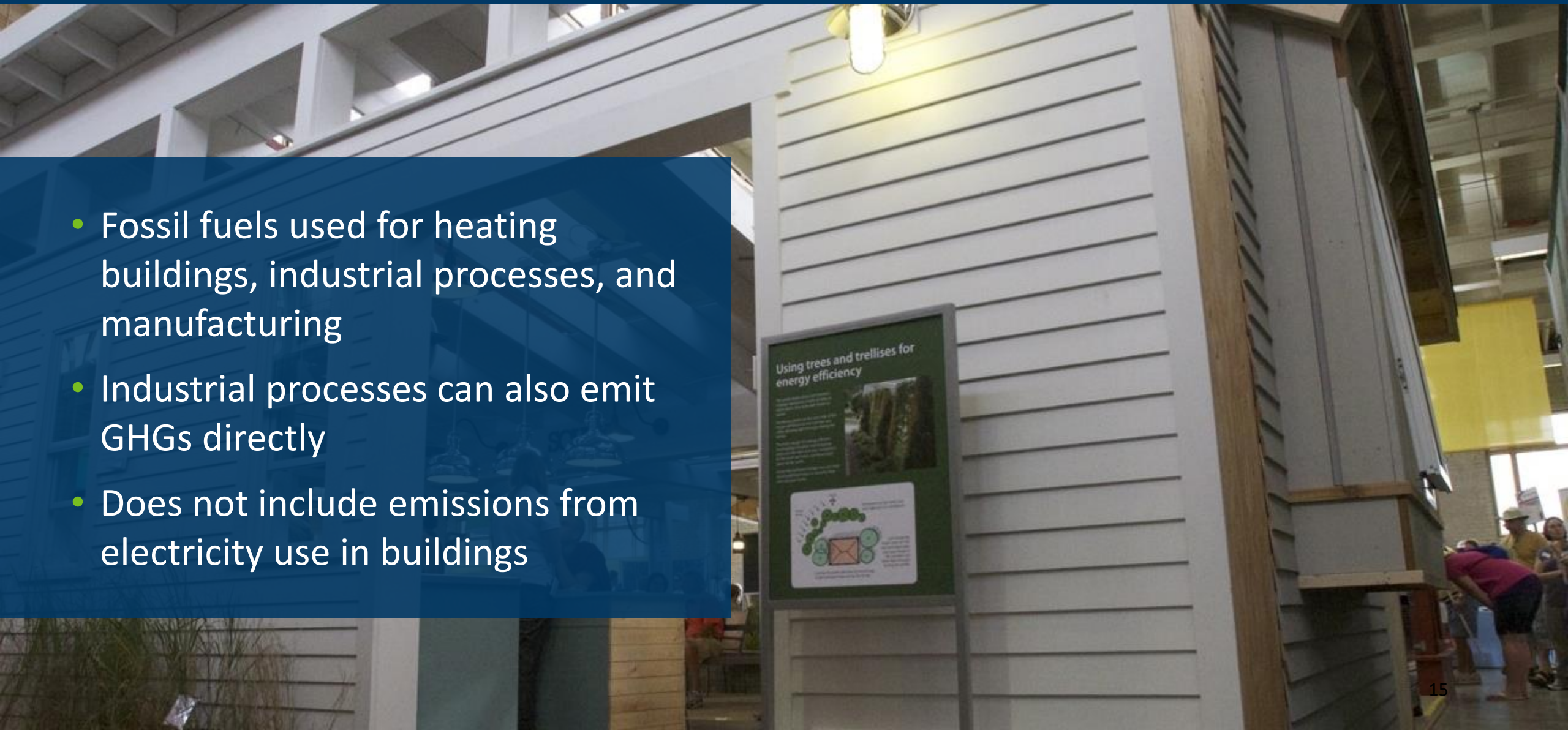


Agriculture, forestry, land use emissions



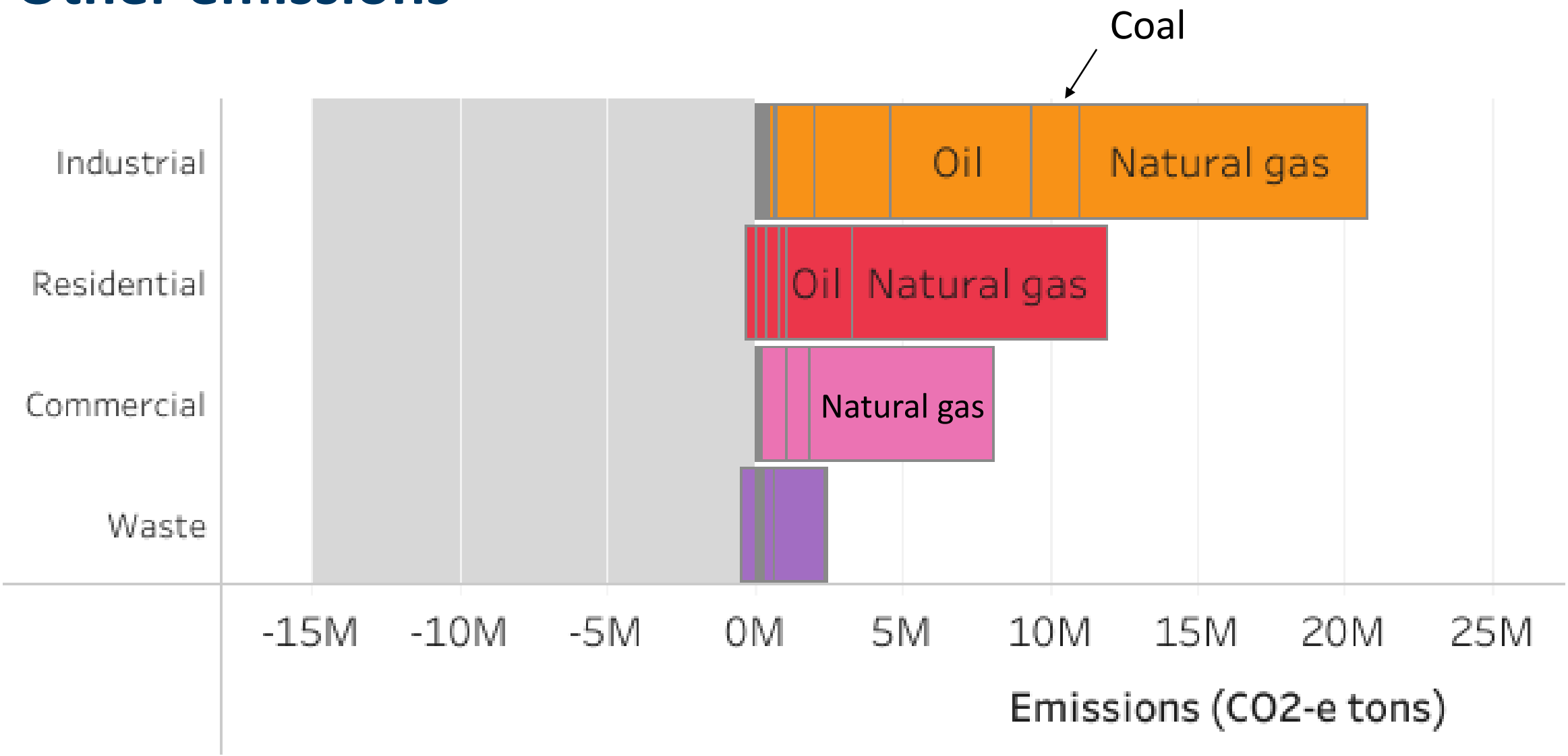

Agriculture,
forestry, land use
↓ 2% GHG emissions, 2005–2018
Action needed:
Increase adoption of best management practices

Buildings



- Fossil fuels used for heating buildings, industrial processes, and manufacturing
- Industrial processes can also emit GHGs directly
- Does not include emissions from electricity use in buildings

Other emissions



Our path forward

- Positive results in electricity generation shows smart climate policies and programs can and do reduce GHG emissions
- We must accelerate the pace of progress in other sectors, especially in transportation and our agricultural and forested lands
- Expand our engagement with Minnesotans to identify ways to reduce our emission and address the existential crisis presented by climate change

Our path forward

- Leverage the work of multiple efforts to reduce emissions and build resiliency
  - Climate Change Subcabinet
  - Governor’s Advisory Council on Climate Change
  - Governor’s Council on Biofuels recommendations
  - Sustainable Transportation Advisory Council recommendations
  - Minnesota Climate Adaptation Partnership

What questions do you have?

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