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
Greeninvest/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 Prty
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

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