

HOW CUTTING METHANE EMISSIONS QUICKLY CAN SLOW GLOBAL WARMING

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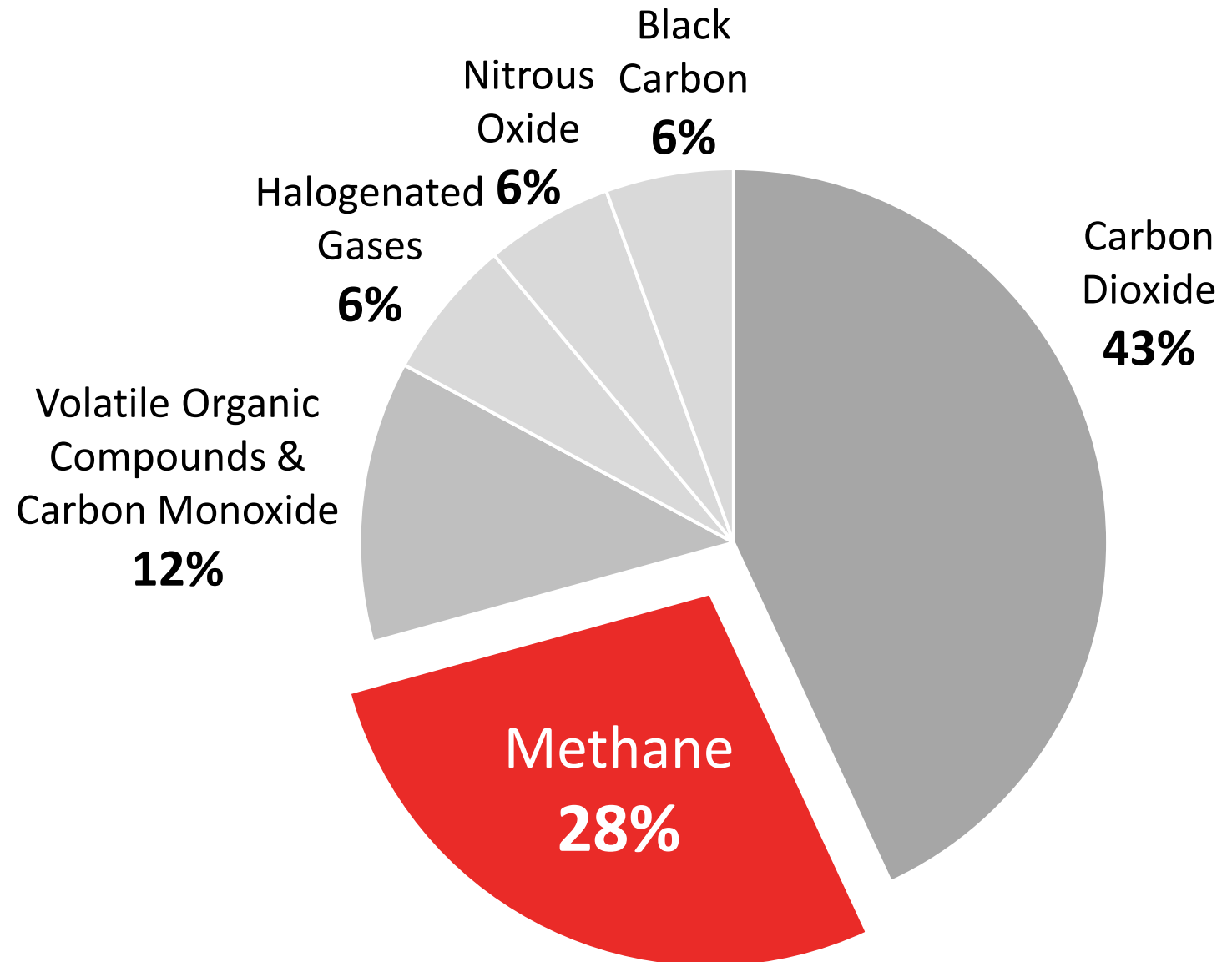
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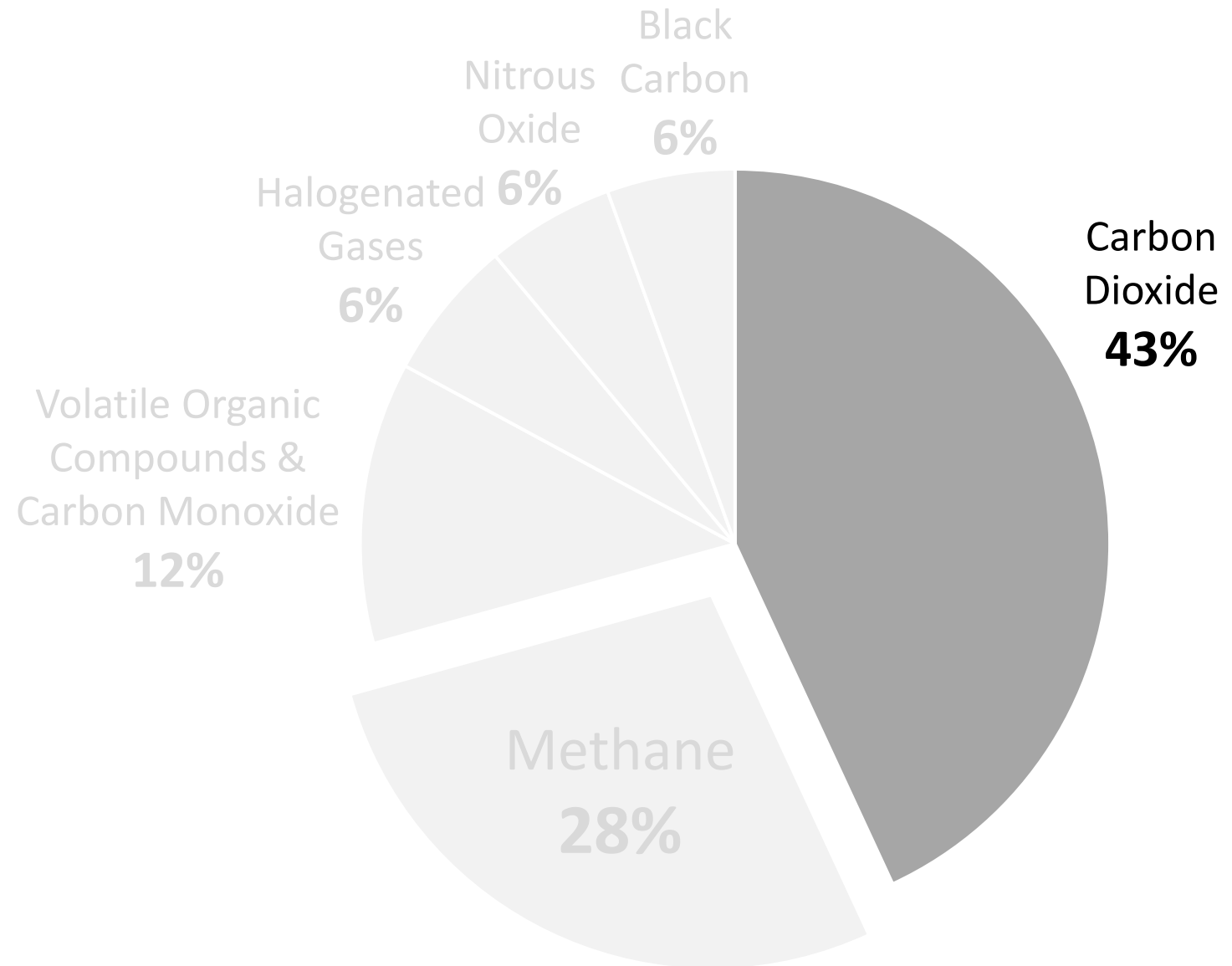
Contributions to 2010-2019 warming relative to 1850-1900

Methane emissions play a major role in current warming



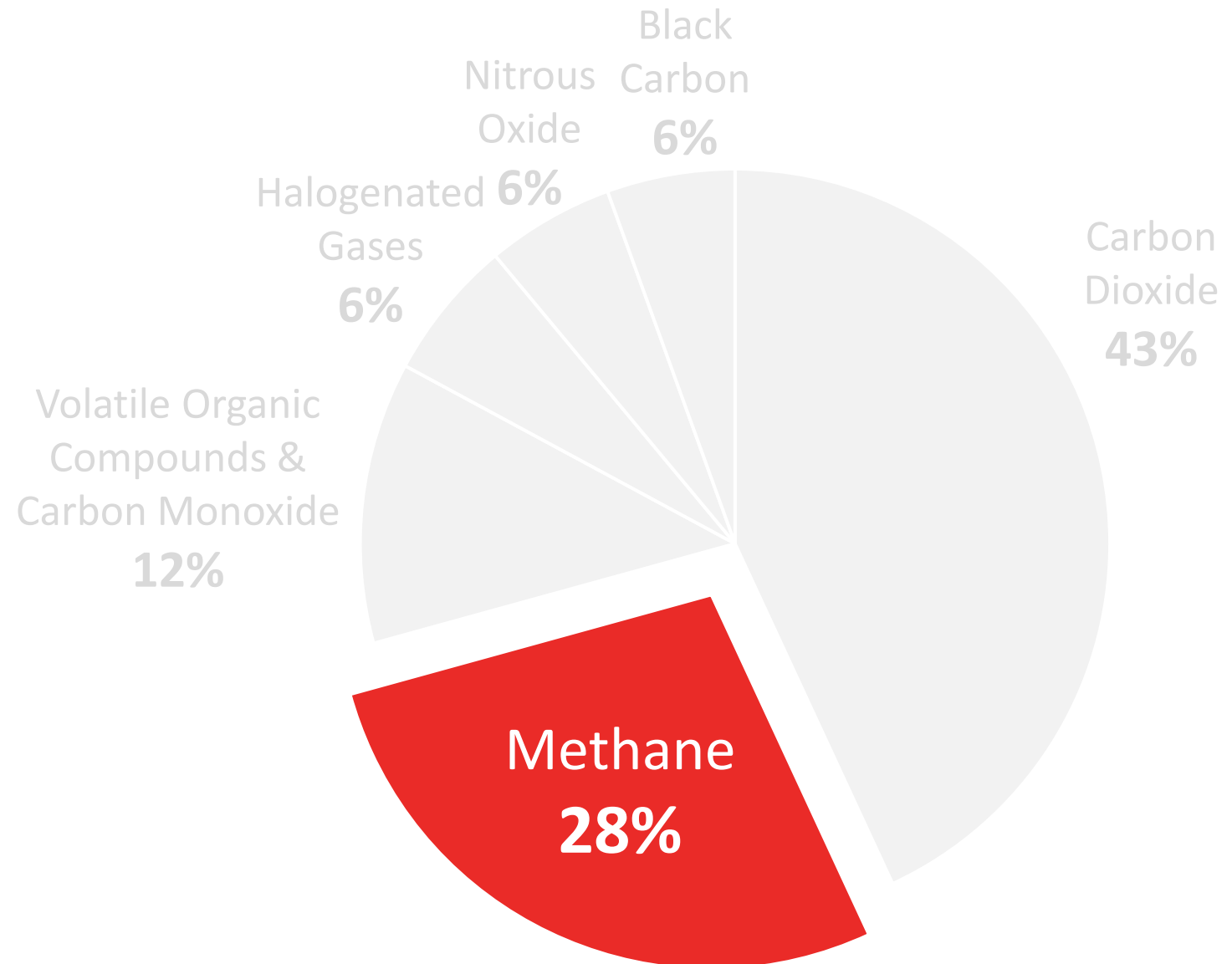
CO₂ impact
from build
up over time

Contributions to 2010-2019 warming relative to 1850-1900



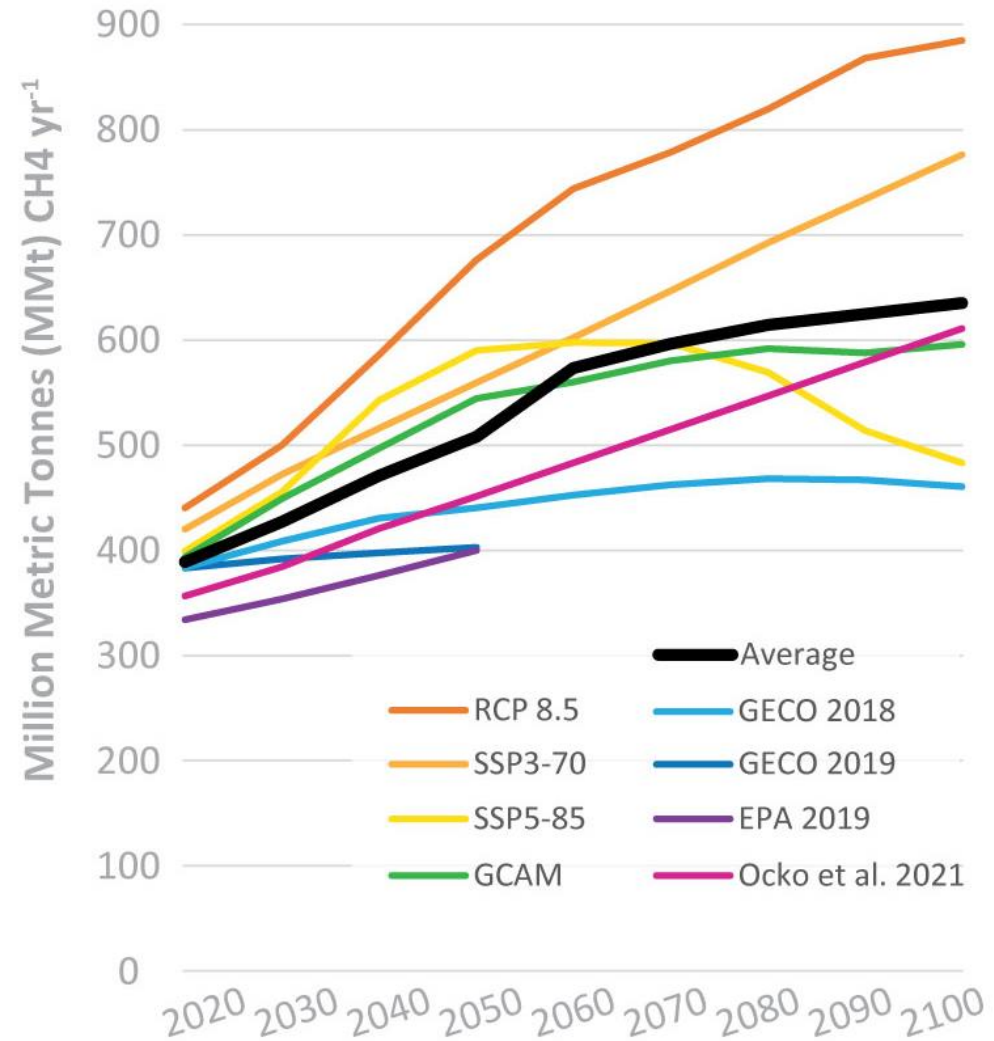
Contributions to 2010-2019 warming relative to 1850-1900

**Methane
impact
from recent
emissions**



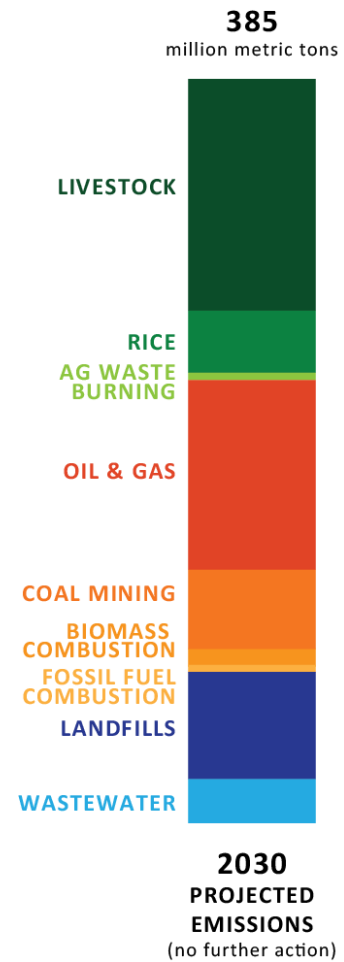
Current path
could yield a
lot more
warming
from
methane

Projections of global methane emissions from human activities in the absence of further climate action



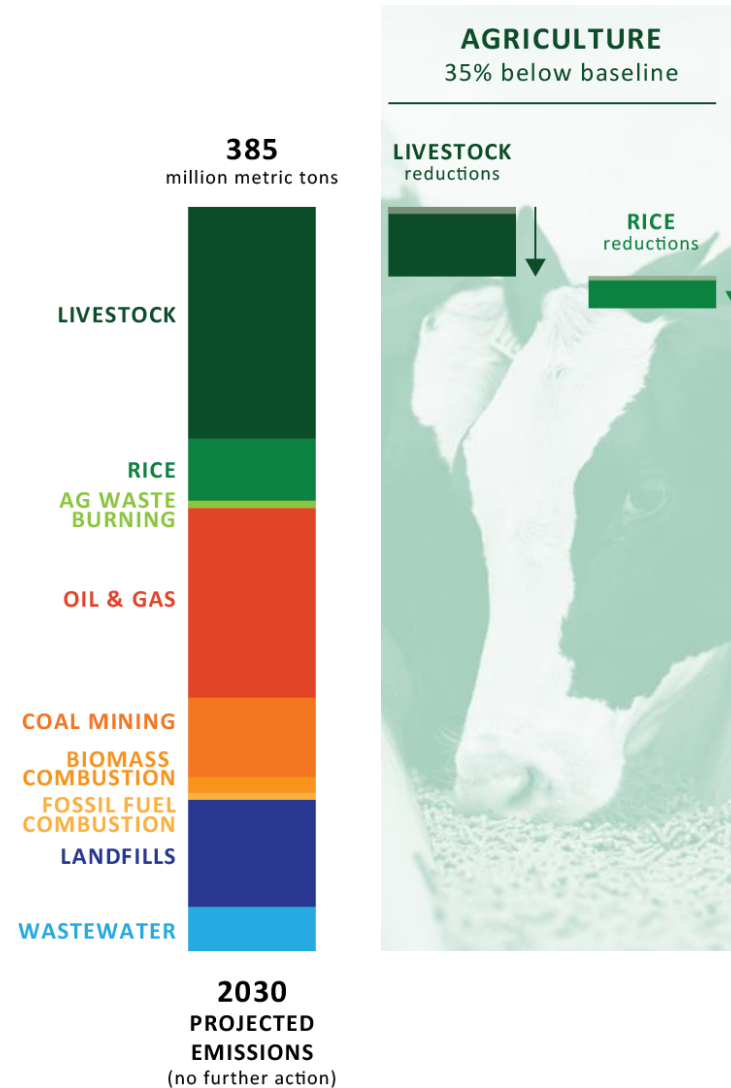
But we
can cut
emissions
in half
over next
decade

Feasible methane mitigation by 2030



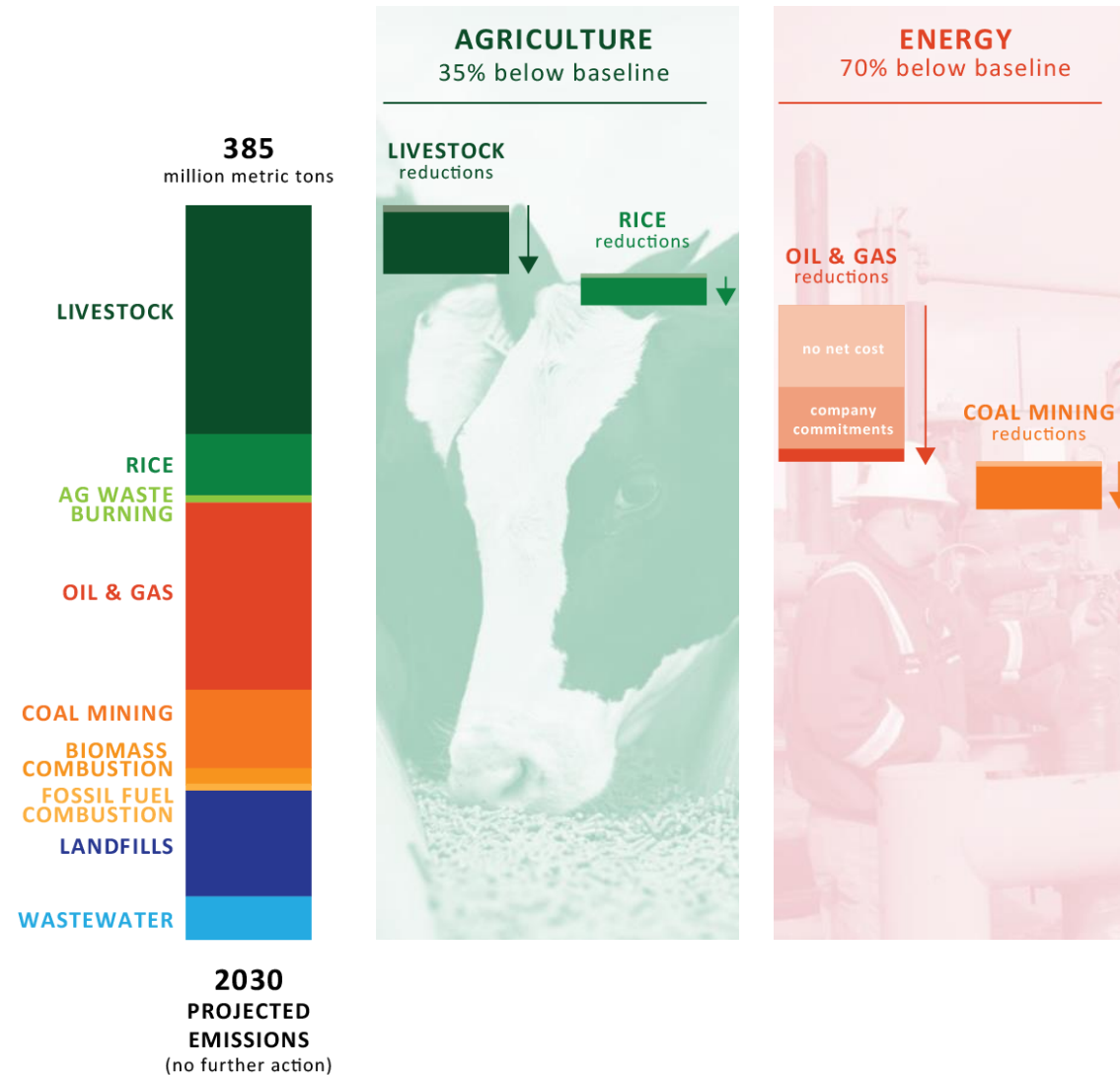
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Feasible methane mitigation by 2030



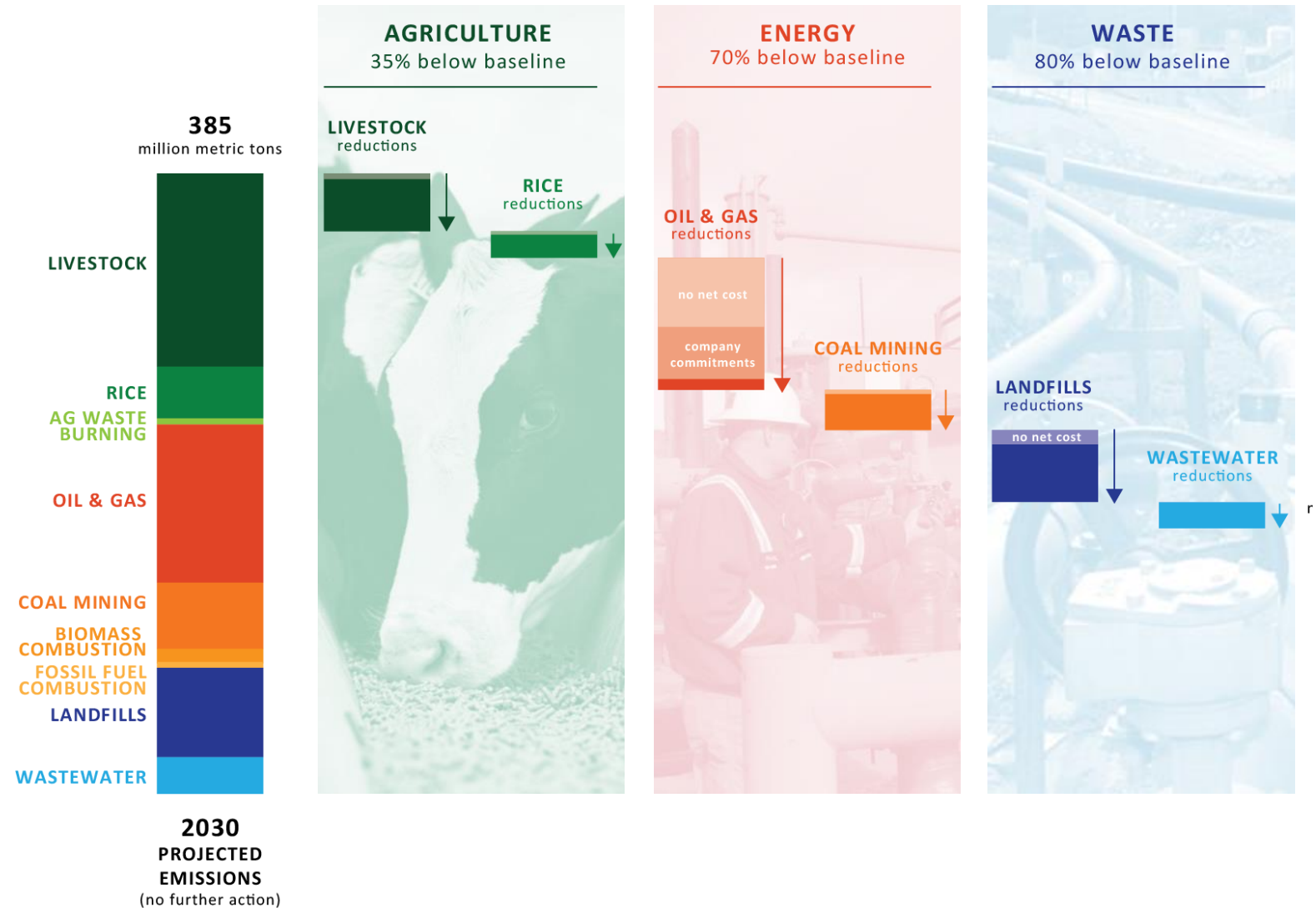
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Feasible methane mitigation by 2030



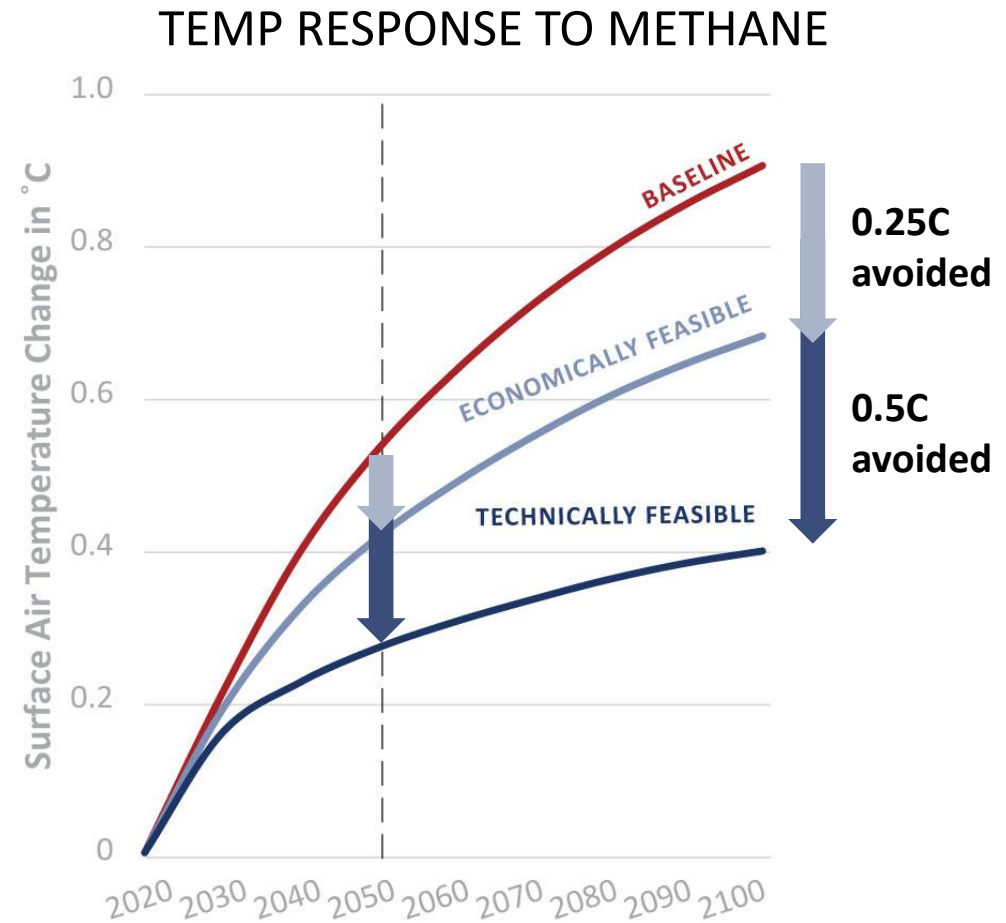
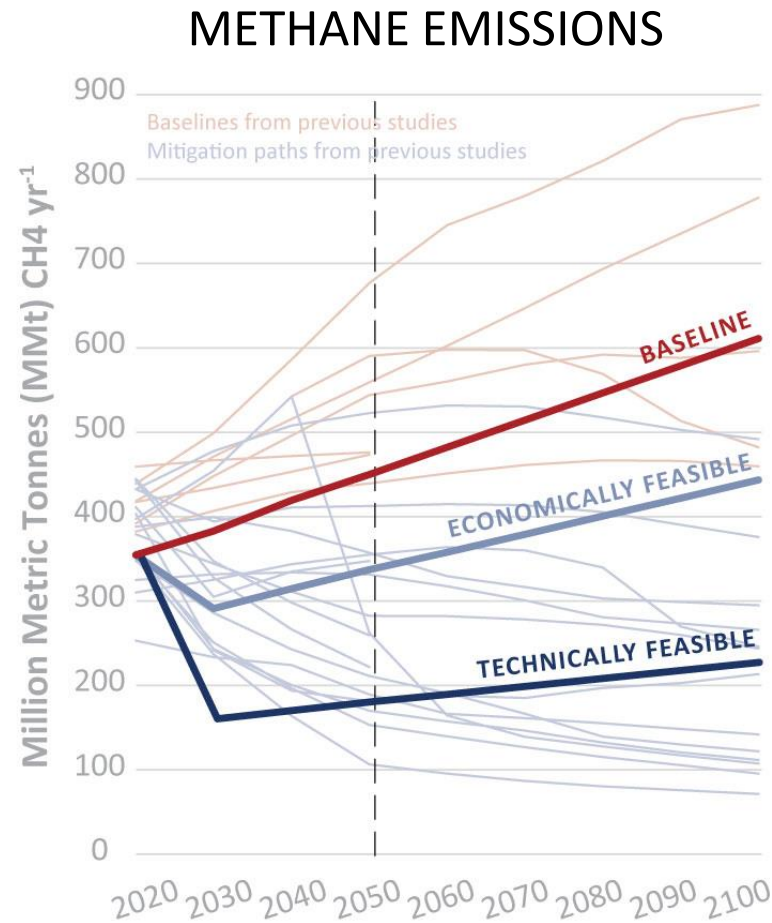
But we can cut emissions in half over next decade

Feasible methane mitigation by 2030



Feasible
methane
mitigation
can avoid
substantial
warming

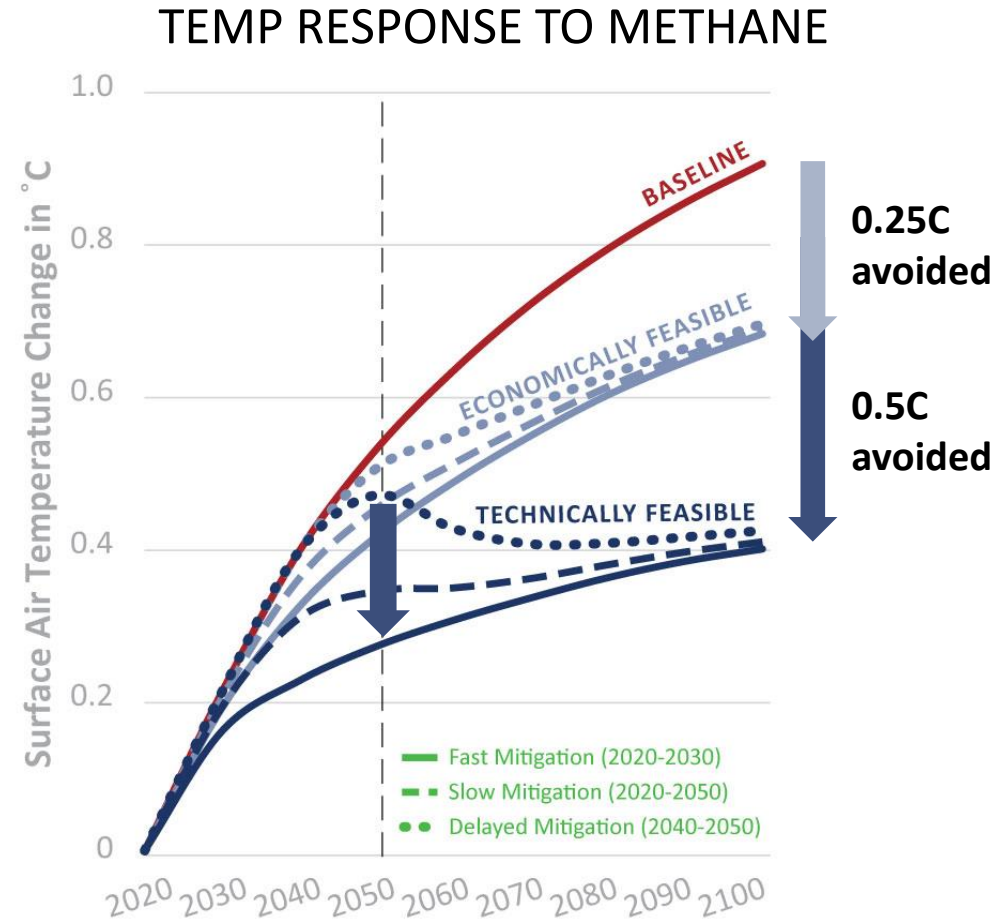
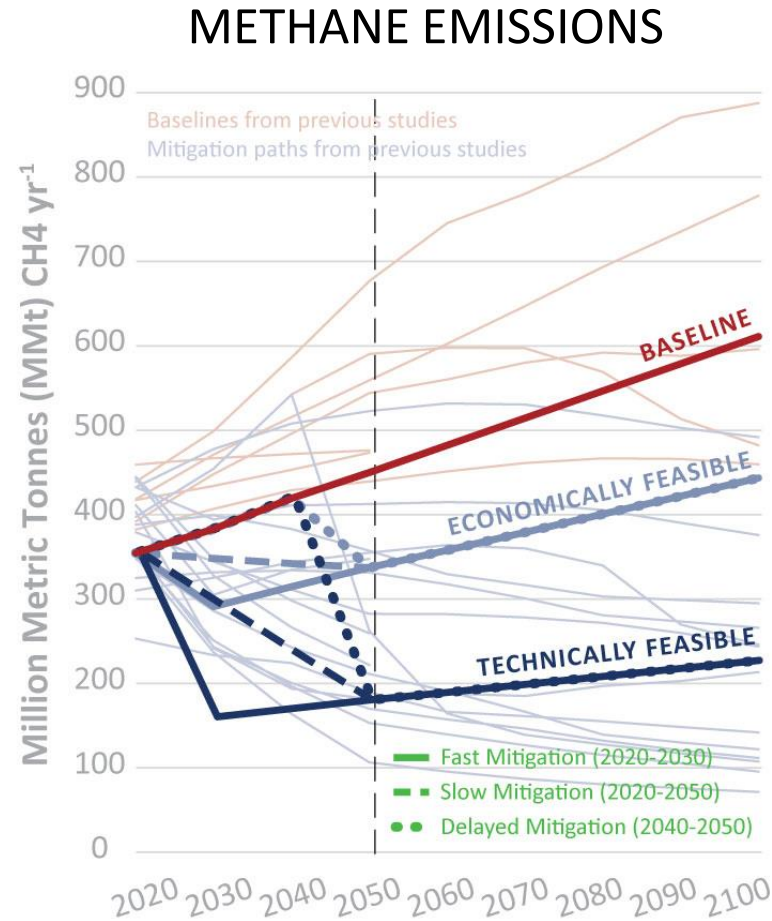
Temperature responses to feasible methane mitigation



Slow down rate of warming in following decades by up to 30%!

Timing of methane mitigation matters more than recognized

Temperature responses to feasible methane mitigation

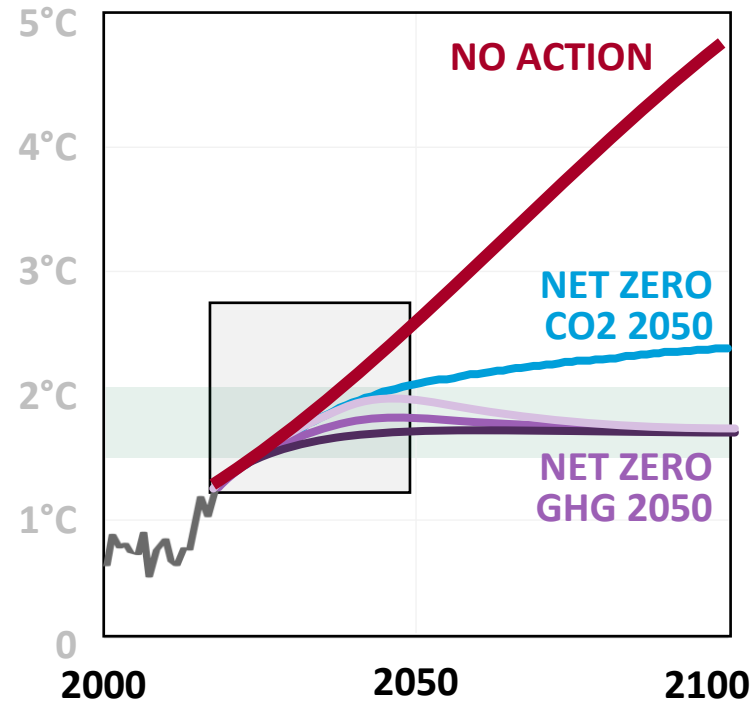


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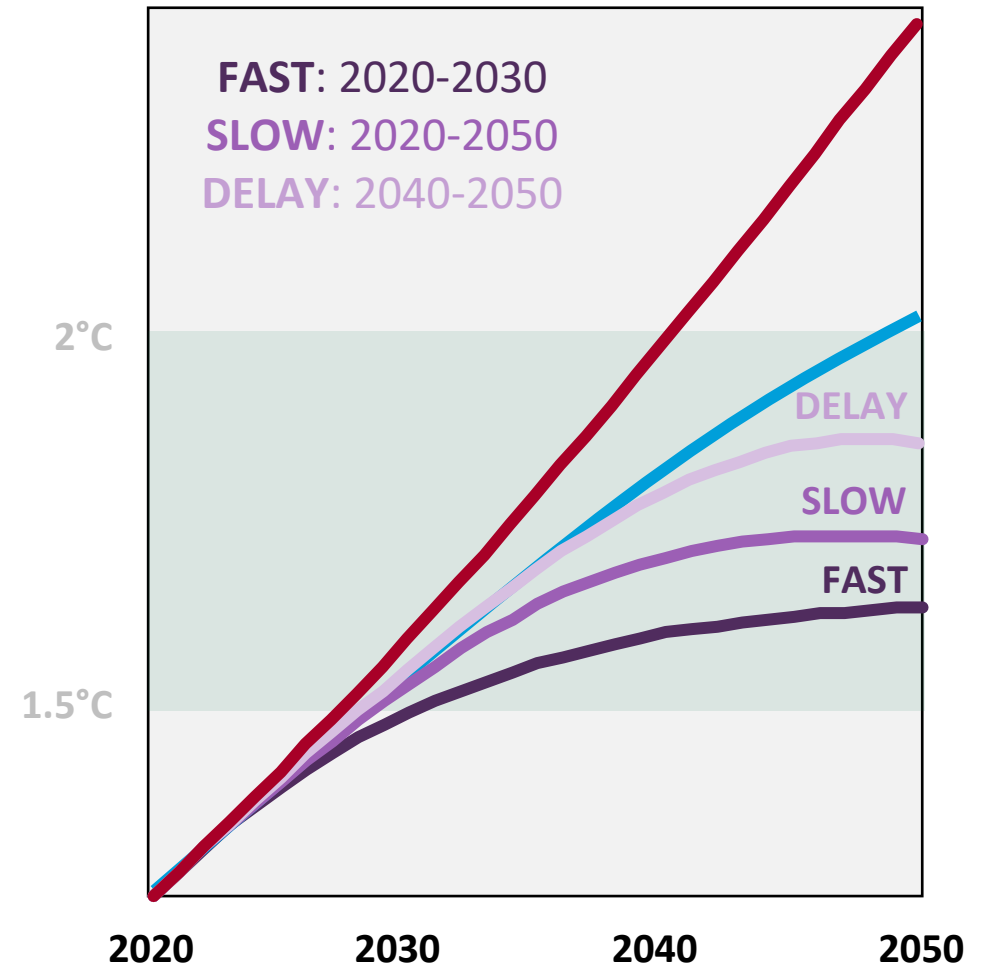
Timing of methane mitigation matters more than recognized

Temp from all emissions

above 1850-1900



Methane mitigation timelines

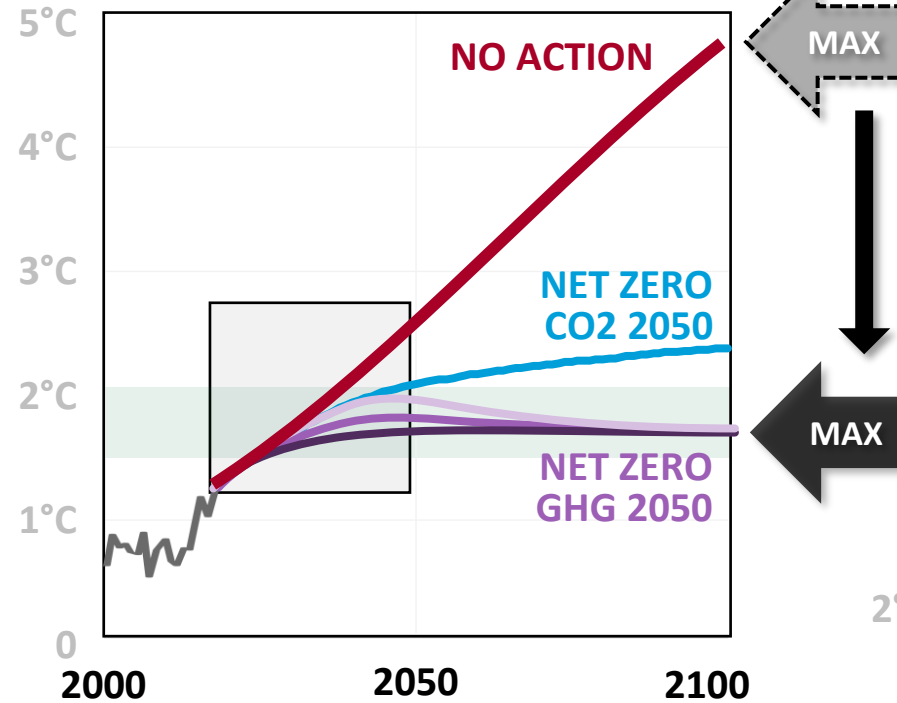


Sources:
Ocko et al. ERL 2021
Sun et al. in review

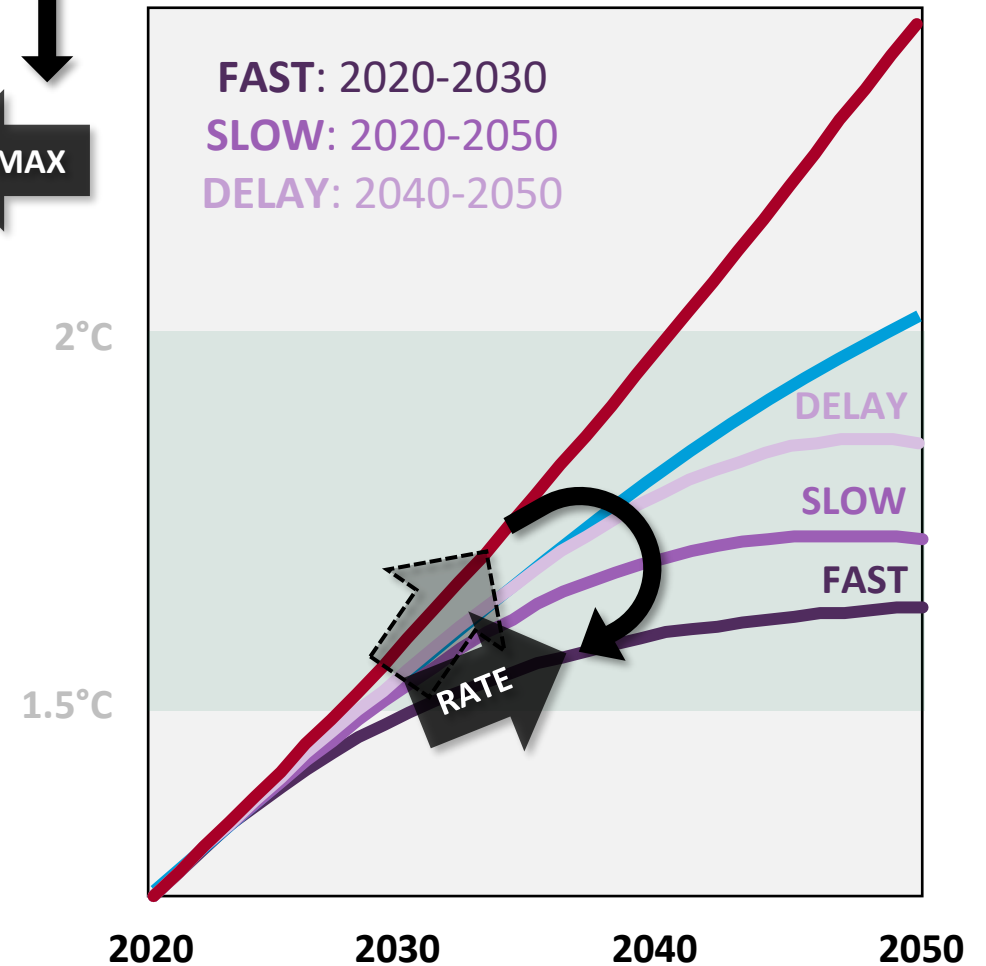
We care about climate change over all timescales

Temp from all emissions

above 1850-1900



Methane mitigation timelines



Sources:
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Sun et al. in review

Methane
mitigation
benefits
health,
crops, and
even jobs!



200 thousand

Premature deaths prevented every year



25 million

Tons of crop losses prevented every year



2x

Growth in size of methane mitigation
service sector in 5 years

**We have an unparalleled
opportunity to considerably slow
down warming in the near-term
with many other co-benefits**

**BOTTOM
LINE**

