

Benefits Are Benefits — Regardless of How They Are Legally Obtained

Over the past year, the Environmental Protection Agency has proposed actions that call into question whether it would fully account for the public health benefits of environmental regulations.

It started when EPA solicited public comment on proposals to exclude any studies whose underlying data are not in the public domain; that would target in particular the reports establishing the relationship between fine particulate pollution and mortality, an emerging field of concern that relies on health

data of individuals whose privacy needs to be protected. The agency also suggested generally weighing what it labeled as pollutant-reduction “co-benefits” differently from the benefits of “directly regulated” emissions. In this regard, EPA proposed to exclude consideration of co-benefits such as particulate reductions in the Mercury and Air Toxics Standards.

But whether a pollutant is directly regulated or not has no bearing on whether society is better off. Untargeted emissions may be reduced along with the substance of legal concern because it can be impossible to engineer control equipment for one kind without reducing others. The economist’s perspective reflects the fact that the atmospheric chemistry — a complex mix of emissions and local meteorology — does not distinguish between whether a pollutant is directly regulated or not. The epidemiology of pollutant exposure — characterized by the likelihood someone may fall ill or die prematurely — also does not depend on how a pollutant is regulated.

In evaluating the benefits of a proposed regulation, an economist integrates the insights from these other disciplines with an understanding of how much people are willing to pay to prevent premature mortality and improve

their health. We compare the public health outcomes expected under the proposed regulation with what would be expected in the absence of the rule, and monetize this difference.

Economists are able to calculate how much people are willing to pay to reduce their risk of dying in many market contexts. Examples are the wage premium required for working in a risky job or a price premium for a safer automobile. We then apply those findings to the context of regulation. In many Clean Air Act contexts the largest

In the mercury rule, “co-benefits” exceed improvements from “direct regulation”

benefits category is the reduction in premature mortality. For the MATS rule, aimed at reducing the toxin that mainly harms the nervous system but does not markedly increase mortality, that shows up principally in the co-benefits of reduced particulates.

In general, premature mortality benefits of a proposed rule, along with other public health benefits, are then compared to its costs. If the benefits exceed the costs, then the proposal would be expected to increase the economic well-being of our population. Economists often refer to this as having positive net *social* benefits, because the accounting of the benefits goes beyond simply looking at companies’ financial statements and consumer spending to include public health.

Consider this thought experiment in your own evaluation of the MATS rule. Suppose that you could go to a drug store to buy a bottle of Improved Air Quality that includes a mix of reduced mercury and fine particulate pollution. If the benefits you derive from the lower pollution exceed the price on the bottle, then you would buy it. It would not matter how the benefits might be divided between mercury and particulates — it’s the fact that the sum of the benefits across these categories



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exceeds the price that motivates you to make the purchase.

This isn’t some arcane hypothetical. In our everyday market transactions, we account for the full bundle of benefits when making a purchase decision. If you walk into a restaurant because you are hungry, would you only enjoy the benefits associated with the nutrition level of the food? After all, that’s why you are hungry. Or would you also calculate in the taste, aroma, ambience, and other characteristics of eating a well-presented meal? They may not be primary to meeting your physiological need, but these benefits would likely influence your decision of how much to pay.

Absent regulation, businesses in the private market don’t have to pay for the costs of the pollution they emit. This market failure justifies the public intervention that aims to internalize these costs so that firms have the incentive to reduce their pollution. When we evaluate a regulatory proposal, we aim to mimic how the private market would allocate resources if it were not suffering from the market failure.

In private markets, individuals and corporations account for the whole suite of benefits when deciding on a purchase or investment. Likewise, a rigorous benefit-cost analysis should incorporate all social improvements of the proposal and compare them to the full social costs. Failing to consider the full suite of benefits simply amounts to distorting analysis with the end objective of relaxing regulatory burdens.