

Sai Bravo Melgarejo | PhD Student

Université de Pau et Pays de l'Adour, E2S UPPA, TREE

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Research Fields

Industrial Organization, Environmental and Energy Economics.

Education

- 2021 (expected) **Ph.D in Economics**, *Université de Pau et Pays de l'Adour, E2S UPPA, TREE*, Pau, France
Advisor: Carole Haritchabalet
- 2018 **Master in Economics**, *Toulouse School of Economics*, Toulouse, France
Specialization in Markets and Organizations, Magna Cum Laude
- 2016 **Bachelor in Economics**, *Toulouse School of Economics*, Toulouse, France
Magna Cum Laude

Teaching Experience

- Spring 2021 Applied Microeconomics, *Université de Pau et Pays de l'Adour*, Undergraduate (L3)
- Spring 2020 Industrial Organization, *Université de Pau et Pays de l'Adour*, Undergraduate (L3)
- Fall 2019, Fall 2020 Microeconomics, *Université de Pau et Pays de l'Adour*, Undergraduate (L2)
- Fall 2017 Macroeconomics, *Toulouse School of Economics*, Undergraduate (L2)

Research

Working Paper

Certification of low-carbon hydrogen in the transport market with C. Harichabalet

This paper develops a theoretical framework to study the deployment of free-of-emissions green hydrogen in the transport sector. We consider a vertically related market with hydrogen producers upstream and fuel stations downstream. Production technologies differ in cost efficiency and carbon emissions. We show that when consumers have limited information about the hydrogen origin, no new green producers are able to enter the market. Producers can use vertical restraints to increase consumer's information but a social desirable outcome is never achieved without government intervention. A label for green hydrogen allows multiple production technologies to co-exist but it needs to be high enough to compensate producers and stations margins.

Work in Progress

Prosumers or Grid Storage? with C. Harichabalet

Private-Public management of hydrogen refueling stations

Professional Experience

- 2018 – Now **Associated PhD Student** at *Mines ParisTech* – Paris, France
Chair "The Economics of Natural Gas" – Research on Hydrogen Economics.
- Apr 2018 – Oct 2018 **Telecom Market Business Analyst Intern** at *Thales* – Toulouse, France
Techno-economic analysis of Telecom LEO projects supervised by Jean-Benoît Laithier.
- Nov 2017 – Mar 2018 **Research Assistant** at *Inrae* – Toulouse, France
Research Project «OBEDIS» supervised by Catarina Goulao (INRA & TSE).
- Apr 2017 – Sep 2017 **Research Assistant** at *LEREPS* – Toulouse, France
Research project «MONOIL» (ANR) supervised by Denis Requier-Desjardins (UT1).

Non-Academic Publications

- BSI Economics *Prosumers: a consequence of smart-grids deployment in electricity markets* (in french)
Technology challenges of the transport sector decarbonisation (in french)
Environmental and health stakes of meat consumption (in french)
- The TSEconomist *Is your internet service provider throttling you?*

Conferences and Seminars

- 2021 ADRES 2021 (Online)
- 2020 FAEE Student Workshop (Online)
 CATT Seminar, University of Pau and Pays de l'Adour, E2S UPPA

Research grants and awards

- 2020 Best student Research Paper in Energy Economics *French Association for Energy Economics*
- 2018 Three-year Ph.D. Scholarship. *Fondation Mines ParisTech – Chair «Economics of Natural Gas»*

Skills

- IT** Advanced: R, Stata, Wolfram Mathematica, LaTeX, Office
 Intermediate: Python (xml, pandas)
- Languages** Spanish (native), French (bilingual), English (CAE C1), Portuguese (A1)

Affiliations

BSI Economics, FAEE, EAERE, EARIE

References

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| Anna Creti Professor of Economics Paris-Dauphine University anna.creti@dauphine.psl.eu | Carole Haritchabalet Professor of Economics UPPA & TSE carole.harichabalet@univ-pau.fr | Estelle Malavolti Associate Professor ENAC & TSE estelle.malavolti@tse-fr.eu | Olivier Massol Associate Professor IFP School olivier.massol@ifpen.fr |
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