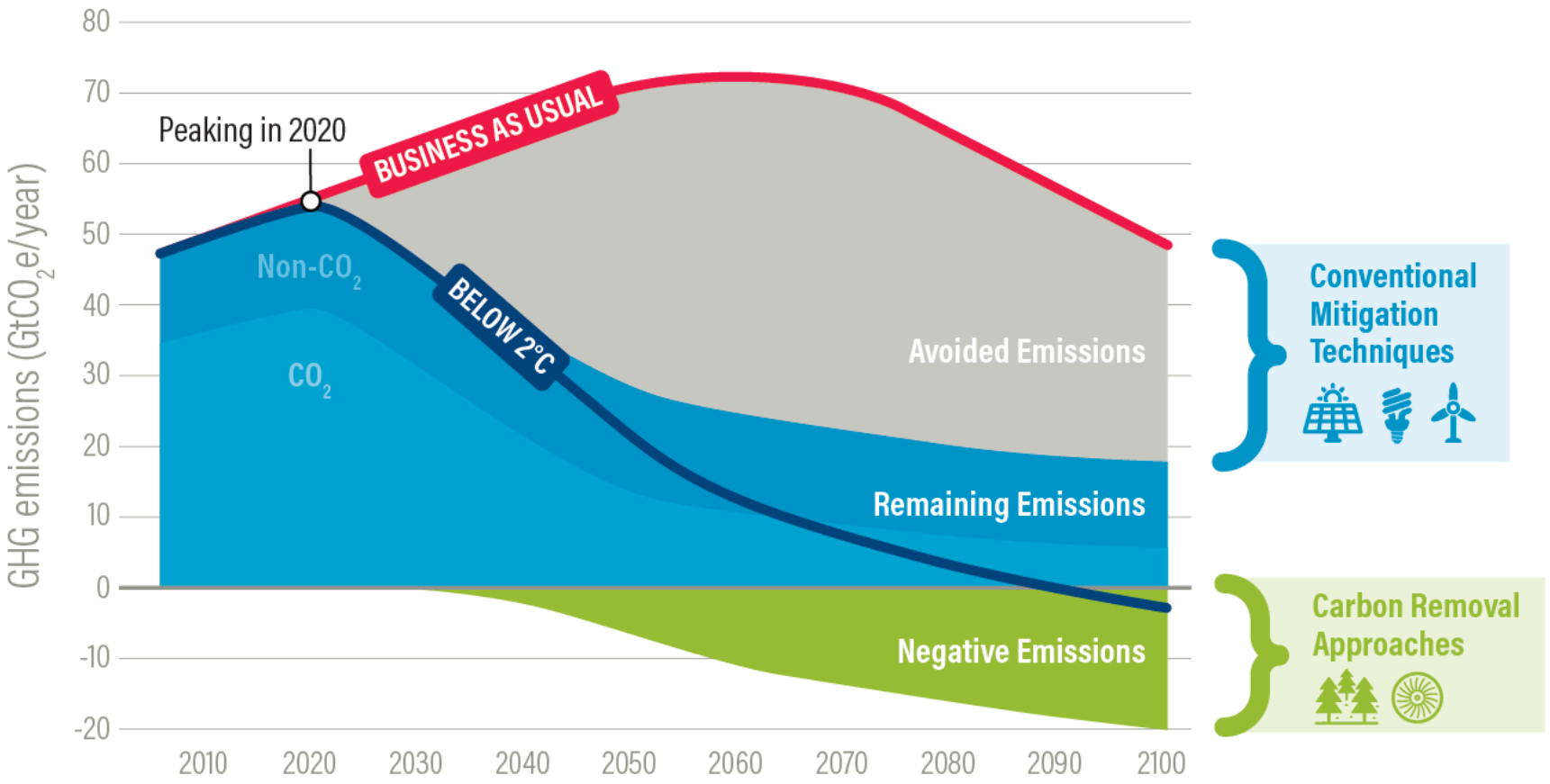
October 24, 2018, MITEI Fall Colloquium

2030 US Climate Goals: Drifting Further from the Target How Can We Get There?

Frances Beinecke
Past President
Natural Resources Defense Council

The imperative:
Staying below 2 degrees of global warming

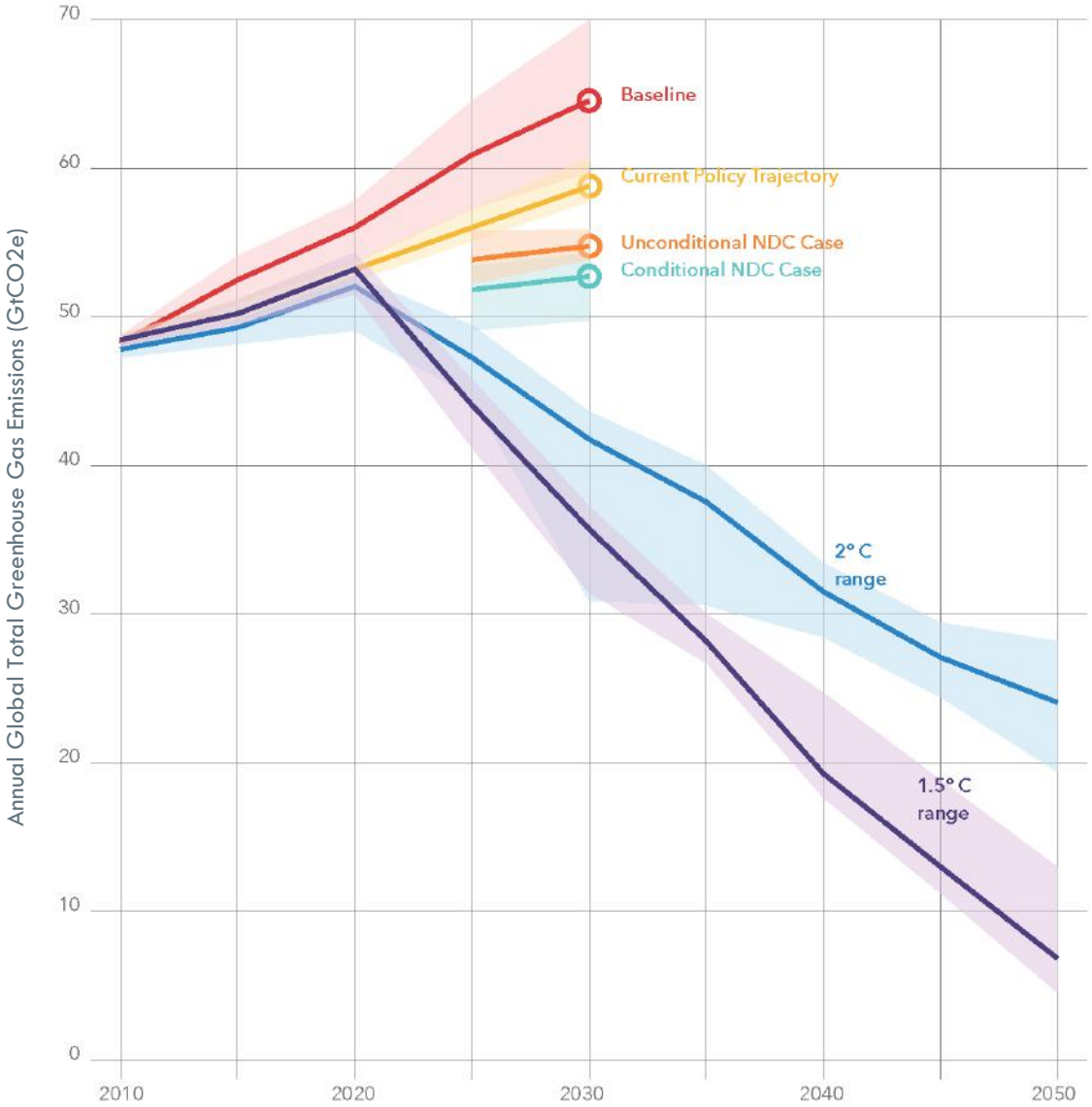


Note: This is a notional scenario consistent with an at least 66 percent chance of limiting global warming to below 2°C. Some residual gross greenhouse gas emissions (both CO_2 and non-CO_2) will remain at the end of the century even with ambitious climate action because they are too difficult or costly to remove entirely. Once negative emissions exceed those that remain net zero emissions is reached.

Adapted from Figure 7.2 in the UNEP *Emissions Gap Report 2017*

THE PARIS AGREEMENT COMMITMENTS ARE A CRITICAL STEP

BUT EVEN IF THEY ARE MET, A SUBSTANTIAL AMBITION GAP REMAINS

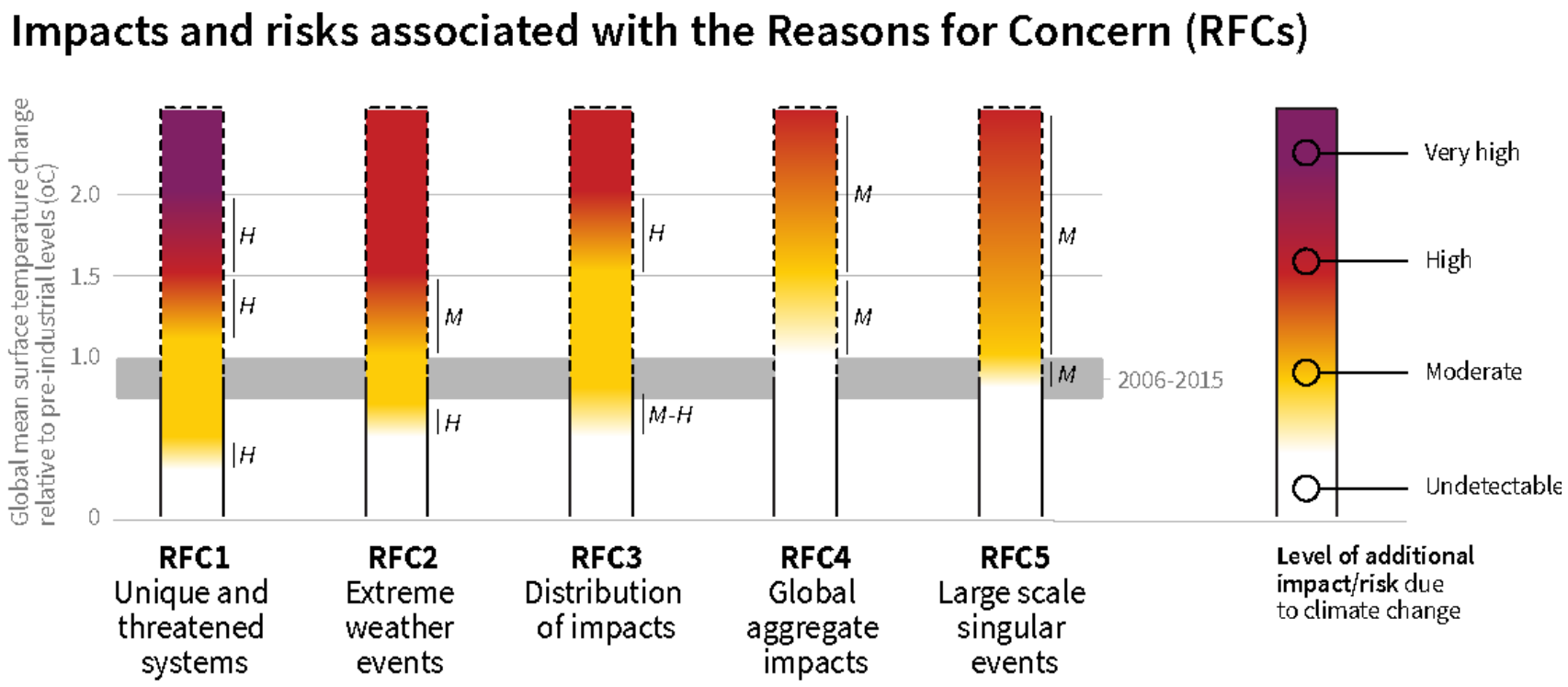


Blue area shows pathways limiting global temperature increase to below 2° by 2100 with >66% chance.

Purple area shows pathways limiting global temperature increase to below 1.5° by 2100 with 50 to 66% chance.

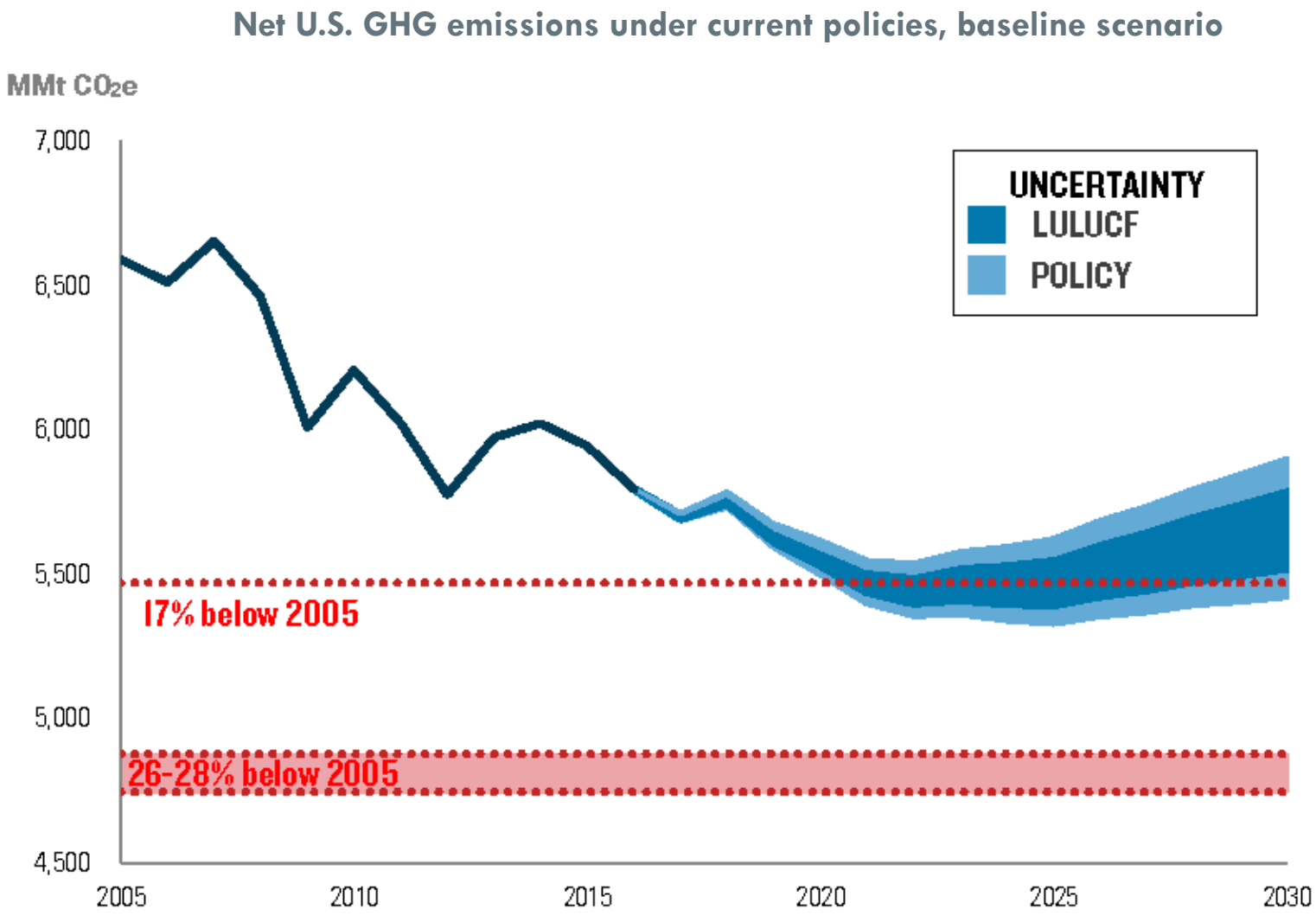
Source: UNEP *Emissions Gap Report 2017*, as adapted in *Fulfilling America's Pledge*

CRITICAL TO AIM FOR NO MORE THAT 1.5 DEGREES OF WARMING



Source: IPCC special report on *Global Warming of 1.5 °C*

Under the Trump administration, we are not on track

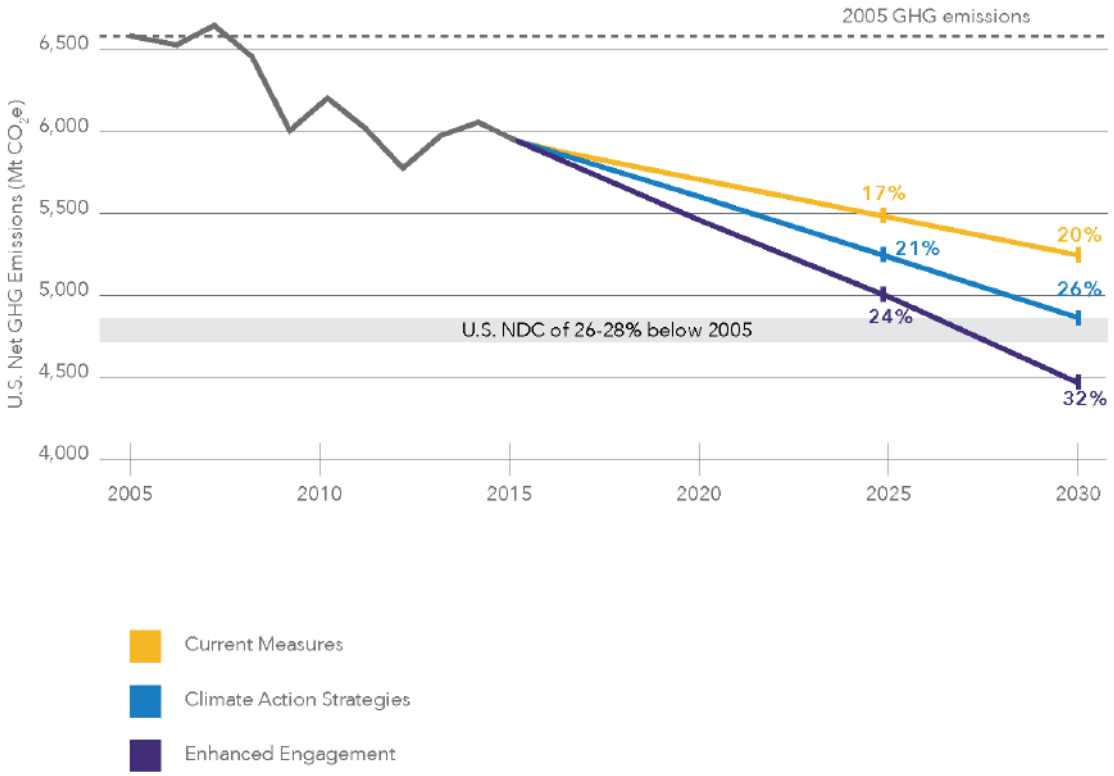


Source: Rhodium Group, *Taking Stock 2018*

The 2016 *Mid-Century Strategy Report* showed a path forward for the U.S.

Source: *United States Mid-Century Strategy for Deep Decarbonization*, 2016

Fulfilling America's Pledge shows that the U.S. NDC could still be within striking distance if states, cities and businesses take ambitious action

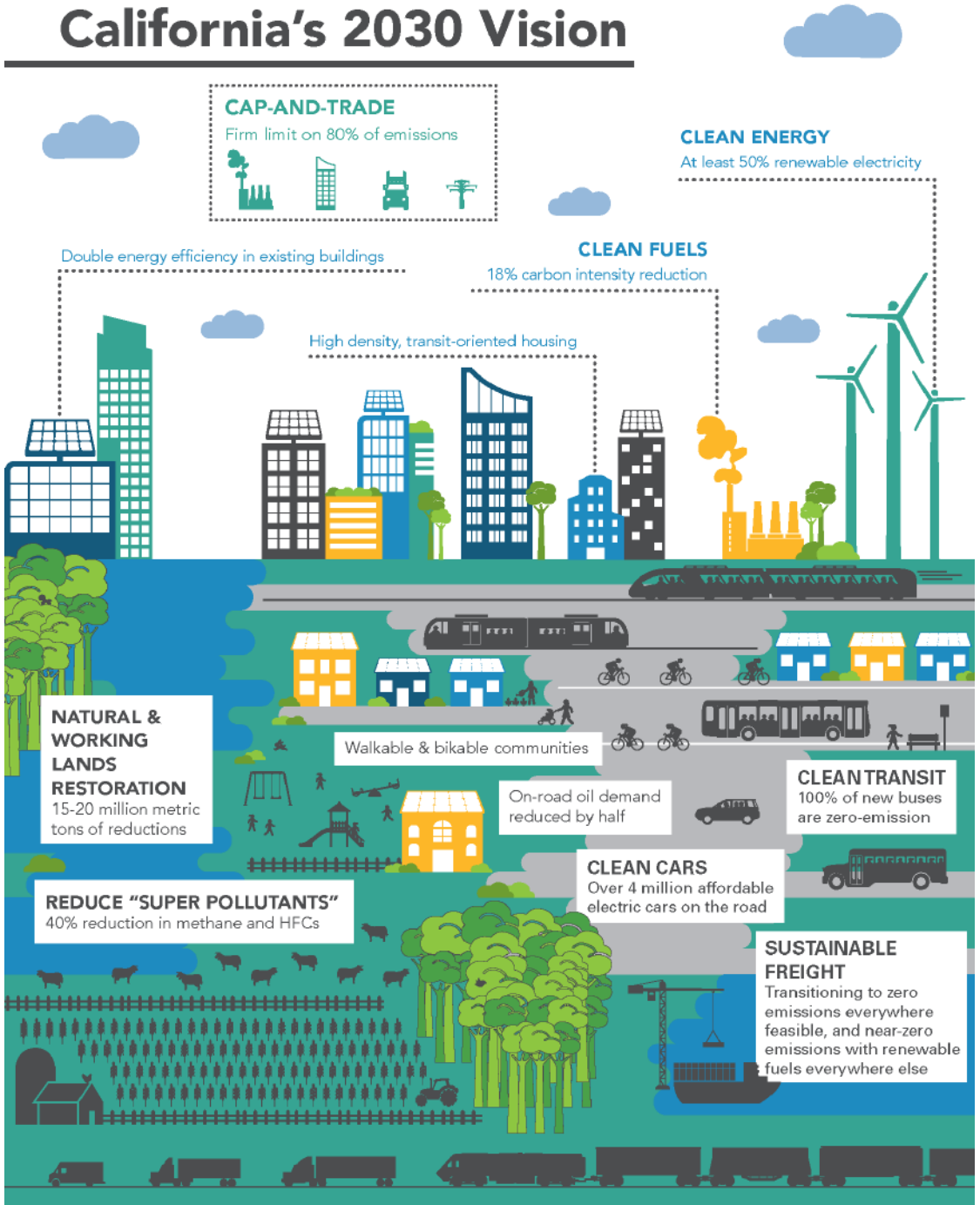


Source: *Fulfilling America's Pledge, 2018*

Fulfilling America's Pledge highlights 10 Climate Action Strategies that represent high-impact, near-term emissions reduction opportunities

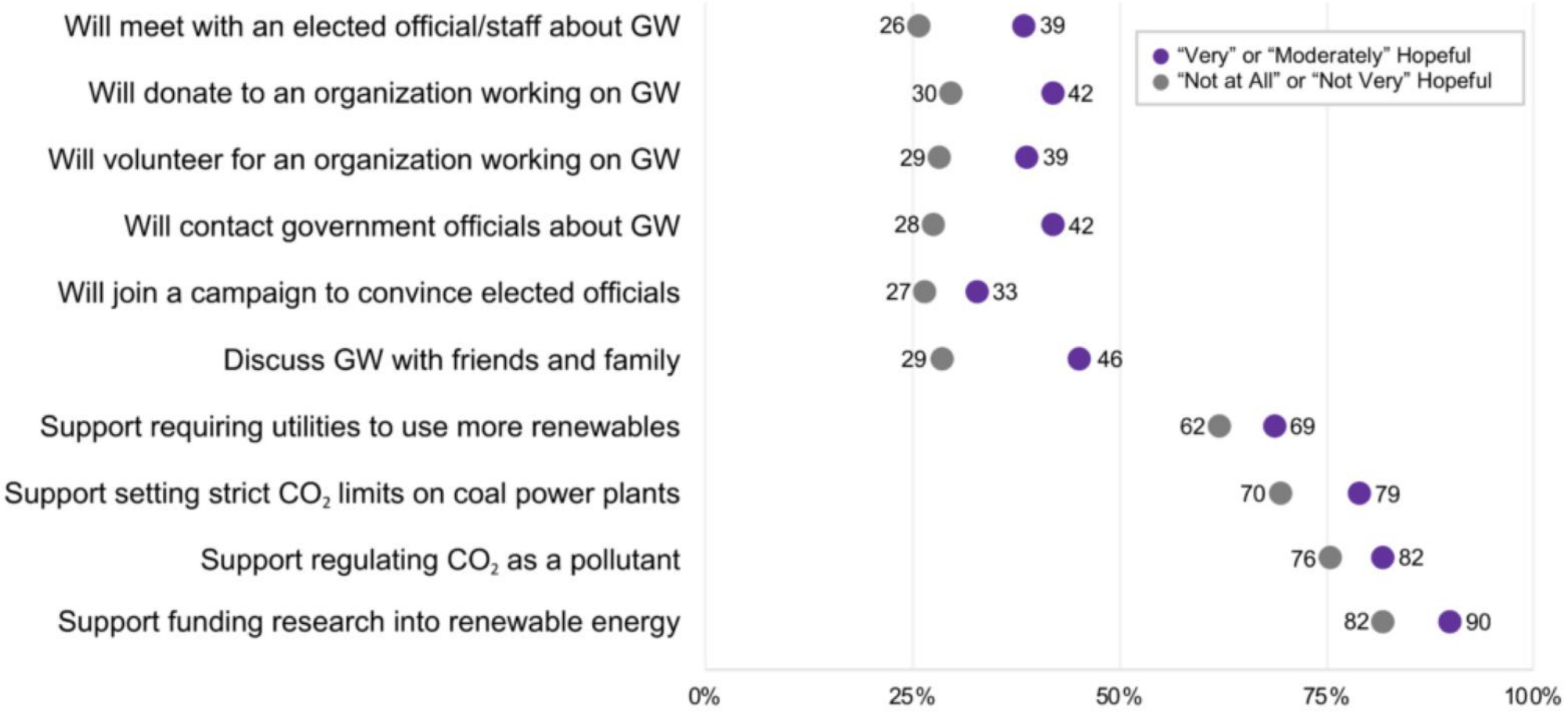
- #1. Double down on renewable energy targets
- #2. Accelerate the retirement of coal power
- #3. Encourage residential and commercial building efficiency retrofits
- #4. Electrify building energy use
- #5. Accelerate electric vehicle adoption
- #6. Phase down super-polluting hydrofluorocarbons (HFCs)
- #7. Stop methane leaks at the wellhead
- #8. Reduce methane leaks in cities
- #9. Develop regional strategies for carbon sequestration on natural and working lands
- #10. Form state coalitions for carbon pricing

California has taken up the challenge of a low-carbon transformation across all sectors of the economy



Source: *California's 2017 Climate Change Scoping Plan*

Fig. 2 Hope Linked to Engagement on Global Warming



Numbers represent the percent of those who are "Very" or "Moderately" hopeful (purple) vs. "Not at all" or "Not very" hopeful (grey) reporting the above intentions, behaviors, and policy preferences.

March, 2018

Yale Climate Communications

THANK YOU

WITH HOPE