KEYSTONE PIPELINE IS A BAD IDEA

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Earth’s climate is changing, driven by increased atmospheric levels of carbon dioxide (CO2) derived from burning fossil fuels. Increased CO2 levels trap more heat, leading to the effects we are now experiencing.

Earth’s average temperature has increased about 1.4 degrees. This may seem small, but it is sufficient to have caused melting of the polar ice caps, accelerating sea level rise, and more frequent droughts, storms, and extreme weather. Scientists estimate that an increase of only another 2.2 degrees can occur safely. To stay below this limit, additional CO2 emissions must be held below 565 gigatons. The current CO2 emissions rate is 36 gigatons per year, suggesting that it will take only 15 years to reach the safe limit. Unfortunately, the rate is increasing, giving us even less time to act. Luckily, we have many options, including more efficient use of energy, shifting from coal to natural gas, developing CO2 capture and storage technology, investing in new generation nuclear power plants, and employing alternative energy systems, such as biofuels, wind and solar.

There are material benefits from taking action now, rather than later. A recent study published in Nature Climate Change found that an emissions policy that limits additional temperature rise to 2.2 degrees reduces impacts by 20 to 65 percent by 2100 relative to one that allows a 5.8-degree added rise. Furthermore, the more stringent policy delays impacts by several decades. Unfortunately, achieving it will not be easy.

Recently, the investment firm PricewaterhouseCoopers LLP estimated that a global decrease in CO2 emissions per unit of GDP of 5.1 percent per year is required to keep cumulative emissions within the safe limit if the reductions begin immediately. Such a reduction rate has never been achieved. Furthermore, the International Energy Agency has noted that if no action is taken by 2017, all the allowable CO2 emissions would be locked-in by energy infrastructure existing at that time. Consequently, some organizations, such as the World Bank, are pessimistic about our ability to keep our emissions within safe limits and point out that if we continue on the current path, global average temperatures will increase by an additional 5.8 degrees or more by the end of this century, with severe consequences.

Today, if the proven reserves of the fossil fuel industry were extracted and burned, the amount of CO2 emitted would far exceed the safe limit. In fact, the IEA estimates that no more than one third of proven reserves can be used if we hope to hold future temperature rises to less than 2.2 degrees. The picture is even bleaker if estimated reserves are considered. If we continue with business as usual, global average temperature will increase more than 12 degrees, severely testing human civilization.

We are complicit with the fossil fuel industry in resisting the needed change. Our unwillingness to reduce fossil fuel consumption drives the industry to constantly seek new resources. This sends it to more extreme environments and causes it to employ ever more extreme forms of extraction.

Canadian tar sands are one example of extreme energy. Their extraction requires clear cutting large tracts of boreal forest, strip mining those tracts to reach the tar sands, and using large amounts of energy to remove the usable components and prepare them for transport via pipeline. Currently, President Obama is considering approval of a permit to allow construction of the northern section of the Keystone XL pipeline to carry crude oil from the Canadian tar sands to a junction in Oklahoma from where it will flow to Texas for refining.
Keystone XL is a bad idea because of what it will carry. But more importantly, it represents a fork in the road. One path leads to more extraction and use of extreme fossil energy, causing ever more CO2 in the atmosphere, leading to ever more climate disruption. The other leads to a world in which we start the difficult but necessary process of decreasing our use of fossil fuels. Future generations will damn us if we choose the former path, but praise us if we choose the latter. Which will it be, Mr. President?

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