

September 7, 2021

The Honorable Charles E. Schumer  
United States Senate  
Washington, D.C. 20510

The Honorable Nancy Pelosi  
1236 Longworth H.O.B.  
Washington, DC 20515

# Hydrogen: Don't Believe the Hype

Dear Speaker Pelosi and Majority Leader Schumer:

The urgency of the climate crisis means we must rapidly and dramatically reorient our energy and electricity systems to eliminate the production and use of fossil fuels. However, addressing the climate emergency must not include funding a hydrogen economy because the vast majority of hydrogen is created directly from natural gas and coal. Leading national and international scientists are clearly calling for the rapid phase out of fossil fuels and this should include phasing out fossil hydrogen before it is expanded. Industry proponents too often shift attention from green hydrogen to “clean hydrogen” that is in reality produced from fossil fuels, nuclear energy and other polluting sources. None of these varying technologies has been thoroughly evaluated, and there is strong reason to believe a massive hydrogen buildout will worsen the climate crisis and cause harm to Black, brown and Indigenous communities.

The fossil fuel industry is using hydrogen to greenwash fossil fuels and support shortsighted industry scams like carbon capture, which will lock us into decades of more fossil fuel dependency. For these reasons, we must exhibit caution when hydrogen is being proposed as a panacea to climate woes and fossil fuel reliance, and urge more evaluation and study of hydrogen before we support a large-scale build out.

New research from scientists at Cornell and Stanford outlines how fossil fuel based hydrogen, coupled with carbon capture and storage has larger greenhouse gas emissions than coal. This hydrogen is generally referred to as blue hydrogen, and sometimes referred to as low-carbon or decarbonized hydrogen. Despite the huge emissions of blue hydrogen, the fossil fuel industry is pitching blue hydrogen as a way to make sustainable hydrogen from fossil fuels. By ignoring the impacts to climate change, public health and the environment, proponents of blue hydrogen are essentially pushing for more fossil fuel development, including fracking, pipelines and harms to Black, Indigenous, and other people of color, often hurt first and worst because of the systemic patterns of industrial development built alongside marginalized communities.

Factory farms are also looking to cash in on the hydrogen greenwash, proposing to use methane from factory farming to create hydrogen, using the same process to create hydrogen from methane as the fossil fuel industry. The only difference is that factory farm gas to hydrogen is used to prop-up an agriculture model that poisons the air and water of nearby communities.

To make matters worse, the fossil fuel industry is proposing a new carbon economy that will use carbon captured from hydrogen production, and other sources, to create new fuels that will emit more carbon, as well as a chemical feedstock for plastic production. This will further exacerbate the climate crisis, frontline community health, as well as the plastic crisis, which is polluting our oceans, food and even the air we breathe with microplastics.

Hydrogen extracted from water, using solar and wind energy, is referred to as “green” hydrogen. New infrastructure for hydrogen utilization can easily be built under the guise of green hydrogen and then use fossil-based hydrogen after the infrastructure is in place. We must ensure that “green” hydrogen is not used to prop up fossil fuel use.

For many of hydrogen’s currently proposed applications, direct electrification (e.g., to grid or batteries) is the most efficient use of renewable electricity and can achieve greater GHG reductions sooner than green hydrogen. Building out hydrogen infrastructure for non-essential sectors would be a grave mistake. Hydrogen combustion is wasteful and produces harmful air pollutants, whereas hydrogen fuel cells only emit water and heat. Therefore, green hydrogen should only be used in fuel cells and reserved for energy applications where no electrification alternative is available. And regardless of its source, the distribution and use of hydrogen (including as ammonia) poses significant hazards that warrant serious evaluation, and which may place significant limits on where and how hydrogen can be safely utilized.

Today, only a small portion of hydrogen is produced for energy purposes; the majority goes into petrochemical and chemical feedstock, oil refining and metal processing. The fossil fuel industry aims to change this by trying to sell the public and Congress on the idea of a hydrogen energy economy, where hydrogen is the new fuel of choice for all our energy needs. This should come as no surprise when we consider that natural gas, almost exclusively derived from fracking, is responsible for over 95 percent of U.S. hydrogen production.

While Congress is poised to make substantial infrastructure investments in clean energy that can help us to transition off fossil fuels, in doing so, we must avoid making investments in hydrogen infrastructure that will continue the legacy of fossil fuels and factory farming. It is for this reason we urge congress to reject any subsidies for hydrogen development in the infrastructure package and instead request that the National Academy of Sciences conduct extensive research into hydrogen production from solar and wind energy and the most effective and efficient uses of that hydrogen in fuel cells.

Sincerely,

**Original Signatories:**

Center for Biological Diversity  
Center for International Environmental Law  
Food & Water Watch  
Friends of the Earth U.S.  
Indigenous Environmental Network

Institute for Policy Studies Climate Policy Program  
New York Lawyers for the Public Interest  
Oil Change International  
Zero Hour

**National Organizations:**

198 methods  
Algalita  
Beyond Extreme Energy  
Environmental Working Group (EWG)  
FracTracker Alliance  
Global Alliance for Incinerator Alternatives  
Grassroots Environmental Education  
GreenLatinos  
Greenvest/Vanderbilt  
Gulf Coast Center for Law & Policy  
Inland Ocean Coalition

Mothers Out Front  
Nevada Nuclear Waste Task Force  
Peak Plastic Foundation  
Physicians for Social Responsibility  
Plastic Pollution Coalition  
Progressive Democrats of America  
Seeding Sovereignty  
Sequoia ForestKeeper®  
Sunrise Movement  
Earth Action, Inc.

## State Regional and Local Organizations:

2degrees Northampton  
350 Bay Area Action  
350 Butte County  
350 Central Mass  
350 Conejo / San Fernando Valley  
350 Eugene  
350 Hawaii  
350 Merced  
350 Seattle  
350 Tacoma  
350 Triangle  
All Our Energy  
Alliance for a Green Economy  
Alliance for Affordable Energy  
Athens County's Future Action Network,  
acfan.org  
Ban SUP  
Bergen County green Party  
Berks Gas Truth  
Berkshire Environmental Action Team (BEAT)  
Better Path Coalition  
Between the Waters  
Biodiversity First!  
Blue Mountains Biodiversity Project  
Boston DSA Eco-Socialism Working Group  
Breathe Project  
Carrizo Comecrudo Tribal Nation of Texas  
CCAG  
Central Jersey Environmental Defenders  
Central Jersey Safe Energy Coalition, Inc.  
Cheyenne River Grassroots Collective  
Church Women United in New York State  
Citizens Action Coalition of IN  
Citizens for a Clean Pompton Lakes  
Citizens United for Renewable Energy  
(CURE)  
Citizens' Environmental Coalition  
Clean Air Council  
Climate Action Now Western Mass  
Climate Reality Leadership Corp Pinellas  
County Chapter  
Climate Reality Project: Susquehanna Valley  
PA Chapter  
Coalition to Ban Unsafe Oil Trains  
Comeback Farm  
Common Ground Rising  
Compressor Free Franklin  
Connecticut Fracked Gas Pipeline Group  
DC Environmental Network  
Delaware Riverkeeper Network  
Don't gas the Pinelands  
Don't Waste Arizona  
Earthworks  
Electrify Now  
Extinction Rebellion San Francisco Bay Area  
Fayetteville police Accountability Community  
Taskforce  
Feminists in Action Los Angeles  
Frack Free Four Corners  
Frack Free New Mexico  
Franklin Co Climate task force  
Franklin County Continuing the Political  
Revolution  
FreshWater Accountability Project  
Friends of the Bitterroot  
GASP  
GBPSR  
HA-HC  
Hudson River Sloop Clearwater  
Landback  
Let's Visit Lee Zeldin  
Long Island Progressive Coalition  
Lower Raritan Watershed Partnership  
Manhattan Local of the Green Prtty  
Maryknoll Sisters - Member  
Massachusetts Climate Action Network  
Mendocino Women's Political Coalition  
Milwaukee Riverkeeper  
New Mexico Environmental Law Center  
NJ PACE, a 501c3  
NJ Skylands Sunrise Hub  
NJ State Industrial Union Council  
North American Climate, Conservation and  
Environment(NACCE)  
North Parish of North Andover Climate Justice  
Group  
North Range Concerned Citizens  
NYC Grassroots Alliance  
NYCD16 Indivisible  
Occupy Bergen County  
Oregon Physicians for Social Responsibility  
Peace Action WI  
Peekskill CAC; Resist Spectra;  
United4CleanEnergy  
Physicians for Social Responsibility  
Pennsylvania  
Plastic Free Delaware  
Power Past Fracked Gas  
Protect PT  
PSR Colorado

PSR Colorado (Physicians for Social  
Responsibility)  
Renewables Now Loveland  
Resist the Pipeline  
RingWand Productions  
Rio Arriba Concerned Citizens  
Safe Energy Rights Group  
San Francisco Bay Physicians for Social  
Responsibility  
Save RGV  
Sisters of St. Dominic of Blauvelt, New York  
Snake River Alliance  
Social Eco Education (SEE-LA)  
Soil and Water Conservation  
Springfield Climate Justice Coalition  
Stop the Algonquin Pipeline Expansion  
Sullivan Alliance for Sustainable Development

Sunflower Alliance  
Surfrider Foundation - Texas Coastal Bend  
Chapter  
Syracuse Peace Council  
Texas Campaign for the Environment  
Texas Environmental Justice Advocacy  
Services  
The Last Plastic Straw  
Thrive at Life: Working solutions  
Together We Will Long Island  
Turtle Island Restoration Network  
Unite North Metro Denver  
Vermont Public Interest Research Group  
Waterspirit  
WildEarth Guardians  
World Beyond Wat

CC:

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Chairperson Kathy Castor  
Chairperson Peter DeFazio  
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