

Dr. Alejandro Nuñez-Jimenez

Sustainability and Technology Group
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 8092 Zurich, Switzerland
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RESEARCH FOCUS

I investigate how policies influence technological and economic change to advance the transition towards sustainable energy systems using quantitative models and multidisciplinary research.

h-index: 13

ORCID: [0000-0002-1505-9772](https://orcid.org/0000-0002-1505-9772)

Google Scholar: [Dr. Nuñez-Jimenez](#)

EMPLOYMENT

2024-present	Research Group Leader, ETH Zürich , Zurich, Switzerland - Research Group Leader within the Chair for Sustainability and Technology at the Department of Management, Technology and Economics (D-MTEC), - Principal Investigator of a Swiss National Science Foundation AMBIZIONE grant and a Swiss Federal Office of Energy EWG grant.
2022-present	Associate , Belfer Center for Science and International Affairs, Harvard University , Boston, US Environment and Natural Resources Program; Science, Technology, and Public Policy Program.
Jan-Mar, 2026	Visiting Scholar, University of Cambridge , Cambridge, the United Kingdom Centre for Environmental, Energy and Natural Resources Governance (C-EENRG) at the Department of Land Economy, Directed by Prof. Laura Diaz Anadon.
2022-2024	Senior Researcher and Lecturer, ETH Zürich , Zurich, Switzerland Lecturer at the Chair for Sustainability and Technology at D-MTEC.
2020-2022	Post-doctoral Research Fellow , Belfer Center for Science and International Affairs, Harvard University , Boston, US Environment and Natural Resources Program; Science, Technology, and Public Policy Program, working on energy technology innovation. Prof. John Holdren. Dir. Henry Lee.
2020-2022	Post-doctoral Research Associate, ETH Zürich , Zurich, Switzerland Chair for Sustainability and Technology at D-MTEC.
2016-2020	Research Associate, ETH Zürich , Zurich, Switzerland Chair for Sustainability and Technology at D-MTEC.
Aug-Oct, 2016	Research Assistant, ETH Zürich , Zurich, Switzerland Data collection and preparation for Prof. Ann-Kristin Zobel and Prof. Joern Hoppmann.
Jul-Aug, 2015	Solar Photovoltaics Business Development Analyst, First Solar, Inc. , Dubai, UAE Strategic market analysis for Senior Director of Business Development Matthew Merfert.
Feb-Aug, 2015	Research Assistant , Swiss Federal Institute of Technology in Lausanne (EPFL), Lausanne, Switzerland Data collection and preparation for Associate Prof. Anu Wadhwa.
Mar-Jun, 2014	Solar Photovoltaics System Engineer, Cleanergetic Seers Solutions , Madrid, Spain Preparation of commercial and technical offers for Managing Director Dr. Antonio Bautista.

EDUCATION

- 2016-2020 **Ph.D. in Management, Technology, and Economics, [ETH Zürich](#)**, Zurich, Switzerland
- Title: Energy policy for the transition: Designing policies for harnessing technological change.
 - Advisor: Prof. Volker Hoffmann, ETH Zürich.
 - Co-examiner: Prof. Kelly Sims Gallagher, Tufts University.
- 2014-2016 **M.Sc., Energy Management and Sustainability, [EPFL](#)**, Lausanne, Switzerland (First of Class)
- Thesis: The influence of bottlenecks on firms' collaboration patterns in innovation ecosystems: An empirical analysis of the solar photovoltaic industry.
 - Advisors: Prof. Matthias Finger (EPFL), Prof. Volker Hoffmann (ETH Zurich).
- 2010-2014 **B.Sc., Energy Engineering**, Technical University of Madrid ([UPM](#)), Madrid, Spain (with honors)
- Minor in Energy Use and Management (Best Academic Record)
 - Thesis: Scientific review and experimental setup for studying biosurfactants' influence on the formation and dissociation of oceanic methane clathrates.
 - Advisors: Prof. Juan Francisco Llamas Borraro, Prof. Ángel Vega Remesal.

TEACHING AND ADVISING

- 2022-present **PhD Advisor,**
Swiss Federal Institute of Technology in Zurich ([ETH Zürich](#))
- Paula Baumann, D-MTEC, ETH Zürich (PhD advisor) since 2025
 - Caterina Croci, D-MTEC, ETH Zürich (PhD advisor) since 2025
 - James Kneebone, D-MTEC, ETH Zürich (PhD advisor) since 2024
 - Inga-Marie Lahrsen, D-MAVT, ETH Zürich (second advisor) since 2023
 - Main advisor: Prof. André Bardow
- 2022-present **Lecturer of Second-cycle Courses (master's level),**
Swiss Federal Institute of Technology in Zurich ([ETH Zürich](#))
- 363-1115-00L Energy Innovation and Management ST2026
 - 363-1115-00L Energy Innovation and Management ST2025
 - 363-1115-00L Energy Innovation and Management ST2024
 - 363-0387-00L Corporate Sustainability FT2023
 - 363-0387-00L Corporate Sustainability FT2022
- 2022-2024 **Lecturer of Executive Training Courses,**
Swiss Federal Institute of Technology in Zurich ([ETH Zürich](#)), and University of St. Gallen
- Executive MBA (emba X), Sustainability module ST2024
 - Executive MBA (emba X), Sustainability module FT2023
 - Executive MBA (emba X), Sustainability module FT2022
- 2018-present **Master's Thesis Advisor,**
Swiss Federal Institute of Technology in Zurich ([ETH Zürich](#))
- Spring term 2026, **Leon Sistek**, "Mapping policy impacts on the German residential heating sector."
 - In collaboration with Dr. Georgios Mavromatidis, at Empa.
 - Spring term, 2026, **Tobias Lascho**, "Development of an automated calibration and validation tool for an agent-based model of clean energy technology adoption."
 - Semester project for the Master's in Energy Science and Technologies of ETH Zürich.
 - Spring term 2024, **Paul Fäth**, "Hydrogen Horizon: Comparing renewable hydrogen definitions in the U.S. and E.U."
 - Case study for the Master's in Science, Technology and Policy program of ETH Zürich.
 - Fall term 2023, **Franziska Katharina Schmidt**, "EU regulation's impact on international renewable hydrogen trade."
 - In collaboration with Prof. Andreas Ulbig at RWTH Aachen University.

- Spring term 2023, **Jan Linder**, “Alpine solar PV for winter production in Switzerland – Opportunities and barriers.”
 - Case study for the Master's in Science, Technology and Policy program of ETH Zürich.
- Spring term 2021, **Johannes Wüllenweber**, “Leveraging Electrolysis Plant Modularity to Achieve Competitive Renewable Hydrogen.”
 - Best Master's Thesis 2021 by the Swiss Association for Energy Economics (SAEE)
- Fall term 2020, **Qing Xu**, “Investigating the Optimal Feed-in Tariff Policy Evolution for Distributed Solar Photovoltaics in the Grid Parity Context of China.”
- Spring term 2019, **Prakhar Mehta**, “The Impact of Self-consumption Regulation on Individual and Community Solar PV Adoption in Switzerland: An Agent-Based Model.”
 - In collaboration with Prof. Arno Schlüter, Architecture and Building Systems, at ETH Zurich
 - Second Best Master Thesis 2019 by the Swiss Association for Energy Economics (SAEE)
- Spring term 2018, **Fabian Rottmann**, “Spreading the use of Responsive Adjustment Mechanisms for Renewable Energy Deployment Policies: An Agent-Based Modelling Cross-Country Evaluation.”
 - In collaboration with Prof. Robert Pitz-Paal, DLR – Institute of Solar Research at RWTH Aachen University.
 - Best Master's Thesis 2018 by the Swiss Association for Energy Economics (SAEE)

2021-2022	Innovative Teaching Coordinator, Swiss Federal Institute of Technology in Zurich (ETH Zürich) – 363-0387-00L Corporate Sustainability FT2021
2016-2019	Teaching Assistant of Second-cycle Courses (master's level), Swiss Federal Institute of Technology in Zurich (ETH Zürich) – 363-0387-00L Corporate Sustainability FT2016, FT2017, FT2018, FT2019 – 363-1076-00L Diffusion of Clean Technologies ST2017, ST2018 – 363-1115-00L Energy Innovation and Management ST2019
2015-2016	MOOC Academic Content Developer, Swiss Federal Institute of Technology in Lausanne (EPFL) Management of Urban Infrastructure Part 1, Innovative Governance of Large Urban Systems, EPFL. Prof. Matthias Finger, Management of Networked Industries Chair, CDM, EPFL. Website: https://www.coursera.org/learn/managing-urban-infrastructures-1
2015-2016	Module Coordinator at the Executive Master's in Governing the Energy Transition, Swiss Federal Institute of Technology in Lausanne (EPFL) Prof. Matthias Finger, Management of Networked Industries Chair, CDM, EPFL

GRANTS AND FUNDING

Total competitive research funding: **CHF 1.2+ million** (USD 1.5 million) as PI since 2023.

2026	Project funding: Coalition for Green Energy and Storage (CGES) initiative (16,000 CHF)
2025	Personal grant: AMBIZIONE grant by the Swiss National Science Foundation (815,000 CHF) • Zero-AMPS: An advanced modelling framework for assessing policy mixes for net-zero emissions technologies (Grant website).
2024	Project funding: Swiss Federal Office of Energy (SFOE) Energy-Economy-Society (224,000 CHF) • HYPATH: Domestic policies and international strategies for Switzerland's energy future
2024	Project funding: Coalition for Green Energy and Storage (CGES) initiative (80,000 CHF)
2024	Seed funding: Una Europa, “Interdisciplinary and community-based research on just energy transitions: The role of green hydrogen,” led by Prof. Clara García (20,950 EUR)
2023	Project funding: D-MTEC Foundation (41,500 CHF)
2023	Project funding: Coalition for Green Energy and Storage (CGES) initiative (80,000 CHF)
2020	Proposal co-writer: Swiss Federal Office of Energy under the Swiss Energy research for the Energy Transition (SWEET) program (8,540,000 CHF)
2020	Conference funding: 5 th NEST Conference by the Swiss Federal Institute of Technology in Zurich (ETH Zürich), Zurich, Switzerland (12,000 CHF)

2016 Personal grant: Swiss Mobility program for graduate student exchanges within Switzerland (3,000 CHF)

AWARDS AND HONORS

2018 Second best presentation at the Technology, Management, and Policy Graduate Consortium, in the Hague, the Netherlands.

2016 Best Final Academic Record of Master's Program, Swiss Federal Institute of Technology in Lausanne (EPFL), Lausanne, Switzerland

2016 MES Academic Excellence Fellowship, Swiss Federal Institute of Technology in Lausanne (EPFL), Lausanne, Switzerland

2015 MES Academic Excellence Fellowship, Swiss Federal Institute of Technology in Lausanne (EPFL), Lausanne, Switzerland

2014 Juan Manuel Kindelán Best Final Academic Record in Energy Use and Management Minor, Technical University of Madrid (UPM), Madrid, Spain

2014 Efficiency & Sustainability in Energy Technology Postgraduate Scholarship, Caja Madrid Foundation, Madrid, Spain

2013 Academic Excellence Scholarship, Autonomous Government of Madrid, Madrid, Spain

2012 Academic Excellence Scholarship, Autonomous Government of Madrid, Madrid, Spain

2011 Academic Excellence Scholarship, Autonomous Government of Madrid, Madrid, Spain

2011 Best First Year Student Academic Record, Technical University of Madrid (UPM), Madrid, Spain

PEER-REVIEWED ARTICLES AND CHAPTERS

+ identifies students working under my supervision

- 16 James Kneebone+, Olivia Moor+, **Alejandro Nuñez-Jimenez**, (under review). "Reconciling the EU Energy Trilemma? Renewable Energy and Policy Paradigm Change" *Energy Policy*.
- 15 Hauke Luetkehaus, Katharina Gaertner, Joern Hoppmann, **Alejandro Nuñez-Jimenez**, (under review). "Breaking the ICE? The impact of demand-pull and technology-push policies on technology decline in incumbent firms." *Technology Forecasting and Societal Change*.
- 14 James Kneebone+, Ben McWilliams, Olivia Moor+, **Alejandro Nuñez-Jimenez**, 2026. "A new European energy policy paradigm revealed by changes in hydrogen strategies." *Energy Policy*. 212: 115119, <https://doi.org/10.1016/j.enpol.2026.115159>
- 13 Adrien Mellot, Christian Moretti, **Alejandro Nuñez-Jimenez**, Jan Linder, Niccolò Moro, Siobhan Powell, Jochen Markard, Christian Winzer, Anthony Patt, 2025. "Electrification, flexibility or both? Emerging trends in European energy policy." *Energy Policy*. 206: 114725, <https://doi.org/10.1016/j.enpol.2025.114725>
- 12 Matthias Sulzer, Georgios Mavromatidis, **Alejandro Nuñez-Jimenez**, Michael Wetter, 2025. "The energy supply security pyramid: A quantitative framework for planning and policy making." *iScience*, 28(5), <https://doi.org/10.1016/j.isci.2025.112407>
- 11 Nuno Bento, **Alejandro Nuñez-Jimenez**, Noah Kittner, 2025. "Decline processes in technological innovation systems: Lessons from energy technologies." *Research Policy*, Vol. 54, Issue 3, <https://doi.org/10.1016/j.respol.2025.105174>
- 10 **Alejandro Nuñez-Jimenez**, Prakhara Mehta+, Danielle Griego, 2023. "Let it grow: How community solar policy can increase PV adoption in cities." *Energy Policy*, Vol. 175, <https://doi.org/10.1016/j.enpol.2023.113477>
- 9 Ryan Hanna, Eugenie Dugoua, **Alejandro Nuñez-Jimenez**, Destenie Nock, Stephanie Arcusa, Sergio Castellanos, Michael R Davidson, Morgan R Edwards, Clara Galeazzi, Xue Gao, Michelle Graff, Kathleen M Kennedy, Eleftheria Kontou, Priyank Lathwal, Mirko Musa, Eric O'Rear, Seetharaman Sivaranjani, Jingjing Zhang, Qianru Zhu, 2022. "Support for climate policy researchers." *Science*, Vol. 378, Issue 6625, <https://doi.org/10.1126/science.adf8956>
- 8 **Alejandro Nuñez-Jimenez**, Nicola De Blasio, 2022. "Competitive and secure renewable hydrogen markets: Three strategic scenarios for the European Union." *International Journal of Hydrogen Energy*, Vol. 47, Issue 84. doi.org/10.1016/j.ijhydene.2022.08.170

- 7 **Alejandro Nuñez-Jimenez**, Christof Knoeri, Joern Hoppmann, Volker H. Hoffmann, 2022. "Beyond innovation and deployment: Modeling the impact of technology-push and demand-pull policies in Germany's solar policy mix." *Research Policy* 51, no. 10: 104585. doi.org/10.1016/j.respol.2022.104585
- 6 Danielle Griego, Prakhar Mehta+, **Alejandro Nuñez-Jimenez**, 2022. "Solar Energy Communities in the Urban Environment." In *The Palgrave Encyclopedia of Urban and Regional Futures*, pp. 1-8. Cham: Springer International Publishing, 2022. doi.org/10.1007/978-3-030-51812-7_184-1
- 5 Lana Ollier, Florence Metz, **Alejandro Nuñez-Jimenez**, Leonhard Späth, Johan Lilliestam, 2022. "The European 2030 climate and energy package: do domestic strategy adaptations precede EU policy change?" *Policy Sciences*, pp.1-24. doi.org/10.1007/s11077-022-09447-5
- 4 **Alejandro Nuñez-Jimenez**, Christof Knoeri, Fabian Rottmann+, Volker Hoffmann, 2020. "The role of responsiveness in deployment policies: A quantitative, cross-country assessment using agent-based modelling", *Applied Energy*, Vol. 275, doi.org/10.1016/j.apenergy.2020.115358
- 3 Marius Schwarz, Aline Scherrer, Claudia Hohmann, Jonas Heiberg, Andri Brugger, **Alejandro Nuñez-Jimenez**, 2020. "COVID-19 and the academy: It is time for going digital," *Energy Research & Social Science*, Vol. 68, doi.org/10.1016/j.erss.2020.101684
- 2 Jochen Markard, Nuno Bento, Noah Kittner, **Alejandro Nuñez-Jimenez**, 2020. "Destined for decline? Examining nuclear energy from a technological innovation systems perspective," *Energy Research & Social Science*, Vol. 67, doi.org/10.1016/j.erss.2020.101512
- 1 **Alejandro Nuñez-Jimenez**, Christof Knoeri, Joern Hoppmann, Volker Hoffmann, 2020. "Can designs inspired by control theory keep deployment policies effective and cost-efficient as technology prices fall?" *Environmental Research Letters*, 15, 4. doi.org/10.1088/1748-9326/ab6bf

CONFERENCE ARTICLES

- 4 Prakhar Mehta+, Danielle Griego, **Alejandro Nuñez-Jimenez**, Arno Schlueter, 2019. "The impact of self-consumption regulation on individual and community solar PV adoption in Switzerland: an agent-based model," J. Phys.: Conf. Ser. 1343 012143, [doi:10.1088/1742-6596/1343/1/012143](https://doi.org/10.1088/1742-6596/1343/1/012143)
- 3 Ann-Kristin Zobel, Joern Hoppmann, **Alejandro Nuñez Jiménez**, 2017. "Unlocking Bottlenecks in Nascent Innovation Ecosystems: How Bottlenecks Impact Firm Collaboration," *Academy of Management Proceedings* Vol. 2017, No. 1, pp. 13336, [doi:10.5465/AMBPP.2017.13336abstract](https://doi.org/10.5465/AMBPP.2017.13336abstract)
- 2 **Alejandro Nuñez-Jimenez**, Raed Bkayrat, 2015. "Utility scale 1,500 VDC PV power plant architecture evolution: Advantages and challenges," *Integration of Renewable Energy into High and Medium Voltage Systems Conference & Exhibition, September 15-16, 2015, Amman, Hashemite Kingdom of Jordan*, [pdf]
- 1 Reinier Verhoog, Kemal Armada, Paul Adrianus Van Baal, Gebran El Dabbak, **Alejandro Nuñez-Jimenez**, 2015. "Modelling and simulation of renewable energy transitions: nuclear phase-out in Switzerland," *International Symposium for Next Generation Infrastructure*.

REPORTS AND POLICY BRIEFS

- 13 Bouallou+, R., **Nuñez-Jimenez, A.**, and Aklin, M. 2025. "The TAPIR framework: A new tool to assess climate and energy demonstration projects." ETH Zürich. [link]
- 12 **Nuñez-Jimenez, A.**, De Blasio, N. 2024. "The International Dimension of Renewable Hydrogen (original in Spanish: La dimensión internacional del hidrógeno reNovable)." *Papeles de Energía*, 25, Funcas. [link]
- 11 **Nuñez-Jimenez, A.**, Knoeri, C., Hoppmann, J., Hoffmann, V. H. 2022 "Combining Technology-Push and Demand-Pull Policies to Create More and Better Energy Jobs." Policy Brief, Belfer Center for Science and International Affairs, Harvard Kennedy School, September 15, 2022. [link]
- 10 **Nuñez-Jimenez, A.**, De Blasio, N. 2022. "MIGHTY: Model of International Green Hydrogen Trade." Paper, Belfer Centre for Science and International Affairs, Harvard Kennedy School, August 3, 2022. [link]

- 9 **Nuñez-Jimenez, A.**, De Blasio, N. 2022. *The Future of Renewable Hydrogen in the European Union: Market and Geopolitical Implications*. Belfer Center for Science and International Affairs, Harvard Kennedy School, March 2022 [[link](#)]
- 8 De Blasio, N., **Nuñez-Jimenez, A.** 2021. *The European Union at a Crossroads: Unlocking Renewable Hydrogen's Potential*. Policy Brief, November 2021 [[link](#)].
- 7 De Blasio, N., Pflugmann, F., Lee, H., Hua, C., **Nuñez-Jimenez, A.**, Fallon, P. 2021, *Mission Hydrogen: Accelerating the Transition to a Low Carbon Economy*. Edited by Nicola De Blasio. Belfer Center for Science and International Affairs, Harvard Kennedy School [[link](#)].
- 6 De Blasio, N., Hua, C., **Nuñez-Jimenez, A.** 2021, *Sustainable Mobility: Renewable Hydrogen in the Transport Sector*, Belfer Center for Science and International Affairs, Harvard Kennedy School [[link](#)].
- 5 **Nuñez-Jimenez, A.**, Binet, S. 2018, *Future of Energy by Young leaders for Energy and Sustainability 2018*, Young leaders in Energy and Sustainability (YES-Europe).
- 4 **Nuñez-Jimenez, A.** 2017, *Energy Students And Young Professionals' Support Needs: An Online Survey Across Europe*, Young leaders in Energy and Sustainability (YES-Europe).
- 3 **Nuñez-Jimenez, A.**, 2016, *The influence of bottlenecks on firms' collaboration patterns in innovation ecosystems. An empirical analysis of the solar photovoltaic industry*, Master's Thesis at the Swiss Federal Institute of Technology in Lausanne (EPFL).
- 2 **Nuñez-Jimenez, A.** 2015, *Enhancing PV systems adoption by Swiss households: A system dynamics policy analysis*, Semester project at the Swiss Federal Institute of Technology in Lausanne (EPFL).
- 1 **Nuñez-Jimenez, A.**, Viana Ensinas, A. 2015, *Review of lignocellulosic biomass pretreatments from a biorefinery perspective*. Semester project at the Swiss Federal Institute of Technology in Lausanne (EPFL).

ENGAGEMENT, BLOGS, AND MEDIA

- | | |
|--------------|---|
| 2024-present | Professional LinkedIn profile: alejandronunezjimenez , with over 4,300 followers. |
| Jul 30, 2026 | Kneebone, James; Nuñez-Jimenez, Alejandro , " From climate to security: Hydrogen reveals changes in Europe's energy Policy ," Spanish Public Policy Network blog. |
| Aug 18, 2025 | Featured in Mongabay , " Green hydrogen development threatens wildlife in Chile ," by Manuel Fonseca. |
| Oct 4, 2024 | Featured in D-MTEC, " The age of the agent: Alejandro Nuñez-Jimenez wins Ambizione fellowship to develop agent-based models for energy systems ," by Sebastian Wagner-Vierhaus. |
| 2010-2023 | Professional Twitter profile: @anunezjimenez , with nearly 8,000 followers. |
| Apr 18, 2023 | Nuñez-Jimenez, Alejandro , " Del campo a la ciudad: cómo las comunidades solares pueden traer las renovables a los centros urbanos ." Nada es Gratis. |
| Apr 15, 2023 | Featured in The Washington Post , " Spanish industry kicks off EU green hydrogen race ," by Jennifer O'Mahony. |
| Apr 15, 2023 | Featured in Associated Press , " Spanish industry kicks off EU green hydrogen race ," by Jennifer O'Mahony. |
| Apr 5, 2023 | Nuñez-Jimenez, Alejandro ; Harts, David M., " Why Young Researchers Are Vital to Climate and Innovation Policy and How to Support Them ." Information Technology and Innovation Foundation (ITIF), Innovation files. |
| Mar 12, 2023 | Featured in El Periódico , " The almost impossible dream of Spain and Italy of becoming the new energy hub in Europe ," by Ricardo Mir de Francia. |
| Mar 9, 2023 | Podcast: Nuñez-Jimenez, Alejandro ; Kermadec, Dorian de; Bermúdez, Jose Miguel; Pollos, Javier (ed.); Armiño, Brais (ed.), " European Commission's Delegated Act on Renewable Hydrogen ." |
| Feb 15, 2023 | Featured in Reuters , " European pipeline strategy must play to hydrogen's strengths ," by Paul Day. |
| Feb 6, 2023 | Featured in DW , " Green hydrogen: How can it help stop climate change? " by Ajit Niranjana. |
| Dec 29, 2022 | Featured in RTVE , " From the gas crisis to hydrogen's disruption: 2022, the year of the shock that changed everything in energy ," by Álvaro Caballero. |

Oct 22, 2022	Featured in RTVE , <i>“From MidCat to BarMar: the keys of the new gas and hydrogen pipeline between Barcelona and Marseille.”</i> by Álvaro Caballero.
Oct 20, 2022	Interviewed in 24 horas of Radio Nacional de España , <i>“BarMar is better news than MidCat.”</i>
Aug 12, 2022	Interviewed in 24 horas of Radio Nacional de España , <i>Researchers: “MidCat is a partial solution.”</i>
Apr 20, 2022	Featured in Weekendadvisen , <i>Spanish pipe dreams</i> , by Kasper Kloch.
Mar 17, 2022	Featured in Business Insider , <i>The European alternative to Russian gas passes through Spain.</i> , by Iván Cáceres.
Mar 10, 2022	Featured in elDiario.es , <i>Dependence on Russia resurrects the project to turn Spain into a gas store for Europe</i> , by Antonio M. Vélez, Raúl Sánchez, Arturo Puente.
Jun 28, 2021	Featured in Le Temps , <i>Hydrogen verd, l’alternativa màgica als combustibles fòssils?</i> By Moisés Pérez.
Mar 26, 2021	Podcast: Nuñez-Jimenez, Alejandro , Sicilia, María, Sánchez-Herrero, Guillermo, Delle Donne, Franco (editor), <i>Green Hydrogen: The missing piece for complete decarbonization</i> , Green Deal – Europe’s Opportunity, <i>Agenda Pública</i> .
Nov 30, 2020	Featured in InfoLibre , <i>El hidrógeno renovable por el que apuesta el Gobierno aún está verde</i> (paywall), by Javier Martínez.
Nov 10, 2020	Nuñez-Jiménez, Alejandro ; De Blasio, Nicola, <i>Will renewable hydrogen help unite Europe?</i> Future is Blue, <i>Agenda Pública</i> , 10 November 2020. [versión en español, 5 November 2020]
Nov 9, 2020	Podcast: Nuñez-Jiménez, Alejandro ; Fresco, Pedro; Ibáñez Gil, David; Rivera, Antonio, <i>Is hydrogen the energy of the future? A Ciencia Cierta</i> , 9 November 2020 [note: podcast only available in Spanish]
Jun 5, 2020	Nuñez-Jiménez, Alejandro , Sicilia, María, and Gálvez, Lina, <i>Batteries and clean hydrogen at the core of a new European industrial policy. The experts speak</i> , Future is Blue, <i>Agenda Pública</i> .
May 31, 2020	Nuñez-Jiménez, Alejandro , <i>Why we need responsive policies to achieve a rapid energy transition</i> , Energy Blog @ ETH Zurich
Mar 31, 2020	Nuñez-Jiménez, Alejandro , <i>Why Spain could be a leader of renewable hydrogen in Europe</i> , <i>Agenda Pública</i> .
Oct 8, 2019	Nuñez-Jimenez, Alejandro . <i>Cheap solar alone would not prevent a renewable energy gap</i> , <i>Energy Blog @ ETH Zurich</i>
May 7, 2019	De la Fuente, José Luis, and Nuñez-Jimenez, Alejandro . <i>La crisis climática y cómo abordar medidas eficaces</i> , <i>Cinco Días</i>
Apr, 2019	Knoeri, Christof, and Nuñez-Jimenez, Alejandro . <i>PV Effizient Fördern</i> , <i>Haustech Magayne</i> .

INVITED PRESENTATIONS, SEMINARS, AND PUBLIC LECTURES

Sep 1-2, 2026	<i>Co-organizer of the conference track “Emerging Trends in Modelling for Advancing Sustainability Transitions”</i> with Prof. Floor Alkemade, Prof. Marten van der Kam, Dr. Stella Steidl, at the 2026 International Sustainability Transitions conference at ETH Zurich, Zurich, Switzerland.
Sep 2, 2026	<i>Moderator “Escaping the complexity trap?”</i> Semi-plenary with Prof. Florence Metz, Prof. Karoline Rogge, Prof. Andris Piebalgs, and Dr. Meike Löhr, at the 2026 International Sustainability Transitions conference at ETH Zurich, Zurich, Switzerland.
Sep 1, 2026	<i>Moderator “Impact”</i> Plenary with Prof. Marko Hekkert, Director General of PBL, and Dr. Veena Srinivasan, Director of Well Labs, at the 2026 International Sustainability Transitions conference at ETH Zurich, Zurich, Switzerland.
May 26, 2026	<i>Invited presentation on “More than megawatts: the changing goals of energy policy”</i> at Chalmers University of Technology, Gothenburg, Sweden.
May 8, 2026	<i>Invited presentation on “How to model the changing goals of energy policy”</i> at the Sustainable Future Research Lunch at the University of Basel, Basel, Switzerland.

Feb 24, 2026	<i>Invited presentation on “How to model the changing goals of energy policy” at the Bartlett School of Environment, Energy and Resources at the University College London, London, United Kingdom.</i>
Feb 11, 2026	<i>Invited presentation on “How to model the changing goals of energy policy” at the Cambridge Climate Society Lent Term seminar at the University of Cambridge, Cambridge, United Kingdom.</i>
Jan 29, 2026	<i>Invited presentation on “More than megawatts: the changing goals of energy policy” at the Cambridge Center for Environment, Energy and Natural Resources Governance (CEENRG) Lent Term seminar series at the University of Cambridge, Cambridge, United Kingdom.</i>
Aug 28, 2025	<i>Conference presentation on “A new European energy policy revealed by changes in hydrogen policies” at the European Consortium for Political Research (ECPR) General Conference 2025 in the Aristotle University of Thessaloniki, Thessaloniki, Greece.</i>
Jul 10, 2025	<i>Invited presentation on “Connecting the micro and the macro: Using agent-based modelling to study energy systems” at the Digital Transformation in Energy Systems Group led by Prof. Dr. Tom Brown at the Technical University of Berlin (TU Berlin) in Berlin, Germany.</i>
Jul 8, 2025	<i>Invited presentation on “How are hydrogen policy strategies changing in the European Union?” at the Geopolitics of Energy and Industrial Transformation Group led by Prof. Dr. Rainer Quitzow at the Research Institute for Sustainability (RIFS) in Potsdam, Germany.</i>
Jun 25, 2025	<i>Conference presentation on “Decline processes in Technology Innovation Systems” at the 16th International Sustainability Transitions (IST) Conference in the DINÂMIA’CET-ISCTE, Centre for the Study of Socioeconomic Change and the Territory, Lisbon, Portugal.</i>
Jun 17, 2025	<i>Invited expert at the online panel “National Perspectives for a Hydrogen Economy” for the Clean Molecules for the Energy Transition course of the Florence School of Regulation at the European University Institute in Florence, Italy.</i>
Jun 16, 2025	<i>Invited presentation “Bridging the micro and the macro: Using agent-based models to study the energy transition.” At the Energy and Process Systems Engineering (EPSE) Group led by Prof. Dr. André Bardow at ETH Zurich in Zurich, Switzerland.</i>
Jun 10, 2025	<i>Conference track co-organiser “Stimulating acceleration and avoiding deceleration of transformation: Concepts, challenges, empirical evidence and best practices” in the European Forum for Studies of Policies for Research and Innovation (EU-SPRI) in Dortmund, Germany.</i>
Jan 27, 2025	<i>Conference presentation on “Gear shift: How changes in hydrogen policies reveal Europe’s new path to net-zero” in the 1st ETH Domain Conference on Social Sciences on Environment, Technology and Sustainability at the Swiss Federal Institute of Aquatic Science and Technology (eawag) in Dübendorf, Switzerland.</i>
Jan 15, 2025	<i>Invited presentation on “Beyond Innovation and Deployment: Using Agent-Based Modeling to study Technology-Push and Demand-Pull Policies” at the Research Group for Environmental and Climate Economics at the ICTA-UAB in Barcelona, Spain.</i>
Nov 8, 2024	<i>Invited expert to “Coffee with scientists” at the ETH Energy Week 2024 at ETH Zurich in Zurich, Switzerland.</i>
Nov 6, 2024	<i>Guest lecture on “Exploring energy innovation policy challenges” in the Energy Economics lecture for the Degree Program in Economics and Finance at the Sapienza University of Rome in Rome, Italy.</i>
July 23, 2024	<i>Invited expert to an expert panel organized by the city government on “Climate change and sustainability: Future and opportunities for rural areas” in Petralia Sottana, Italy.</i>
July 23, 2024	<i>Conference presentation “Exploring Scale and Learning Trade-offs in Energy Technologies” at the Applied Economics Conference <u>Petralia 2024</u> in Petralia Sottana, Italy.</i>
Jun 18, 2024	<i>Conference presentation “Renewable hydrogen and sustainability transitions: How competing actors could shape electrolysis cost reductions” at the 15th International Sustainability Transitions (ISTI) conference in Oslo, Norway.</i>
Feb 13, 2024	<i>Guest lecture on “Challenges of a green hydrogen economy” at the Sustainability Management and Operations Master at KLU University in Hamburg, Germany.</i>
Sep 12, 2023	<i>Invited expert in the panel session “Tackling the combined energy and climate crisis” at the <u>Sustainable Switzerland Forum 2023</u> in Bern, Switzerland.</i>

- Aug 31, 2023 *Conference presentation* “A compass in a storm: How energy modelling helps govern the energy transition during crises” at the 14th International Sustainability Transitions (IST) conference, in Utrecht, the Netherlands.
- Aug 30, 2023 *Conference presentation* “Breaking the ICE? – How demand-pull and technology-push policies for emerging technologies shape firm innovation in incumbent technologies” at the 14th International Sustainability Transitions (IST) conference, in Utrecht, the Netherlands.
- May 31, 2023 *Invited discussant* at the “Pipelines or ships, that is the EU hydrogen question” at the Florence School of Regulation in Florence, Italy.
- May 19, 2023 *Invited expert* at the First Young Dialogue of Real Instituto Elcano on “Agenda and geopolitical challenges of the Spanish Presidency of the Council of the European Union,” at the Real Instituto Elcano, Madrid, Spain.
- May 19, 2023 *Invited presentation* on “The Future of Renewable Hydrogen in the EU,” at the Institute for Investigations on Technology at the Universidad Pontifica Comilla, Madrid, Spain.
- Feb 21, 2023 *Invited expert* at the high-level International Energy Agency workshop “Achieving scale-up of low-emission hydrogen and ammonia for net-zero in G7 countries,” in Paris, France.
- Jan 31, 2023 *Invited speaker* at the event “Hydrogen, the future of sustainable mobility?” at the Swiss Embassy in Paris, France.
- Jan 20, 2023 *Invited presentation: “Challenges of the Green Hydrogen Economy”* at the ITIF Junior Scholars Seminar Series, in Washington, D.C., the United States.
- Nov 24, 2022 *Invited presentation: “Hydrogen innovation – an overview,”* at the 2nd workshop of the Energy Now! Initiative of the Energy Science Centre at ETH Zurich, in Zurich, Switzerland.
- Oct 26, 2022 *Invited presentation: “The Future of Renewable Hydrogen in the European Union”* at Prof. Jessica Trancik’s laboratory, at the Institute for Data, Systems and Society at the Massachusetts Institute of Technology, in Cambridge, MA, the United States.
- Oct 13, 2022 *Invited presentation: “Challenges of a Green Hydrogen Economy”* at Seminar of the Sustainability and Technology Group at ETH Zurich, in Zurich, Switzerland.
- Oct 6, 2022 *Invited presentation: “Hydrogen’s role in the energy transition”* at the Energy Sector Group Technology Briefing to Management, in the Asian Development Bank.
- Sep 28, 2022 *Invited presentation: “Challenges of a Green Hydrogen Economy”* at the SwissRe’s Engineering Underwriting Forum, in Rüschlikon, Switzerland.
- Apr 27, 2022 *Invited presentation: “The EU’s Hydrogen Accelerator - what steps should be taken?”* at the Florence School of Regulation, European University Institute, in Florence, Italy.
- Mar 24, 2022 *Invited presentation: “The Quest for Hydrogen Hubs in the United States”* at the ENRP/STPP Fellows Research Seminar, Belfer Center for Science and International Affairs, Harvard Kennedy School, in Cambridge MA, the United States.
- Mar 18, 2022 *Guest lecture: “The future of renewable hydrogen in the European Union”* as part of the course Engineering, Economics and Regulation of the Electric Power Sector at the MIT Sloan Business School, Massachusetts Institute of Technology, in Cambridge MA, the United States.
- Mar 17, 2022 *Invited presentation: “The future of renewable hydrogen in the European Union”* at the Climate Policy Lab Internal Research Seminar, The Fletcher School, Tufts University, in Medford MA, the United States.
- Dec 1, 2021 *Invited presentation: “Destined for Decline? Examining the Role of Nuclear in the Ongoing Energy Transition”* at the Project on Managing the Atom Seminar Series, Harvard Kennedy School, in Cambridge MA, the United States.
- Oct 21, 2021 *Invited presentation: “Future supply of renewable hydrogen in the European Union”* at the Cambridge Centre for Environment, Energy, and Natural Resource Governance (C-EENRG) seminars, Cambridge University, in Cambridge, the United Kingdom.
- May 3, 2021 *Invited presentation: “Renewable Hydrogen Potential in the EU”* at the Harvard Kennedy School Energy Policy Seminar, in Cambridge MA, the United States
- Nov 19, 2020 *Invited expert*, at the High-Level Conference “Green Hydrogen: An Opportunity for Spain,” organized by the Spanish Ministry for the Ecological Transition and the Demographic Challenge. With the participation of

Spain's President Pedro Sánchez, European Commission Executive Vice-president Frans Timmermans, European Commissioner for Energy Kadri Simson, and four minister from Spain's government, in Madrid, Spain.

- May 7, 2020 *Opening Speech*, at the 5th Network of Early career scholars in Sustainability Transitions (NEST) Conference, in Zurich (online conference), Switzerland.
- Feb 14, 2020 *Can designs inspired by control theory keep deployment policies effective and cost-efficient as technology prices fall?* At the Renewable Energy Systems Group of Prof. Dr. Evelina Trutnevyte, in the University of Geneva, in Geneva, Switzerland.
- Nov 28, 2019 *Balancing technology-push and demand-pull policies to accelerate the diffusion of clean energy*, at the 2nd Energy Innovation Bootcamp at the Florence School of Regulation, in Florence, Italy.
- Oct 11, 2019 *Assessing responsive designs for effective and cost-efficient deployment policies in different countries*, at the 12th Swiss Association for Energy Economics student chapter workshop, in Zurich, Switzerland.
- Sep 5, 2019 *Balancing Technology-Push and Demand-Pull Policies for Accelerating the Diffusion of Clean Energy*, at the 13th European Consortium for Political Research (ECPR) General Conference, in Wroclaw, Poland.
- Jun 28, 2019 *A quantitative, cross-country evaluation of responsive policy designs to accelerate technology deployment*, at the 4th International Conference in Public Policy (ICPP), in Montreal, Canada.
- Jun 27, 2019 *Balancing Technology-Push and Demand-Pull Policies for Fostering Innovation and Accelerating their Diffusion*, at the 4th International Conference in Public Policy (ICPP), in Montreal, Canada.
- Jun 26, 2019 *A quantitative, cross-country evaluation of responsive deployment policies to accelerate sustainability transitions cost-efficiently*, at the 10th International Sustainability Transitions (IST) conference, in Ottawa, Canada.
- Aug 20, 2018 *Spreading the use of responsive adjustment mechanisms for renewable energy deployment policies: An agent-based modelling cross-country evaluation*, at the 14th Annual Conference of the European Social Simulation Association (ESSA), in Stockholm, Sweden.
- Jun 18, 2018 *Spreading the use of responsive adjustment mechanisms for renewable energy deployment policies: An agent-based modelling cross-country evaluation. Technology, Management, Policy Graduate Consortium*, in the Hague, the Netherlands.
- Jun 11, 2018 *How to avoid costly policies as technology becomes cheaper?* at the 9th International Sustainability Transitions (IST) conference in Manchester, the United Kingdom.
- Mar 27, 2018 *Towards responsive deployment policies: an Agent-Based Model approach*, at the Frontiers in Energy Research seminar, Energy Science Centre of ETH Zurich, in Zurich, Switzerland.
- Jun 20, 2017 *Dynamic policy adjustment to technological change — An agent-based modelling approach*, at the 8th International Sustainability Transitions (IST) conference, in Gothenburg, Sweden.
- Jun 2, 2017 *Unblocking bottlenecks in emerging innovation ecosystems: How bottlenecks impact collaboration* (co-authored with Ann-Kristin Zobel and Joern Hoppmann), at the PhD Academy on Sustainability and Technology, in Appenzell, Switzerland.

PROFESSIONAL AFFILIATIONS AND LEADERSHIP

- 2026- Member of the Energy Science Centre of ETH Zurich.
- 2025- Chair of the Scientific and Technology Committee of the Coalition for Green Energy and Storage (CGES)
- 2022- Member, Spanish Public Policy Network (SPPN)
- 2020- Member, Macro-Energy Systems Society (MES)
- 2019- Member, International Association for Energy Economics (IAEE)
- 2019- Member, Swiss Association for Energy Economics (SAEE)
- 2016- Member, Sustainability Transitions Research Network (STRN)
- 2025-2026 Co-organizer of the International Sustainability Transitions (IST) conference 2026, in Zurich, Switzerland.

2023-2024	Member, Association for Public Policy Analysis and Management (APPAM)
2019-2020	Co-founder & Editor, Energy Blog of ETH Zurich
2019-2020	Leader of the Organizing Committee of the 5 th Network of Early Career Researchers in Sustainability (NEST) Transitions Conference, which occurred online between 7-8 May 2020.
2019-2020	Advisory Board member, Young Energy leaders for Sustainability, Europe (YES)
2016-2018	Co-founder and Director of Analytics, Young Energy leaders for Sustainability, Europe (YES)
2015-2016	Founder and Co-director, Energy Business, Policy and Technology Group at the Swiss Federal Institute of Technology Lausanne (EPFL)
2013-2014	Co-founder, School for Student Representatives (EFyDE), Technical University of Madrid (UPM)
2012-2014	Chairman of the Student Union, Mining and Energy Engineering School of the Technical University of Madrid (UPM)
2010-2014	Student member, Assembly of the Technical University of Madrid (UPM)
2010-2012	Representative of Energy Engineering Degree students, Technical University of Madrid (UPM)

EDITORIAL SERVICES AND REFEREEING

Academic Editor, [PLOS Climate](#)

Invited Reviewer:

- PNAS Nexus; Nature Energy; Nature Communications; Joule; Energy Policy; Research Policy; Energy Research & Social Science (ERSS); Environmental Innovation and Societal Transitions (EIST); Environmental Research: Infrastructure and Sustainability; PLOS Climate; PLOS One; Technological Forecasting & Social Change (TFSC); Journal of Cleaner Production; Political Geography; Utilities Policy; Energy Strategy Reviews (ESR); Sustainable Futures; npj Climate Action.

Invited expert reviewer of reports by the International Renewable Energy Agency (IRENA) and the International Energy Agency (IEA).

LANGUAGES

Spanish	Mother tongue
English	Bilingual
French	Limited working proficiency (B1-B2)
German	Limited working proficiency (A2-B1)

METHODOLOGICAL EXPERTISE

I am an expert in the following quantitative methods:

- Agent-based modelling (ABM),
- Optimization models based on mixed-integer linear programming (MILP),
- Techno-economic analysis.

I have research experience in several other quantitative and qualitative methods, including:

- Social network analysis,
- Econometric analysis,
- Expert interviews,
- Multi-criteria decision analysis,
- Qualitative coding and text analysis,
- Case studies.

These methods are implemented using multiple software tools, most prominently: Python, NetLogo, Matlab, Microsoft Excel, Atlas.ti.

PEDAGOGICAL TRAINING

- 2026: Foundations of Learning and Teaching, ETH Zurich (55 hours).
 - Objectives: (1) Design courses and assessment procedures; (2) Promote continuous learning throughout the semester; (3) Conduct a teaching project in your own course; (4) Exchange with other lecturers to advance teaching excellence.
- 2025: Strategies for inclusive teaching, ETH Zurich (8 hours).
- 2025, Leading as a postdoc, ETH Zurich (1.5 hours).
- 2023, EduTalk, ETH Zurich (3.5 hours).
- 2018, Learning to Teach, ETH Zurich (36 hours).
 - Objectives: (1) plan teaching sequences according to learning objectives, (2) engage students in relevant learning activities, (3) use feedback effectively for teaching and learning, and (4) implement selected teaching strategies in a small teaching project.