AGAINST DIVESTMENT DILLON WEBER P. 36

## AGAINST DIVESTMENT



**A single shale** Derrick stands among the Marcellus, PA hills

Though I'm sure many students at Penn would be overjoyed, I personally hope to never see the headline "Penn divests" splashed across the front page of the Daily Pennsylvanian. At Penn, the recent movement on campus to divest from fossil fuels—including the student referendum—has drawn a lot of attention to the issue of anthropogenic climate change and the fossil fuel industry. While it is easy to argue against the burning of fossil fuels while safely ensconced in an industrialized nation, it should be abundantly clear that abandoning fossil fuels is simply not a realistic option for Penn, the United States, or the world. Therefore, any statement or symbolic gesture against fossil-fuels must be simply that—a gesture without any real impact. A decision by the University to divest would not help reduce emissions, but it could hurt students and the University.

The divestment issue comes down to just a few simple, undeniable realities: (1) Penn and the rest of the world are entirely dependent on burning carbon to maintain our current standards of living, (2) technology for green energy cannot effectively replace many of the functions fossil-fuels serve, and (3) divestment has the potential to harm Penn's endowment returns.

When it comes to arguing against the use of fossil fuels to power our society, the most immediate issue is that of demand. According to the U.S. Energy Information Administration (EIA), the world uses the energy equivalent of 260 million barrels of oil per day (525 quadrillion BTUs), the majority of which is energy supplied from fossil fuels like coal, oil, and natural gas.<sup>1</sup> Most major energy companies, as well as the EIA, predict demand to rise between 30% and 40% over the next 25 years.<sup>2,3</sup> This increase in

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demand is expected to come almost entirely from developing or underdeveloped nations and will be driven by economic growth. These nations cannot afford the less efficient, more expensive green energy technologies. Preventing the use of fossil fuels will deprive these nations and peoples of opportunities for industrialization and economic growth, arguably preventing them from attaining the same increased living standards that all currently developed economies enjoy.

The divestment movement has focused attention on the harm some fossil fuel companies have caused some communities, but they fail to note that industrialization and economic growth require massive amounts of energy at low costs which currently can only be provided by fossil fuels. Access to affordable energy sources like fossil fuels represent the best hope many nations have to lift their countries into the modern world and out of poverty.

However, let's imagine that a piece of newly developed technology could somehow compete with fossil fuels in terms of economics

<sup>&</sup>lt;sup>1</sup> US Energy Information Administration. (2012). International Energy Statistics: Total Primary Energy Consumption. Retrieved From: http://www.eia.gov/cfapps/ipdbproject/IEDIndex3.cfm?tid=44&pid=44&aid=2

<sup>&</sup>lt;sup>2</sup> US Energy Information Administration. (2015). Delivered energy consumption, Total World. Retrieved From http://www.eia.gov/oiaf/aeo/tablebrowser/#re-lease=IEO2014&subject=0-IEO2014&table=15-IEO2014&region=4-0&cases=Reference-2014\_03\_21

<sup>&</sup>lt;sup>3</sup> ExxonMobil. (2015). The Outlook for Energy: A View to 2040. Retrieved From http://cdn.exxonmobil.com/~/media/Reports/Outlook%20For%20Energy/2015/2015-Outlook-for-Energy\_print-resolution.pdf

	Total Primary Energy Consumption (Quadrillion Btu)										
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
United States	97.645	97.943	100.161	100.282	99.629	101.317	99.292	94.596	97.496	97.461	95.058
Brazil	8.554	8.641	8.994	9.278	9.501	10.014	10.474	10.391	11.462	11.893	12.095
United Kingdom	9.747	9.793	9.853	9.815	9.710	9.371	9.259	8.734	8.920	8.432	8.628
Russia	26.663	27.395	28.145	27.894	29.048	29.055	29.552	26.809	30.028	30.414	31.522
China	43.479	49.978	57.913	64.422	70.390	74.853	78.939	85.989	94.918	103.651	105.882
India	13.709	14.161	15.379	16.484	17.663	19.062	19.692	21.568	22.850	23.483	23.916

## and scale. One must wonder who could possibly have the capability and know-how to develop such technology. As the largest players in the energy industry, fossil fuel companies are actually in the best position, and have the largest incentive, to do so. The divestment movement frequently points out that any anti-CO2 legislation could very quickly turn many fossil fuel investments into stranded assets. Therefore, fossil fuel companies have huge incentives to continually develop new and cleaner ways to harvest energy from their sources. This has happened time and again, since the beginning of industrial use of fossil fuels.

## "Divestment does nothing to fight emissions or climate change beyond 'sending a message.""

Take, for example, the recent fall in CO2 emissions in the United States. Since 2007, overall CO2 emissions have declined 13%.<sup>4</sup> The dominant factor in this drop has been the switch from coal to natural gas for electricity generation, according to the Center for Climate and Energy solutions.<sup>5</sup> With the advent of horizontal drilling combined with hydraulic fracturing—a technological breakthrough driven by market incentives—companies have been able to economically produce massive amounts of natural gas domestically, driving the price down and encouraging power companies to switch to natural gas. Such examples make it clear, the solution to global climate change and greenhouse gas emissions will come from markets and economics, not from emotional arguments and feel-good policy movements.

Finally, the issue of divestment has the potential to harm Penn's endowment returns. It doesn't take a Wharton MBA to know that reducing investment options will lead to a less profitable portfolio. Divestment supporters counter this by arguing that fossil-fuel companies must, in the end, become unprofitable. Even if this were the case, the efficient market hypothesis tells us that these risks are already incorporated into the company's stock prices and returns, meaning even with the potential of a massive stranded-assets scenario fossil fuel companies can still be a sound investment for years to come.

Divestment does nothing to fight emissions or climate change beyond 'sending a message.' Rather than attempting to ascribe a political viewpoint to the entire student body and potentially harming investment returns on Penn's endowment, Penn students should focus on making immediate, direct, and effective change in their own lives by analyzing their lifestyles and finding where they can be more efficient. Divestment is not the way to go.

<sup>&</sup>lt;sup>4</sup> Crawford, M. & Peace, J. Center for Climate and Energy Solutions. (June 2013). Leveraging Natural Gas to Reduce Greenhouse Gas Emissions. Retrieved From: http://www. c2es.org/publications/leveraging-natural-gas-reduce-greenhouse-gas-emissions <sup>5</sup> Ibid