SAVELLI iacopo (www.iacoposavelli.it) https://scholar.google.it/citations?user=3aXbtB4AAAAJ

• Education and key qualifications

2023 Qualification as Associated Professor in Applied Economics (SECS-P/06)

18/02/2019	PhD in Engineering and Information Science Department of Information Engineering and Mathematics, University of Siena, Italy Thesis: " <i>Towards the Integration of Electricity Markets: System-wide and Local Solutions</i> " Supervisor: Prof. Antonio Vicino
2014	Master in Finance – Grade: 110/110 cum laude
	School of Economics, University of Siena, Italy
2011	Bachelor in Economics – Grade: 110/110 cum laude
	School of Economics, University of Macerata, Italy

• Current position

2024 - Present Marie-Curie Research Fellow project "GREENER – Navigating energy storage challenges: profitability and net zero goals in Europe's energy transition" Centre for Research on Geography, Resources, Environment, Energy & Networks (GREEN), Bocconi University, Italy

• Previous position(s)

- 2023 2024 **Principal Investigator** of the project "Decarbonising the energy system by incentivising energy storages in the right places", funded with €150.000 by the Italian Ministry of University and Research (funds for young researchers). Bocconi University, Italy
- 2021 2022 Research Associate Department of Engineering, University of Edinburgh, UK
- 2019 2021 Postdoctoral Researcher School of Geography and the Environment, **University of Oxford**, UK

• Honors & Awards

2020 **1st prize - Best conference paper award** - 17th European Energy Market Conference (EEM), Stockholm, Sweden, 2020. Paper title: "Nodal and fixed price coexistence in distribution networks with optimal investment planning and tariff design".

Scientific committees

2023 **Member of the Scientific Committee** for the 18th International Association for Energy Economics (IAEE) European Conference, Milan, 2023. www.aiee.it/iaee_2023

• International collaborations

2019 - 2021 Member of the Energy Revolution (EnergyREV) Consortium with more than **60 academics**.

I led Tasks 5 and 6 within the WP3.2 (EPSRC EP/S031901/1) for the £8m EnergyREV consortium, designing new mechanisms to integrate smart local energy systems into national electricity markets.

• Keynote speaker / Chair

- 2023 **Keynote speaker dual-plenary** session on "**Energy Transition: the EU Roadmap to 2050**" at the 18th International Association for Energy Economics (IAEE) European Conference, Milan, 24-27 July 2023.
- 2023 **Chair of the parallel session** on "Energy storage: case studies" at the 18th International Association for Energy Economics (IAEE) European Conference, Milan, 24-27 July 2023.

• Funding

- 2024 Present Marie-Curie European Fellowship, project "GREENER Navigating energy storage challenges: profitability and net zero goals in Europe's energy transition", €172k.
 <u>Topic</u>: investigating how storage deployment could cannibalise its own market and the effect it can have on reaching net zero carbon emissions. Funding source: EU.
- 2023 2024 Principal Investigator, project: "Decarbonising the energy system by incentivising energy storages in the right places", €150k.
 <u>Topic</u>: investigating the role of grid-scale batteries on welfare and carbon emissions in the Italian energy system. Funding source: Italian Ministry of University and Research, funds for Young Researchers (CUP J47G22000430001).
- 2021 2022 Co-Investigator, project: "A new design paradigm to incentivise low-carbon technologies in the UK", £32k.
 <u>Topic</u>: Peer-reviewed project within the Energy Revolution Consortium (EP/S031863/1) to develop new incentive schemes for renewables in the UK. Funding source: UKRC.

• Affiliation

2024 - Present Affiliated Scientist at RFF-CMCC EIEE.

Teaching

- 2020 2022 **"Electricity Market Laboratory**" module, 2 x 3 hours, within the MSc in Energy Systems, University of Oxford.
- 2019 **"Energy Market"**, **30 hours**, within the "Electric System and Energy Market" course, Department of Engineering, University of Siena.
- 2016 2018 **"Models for Financial Applications**" (teaching assistant) **20 hours x 3 years**. Time series analysis (ARIMA, ARCH/GARCH), Department of Engineering, University of Siena.

• Engagement with Policymakers

- 2023 Written evidence on the amendments to **European Union Electricity Regulation** 2019/943, Electricity Directive (EU) 2019/944 and Regulation (EU) No 1227/2011 (REMIT), May 2023.
- 2022 Engagement with the **Department for Business, Energy and Industrial Strategy, UK Gov.** for developing a new design paradigm to incentivise low-carbon technologies in the UK, 2022.
- 2021 **Environmental Audit Committee, UK**. Written evidence on "Technological Innovations and Climate Change: Community Energy".
- Supervision
 - **Postdoctoral researchers**:
 - 2022 Present Dr Mostafa Nosratabadi, University of Oxford

• PhD candidates:

2021 - Present	
2021 - Present	

Ms Xia Yuxin, University of Edinburgh Ms Xiyu Ren, University of Oxford

• Master's students:

2021 - 2022	Mr Sequera Jimenez Francisco, University of Edinburgh
2020 - 2021	Mr Evan Chee Ng, University of Oxford
2019 - 2020	Mr Armen Danielian, University of Oxford

Journal papers

- 2024 **I Savelli**, D Howey, T Morstyn, Location matters for large-scale energy storage policy: spillover effects for balancing costs and carbon emissions across Italy, Under review. Preprint DOI: http://dx.doi.org/10.13140/RG.2.2.30946.95686
- 2024 R Xiu, **I Savelli**, T Morstyn, Making resource adequacy a private good: The good, the bad, and the ugly, Joule
- 2023 I Savelli, HR Bokkisam, P Cuffe, T Morstyn, On-demand energy flexibility market via smart contracts to help reduce balancing costs in Great Britain, Energy Economics, 126
- 2023 F Billimoria, F Fele, **I Savelli**, T Morstyn, M McCulloch, An Insurance Paradigm for Improving Power System Resilience via Distributed Investment, IEEE Transactions on Energy Markets, Policy and Regulation
- 2023 A Parede, J Aguado, C Essayeh, Y Xia, **I Savelli**, T Morstyn, Stacking Revenues from Flexible DERs in Multi-Scale Markets using Tri-Level Optimization, IEEE Transactions on Power Systems
- 2023 **I Savelli**, T Morstyn, The energy flexibility divide: An analysis of whether energy flexibility could help reduce deprivation in Great Britain, Energy Research & Social Science 100
- 2023 P Grunewald, M Aunedi, SM Nosratabadi, T Morstyn, **I Savelli**, et al., Taking the long view on shortrun marginal emissions: how much carbon does flexibility and energy storage save?, Oxford Energy
- 2022 I Savelli, J Hardy, C Hepburn, T Morstyn, Putting wind and solar in their place: Internalising congestion and other system-wide costs with enhanced contracts for difference in Great Britain, Energy Economics 113
- 2022 F Billimoria, F Fele, **I Savelli**, T Morstyn, M McCulloch, An insurance mechanism for electricity reliability differentiation under deep decarbonization, Applied Energy 321
- 2021 **I Savelli**, T Morstyn, Electricity prices and tariffs to keep everyone happy: a framework for fixed and nodal prices coexistence in distribution grids with optimal tariffs for investment cost recovery, Omega 103
- 2021 **I Savelli**, T Morstyn, Better together: Harnessing social relationships in smart energy communities, Energy Research & Social Science 78
- 2021 T Morstyn, **I Savelli**, C Hepburn, Multiscale design for system-wide peer-to-peer energy trading, One Earth 4 (5)
- 2020 I Savelli, A De Paola, F Li, Ex-ante dynamic network tariffs for transmission cost recovery, Applied Energy 258
- 2019 B Cornélusse, **I Savelli**, S Paoletti, A Giannitrapani, A Vicino, A community microgrid architecture with an internal local market, Applied Energy 242
- 2018 **I Savelli**, B Cornélusse, A Giannitrapani, S Paoletti, A Vicino, A new approach to electricity market clearing with uniform purchase price and curtailable block orders, Applied energy 226
- 2017 **I Savelli**, A Giannitrapani, S Paoletti, A Vicino, An optimization model for the electricity market clearing problem with uniform purchase price and zonal selling prices, IEEE Transactions on Power Systems 33

Conference Proceedings

- 2024 Y Xia, **I Savelli**, T Morstyn, An Incentive Regulation Approach for Balancing Stakeholder Interests in Transmission Investment, 23rd Power Systems Computation Conf. (PSCC), Paris-Saclay, France.
- **I Savelli**, Y Xia, T Morstyn, An incentive scheme for storage investments to help reduce carbon emissions, 45th IAEE International Conference, Istanbul, Turkey.
- 2023 **I Savelli**, M Percoco, The effect of deploying large-scale energy storages in Italy, 18th IAEE European Conference, Milan, Italy.

- 2023 B Bird, HR Bokkisam, **I Savelli**, T Morstyn, P Cuffe, Towards a Blockchain Implementation of a Governance & Revenue Dispersal Mechanism for Investments in Battery Energy Storage Systems, IEEE PowerTech, Belgrade, Serbia.
- 2022 HR Bokkisam, **I Savelli**, T Morstyn, P Cuffe, Towards a distributed autonomous organisation for financing, governing and disbursing revenues of a battery energy storage system, IEEE 1st Global Emerging Technology Blockchain Forum, Irvin, California.
- 2020 A De Paola, **I Savelli**, T Morstyn, A novel ex-ante tariff scheme for cost recovery of transmission investments under elasticity of demand, 17th International Conference on the European Energy Market, Stockholm, Sweden.
- 2020 **I Savelli**, C Hepburn, T Morstyn, Nodal and fixed price coexistence in distribution networks with optimal investment planning and tariff design, 17th International Conference on the European Energy Market, Stockholm, Sweden.
- 2019 S Paoletti, **I Savelli**, A Garulli, A Vicino, A bilevel programming framework for piecewise affine system identification, IEEE 58th Conference on Decision and Control, Nice, France.
- 2019 **I Savelli**, B Cornélusse, S Paoletti, A Giannitrapani, A Vicino, A local market model for community microgrids, IEEE 58th Conference on Decision and Control, Nice, France.
- 2019 L Duchesne, B Cornélusse, **I Savelli**, Sensitivity analysis of a local market model for community microgrids, IEEE PowerTech, Milan, Italy.
- 2018 **I Savelli**, A Giannitrapani, S Paoletti, A Vicino, B Cornélusse, Introducing block orders in the Italian day-ahead electricity market, 15th Int. Conf. on the European Energy Market, Lodz, Poland.
- 2017 **I Savelli**, A Giannitrapani, S Paoletti, A Vicino, An exact solution to the market clearing problem with uniform purchase price, IEEE PES Innovative Smart Grid Technologies Conf. Europe, Turin, Italy.