

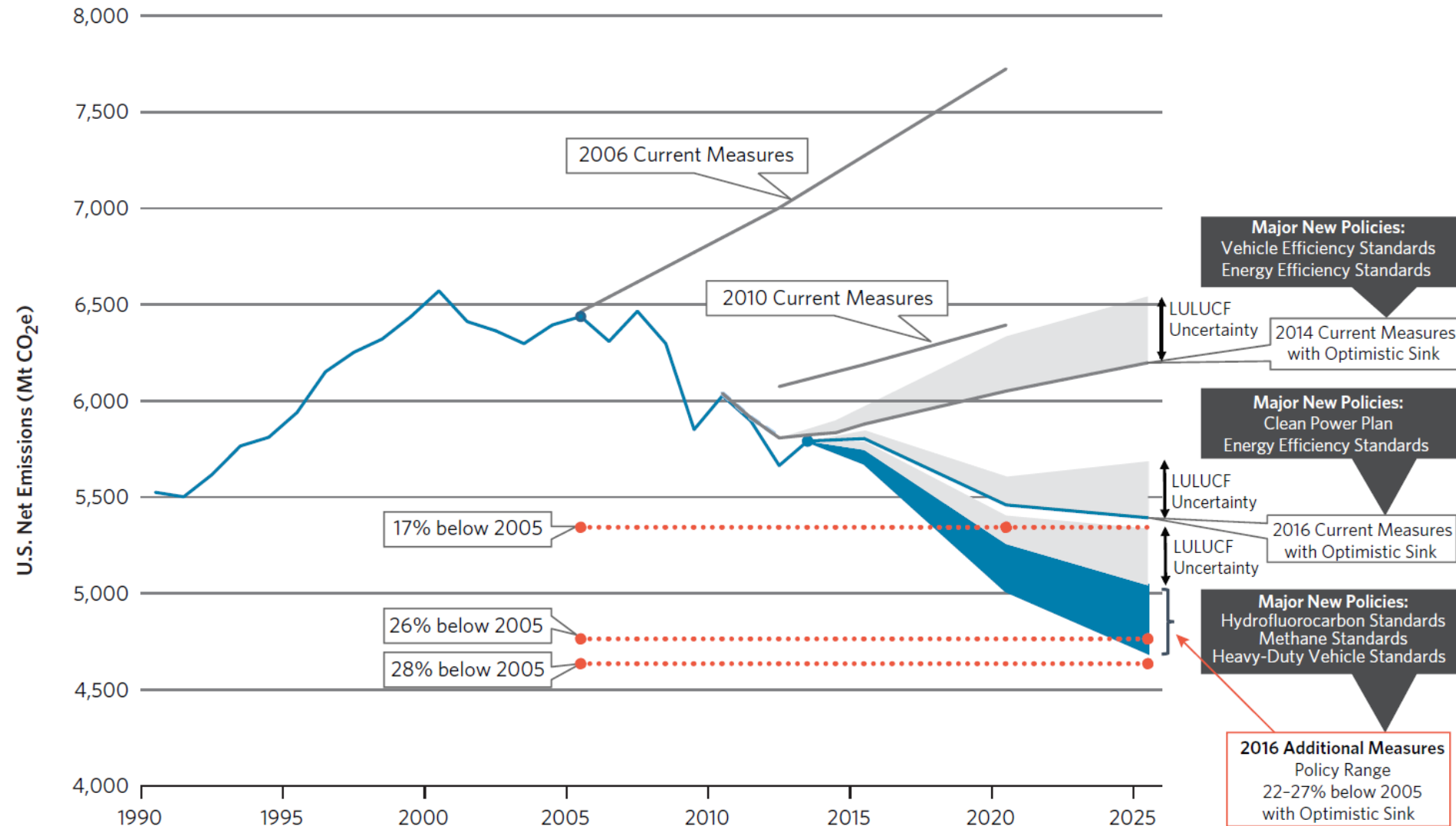
Charting an Ambitious U.S. NDC

Leon Clarke

November 30, 2021



The Second U.S. Biennial Report (2016)





Today the United States began the process to withdraw from the Paris Agreement. Per the terms of the Agreement, the United States submitted formal notification of its withdrawal to the United Nations. The withdrawal will take effect one year from delivery of the notification.

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As noted in [his June 1, 2017 remarks](#), President Trump made the decision to withdraw from the Paris Agreement because of the unfair economic burden imposed on American workers, businesses, and taxpayers by U.S. pledges made under the Agreement. The United States has reduced all types of emissions, even as we grow our economy and ensure our citizens' access to affordable energy. Our results speak for themselves: U.S. emissions of criteria air pollutants that impact human health and the environment declined by 74% between 1970 and 2018. U.S. net greenhouse gas emissions dropped 13% from 2005-2017, even as our economy grew over 19 percent.



April 22, 2021: The U.S. Commits to Ambitious 2030 Reductions

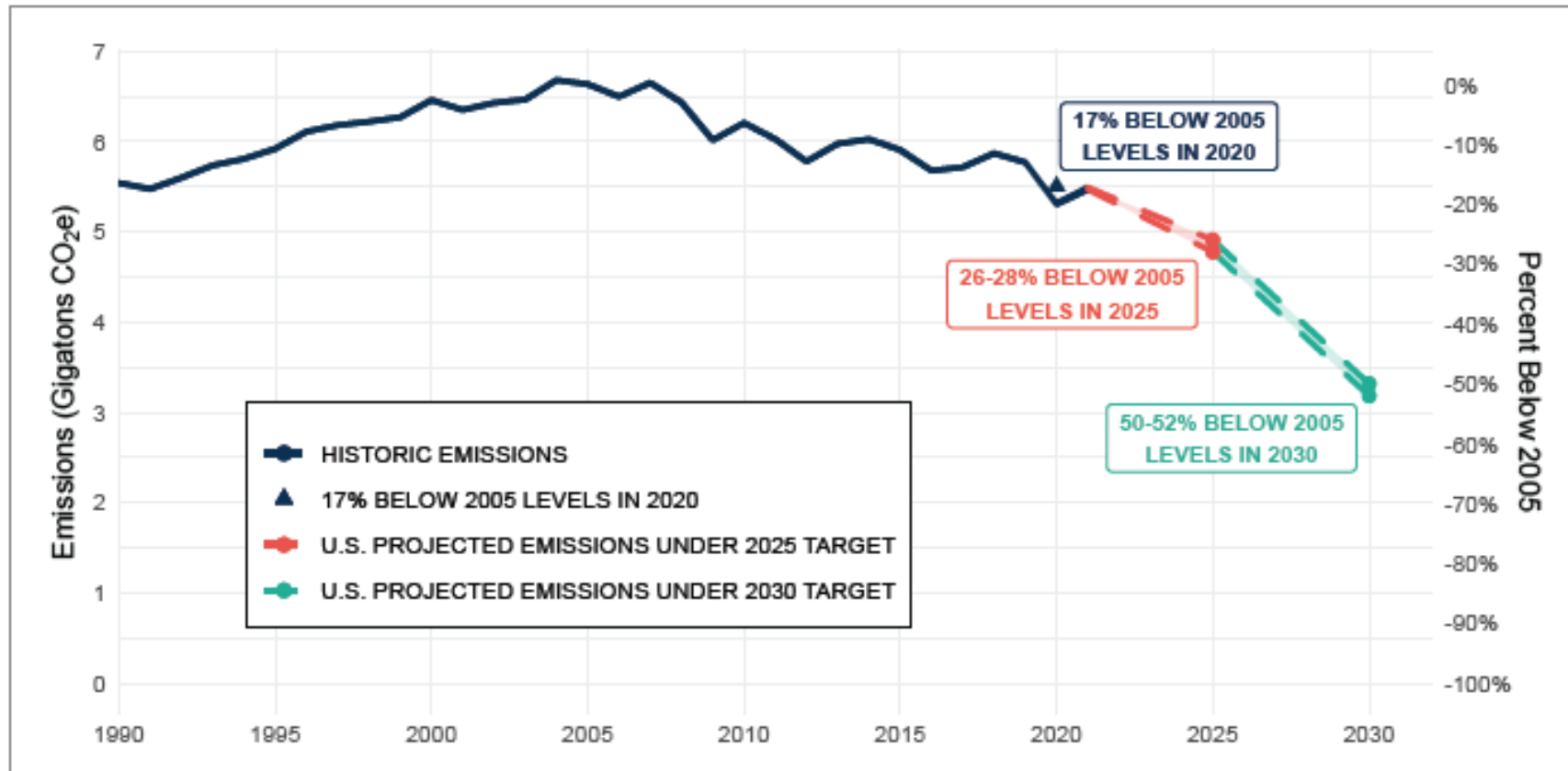


Figure 2: United States historic emissions and projected emissions under the 2030 NDC target.

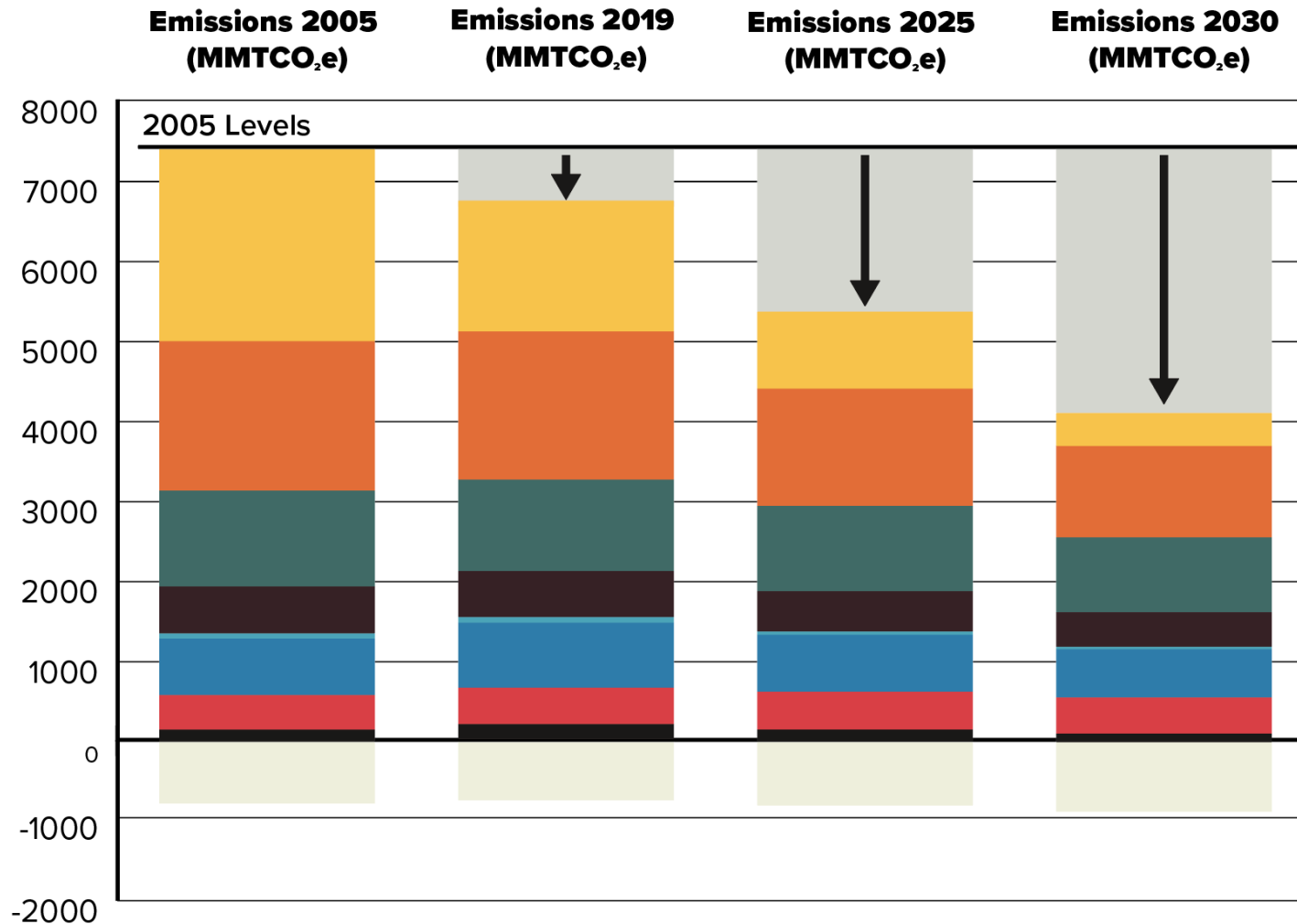
This figure shows the historical trajectory of U.S. GHG emissions and the pathway to the 2030 GHG reduction targets. The 2030 NDC target is ambitious, and policies and measures have put the American economy on a declining emissions trend consistent with these goals. The 2030 targets put the United States on a faster track than a straight-line path to net-zero in 2050 would require.

What's in the \$550 Billion for Climate in the Reconciliation Bill

- 10-year tax credits to incentivize investments in renewable energy like wind and solar.
- Raising the electric vehicle tax credit to \$12,500 for cars made in unionized, U.S. factories.
- Offering consumer rebates for switching to clean energy.
- Creating a Civilian Climate Corp to provide employment and protect public lands.
- Money for natural climate solutions like coastal restoration and forest management.
- Money for reducing pollution in low-income communities

All In action can deliver 52% emission reductions by 2030

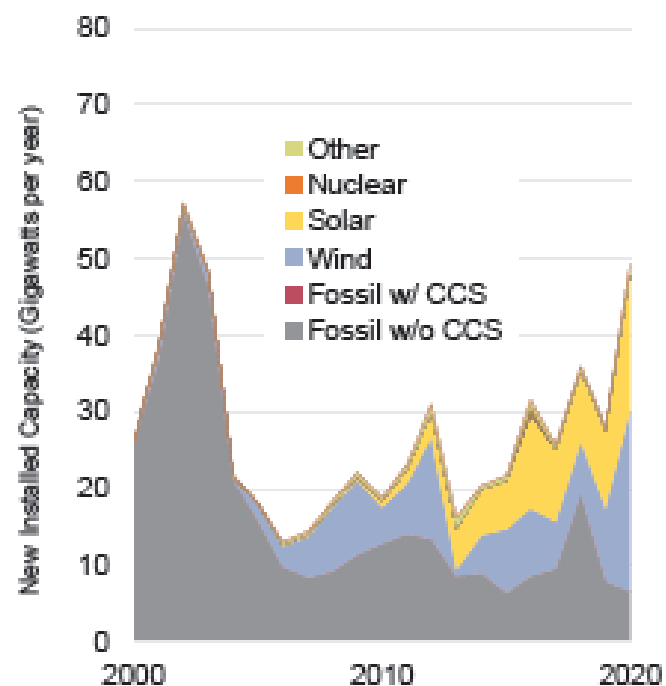
AMERICA IS
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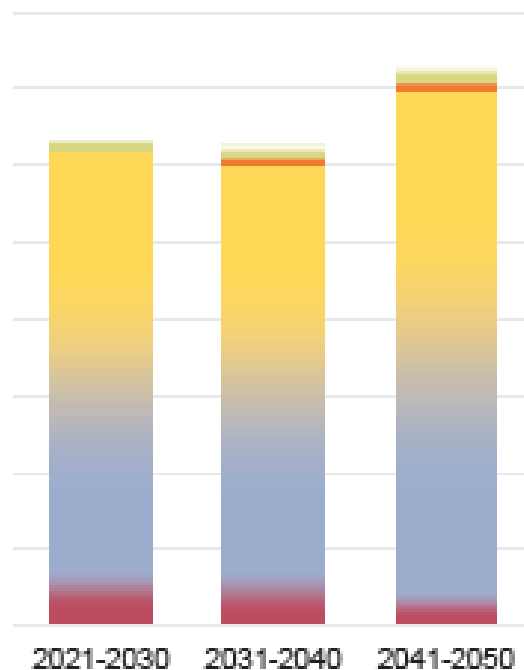
Sector/GHG	Change from 2005 to 2030 (MMTCO ₂ e)	Change relative to 2005 (%)
Electricity CO ₂	-2008	-83%
Transport CO ₂	-725	-39%
Industry CO ₂	-263	-22%
Buildings CO ₂	-154	-26%
Other CO ₂	-33	-50%
CH ₄	-105	-15%
N ₂ O	18	4%
F-Gases	-40	-27%
LULUCF	-98	-12%
Net GHG Total	-3409	-52%



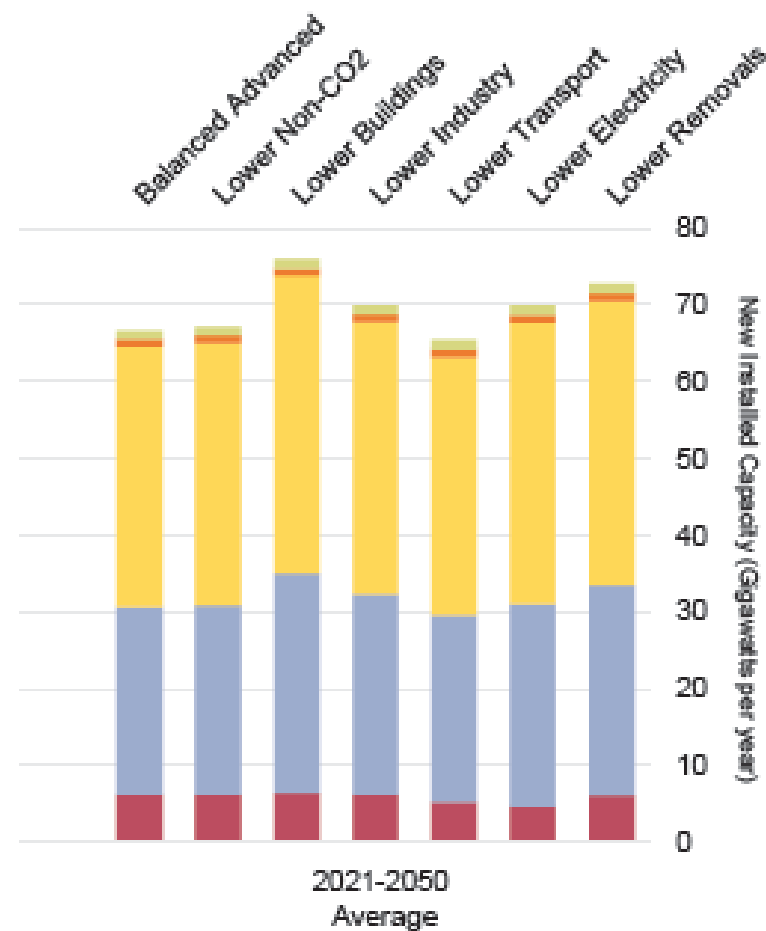
HISTORICAL CAPACITY ADDITIONS



REPRESENTATIVE PATHWAY TO 2050 NET-ZERO



ALTERNATE PATHWAYS TO 2050 NET-ZERO



Selected 2030 Results from Two Studies

- **Electricity:** Renewable power generation delivers roughly 50% of electricity—a quadrupling from today's levels.
- **Electricity:** There will be little to no electricity generated by coal-fired power plants without carbon capture and storage
- **Electricity:** Generation from gas-fired power plants will be a third lower than today.
- **Transportation:** Over 65% of new cars and SUV sales will be electric (pure EV or PHEV), and 10% of new truck sales will be electric.
- **Buildings:** All new buildings are 100% electric.
- **Buildings:** Almost all new appliance sales will be electric.
- **Industry:** Cement emissions will be 20% lower than they were in 2018.
- **Methane:** Methane (CH₄) leaks from oil and gas systems will be cut by 60%.
- **Natural and Working Lands:** Carbon absorption in the land sector increases by 20%.



Nonfederal Actors Committed to Climate Action in Support of Paris Agreement.

3,375+

BUSINESSES AND INVESTORS

25

STATES

50+

**HEALTHCARE
ORGANIZATIONS**

650+

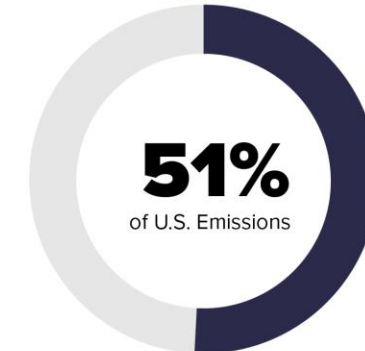
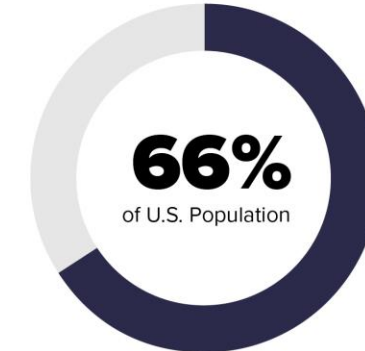
UNIVERSITIES

580+

**CITIES, COUNTIES
AND TRIBES**

900+

**FAITH-BASED
AND CULTURAL
ORGANIZATIONS**



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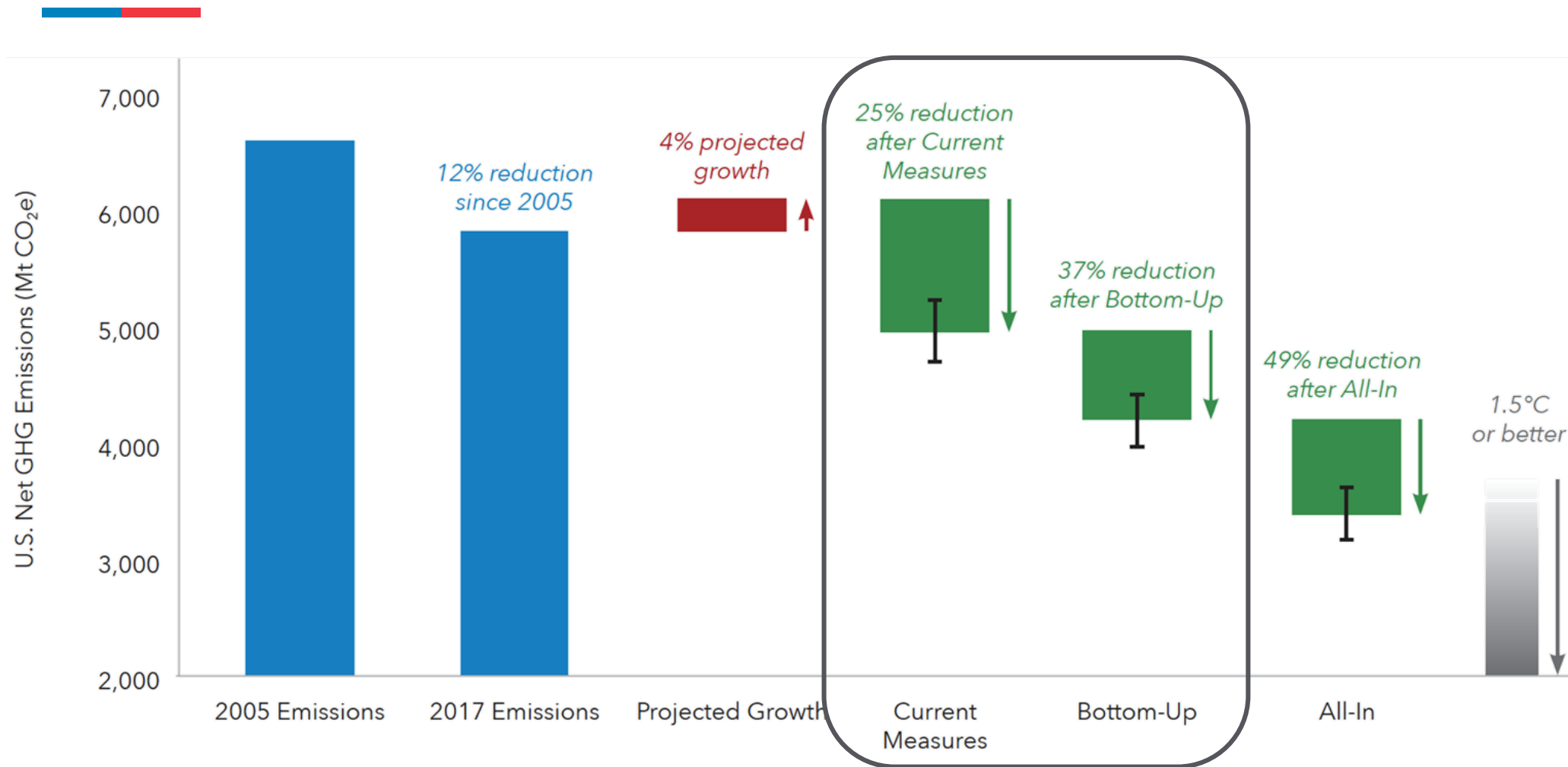


Non-federal action can drive federal ambition

- GHG vehicle emission standards by California and ten other states helped set ambition for federal standards in 2009
- State renewable standards, public and private renewable procurement targets, and civil society pressure for coal plant retirements have driven power sector emission reductions
- State HFC phase-down policies led to corporate support for federal action, adopted under the AIM Act of 2020

Non-federal action alone can drive significant emissions reductions.

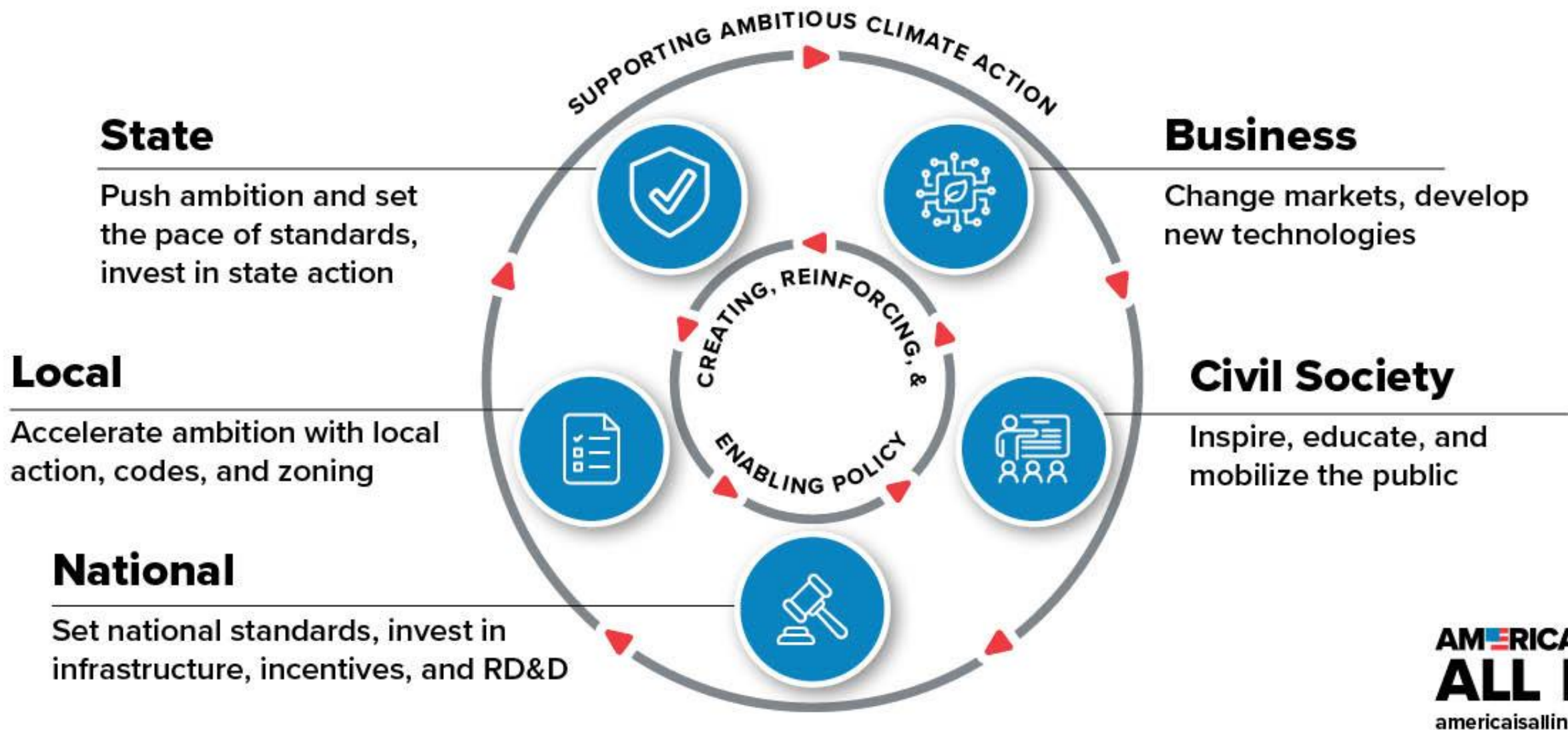
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From *Accelerating America's Pledge: Going All-In to Build a Prosperous, Low-Carbon Economy for the United States*. December 2019.

Available at: <https://www.americaisallin.com/reports-news/>

The All-In Climate Strategy



How do we get there?

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Transport

Phase out ICE vehicles (light-duty by 2035) || Install 1 million new EV charging plugs ||
Double investment in mass transit

Power

Achieve 100% clean electricity by 2035 || Invest in R&D for reliable, resilient energy supply || Train
clean energy workforce

Buildings

Install only all-electric appliances by 2030 || Build only zero-emission buildings by 2030 || Invest in
building electrification and efficiency

Industry

Reduce oil & gas methane leakage 60% by 2030 || Increase CCUS ||
Implement “buy clean” requirements

Lands

Implement nature-based solutions || Increase waste-to-energy ||
Expand sustainable agriculture

The Transportation Sector with an All-In Strategy



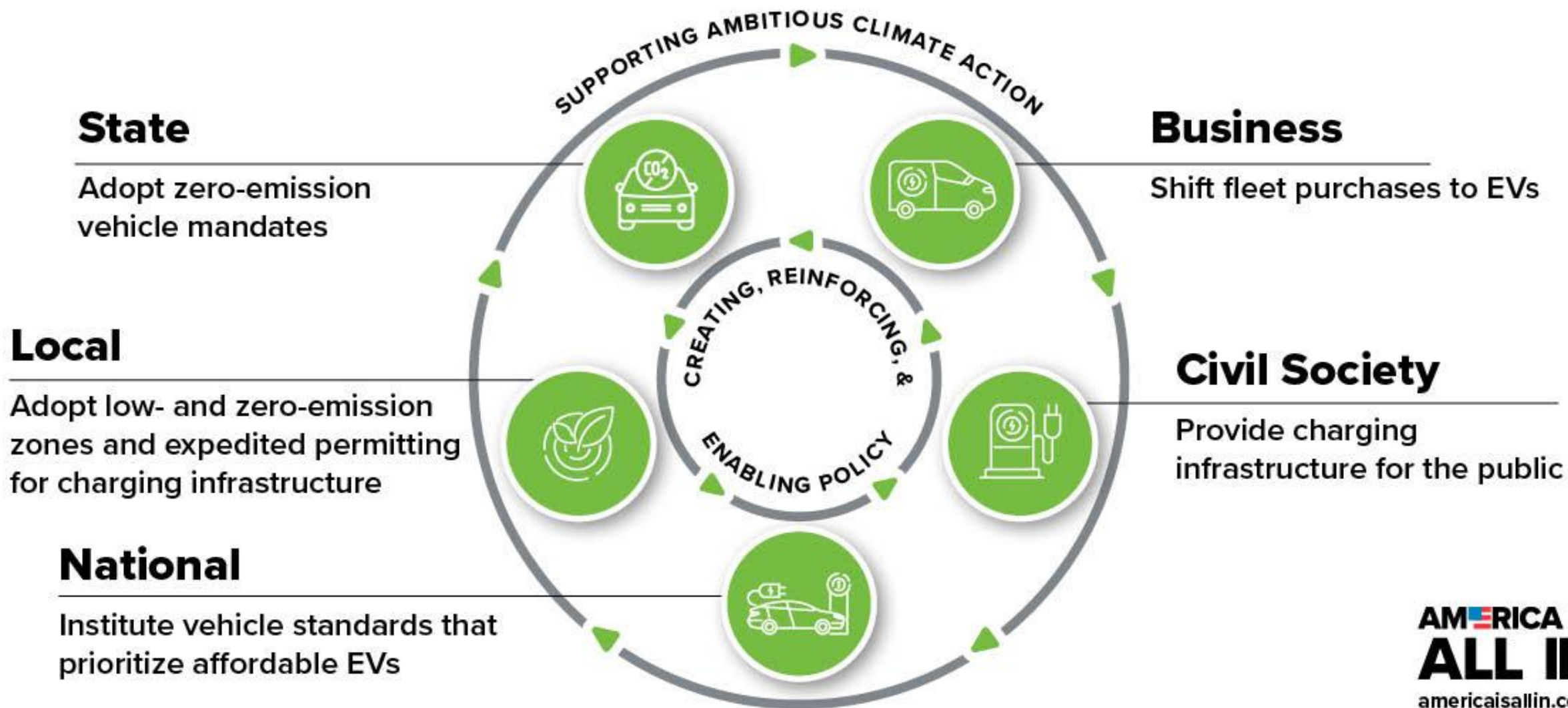
Priority high
ambition policies
that can lead
to **50–52%**
emissions
reductions by
2030

“ALL IN” BREAKTHROUGH ACTIONS:

- Mandate/incentivize phase-out of internal combustion engines for light-duty vehicles by 2035 and medium- and heavy-duty vehicles by 2045 (federal and state)
- Produce and procure ZEVs, targeting 100% of light-duty vehicle sales by 2035 and at least 30% of heavy-duty vehicle sales by 2030 (all)
- Invest in mass transit and one million new EV charging plugs that are broadly available to all communities (all, led by federal)

The All-In Climate Strategy:

Policy Interactions Contributing to Rapid Electric Vehicle (EV) Adoption



The Power Sector with an All-In Strategy



Priority high
ambition policies
that can lead
to **50–52%**
emissions
reductions by
2030

“ALL IN” BREAKTHROUGH ACTIONS:

- Mandate/incentivize 100% clean electricity by 2035 and 80% or more by 2030 (federal and state)
- Procure 100% clean electricity on a 24/7/365 basis as soon as possible (all)
- Invest in RD&D to ensure a reliable, resilient energy supply that is largely renewable (federal, business)
- Train and inspire the clean-energy workforce while supporting community transition (all, especially civil society)

The Building Sector with an All-In strategy



Priority high
ambition policies
that can lead
to **50–52%**
emissions
reductions by
2030

“ALL IN” BREAKTHROUGH ACTIONS:

- Mandate/incentivize energy-efficient, all-electric appliances and zero-emissions new buildings by 2030 (federal, state, city)
- Invest in building electrification and efficiency upgrades, with a priority for low- and middle-income housing (federal, state, city)
- Raise awareness of public health and climate dangers of gas (all, especially civil society)

The Industrial Sector with an All-In Strategy



Priority high
ambition policies
that can lead
to **50–52%**
emissions
reductions by
2030

“ALL IN” BREAKTHROUGH ACTIONS:

- Mandate best practices and prohibit venting and flaring at oil and gas sites, reducing fugitive methane leakage by at least 60% by 2030 (federal, state, cities in oil-producing regions)
- Incentivize CCUS, innovation, and low-carbon solutions in hard-to-abate sectors (federal and state)
- Implement “buy clean” requirements for emissions-intensive goods and infrastructure (e.g., cement and steel) (all)
- Raise awareness about green products and construction practices (all, especially civil society)
- Mandate stringent refrigerant management protocols and use of low-GWP alternatives wherever viable, driving down HFC emissions by 40% or more by 2030 (federal, state)

The Natural and Working Lands Sector with an All-In Strategy



Priority high
ambition policies
that can lead
to **50–52%**
emissions
reductions by
2030

“ALL IN” BREAKTHROUGH ACTIONS:

- Incentivize nature-based solutions, targeting an **18% increase (additional 140 MT)** in annual carbon sequestration from present levels (federal, state)
- Incentivize and invest in waste-to-energy and sustainable agriculture (federal, state, business)
- Invest in enhanced GHG quantification and monitoring (federal, state, business)



All In action can deliver more than just emissions reductions

- GHG emissions reductions and increased carbon sink
- Improved health from improved air and water quality
- Modernized and resilient renewable energy grid
- Economy-wide job creation and better access to jobs
- Energy cost savings
- Improved ecosystem services and increased resilience
- Revitalized communities and manufacturing sector

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SCHOOL OF
PUBLIC POLICY

CENTER FOR GLOBAL
SUSTAINABILITY

Thank You