



PERSONAL INFORMATION

Ramiro Fernando Parrado Moscoso

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EDUCATION AND TRAINING

January 2008 – March 2012

PhD Science and Management of Climate Change - Impacts and Management of Climate Change (Doctor Europaeus)

Ca' Foscari University of Venice - Department of Economics, Venice

- Environmental economics, Computable general equilibrium modelling, Climate impact and policy analysis
- Thesis: "Climate change policies and endogenous technical change in a general equilibrium modelling framework. Trade Spillovers, Knowledge Stocks and Rebound Effects"
- Supervisor: Prof. Carlo Carraro

2005

Msc in Economics

Universidad Andina Simón Bolívar, La Paz in collaboration with the econometrics department of the University of Geneva (Université de Genève)

- Quantitative Evaluation of Economic Policies

1996

Bsc in Economics

Universidad Católica Boliviana, La Paz

- Microeconomics, macroeconomics, econometrics, economic policy

WORK EXPERIENCE

2018 - present

Scientist

Economic analysis of Climate Impacts and Policy Division

Centro Euro-Mediterraneo sui Cambiamenti Climatici (CMCC), Venice, Italy (www.cmcc.it)

- General Equilibrium and Climate Change Policy Modelling

06/2022 – 07/2022

Consultant

International consultant on decarbonization pathways

United Nations Conference on Trade and Development (UNCTAD)

United Nations

- Provide analysis on key drivers of Least Developed Countries (LDCs) GHG emissions, including intensity analysis, highlighting existing low-carbon technologies and potential obstacles for their adoption in LDCs.
- Map existing models used for decarbonization pathways. Carry out analysis of current methodologies to identify the limitations of existing models in the light of LDCs' context.
- Propose guidelines for a modelling framework that could be used to develop decarbonization assessments on LDCs based on a critical discussion of existing gaps and research/assessment priorities

2016-2018

Adjunct Professor

Ca' Foscari University of Venice

Teaching activity for the following programs:

MSc. (DM270) SCIENCE AND MANAGEMENT OF CLIMATE CHANGE [A02D]

PhD. (D.M.45) SCIENCE AND MANAGEMENT OF CLIMATE CHANGE [R243]

Course: Modeling Impacts of Climate Change and Adaptation Strategies II [PHD027]

2007 - 2017 Researcher*Economic analysis of Climate Impacts and Policy Division***Centro Euro-Mediterraneo sui Cambiamenti Climatici (CMCC), Venice, Italy (www.cmcc.it)**

- General Equilibrium and Climate Change Policy Modelling

07/2018 - present Researcher**RFF-CMCC European Institute on Economics and the Environment (EIEE), Venice, Italy (www.eiee.org)****04/ 2006 – 12/2017 Senior Researcher****Fondazione Eni Enrico Mattei (FEEM), Venice, Italy (www.feem.it)**

- General Equilibrium and Climate Change Policy Modelling

09/ 2010 – 12/2010 Visiting Researcher**Zentrum für Europäische Wirtschaftsforschung GmbH (ZEW)/Centre for European Economic Research, Mannheim, Germany**

- Endogenous technical change and CGE modelling

11/2005-01/2006 Guest Researcher**Ecological and Environmental Economics Programme (EEE) at The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy**

- CGE modelling

09/2005-10/2005 Consultant for the Socio-demographic Indicators Database – BDIS (Base de Datos de Indicadores Sociales)**National Statistics Institute (INE), La Paz, Bolivia**

- Elaboration of the profile and thematic content of the database with data from population's censuses and demographic surveys, taking into account the structure of the DEV-INFO platform.
- Analysis of indicators according to the concepts and standardized definitions adopted by INE.

04/2005-08/2005 Consultant for the project: “Encuesta Continua de Hogares / MECOVI” 2003-2004”**National Statistics Institute (INE), La Paz, Bolivia**

- Analysis, validation and consistency verification of the expenditure database (MECOVI).
- Elaboration of consistency and imputation programs for the database.
- Estimation of the consumption and expenditure structures with survey information.
- Processing of statistical information for the publication of indicators based on the survey data.

2003 – 2004 Industrial Policy and Financial Instruments Consultant**Vice-Ministry of Industry, Trade and Exports, Bolivian Industrial Competitiveness Strategy Project (Estrategia Boliviana de Competitividad Industrial - EBCI), project supported by Danish Cooperation. La Paz, Bolivia**

Main duties accomplished in collaboration with the team of consultants of the EBCI Project were in relation to:

- Diagnosis of the exporting industrial sector in Bolivia.
- Design of the Competitiveness Strategy for the Bolivian industry.
- Design of a industrial policy instrument referred to access to financial resources through a Risk Capital Fund – Industrial Productive Capacity Expansion Fund .

1999 – 2002 Consultant**Berthin Consultoría, La Paz, Bolivia**

- Asset and Company Valuation; Financial and cash flow analysis; Feasibility studies; Market

research studies; Impact and Financial sustainability studies.

1994 – 1996 Researcher

Sociedad Franco Boliviana, La Paz, Bolivia

Member of the research team in charge of the elaboration and writing of the following reports:

- "Banking and Finance in South America" - Management Report, published and distributed by The Financial Times Management Reports in February of 1995.
- "Energy in Latin America", and "Investment in Latin America".

PUBLICATIONS

Peer reviewed papers

- Auer C., Bosello F., Bressan G.M., Delpiazzi E., Monasterolo I., Parrado R., Reyer C. (2025). Cascading socio-economic and financial impacts of geopolitical shocks: evidence from the Russia-Ukraine crisis. *Communications Earth and Environment*. doi.org/10.1038/s43247-025-02119-1
- Valle-García, A., Montilla-López, N., Parrado R., Berbel, J., Martínez-Dalmau, J., Kahil, K., Gutiérrez-Martín, C. (2025). "Integrated Assessment of Resilience to Drought by Coupling Hydro- Economic and Macroeconomic Models." *Journal of Hydrology* 133549. Doi.org/10.1016/j.jhydrol.2025.133549.
- Key R., Parrado R., Delpiazzi E., King R., Bosello F. (2024). Potential climate-induced impacts on trade: The case of agricultural commodities and maritime chokepoints. *Journal of Shipping and Trade*, 9, 11.
- van der Wijst K.I., Bosello F., Dasgupta S., Parrado R., Standardi G., et al. (2023). New damage curves and multimodel analysis suggest lower optimal temperature. *Nature Climate Change*, 13, 434–441
- Akin-Olcum, G., Ghosh, M., Gilmore, E., Johnston, P., Khabbazan, M.M., Lubowski, R., McCallister, M., Macaluso, N., Peterson, S., Winkler, M., Duan, M., Li, M., Parrado, R., Rausch, S., (2022). A model intercomparison of the welfare effects of regional coalitions for ambitious climate mitigation targets. *Climate Change Economics*. <https://doi.org/10.1142/S2010007823500094>
- Pérez-Blanco, C.D., Parrado, R., Essenfelder, A.H., Bodoque, J., Gil-García, L., Gutiérrez-Martín, C., Ladera, J., Standardi, G., (2022). Assessing farmers' adaptation responses to water conservation policies through modular recursive hydro-micro-macro-economic modeling. *J. Clean. Prod.* 360, 132208. <https://doi.org/https://doi.org/10.1016/j.jclepro.2022.132208>
- Rizzati, M., Standardi, G., Guastella, G., Parrado, R., Bosello, F., Pereglio, S., (2022). The local costs of global climate change: spatial GDP downscaling under different climate scenarios. *Spat. Econ. Anal.* 1–21. <https://doi.org/10.1080/17421772.2022.2096917>
- Bosello, F., Parrado, R., (2021). Climate Change Impacts and Market-Driven Adaptation: The Costs of Inaction Including Market Rigidities, in: *Climate and Development*. pp. 137–175. https://doi.org/10.1142/9789811240553_0006
- Parrado, R., Pérez-Blanco, C.D., Gutiérrez-Martín, C., Gil-García, L., (2020). To charge or to cap in agricultural water management. Insights from modular iterative modeling for the assessment of two-way micro-macroeconomic feedback links. *Science of the Total Environment*, 742 (10), 140526.
- Bosello F., Parrado R., Macro-economic assessment of climate change impacts: methods and findings, 2020, *Ekonomiaz*, N.º 97, 44-61, 1º semestre, (2020), <https://www.euskadi.eus/web01-a2reveko/es/k86aEkonomiazWar/ekonomiaz/abrirArticulo?idpubl=93®istro=6>
- Parrado, R., Bosello, F., Delpiazzi, E., Hinkel, J., Lincke, D., and S. Brown (2020) 'Fiscal effects and the potential implications on economic growth of sea-level rise impacts and coastal zone protection'. *Climatic Change*. doi: 10.1007/s10584-020-02664-y.
- Waisman H., Bataille C., Winkler H., Jotzo F., Shukla P., Colombier M., Buira D., Criqui P., Fishedick M., Kainuma M., La Rovere E., Pye S., Safonov G., Siagian U., Teng F., Virdis M., Williams J., Young S., Anandarajah G., Boer R., Cho Y., Denis-Ryan A., Dhar S., Gaeta M., Gesteira C., Haley B., Hourcade J., Liu Q., Lugovoy O., Masui T., Mathy S., Oshiro K., Parrado R., Pathak M., Potashnikov V., Samadi S., Sawyer D., Spencer T., Tovilla J., Trollip H., (2019), A pathway design framework for national low greenhouse gas emission development

- strategies, *Nature Climate Change*, volume 9, pages 261–268, DOI: <https://doi.org/10.1038/s41558-019-0442-8>
- Parrado R., Pérez-Blanco D., Gutiérrez-Martín C., Standardi G., (2018), Micro-macro feedback links of agricultural water management: Insights from a coupled iterative positive Multi-Attribute Utility Programming and Computable General Equilibrium model in a Mediterranean basin, *Journal of Hydrology*, Volume 569, February 2019, Pages 291-309, DOI: <https://doi.org/10.1016/j.jhydrol.2018.12.009>,
 - Campagnolo L., Carraro C., Eboli F., Farnia L. and Parrado R., (2017), The ex-ante Evaluation of Achieving Sustainable Development Goals, *Social Indicators Research* (online first)
 - Pérez-Blanco C.D., Standardi G., Mysiak J., Parrado R., Gutiérrez-Martín C. (2016), Incremental water charging in agriculture. A case study of the Regione Emilia Romagna in Italy, *Environmental Modelling and Software*, *Environmental Modelling & Software* 78 (2016), 202-215, <http://dx.doi.org/10.1016/j.envsoft.2015.12.016>
 - Campagnolo L., Carraro C., Davide M., Eboli F., Lanzi E., Parrado R. (2016), Can Climate Policy Enhance Sustainability?, *Climatic Change* (2016) 137:639–653, <http://dx.doi.org/10.1007/s10584-016-1701-6>
 - Virdis, M., Gaeta, M., De Cian, E., Parrado, R. et al., (2015). Pathways to Deep Decarbonization in Italy Available at: <http://deepdecarbonization.org>
 - Bosello F., Parrado R., Rosa R., Eboli, F., (2015), REDD in the Carbon Market: A general equilibrium analysis, *Environmental Modeling & Assessment*, 20 issue 2, pp 103-115, <http://dx.doi.org/10.1007/s10666-014-9419-1>
 - Dellink, R., Lanzi, E., Chateau, J., Bosello, F., Parrado, R., De Bruin, K., (2014), Consequences of Climate Change Damages for Economic Growth. A Dynamic Quantitative Assessment, *OECD Economics Department Working Papers*, No. 1135, OECD Publishing, <http://dx.doi.org/10.1787/5jz2bxb8kmf3-en>
 - Parrado R., De Cian E., (2014), Technology spillovers embodied in international trade: Intertemporal, regional and sectoral effects in a global CGE framework, *Energy Economics*, 41, 76-89, <http://www.sciencedirect.com/science/article/pii/S0140988313002417>
 - Bosello F., Parrado R., Rosa R., (2013), The economic and environmental effects of an EU ban on illegal logging imports. Insights from a CGE assessment, *Environment and Development Economics*, DOI: <http://dx.doi.org/10.1017/S1355770X12000526> .
 - Bosello F., Campagnolo L., Eboli F., Parrado R., (2012), Energy from waste: generation potential and mitigation opportunity, *Journal of Environmental Economics and Policy Studies*, 14 (4), published: 07/31/2012, 403-420, <http://link.springer.com/article/10.1007/s10018-012-0043-5>
 - Bosello F., Eboli F., Parrado R., Nunes P.A.L.D., Ding H., Rosa R., (2011), “The economic assessment of changes in ecosystem services: an application of the CGE methodology”, *Economía Agraria y Recursos Naturales*. Vol. 11, 1. (2011). pp. 161-190.
 - Eboli F., Parrado, R., Roson, R., (2010), “Climate Change Feedback on Economic Growth: Explorations with a Dynamic General Equilibrium Model”, *Environment and Development Economics*, Volume 15, Issue 05
 - Parrado, R., Peñaranda, A., Sandoval, F., (2004), “Especialización, Diversidad y Competencia como Externalidades Dinámicas en la Industria Manufacturera en Bolivia”, in *Revista de Humanidades y Ciencias Sociales*, segunda época, volumen 9 N° 1-2, June – December 2003, pp 125-172, Instituto de Investigaciones Económicas y Sociales, Universidad Autónoma Gabriel René Moreno, Santa Cruz.

Chapters in books

- Bosello, F. and Parrado, R., (2021) Climate Change Impacts and Market-Driven Adaptation: The Costs of Inaction Including Market Rigidities, in *Climate and Development*, pp. 137–175.
- Calzadilla, A. and Parrado, R. (2018), Extending macro-economic modelling into the resource nexus, in Bleischwitz, R., Hoff, H., Spataru, C., van der Voet, E., VanDeveer S.D., *Routledge Handbook of the Resource Nexus*.
- Carraro C., Campagnolo L., Eboli F., Giove S., Lanzi E., Parrado R., Pinar M., Portale E., (2013), The FEEM Sustainability Index: An integrated tool for sustainability assessment in Marina Erchtchoukova, Peter Khaiter, Paulina Golinska, *Sustainability Appraisal: Quantitative Methods and Mathematical Techniques for Environmental Performance Evaluation*, http://dx.doi.org/10.1007/978-3-642-32081-1_2 , Springer Verlag.
- Bosello, F., Eboli, F., Parrado, R. (2009), “Assessing climate change cost for the economy: valuation results from a GEM perspective” in Carraro, C., Bosello, F. and P.A.L.D. Nunes (Eds) *Impacts of Climate Change and Biodiversity Effects*, Final Report to the European Investment

Bank, Luxemburg.

- Roson R., Eboli F. and Parrado R., (2008), "Gli impatti macroeconomici del cambiamento climatico in Italia. Un'analisi di equilibrio generale" [Macroeconomic impacts of climate change in Italy. A general equilibrium analysis], in Carraro C. (ed), Impatti dei cambiamenti climatici e strategie di adattamento in Italia. Una valutazione economica, Il Mulino, Bologna, forthcoming, 2008.
- 1995, "Banking and Finance in South America", published and distributed by Financial Times Management Reports, Pearson Professional Ltd. London.

Working papers

- Delpiazzo, E., Parrado, R., Standardi, G., (2017), Extending the Public Sector in the ICES Model with an Explicit Government Institution, Fondazione Eni Enrico Mattei, Working Paper, No 011.2017
- Ponce, R., Parrado, R., Stehr, A., Bosello, F., (2016), Climate Change, Water Scarcity in Agriculture and the Economy-Wide Impacts in a CGE Framework, Fondazione Eni Enrico Mattei, Working Paper, No 079.2016
- Lennox, J., Parrado, R., (2015), Capital-embodied Technologies in CGE Models, Fondazione Eni Enrico Mattei, Working Paper, No 002.2015.
- Bosello, F., Parrado, R., (2014), Climate Change Impacts and Market Driven Adaptation: the Costs of Inaction Including Market Rigidities, Fondazione Eni Enrico Mattei, Working Paper, No 064.2014.
- Orecchia, C., Parrado, R., (2013), A Quantitative Assessment of the Implications of Including non-CO2 Emissions in the European ETS, Fondazione Eni Enrico Mattei, Working Paper, No 100.2013.
- Bosello, F., Campagnolo, L., Carraro, C., Eboli, F., Parrado, R. and Portale, E. (2013). "Macroeconomic Impacts of the EU 30% GHG Mitigation Target", Fondazione Eni Enrico Mattei, Working Paper, No 28.2013.
- Campagnolo L., Carraro C., Davide, M., Eboli F., Lanzi E., Parrado R., (2013), "Can Climate Policy Enhance Sustainability?", Fondazione Eni Enrico Mattei, Working Paper, No 10.2013.
- Carraro C., Campagnolo L., Eboli F., Lanzi E., Parrado R., Portale E., (2012), "Quantifying Sustainability: A New Approach and World Ranking", Fondazione Eni Enrico Mattei, Working Paper, No 94.2012
- De Cian, E., Parrado, R., (2012), "Technology spillovers embodied in international trade: Intertemporal, regional and sectoral effects in a global CGE framework", Fondazione Eni Enrico Mattei, Working Paper No 27.2012
- Michetti, M., Parrado, R., (2012), "Improving land-use modelling within CGE to assess forest-based mitigation potential and costs", Fondazione Eni Enrico Mattei, Working Paper No 19.2012
- Parrado, R., Voigt, S., Löschel, A., (2012), "Endogenous Technical Change and Climate Policy: Effects of Research and Development and a Stock of Knowledge in a General Equilibrium Framework", mimeo.
- Parrado, R., (2012), "The Economy-Wide Rebound Effect and Climate Policy Effectiveness in a Multiregional General Equilibrium Framework", mimeo.
- Parrado, R., Ponce, R., (2012), Economy-wide Impacts of Climate Change on Water Resources in Africa: A CGE Approach, mimeo.
- Bosello, F., Eboli, F., Parrado, R., Rosa, R., (2010), "REDD in the Carbon Market: A General Equilibrium Analysis", Fondazione Eni Enrico Mattei Working Paper No 142.2010.
- Bosello, F., Parrado, R., Rosa, R., (2010), "The Economic and Environmental Effects of an EU Ban on Illegal Logging Imports. Insights from a CGE Assessment", Fondazione Eni Enrico Mattei Working Paper No 67.2010.
- Roson R., Eboli F. and Parrado R., (2009), "Climate Change Feedback on Economic Growth: Explorations with a Dynamic General Equilibrium Model", Fondazione Eni Enrico Mattei Working Paper No 2009.043.

Other articles

- Bosello, F., Parrado, R., (2014), Climate Change Impacts and Limited Market-driven Adaptation, (September 25, 2014). Review of Environment, Energy and Economics (Re3).
- Orecchia, C., Parrado, R., (2013), Including non-CO2 Emissions in the European ETS, (October 17, 2013), Review of Environment, Energy and Economics (Re3).
- Carraro, C., Cruciani, C., Lanzi, E., Parrado, R., (2011), "Il FEEM SI. Un indicatore comparativo

- per lo sviluppo sostenibile”, Rivista Delle Politiche Sociali N. 1, 2011. (gennaio-marzo).
- Lanzi, E., Parrado, R., (2011), “Gli impegni di Cancún, gli impatti sulla sostenibilità”, Equilibri 1/2011, Rivista per lo Sviluppo Sostenibile.
 - Carraro, C., Lanzi, E., Parrado, R., (2010), “World Sustainability in the Climate Policy Sphere: A scenario assessment of different commitments for curbing CO2 emissions in a Sustainability Framework” in Modelling for Environment's Sake, Proceedings of the Fifth Biennial Conference of the International Environmental Modelling and Software Society, Ottawa, Canada, July 5-8, 2010, David A. Swayne, Wanhong Yang, A.A. Voinov, A. Rizzoli, T. Filatova (Eds.), ISBN: 978-88-9035-741-1, Volume 2.

Memberships EAERE – European Association of Environmental and Resource Economists

Referee for Agricultural and Food Economics
 Climate Change Economics
 Climatic Change
 Contemporary Economic Policy
 Ekonomiaz
 Economic Modelling
 Energy Economics
 Energy Journal
 Energies
 Journal of International Trade & Economic Development
 Mitigation and Adaptation Strategies for Global Change
 Nature Communications
 Science of the Total Environment
 Water Economics and Policy
 Water Resources Research
 GTAP conference

PERSONAL SKILLS

Mother tongue(s) Spanish

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C2	C1	B2	C1
Italian	C1	C1	B2	B1	B2

Organisational / managerial skills ▪ Experience in team work and organizing groups of people.

Job-related skills ▪ Data analysis, economic modelling, seminar and workshop presentations

Computer skills Specific Applications: R, Tsp, E-Views, Stata, Spss, Gams, Gempack, Model Vision, Crystal Ball, Risk Manager
 General Applications: Microsoft Office (Word, Excel, Power Point, Access), Project.