### **MEMORANDUM**

TO: University of Denver Task Force on Divestment from Fossil Fuel Stocks

FROM: Frank N Laird

DATE: August 8, 2016

RE: Divestment from fossil fuel firms

# **Executive Summary**

Divestment advocates put forth several different rationales for their case.

- 1. Fossil fuel stocks are doomed to go down as a response to climate change and so will lower the returns to university investments.
- 2. Divestment harms fossil fuel firms and so impedes their ability to produce fossil fuels, which will lower greenhouse gas emissions.
- 3. Divestment delegitimates fossil fuel firms, making it easier for governments to impose restrictions on them.
- 4. Universities should not invest in firms that are based on an unethical activity.

Activists, scholars, and journalists debate each of these rationales. This memo puts those debates into a larger context. Divestment as a climate strategy implies an inaccurate picture of the nature of the climate problem and so diverts the attention and resources of activists away from creating alternatives to fossil fuels, the issue that really matters.

- 1. The global oil industry is not dominated by investor-owned firms but rather by nationally-owned firms, from which universities cannot divest because they cannot invest in them in the first place.
- 2. Demand for energy services drives the consumption of fossil fuels. Production follows demand, not the other way around.
- 3. Demand for energy is global and the increases in demand come from the rapidly-growing developing economies. The only thing that will dramatically curtail that demand is the failure of the development process in those countries, an outcome would condemn billions of people to continued poverty. If climate activists and policy makers want to reduce fossil fuel use they must create better alternatives

I elaborate all these points below.

## Is Divesting from Fossil Fuel Stocks Really Green?

When the fossil fuel divestment movement started on U.S. university campuses, I thought that it would have no practical effects on energy use but might have good symbolic effects. I have since revised that view; I still think it will have no practical results but now think that the symbolic messages that it sends are counterproductive.

Symbolic acts convey a narrative, and the narrative that comes out of university endowment divestment activism inaccurately depicts the nature of the problem of fossil fuel consumption and, as a result, promotes a simplistic and misleading view of what it will take to reduce that consumption. Less charitably, it allows people who enjoy a high-energy-consumption lifestyle to feel good about their contribution to reducing that consumption without either making any changes to how they live or venturing into the technologically and socially difficult tasks of changing the immense existing energy systems.

# Symbols and Narratives

The symbolic act of divestment promotes an inaccurate narrative, one that says that investor-owned fossil fuel companies insist on producing their fuels, which leads to burning those fuels, which leads to climate change. Since climate change will cause immense hardship for billions of people, investors of good conscience must avoid firms that produce fossil fuels.

Most assuredly, burning fossil fuels leads to climate change, but the rest of that narrative leaves out key parts of the story, and those omitted parts present a different picture. While the divestment movement targets fossil fuels in general, its advocates usually toss out the names of oil companies when giving examples of their villains, so consider that industry. What is left out?

First, investor-owned firms no longer dominate the oil industry. Every year *Petroleum Intelligence Weekly* publishes its list of the top 50 firms, noting which ones are owned by governments and which are private, i.e. investor-owned. Only 4 of the top 10 and 6 of the top 20 are private. The rest are either wholly owned by their respective governments or, in a few cases, those governments own a controlling share. Saudi Aramco leads the list, as it has for years, and you have to get down to number four before ExxonMobil shows up. The divestment movement targets the investor-owned firms because those are the only firms that divestment can target. But they are not the whole, or even largest, part of the story. The state-owned firms, which have shown no particular environmental sensitivity, will carry on selling their oil no matter what happens to the private firms.

<sup>&</sup>lt;sup>1</sup> "PIW's Top 50: How the Firms Stack Up," Petroleum Intelligence Weekly, November 16, 2015, Supplement.

Second, all these firms are producing oil because they think customers will buy it. They do not like producing more oil than the market demands, though they sometimes do produce a surplus because their forecasts of future demand are too high or because all firms, especially the nationally-owned firms, are now chasing market share. As investor-owned oil production has surged in the United States, nationally-owned firms in other countries have not reduced their output to keep prices up. All oil companies, government-owned and private, currently pay a steep price for over-producing oil. The price of crude oil has dropped by more than a factor of three since the summer of 2014, causing global revenue losses to those firms in the hundreds of billions of dollars.<sup>2</sup>

Third, the demand that drives production comes from more than the United States. The growth in demand over the last several years has taken place almost exclusively in the rapidly-growing developing countries. Oil consumption in the United States, France, Germany, and the United Kingdom declined between 2004 and 2014 while it rose in places like China, India, and Brazil.<sup>3</sup> This result is hardly surprising. Many developing countries have been pushing hard to grow their economies, and increased energy consumption is both cause and consequence of their growth. If the investor-owned oil companies cannot meet that growing demand, the nationally-owned firms will do so.

Finally, people in wealthy industrial countries have no moral basis for telling the developing countries to curtail their demand for oil or other modern energy services. Per capita energy consumption in China is one-third that of the United States, while Brazil's is less than one-fourth, and India's is less than one-tenth.<sup>4</sup> All those countries, and many more, want to grow their economies, and that will entail increasing energy consumption. They have no interest in lectures about the importance of leaving oil underground by people in wealthy, high-energy-consumption countries.

The details for natural gas and coal differ from oil. Natural gas consumption has increased in the United States, displacing coal, while coal consumption has increased in some other countries. But these variations should not obscure the basic story. Demand for fossil fuels has mostly plateaued in the wealthy industrial countries, is rising in the developing world, and a set of global, mostly government-owned, firms are eager to supply the fuels to satisfy that demand. That is the important narrative, and university divestment is just a diversion, something that distracts activists from doing things that could make a real difference.

<sup>&</sup>lt;sup>2</sup> For data on oil prices, see Energy Information Administration, Petroleum data, available at http://www.eia.gov/petroleum/data.cfm#prices.

<sup>&</sup>lt;sup>3</sup> "BP Statistical Review of World Energy," (June 2015), p. 9. Available from <u>bp.com/statisticalreview</u>.

<sup>&</sup>lt;sup>4</sup> International Energy Agency, *Key World Energy Statistics 2015*, (Paris: OECD). Energy Indicators Table, pp. 48-57. Available from www.iea.org/statistics/ accessed on February 21, 2016.

It is easy to understand the desire to punish the fossil fuel firms. They are huge, wealthy, and aggressive in promoting their interests. Their leadership sometimes behaves with breath-taking arrogance. During the horrendous 2010 oil leak in the Gulf of Mexico, the CEO of BP, the firm that owned the leaking well, took a break from overseeing the efforts to cap the well in order to watch his yacht during a big race in England, this after complaining about how the oil leak was making his life difficult. Some firms have funded climate-denial organizations that have done much to obscure the issues in the United States. But frustration and anger should not distract people from what really needs to be done.

If activists want the fossil fuel firms to sell less fuel, then they need to work for alternatives so people around the world will want to consume less fuel. Nothing harms fossil fuel firms like reduced demand. The most obvious thing activists can do, therefore, is ask themselves how serious they are about reducing their own consumption.

But that individual approach is not enough. People cannot reduce their consumption too much in a society where consuming fossil fuels is required for core activities of modern life. That means that those who care about climate change need to get involved in finding and diffusing sources of energy that can take the place of fossil fuels and still enable people to live fulfilling lives. Below is just a sketch of where those changes are going to come from.

## Coal

Coal, the worst of the fossil fuels for climate change, is on the way out, which is very good news. Coal consumption in the United States has been declining since 2008, mostly due to competition from cheap natural gas. Coal consumption is declining across all the wealthy industrial countries. Coal consumption has increased dramatically in some developing countries, but even those countries are under pressure to reduce its use for purely local reasons. In addition to being a potent source of greenhouse gases, coal also produces a variety of local pollutants, creating severe air pollution problems in cities in China and India. Growing use of natural gas, hydro power, wind, solar, and nuclear will continue to push coal out of the electricity market, which consumes most coal. Many factors could inhibit this transition of the electricity system away from coal, but the broad outlines of the path forward are clear, and finding ways to navigate that path should offer many rewarding career opportunities in coming years.

Natural gas

<sup>&</sup>lt;sup>5</sup> Rachael Satter, "As Oil Spews in Gulf, BP Chief at UK Yacht Race," Associated Press Financial Wire, June19, 2010.

<sup>&</sup>lt;sup>6</sup> Energy Information Administration, Interactive Data Browser for Coal, Table 6.1. Accessed on February 23, 2016 at http://www.eia.gov/beta/MER/index.cfm?tbl=T06.01#/?f=M.

<sup>&</sup>lt;sup>7</sup> International Energy Agency, Coal Information (2015 Edition), Paris: OECD, 2015. Table 6a, p. IV.10.

Natural gas consumption in wealthy countries has increased in recent years, in contrast to coal and oil. It is cheap, relatively clean to burn, and versatile. At some point the same carbon-free energy sources that are displacing coal will displace natural gas from the electricity sector. Displacing it from other sectors will be a larger challenge. There are a few technologies for creating gas from biological materials, and labs around the world are investigating alternative feedstocks and conversion technologies to make gas production and use more benevolent. These technologies are farther from being competitive than are those that create electricity and will take longer to displace natural gas.

#### Oil

Oil will be the most difficult fossil fuel to replace. It is energy dense, produces a huge variety of products, and is easy to transport via truck, train, or pipeline. Efforts to replace it with biologically-based fuels, like ethanol made from corn or diesel made from palm oil, create their own environmental and social costs. Finding socially and environmentally acceptable ways to eliminate oil requires considerable research and much creative thought.

#### Land use

Though not as large as direct fossil fuel consumption, land use patterns affect greenhouse gas levels in the atmosphere and, more indirectly, our use of fossil fuels. The question of what to do here is not so difficult, but finding politically and socially feasible ways to plant more trees and pave fewer parking lots presents big challenges.

## Changing all parts of the system

Energy consumption involves more than just burning coal or installing a solar panel. A transition to sustainable energy implies changing the largest technological system on earth, one that has financial, social, and political components as well as technologies and fuels. Advocates of a new system will need to find ways to encourage and cope with changes in all those components.

## Think demand, not supply

There is a long history in the United States of trying to choke off the supply of harmful products that many people desire to have. Trying to outlaw alcohol only led to grief, including crime waves. The analogy is not exact, to be sure, but if you want to reduce the amount of fossil fuels that people burn, you need to do that by reducing demand. Give people another way to satisfy their needs, help them be more efficient, or encourage the spread of more sustainable environmental values. None of that starts with divestment.