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Approval of the Keystone XL pipeline project — to deliver half a million barrels of oil from Alberta oilsands to the U.S. — has become the rallying cry of the environmental movement reminiscent of an era past.

The protests in front of the White House have become the signature cause célèbre and the willingness of celebrities such as Naomi Klein to be arrested is a measure of the passions. If the end goal is to reduce the global carbon footprint, however, all this betrays a failure of imagination hitched to a poor strategy.

Whether security of supply from a reliable northern neighbour trumps the concerns for the environment, or the other way around, will depend on a political calculus that only the U.S. president can make. Let us assume the sit-in strategy proves successful and President Barack Obama denies approval and no oil — at least from the proposed pipeline — flows. Are we then to conclude that the oil will not be produced and the atmosphere saved from the greenhouse gas emissions?



Actress Daryl Hannah takes part in a demonstration against the Keystone pipeline in front of the White House. (Aug. 30, 2011).

Evan Vucci/AP

The essential argument put forward by the environmental movement conflates the issue by emphasizing emissions at the production stage in Alberta. At the heart of the matter is consumption: the burden that we place on the environment as consumers as we drive and fly to our destinations and go about our lives with studied indifference.

Whether the oil is extracted from Norway, Nigeria, the Gulf of Mexico or the Middle East, the largest and the dominant contribution to the carbon footprint is at the consumption of the product itself. We have not witnessed a call by the environmental groups to ban delivery of oil either by tankers or pipelines from where it is produced to its final use. It is disingenuous to focus on the Alberta oilsands as the primary embodiment of “sin” against the environment.

The protesters also betray a lack of imagination. Emissions of greenhouse gases into the atmosphere and their potential impacts on the climate constitute an enormous challenge for humanity requiring an active but a more nuanced response. The compelling need is for a transition to a low-carbon energy economy. Such a transition is achievable but it will take anywhere from 50 to 70 years and electrification of energy use will be critical for this transition.

The primary strategy is to push U.S. coal generation out to the margin of the existing power system in an economical manner. This is within reach. The Canadian advantage is low-carbon electricity delivered through an east-west grid with interconnections at regional hubs as the backbone. Significant enhancement of electricity trade with the U.S. — increase by at least an order of magnitude from current levels — would be part of this picture.

There is a large potential for a number of Canadian provinces to benefit from development of a continent-wide power grid with targeted focus to reduce the burden on the environment through non-carbon-based sources of electricity generation. Over time, Canada’s clean energy advantage will prove to be a far more effective weapon than the yet-undeveloped and costly carbon capture and sequestration technologies. In addition, when coal generation utilities internalize the cost of regulations and they show up on corporate bottom lines, the incentives for trade will be there.

With a reduced carbon footprint from electricity generation, the power system is then well-positioned to displace gasoline through electric vehicles; another powerful trend that is underway for a consumer-friendly pathway to sustainable mobility. Electrification of mass transit within cities and high-speed maglev trains for intercity travel complement the broader strategy.

To displace the oil output from the Keystone XL pipeline — in terms of energy content — would require about 16 gigawatts of electric output achieved over three high voltage transmission lines. The technology exists and several projects on such a scale exist around the world (Canada, Quebec, Brazil and China).

Achievement of a low-carbon energy future is feasible but only if we can shift our gaze toward constructive engagement of policy-makers, business leaders and NGOs. A nonconfrontational businesslike approach does not ring in one's ears but it has a far better chance of success than walking around circles with tin cans on one's ankles.

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