NWF Carbon Management Policy



Louisiana Infrastructure. Photo by Emily Clarke

Carbon Management and NWF

he mission and work of the National Wildlife Federation (NWF) is to ensure that people, wildlife, and ecosystems thrive despite accelerating climate and biodiversity crises. Effectively managing carbon is essential to NWF's mission, and our NGO, government partners, and the public rely on us to advocate for climate policies that sustain both humans and wildlife, and create more responsible industry practices.

In climate policy conversations, NWF leads with conservation principles and the importance of including local community voices. NWF works to ensure the mission and values of the Federation are not just represented, but incorporated into industry discussions, legislative frameworks, agencies' policies, and projects.



The Challenge

lobal climate change is a human-made existential threat to all life on earth that humanity must quickly solve. Given this urgency, NWF believes that all feasible proven and promising measures need to be considered to achieve deep and scalable greenhouse gas (GHG) reductions across all economic sectors to preserve habitat and species, while limiting economic disruption. It is also incumbent upon NWF to ensure that the burdens resulting from climate change and

climate remediation solutions do not continue to fall on our most vulnerable communities, both geographic and demographic, and that those most at risk from climate change impacts be strategically and proactively involved in determining

which climate measures are best for them.

As the second largest emitter of GHGs after China, the US released about 5.8 billion tons of GHGs in 2019. According to the US Environmental Protection Agency (US EPA) CO² emissions by US economic sector are: Transportation, Electric Power Generation, Industry, Residential & Commercial Buildings, and Non- Fossil Combustion. **See** figure below.

NWF supports solutions that reduce CO2 and other

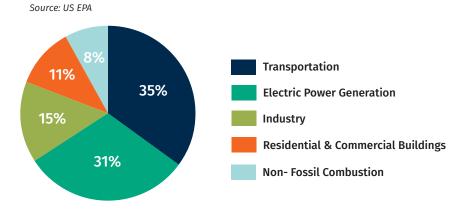
GHGs for all sectors, particularly in the United States.

Within the industrial sector, NWF analyzes and advocates for varied solutions such as fuel-switching, increased efficiency, increased use of renewable energy sources, and carbon capture, use, storage, and removal for unavoidable and residual emissions. These industrial sector strategies are not exclusive of other strategies we advance to curb climate change, such as natural carbon sequestration or phasing out fossil fuel-based power generation and replacing it with responsibly-sited renewable energy.



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CO2 emissions by US economic sector



Steel and cement high-heat and fossil-fuel reliant production processes are responsible for 75 percent of their direct emissions, regardless of fuel source. The current state of low- and zero-emission technology and energy resources leave heavy industry with few cost-effective and scalable options for reducing GHG emissions to desirable levels. NWF strongly supports the use of nature-based strategies to minimize atmospheric CO² and buffer against impacts, but acknowledges they are not sufficient for the scale of emissions reductions needed.

Over decades, NWF has adopted affiliate policy resolutions on reducing climate-changing emissions from multiple sectors, and supporting the IPCC's goals to halve emissions by 2030 and realize net-zero emissions by 2050 through a supportive transition away from fossil fuels. Affiliates have also passed resolutions that support curbing other pollution and harmful activities in the industrial sector, e.g., on mining, manufacturing of chemicals like PFAS and PCBs, fracking, logging and agriculture, commercial shipping, brownfields cleanup, and abandoned oil/gas well reclamation.

NWF also acknowledges that atmospheric concentrations of CO² are already exceeding our planet's ability to absorb and neutralize their warming effects, meaning that active carbon removal strategies such as direct air capture should be explored as part of total efforts to achieve the IPCC goals.

Call to Action

Effective carbon management requires accommodation of continued but diminishing fossil-fueled industrial activity by both developed and developing economies, while not adversely impacting the health and well-being of already vulnerable communities and developing nations. With that, consideration of a variety of approaches will be crucial, including protecting and enhancing natural carbon sinks, and considering technologies for carbon capture and removal.

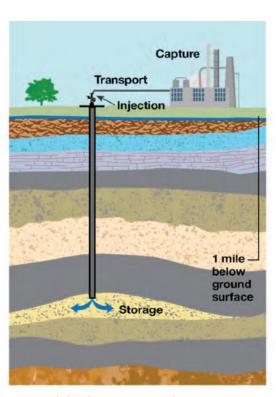
The objectives of these actions are:

1) Eliminating/reducing new emissions (near-term). Reducing industrial emissions at their source by improving efficiency and electrifying key processes, transitioning to renewable and zero-carbon energy where possible, and reusing or capturing and storing unavoidable or residual carbon emissions; and

2) Eliminating existing atmospheric gasses (long-term).

Confronting the build-up of historic legacy emissions in the atmosphere through safe carbon removal technology and technology-enhanced nature-based practices that supplement natural carbon sinks.

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Class VI injection well. Graphic by U.S. Environmental Protection Agency



EPA visits Louisiana communities. Photo by Eric Vance, US EPA

Importance for NWF

NWF's role in carbon management is to shape policy and industry trends by convening, listening to, learning from, and educating stakeholders to better represent climate, conservation, and environmental justice priorities in ways that reflect the Federation's values and mission.

The role of NWF in carbon management is explained further in the context of the following areas: Policy advocacy that reflects 1) wildlife conservation, 2) climate change solutions, 3) and environmental justice and equity. **See figure below.**

NWF Carbon Management Role



In supporting these principles, NWF believes that carbon management that involves captured emissions will require extensive safety, monitoring, and reporting protocols to ensure overall benefit and to reduce the chances of dangerous and concentrated releases of CO². Any deployment of carbon capture and storage technologies and practices, especially high concentrations of stored GHGs, must include consideration of potentially impacted communities, working lands, and sensitive habitats and ecosystems.