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## **Tomas Wilner**

Job Market Paper

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Last updated 3<sup>rd</sup> November, 2023

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**Economics** 

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Fields	Research: Environmental and Energy Economics, Industrial Organization Teaching: Environmental and Energy Economics, Industrial Organization, Econometrics				
Education	Ph.D., Economics, Northwestern University (antic Committee: Mar Reguant (Chair), Gaston Illanes, Robert Porter, Vivek Bhattach M.A., Economics, Northwestern University M.A., Economics, Universidad de Chile B.Sc.Eng., Industrial Engineering, Universidad de Chile				pated) 2024 rya 2021 2017 2015
Fellowships & Awards	Dissertation University Fellowship, Northwestern University Distinguished Teaching Assistant Award, Northwestern University University Fellowship, Northwestern University National Masters Degree Fellowship, Chilean Ministry of Education			-	2023-2024 2020-2021 2018-2023 2015-2017
Teaching Experience	Teaching Assistant, Northwestern University Industrial Organization (graduate), Energy Economics (undergrad), App (undergrad) Teaching Assistant, Universidad de Chile Econometrics (graduate), Statistics (undergrad), Finance II (undergrad)				2019–2023 conometrics 2013–2016 Marketing
Research Experience	Research Assistant, Profes Research Assistant, Profes Research Assistant, Profes Research Assistant, Profes Research Assistant, Profes	sor Mar Reguant, N sor Carlos Noton, I sor Juan Escobar, I	Iorthwestern Univer Jniversidad de Chile Jniversidad de Chile	rsity	2021-2023 2021 2017 2016 2015-2016
Other Experience	Summer Intern, Chilean Antitrust Agency				2016
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interventions" with Jingyuan Wang

Abstract: Natural gas has become a pivotal technology in the energy transition, as it can complement renewable generation at a lower emission rate compared to alternative fossil fuels. In countries with scarce natural gas reserves, firms might exhibit insufficient import levels relative to governmental preferences. In this paper, we study several policies designed to incentivize larger natural gas orders and examine their impact on long-term renewable entry. Our research is conducted in Chile, a notable player in the adoption of solar energy, which implemented a novel policy to encourage the procurement of natural gas. We find that, even though the policy displaces coal usage, it simultaneously increases natural gas imports to such an extent that it counterbalances its positive effects on emissions, with a

"Natural gas to complement solar intermittency: Long-run consequences of policy

net pollution cost of \$20 million per year. The removal of this policy would not only result in a short-term reduction in emissions but also stimulate increased solar energy adoption in the long run by 10%. Among the policies we examined, the implementation of a carbon price emerges as one of the best choices, as it elevates natural gas imports, lowers emissions in the short run by \$191 million annually, and maximizes solar energy entry in the long term by 54%.

## Working papers

## "Beyond the impossible: Steering consumers away from beef"

Abstract: The effect of meat consumption on the environment is well-documented, yet little is known about the effect of policies targeting environmentally harmful food choices. I build a structural model of the demand for meat which allows me to study consumer responses to three different policies: a 50% reduction of beef products on retail shelves, an environmental tax reflecting the environmental costs of food products, and advertisements for plant-based products that increase consumers' valuation of them. I also analyze the supply side to estimate how prices would change in equilibrium under these counterfactual scenarios. I find that imposing restrictions on beef products alone does not achieve a significant reduction in emissions. The consumer welfare loss is larger than the environmental gains, and its benefits can be easily matched with a small tax instead. Conversely, the tax and an increment on plant-based products' valuations prove to be more effective in reducing emissions. However, the burden of the tax policy is born disproportionately by underprivileged consumers. The environmental benefits of the tax come mainly from consumers switching to poultry and pork products. Therefore, a policy that subsidizes these types of meat products while taxing beef might achieve more progressive results.

Invited workshops

Berkeley/Sloan Summer School in Environmental and Energy Economics, University of California, Berkeley

2020

**Programming** 

Matlab, Python, Julia, Stata, R, QGIS (basic)

Languages

English (fluent), Spanish (native), Portuguese (basic)

References

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