
*Delivering on the Paris Agreement: A demand-driven,
integrated assessment modelling approach*



PARIS REINFORCE

LOW-CARBON TRANSITIONS IN RUSSIA

Enhancing climate policy through co-creation

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Online

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WHAT WE ARE TRYING TO ACHIEVE GLOBALLY – IMPACTS OF CLIMATE CHANGE

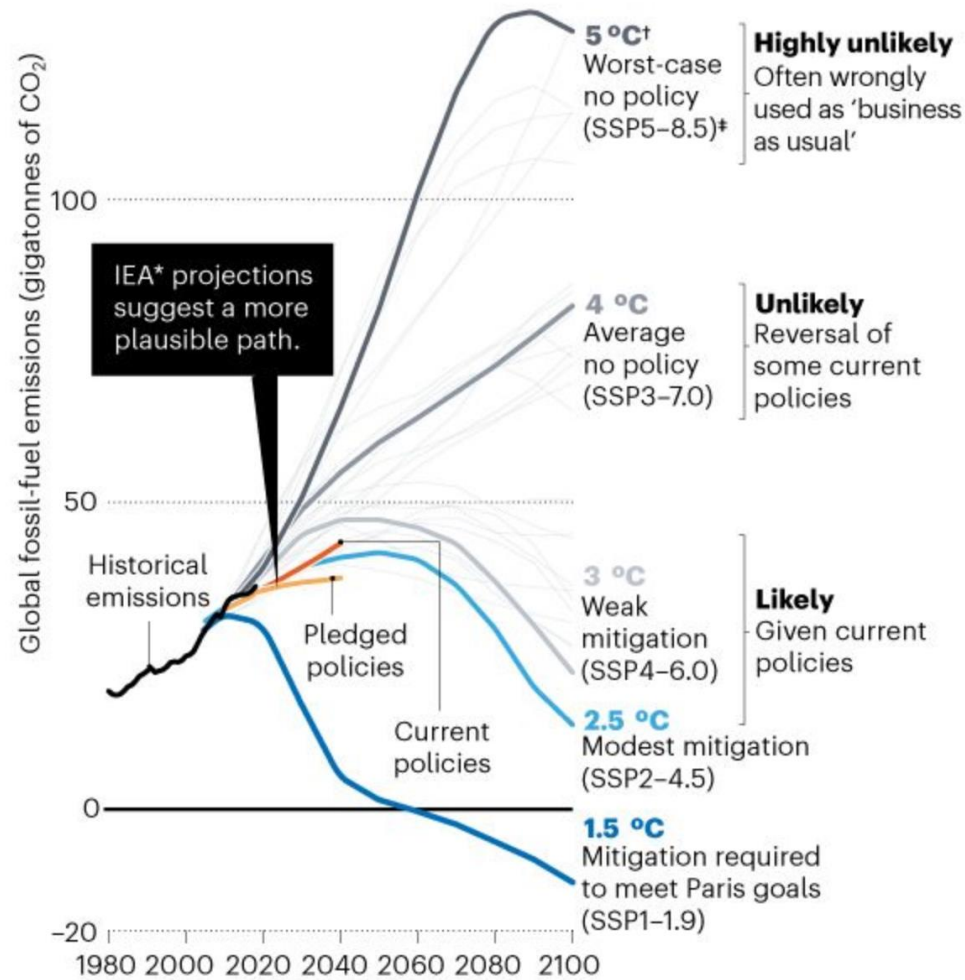


	1981-2010				
Chance of:	0.61°C	1.5°C	2°C	4°C	
Major heatwave	5%	28%	49%	92%	
Agricultural drought	9%	24%	34%	61%	
50-yr river flood	2%	2%	3%	5%	
Maize heat damage	5%	12%	18%	50%	

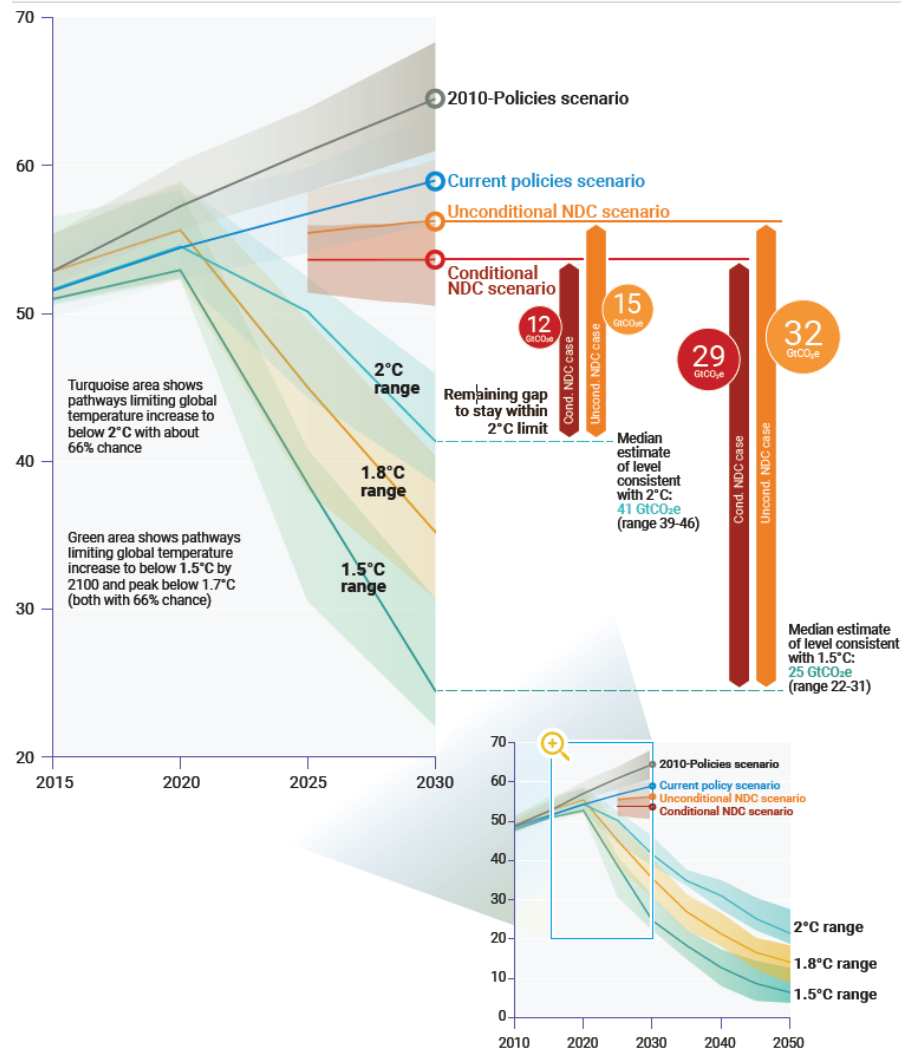
Source: Arnell, N. et al. (2019) Global and regional impacts of climate change at different levels of global temperature increase



WHICH IS WHY WE NEED TO REDUCE EMISSIONS RAPIDLY



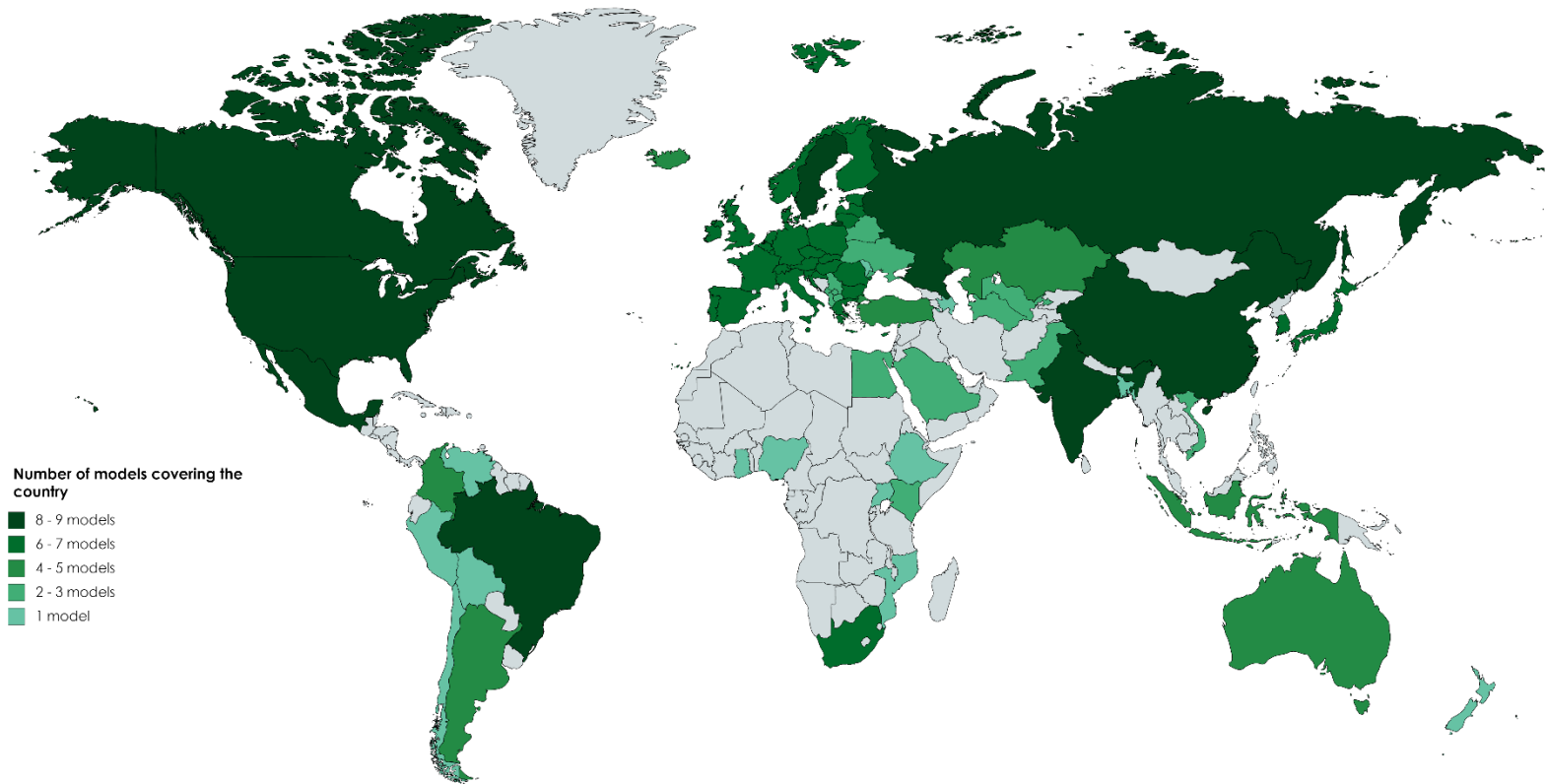
CURRENT POLICIES AND PLEDGES ARE NOT ON TRACK TO DELIVER PARIS GOALS



Source: UNEP (2020) UNEP Gap Report 2020.



WHAT CAN OUR MODELS DELIVER IN TERMS OF GEOGRAPHIC COVERAGE?



Created with mapchart.net ©



Target : Reduce emissions by 25-30% by 2030 compared to 1990

How

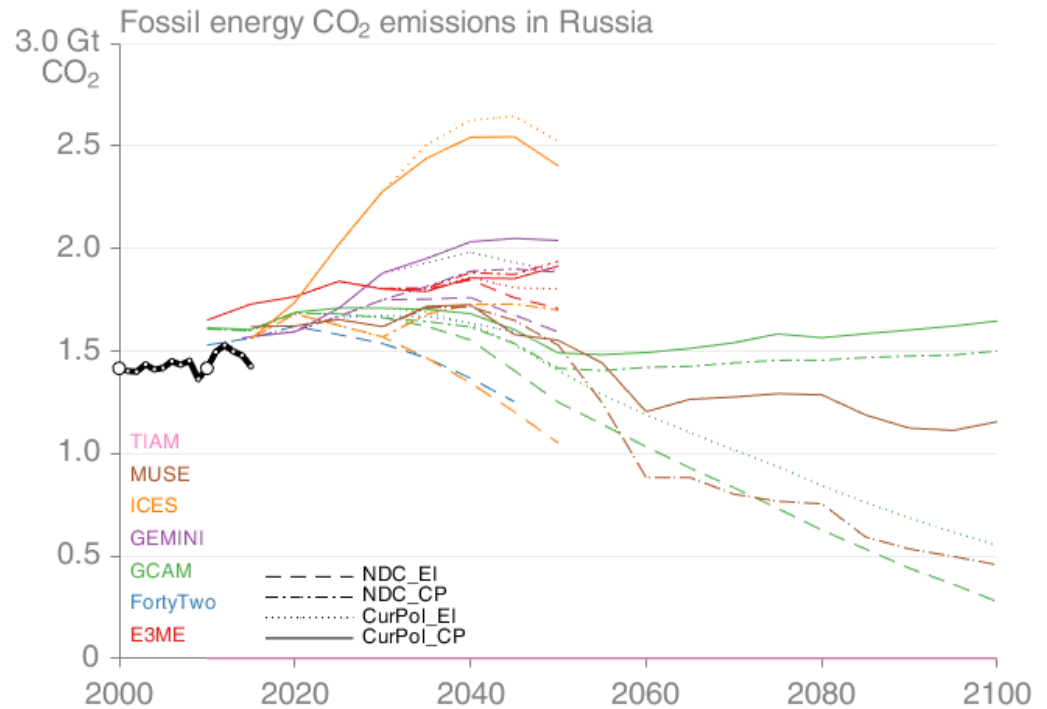
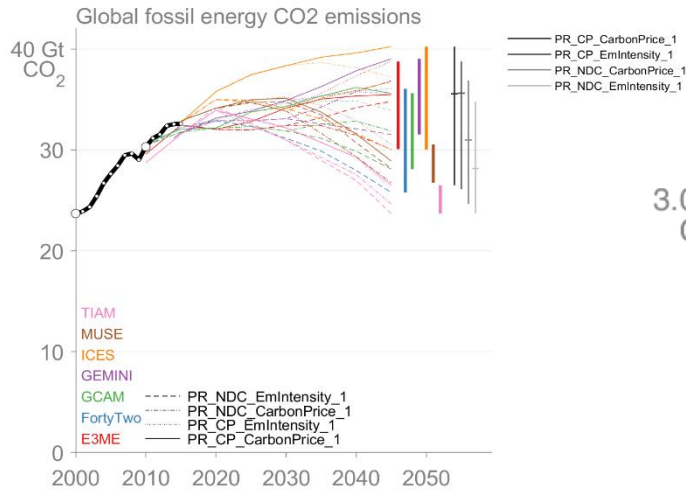
- Includes LULUCF
- Target is subject to “the maximum possible account of absorbing capacity of forests”



Current situation :

- 5th largest emitter of GHGs (behind China, USA, EU and India)
- **Fuel combustion** is responsible for the majority (54%) of total emissions (excl. LULUCF), located mainly in power and heat production, transport, and industries.
- **Fugitive emissions of methane** contribute to 29% of total emissions, and they are localized in coal, oil, and gas industries.
- Forestry and land use (LULUCF) provides about 650 MtCO₂ **net sink** per year (20% of total GHG emissions), with significant potential for further growth, making this sector important for the national decarbonization strategy.
- Agriculture, waste, and industrial processes (excl. energy use) are **relatively marginal**, but jointly amount to 17% of total GHG emissions and may have significant potential for decarbonization.

WHERE THE WORLD AND RUSSIA ARE HEADED



HOW CAN YOU HELP US MAKE OUR MODELLING REAL-WORLD RELEVANT?

What's in the NDC?

Current sources

Potential measures?

O&G

No targets

Fugitive CH₄ emissions

Reduce leaks, flaring, venting

Forests

No targets

Deforestation and land use change

- *Afforestation/Reforestation*
- *Natural land conservation*

Fuel use

No targets

power and heat production, transport, and industries

- *Faster efficiency Improvement rate?*
- *Fuel switching?*



TIME FOR QUESTIONS & DISCUSSION



Thank you!

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