



**US Senate Committee on Energy and Natural Resources hearing on
“Shale Development: Best Practices and Environmental Concerns”**

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Draft Statement**

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There are serious environmental issues with shale gas and oil exploration, production and use. There are no “best practices” that can fully address the environmental and climate impacts of shale development. Strong regulatory standards can mitigate some of these harmful impacts and issues; however, the Sierra Club is advocating that the nation move beyond natural gas. Best available science shows even with the best controls and requirements in place and enforced, continued reliance on natural gas puts us on climate trajectory towards disaster. In environmental and climate terms - natural gas is a gangplank, not a bridge.

Although no amount of regulation will make fracking safe, nor acceptable, we must establish strong federal regulations to help assure that the public, our communities, and our nation’s air, water and wildlands are safer. Fundamental environmental protections are essential at the federal level to ensure that shale oil and gas development does not take place at an unacceptable cost to our communities. Establishing minimum federal requirements is particularly important given the exemption of oil and gas drilling from a range of basic federal environmental protections, such as the Safe Drinking Water Act and Clean Water Act.

The threats to the environment from shale oil and gas operations are wide ranging. The climate impact of fugitive methane leakage, combined with emissions at the burn point, mean that increased use of natural gas will lead us to unacceptable levels of climate disruption even if the most optimistic estimates of leakage rates are true.

We are concerned about the environmental risks of shale development that exist from the cradle to the grave -- including initial seismic investigations, to the construction of roads and wellpads, drilling, fracking and other well stimulation methods, to production, processing, waste storage and disposal, pipelines, trucking, site reclamation, plugging, and abandonment. Along that entire chain of shale development there are dozens of potential sources of toxic air and water pollution, climate disruption pollution, and land and

habitat destruction. There are also serious economic impacts to landowners and important parts of the economy -- including tourism, agriculture and outdoor recreation.

The Federal Government has an opportunity to lead and serve the public good by placing environmental protection, public health and climate disruption at the forefront of the fracking debate. We must close the federal exemptions for the oil and gas industry. We must finalize a BLM rule that requires rigorous protections, such as full public disclosure, required baseline testing and a ban on the use of diesel fuel and open pits for wastewater storage. We have yet to assess and understand the comprehensive environmental and economic impact of LNG exports, which is essential before any final authorizations are granted. Congress must pass legislation such as the FRAC Act, the BREATHE Act and the FRESHER Act, all of which have been introduced in the House. This committee and the Senate should ensure that the resources are available to our federal agencies to conduct research that's needed to assess the climate and environmental damage already done.

Carbon dioxide concentrations in the atmosphere have surpassed the 400 ppm for the first time in human history. Concentrations of methane, a far more potent but shorter lived greenhouse gas, are above 1800 ppm. Unless greenhouse gasses fall sharply and quickly -- we are creating a world unlike any our civilization was designed to withstand. We must transform our energy system, leaving the vast bulk of known oil, coal and natural gas reserves in the ground, rather than in our atmosphere. This task, in turn, requires great political will and sustained investments in zero-carbon energy. We must start immediately.