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To: Interested Parties
From: Evergreen Action Policy Team
Date: July 18, 2023
Re: Ensuring the Clean Hydrogen Tax Credits Don't Fund Climate Opposition

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Will the Biden administration allow billions in public money to fund the opposition to its second-term climate agenda or will it seize an opportunity to ensure those funds help build out a clean power grid and support a wave of truly clean hydrogen and industrial decarbonization? The stakes are large as the Internal Revenue Service (IRS) finalizes guidance this summer on how the hugely valuable clean hydrogen tax credit in the Inflation Reduction Act (IRA) can be spent.

- The IRA's "45V" tax credit awards billions to clean hydrogen producers that can demonstrate extremely low lifecycle greenhouse gas emissions. IRS must follow the IRA's text and establish clear rules to ensure "clean" hydrogen actually meets the stringent climate pollution limits. Hydrogen takes a huge amount of electricity to "electrolyze" from water. **The question is whether the IRS guidance will specify that only hydrogen made with new, nearby, and time-matching renewable electricity is eligible for the full tax credit**. Good guidance requires "the three pillars" to make sure clean energy is closely linked to clean hydrogen—requiring that the power to make it be (1) additional, (2) delivered to the same grid as the electrolyzer, and (3) produced at the same time as it is used.

- **Without strong guidance, hydrogen's new electricity demand will be met by fossil gas and coal plants, ramping up grid emissions by hundreds of millions of tons.** New EPA carbon pollution standards mean power plants themselves may burn hydrogen, so lax rules would send us into a power doom loop—hydrogen and fossil power driving up mutual dirty demand.

But it's not just about the tons. Instead, there's a strategy choice in play, with two options that will help set the course of the second Biden term, and of America's green industrial revolution:

- **If hydrogen producers bring clean energy online to secure 45V funds under strong IRS guidance, they'll align with clean energy and super-charge a clean grid.** With these incentives, the industry will apply private and public money and lobbying power to build up the renewable energy, storage, and transmission we need to clean up the rest of the economy—including steel, cement, and transportation.

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- **But, if weak guidance aligns hydrogen with the fossil fuel industry, hydrogen interests won't push the grid to clean up and will have political incentives to oppose new climate rules.** Weak IRS guidance would mean tens of billions in hydrogen dollars being transferred to natural gas plants to pay for electricity and *give the new industry a huge publicly-funded incentive to lobby against cleaning up the grid and other sectors, along with delaying the retirement of expensive fossil fuel power plants.*

Background: The Fight to Keep Hydrogen Clean

If the new hydrogen industry is going to reap hundreds of billions of dollars in public money from our marquee climate law, it should reduce greenhouse gas emissions, not worsen the climate crisis. As our colleagues in the environmental movement and academia have explained, meeting hydrogen energy demand with fossil plants would add hundreds of millions of tons of carbon pollution from the grid. The result could be a power doom loop in which hydrogen demand financially underwrites gas and coal plant operation, propping up fossil plants in the midst of a climate crisis. That's why clean energy advocates have called for applying "three pillars" in the coming IRS guidance on 45V that would ensure that publicly-funded electrolytic hydrogen plants (1) add additional clean energy to the grid, (2) that is delivered to the same grid, (3) when they actually operate.

Independent analysis shows that these basic requirements are compatible with scaling a truly clean hydrogen sector, and will avoid massive spikes in power sector emissions. This would slow the build-out needed for climate action, including creating the fuel and electricity supplies for clean steel and cement facilities.

Don't Fund Opponents of Progress: Fake Transition Industries and Real Fossil Lobbying

Financially linking together the fossil fuel industry and the new hydrogen industry will weaken and delay the clean energy transition. Like Charlie Brown and the football, some hydrogen and utility lobbyists want to set up the administration to fund hydrogen that is actually dirty while promising they're really committed this time.

A dirty hydrogen industry would have billions in funds to oppose further climate action using the 45V tax credits they will be securing. If blessed by IRS, none of these dirty facilities will support any efforts to limit the use of their product, including in the current proposed fossil power plant carbon pollution standards or future industrial decarbonization standards.

This problem should be very familiar. Whenever the U.S. has funded an ostensibly almost-clean "bridge fuel" as a compromise measure, we've seen that industry turn around to fight progress. It's the story of fossil gas interests fighting truly clean power (including with your money) to protect market share. It's the story of corn-based biofuels securing millions of dollars in mandated market share and then opposing vehicle electrification that threatens their polluting

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fuel. And, unless the IRS guidance is strong, it will be the story of fossil-produced hydrogen fighting truly clean hydrogen and renewable companies and a real industrial and power system transition. What can we expect if the IRS guidance aligns hydrogen and fossil gas interests?

- ***Dirty Hydrogen Will Undermine Clean Power and Environmental Justice***
  The proposed carbon pollution standards could be complied with by retiring old fossil plants and replacing them with clean energy and battery storage. But they could also be met by retrofitting facilities, whether with carbon capture or, relevant here, to burn hydrogen—retrofits which power plants will seek to fund publicly with ratepayer money. The dirty hydrogen industry will lobby to remove limits in EPA rules on the use of their fuel in power plants and support ratepayer funding to retrofit old plants, locking in more carbon pollution from the grid for years to come than would occur with retirements.

- ***Dirty Hydrogen Will Undermine Rural Electric Coop Decarbonization***
  The administration and Congress have dedicated billions to support rural electric coops and other small electricity producers, in the biggest infusion of funds since rural electrification a century ago. It is critical they adopt clean energy plans and shed reliance on old fossil facilities that expose their rural customers to air pollution and fuel price shocks. If the hydrogen industry has a strong financial interest in clean energy, it will have a strong incentive to invest in rural power systems, where solar and wind potential is high. Without it, hydrogen may instead prop up ancient and expensive fossil facilities in rural communities that deserve better.

- ***Dirty Hydrogen Will Undermine Industrial Decarbonization***
  EPA will not propose or finalize Clean Air Act standards for steel, cement, or other industrial uses until the second Biden term. If, by that time, hydrogen is reaping billions of dollars under lax IRS guidance, the industry will, of course, lobby against any limits on the use of its fuel. The result? A wall of opposition to EPA and the administration as they seek to clean up heavily polluting sectors unless they allow the use of fossil-produced hydrogen and a foregone chance to have cleaner hydrogen fund a cleaner grid for industry.

- ***Dirty Hydrogen Will Distort IRA Deployment***
  As states and investors make decisions on decarbonization plans, including on the creation of "hydrogen hubs," they need a clear signal that hydrogen and clean power production need to go together—which will allow for the creation of supportive state policies, laws, and incentives. If the federal government fails to draw that tight connection, we can expect a state-by-state effort by the hydrogen and fossil industry to deploy dirty hydrogen on the cheap and to prevent states from being more rigorous than the federal government.

- ***Dirty Hydrogen Will Crowd Out Clean Hydrogen***

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Industry talks about “phasing in” the three pillars—a phase in so long that plants that begin construction for years to come can permanently avoid many of the three pillars for their full life. Any phase-in needs to be short, focused, and not allow facilities to avoid all three pillars as soon as possible, Otherwise, as soon as money starts flowing, dirty hydrogen and fossil allies will start lobbying, hard, for guidance changes or statutory amendments to lock in their undue benefits going forward, just as other fake transition fuels have done in the past. What’s more, these non-compliant electrolyzers will fail to truly work in harmony, or fund, the more flexible and increasingly renewable-powered grid we need—even though the U.S. has a real advantage in flexible electrolyzer design it could seize internationally by further commercializing this superior technology.

- ***Dirty Hydrogen Will Undermine Equity and Justice40***
  America’s fossil plants and industrial facilities are overwhelmingly located in communities of color, rural areas, and lower-income communities. Law and equity demand that the clean energy agenda lift up parts of the country that too often have been left out. It would be unacceptable to pour public funds into dirty facilities to keep polluting these communities.

A Better Path

In the end, the administration faces a false trade-off, self-servingly framed by fossil fuel industry interests. **It is simply not true that we need to sacrifice truly clean hydrogen and the three pillars to meet demand for hydrogen in other sectors**. There is a better path that begins with strong 45V guidance that stops public funds from flowing to the fossil industry, bolsters a strong Clean Air Act section 111 carbon pollution rule from EPA that makes clear that only clean hydrogen can be used for compliance, and helps stand up a truly clean hydrogen industry that genuinely speeds industrial decarbonization and the clean energy transition. In that world, the hydrogen industry can prosper by aligning itself with clean energy, creating a powerful new political alliance that can jointly push for ever-accelerating renewable and storage deployment. **This is a world in which old, expensive, polluting gas and coal plants retire, and a mix of public funds (including 45V and the Production Tax Credit (PTC) and Investment Tax Credits (ITC) for clean energy) are properly aligned with private interests and legislative intent to further super-charge the massive grid and energy investments we need to electrify and decarbonize all sectors, including heavy industry.**

What’s more, the same political coalition that strong 45V guidance creates is well-positioned to drive forward industrial decarbonization. On this path, as EPA prepares rules to support industrial decarbonization—which will inevitably drive demand for *both* electricity and hydrogen—the hydrogen and clean electricity businesses are aligned and investments are ramping up harmoniously. The political coalition will support utility efforts to expand clean energy production for industrial uses (which in turn is needed to secure further

45V funding for clean hydrogen), and thereby also support transferring industry energy demands from fossil fuels over to the clean grid and to clean hydrogen.

It is strongly in the administration's interest to issue firm 45V guidance and align future energy coalitions in favor of industrial decarbonization. ***Since similar volumes of hydrogen will be produced under either scenario, the key question is the allegiance of the new industry; we should want that industry to be ready and eager to partner with renewable energy to support electrification of steel, cement, and other heavy industry, expediting, not hampering, effective decarbonization of our economy.***