

# Europass Curriculum Vitae

## Personal information

First name/ Surname

**Andrea Bigano** 

Nationality

Italian

Date of birth

30 June 1969

# Work experience

Dates

**Dates** 

November 2016- October 2017

Occupation or position held Main activities and responsibilities

- Visiting Chief Researcher in Economics
- Coordinating the research on economic impacts of climate change within the Laboratory of Climate Research.
- Supervision of PhD Students.
- Contributing to the Laboratory activities (mainly from remote) and visiting the Far Eastern Federal University in October 2017.

Department of Soil Science, School of Natural Sciences, Far Eastern Federal University, L643 Office, Bldg. L, FEFU Campus, Russkiy Island, Vladivostok, Russia

Name and address of employer

January 2011 →

Occupation or position held Main activities and responsibilities

Scientist, Associate Scientist

- Task Leader for Tasks 6.1 and 6.2, on public acceptability of adaptation solutions, within the Horizon 2020 project TransformAr (2021 - )
- Main Author for Energy, and member of the Economics team, G20 Climate Atlas, ECF grant, 2021
- Researcher within the ECIP Strategic Project on climate risk indicators for sovereigns (Jan 2020 -)
- Researcher within the DG -CLIMA tender SAM-PS on modelling for climate change adaptation (2020 2021)
- Researcher within the Horizon 2020 CSA project SINCERE (Jan 2019-) on strengthening the
  delivery of the JPI Climate Strategic Research and Innovation Agenda, with specific focus on
  the climate finance community (Jan 2019-)
- Lead Topic Expert for the energy sector and the building sector within the European Topic Centre on Climate Change impacts (ETC-CCA), tender ECC-EEA; co-authoring EEA report on climate change impacts and adaptation for the EU energy system; (Nov 2018 - )
- Senior Scientist within the RFF-CMCC European Institute on Economics and the Environment (Sept 2018-)
- Lead expert for socioeconomic data analysis, C3S Tourism, Copernicus Service contract (Tender EMCWF) (Nov 2017- July 2019)
- Member of the CMCC for the Interreg MED Project MEDNICE and follow-up project Efficient Buildings, on energy efficiency in public buildings (Jan 2017-)
- Sector Coordinator for Tourism and Energy, Italian National Adaptation Plan (Tender of the Italian Ministry of the Environment, Land and Sea); (2016)
- Lead Expert for the energy sector in a project providing technical assistance for institution building of the Albanian Ministry of Environment in enforcing the EU environmental and climate Acquis. Tender EuropeAid/135700/DH/SER/AL (July 2015 – April 2017)
- Lead Author for Energy and Tourism, 2016 EEA report on climate change, impacts and vulnerability in Europe. Tender ECC-EEA (April 2014 – Dec 2016)
- Sector Coordinator for Tourism, Italian National Adaptation Strategy (Tender of the Italian Ministry of the Environment, Land and Sea) (2012-2014)

Senior researcher within the CMCC of the Europeaid project EC2, on the cooperation between Europe and China on clean energy technologies, leading to the establishment of an excellence centre (the EC2 Centre) at the Tsinghua university in Beijing. Work Package leader for Work Package C (capacity building) (2011-2013). Centro Euro-Mediterraneo sui Cambiamenti Climatici (CMCC), Via Augusto Imperatore 16, 73100 Name and address of employer Lecce, Italy Type of business or sector Non-profit research institute Dates June 2003 → June 2018 Occupation or position held Senior Researcher Main activities and responsibilities Chair, 6th Workshop on Empirical Methods in Energy Economics, (June 2017-June 2018) Principal investigator in a short project on the implementation of Directive 2012/27/EU on energy efficiency for households and in the building sector. Tender of the Directorate General for Parliament Research Services, European Parliament, Brussels (2016) Senior researcher within the FP7 project Pocacito, on roadmaps for EU post-carbon cities. (2013 - 2017).Work Package Leader, WP6 Quantitative Modelling, in the 7th Framework Programme (FP7) project DYNAMIX, on the design and assessment of policy mixes for resource efficiency in the EU (2012-2016). Senior researcher within the FP7 project PURGE (Public health impacts in Urban environments of Greenhouse gas Emissions reduction strategies). Involved in Work Packages 7 and 8, on the evaluation of the household response to different measures to increase energy efficiency and reduce greenhouse gases emissions. (2011-2014) Research Leader for the topic "Sustainable Energy" in FEEM's Sustainable Development Program (2008-2011) Scientific coordinator of SECURE, a FP7 medium-size project (15 partners, 36 months) on energy security in Europe. Drafting and negotiating the project proposal. (2007 -2010) Scientific supervision of a project on the comparative analysis of energy markets and energy policies in the EU, USA, Japan, and China (Tender of the Italian Ministry of the Environment, Land and Sea, 2007 -2008). Negotiation and coordination of a project on energy efficiency in Italy for the Italian energy industry trade association (Confindustria Energia) (2007). Evaluation of the costs of inaction and adaptation related to the impacts of climate change effects on hydrogeological risk in Italy, within a project evaluating costs and adaptation options of climate change in Italy. Tender of the Italian Ministry of the Environment, Land and

- Sea in preparation of the National Conference on Climate Change. (2007).
- Econometric analysis of the impacts of climate change in the Italian Alps. (Interreg Project ClimChAlp, 2007).
- Evaluation of climate and energy policy scenarios for the Lombardy Region (2007).
- Member of the coordination team of a FP6 project on full cost assessment of electricity production in Europe (CASES). (2006-2007).
- Management and research activities within a FP6 project on the economic analysis of the external costs of oil production and transport (NEEDS) (2005-2007).
- Econometric and computable general equilibrium analysis of climate change effects on the world economy trough its impacts on tourism, sea level rise and energy demand (2003-2007).

Name and address of employer Type of business or sector Fondazione Eni Enrico Mattei (FEEM), Corso Magenta 63, 20123 Milan, Italy

Non-profit research institute

Dates

September 2005 - December 2006

Occupation or position held

Consultant (part time)

Main activities and responsibilities

- Energy Markets Analysis (prices and demand forecasts, electricity transmission issues).
- Set-up and coordination of a project monitoring energy investments in Italy
- Competition scenario analysis for Alitalia.

Name and address of employer Type of business or sector REF, Ricerche per l'Economia e la Finanza, Via Gioberti 5, 20123 Milan, Italy

Consultancy Firm

June 2003 - March 2004 Occupation or position held Scientific Consultant (part time) Main activities and responsibilities Analysis of the impact of climate change on tourism in a general equilibrium perspective. Setting-up of the analysis of the climate change impact on energy use. The Abdus Salam International Centre for Theoretical Physics (ICTP), Strada Costiera 11, 34100 Name and address of employer Trieste, Italy Type of business or sector International Institution (UNESCO research centre). Dates August 1996 - May 2003 Research Officer Occupation or position held Main activities and responsibilities Quantitative analyses of the European electricity sector by means of partial equilibrium computable models (1999-2003). Evaluation of environmental policies for the Belgian electricity sector; based on ExternE Project external cost estimates. Theoretical analysis of environmental policies in an international oligopolistic market, in presence of asymmetric information (1997-1999). Economic valuation of the external costs of electricity generation in Belgium. (National Implementation of the ExternE project) (1997–1998) Econometric evaluation of the impact of climate change in Italy. (1996–2000). Name and address of employer Centrum voor Economische Studiën, Katholieke Universiteit Leuven (KUL), Naamsestraat 69, 3000 Leuven, Belgium Type of business or sector Academic Research Centre · Lecture on Climate Change and Tourism, Master in Economia e Gestione del Turismo, CISET -**Teaching activities** Università Ca' Foscari Venezia (2020) • Lectures on energy and climate change for the training module "Climate Scenarios and Adaptation and Mitigation Policies" within the tender contract "Higher Education Services in the fields of sustainable development and environmental management in the framework of bilateral cooperation Italy - China " for the Italian Ministry of Environment, (2018-2019) Lectures on energy economics within a short course by CMCC and the University of Maryland on "Energy, climate change and options for a low-carbon economy" (2017-2019) · Short courses on the economics of energy sources and climate change, University of Turin, (May 2010, October-November 2010, November 2011, October-November 2012). Contract professor for an advanced course in Microeconomics, University of Milan - Bicocca, Faculty of Statistics (Academic Year 2007-2008). • Lectures on "Global Energy Challenges in the 21st Century" and "Energy Planning in Resource Rich Countries and Recourse Poor Countries" within the "Sustainability of Natural Resources" course, Venice International University (July 2008). Short course on "Evaluation of Externalities of the Energy Sector" within the doctoral program of the Department of Mechanical Engineering, University of Padua (Academic Year 2006-2007). Short course on "Environmental Economics and Sustainable Tourism" within the Master program on Environmental Economics and Policy of the Faculty of Political Science, University of Milan. (Academic Year 2004-2005). **Education and training** 1st September, 1997 – 25th February, 2003 **Dates** Title of qualification awarded PhD. in Economics Name and type of organisation Katholieke Universiteit Leuven, Belgium, (University) providing education and training Title of the Thesis "The Environmental Regulation of the Electricity Sector in a European Market Framework (Supervisor: Prof. Stef Proost) Dates 1st August, 1996 - 1st September, 1997 Title of qualification awarded **Doctoral Qualification in Economics** Principal subjects / occupational skills Energy Economics, Environmental Economics, Industrial Economics, Public Economics, Page 3 / 7 - Curriculum vitae of

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covered Microeconomics, Game Theory Name and type of organisation Katholieke Universiteit Leuven, Belgium (University) providing education and training Title of the Thesis Environmental Regulation of the Electricity Sector in a European Context (Supervisor: Prof. Stef Proost). **Dates** 1st September, 1995 – 1st September, 1996 Title of qualification awarded Master of Science in Environmental Economics Name and type of organisation University College London, United Kingdom (University) providing education and training Title of the Thesis The Amenity Value of Climate in Italy (Supervisor: Prof. David Maddison) **Dates** 1st September, 1987 – 16th March, 1994 Title of qualification awarded Laurea in Economia Politica (First Degree in Economics) (110/110 cum laude) Name and type of organisation Università Commerciale L. Bocconi, Milan, Italy providing education and training Title of the Thesis Modelli di regolamentazione dell'inquinamento da fonte non localizzata (Models of non-point pollution regulation) (Supervisor: Prof. Piero Tedeschi) Other courses and Summer schools EEA Summer School on Regulation of European Markets, Toulouse, France (1999). EAERE Summer School on the International Dimension of Environmental Policy, Venice, Italy (2000) ICTP Advanced Course on Computable General Equilibrium Modelling (CGE) and the Environment, Trieste, Italy (2003) Personal skills and competences Mother tongue(s) Italian Other language(s) Self-assessment Europoan lovol (\*) S

European ievei ( )
English
Dutch
panish / Castilian
French

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user
B1	Independent user	B1	Independent user	A2	Independent user	B1	Independent user	A2	Basic user
B2	Independent user	B2	Independent user	В1	Independent user	B1	Independent user	A2	Basic user
B1	Independent user	В1	Independent user	В1	Independent user	B1	Independent user	A2	Basic user

(\*) Common European Framework of Reference (CEF) level

Computer skills and competences

Economic Modelling: GAMS, Gempack. ;Statistic/Econometric analysis: Stata. Microsoft Office (Word, Excel, Powerpoint)

## Additional information

- Consultant for the OECD, Paris, France (August 2014 June 2015) Reviewing the approaches used in economy-environment models to study the economic consequences of the health impacts from air pollution (valuation of mortality, morbidity and productivity effects) and advising on the most suitable methodology to be used for the CIRCLE project.
- Judicial expert in the Joint Review Panel process of the Northern Gateway Pipeline project, for the Janes Freedman Kyle Law Corporation, Vancouver, Canada, representing the Gitxxala First Nation. Providing expert opinion and testimony on the risk assessment results submitted by the proponent (2011, 2013).
- Oral presentations at almost all conferences of the European Association of Environmental and Resources Economists (EAERE) from 1997 to 2019 (bar 2004) and at the 2002 and 2014 editions

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- of the World Congress of Environmental and Resource Economists. Several presentations in international seminars, workshops, and conferences.
- Expert Reviewer, IPCC WORKING GROUP II Climate Change 2014: Impacts, Adaptation, and Vulnerability (AR5); and Working Group III to the Sixth Assessment Report (AR6, 2021).
- Refereeing of economic articles for the Energy Journal, Energy Economics, Energy Policy, Economic Modelling, Climatic Change, Journal of Tourism Management, Journal of Transport Economics and Policy and the FEEM Working Paper Series
- Member of the European Association of Environmental and Resource Economists.
- Member of the Italian Association of Environmental and Resource Economists.
- Member of the research network Empirical Methods in Energy Economics (EMEE)
- Member of the Scientific Committee of the blog Climalteranti (<u>www.climalteranti.it</u>)
- Research Fellow, CMCC, Venice and Lecce, Italy (2007-2010).

**Annexes** 

Selected publications on next page

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Last Update: November 18, 2021

#### SELECTED PUBLICATIONS BY ANDREA BIGANO

Papers in peerreviewed journals Harris S., Weinzettel J., Bigano A., Källmén A. (2020) Low carbon cities in 2050? GHG emissions of European cities using production-based and consumption-based emission accounting methods. Journal of Cleaner Production, V. 248, 2020, 119206, ISSN 0959-6526, https://doi.org/10.1016/j.jclepro.2019.119206

Alberini A., Di Cosmo V., Bigano A., (2019) How are fuel efficient cars priced? Evidence from eight EU countries Energy Policy, Vol: 134 pp: 110978, https://doi.org/10.1016/j.enpol.2019.110978

Zotti, J. and Bigano, A. (2019) Write circular economy, read economy's circularity. How to avoid going in circles. Econ Polit (2019). https://doi.org/10.1007/s40888-019-00145-9

Alberini, A., Ščasný, M. Bigano, A., (2018) Policy- v. individual heterogeneity in the benefits of climate change mitigation: Evidence from a stated-preference survey, Energy Policy, V. 121, 565-575, ISSN 0301-4215, <a href="https://doi.org/10.1016/j.enpol.2018.07.008">https://doi.org/10.1016/j.enpol.2018.07.008</a>.

Alberini, A., Bigano, A. Ščasný, M., Zvěřinová, I., (2018) Preferences for Energy Efficiency vs. Renewables: What Is the Willingness to Pay to Reduce CO<sub>2</sub> Emissions?, Ecological Economics, V. 144, 171-185, ISSN 0921-8009.

Spinoni, J., Vogt, J. V., Barbosa, P., Dosio, A., McCormick, N., Bigano, A. and Füssel, H.-M. (2017), Changes of heating and cooling degree-days in Europe from 1981 to 2100. Int. J. Climatol. doi:10.1002/joc.5362

Bigano A., Sniegocki, A, Zotti, J., (2016), Policies for a More Dematerialized EU Economy. Theoretical Underpinnings, Political Context and Expected Feasibility, *Sustainability*, 8(8), 717, 1-22, http://www.mdpi.com/2071-1050/8/8/717

Alberini, A., Bigano, A. (2015) "How Effective Are Energy-Efficiency Incentive Programs? Evidence from Italian Homeowners". Energy Economics, 52(S1): S76-s85 doi:10.1016/j.eneco.2015.08.021

Alberini, A. Bigano, A, Boeri, M. (2014) Looking for Free-riding: Energy Efficiency Incentives and Italian Homeowners. Energy Efficiency, 7:571–590 DOI 10.1007/s12053-013-9241-7, Springer.

Bigano, A., Cassinelli, M., Markandya, A., Sferra, F. (2010). The Role of Risk Aversion and Lay Risk in the Probabilistic Externality Assessment for Oil Tanker Routes to Europe *Journal of Transport Economics and Policy*, 44 (1), pp. 93-118.

Bigano, A, Bosello, F. Roson, R., Tol, R.S.J. (2008) Economy-Wide Estimates of the Implications of Climate Change: A Joint Analysis for Sea Level Rise and Tourism. *Mitigation and Adaptation Strategies for Global Change* Vol. 13, 8, pp 765–791.

Bigano, A., Hamilton, J.M., Tol, R.S.J. (2007). The Impact of Climate Change on Domestic and International Tourism: A Simulation Study, The Integrated Assessment Journal Vol. 7, 1, Pp. 25–49. Open Access Research.

Bigano, A., Hamilton J.M., Lau M., Tol, R.S.J. and Zhou, Y. (2007), "A Global Database of Domestic and International Tourist Numbers at National and Subnational Level", International Journal of Tourism Research, vol. 9, pp. 147-154.

Bigano, A., Hamilton, J.M., Maddison, D.J., and Tol, R.S.J. (2006), "Predicting Tourism Flows under Climate Change", An Editorial Essay, Climatic Change, Vol. 79, N. 3-4.

Bigano, A., Hamilton, J.M., Tol, R.S.J. (2006). The Impact of Climate on Holiday Destination Choice. *Climatic Change* 76: 389-406

Berritella, M., Bigano, A., Roson, R., Tol, R.S.J. (2006). A General Equilibrium Analysis of Climate Change Impacts on Tourism. *Tourism Management*. 27: 913-924.

Maddison, D., Bigano, A. (2003). The Amenity Value of the Italian Climate. *Journal of Environmental Economics and Management*, 45: 319-332.

Bigano, A., Proost, S., Van Rompuy, J. (2000). Alternative Environmental Regulation Schemes for the Belgian Power Generation Sector. *Environmental and Resources Economics*, 16: 121-160.

Books and book chapters

Spano D., Armiento M., Aslam M.F., Bacciu V., Bigano A., Bosello F., Breil M., Butenschön M., Cadau M., Cogo E., Colelli F. P., Costa Saura J.M., Dasgupta S., De Cian E., Debolini M., Didevarasl A., Ellena M., Galluccio G., Harris R., Johnson K., Libert A., Lo Cascio M., Lovato T., Marras S., Masina S., Mercogliano P., Mereu V., Mysiak J., Noce S., Papa C., Phelan A.S., Pregagnoli C., Reder A., Ribotta C., Sano M., Santini A., Santini M., Sartori N., Sini E., Sirca C., Tharmananthan R., Torresan S., Trabucco A., (2021)"G20 Climate Risk Atlas. Impacts, policy and economics in the G20" DOI: 10.25424/cmcc/g20\_climaterisks

Botzen, W.; Bacciu, V.; Mereu, V.; Furlan, E.; McCall, R.; Torres, L.; Tesselaar, M.; Marzi, S.; Morales Irato, D.; Watkiss, P.; Ijff, S.; Mysiak, J.; Koks, E.; Mol, J.; Bloemendaal, N.; Robinson, P.; Hrast Essenfelder, A.; Mereu, S.; Scoccimarro, E.; Zennaro, Federica; Bosello, Francesco; Becker, Bernhard; Trabucco, Antonio; Wens, Marthe; Medri, S.; Wouters, L.; Rizzo, A.; Nirandjan, S.; Ebrey, R.; Caires, S.; van der Lelij, A. C.; Torresan, S.; Bigano, A.; Jeuken, A.; Aerts, J.; Mercogliano, P.; de Ruiter, M.; Winter, G.; Reder, A. (2021) Study on adaptation modelling Comprehensive desk review: climate adaptation models and tools. Publications Office of the EU. ISBN 978-92-76-30711-2; DOI 10.2834/328683

Fussel H-M, Kurnik, B, Tomescu M, Vanneuville W, Smith M, Gerber F, Artola I, Adriaenssens V, Bigano A, Vingerhouts

P, Eerens H. (2019) Adaptation challenges and opportunities for the European energy system: Building a climate-resilient low-carbon energy system. EEA Report N.1/2019, European Environmental Agency, Copenhagen, Denmark, ISBN 978-92-9480-065-7, doi:10.2800/227321

Bastianin A, Bigano A, Cattaneo C, Cassinelli, M, Cologni A, Manera M, Marazzi L, Markandya A., Pierfederici R, M. Plotegher M, and Sferra F.(2017), *Energy Governance, Institutions and Policies in the EU*, in M. Manera (ed.), *Energy Governance, Institutions and Policies in China and the EU*, FEEM Press, Milano (ISBN: 9788894170146)

Bigano A, Vogt J, Spinoni J, Perrels A, Crawford–Brown D, Kiviluoma J. (2017). *Section 5.4: Energy.* In: *European Environment Agency. Climate change impacts and vulnerability in Europe 2016. An indicator-based report.* vol. 1/2017, p. 244-253, Luxemburg: Publications Office of the European Union, Luxembourg, doi: 10.2800/534806

Bigano A, Fussel H-M, Perrels A, Prettenthaler, A (2017). Section 5.6: Tourism. In: European Environment Agency. Climate change impacts and vulnerability in Europe 2016 An indicator-based report. vol. 1/2017, p.263-266, Luxemburg: Publications Office of the European Union, ISBN:978-92-9213-835-6, doi: 10.2800/534806

Bigano A, Arigoni Ortiz, R, Markandya A, Menichetti M, Pierfederici R, (2011). The Linkages between Energy Efficiency and Security in Europe. In Galarraga, I., González-Eguino, M., Markandya, A. (eds.) *Handbook of Sustainable Energy*, Edward Elgar.

Markandya A, Bigano A, Porchia R, (eds.) (2010) The Social Cost of Electricity: Scenarios and Policy Implications, Edward Elgar Publishing.

Bigano A, Goria A, Hamilton, J, Tol RSJ. (2005). The Effect of Climate Change and Extreme Weather Events on Tourism. In: Lanza A, Markandya A, Pigliaru F, (eds). *The Economics of Tourism and Sustainable Development*, Edward Elgar Publishing. Also available as *Fondazione Eni E. Mattei Working Paper* n. 30.05, Milan, Italy.