

PERSONAL INFORMATION

Manjola Banja

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Sex Female |
Date of birth 10/03/1967 |
Nationality Albanian – EU Permanent Resident

WORK EXPERIENCE

01.06.2021 – 31.05.2024

Scientific/Technical Officer (Contract Agent FG IV)

Directorate C – Energy, Climate and Transport, Air and Climate Unit, Joint Research Centre, European Commission, Ispra, Italy, <https://ec.europa.eu/jrc/en>.

Perform studies related to changes of greenhouse gases (GHG) and air pollutant emissions in time and in space to measure the impact on climate change. Comparison with other data sources as EMEP, Eurostat and countries submissions to UNFCCC and under National Emissions reduction Commitments Directive (NECD).

Involved in the development and update of the JRC EDGAR (Emissions Database for Global Atmospheric Research) database on GHG and air pollutant. Involved in the update of activity data, technology, emission factors and emission reduction measures covering sectors of Waste, Agriculture and Energy. Lead of the work to improve the air pollutant emissions estimation from the small-scale combustion sector.

Scientific leader of the JRC Agricultural Emission Estimation (AgrEE) Tool supporting the EU Member States to improve national inventories on air pollutant and greenhouse gas emissions from agricultural sector https://edgar.jrc.ec.europa.eu/agree_tool/public/

Collaboration with DG ENV, DG ENER, Eurostat, the UNECE Convention on Long-range Transboundary Air Pollution Task Force for Emissions Inventory and Projections (TFEIP) and participation in several technical meetings and workshops.

Lead of the Unit C.5 work to create a communication platform between EDGAR and POLES -JRC model allowing EDGAR to project emissions using POLES-JRC model information and providing POLES-JRC the latest up to date historical emissions. Building synergies for emission computation, data sharing, etc

Contribution to the JRC project “ Sustainable Heating and Cooling” having in focus the status of air pollutant emissions and their projections up to 2030 and 2050.

10.03.2020 – 31.03.2021

Expert Intra-Muros at Air and Climate Unit, Directorate for Energy, Transport and Climate, JRC, EC

Technical support for the development of the JRC Emissions Database for Global Atmospheric Research (EDGAR) database and applications. Developing a database, which collects all the information, needed to update the EDGAR agricultural emissions to serve the needs of policy makers (e.g. DG ENV, DG AGRI, etc.) and Member States. Work under the Administrative Arrangement (AA) with DG Environment.

Responsibilities:

Task 1 – Evaluation of the state of the art of air pollutant emissions in the agricultural sector in a technical report. For each agricultural sub-sector (e.g. agricultural waste burning, agricultural soils, manure and fertiliser management and application, livestock feeding and housing, and enteric fermentation), the report will summarize the methodologies (Tier 2 and higher) relevant to compute air pollutant emissions, following EMEP/EEA and IPCC guidelines.

Task 2 – Supporting the dialogue with Member States in collaboration with DG ENV and collecting detailed information. Participation at meetings of “Ambient air quality expert group relating to the implementation of the NEC directive on the

reduction of national emissions of certain atmospheric pollutants. Participation at workshops and meetings organised in the frame of the AA.

Task 3 – Development of a tool to compute air pollutant and greenhouse gas emissions from agricultural sector. The main aim of the tool is to provide the user/inventory compiler with the possibility to improve consistency between air and GHG emission reporting and to move to a Tier 2 methodology for their reporting following the template set under the Air Convention and referred to in the NECD (EC, Directive 2016/2284, 2016).

07.02.2020 – 28.02.2020

Expert at HEAT GmbH

Market study on “Mitigation potential for heat pump and commercial refrigeration equipment in EnC countries – Ukraine case” - In the framework of the Heat GmbH project “Capacity Building for the Innovative Application of Energy-Efficient and Climate-Safe Technologies RACHP in Ukraine, Umweltbundesamt, German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.

- Responsible for the market study structure and the final edition of the study
- Responsible for data collection on heat pump market in EU and EnC countries having in focus Ukraine
- Writing the sections of the market study related to the
 - Country background,
 - Heating/Cooling demand drivers and gas usage in Ukraine
 - Legal and regulatory framework in EU and Ukraine related to renewable energy and energy efficiency
 - Heat pumps market in EU and Ukraine-progress and projections
 - Comparison of climate friendly and conventional heat pumps vs gas boilers
 - Development of mitigation scenarios up to 2050 on emission savings potential in Ukraine when introducing heat pumps
 - Development of scenarios up to 2050 on heat pump penetration in the Ukraine household stock

14.06.2019 – 31.01.2020

Expert at Air and Climate Unit, Directorate for Energy, Transport and Climate, JRC, EC

Work Package “Air and Climate in Western Balkans” supports the process of accession of the Western Balkans Countries as envisaged in the EU strategy for the Western Balkans (COM (2018)65) and the Enlargement package (COM (2018) 450).

Responsibilities:

- Analysis of the alignment of Western Balkans countries with EU environment and climate change *acquis*;
- Design and drafting of a Science for Policy Report on the status of air quality, air pollutants emissions and GHG emissions in Western Balkans;
- Design and drafting of a Technical Report on Western Balkans countries profiles on the status of air quality and GHG emissions;
- Establishment of the database on air quality (concentrations) in six countries of Western Balkans: Albania, Kosovo, Serbia, Montenegro, North Macedonia and Bosnia & Herzegovina;
- Establishment of the database on air pollutants emissions in six countries of Western Balkans: Albania, Kosovo, Serbia, Montenegro, North Macedonia and Bosnia & Herzegovina;
- Establishment of the database on GHG emissions in six countries of Western Balkans: Albania, Kosovo, Serbia, Montenegro, North Macedonia and Bosnia & Herzegovina;
- Preparation of collections for publishing in JRC Data Catalogue and EU Open Data Portal

07.09.2018 – 31.10.2018

Expert at Abcons Sh.p.k

Air quality legislation and air pollution background – Case study Korca (Albania)

Air pollution dispersion modelling of combined cycle cogeneration power plant Korca (Albania)

Responsibilities:

- Identify and point out relevant legal requirements (IFC/EU/Albanian) to be considered for placing and operation of the plant and its ancillaries; combine in a table format the maximum allowed levels for each of the air quality parameters in accordance with the relevant Standard (IFC/EU/Albanian);
- Describe the air quality conditions of the project area: expected (due to air contamination sources in the area) or based in air quality monitoring station results (if they occur in the project area).
- Confirm/change air quality parameters that will be measured and sampling/testing methodology toward national and international standards.
- Prepare a summary – Evaluate/compare the measured results and air 2xercise2 results toward national and international standards (EU/IFC/IBRD), risks and mitigation measures/ recommendations;
- Determine air modelling methodology, including codes, standards, limits and finalize the methodology;
- Perform air pollutants dispersion modelling for the interested area;
- Prepare air modelling report and associated maps.

15.03.2015 – 15.03.2018

Scientific/Technical Officer (Contract Agent FG IV)

Directorate C – Energy, Climate and Transport, Energy Efficiency and Renewables Unit, Joint Research Centre, European Commission, Ispra, Italy, <https://ec.europa.eu/jrc/en>

- Leader of work packages

1. Monitoring Actual and Foreseeable Renewable Energy Deployment
 2. Bioenergy Assessment and Modelling
- Responsible and contact point for a multi-dimensional energy database, which is transformed in an interactive tool and accessible for the public, the dedicated space in EU Science Hub -NREAPs and progress reports data portal - <https://ec.europa.eu/jrc/en/scientific-tool/nreap-data-portal>
 - Responsible for (i) an integrated analysis in line with the EU long term energy and climate policy (ii) renewable energy deployment in the EU towards 2020 and 2030 targets; (iii) impact of this deployment to the greenhouse gas emissions; (iv) renewable energy regulatory and financial measures in place or planned, and (v) renewable energy policy developments within the Europe energy market.
 - Supporting DG Energy on the impact assessment of bioenergy sustainability SWD (2014) 259 final and SWD (2016) 418 final in the process of Renewable Energy Directive recast.
 - Representing JRC at the Energy Statistics Working Group (Eurostat).

01/05/2011–31/12/2014

Detached National Expert

Institute for Energy, Climate and Transport, Renewables and Energy Efficiency Unit, Joint Research Centre, European Commission, Ispra, Italy, <https://ec.europa.eu/jrc/en>

Assessment of legislations related to lifecycle of greenhouse gases of fuels in Europe, USA, Canada; Sustainability of bioenergy; Water and bioenergy; Analysis of EU and non-EU countries progress towards their 2020 targets/plans; Establishing a multidimensional renewable energy database; Part of JRC team supporting DG MARE on marine technologies and their potential in EU; Writing science for policy/technical reports, participation in conferences, workshops, training; representing JRC at the Energy Statistics Working Group (Eurostat).

01/01/2008–31/12/2014

Scientific Researcher

Polytechnic University, Tirana, Albania, Tirana (Albania)

Air and water pollution monitoring; Air pollution dispersion modelling (local distribution); Coordinator of national projects in the environment field; Writing scientific/technical reports/papers; Participating in conferences, workshops, training

01/05/2003–31/12/2007

Deputy Director

Institute of Hydrometeorology, Academy of Sciences of Albania, Tirana (Albania)

Management of hydrometeorological activities, coordinator of national and international projects in the field of environment (air and water); Writing management/scientific/technical/evaluation reports; Representing nationally and internationally hydrometeorological activities; Participation in conferences, workshops.

01/09/1990–30/04/2003

Scientific Researcher

Institute of Hydrometeorology, Academy of Sciences of Albania, Tirana (Albania)

Air pollution monitoring and modelling; statistics analysis of meteorological elements and air pollutants time series; writing technical reports; participation in conferences and workshops.

EDUCATION

01/01/2005–15/12/2008

Doctor of Science in Atmospheric Physics

University of Tirana, Faculty of Natural Sciences, Tirana (Albania)

The influence of meteorological elements in air pollutants transport in atmosphere

01/01/2002–20/12/2004

Master of Science

University of Tirana, Faculty of Natural Sciences, Tirana (Albania)

Instrumental Chemistry

01/09/1985 – 31/08/1990

Bachelor Diploma

University of Tirana, Faculty of Natural Sciences, Tirana (Albania)

Engineering Chemistry

MAIN ACHIEVEMENTS

- Establishment of the first Air Pollution Monitoring Network in Albania
- Deputy Director of Hydrometeorological Institute, Academy of Sciences of Albania
- Coordinator/Expert in National and International Projects
- Leader WPK "Monitoring Actual and Foreseeable Renewable Energy Deployment"
- Leader WPK "Bioenergy Assessment and Modeling"
- Contribution to WPK "Development of the European Energy Efficiency Platform"

- Contribution to WPK "Nexus perspectives for the Mediterranean region and Africa".
- Contribution to JRC initiative to support Danube region
- Leader author of JRC Science for Policy reports. (<https://ec.europa.eu/jrc/en/publications-list/banja>)
- Author of the renewable energy data portal sourced from EU and non-EU countries reporting under existing Renewable Energy Directive and complemented with the latest data collected through the indicative SHARES Tool (Eurostat) (<https://ec.europa.eu/jrc/en/scientific-tool/nreap-data-portal>)
- NREAPs data set at [JRC Data Catalogue](#) and [EU Open Data](#)
- Contribution to SWD (2016) 418 final on "Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources (recast)" (Part ¼ and 4/4)
- Contribution to [SWD \(2014\) 259 final](#) "State of play on the sustainability of solid and gaseous biomass used for electricity, heating and cooling in the EU"
- Contribution to EEA reports "Renewable Energy in Europe – recent growth and knock-on effects", 2015-2017 editions.
- Contribution to REN21 2016-2019 editions "Renewable Global Status Report",
- Contribution to IRENA-IEA-REN21 "Renewable Energy Policies in a Time of Transition" paper (2018)
- Expert Reviewer of REN21 "Asia and the Pacific Renewable Energy Status Report" (2019)
- Expert Reviewer of "WGIII Contribution to the IPCC Sixth Assessment Report (AR6)" (January 2020)
- Reviewer at Energy Policy Journal (Certificate of Reviewing)
- Reviewer of IRENA-IEA-REN21 report "Renewable Energy Policies in a Time of Transition: Heating and Cooling", (2020)
- Scientific leader of Agriculture Emission Estimation (AgrEE) tool https://edgar.jrc.ec.europa.eu/agree_tool/public/
- Scientific lead of the improvement of air pollutant emissions estimation in the EDGAR database

TRAINING / WORKSHOPS

- Increasing your scientific impact through social media – Training workshop organised by Joint Research Centre, 06 June 2023
- TFEIP meeting 2023, presentation "Updates on the Agricultural Emission Estimation (AgrEE) Tool", <https://www.tfeip-secretariat.org/oxford-2023>
- TFEIP meeting 2022, presentation "Update on the JRC emission tool", Hybrid event, <https://www.tfeip-secretariat.org/web-conference-2022>
- TAIEX EIR Peer2Peer workshop "Multi-country Workshop on Ammonia reducing technology and measures: how to include the reduction effect in the national emission inventory and projections", (virtual), 16.11.2021, presentation "How can ammonia reducing technologies and measures be handled in the AgrEE tool", <https://webgate.ec.europa.eu/TMSWebRestrict/resources/js/app/#/library/detail/81159?hasBackBtn=false>
- Workshop on Capacity Building for Emission Inventories, September 2021, Ricardo Group, DG ENV
- TFEIP meeting 2021, presentation "Insights on the Agricultural Emission Estimation (AgrEE) prototype tool", Hybrid event, <https://www.tfeip-secretariat.org/web-conference-2021>
- Ambient Air Quality Expert Group Meeting – The Implementation of the Directive in the Reduction of National Emissions of certain Air Pollutants, DG Environment, 11.02.2021, Oral Presentation, Virtual event
- JRC Virtual Training "Screening for High Emissions Reduction Potential on Air (SHERPA) tool for beginners", 24.11.2020
- Joint IRENA – JRC Expert Workshop on "Benchmarking long-term scenario comparison studies for the clean energy transition", 10.09.2020, Virtual event
- Community of Practice "Composite Indicators and Scoreboards", 07-08 November 2019, Joint Research Centre, Ispra, Italy
- Training on "Composite Indicators and Scoreboards", 04-06 November 2019, Joint Research Centre, Ispra, Italy
- Workshop "Extreme events and energy transitions: tackling the challenges of climate change by integrating social and complex systems science", 23-27 September 2019, Joint Research Centre, Ispra, Italy
- Training on "Composite Indicators and Scoreboards", 05-07 November 2018, Joint Research Centre, Ispra, Italy
- Meeting on "Energy Statistics Working Group", 08-09 November 2017, Eurostat (ESTAT 5), Luxembourg
- Training on "Application of decomposition analysis techniques to investigate energy consumption trends in Europe", 11-12 July 2016, Joint Research Centre, EC, Ispra, Italy
- Meeting on "Energy Statistics Working Group", 15-17 June 2016, Eurostat (ESTAT 5), Luxembourg
- European Statistical Advisory Committee (ESAC) workshop "Indicators: user requirements, methodological issues and communication challenges", 09-10 May 2016, Hague, Netherlands
- Meeting on "Energy Statistics Working Group", 02 March 2016, Eurostat (ESTAT 5), Luxembourg
- Meeting on "Energy Statistics Working Group", 28 October 2015, Eurostat (ESTAT 5), Luxembourg
- Training on "INSPIRE Basics – INSPIRE Utilisation", 10-11 September 2015, Joint Research Centre, EC, Ispra, Italy
- Meeting "Energy Statistics Working Group", 24-25 June 2015, Eurostat (ESTAT 5), Luxembourg
- Meeting on "Energy Statistics Working Group", 14 November 2014, Eurostat (ESTAT 5), Luxembourg
- Meeting on "Energy Statistics Working Group", 26-27 June 2014, Eurostat (ESTAT 5), Luxembourg
- Meeting on "Energy Statistics Working Group", 28 June 2013, Eurostat (ESTAT 5), Luxembourg
- Training on "Clear writing", 19-20 June 2013, Joint Research Centre, EC, Ispra, Italy
- Training on "Scientific writing", 07-08 March 2013, Joint Research Centre, EC, Ispra, Italy
- Workshop on "Assessment of the potential of pumped hydropower storage", 03-04 April 2012, SETIS, IET-Joint Research Centre, EC, Petten, Netherlands
- Training on "Introduction Linux", 17-18 October 2011, Joint Research Centre, EC, Ispra, Italy
- Training on "ArcGis Desktop", March 2011, Albania GIS DATA, Tirana, Albania
- Training on "The Community Multiscale Air Quality Modeling System – CMAQ", 14-15 October 2010, CMAS Centre, University of North Carolina, USA

- Workshop on "Uncertainty in air pollution measurements", 15-17 September 2009, IES, Joint Research Centre, EC, Ispra, Italy
- Training on "Practical Air Dispersion Modelling", 12-14 November 2008, Trinity Consultants, Albany, USA
- Training on "International Research Program on EU project development and management", 07-11 July 2008, Academy of Sciences of Albania and Genardo Ltd., Tirana, Albania
- Training on "Measurement of uncertainty linked with ISO 17025" and "Quality control at analytical laboratories", 08-09 July 2008, Directorate of Accreditation of Albania, Tirana, Albania
- Workshop on "Air Pollution Management", 20-26 April 2008, SIDA, Bangkok, Thailand
- Workshop on "Legal and technical aspects of certified emission reduction (CERs) and carbon market transactions", 26 February 2008, Italian Ministry of Environment, Land and Sea / University of Siena Italy
- Workshop on "Air Quality Methods and Equipment's", 24 January 2008, EU Project "Strengthening of Environmental Monitoring in Albania" (StEMA), Tirana, Albania
- Training on "Quality control/assurance of analytical analysis", 11-13 December 2007, EU Project "Strengthening of Environmental Monitoring in Albania" (StEMA), Tirana, Albania
- Workshop on "Environmental features and sustainable development of the Albanian and Apulia wetlands", 23-24 November 2007, Academy of Science of Albania/ University of Bari, Italy. Interreg IIIA Italy – Albania
- Workshop on "Intercomparison exercise on air quality", 07-12 October 2007, IES, JRC, EC, Ispra / WHO-Berlin, Essen, Germany
- Training on "Modelling transport and transformation in the atmosphere (SMOKE, WRF and CAMx models)", 01-10 August 2007, NMHI-Bulgaria and CMAS-USA, Sofia, Bulgaria
- Training on "Air pollution management", 02 September-05 October 2007, SIDA and SMHI, Norrkoping, Sweden
- Workshop on "CARDS 2003 Program" Support for Standards, Certification and Accreditation in Albania" Europe Aid/120467/C/SV/AL", 24 April 2007, General Directory of Accreditation of Albania, Tirana, Albania
- Workshop on "DMCSEE (Drought Management Center for South Eastern Europe)", 17 April 2007, World Meteorological Organization (WMO), Tirana, Albania
- Training on "Ion-Chromatography", June 2006, EC / ISIC, Rogla, Slovenia
- Workshop on "Intercomparison exercise on air quality", 02-07 April 2006, World Health Organization, Langen, Germany
- Workshop on "Key issues for sustainable management of transboundary aquifers in Mediterranean and in South Eastern Europe", 21-23 October 2004, INWEB/UNESCO-ISARM, Thessaloniki, Greece
- Training on "Landscape integrity for sustainability in the coastal zone", 20-24 September 2004, ICS-UNIDO/ International Environment University of Malta, Gozo, Malta
- NATO Advanced Research Workshop "Air pollution processes in regional scale" 13-15 June 2002, Halkidiki, Greece
- "On-Job training course in the field of air pollution monitoring", 20 September – 15 October 1999, IMGW Poland
- Training on "Background atmospheric composition monitoring", 11-15 October 1993, WMO/BERDI, Halkidiki, Greece
- Training on "Monitoring and assessment of airborne pollution in Mediterranean", 09-18 February 1993, WMO/UNEP/ University of Malta, Valleta, Malta.

PERSONAL SKILLS

Mother tongue(s)

Albanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Italian	C2	C2	C2	C2	C1
German	B 1	B 1	B 1	B 1	B 1
French	A1	A1	A1	A1	A1

Levels: A1/A2: Basic user – B1/B2: Independent user – C1/C2 Proficient user, [Common European Framework of Reference for Languages](#)

Communication skills

Very good written and verbal communication skills. I am confident and have professional speaking abilities and experience through participation in many national and international activities. I have a good experience in writing papers, reports, briefings, background papers, conference presentations, interservice groups consultations.

Organisational / managerial skills

Very good organisational and managerial skills gained during my long activity as researcher and manager. I have a demonstrated ability to manage and organize a large set of projects and publications ensuring quantitative and analytical excellence, and ability to explain complex technical issues for a more general policy audience.

Main skills

- Management and project coordination/evaluation activities
- Energy Policy (including renewables),
- Database management (Excel, Access, SQL),
- Data collection and statistical analysis (R, Stata, Matlab, Minitab, PCA, Multivariate analysis),
- Risk Analysis (Monte Carlo Simulation),
- Spatial Data Analysis (ArcGIS, Tableau v.2019.3 for advanced spatial analysis, LandViewer-EOS, QGIS).
- Data dissemination & visualisation (Tableau, QLIK sense, Power BI, Drupal, PHP),

- Air Pollution Modelling (AERMOD, Screen3, Breeze-Screen, ADMS),
- Sustainability of bioenergy,
- Decomposition analysis of final energy consumption,
- Big data analysis,
- Composite Indicators and Scoreboards,
- Climate change mitigation,
- Sustainable Development and Management.

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Levels: Basic user – Independent user – Proficient user
[Digital competences – Self-assessment grid](#)

ADDITIONAL INFORMATION
 Publications

- **Improving the estimation of air pollutant emissions from small-scale combustion sector – The state-of-art, updates and improvements in EDGAR database for EU27**, JRC134941, <https://publications.jrc.ec.europa.eu/repository/handle/JRC134941>
- **Emission ensemble approach to improve the development of multi-scale emission inventories**, (in print), <https://egusphere.copernicus.org/preprints/2023/egusphere-2023-1257/>
- **GHG emissions of all world countries**, 2023, <https://publications.jrc.ec.europa.eu/repository/handle/JRC134504>
- **HTAP_v3 emission mosaic: merging regional and global monthly emissions (2000-2018) to support air quality modelling and policies**, 2023, <https://essd.copernicus.org/articles/15/2667/2023/>
- **Status of environment and climate in the Western Balkans**, 2022, <https://publications.jrc.ec.europa.eu/repository/handle/JRC129172>
- **CO2 emissions of all world countries**, 2022, <https://publications.jrc.ec.europa.eu/repository/handle/JRC130363>
- **Development of EDGAR-POLES JRC platform on historic and projected greenhouse gases and air pollutant emissions**, https://img1.wsimg.com/blobby/go/cacacd14-b43b-4e80-8617-46683c8b6233/downloads/JRC131423_Development_of_EDGAR-POLES_platform.pdf?ver=1696702263871
- **Support to the improvement of national air pollutant emissions inventories for the agricultural sector in Europe**, EUR 31015 EN, Publications Office of the European Union, Ispra, 2022, ISBN 978-92-76-49350-1, doi:10.2760/188866, JRC128653, <https://publications.jrc.ec.europa.eu/repository/handle/JRC128653>
- **GHG emissions of all countries**, EUR 30831 EN, Publication Office of the European Union, 2021, ISBN: 978-92-76-41546-6, doi: 10.2760/73513, JRC126363, <https://publications.jrc.ec.europa.eu/repository/handle/JRC126363>
- **Biomass flows in the European Union: The EU Biomass Flows tool, version 2020**, EUR 30454 EN, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-25378-5 (online), doi:10.2760/14342 (online), JRC122379, <https://ec.europa.eu/jrc/en/publication/biomass-flows-european-union>
- **How can solid biomass contribute to the EU's renewable energy targets in 2020, 2030 and what are the GHG drivers and safeguards in energy- and forestry sectors?** 2020, Renewable Energy Journal, Vol.165, Part 1, (peer review), co-author, <https://www.sciencedirect.com/science/article/pii/S0960148120317900#>
- **Methodological overview on the calculation of air pollutant and greenhouse gas emissions from agricultural activities**, EUR 30338 EN, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-21415-1 (online), doi:10.2760/240 (online), JRC121579, <https://publications.jrc.ec.europa.eu/repository/bitstream/JRC121579/kjna30338enn.pdf>
- **How are the EU Member States contributing to the biomass target for EU's renewable energy consumption and environmental impact?**, doi: 10.5071/28thEUBCE2020-4CO.10.3, 28th European Biomass Conference & Exhibition, Marseille, France, 2020, <http://www.etaflorence.it/proceedings>
- **Market study on mitigation potential for heat pump and commercial refrigeration equipment in Ukraine**, 2020, HEAT GmbH, Umwelt Bundesamt, Refrigeration Association of Ukraine, http://ref.org.ua/upload/iblock/420/Ukraine-Market-Study_Heat-pumps-and-refrigeration.pdf
- **Status of air pollutants and greenhouse gases in the Western Balkans- Benchmarking the accession process progress on environment**, EUR 30113 EN, Publications Office of the European Union, 2020, ISBN 978-92-76-16860-7, doi:10.2760/48321, JRC118679, https://publications.jrc.ec.europa.eu/repository/bitstream/JRC118679/air_qualityghg_western_balkans_online.pdf
- **Support for biogas in the EU electricity sector – a comparative analysis**, 2019, Biomass and Bioenergy Journal, Vol. 128 (peer review), (leader coauth.), <https://www.sciencedirect.com/science/article/pii/S0961953419302624#ack0010>
- **Biomass for energy in the EU – the support framework**, 2019, Energy Policy Journal Vol. 131, pp.215-228, (peer review), (Leader coauth.), <https://www.sciencedirect.com/science/article/pii/S0301421519302873#gs1>
- **Role of national fossil fuel comparators in the nominal emission savings through bioenergy under the RED - case**

study in six EU countries, 2019 – Accepted as Visual Presentation at EUBCE 2019

<http://programme.eubce.com/abstract.php?idabs=15927&idses=859&idtopic=22> (Leader coauth)

▪ **Resource Efficiency and GHG Emissions of Wood Product Cascading & Bioenergy in the European Union, 2019** – Accepted as Oral Presentation at EUBCE 2019,

<http://programme.eubce.com/abstract.php?idabs=15922&idses=898&idtopic=27> (coauth)

▪ **An analysis of capacity market mechanism for solar photovoltaics in France, 2019**, Peer Review, International Journal of Smart Grid- iSmartGrid, Vol. 3, No 1. March 2019, <https://www.ijsmartgrid.org/index.php/ijsmartgridnew/article/view/36/pdf> (Leader coauth).

▪ **How can solid biomass contribute to the EU's renewable energy targets in 2020, 2030 and what are the GHG drivers and safeguards in energy- and forestry sectors?** 2019, submitted for publication at Renewable Energy Journal (peer review), (coauth), Abstract available at <https://manjolanbanja.com/publications>.

▪ **Support for solar photovoltaics in France: a shift towards capacity market mechanism**, 2018, Peer Review paper, Oral presentation at 7th International Conference on Renewable Energy Research and Applications, 14-17 October 2018, Paris, France, (Leader coauth). Abstract available at <https://manjolanbanja.com>. Paper available at <https://ieeexplore.ieee.org/document/8566800>

▪ **Support schemes and measures enabling the use of biomass for energy in the EU**, 2018, In: European Biomass Conference and Exhibition, 14-17 May 2018, Copenhagen, Denmark, ISSN 0973-0826, JRC108922 <http://programme.eubce.com/2018/B/PDF/BOA.pdf> (Leader coauth)

▪ **Renewables in the EU: an overview of support schemes and measures**, 2017, Publication Office of European Commission, May 2018, ISBN 978-92-79-79361-5, doi:10.2760/521847, (Leader coauth). <https://publications.europa.eu/en/publication-detail/-/publication/83d9ab2f-647d-11e8-ab9c-01aa75ed71a1/language-en/format-PDF>

▪ **Biomass flows in the European Union - The Sankey biomass diagram towards a cross-set integration of biomass**. 2017, Publication Office of European Commission, 978-92-79-68047-2, doi: 10.2760/352412, (co-author)

▪ **Renewables in the EU: the support framework towards a single energy market** - EUR 29100 EN,, Publication Office of the European Union, Luxembourg, 2017, ISBN 978-92-79-79362-2, doi:10.2760/69943, JRC 110415, <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/renewables-eu-support-framework-towards-single-energy-market-eu-countries-reporting-under> (Leader coauth)

▪ **Water-Energy-Food nexus interactions assessment: Renewable energy sources to support water access and quality in West Africa**, Publication Office of European Commission, 2018, EUR 29196 EN, ISBN 978-92-79-84034-0, doi:10.2760/1796., <https://ec.europa.eu/jrc/en/publication/water-energy-food-nexus-interactions-assessment-renewable-energy-sources-support-water-access-and> (coauth)

▪ **Renewable technologies in the EU electricity sector: trends and projections - Analysis in the framework of the EU 2030 climate and energy strategy**", EUR 28897 EN, Publications Office of the European Union, Luxembourg, 2017, ISBN 978-92-79-76903-0; doi:10.2760/733769, JRC109254, <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/renewable-technologies-eu-electricity-sector-trends-and-projections-analysis-framework-eu> (Leader coauth).

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- JRC Working Programme Project DETECT – Scientific Officer (2021 – now)
- JRC Working Programme Project IPPA – Scientific Officer (2021-2022)
- JRC EDGAR Database – GHG emissions from agriculture – Expert (2020-2021)
- German Environment Agency (UBA), HEAT GmbH - Capacity Building for the Innovative Application of Energy-Efficient and Climate-Safe Technologies RACHP in Ukraine – Expert (February 2020)
- JRC Working Programme Work Package “Air and Climate in Western Balkans” (AC – WB) – Scientific Officer (2019-2020)
- JRC Working Programme Project “Renewable energies inside and outside the EU (REEU+)”, – Leader WPK “Monitoring Actual and Foreseeable Renewable Energy Deployment” (2012-2018)
- JRC Working Programme Project “Bioeconomy” — Leader WPK “Bioenergy Assessment and Modelling”, (2016-2018)
- JRC Working Programme “Development of the European Energy Efficiency Platform”, Scientific Officer, (2015-2018)

- JRC Working Programme Project “Nexus perspectives for the Mediterranean region and Africa”, Scientific Officer (2017-2018)
- JRC Working Programme Project “ASBIO” Biomass Assessment Study, Scientific Officer, (2015-2016)
- JRC ‘Scientific Support to the Danube Strategy’ Initiative, Bioenergy Nexus Cluster, Scientific Officer, (2013 – 2016)
- EU CARDS Project” Implementation of the National Plan for Approximation of Environmental Legislation in Albania” – Expert (2009-2010)
- S&T cooperation program Albania-Italy Project “Use of diffusive sampling monitoring for the evaluation and prevention of air pollution” – Coordinator/Expert (2008-2010)
- NATO SIF Project “Modelling system for emergency response to the release of harmful substances in the atmosphere” (MM5 and CAMx models) – Coordinator/Expert (2006-2009)
- World Bank Project “Disaster risk mitigation and adaptation” – Expert (2008)
- World Bank/ISDR/WMO Project “Meteorological and hydrological information sharing – status, needs, capacity building in South-East Europe” – Expert (2007)
- S&T cooperation program Albania-Italy Project “Environmental isotopic composition of precipitations and their application in the climate change” – Expert (2005-2007)
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- UNESCO/IOC Project “Adriatic Sea integrated coastal areas and river basin management: System pilot project-extension”, ADRICOSM-EXT – Expert (2005-2007)
- Albanian Ministry of Environment, Forestry and Water Administration “Monitoring Air Quality in Albania” – Coordinator/Expert (2005-2009)
- ISMAR/CNR Project “Study of environmental conditions of the industrial area of Porto-Romano, Maritime system” – Coordinator/Expert (2005-2006)
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