ROSARIA CHIFARI

Member of ENT since June 2017 Consultant, researcher and coordinator of waste management, circular economy and energy projects



EDUCATION

- 2016. PhD in Environmental Science and Technology at the Autonomous University of Barcelona (UAB).
- _ 2006. MSc in Environmental and Territory Engineering. MSc Degree obtained at the University of Naples Federico II (UNINA).
- _ 2000-2006. Environmental and Territory Superior Engineering at the University of Naples Federico II (UNINA).



| PROFESSIONAL EXPERIENCE

- December 2016 Junio 2017. European Centre for Governance in Complexity, Barcelona. External researcher on sensitivity analysis of DG REGIO database of the payments in the programming period 1989-2013.
- November 2013 November 2016. Institute of Environmental Science and Technology (ICTA) of the Autonomous University of Barcelona (UAB), Barcelona. PhD Candidate. Main task was the management and coordination of the European project LIFE+ MARSS Material Advanced Recovery Sustainable aiming at evaluating the performance of an innovative technology for processing and recycling municipal solid waste.
- February July 2013. Institute of Energy Technologies (INTE) of the Polytechnic University of Catalonia. BarcelonaTech (UPC), Barcelona. External researcher on transparent electrodynamic shield application in solar panels in remote areas.
- December 2010 December 2017. SQ Consult B.V, Barcelona & Utrecht. Independent consultant in renewable energy y bioenergy. Main tasks were preparation of technical reports and working papers, tendering process coordination and preparation of proposals, grant requests and expressions of interest. Identification of new business opportunities in the international renewable energy markets with particular attention in Spain, Italy and Latin America.
- September 2009 December 2010. Factor CO2 Ideas, Barcelona. Consultant in renewable energy and climate change. Main responsibilities were project proposals writing for national and international funding agencies and development of technical content in renewable energy projects.
- June 2007 August 2009. Ecofys International, Roma, Barcelona, Cologne & Utrecht. Consultant in bioenergy. Main responsibilities were technical content development in bioenergy strategic studies, coordination in tendering and proposal development process framed within multilateral development banks and support in acquisition of new projects and clients.
- February 2007 May 2007. les consulting S.r.l., Roma. Junior Consultant in bioenergy. Main tasks were project coordination and research of technical content of projects related to use of residues and waste as alternative fuel within cement production sector.

June 2006 - January 2007. Faber S.r.I., Naples. Junior Consultant in bioenergy. Main task were project coordination and development of design and permitting procedure for biogas CHP plants.



MOST RELEVANT AREAS OF EXPERTISE

- _ Circular economy and Waste management (special emphasis in municipal solid waste)
- Renewable Energy (special interest in Bioenergy)



MAIN PROJECTS

Waste and Circular Economy

- _ Closing the circle through industrial symbiosis with other companies and leading the transition to a circular and emissions-neutral economy. EDISON | 2024.
- Exploratory study for the use of new land to recover materials from waste in TRARGISA. Tragsatec | 2024.
- <u>Technical assistance to AIREF for the development of the study on public spending</u> related to urban waste management. AIREF | 2023-2022.
- Calculation of statistics and indicators of circular economy and waste. IHOBE | 2022 -2023.
- Horizon 2020 circular economy "BIOCIRCULARCITIES Exploring the circular bioeconomy potential in cities. Proactive tools for implementation by policy makers and stakeholders". The Fundació ENT is Project Coordinator of the Consortium. Client: European Commission European Union's Horizon research and innovation program H2020-BBI-JTI-2020 under Grant Agreement No 101023516. October 2021 on going.
- Horizon 2020 circular economy "DECISIVE Decentralised management Scheme for Innovative Valorization of urban biowaste". European Commission | 2016 2021.
- _ Training of the MedCities network members in municipal waste management, environmental management, energy efficiency and mobility. MedCities | 2021.
- Scoping study to assess the feasibility of further EU measures on waste prevention and implementation of the Plastic Bags Directive. Eunomia for the European Commission | 2020.
- _ Inventory of waste treatment plants in Spain and Portugal. Novamont | 2020.
- Conventional & Biodegradable Plastics in Agriculture. Technopolis | 2020.
- Mapping objectives in the field of environmental taxation and budgetary reform: Internalisation of environmental external costs. IEEP | 2019 2020.
- Absorbent and hygiene products: Overview of waste management in Spain. Confidencial | 2018.
- "LIFE+ MARSS project: development of a toolkit for the integrated assessment of municipal waste management systems that encompasses the environmental, institutional, socioeconomic, biophysical and socio-cultural dimensions of waste management". Commissioned by European Commission. 2013-2015.
- "Survey on use of Refuse Derived Fuels for the cement production industry in 10 European countries (additional analysis of regulatory framework and financing schemes regarding energy use of biomass)". Commissioned by Cemex. 2008.

_ "Manure Biodigestion technologies analysis in Aragón". Commissioned by Aragón Government. 2010.

- "Resource evaluation for solid biomass for energetic use to identify the market dynamics in the European Union and the rest of the world". 2008.
- "Italian vegetable used oil market analysis". Client: Ferrero, 2008.
- _ "Use of residues and waste within "waste to energy" industries (such as cement production)". Client: Holcim, 2007.
- _ "Design and permitting scheme of plants for the production of biogas CHP plants in some Municipalities of Campania Region". Client: Campania Region, 2007.

Renewable Energy

- "Investigation on transparent electrodynamic shield application to mitigate the solar panel power output reduction due to dust accumulation in remote areas". Client: Polytechnic University of Catalonia. BarcelonaTech (UPC), 2013.
- _ "Renewable Energy and Energy Efficiency political framework and financial support schemes in Spain". Client: Mars, 2009.
- _ "Implementation of a new energy infrastructure for a small village based on Renewables". Client: Diputación de Gipuzkoa, 2010-2011.
- "Local strategy energy plan for a self-sustained energy system for the Municipality of Sitges". Client: Municipality of Sitges, 2010.
- _ "Full conceptual design of a "Renewable Energy Sustainable Demonstration Farm" in Dominican Republic". Client: Inter-American Development Bank, 2009-2010.
- "Evaluation of the socio-economic impact of Wind Park proposals for the region of Cantabria, Spain". Client: GENERCAN, 2009;
- _ "Installation Guideline for Large Scale Solar Thermal Systems". Client: Confidential, 2009.
- _ "Analysis of the regulatory framework and subsidize schemes for the promotion of renewable energy projects in Spain and Italy". Client: Confidential, 2008.

Bioenergy

- _ "Advice on transposition of RED for biofuels sustainability criteria in Spain". Client: National Energy Commission (CNE), 2012.
- _ "Advice on sustainability policies for biofuels trading". Cliente: ED&F MAN, 2011.
- _ "Study on Biogas plant opportunities for the Dairy industry in Gipuzkoa". Cliente: URKOME Rural Development Association in Basque Country, 2011.
- _ "Technical and economic analysis of logistics and markets adaptation for biofuels in Spain". Client: IDAE, 2009-2010.
- "Detailed sustainable lignocellulosic biomass market study to identify its dynamics in 5 European countries". Client: Abengoa Bioenergy, 2008.
- "Evaluation of the emissions derived from biofuels supply chain through SIMAPRO software. Life cycle analysis for the characterization of no-GHG emission within specific biofuels supplies chain and related fossil fuels". Client: Confidential, 2008.
- "Study on biofuels (biodiesel, bioethanol, biogas) potential of the Province of Turin and assessment of the environmental and economic outcomes". Client: Province of Turin, 2007-2008;

_ "Market analysis regarding potential and available solid biomass streams for "district heating". Client: SHV, 2007.

Climate Change

- Supporting the Evaluation of the EU Biodiversity Strategy to 2020 and Follow-up. Trinomics for the European Commission | 2019 2021.
- _ "Evaluation of carbon footprint of GSMA Mobile World Congress 2011". Client: GSMA, 2010.
- _ "Developing carbon budget and domestic offset projects for Spain". Client: Friend of the earth Spain, 2009-2010.



PUBLICATIONS

Thesis

- Chifari, R. (2016). Integrated assessment of Municipal Solid Waste Metabolism. The case of the Metropolitan Area of Naples, Italy. Doctoral Dissertation, Autonomous University of Barcelona, Institute of Environmental Science and Technology. Barcelona, Spain.
- Chifari, R. (2006). Project design of small biogas production facilities from anaerobic digestion of the organic fraction of Municipal Solid Waste in the Campania Region. MSc Thesis. University of Naples Federico II. Department of Environmental and Territory Engineering. Naples, Italy.

Articles in scientific journals and book chapters

- Ansanelli, G., Fiorentino, G., Chifari, R., Meisterl, K., Leccisi, E., Zucaro, A. (2023) Sustainability Assessment of Coffee Silverskin Waste Management in the Metropolitan City of Naples (Italy): A Life Cycle Perspective. Sustainability, 15(23), 16281.
- Torrente-Velásquez, J.M., Ripa, M., Chifari, R., Bukkens, S., Giampietro, M., (2020). A waste lexicon to negotiate extended producer responsibility in free trade agreements. Resour. Conserv. Recycl. 156, 104711.
- Torrente-Velásquez, J. M., Chifari, R., Ripaa, M., Giampietro, M. (2019) Robust information for effective municipal solid waste policies: Identifying behaviour of waste generation across spatial levels of organization. Waste Management, 103: 208-217.
- Puig Ventosa, I., Campos Rodrigues, L., Chifari, R. "Taxes on Air Pollution in Spain", p. 315-336, in Villar Ezcurra, M., Cámara Barroso, C. (Eds.) (2019) Environmental Tax Studies for the Ecological Transition. Civitas Thomson Reuters.
- Torrente, J. M., Giampietro, M., Ripa, M., Chifari, R. (2019) Landfill reactions to society actions: The case of local and global air pollutants of Cerro Patacón in Panama. Science of The Total Environment, 135988.
- Chifari, R., Renner, A., Lo Piano, S., Ripa, M., Bukkens, S., Giampietro, M. (2017)

 Development of a municipal solid waste management decision support tool for Naples,

 Italy, Journal of Cleaner Production, Volume 161, 1032-1043,

 https://doi.org/10.1016/j.jclepro.2017.06.074
- Chifari R., Lo Piano, S., Matsumoto S., Tasaki T. (2017) "Does recyclable separation reduce the cost of municipal waste management in Japan?". Waste Management 60, 32-41, https://doi.org/10.1016/j.wasman.2017.01.015
- Chifari, R., Piano, S. L., Bukkens, S. G., & Giampietro, M. (2016). A Holistic Framework for the Integrated Assessment of Urban Waste Management systems. Ecological Indicators, 94 (3), 25-36, https://doi.org/10.1016/j.ecolind.2016.03.006

Chifari, R. and Giampietro, M. (2015). Proceedings of the 9th Biennial International Workshop Advances in Energy Studies, Energy and Urban Systems. Chapter: Participatory integrated assessment of urban waste management systems. pp. 115-125.



COURSES AND WORKSHOPS

- Pydata Barcelona 2017 course. ESADE, Barcelona 2017.
- _ CoEnerCat 4rt Congrés d'Energia de Catalunya "Energia, territori, medi Ambient, qualitat de vida, Economia local", Institut d'Estudis Catalans, Barcelona 2017.
- PhD course: "Scientific Writing", Autonomous University of Barcelona (UAB), Barcelona 2015.
- PhD course: "Taller Noves eines per a la difusió de la Geoinformació: ArcGIS Pro". Autonomous University of Barcelona (UAB), Barcelona 2015.
- "The business formula" entrepreneurship and sales course. Seeseuno CINC, Barcelona 2012.
- _ ECOFARM Course "Innovation for sustainable farmer sector". ADAP, Barcelona 2010.
- WISE (Waste in Social Environment) Course on "Human producer of waste and decision-maker for recycling systems". Marie Curie Actions. Madrid 2010.
- Project Management Skills Course. Ecofys International, Utrecht 2009.
- Qualification to the Profession of Engineer in National Engineer Chart of the Province of Naples. National Engineer Chart of the Province of Naples, Naples 2007.



PRESENTATIONS IN INTERNATIONAL CONFERENCES

- Workshop "Agorà dei movimenti in difesa dei territori e per la giustizia ambientale" presenting "Un approccio olistico all'analisi integrata di sistemi di gestione dei rifiuti urbani". Naples, March 2016.
- The 15th International Waste Management and landfill Symposium with the presentation: "Integrated Assessment of Urban Solid Waste Management Systems: a quantitative characterization of the situation in Naples". S. Margherita di Pula (CA-Sardinia), October 2015.
- Workshop in COPPE/UFRJ presenting "Understanding urban solid waste metabolism and role of local institutions: the case of two "favelas" in Rio de Janeiro". Rio de Janeiro, July 2015.



SCHOLARSHIP AND AWARDS

- 2016. Academic award "International Doctorate" during PhD course.
- 2015. Marie-Curie fellow UFRJ during PhD course.
- _ 2006. Academic award "110/110 Cum Laude" during MSc course.