

The oil industry is enormous – something like 2-3% of global GDP. Individual firms like ExxonMobil earn tens of billions of dollars each quarter. Controlling climate change will mean drastic curtailment in the coming decades of the industry's major products. There's no way that the industry will accept this lying down, and it's a formidable opponent. To be successful, we will need a combination of strategies, aside from the rightness of our cause. There's no doubt that there will be major battles with the industry. The question is only whether we can strengthen the forces on our side or reduce the stakes for the industry now and then. Here are some strategies of both types.

1. **Expand transparency.** Most obviously, everything that undermines the political clout of oil companies is good. That means more investigations of how they exercise political influence and of their manipulation of public opinion, such as the state of New York has already begun. Other activities, such as the efforts of activist shareholders, are also desirable.
2. **Adapt strategies from the coal realm.** The decline of the coal industry isn't just due to cheaper alternatives. It is also due to a concerted effort by regulators and environmental groups to address the environmental harms caused by the industry. We need tighter regulation of oil company activities including drilling, refining, transportation and storage. Federal, state, and local efforts are all needed.
3. **Find common ground where possible.** Despite the basic conflict between oil and climate stability, there are some areas where interests may coincide, such as decreasing methane leaks and reducing CO<sub>2</sub> from industry operations. If exports of natural gas also serve to head off new coal capacity in China and India, that might also be a plus. It would be worth putting some real government money into carbon capture and sequestration (CCS). The oil companies are ideally situated for the storage part of CCS. In addition, CCS might allow natural gas plants to stay in use.
4. **Nurture new technologies.** The cheaper we can make electric vehicles, biofuels, and other substitutes for oil, the more readily these will take hold. This will require much greater funding for research and development to improve the relevant technologies.
5. **Eliminate subsidies for oil.** The oil and gas industry have long benefitted from implicit subsidies. It may be possible to fight these, including alliances with small-government and deficit-hawk conservatives. Oil and gas make enough money on their own without benefitting from government giveaways. They shouldn't get cheap access to federal lands or special tax breaks.
6. **Cultivate business alliances.** Utilities have a strong interest in expanding the use of electric vehicles. So do renewable energy companies who will meet much of the new power demand. Car manufacturers also seem to think EVs will be future money-makers. Anything that makes these industries stronger provides a counterweight to oil

industry influence.

7. **Recognize the interests of oil states.** Alaska, the Gulf States, and others including California derive large economic benefits from oil and gas, including tax revenues and jobs. We need to start thinking of how to cushion those losses. We shouldn't wait until people are already losing jobs to design retraining and placement programs. Doing so isn't only good politics, it's also the right thing to do. It's unrealistic to think we can make everyone a winner during the carbon transition, but we can at least try to keep them from losing so badly.
8. **Support political reforms.** Anything that would reduce the role of money in politics will soften the political clout of the oil industry. So will general ethics and transparency laws. The oil industry is the paradigm special interest. Anything that reduces special interest influence and empowers the general public also helps with climate change.
9. **Keep it in the ground.** The oil industry gets access to the oil and gas on federal lands at below-market prices. The government should eliminate industry access to public lands as much as possible, including Alaska National Wildlife Refuge and offshore waters.
10. **Encourage biofuels.** Biofuels aren't likely to be the answer to our need to decarbonize the transportation sector. But they could provide some much-needed help, especially if efforts to use cellulose and algae as feedstocks pan out. And selling more biofuels means selling less petroleum, shaving away the industry's financial heft.
11. **Expose oil's international entanglements.** Big Oil has always had links with repressive, corrupt regimes. Big Oil has always had close ties with autocrats, and they've always meddled in international politics. Those won't particularly endear them to the American public. We need to start investigating and publicizing those links. And speaking of geopolitical factors, we also need to start some serious investigations of the sovereign wealth funds of the oil powers. Those people are not necessarily on our side.
12. **Subsidize the industry's transition.** Although in general I'm opposed to subsidizing the industry, it may be worthwhile to provide incentives for the industry to invest more heavily in fields outside its core business. The reason is once again to diminish, even if only a little, the industry's incentive to fight the transformation of the U.S. energy system.

Transforming our energy system, especially transportation, is going involve major political struggles. Those should be front and central in devising our strategies, not an afterthought.