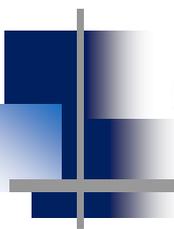


# NLA Sustainability Committee

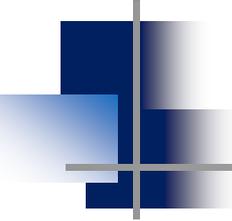
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November 19, 2020  
Online



# The Biden Plan and the Climate 21 Project

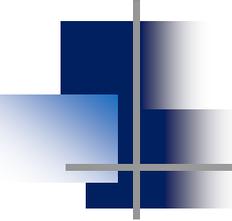
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# Biden Plan Summary

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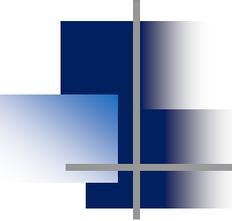
- Ensure the U.S. achieves a 100% Clean Energy Economy and Net-Zero Emissions no later than 2050
  - Enforcement mechanisms
  - Investment in energy and climate research and innovation
  - Incentivize the rapid deployment of clean energy innovations across the economy



# ARPA-C

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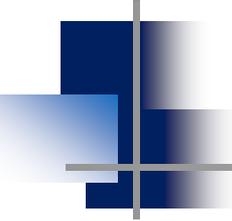
- Establish ARPA-C, a new, cross-agency Advanced Research Projects Agency focused on climate
  - Energy storage, nuclear, refrigerants, buildings, renewables, Hydrogen, CCS, agriculture
- Also “decarbonizing industrial heat needed to make steel, concrete, and chemicals and reimagining carbon-neutral construction materials”



# Re-join Paris Agreement

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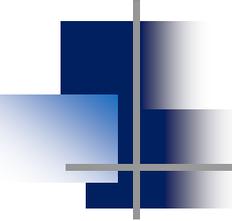
- Convene a climate world summit of major carbon-emitting nations to make more ambitious national pledges
- Lock in enforceable international agreements to reduce emissions in global shipping and aviation
- Curb hydrofluorocarbons



# Other

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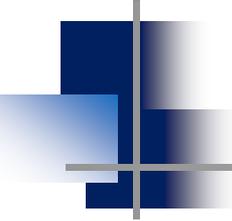
- Bilateral U.S.-China agreements on carbon mitigation
- G20 commitment to end all export finance subsidies of high-carbon projects
- Wide-ranging proposals on National Security, Defense, the Arctic, Environmental Justice, Clean Water, Assistance to workers impacted by clean energy transition



# Climate 21 Project

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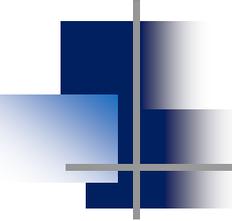
- Executive Office of the President/Council on Environmental Quality
- Office of Management and Budget
- Environmental Protection Agency
- Department of the Interior
- Department of Energy
- Department of Agriculture
- Department of Transportation
- Department of State
- Department of Justice
- National Oceanic and Atmospheric Administration
- Department of the Treasury



# Key Recommendations

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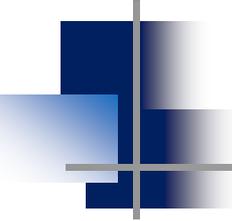
- Creating a White House National Climate Council that is “co-equal” to the Domestic Policy Council and National Economic Council
- Establish a “carbon bank” under the USDA’s Commodity Credit Corporation
  - pay farmers and forest owners to store carbon in their soils and lands
- Push to electrify cars and trucks through the Transportation Department
- Develop a climate policy at the Treasury Department that promotes carbon reductions through tax, budget and regulatory policies



# Recommendations

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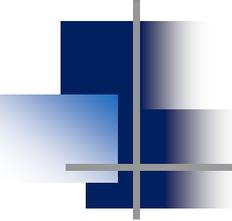
- Pre-inauguration
- Day 1
- First 100 Days



# Pre-Inauguration

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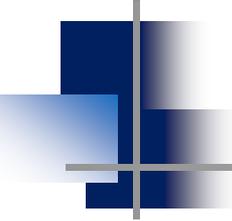
- Select an Assistant to the President for Climate
  - Serve as the first Director of a newly created White House National Climate Council (NCC)
- Public event to showcase the president-elect's commitment to climate action and preview the Day 1 climate plan
- Draft Day 1 climate Executive Orders
- Evaluate readiness to lead on climate change
- Engage with Congressional leaders to identify strategies to achieve climate priorities



# Day 1

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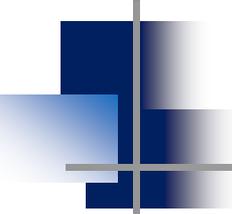
- Issue EO to create the National Climate Council (NCC), co-equal to the Domestic Policy Council and the National Economic Council
- Launch a 90-day, cabinet-level Climate Ambition Plan Task Force (holds the entire administration accountable)
- Advance EJ across federal government
- Rejoin Paris, and mitigate previous damaging environmental decisions
- Embed climate agenda in other WH policy councils



# First 100 Days

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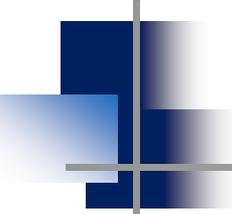
- Convene cabinet-level and staff-level Climate Task Force meetings and produce the administration's Climate Ambition Plan
- Issue EOs as identified in the Climate Ambition Plan
- Convene world leaders to lay the groundwork to secure more ambitious global climate pledges



# EPA: Budget, Management, and Structure

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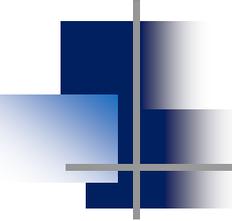
- Renewed attention to compliance and enforcement; concerted effort to work with states, communities, and industry to address the climate crisis (Day 1)
- Mobilize EPA's offices to prioritize climate activities
- Create an Environmental Justice Council
- Build the case for budget increases to fund core science and environmental program work



# EPA: Key Program Opportunities

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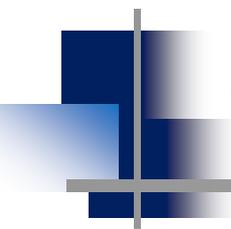
- Initiate high-leverage climate rulemakings
- Direct OAR to create CAAAct rulemaking teams for vehicles, power sector, and O&G (Day 1)
- Development of a coordinated regulatory plan for hydrofluorocarbons
- Direct OAR to develop a strategy to address the remaining emitting sources (100 Days)
- File the motions necessary to reconsider Trump era rules in pending litigation (100 Days)



# EPA: Interagency Priorities and Relationships

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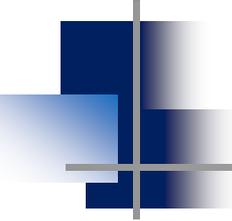
- Plan to expedite high priority regulations (100 Days)
- Marshal expertise to support a strengthened U.S. commitment under the Paris Agreement
- Seek interagency partnerships and cross-agency initiatives to pursue meaningful GHG reductions in the industrial sector
  - Including energy efficiency and partial electrification (100 Days)



# Majority Report from House Select Committee on Climate Crisis

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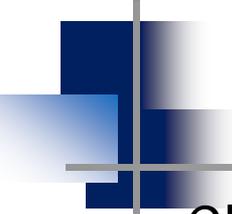
Published June 30, 2020



# Summary

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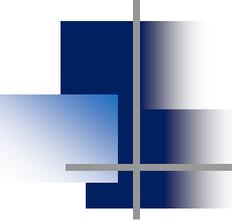
- Long-term decarbonization goals
- Environmental justice
- Infrastructure investment
- Climate resilience
- New EPA Responsibilities



# The Twelve “Pillars”

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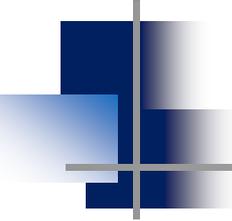
1. Clean energy investments and standards
2. Innovation and deployment of clean technologies
3. Expanding domestic manufacturing of clean & zero-emission technologies
4. Breaking down barriers to clean technologies
5. Investing in workers
6. Placing EJ “at the center” of federal policy
7. Addressing risks to health infrastructure
8. Investing in agriculture
9. Boosting climate resilience
10. Restoring public lands and waters
11. Restoring international climate leadership
12. Strengthening “core” institutions and climate science.



# Targets

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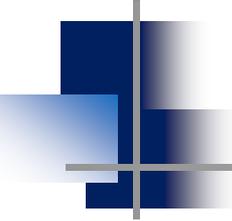
- Net-zero carbon emissions by 2050
- A clean energy standard to achieve net-zero power sector emissions by 2040
- Commitment to a “carbon price” consistent with the 2050 commitment (with caveats)



# Report Recommendations

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- “Implement Tradable Performance-Based Emission Standards for Key Industrial Products”
  - Regulatory, or market-based
- EPA to establish performance standards for EI industries
- Setting benchmarks to include life-cycle emissions, product differentiation, stringency, input from other stakeholders including fenceline communities

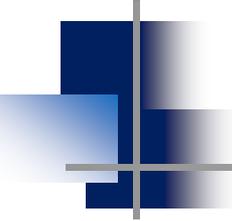


# Summary of Carbon Pricing Proposals in the 116<sup>th</sup> Congress

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- Eleven states already price carbon
  - Numerous states considering similar action
- Currently, ten federal carbon pricing proposals introduced in 116<sup>th</sup> Congress (2019 – 2020)
  - Nine establish a carbon tax
  - One, cap-and-dividend program (a cap-and-trade program that rebates revenues to consumers)

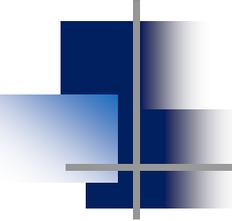
PROPOSAL	SPONSOR(S)	CARBON PRICING MECHANISM	START DATE	REGULATING AUTHORITY
Energy Innovation and Carbon Dividend Act	Reps. Ted Deutch (D-Fla.) and Francis Rooney (R-Fla.)	Carbon Tax	270 days after enactment	U.S. Treasury Department in consultation with EPA
Healthy Climate and Family Security Act	Sen. Chris Van Hollen (D-Md.) and Rep. Don Beyer (D-Va.)	Cap and Trade	Jan 1, 2020	U.S. Treasury Department in consultation with EPA
American Opportunity Carbon Fee Act	Sens. Sheldon Whitehouse (D-R.I.) and Brian Schatz (D-Hawaii)	Carbon Tax	Jan 1, 2020	U.S. Treasury Department in consultation with EPA
Climate Action Rebate Act	Sens. Chris Coons (D-Del.) and Dianne Feinstein (D-Calif.) and Rep. Jimmy Panetta (D-Calif.)	Carbon Tax	Next tax year after enactment	U.S. Treasury Department in consultation with EPA
Stemming Warming and Augmenting Pay Act	Reps. Francis Rooney (R-Fla.) and Dan Lipinski (D-Ill.)	Carbon Tax	Jan 1, 2021	U.S. Treasury Department in consultation with EPA
Raise Wages, Cut Carbon Act	Reps. Francis Rooney (R-Fla.) and Dan Lipinski (D-Ill.)	Carbon Tax	Jan 1, 2020	U.S. Treasury Department in consultation with EPA
America Wins Act	Rep. John Larson (D-Conn.)	Carbon Tax	Jan 1, 2020	U.S. Treasury Department in consultation with EPA
Market Choice Act	Reps. Ryan Fitzpatrick (R-Pa) and Salud Carbajal (D-Calif.)	Carbon Tax	Jan 1, 2020	U.S. Treasury Department in consultation with EPA
Carbon Reduction and Tax Credit Act	Rep. Sean Maloney (D-N.Y.)	Carbon Tax	Jan 1, 2020	U.S. Treasury Department in consultation with EPA
America's Clean Future Energy Act	Sen Dick Durbin (D-Ill.)	Carbon Tax	Program benefits	U.S. Treasury Department in consultation with EPA



# Proposals Summary

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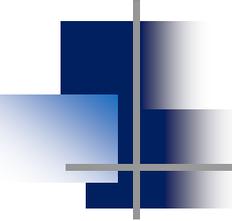
- Seven of ten cover CO<sub>2</sub> emissions from fossil fuel combustion (coal, NG, crude, biomass)
  - One proposal includes all GHGs reported under EPA GHGRP
- Two of the seven include process emissions (list of 20 industries – including lime)
  - Stemming Warming and Augmenting Pay Act (July 25, 2019)
  - Market Choice Act (Sept 26, 2019)



## Proposals Summary (cont.)

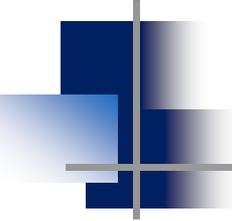
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- Two of ten tax CO<sub>2</sub> content of fossil fuel upstream or midstream (coal mines, refineries, natural gas processing or importers)
- One taxes CO<sub>2</sub> content of fossil fuel



# Likelihood?

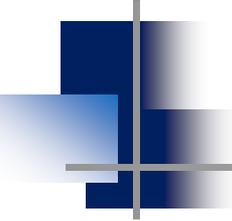
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# Cement Industry News

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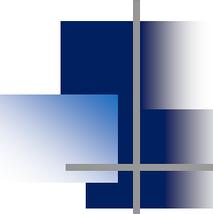
- Major cement companies aim for carbon neutrality by 2050
- Announced September 1 by Global Cement and Concrete Association
  - Backed by 40 of worlds leading cement and concrete companies including U.S. manufacturers
- Support from PCA



# GCCA Approaches for Achieving Carbon Neutrality

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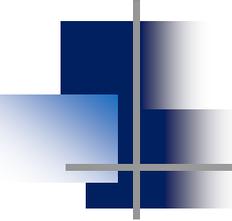
- Eliminating direct energy-related emissions and maximizing the co-processing of waste from other industries
- Reducing and eliminating indirect energy emissions through renewable electricity sources
- Reducing process emissions through new technologies and deployment of carbon capture at scale



# GCCA Approaches for Achieving Carbon Neutrality (cont.)

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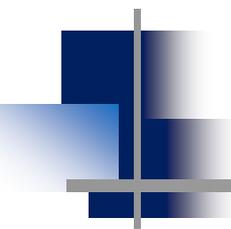
- Reducing the content of clinker in cement and cement in concrete, & more efficient use of concrete in buildings and infrastructure
- Reprocessing concrete from construction & demolition waste to produce recycled aggregates to be used in concrete manufacturing; and
- Quantifying and enhancing the level of CO<sub>2</sub> uptake of concrete through recarbonation and enhanced recarbonation in a circular economy, whole life context.



# Next Steps

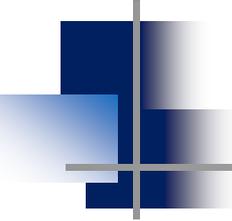
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- Sustainability committee will develop list of options and a path forward
- Report back to Board in January '21 with recommendations and a plan for next 2 – 3 years



# The Circular Economy

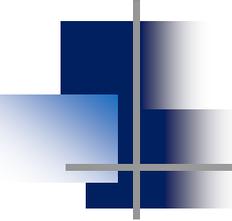
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# Transforming Economy from Linear to Circular Model

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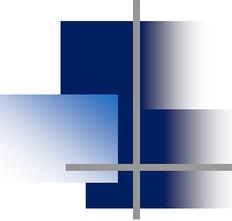
- Maintain value of products and materials for as long as possible
- Minimizing waste
- Using products that reached their end of life to create further value
- Promoting and putting into practice recycling, recovery, and re-use of end applications



# Minerals Sector Circularity

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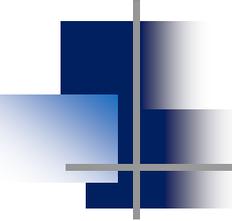
- Manage quarries to minimize footprint and optimize the use of resources
- Energy leakage minimized
  - Constantly improving operations to reduce carbon emissions and reduce wastes
- Best techniques for product transportation
- Post-mining restoration



# Example Projects (European)

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- Reduction in fines
- Hot mix asphalt/road durability
- Sustainable agriculture/soil amendments
- Reverse metallurgy: plasma metal recovery
- De-oiling process



# Questions

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