



Alternative Fuels & Chemicals Coalition

Advocating for Public Policies to Promote the Development & Production of Alternative Fuels, Renewable Chemicals, Biobased Products, and Sustainable Aviation Fuels

Response to the House Select Committee on the Climate Crisis Request for Information



HOUSE SELECT COMMITTEE ON THE **CLIMATE CRISIS**

To inform the policy recommendations of the Select Committee, please provide responses to the questions below by **November 22, 2019** by emailing ClimateCrisisRFI@mail.house.gov. **This request is optional, and you need only reply to the questions that are relevant to your organization or expertise. Please submit your response as both a Word document and PDF.**

Sector-Specific Policies

1. What policies should Congress adopt to decarbonize the following sectors consistent with meeting or exceeding net-zero emissions by mid-century? Where possible, please provide analytical support that demonstrates that the recommended policies achieve the goal.

a. Transportation:

American Diversified Energy (“ADE”) – <http://www.americandiversified.energy/learn-more> – and the **Alternative Fuels & Chemicals Coalition (“AFCC”)** - <https://www.altfuelchem.org/> - recommends that the House Select Committee on the Climate Crisis (“the Committee”):

- (1) **Pass and implement Senator Wyden’s “Clean Energy for America Act,” S.1288:** <https://www.congress.gov/bill/116th-congress/senate-bill/1288?q=%7B%22search%22%3A%5B%22S.1288%22%5D%7D&s=2&r=1>
- (2) **Ensure funding for all federal agency programs that support innovation, research & development, commercialization, and deployment of new and improved technologies for transportation and propulsion.**



- (3) Focus in particular on continuing funding for and improving the U.S. Department of Energy’s Title 17 loan guarantee and Advanced Technology Vehicle Manufacturing direct loan programs so that they function more effectively by adopting the recommendations being provided to the Committee by **Elio Muller** and **Richard Corrigan**.

Please see:

- (a) The list of the federal agency programs that provide funding for each of the nine Technology Readiness Levels (TRLs) from concept through commercialization:
<http://www.americandiversified.energy/directory>
- (b) The list of 51 bioeconomy federal agency programs representing \$54 billion in funding and loan authority that were threatened with elimination or severe cuts in President Trump’s FY2020 budget which the advocacy group that ADE co-founded earlier this year with the Kilpatrick Townsend & Stockton law firm – the **Alternative Fuels & Chemicals Coalition (“AFCC”)** – worked (successfully so far) to maintain and increase the funding and loan authority for these programs: <https://www.altfuelchem.org/fy2020-appropriations>

These represent existing programs and funding that already is in place that can be leveraged to support the transition to a carbon-free transportation system through progressive steps **beginning with advance fossil energy technologies to reduce the impacts of fossil fuel use in the existing marine, rail, air, and on- and off-road transportation infrastructure while drop-in renewable and alternative fuel technologies are deployed and ramped up.**

Renewable and alternative fuel production can **greatly reduce the impacts of all of the nation’s legacy vehicles** – including aircraft, locomotives, ships, and on- and off-road vehicles (such as those used in agriculture and construction) – while these vehicles are being replaced by electric, hydrogen, and mag-lev vehicles.

b. Electric power. The Select Committee would like policy ideas across the electricity sector but requests specific comment on two areas:

- i. If you recommend a Clean Energy Standard, how should it be designed?
- ii. How can Congress expedite the permitting and siting of high-voltage interstate transmission lines to carry renewable energy to load centers.



- ii. ADE and AFCC recommend that, instead of relying on centralized sources of power generation that feed into large interstate and regional grids – both of which are vulnerable to attack and massive outages (with the subsequent disruption of lives and commerce) caused by climate events – wildfires, tornados, hurricanes, etc., – all of which are going to become more extreme as a result of the climate crisis.

Instead, **ADE and AFCC recommend that the current power generation system be broken down into decentralized, community-focused power generation systems that have separate sources of power generation** – using solar, wind, geothermal, waste-to-energy, and hydrokinetic (power generated from water and tidal currents, which can even be incorporated into water mains, such as the City of Portland, OR has done) – which are less susceptible to events that can cause large power outages, and which can incorporate residential and commercial power generation systems, that allow for multiple stand-alone-pods of power generation in each community, where power also will be generated and available, no matter which disruptive event occurs.

All of these power systems should, additionally, be hardened so that they can sustain electric magnetic pulses (EMPs).

c. Industry –

- (1) **Transition to clean power** – solar, wind, geothermal, waste-heat-to-energy, hydrokinetic, etc.
- (2) **Replace coal driven and heat-intensive processes** with cleaner alternatives (solid renewable fuels produced from municipal solid waste, as is widespread in Europe, for example, and hydrogen)
- (3) **Facilitate a transition to recently introduced and emerging technologies** to produce cement and concrete with a much smaller carbon footprint. See: <http://theconversation.com/green-cement-a-step-closer-to-being-a-game-changer-for-construction-emissions-126033>

d. Buildings –

Encourage:

- green roofs,
- self-tinting windows to save energy (see <https://www.kinestral.com/#banner>),



- use of sustainable building materials,
- incorporation of renewable energy technologies into the design (bands of solar panels or small wind turbines between the floors of high-rise buildings, for example),
- compact development patterns,
- walkable communities, and
- the other features of sustainable urban design.

2. What policies should Congress adopt to ensure that the United States is a leader in innovative manufacturing clean technologies; creating new, family-sustaining jobs in these sectors; and supporting workers during the decarbonization transition?

- **Ensure continued and increased funding for** all existing federal agency programs that provide funding for each of the nine Technology Readiness Levels (TRLs) from concept through commercialization: <http://www.americandiversified.energy/directory>
- **Seek ways to build on, expand, and leverage these programs** through the annual Congressional appropriations process, through the U.S. Treasury's Opportunity Zone tax incentive, and public-private partnerships.
- **Seek ways to create synergies and greater efficiencies** by streamlining and combining existing programs and adding funding opportunities to these programs **to provide funding and prioritize for projects that will mitigate the impacts of the climate crisis, both for new technologies and existing technologies and for both small and large projects.**

3. What policies should Congress adopt to ensure that environmental justice is integral to any plan to decarbonize these sectors?

Cross-Cutting Policies

4. Carbon Pricing:

- a. What role should carbon pricing play in any national climate action plan to meet or exceed net zero by mid-century, while also minimizing impacts to low- and middle-income families, creating family-sustaining jobs, and advancing environmental justice? Where possible, please provide analytical support to show that the recommended policies achieve these goals.
- b. How could sectoral-specific policies, outlined in questions 1-3, complement a carbon pricing program?

5. Innovation:

- a. Where should Congress focus an innovation agenda for climate solutions? Please identify specific areas for federal investment and, where possible,



recommend the scale of investment needed to achieve results in research, development and deployment.

- **Start with existing programs and tax incentives** – see 1a(1)(a) and 2 above – and improve, add to, and build on these.
- b. How can Congress incentivize more public-private partnerships and encourage more private investment in clean energy innovation?
- **Provide the private sector and business community with greater certainty.** Modify public policies, tax incentives, funding opportunities, etc. so they can be kept in place for a minimum of five years, not from the time of enactment, but from the time that a business or private sector entity applies for or begins to use the program. This will provide businesses with greater certainty, allow for a minimum of a five-year planning cycle for a business that enters into or takes part in a federal program, funding opportunity or tax incentive, and will encourage greater business and private sector participation

Agriculture

6. What policies should Congress adopt to reduce carbon pollution and other greenhouse gas emissions and maximize carbon storage in agriculture?
7. What policies should Congress adopt to help farmers, ranchers, and natural resource managers adapt to the impacts of climate change?
- **Use existing federal programs to the degree possible** to promote the development, adoption, and deployment of technologies, methods, and process to accomplish these objectives – with an emphasis on project/technologies/methods that also will stimulate job creation and rural economic development – with funding for operations & management (O&M) and job training

Oceans, Forestry and Public Lands

8. How should Congress update the laws governing management of federal lands, forests, and oceans to accelerate climate adaptation, reduce greenhouse gas emissions and maximize carbon storage?

Non-CO2 Greenhouse Gases

9. What policies should Congress adopt to reduce emissions of non-CO2 greenhouse gases, including methane, nitrous oxide, and fluorinated gases?

Carbon Removal

10. How can Congress accelerate development and deployment of carbon removal technology to help achieve negative emissions?



Resilience and Adaptation

11. What policies should Congress adopt to help communities become more resilient in response to climate change? The Select Committee welcomes all ideas on resilience and adaptation but requests comments on three specific questions:

- a. What adjustments to federal disaster policies should Congress consider to reduce the risks and costs of extreme weather and other effects of climate change that can no longer be avoided?
- b. How can Congress better identify and reduce climate risks for front-line communities, including ensuring that low and moderate-income populations and communities that suffer from racial discrimination can effectively grapple with climate change?
- c. What standards and codes should Congress consider for the built environment to ensure federally-supported buildings and infrastructure are built to withstand the current and projected effects of climate change?

Climate Information Support

12. Our understanding and response to the climate crisis has relied on U.S. climate observations, monitoring and research, including regular assessment reports such as the National Climate Assessment. What policies should Congress adopt to maintain and expand these efforts in order to support solutions to the climate crisis and provide decisionmakers – and the American people – with the information they need? Where possible, recommend the scale of investment needed to achieve results.

International

13. The climate crisis requires a global response. U.S. leadership is critical for successful global solutions. What policies should Congress adopt to support international action on the climate crisis?

In addition to your responses to any of these questions, please include any other specific policies that you think Congress should adopt to solve the climate crisis and adapt to the impacts of climate change.

New technologies and breakthroughs are emerging on a continuous basis to address these issues:

- Federal agency program managers should not solely wait for technology and project developers to reach out to them for funding assistance
- Instead, **federal agency program managers should promote the programs that are available**, taking part in conferences, providing articles and PowerPoint presentations to industry publications, actively monitor news reports about new technologies and breakthroughs, and reach out to their developers to acquaint



them with the federal programs that can be used to advance the development and deployment of new technologies and breakthroughs.

- **Federal agency program managers should sponsor “listening sessions”** to bring together industry leaders, new technology developers, rural community interests, and urban community interests to obtain suggestions on how the programs they administer can be made more effective, easier to apply for and carry out, and revised to remove obstacles and address overlooked opportunities.
- Federal agency programs have a vital role to play in launching new technologies and breakthroughs by being able to:
 - ✓ **De-risk the investments that are being made** by private investors and lenders in first-of-their-kind technologies and projects through loan guarantee programs, and
 - ✓ **Jump start private sector investment and lending** to expand on and deploy follow-on projects by providing investor/lender confidence in the viability and bankability new technologies and projects.

ADE provides links on a daily basis to articles about new technologies and breakthroughs, as well as links to articles about the impacts of the climate crisis and steps that can be taken to address these impacts.

To view these links, please see:

- American Diversified Energy Newsbriefs: Breakthrough Technologies & Energy Innovations: <http://www.americandiversified.energy/newsbriefs>
- Climate Crisis News: <https://www.facebook.com/climatecrisisNEWS>

Should you have any questions or wish to obtain additional information on any of ADE's responses to this RFI, please feel free to call or email me:

CJ Evans, Managing Director, American Diversified Energy, and Executive Director,
Alternative Fuels & Chemicals Coalition
Tel. 202-750-0007
Email: cj@ade.llc

Thank you for this opportunity to respond to the Committee's RFI

Note: The Select Committee may choose to publish your responses in whole or in part. All responses will become part of the permanent committee record in the National Archives.