

Hurricanes, hog manure and the dire need for carbon pricing

October 15 2018, by D.t. Cochrane



Credit: CC0 Public Domain

"Once-in-a-lifetime" hurricanes are striking the southern United States with alarming frequency. Hurricane Michael just slammed into the Florida panhandle, and the destructive power of Hurricane Florence is

still being felt, especially in North Carolina.

Florence caused the state's [toxic hog lagoons, where pig manure from enormous factory farms is stored](#), to breach or overflow.

Both the power of hurricanes and the concentration of hog lagoons in North Carolina are the result of more than a century of cheap fossil fuels. Carbon prices are an important way to address both problems.

[The severity of these storms is due to climate change](#). And [climate change is caused by harmful emissions from human activities](#), especially burning fossil fuels.

Similarly, the scale of pork production in North Carolina is due to fossil fuels. The pork produced in North Carolina is shipped across North America and [around the world](#). Low transportation [costs](#) make this economically feasible.

Pig waste becomes an [acute environmental threat in large amounts](#). Without cheap fossil fuels, pork production would not occur at this scale.

Fossil fuels have other costs

Technically, it's incorrect to say that fossil fuels have been cheap. Rather, they have been cheap for consumers. Events like Florence demonstrate just how expensive "cheap" fossil fuels actually are.

The rest of the world, and future generations, bear the costs of past and present fossil fuel use when they suffer the effects of [climate change](#). The [ongoing crisis](#) in the Carolinas is the bill coming due for decades of cheap pork.

Economists call this kind of cost an "externality." When others besides buyers and sellers bear a cost —or enjoy a benefit —from an exchange, there are externalities. We can think of externalities as subsidies.

The neighbours of hog waste cesspools, who endure [negative health effects](#) and who will live with the [long-term](#) consequences of [lagoon failures](#), are subsidizing pork consumption elsewhere in the world.

Many goods are subsidized by the externalization of costs onto others. And those in wealthy countries, who consume an unequal share of the world's goods, are the primary recipients of these subsidies.

Climate change is the largest single externality, created as a byproduct of fossil fuel use.

Externalities are the rule

Because markets are interconnected, if just one cost in producing a good is externalized, then every product for which that good is an input is under-priced.

Therefore, any production that relies on fossil fuels generates goods cheaper than they should be. This means negative externalities are likely present in every market.

The pervasive presence of externalities is a serious challenge to free market economic theory. That's why, historically, economists have downplayed externalities. However, the crisis of climate change may be forcing the profession to acknowledge the ubiquity of externalities.

One positive signal is the awarding of the 2018 Nobel Memorial Prize in Economics to William Nordhaus, who writes extensively about the economics of climate change.

Practically, it is impossible to account for every cost and every benefit because our systems of production and distribution are completely entangled in society.

For markets to work as economists theorize, we must be able to perfectly and completely price every good and every service, including the disposal of waste. Only under these impossible conditions will the beneficiaries of an exchange truly and properly compensate those that bear the costs.

Although we could never capture every cost, we can create better and worse prices.

Carbon prices are an important start

Nobel recipient Nordhaus is a vocal supporter of carbon prices as a market-based way of dealing with climate change. The recent turn against carbon prices has come primarily from politicians who profess support for free markets. What they're actually doing, however, is advocating for a continued carbon subsidy for fossil- [fuel](#) use.

Carbon pricing will not solve the crisis of climate change. However, it will change the way we use fossil fuels, with cascading effects of reduction, substitution and redistribution. Among those effects will be more production closer to home.

In the short term, carbon pricing will have negative effects in places like North Carolina, where intensive, large-scale hog production brings jobs and tax revenue.

However, these benefits caused the neighbours of hog lagoons to bear externalized costs to their health. Now, with lagoon contents flowing into rivers, many more people will bear incalculable costs.

Hurricanes like Michael and Florence are spectacles of destructive winds and torrential rains. Although the winds and rains pass, the disasters left in their paths continue to unfold.

In North Carolina, the release of hog waste was the clashing of two externalities — [climate](#) change and hog lagoons — and the people of the Carolinas will continue to pay the price for years to come.

Cheap [fossil fuels](#) contort the global economy in ways that have systematically harmed some and benefited others. Justice demands that those of us who have benefited take responsibility. Ending carbon subsidies is one necessary step in that direction.

This article is republished from [The Conversation](#) under a Creative Commons license. Read the [original article](#).

Provided by The Conversation

Citation: Hurricanes, hog manure and the dire need for carbon pricing (2018, October 15)
retrieved 25 April 2024 from
<https://phys.org/news/2018-10-hurricanes-hog-manure-dire-carbon.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--