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## The Reality of Carbon Taxes in the 21st Century

Reviewed by Shi-Ling Hsu

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## BOOK REVIEW

## The Reality of Carbon Taxes in the 21st Century

The Reality of Carbon Taxes in the 21st Century

by Janet E. Milne, Stefan Speck, Mikael Skou Andersen, and David G. Duff

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The Environmental Tax Policy Institute at Vermont Law School and the Vermont Journal of Environmental Law have assembled a collection of four essays on carbon taxation by four prominent environmental tax experts. For anyone interested in carbon taxation as a means for addressing climate change, this is an important collection, because it brings the reader up to date on carbon tax developments throughout the world. It can be challenging to obtain reliable, accurate descriptions and analysis of carbon tax regimes, and this collection fills that void. The four essays are reviewed in brief separately, and some general observations are added at the end about the volume as a whole.

Janet E. Milne, who spearheaded this effort, authored the lead piece "Carbon Taxes in the United States: The Context for the Future," a legal, political, and policy analysis of the grim history of environmental taxes and the apparently dim future of carbon taxes in the United States. Environmental taxes have never been acceptable in the tax-unfriendly United States, and it might seem odd to even have a chapter on U.S. carbon taxation, especially since the Obama administration seems committed to a cap-and-trade program.

However, given the position of the United States as the second-largest emitter of greenhouse gases, and as the only country capable of bringing China into global cooperation, it is vital to address what *might* happen in the United States. And dim as they are, the prospects of a U.S. carbon tax have never seemed better, with the union of such strange bedfellows such as Sen. Bob Corker, R-Tenn.; economist Joseph E. Stiglitz, winner of the Nobel Memorial Prize in Economic Sciences (2001) and chairman of President Clinton's Council of Economic Advisors; N. Gregory Mankiw, chairman of President George W. Bush's Council of Economic Advisors; and the decidedly left-wing environmental organization Friends of the Earth. Milne's article reviews carbon tax proposals that are apprehensively making their way into American political discourse, and explains how the United States has gotten to this point. Central to the way that carbon taxes are negatively received is the failed Clinton BTU tax, which seems to have chilled political talk about consumption-based energy taxes. Milne argues that "[t]he fate of the Clinton BTU tax need not necessarily ring the death knell for a federal carbon tax in the United States." A snarkier piece might have chastened those Clinton holdovers in the Obama administration for overlearning lessons from the BTU tax. Things are, as Milne reminds us, different this time around.

Stefan Speck's essay "The Design of Carbon and Broad-based Energy Taxes in European Countries" does for Europe what Milne's does for the United States, proficiently covering the much broader and deeper history of European environmental taxation. Europe's greater experiences and willingness to levy environmental and carbon taxes would seem to make for a happier story (if one is a carbon tax advocate), but there is a richer analysis that Speck provides on the considerable internal tensions within Europe over international competitiveness. Competitiveness concerns explain the absurdity of a German energy tax that, until 2007, exempted coal. Germany is certainly not alone. Other countries have a variety of tax rates that apply to a variety of industries, for reasons one can only guess at. Speck's otherwise excellent contribution

might have shed light on these apparent anomalies. Rent-seeking remains the bane of any attempt to price environmental externalities, and yet, with the complicated layers of regulation and taxation in Europe, some carveouts can be justified on the grounds that they avoid double and triple taxation. With energy and carbon dioxide taxes being levied on activities that are already regulated or taxed — for example, electricity consumption is already taxed in Denmark, regardless of the energy source - some countries may be legitimately interested in trying to ensure that the burden on coal-fired power plants is not duplicatively large. Speck's insights and knowledge of the political processes within Europe regarding the layers of energy and carbon taxation may help the reader understand how the myriad of tax rates and schemes came about.

Mikael Skou Andersen's "Environmental and Economic Implications of Taxing and Trading Carbon: Some European Experiences' delves into some of the policy rationales and theoretical debates over carbon taxes and carbon trading, and thus serves as a nice complement to Speck's piece. This contribution comes closest to what I would have liked to have seen (but was not the explicit intent of the collection): a normative argument in favor of carbon taxation. Andersen briefly reviews some of the work on the double dividend effect, the distributional consequences of taxation and revenue recycling, and some macroeconomic consequences, and analyzes the net tax burden on some energy intensive industries subject to taxation. Further, Andersen analyzes the tax burdens layered on top of the EU emissions trading system. The effect is a brief but informative look at some of the economic theory and effects of carbon taxation.

Finally, David G. Duff's "Carbon Taxation in British Columbia" reviews the only significant carbon tax instituted in North America, one that might serve as a model for other North American jurisdictions considering carbon taxation. Duff does his usual excellent job of explaining the British Columbia carbon tax in the context of the design issues and, importantly, gives the reader some sense of the political implications from the tax. Here, the story turns less happy, as the opposition party in British Columbia, the left-wing New Democratic Party (NDP), has campaigned against the carbon tax on the grounds that it "hurts the poor." This charge is patently false, because the revenue recycling mechanisms associated with the carbon tax actually impose a greater burden on emitting industries than on individuals, and a greater burden on affluent households than poorer ones. The depressing upshot of this, as Duff chronicles, is that the NDP gained considerable political ground by exploiting the North American tax phobia.

As a volume intended to provide a description of context in which carbon taxes are implemented and proposed, it was important and useful for the authors to discuss the many energy taxes and environmental taxes that have come before it. In understanding carbon taxes, however, one point would have been helpful to emphasize: Unlike many energy and environmental taxes, carbon taxes scale almost perfectly with the harm caused by carbon dioxide emissions. This is music to the ears of economists, who typically prescribe unitary taxes that approximate the marginal social damages of emissions. While the carbon tax is not a measure of marginal social damages (because we do not know what the marginal damages are), it is a very important economic advantage that carbon taxes punish emitters in direct proportion to their harm. In other words, the carbon tax accurately sorts carbon emitters by their social harm and, in so doing, sends price signals to encourage movements to lower-emitting activities. The Clinton BTU tax, by contrast, would have punished natural gas for being a more efficient energy source than coal. This makes the case for carbon taxes much more compelling than has been made for other failed environmental taxes, particularly in light of the seriousness of the climate change problem. Indeed, the authors could have tapped into the optimism of some carbon tax advocates, drawing out some of the merits of carbon taxes in the varied settings in which they write.

I would welcome a future volume from these and similarly expert authors of a critical analysis of carbon taxes, and the context in which they have been implemented. For example, the complexity of the European context may make a carbon tax more difficult to implement cleanly. This may explain, perhaps, the complexity of the Danish carbon tax, and the other attempts to layer a carbon tax on top of an already complicated regulatory architecture. But why did Sweden succeed in having a carbon tax freer of exemptions? Was it because Sweden adopted the tax so early? And what about North America? To those who dismiss the political reality of a carbon tax, and to those who think that a carbon tax would inevitably be hijacked by special interests bent on rent-seeking, the British Columbia example should make us reconsider. When a jurisdiction starts with nothing, as British Columbia did, is it easier to begin with a carbon tax? It may even be that the political economy of a U.S. carbon tax could be more favorable, because those who would be regulated under a cap-and-trade program might wish to spread the pain more broadly throughout the economy, as a carbon tax would.

In short, the brevity of this collection of essays precludes it from being a comprehensive treatment of carbon taxes. While the goal of this collection seems more modest, it successfully raises the question of the political economy and administrative feasibility of carbon taxes, important issues as we progress with climate change regulation. More importantly, this volume sets the factual stage for a future policy debate over carbon taxes, and future policymakers (and other policy wonks) will find this a valuable resource.