

19 July 2021

To: The Right Honourable Justin Trudeau, Prime Minister of Canada

cc: Chrystia Freeland, Deputy Prime Minister & Minister of Finance
Seamus O'Regan, Minister of Natural Resources
Jonathan Wilkinson, Minister of Environment and Climate Change
François-Philippe Champagne, Minister of Innovation, Science and Industry

Re: Carbon capture is not a climate solution

Dear Prime Minister and Members of Cabinet,

On behalf of our millions of members and supporters across the United States, Canada, and globally, we are writing to express deep concerns about our governments' support for carbon capture and storage (CCS) technologies. Despite occupying center stage in the "net zero" climate plans trumpeted by the United States, Canada, and other countries at the Leaders' Summit on Climate, in government spending programs and in bills pending before Congress, carbon capture is not a climate solution. To the contrary, investing in carbon capture delays the needed transition away from fossil fuels and other combustible energy sources, and poses significant new environmental, health, and safety risks, particularly to Black, Brown, and Indigenous communities already overburdened by industrial pollution, dispossession, and the impacts of climate change.

Pledges to achieve "net zero" emissions through the use of CCS technologies rely on the flawed premise that we can continue burning fuels indefinitely by capturing some of the carbon emissions and offsetting the rest. As explained below, CCS does not halt the core drivers of the climate crisis — fossil fuel production and consumption — or meaningfully reduce greenhouse gas emissions. Instead, it prolongs reliance on fossil fuels and, perversely, increases oil production through "enhanced oil recovery." CCS is neither economically sound nor feasible at scale. And most alarmingly, it threatens the communities affected by carbon capture infrastructure and the underlying sources of emissions to which the technology is attached.

Simply put, technological carbon capture is a dangerous distraction. We don't need to *fix* fossil fuels, we need to *ditch* them. To avoid catastrophic climate change, we need to deploy resources to replace the fossil fuel industry, not prop it up. Directing government support to CCS diverts resources from the most sustainable and job-creating solutions to the climate crisis: phasing out oil, gas, and coal; investing in energy efficiency and non-combustion renewable energy sources; and nurturing forests, wetlands, and other natural landscapes that function as carbon sinks.

The buildout of CCS infrastructure presents serious health, safety, and environmental risks, particularly for marginalized communities, already overburdened by industrial hazards, that are being targeted for CCS. These dangers are systematically overlooked in discussions on carbon capture. Transporting and storing carbon dioxide (CO₂) involves a massive network of perilous pipelines connected to underground injection sites, each with their own set of dangers. Pipelines can leak or

rupture; compressed CO₂ is highly hazardous upon release and can result in the asphyxiation of humans and animals. Underground storage poses additional risks, such as potential leakage, contamination of drinking water, and stimulation of seismic activity. These hazards apply to all the current and proposed variants utilizing CCS technologies, including carbon capture utilization and storage (CCUS), fossil hydrogen with CCS (“blue” or decarbonized hydrogen), bioenergy with CCS (BECCS), coal-bioenergy systems with CCS (CBECCS), waste-to-energy with CCS (WtE-CCS), and direct air capture (DAC), which depends on CCS or CCUS to manage the captured carbon.

CCS is not consistent with the principles of environmental justice. As the U.S. White House Environmental Justice Advisory Council’s [Interim Final Recommendations](#) made clear, CCS will not benefit communities. Yet pollution-burdened communities are being targeted for CCS, which brings new risks and threats, ironically in the name of environmental justice. The U.S. Gulf Coast, including the Louisiana petrochemical corridor known as “Cancer Alley,” northern plains, and California Central Valley, as well as the provinces of Alberta and Saskatchewan in Canada, are among those areas being targeted for CCS development. Such a buildout would impose new pollution and safety hazards on Black, Brown, and Indigenous communities already suffering the disproportionate and deadly impacts of environmental racism.

Rather than replacing fossil fuels, carbon capture technology prolongs our dependence on them. By design, carbon capture is parasitic on the underlying sources of emissions to which it is attached. Putting carbon capture technology on greenhouse-gas emitting facilities enables those facilities to continue operating, effectively providing those emitters with a license to pollute indefinitely. In practice, CCS at best captures only a fraction of carbon emissions and fails to address other harmful pollution from fuel combustion, such as fine particulate matter (PM_{2.5}), as well as other contaminants from the underlying activities to which CCS was applied. The additional energy required to power the carbon capture process generates even more emissions if supplied by fossil fuels.

Worse still, the majority of captured carbon is used to pump more oil out of the ground, in a practice known as “enhanced oil recovery” (EOR). Almost all existing CCS projects are tied to EOR, whereby CO₂ is injected into depleted underground oil reservoirs to boost oil production. EOR is currently the primary market driver for captured CO₂; no other markets exist at the scale proposed by many of the technology’s proponents. EOR is disastrous for the climate, as it results in more oil extraction and more carbon emissions when that oil is burned. And yet, the public in the United States is currently paying for EOR through the Section 45Q tax credit, of which oil companies are the biggest beneficiaries. In Canada, the oil and gas industry is lobbying for a similar tax break.

There is no economic rationale for the massive deployment of CCS. Attaching carbon capture technology to an emitting source makes operating that source both more expensive and more energy-intensive. As costs of clean energy like solar and wind plummet, fossil fuel and biomass power plants are becoming less competitive, and adding

carbon capture just makes them more costly. Even in heavy-emitting industrial sectors such as plastic or petrochemical manufacturing, applying CCS at scale makes little climate or economic sense. The push to deploy CCS in the industrial sector ignores the most important alternative methods for curtailing the *vast* majority of the sector's emissions, which are available and scalable: replacing fossil fuels with non-carbon emitting renewable energy to supply power and heat, adapting production processes and methods, reducing and ultimately ending production of wasteful and unsustainable materials like disposable plastics, and reusing materials in manufacturing to reduce the production of virgin material. Investing in CCS infrastructure add-ons to existing facilities locks those facilities and their current energy technologies in place, and diverts resources from non-polluting alternatives that are compatible with a safe climate future.

CCS does not *remove* CO₂ from the atmosphere. At best, it prevents some carbon emissions from entering the atmosphere. But even there it falls short: CCS projects implemented to date have systematically overpromised and under-delivered on emissions reductions. Advertisements from some fossil fuel companies that compare CCS to a living plant are deeply misleading. Industry claims that BECCS is a negative emissions technology are based on the flawed and scientifically discredited premise that burning biomass is carbon neutral. In fact, burning wood for energy can increase greenhouse gas impacts for decades to centuries compared to fossil fuels.

The promise of “permanent” storage or sequestration of captured carbon is not backed by science or existing regulations. Current U.S. federal regulations, for example, only require storage of CO₂ for 50 years to qualify for subsidies. But CO₂ lingers in the atmosphere and environment on a geological time scale — for many hundreds or even thousands of years. Considering CO₂ injected underground or used in the manufacture of plastics, cement, or other goods to be safely contained in perpetuity is irresponsible at best, as it merely kicks the can down a very short road, to be a burden to the next generation.

Deploying CCS at any climate-relevant scale, in the short timeframe we have to avert climate catastrophe, without posing substantial risks to communities on the frontlines of the buildout, is a pipe dream. Despite the billions of taxpayer dollars spent by governments in both the United States and Canada on CCS over the last ten-plus years, the technology has not made a dent in CO₂ emissions. Continuing to sink federal funds into technological carbon capture is choosing to chase a fossil-fueled fantasy rather than deal with the root of the problem.

Therefore, we, the undersigned organizations, urge you to:

1. **Ensure that the environmental justice and human rights impacts and the significant safety risks of CCS are front and center in any hearings and policy discussions regarding the technology.** Representatives from communities disproportionately harmed by systemic environmental racism, including Black, Brown and Indigenous communities, and the environmental justice organizations accountable to them, should be invited to testify in all congressional or parliamentary hearings and formal policy discussions on CCS. All decisions regarding CCS policy must respect and uphold the rights of

Indigenous Peoples.

2. **Reject proposals to provide, extend, or increase government funding and subsidies for CCS/CCUS and related infrastructure.** Rather than funding CO₂ pipelines and expensive retrofits to dirty power and industrial plants, public resources should be invested in sustainable infrastructure that serves people, not polluters. From replacing lead pipes to ensure safe drinking water and ensuring access to safe drinking water for all First Nations, to upgrading public transit and accelerating deployment of electric vehicles and non-polluting energy sources, to sustaining natural ecosystems and supporting communities impacted by climate change, there are many areas deserving of government investment that are a “win-win” for people and the planet. CCS is not one of them.
3. **Prohibit the use of 45Q tax credits in the U.S. or other national subsidies in the U.S. or Canada for enhanced oil recovery.** Federal funds deployed to address the climate crisis and accelerate the transition to a non-polluting energy future must not be used to produce more of the oil and gas that are choking our planet. Using government funds to give handouts to polluters is bad enough; doing it in the name of ‘climate action’ adds insult to injury.
4. **Investigate how existing U.S. and Canadian subsidies for CCS technologies have been used to date and close loopholes in tax policy that allow polluters to claim the credits without demonstrating compliance with monitoring, reporting, and verification requirements.** The U.S. Treasury’s Inspector General for Tax Administration, for example, found that fossil fuel companies improperly claimed nearly \$900 million in tax credits under 45Q. No further support for CCS technologies should be approved at all, let alone while questions loom over the use of funds to date.
5. **Reject national energy strategies that rely on or anticipate CCS.** Current legislative proposals, including proposals for a national Clean Electricity Standard in the United States and Canada’s hydrogen strategy, are designed to promote or accelerate the deployment of CCS. National strategies should focus on eliminating the use of fossil fuels and other combustible sources in our energy system, not simply reducing their emissions intensity.

Conclusion: Carbon capture schemes are unnecessary, ineffective, exceptionally risky, and at odds with a just energy transition and the principles of environmental justice. We ask that you reject federal funding for CCS technologies, immediately end subsidies for enhanced oil recovery, and instead prioritize investments in safe and sustainable climate solutions and equitable and just transitioning of workers and communities to a fossil-free, clean energy economy.

Signed,

International

350.org
Ben & Jerry's
Catholic Divestment Network
Citizens' Resistance at Fermi 2
Coalition for a Nuclear Free Great Lakes
EcoHealth Network
Global Alliance for Incinerator Alternatives
GreenFaith
International Marine Mammal Project
Just Transition Alliance
Network of Spiritual Progressives
North American Climate, Conservation, and Environment
Ocean Conservation Research
Oceanic Preservation Society
Oil Change International
Reconstructionist Rabbinical Association
Sisters of Charity Federation
Social Eco Education Los Angeles
Stand.earth
The Enviro Show
Waterkeeper Alliance

Canada

Alberta Liability Disclosure Project
Below 2°C
British Columbia Hydro Ratepayers Association
Canadian Association of Physicians for the Environment
Canadian Environmental Law Association
Canadian Health Association for Sustainability & Equity
Canadian Unitarians for Social Justice
Canadian Voice of Women for Peace
Canadians for Tax Fairness
Chemainus Climate Solutions
Climate Action Powell River
Climate Emergency Unit
Climate Justice Montreal
Climate Justice Ottawa
ClimateFast
Committee for Human Rights in Latin America
Community Climate Council
Comox Valley Council of Canadians
Council of Canadians / Le Conseil des Canadiens
Courage Montreal
Curr Dynasty Creative
Ecologos Water Docs

Environmental Defence Canada
ENvironnement JEUnesse
Environnement Vert Plus
Équiterre
Extinction Rebellion New Brunswick
For Our Grandchildren
For Our Kids North Shore British Columbia
For Our Kids Toronto
Fridays for Future Toronto
Friends of the Earth Canada
Georgia Strait Alliance
Glasswaters Foundation
Global Peace Alliance BC Society
Grand(m)others Act to Save the Planet
Grandmothers Advocacy Network
Just Earth
Leadnow
MiningWatch Canada
My Sea to Sky
Nature Canada
Parents for Climate
People's Health Movement Canada
Réseau Québécois sur l'Intégration Continentale
Respecting Aboriginal Values & Environmental Needs
Seniors For Climate Action Now!
Shift: Action for Pension Wealth & Planet Health
Sierra Club Canada Foundation
Simcoe County Environmental Youth Alliance
Simcoe County Greenbelt Coalition
Sustainable Orillia Youth Council
TBL Communications
The Climate Reality Project Canada
Wilderness Committee
Wildsight
Women's Healthy Environments Network

United States

198 methods
2 Degrees Northampton
350 Bay Area Action
350 Brooklyn
350 Butte County
350 Central Mass
350 Colorado
350 Conejo / San Fernando Valley

350 Corvallis
350 Eugene
350 Hawaii
350 Juneau
350 Kishwaukee
350 Maine
350 Massachusetts
350 Merced
350 Montana
350 New Hampshire
350 New Orleans
350 NYC
350 Sacramento
350 Seattle
350 Spokane
350 Tacoma
350 Triangle
350 Wenatchee
A Community Voice
Action Center on Race & the Economy
ActionAid USA
Advocacy & Training Center
Advocates for Springfield
AFGE Local 704
Alabama Interfaith Power & Light
Algalita
Alliance for a Green Economy
Alliance for Affordable Energy
Amazon Watch
American Environmental Health Studies Project
American Family Voices
American Indian Movement Southern California
Animals Are Sentient Beings
Animas Valley Institute
Anthropocene Alliance
Atchafalaya Basinkeeper
Athens County's Future Action Network
Atlantic Coast Conference Climate Justice Coalition
Ban Single-Use Plastics
Bergen County Green Party
Berks Gas Truth
Better Path Coalition
Beyond Extreme Energy
Beyond Plastics
Biofuelwatch
Black Mesa Trust

Black Voters Matter Fund
Bold Alliance
Breathe Project
Bronx Climate Justice North
Buckeye Environmental Network
Bucks County Concerned Citizens Against the Pipelines
Bucks Environmental Action
Businesses for a Livable Climate
California Businesses for a Livable Climate
California Democratic Party Environmental Caucus
California Environmental Justice Alliance
California River Watch
California Safe Schools
Call to Action Colorado
Cape Downwinders
Carrie Dickerson Foundation
CatholicNetwork US
Catskill Mountainkeeper
Cedar Lane Unitarian Universalist Church Environmental Justice Ministry
Center for Biological Diversity
Center for Climate Integrity
Center for Coalfield Justice
Center for Environmental Health
Center for Environmentally Recycled Building Alternatives
Center for International Environmental Law
Center on Race, Poverty & the Environment
CEO Pipe Organs
Change the Chamber
Chicago Area Peace Action
Choctawhatchee Riverkeeper
Church Women United in New York State
Citizen Power
Citizens Action Coalition
Citizens Awareness Network
Ciudadanos Del Karso
Clean Air Action Network of Glens Falls
Clean Air Now
Clean Energy Action
Clean Energy Now Texas
Climate Action Now Western Mass
Climate Action Rhode Island / 350 Rhode Island
Climate Hawks Vote
Climate Justice Alliance
Climate Reality Project New Orleans
Coal River Mountain Watch
Coalition Against Death Alley

Coalition Against Pilgrim Pipeline New Jersey
Coalition for Outreach, Policy, Education
Colorado Businesses for a Livable Climate
Colorado Small Business Coalition
Columbus Community Bill of Rights
Comite Pro Uno
Common Ground Community Trust
Community Action Works
Community Church of New York
Concerned Citizens for Nuclear Safety
Concerned Citizens of Saint John
Concerned Health Professionals of New York
Concerned Ohio River Residents
Conejo Climate Coalition
Congregation of Sisters of Saint Agnes
Conservation Congress
Conservation Council for Hawaii
Cool Effect
Cooperative Energy Futures
Corporate Accountability
Cottonwood Environmental Law Center
Council on Intelligent Energy & Conservation Policy
Courage California
Damascus Citizens for Sustainability
DC Environmental Network
Deep Green Resistance New York
Deep South Center for Environmental Justice
Democratic Environmental Caucus of St. Bernard Parish
Descendants Project
Detroit Hamtramck Coalition for Advancing Healthy Environments
Dis Organization for Solar Power
Dogwood Alliance
Don't Gas the Meadowlands Coalition
Don't Waste Arizona
Don't Waste Michigan
Drawdown Bay Area
Dryden Resource Awareness Coalition
Earth Action
Earth Care
Earth Day Initiative
Earth Day Network
Earthworks
EcoEquity
Education, Economics, Environmental, Climate & Health Organization
Electric Auto Association of Central Coast California
Elgin Green Groups 350

Empower Our Future
Endangered Species Coalition
Environmental Communion New Jersey Association United Church of Christ
Environmental Protection Information Center
Environmental Transformation Movement of Flint
Environmental Working Group
Escambia County Democratic Environmental Caucus of Florida
Extinction Rebellion New Orleans
Extinction Rebellion San Francisco Bay Area
Fairmont Peace Group
Family Farm Defenders
Fenceline Watch
First Presbyterian Church of Brooklyn
First Unitarian Universalist Church of New Orleans
Five Calls Civic Action
Florida Student Power Network
Food & Water Watch
Food Shift
Forest Unlimited
Fossil Free California
Fossil Fuel Divest Harvard
Fox Valley Citizens for Peace & Justice
FrackBusters New York
FracTracker Alliance
Franciscan Action Network
FreshWater Accountability Project
Fridays for Future USA
Friends of Buckingham
Friends of the Earth U.S.
Fuerza Mundial
Genesis Farm
Global Justice Ecology Project
Global Witness
Golden Ponds Farm
Grassroots Environmental Education
Grassroots Global Justice Alliance
Great Egg Harbor Watershed Association
Great Old Broads for Wilderness
Great Plains Action Society
Greater Grand Rapids NAACP
Greater New Orleans Housing Alliance
Greater New Orleans Interfaith Climate Coalition
Green Education & Legal Fund
Green New Deal Virginia
Green Newton
Green Retirement

Green State Solutions
Greenaction for Health and Environmental Justice
GreenARMY
GreenLatinos
Greenpeace USA
GreenRoots
Greenvest
Gulf Coast Center for Law & Policy
Haiti Cholera Research Funding Foundation USA
Harambee House
Harvard Solar Gardens
Healthy Gulf
Heirs To Our Oceans
Homewise Realty
Hudson River Sloop Clearwater
Idle No More SoCal
In the Shadow of the Wolf
Indian Point Safe Energy Coalition
Indigenous Environmental Network
Indivisible CA-43
Indivisible Pittsfield
Inland Ocean Coalition
INOCHI / Women for Safe Energy
Institute for Agriculture and Trade Policy
Institute for Policy Studies Climate Policy Program
Interfaith Council for Peace & Justice
International Indigenous Youth Council Los Angeles
Iowa Citizens for Community Improvement
Ironbound Community Corporation
John Muir Project
Justice & Beyond
Klamath Forest Alliance
KyotoUSA
LaPlaca & Associates
Living Rivers
Local Environmental Action Demanded Agency
Long Beach 350
Long Island Progressive Coalition
Longmeadow Pipeline Awareness Group
Los Padres ForestWatch
Louisiana Bucket Brigade
Louisiana League of Conscious Voters
Lower 9th Ward Neighborhood Watch
Lynn Canal Conservation
Manhattan Project for a Nuclear-Free World
Maryland Legislative Coalition

Mass Peace Action
Massachusetts Forest Watch
Maternal & Child Health Access
Metro New York Catholic Climate Movement
Michigan Alliance for Justice in Climate
Michigan Environmental Justice Coalition
Michigan Interfaith Power & Light
Mid-Missouri Peaceworks
Milwaukee Riverkeeper
Mission Blue
Moral ReSources
Mothers Out Front
Mothers Out Front Tompkins
Movement Rights
MoveOn.org Hoboken
Nassau Hiking & Outdoor Club
Nature Rhythms
Network in Solidarity with the People of Guatemala
Nevada Nuclear Waste Task Force
New Energy Economy
New Jersey State Industrial Union Council
New Mexico Environmental Law Center
New York / New Jersey Environmental Watch
New York Climate Action Group
New York Lawyers for the Public Interest
Ní Btháska Stand Collective
Nobody Leaves Mid-Hudson
North American Water Office
North Bronx Racial Justice
North Carolina Council of Churches
North Carolina Interfaith Power & Light
North Country Earth Action
North Range Concerned Citizens
Northern Michigan Environmental Action Council
Northridge Indivisible
No Waste Louisiana
Nuclear Age Peace Foundation
Nuclear Information & Resource Service
Nuclear Watch South
NY-16 Indivisible
NYC Environmental Justice Alliance
Occupy Bergen County
Ohio Valley Environmental Coalition
Oil & Gas Action Network
On Behalf of Planet Earth
Organized Uplifting Resources & Strategies

Our Climate Education Fund
Our Place in the World: A Journal of Ecosocialism
Our Revolution Minnesota
Our Santa Fe River
Partnership for Policy Integrity
Pax Christi USA New Orleans
Peace Action Wisconsin
Peak Plastic Foundation
Peninsula Interfaith Climate Action
People Over Petro Coalition
People's Solar Energy Fund
People's Party
Peoples Climate Movement New York
Physicians for Social Responsibility Arizona
Physicians for Social Responsibility Iowa
Physicians for Social Responsibility Pennsylvania
Pipe Line Awareness Network for the Northeast
Plastic Free Delaware
Plastic Pollution Coalition
PlasticFreeRestaurants.org
Plymouth Friends for Clean Water
Post Carbon Institute
Powder River Basin Resource Council
Power Past Fracked Gas
Power Shift Network
Presentation Sisters
Preserve Montgomery County Virginia
Progressive Democrats of America
Proposition One Campaign
Public Citizen
Public Goods Institute
Publish What You Pay United States
Pueblo Action Alliance
Rachel Carson Council
Rainforest Action Network
Rapid Shift Network
RedTailed Hawk Collective
Redwood Justice Fund/ Prison Radio
Renewable Energy Long Island
Resistance Action Tuesdays & Thursdays Pack
Resource Renewal Institute
RESTORE: The North Woods
Rio Grande Valley Great Old Broads for Wilderness
RISE St. James
River Guardian Foundation
River Valley Organizing

Riverdale Jewish Earth Alliance
RootsAction
Safe Energy Rights Group
San Luis Obispo Mothers for Peace
Sane Energy Project
Sanford-Oquaga Area Concerned Citizens
Santa Barbara Standing Rock Coalition
Santa Cruz Climate Action Network
Save Our Illinois Land
Save RGV from LNG
Save the Frogs!
Science & Environmental Health Network
Sequoia ForestKeeper
Seven Circles Foundation
Shenandoah Energy Services
Sierra Club Delta Chapter
Sisters of Charity of Nazareth Congregational Leadership
Sisters of Charity of Nazareth Western Province Leadership
Sisters of Charity of New York
Sisters of Saint Dominic of Blauvelt
Snake River Alliance
Socially Responsible Agriculture Project
Society of Native Nations
Solidarity Info Service
Sonoma County Climate Activist Network
South Shore Audubon Society
Southeast Faith Leaders Network
SouthWings
Spirit of the Sun
Spottswoode Winery
Springfield Climate Justice Coalition
Stop Fracking Long Beach
Stop SPOT & Texas Gulflink: Save Our Gulf Coast
Stop the Algonquin Pipeline Expansion
Sullivan Alliance for Sustainable Development
Sunflower Alliance
Sunrise Knoxville
Sunrise Movement Baltimore
Sunrise Movement New Orleans
Sustainable Belmont
Sustainable Medina County
Syracuse Cultural Workers
Texas Campaign for the Environment
Texas Environmental Justice Advocacy Services
Texas Grassroots Alliance
The Borneo Project

The Climate Center
The Climate Mobilization
The Forest Foundation
The Freedom BLOC
The Future Left
The Green House Connection Center
The Last Beach Cleanup
The Last Plastic Straw
The Lilies Project
The River Project
The Wei
Three Mile Island Alert
Toledo Coalition for Safe Energy
Transition Sebastopol
Tucson Climate Action Network
Turtle Island Restoration Network
Unitarian Universalist Congregation of Binghamton Green Sanctuary
Unitarian Universalist Mass Action
Unitarian Universalists for a Just Economic Community
Unite North Metro Denver
United Church of Christ Environmental Justice Ministry
Utah Valley Earth Forum
Valley Watch
Verde
Veterans For Peace Climate Crisis & Militarism Project
Wall of Women
Wasatch Clean Air Coalition
Washington Physicians for Social Responsibility
Washtenaw350
Water and Air Team Charlevoix
Waterspirit
Wendell State Forest Alliance
West Dryden Residents Against Pipeline
Western Organization of Resource Councils
Western Rural + Plains States Project
Western Watersheds Project
White Rabbit Grove RDNA
Wild Nature Institute
WildEarth Guardians
Women Watch Afrika
Women's Earth and Climate Action Network
Working Families Joliet
Young Democrats of America Environmental Caucus
Youth United for Climate Crisis Action
Youth Vs. Apocalypse
Zero Hour