

MIGUEL ANGEL TOVAR REAÑOS, PhD

Research experience

- Economic and Social Research institute (ESRI), Ireland* 2018–Present
Research Officer at the energy and environment research area
- Distributional effects of energy and environmental policies
 - Microsimulation
 - Fuel poverty
- Centre for European economic Research (ZEW), Germany* 2012-2018
Postdoctoral researcher at the department of environmental economics
- Big data at Goethe-Universität Frankfurt*
Guest researcher at the department of informatics working on a health-economics project using machine learning techniques Summer–2017

Business Intelligence

- Mexican Research Institute of Oil (Instituto Mexicano del Petroleo)*
Forecasting of energy consumption and model developing 2004–2007
- Forecasting energy demand for the transport sector

Teaching experience

- Trinity College, Dublin*
Module on Environmental and energy policy. Master students 2022
- Mannheim University*
Guest lecturer on microsimulation. Master students 2018
- University of Essex*
Teaching Assistant for Mathematical Economics 2009–2011
- University of Essex*
Two day course on time series, Master level 2010

Instituto Politecnico Nacional, Mexico City 2001–2002
Teaching Econometrics

Preparatoria Oficial No. 81, Edo de Mex 2002–2004
• Teaching mathematics

Education

PhD in Economics, University of Essex, UK 2012

MSc in Economics, University of Essex, UK 2008

BSc in Economics, Instituto Politecnico Nacional, Mexico City 2001

Computer skills

I have extensive experience programming in R, Stata, GAMS and Python.

Publications

2023 "Keep out the cold: An analysis of potential gaps in fuel poverty policies in Ireland" (jointly with Arya Pillai and John Curtis), *Energy Research Social Science*

2023 "Trends in household demand and greenhouse gas footprints in Germany: Evidence from microdata of the last 20 years" (jointly with Anke Jacksohn, Frank Pothen and Katrin Rehdanz), *Ecological Economics*

2023 "Energy poverty prediction and effective targeting for just transitions with machine learning" (jointly with Constantine Spandagos and Muireann Lynch), *Energy Economics*

2023 "The role of energy, financial attitudes and environmental concerns on perceived retrofitting benefits and barriers: Evidence from Irish home owners " (jointly with John Curtis, Arya Pillai and David Meier), *Energy and Buildings*

2022 "Gathering support for carbon taxation by combining transfers with lower income taxes (jointly with Rick van der Plueg and Armon Rezai)", *European Economic Review*

2022 "Public acceptance of sustainable energy innovations in the European Union: A multidimensional comparative framework for national policy (jointly with Constantine Spandagos and Muireann Lynch) ", *Journal of Cleaner Production*

2022 "Farm technical and environmental efficiency and subsidy re-distribution in Ireland: a sim-

ulation approach of possible performance and equity effects (jointly with Maria Martinez Cillero)”, *Journal of Agricultural Economics*

2022 ”Spatial scenarios of potential electric vehicle adopters in Ireland (jointly with Arya Pillai and John Curtis) ”, *Case Studies on Transport Policy*

2022 ”The benefits of action on implementing carbon taxation in Ireland (jointly with Muireann Lynch)”, *Journal of Environmental Planning and Management*

2022 ”The Distributional Impacts of Environmental Reforms on Private Transportation in Ireland”, *The Economic and Social Review*

2022 ”Are fuel poverty metrics fit for purpose? Evidence from Ireland? (jointly with Muireann Lynch) ”, *Sustainable Cities and Society*

2021 ”Fuel for poverty: A model for the relationship between income and fuel poverty”, *Energy Policy*

2021 ”The heterogeneous effects of carbon taxation in Ireland (jointly with Muireann Lynch)”, *Energy Policy*

2020 ”Initial incidence of carbon taxes and environmental liability. A vehicle ownership approach”, *Energy Policy*

2020 ”‘Floods, flood policies and changes in welfare and inequality: Evidence from Germany, *Ecological Economics*

2019 ”‘Access to and consumption of natural gas: Spatial and socio-demographic drivers”, jointly with John Curtis and Gianluca Grilli, *Energy Policy*

2018 “Material Footprint of Households. The Case of Germany” (jointly with Frank Pothen), *Ecological Economics*

2018 “Household energy prices and inequality: Evidence from German microdata based on the EASI demand system” (jointly with Nikolas Wolfing), *Energy Economics*

2018 “Fuel for Inequality: Distributional Effects of Environmental Reforms for Private Transport” (jointly with Katrin Sommerfeld), *Resource and Energy Economics*

2017 “Economic Impacts of Renewable Energy Promotion in Germany“ (jointly with Christoph Bohringer and Florian Landis), *The Energy Journal*

2013 “Capital-Energy Relationships: An Analysis When disaggregating by Industry and Different Types of Capital,” (jointly with Emma Iglesias), *The Energy Journal*

2012 “The Structure of Energy Efficiency Investment in the UK Households and its Average Monetary and Environmental Savings,” *Energy Policy*

2011 “An Integral Evaluation of Dieselisation Policies for Households’ cars,” *Energy Policy*

Chapters

2019 Road Transport and Its Potential Inclusion in the EU ETS (jointly with Martin Achtnicht, Kathrine von Graevenitz, Simon Koesler, Andreas Löschel, Beaumont Schoeman), published in *The European Dimension of Germany’s Energy Transition*, Springer

Reports

2019 “Carbon taxation in Ireland: distributional effects of revenue recycling policies”, This QEC Special Article, ESRI

2015 “Including Road Transport in the EU-ETS – An Alternative for the Future?” (jointly with Achtnicht, Martin, Kathrine von Graevenitz, Simon Koesler, Andreas Löschel, Beaumont Schoeman and Miguel Angel Tovar Reaños) Adam Opel AG, BMW AG, ZEW Mannheim

2012 “Scenarios for a Post-2020 European Climate Policy” (jointly with Oliver Schenker, Andreas Loschel)

2013 “An Overview on Current Climate Policies in the European Union and its Member States” (jointly with Florian Landis, Oliver Schenker, Christina Vonnahme and Sonja Zitzelsberger)

Grants

Sustainable Energy Authority of Ireland (SEAI): Identifying and overcoming societal barriers to sustainable energy adaptation , Identifying non-financial barriers to energy efficiency residential retrofits in low income households

The Environmental Protection Agency (EPA):

Designing a Green, Equitable and Socially Acceptable Subsidy Scheme, Green Tax Reform and Identifying everyday barriers to climate mitigation behaviour

Department of the Environment, Climate and Communications (DECC): Fuel poverty

Gas innovation fund 2022-012: An examination of the abatement potential of the supply and usage of biomethane

MaTax research fund to develop a microsimulation model (starts: March2015)

Scholarship TELMEX for four years during my undergraduate studies

Languages

- Spanish: Native speaker
- English: Professional fluency
- German: Intermediate level
- French: Basic