TEACHING AND LEARNING GUIDE

Teaching & learning guide for: Carbon pricing ethics

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1 | AUTHOR'S INTRODUCTION

There are a variety of actions that we must pursue to tackle climate change, perhaps the most critical challenge of our time. Some people are technological optimists who think that engineering solutions can save us; others are policy optimists who think that the right policy can do it. The correct answer is that we must try *many* different things—and many of those things have to go succeed *together*—to make the massive and urgent changes needed to prevent the worst climate impacts.

The primary purpose of this review is to survey the ethical and economic issues involved in contemporary climate policy solutions at a level that is accessible to undergraduates and philosophers with no background familiarity with these debates. The secondary purpose is to bring together many important sources from relevant disciplines. The review begins by dividing policy responses into three main categories: *command and control regulation* (which prohibit or set standards for levels of emissions), *carbon taxes* (which set a fixed cost per emissions unit), and *cap and trade* (which sets a maximum amount of emissions and allows the permits to emit to be bought or traded).

In order to answer which of these are practically or morally preferable, the review canvasses the moral, political, and economic literature for various arguments in favour and against these different positions, ultimately concluding that there are advantages of carbon taxes and cap and trade (jointly, *carbon pricing* policies) over command and control and that, between carbon taxes and cap and trade, both likely help, but carbon taxes may be better in practice.

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2 | AUTHOR RECOMMENDS

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Baranzini, A., van den Bergh, J. C. J. M., Carattini, S., Howarth, R. B., Padilla, E., & Roca, J. (2017). Carbon pricing in climate policy: Seven reasons, complementary instruments, and political economy considerations. *Wiley Interdisciplinary Reviews: Climate Change*, 8(4), e462. http://doi.org/10.1002/wcc.462

This review covers both the practical and political challenges of carbon pricing, while clearly explaining the advantages of adopting such policies.

Best, R., Burke, P. J., & Jotzo, F. (2020). Carbon pricing efficacy: Cross-country evidence. Environmental and Resource Economics, 77(1), 69–94. http://doi.org/10.1007/s10640-020-00436-x

This is the first cross-country evaluation of extant carbon pricing policies, showing that there is a small, but statistically significant reduction in the rate that emissions grow associated with higher carbon prices.

Caney, S. & Hepburn, C. (2011). Carbon trading: Unethical, unjust and ineffective? *Royal Institute of Philosophy* Supplement, 69, 201–234. http://doi.org/10.1017/S1358246111000282

This article introduces several early versions of the objections to various kinds of markets for carbon damages. It addresses them in an even-handed way, indicating which of these objections can be rebutted and which are more challenging.

Goodin, R. E. (1994). Selling environmental indulgences. *Kyklos*, 47(4), 573–596. https://doi.org/10.1111/j.1467-6435.1994.tb02067.x

This early article laid the tracks for many of the ensuing debates, drawing attention to many potentially problematic features of carbon markets.

Green, J. F. (2021). Does carbon pricing reduce emissions? A review of ex-post analyses. *Environmental Research Letters*, 16(4), 043004. http://doi.org/10.1088/1748-9326/abdae9

Since there are so many potential confounding factors in addressing carbon pricing policies, Jessica Green concludes that they are unlikely to actually help much, if at all.

Klenert, D., Mattauch, L., Combet, E., Edenhofer, O., Hepburn, C., Rafaty, R., & Stern, N. (2018). Making carbon pricing work for citizens. *Nature Climate Change*, 8(8), 669–677. http://doi.org/10.1038/s41558-018-0201-2

This piece discusses various morally relevant options for developing carbon pricing policies, and how uses of tax revenues can be used to enhance political feasibility.

Narassimhan, E., Gallagher, K. S., Koester, S., & Alejo, J. R. (2018). Carbon pricing in practice: A review of existing emissions trading systems. *Climate Policy*, 18(8), 967–991. http://doi.org/10.1080/14693062.2018.1467827

This policy piece surveys the actual implementation of cap and trade policies, suggesting that it is difficult to disentangle the effects of carbon pricing, but that we can try to show improvements in the policies and that we need to be clear about our intentions in order to assess them (also cf. Haites, 2018, http://doi.org/10.1080/14693062.2 018.1492897).

Yamazaki, A. (2017). Jobs and climate policy: Evidence from British Columbia's revenue-neutral carbon tax. Journal of Environmental Economics and Management, 83, 197–216. https://doi.org/10.1016/j.jeem.2017.03.003

This article shows that not only can a well-designed carbon tax reduce emissions relative to trend, but can also do so while not undermining competitiveness *and* boosting jobs through double dividends (using the carbon tax revenue to reduce other taxes like income tax).

3 | ONLINE MATERIALS

The World Bank Carbon Pricing Dashboard:

https://carbonpricingdashboard.worldbank.org/

The World Bank keeps an up to the minute dashboard of where in the world carbon pricing policies have been adopted and are expected to come online. You can select a country or region to see if it has a carbon pricing, what sectors it covers and even the price level. In my experience, students are often interested (and surprised!) to hear if they are covered by a carbon price.

Interview with Nobel Laureate Joseph Stiglitz and Lord Nicholas Stern: https://www.youtube.com/watch?v=C80LbP6Jlhc

An interview about their report, launched at the Intergovernmental Panel on Climate Change's 22nd meeting (COP22). The report found that carbon prices in the range of US\$40-80 per ton of carbon dioxide in 2020, rising to US\$50–100 by 2030, would be the lowest levels of carbon pricing consistent with the Paris Agreement targets.

4 | FOCUS QUESTIONS

- 1. How are carbon pricing policies supposed to dissuade emissions?
- 2. Are carbon pricing policies—carbon taxes and cap and trade—more justifiable or more effective than command and control legislation? Why or why not?
- 3. What are the most influential arguments offered against carbon taxes or cap and trade policies in political discourse? What are potential responses to these arguments?
- 4. Under which conditions are carbon pricing policies regressive? How might that depend on one's region? The type of policy? The use of revenue?
- 5. Should we think of emitting carbon dioxide as *generally* wrong or *marginally* wrong? How would the difference between these conceptions change our policy choices?

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