



Laura RECUERO VIRTO

Email address: laura.recuero_virto@devinci.fr

Date of first appointment: 01/09/2022

Nationality: Spanish and French

Teaching Department: Finance

Research group: Data Science, Digital Transformation, Risks and Complex Systems

RESEARCH INTERESTS

Environmental perceptions & risks

Sustainable development in AI & new technologies

EDUCATION

Sep 2013 - June 2017, Polytechnic School, Spain

PhD in environmental engineering – marine resources conservation

Supervisor: Carlos Romero (profesor, Polytechnic School of Forests, Spain); Cum Laude. External reviewers: Glenn Marie Lange (senior researcher, World Bank), Denis Bailly (deputy head, UMR AMURE). Members of jury: Antonio Casimiro Herruzo Martinez (professor, ETSI Montes, Forestal y del Medio Natural, Universidad Politecnica de Madrid), Miguel Marchamalo Sacristan (assistant professor, ETSI Caminos, Canales y Puertos, Universidad Politecnica de Madrid), Tiago Domingos (associate professor, Instituto Tecnico Superior, Universidad de Lisboa), Emilio Cerda Tena (professor, Facultad de Ciencias Empresariales y Economicas, Universidad Complutense de Madrid), Alejandro Caparros Gass (Scientific researcher, CSIC)

Jun 2016, Université Paris Dauphine, France

Habilitation à diriger des recherches

Supervisor: Patrice Geoffron (professor, Université Paris Dauphine, France). Reviewers: Jean-Paul Azam (Professor, Toulouse School of Economics) and Marc Bourreau (Professeur, Télécom ParisTech). Other members of jury: Philippe de Vreyer (Professor, Université Paris Dauphine), Farid Gasmi (Professor, Toulouse School of Economics)

May - Jul 2013, University of British Columbia, Canada (online)

Course: Climate literacy: Climate change fundamentals

Mar - Apr 2013, University of Illinois at Urbana-Champaign, US (online)

Course: Sustainability and globalisation

Jul 2009, Management Centre Consulting, UK

Fundraising course funded by the OECD Development Centre

Jul 2009, Faculty of Economics, University of Coimbra, Portugal

Course on development, economic growth and international aid, with Xavier Sala-i-Martin

Apr 2008, Conseil National des Universités, France

Qualified to be assistant professor on economics at public universities in France (qualification aux fonctions de maître de conférences, Section 5, Sciences Économiques, par décision en date du 8 février 2008)

Oct 2003 - Sep 2007, Toulouse School of Economics, France

PhD in economics - infrastructure regulation

Supervisor: Farid Gasmi Farid Gasmi (Professor, Toulouse School of Economics) ; Très honorable avec félicitations du jury. Members of jury: Pablo Spiller (Professor, University of California Berkeley-HAAS), Jon Stern (Research Director, City University of London), Jean-Paul Azam (Professor, Toulouse School of Economics), Christian Bontemps (Professor, Toulouse School of Economics), Farid Gasmi (Professor, Toulouse School of Economics) and Paul Nomba Um (Lead Economist, The World Bank)

Oct 2003 - Sep 2005, Toulouse School of Economics, France
Diplôme européen d'économie quantitative approfondie (DEEQA), Master in industrial economics (DEA)

Oct 2001 - Jun 2003, Polytechnic School, Spain (distance learning)
MBA - trade. Final project: Creation of an exporting company (Turkey - Spain)

Mar 2001, Centre Nationale des Études Spatiales, France
Training program ADEQUA, tools for making quality decisions

Oct 1995 - Apr 2000, Engineering in Polytechnic School, Spain (formal equivalence with Télécom ParisTech)
Master of science (telecommunications engineering - specialisation radiocommunications)

Sep 1985 - Jun 1995, Kensington School, Spain
English school

TEACHING AREAS

Environmental policy and economics (general, mineral resources, biodiversity)
Telecommunications regulation (new mobile and satellite technologies)
Economics (macroeconomics, microeconomics)
Econometrics (including stata and R coding) & statistics

ACADEMIC AND PROFESSIONAL EXPERIENCE

Past & current positions

Sept 2025 - , ICN Business School, France (full professor, Supply chain & information systems department)
Research-track, 120h of teaching per year

Sep 2022 – Aug 2025, Ecole de Management Léonard de Vinci, France (enseignant-chercheur, Finance Department).
Researcher with 120h of teaching per year, Head of M1&M2 programme on Management & Consulting in Sustainable Development in the Programme Grande Ecole (PME).

Sep 2020 – Jun 2024, Ecole Polytechnique, France (senior researcher, Département Management de l'Innovation et Entrepreneuriat)
5-year ANR (French research national agency) project (250K €) on the economic, legal, and environmental impact of the choice of fuels for shipping. **Belmont forum award (1 million €)** with an international consortium - Germany (GEOMAR, Kiev university) and Sweden (Universities of Uppsala and Chalmers). In charge of postdocs, M. Sebe and F. Yao.

Oct 2019 - Aug 2022, Telecommunications regulatory authority (ARCEP), France (deputy head - full time, Innovation and Mobile Department, Radiofrequency Planning Unit)
Responsible for 5G trials (3,5 GHz, 26 GHz) and 5G frequency planning, frequency coordination at the borders of the country, exposure to radiofrequency. Following international radiofrequency groups on regulation and policies (PT1, RSCOM, RSPG)

Apr 2018 - Sep 2019, Ecole Polytechnique, France (visiting researcher, i3- Centre de Recherche en Gestion)
Research on the management of noise in the ocean from shipping

Mar 2018 - Sep 2019, European Institute for Marine Studies, France (research coordinator, United Nations university centre on the sciences and the governance of the oceans project, Université de Bretagne Occidentale, Unité Mixte de Recherche Aménagement des Usages des Ressources et des Espaces marins et littoraux, Centre de droit et d'économie de la mer, UMR AMURE)
Responsible for drafting (i) two reports on the management of noise in the ocean from shipping and on the synergies and gaps between scientific priorities and public policies related to the ocean in the South-Atlantic for the next decade, and (ii) several policy briefs on ocean science and governance

Sep 2017 - Feb 2018, French Railway and Road Regulatory Authority, France (Deputy Head, Railway Infrastructure Regulatory Unit)
Price regulation, focal point for the European Independent Regulators Group – Rail

Dec 2016 - Aug 2017, Organisation for Economic Cooperation and Development (OECD), France (Seconded – part time, Environment Directorate)

Responsible for drafting a background document on indicators for monitoring the blue economy (SDG 14) and for drafting the TOR for a background document on maritime spatial planning, for the Green Growth and Sustainable Development Forum (OECD, November 2017)

Jan 2013 - Aug 2017, French ministry of foreign affairs (MAEDI), France (chief economist of the MAEDI, Head of Unit, Economic Analysis and Globalisation and special advisor for multilateral development banks at La direction générale de la mondialisation, du développement et des partenariats)

Responsible for (i) providing economic analyses on macroeconomic, development and environmental and natural resource topics; (ii) the management of grants, studies and financial collaborations on research with external private and public partners; (iii) the management of the 400 K€ budget at La Sous-Direction des affaires économiques internationales. Focal point for (i) marine industries (diplomatie économique), (ii) Cepii governing board; (iii) the informal network of chief economists of ministries of foreign affairs (US, UK, Germany, EEAS); (iv) economic research relationships in France and internationally (private sector, banks, think tanks). Special advisor for the development of collaborations with 4 multilateral development banks (World Bank, AfDB, BID and AsDB). Team and program management.

Oct 2008 - Jan 2013, Organisation for Economic Cooperation and Development (OECD), France (Economist, Europe, Africa & Middle East and Competitiveness & Structural Analysis Divisions at the OECD Development Centre)

Lead economist in economic reports on Africa on a program with the AfDB, UNDP and UNECA, to deliver recommendations to the public sector (operators, state) on macroeconomic and structural policies building on field missions and forecasting. Special focus on country cases in Angola, Cape Verde, Mozambique, Togo and Tunisia. Contributed to ministerial meetings on utilities regulation (African Union, OECD-NEPAD). Development of international partnerships on infrastructure, organisation of high-level international meetings and proven fundraising experience.

Dec 2007 - Sep 2008, TélécomParistech, France (Engineer in Research & Development, Economic and Social Sciences Department)

Contribution to the program Infrastructure and Economic Performance in a research chair on Innovation and Regulation in Infrastructure (IREN). The work involved drafting policy papers on infrastructure and economic growth, organising a high-level international conference, and managing consultants on broadband regulation and economic growth at the Public Utility Research Center, UF Warrington, US

Sep 2007 - Mar 2008, Organisation for Economic Cooperation and Development (OECD), France (visiting researcher, Public Governance and Territorial Development Directorate, Budgeting and Public Expenditures Division)

Responsible for an economic analysis on budgetary practices and procedures: Fiscal performance in budgetary practices and procedures in OCDE and Latin American countries. Development of new indicators to improve effectiveness and efficiency in service delivery in budgetary institutions

Jul 2006, The World Bank, US (visiting researcher, World Bank Institute)

Responsible for an economic analysis on regulatory performance in infrastructure in OECD and non-OECD economies. Development of new indicators

Oct 2004 - Sep 2007, Toulouse School of Economics, France (Allocataire de Recherche, Quantitative Economic Research Department, GREMAQ)

Analyses of utilities' reforms in OECD and non-OECD countries

Dec 2001 - Jun 2003, Centre National des Études Spatiales, France (Project Manager, Launcher Management Division)

Responsible for a 600K€ project for the renewal of radiolinks in Guyana's Space Centre. Analysis of needs, editing of technical specifications, choice of solutions, negotiation with international firms, following of works, performance evaluation. Supervision of project implementation by NERA Networks (Norway)

Mar 2001 - Aug 2001, European Space Agency, The Netherlands (Internship, Navigation Department)

Development of a software tool to compare GPS and Galileo signals performance by simulating a transmission - channel - reception chain

Jul 2000 - Dec 2000, Nortel Networks, France (Internship, Radio-Frequency Department)

Development of a link budget tool for third generation mobile propagation time division duplex (UMTS-TDD)

Feb 2000 - Jun 2000, Engineering, Polytechnic School, Spain (Technical support, Electronic Design Laboratory)

Design and implementation of an analogue & digital synchronized circuit for the control of alarms. Supervision of 10 students

Aug 1999, Engineering, Télécom ParisTech, France (Internship, Electronic Communications Department)

Study of space diversity and time coding techniques in wireless channels

Feb 1998 - June 1998, Engineering, Polytechnic School, Spain (Technical support, Electronic Communications Laboratory)

Simulations with different type of signals (ASK/FSK/PSK, AM/FM/PM). Supervision of 20 study

Past & current affiliations

Sep 2020 - June 2024, Ecole Polytechnique, France (senior researcher, Département Management de l'Innovation et Entrepreneuriat)

May 2017 - May 2019, Museum National d'Histoire Naturelle, France (associate researcher, Centre d'Écologie et des Sciences de la Conservation, CESCO)

Jan 2015 - Jun 2017, SciencePo, France (lecturer, The Paris School of International Affairs)

Oct 2008 - Feb 2013, Télécom Paristech, France (associate researcher, Economic and Social Sciences Department)

Apr 2011 - Feb 2013, Research ICT Africa (research think tank, University of Cape Town), South Africa (associate researcher)

PEDAGOGICAL ACTIVITIES (ELMV)

Responsible of a two-year PGE specialisation on “Management & Consulting in Sustainable Development” (en alternance)

Programme design (benchmarking with other masters in Europe), promotion activities (participation to meetings to organise promotion, preparation of marketing content, participation to promotional events and webinaires), pre-validation of candidates, jury for accessing the programme, validation of company offers for “alternants”, validation of missions of “alternants”, participation to weekly meetings with the planning service, participation of regular meetings for PGE specialisations, organisation of regular meetings with student delegates,... Organisation of a Comité d'Audit Pédagogique to evaluate A4 and A5 content with student delegates, experts from ELMV alumni, experts from key companies in sustainable development, 2 permanent staff, ELMV management. Feeding into the DD&RS label renewal end of 2025. In the AOL process for accreditations (course Considérations éthiques). A4 opened in 2024 with 20 students

Module manager for all the courses in A4 (13 courses), and all the courses in A5 (20 courses). Search for teachers for A4 and A5 aligned with accreditations requirements, coordination meetings with the teachers for each course in A4, co-design of content with the A4 and A5 teachers with **pedagogical innovation** (linkedin e-learning services for courses to have a soft landing for students who have not followed before some topics (2 examples for A4: supply chain and finance); three courses with virtual reality under ApprentXR (prise de parole, anticiper et gérer des conflits, la protection des données sensibles), [serious game for MCDD A5 Collective versus competing strategies with a Marine Spatial Planning Challenge \(University of West Brittany\)](#) (3h), [business game for MCDD A5 RSE in the construction sector Woody \(Optigest\)](#) (3 days). Round table with luxury companies for the master class, masterclass with a head hunter on RSE ([Caroline Renoux](#)), masterclass on sustainable finance careers ([Florian Grandcolas](#)), visit to a luxury company (Hermes), content added on sustainable development systematically for each course, support for the preparation of exams, quizzes and catch-ups. Three accreditations are proposed in the programme ([Scrum](#) (méthode agile) in S7 A4, [ISO26000](#) (social responsibility) in S9 A5 and [RGPD](#) (conformité des traitements de données à caractère personnel) in S10 A5. They are proposed through a collaboration with the company [ENABLERS](#))

Module manager/leader 2022-2025 (excluding MCDD programme)

All PGE economics courses (PGE1, RS1, PGE2, PGE4) and some DIB courses on economics (DIB1): Coordination of 8 module sheets with a total of 60 groups, ~2000 students per academic year. Coordination meetings with all the teachers in each course in PG1, PG2, PG4, updated content (more quantitative content, higher requirements, inclusion of new trends), **pedagogical innovation** (WOOLAP, external conference “Journée de la Terre” for PGE1 and RS1, participation to research surveys on sustainable development for DIB1, Harvard macroeconomics simulation for PG4), content added on sustainable development systematically for each course, preparation of exams, quizzes and catch-ups (except PG4), search for new teachers aligned with accreditations requirements

COURSES TAUGHT WITHIN THE INSTITUTION ELMV

Research bootcamp, 5th year (PGE) 2022-2025
Research Design, 4th year (PGE) 2022-2025
Macroeconomics, 4th year (PGE) 2022-2025
Biodiversity economics, 4th year (PGE) 2022
Global economics, 2nd year (PGE) 2022
Digital economics, 1st year (bachelor) 2023
Fundamentals in economics, 1st year (PGE) 2022-2024
Fondamentaux en économie, 1st year (PGE) 2022-2024

Past courses

2023 -, Applied econometrics 2, Economics department, Ecole Polytechnique
Paris, graduate programme (master level)

2022 -, Economics of Biodiversity, Economics department, Ecole Polytechnique
Paris, graduate programme (master level)

2022 -, Supervision of research projects

Paris, graduate programme (master level)

2019 - 2022, Statistics (R coding), Economics department, Ecole Polytechnique

Paris, graduate programme (master level)

2018 - 2022, Introduction to econometrics, Economics department, Ecole Polytechnique

Paris, second year programme

2018 - 2022, Applied econometrics, Economics department, Ecole Polytechnique

Paris, graduate programme (master level)

2015 – 2019, Environmental economics and natural resource economics, Mines ParisTech

Paris, Mastère Spécialisé International Environmental Management, Institut Supérieur d'Ingénierie et de Gestion de l'Environnement

2015 – 2019, Mineral resources: Economics and geopolitics, Mines ParisTech

Paris, Mastère Spécialisé International Environmental Management, Institut Supérieur d'Ingénierie et de Gestion de l'Environnement

2014 – 2016, Mineral resources: Economics and geopolitics, SciencePo Paris

Paris, Master in International Economic Policy, Master in Environmental Policy, Paris School of International Affairs

2014 – 2019, Public policies and mineral resources, Paris Sciences et Lettres (PSL), Mines ParisTech

Paris, Institut Supérieur d'Ingénierie et de Gestion de l'Environnement

2010, Universal service in telecommunications, International Telecommunications Union

Cape Verde, Portuguese Centres of Excellence programme funded by the Portuguese government. Cape Verde (Ministry of Infrastructure)

2008 – 2014, Universal service in telecommunications, Télécom ParisTech and World Bank

Burkina Faso, World Bank professional master for public and private sector from African francophone countries. Ouagadougou (Ministry of Communications, Burkina Faso), in Buea (Buea University, Cameroun)

2008 – 2014, Telecommunications infrastructure and development economics, Télécom ParisTech

Paris, undergraduate

2005, Labour economics, Toulouse School of Economics

Toulouse, undergraduate

INTELLECTUAL CONTRIBUTIONS (OVER THE LAST 5 YEARS)**Articles in peer-reviewed journals**

> **ABS2 2025 (funded by the Agence Nationale de Recherche (ANR), France):** “Marine Policy Shipping fuel pathways in a changing climate: A prospective foresight study for 2050”, with A. Rutgeresson (Uppsala University, Sweden), C. Marandino (GEOMAR, Germany), D. Booge (GEOMAR, Germany), S. Hajjaji (Kiel University, Germany), R. Kumar (Uppsala University, Sweden), N. Matz-Luck (Kiel University, Germany), K. Salo (Chalmers University, Sweden), M. Sebe (Polytechnic School of Paris, France), F. Yao (Polytechnic School of Paris, France). [Marine Policy](#), 182, 106868 (**impact factor 2024 3.7**)

> **Non-ABS 2025 (environmental sciences - Web of Science) (funded by the Agence Nationale de Recherche (ANR), France):** “Charting the course to cleaner shipping routes: emission inventory for Baltic Sea shipping and green fuel potential”, with A. Rutgeresson (Uppsala University, Sweden), C. Marandino (GEOMAR, Germany), D. Booge (GEOMAR, Germany), S. Hajjaji (Kiel University, Germany), R. Kumar (Uppsala University, Sweden), N. Matz-Luck (Kiel University, Germany), K. Salo (Chalmers University, Sweden), M. Sebe (Polytechnic School of Paris, France), F. Yao (Polytechnic School of Paris, France). [Carbon Management](#), 16(1) (**impact factor 2024 2.8**)

> **ABS2 2025:** “Digital Sustainability Trade-Offs: Public Perceptions of Mobile Radiation and Green Roofs”, with A., Thielens (Department of Information Technology, Ghent University-imec, Belgium & Advanced Science and Research Center, The City University of New York, US), Saba, P. (DVR), Marek Czerwinski (Poznan University of Life Sciences), Paul Nomba Um (World Bank). [Communications of the Association for Information Systems](#), 56, 720-762 (**impact factor 2024 3.2**)

> **ABS2 2025:** "Economic Growth: What are the Potential Consequences on Mangrove Blue Carbon?", with D. Couvet (Museum national d'histoire naturelle), F. Gasmi (Ecole d'Economie de Toulouse). [Journal of Forest Economics](#), Vol. 40: No. 1-2, pp 1-45 (**impact factor 2024 0.7**)

> **ABS3 2024 (funded by the Agence Nationale de Recherche (ANR), France):** "Environmentally Differentiated Port Dues: A Case Study for a Transparent Scheme", with M. Sèbe (Département Management de l'innovation et entrepreneuriat, Ecole Polytechnique, France), F. Yao (Département Management de l'innovation et entrepreneuriat, Ecole Polytechnique, France) and H. Dumez (Département Management de l'innovation et entrepreneuriat Ecole Polytechnique, France). [Environmental & Resource Economics](#), vol. 87, no. 11, p. 2993-3009 (**impact factor 2023 3.2**)

> **ABS4 2024:** "The determinants of legislation for radiofrequency electromagnetic fields (RF-EMF) with the onset of 5G: An empirical analysis with a worldwide cross-sectional dataset", with M. Czerwinski (Poznan University of Life Sciences, Poland), J. Froidevaux (Faculty of Natural Sciences, University of Stirling, United Kingdom & Museum National d'Histoire Naturelle, France), [Risk Analysis](#), vol. 44, no. 9, p. 2046-2088 (**impact factor 2024 3.32**)

> **ABS3 2024 (funded by the Agence Nationale de Recherche (ANR), France):** "The effect of LNG bunkering on port competitiveness using multilevel data analysis", with F. Yao (Département Management de l'innovation et entrepreneuriat, Ecole Polytechnique, France), M. Sèbe (Département Management de l'innovation et entrepreneuriat, Ecole Polytechnique, France), A. Nassiri (Centre de droit et d'économie de la mer, Université de Bretagne Occidentale, France) and H. Dumez (Département Management de l'innovation et entrepreneuriat, Ecole Polytechnique, France). [Transportation Research Part D-Transport and Environment](#), vol. 132, p. 104240 (**impact factor 7.041**)

> **ABS3 2024:** "Digital Literacy, Sustainable Development and Radiation Regulation: Policy and Information Systems Implications", with F. Gasmi (Toulouse School of Economics, France), P. Nomba Um (World Bank, Washington, US), P. Saba (Léonard de Vinci Pôle Universitaire, France). [Information Systems Frontiers](#) preprinting (**impact factor 2024 6.9**)

> **ABS4 2024:** "The exposure of non-human living organisms to mobile communication emissions: A survey to establish European stakeholders' policy option preferences", with A. Thielens (Department of Information Technology, Ghent University-imec, Belgium & Advanced Science and Research Center, The City University of New York, US), M. Czerwinski (Poznan University of Life Sciences, Poland), J. Froidevaux (Faculty of Natural Sciences, University of Stirling, United Kingdom & Museum National d'Histoire Naturelle, France), [Risk Analysis](#) preprinting (**impact factor 2024 3.32**)

> **NON-ABS 2024 (environmental engineering and energy & environmental sciences – Web of Science):** "Addressing Wildlife Exposure to Radiofrequency Electromagnetic Fields: Time for Action", with J. Froidevaux (Faculty of Natural Sciences, University of Stirling, United Kingdom & Museum National d'Histoire Naturelle, France), M. Czerwinski (Poznan University of Life Sciences, Poland), A. Thielens (Department of Information Technology, Ghent University-imec, Belgium & Advanced Science and Research Center, The City University of New York, US), K. J. Park (Faculty of Natural Sciences, University of Stirling, United Kingdom), [Environmental Science & Technology Letters](#), vol. 11, no. 1, p. 3-4 (**impact factor 2024 8.9**)

> **ABS2 2023:** "An empirical analysis of economic growth in countries exposed to coastal risks: Implications for their ecosystems", with F. Gasmi (Toulouse School of Economics, France), and D. Couvet (Museum National d'Histoire Naturelle, France), [Economic Systems](#), vol. 47, no. 4, p. 101130 (**impact factor 2024 3.39**)

> **NON-ABS 2023 (environmental sciences – Web of Science):** "Do electromagnetic fields used in telecommunications affect wild plant species? A control impact study conducted in the field", with M. Czerwinski (Poznan University of Life Sciences, Poland), A. Vian (Université d'Angers, INRAE, France), B. A. Woodcock (NERC Centre for Ecology and Hydrology, United Kingdom), P. Golinski (Poznan University of Life Sciences, Poland), and L. Januszkiewicz (Institute of Electronics, Lodz University of Technology, Poland), [Ecological Indicators](#), vol. 150, no. June 2023, p. 11 (**impact factor 2024 7.0**).

> **NON-ABS 2022 (environmental sciences – Web of Science):** "Maritime transportation: Let's slow down a bit", M. Sèbe, P. Scemama (Unité d'Economie Maritime, Ifremer, France), A. Choquet (Brest Business School, France), J.-L. Jung (Université de Brest, Museum National d'Histoire Naturelle, CNRS, France), A. Chircop (Canada Research Chair in Maritime Law and Policy, Schulich School of Law, Canada), P. Marras-Aït Razouk (French Agency for Biodiversity, France), S. Michel (French Agency for Biodiversity, France), and V. Stiger-Pouvreau (Université de Brest, CNRS, IRD, Ifremer, France), [Science Of The Total Environment](#), vol. 811, p. 152262 (**impact factor 2024 8.2**)

> **NON-ABS 2022 (environmental sciences – Web of Science):** "How can ports act to reduce underwater noise from shipping? Identifying effective management frameworks", with H. Dumez (Département Management de l'innovation et entrepreneuriat, Ecole Polytechnique, France), C. Romero (Universidad Politécnica de Montes, Spain) and D. Bailly (Centre de droit et d'économie de la mer, Université de Brest, France). [Marine Pollution Bulletin](#), Volume 174, working paper at the [Centre de Recherche en Gestion Working papers, Ecole Polytechnique](#) (21-CRG-01) and at the [French Association of Environmental and Resource Economists](#) (2021-13) (**impact factor 2023 5.3**)

> **ABS3 2020:** "The impact of renewable versus non-renewable natural capital on economic growth", with F. Gasmi (Toulouse School of Economics, France), D. Couvet (Museum National d'Histoire Naturelle, France), [Environmental and Resource Economics](#) 77:271–333, French Association of Environmental and Resource Economists [FAERE 2017.15 working papers](#) (**impact factor 2023 3.2**)

Case studies - Policy briefs

The conversation 2024: [“5G à Paris et au Havre : deux approches distinctes pour arbitrer entre potentiel économique et incertitudes sanitaires?”](#) with J. Froidevaux (Faculty of Natural Sciences, University of Stirling, United Kingdom & Museum National d'Histoire Naturelle, France)

Policy Brief Ocean University Initiative 2024: [“In support of decision-making: Assessing and monitoring the social and ecological vulnerability of coral reef-dependent socio-ecosystems”](#), with Thiaw, M. (Dakar-Thiaroye Oceanographic Research Center) (in French: [“Aide à la prise de décision : évaluation et suivi de la vulnérabilité sociale et écologique des socio-écosystèmes dépendant des récifs coralliens”](#)), with A. Comte (International Center for Research on Environment and Development), L. Pendleton (University of Brest, Global Science, World Wildlife Fund, Global Change Institute, University of Queensland), D. Bailly (AMURE Research Unit, University of Brest), European University Institute for the Sea

The conversation 2023: [“Quel développement pour les territoires exposés aux risques côtiers ?”](#), with D. Couvet (Museum National d'Histoire Naturelle, France) and F. Gasmi (Toulouse School of Economics, France), (3110 reads)

Policy Brief Ocean University Initiative 2023 (funded by the Agence Nationale de Recherche (ANR), France): [“Consumption, Technology and Wellbeing”](#), M. Perona (Executive director, Wellbeing observatory CEPREMAP, M. Sèbe (Département Management de l'innovation et entrepreneuriat, Ecole Polytechnique, France), F. Yao (Département Management de l'innovation et entrepreneuriat, Ecole Polytechnique, France) (in French: [“Consommation, technologie et bien-être”](#)), European University Institute for the Sea

Policy Brief Ocean University Initiative 2023: [“Sustainable Development Goal 14 on the ocean Some insights on fisheries subsidies, noise and plastics”](#) with F. Daures (Unité d'Economie Maritime, Ifremer, France), O. Guyander (Unité d'Economie Maritime, Ifremer, France), L. Chauvaud (Marine Ecology Research Director CNRS, LEMAR, European university institute for the Sea, France) A. Huvet (Researcher in physical oceanography IRD, France), C. Maes (Researcher in molecular physiology Ifremer, France) (in French: [“Objectif de développement durable n°14 sur l'océan. Quelques éclairages sur les subventions à la pêche, le bruit et les plastiques”](#)), European University Institute for the Sea

Policy Brief ShipTRASE 2023 (funded by the Agence Nationale de Recherche (ANR), France): [Transdisciplinary research for ocean sustainability](#), with ShipTRASE consortium: Dennis Booge (Chemical Oceanography, GEOMAR, Germany), Johan Mellqvist (Remote Sensing, Chalmers University, Sweden), Vladimir Conde (Engineering/Remote Sensing, Chalmers University, Sweden), Maxime Sèbe (Environmental Economics, Polytechnic School of Paris, France), Shams El Din El Hajjaji (International Law, Kiel University, Germany), Anna Rutgersson (Atmospheric Sciences, Uppsala University, Sweden), Christa Marandino (Chemical Oceanography, GEOMAR, Germany), Kent Salo (Mechanics and Maritime Sciences, Chalmers University, Sweden), Laura Recuero Virto (Environmental Economics, Polytechnic School of Paris, France), Nele Matz-Lück (International Law, Kiel University, Germany).

Policy Brief Ocean University Initiative 2020: [“Underwater noise. What can we learn from the case of Le Havre?”](#), with Dumez, H. (Ecole polytechnique), Galichon, P., (Port du Havre), Le Courtois (The French Naval Oceanographic and Hydrographic Department), Muntoni, M. (Groupement d'Intérêt Publique Seine-Aval) (in French: [“Bruit sous-marin: Que pouvons-nous apprendre du cas du Port du Havre?”](#)), European University Institute for the Sea

Policy Brief Ocean University Initiative 2020: [“Questions on Marine Protected Areas \(MPAs\)”](#), with Thiaw, M. (Dakar-Thiaroye Oceanographic Research Center) (in French: [“Questions sur les Aires Marines Protégées \(AMP\)”](#)), European University Institute for the Sea

Policy Brief Ocean University Initiative 2018: [“Monitoring Sustainable Development Goal 14 on the ocean”](#), with Didier, A-F. (Ministère de l'Ecologie et de la Transition Solidaire), Kitamori, K. (OECD) (in French: [“Suivi de l'Objectif de Développement Durable 14 sur l'océan”](#)), European University Institute for the Sea

Conferences & seminars

Conference 2024 Information & Communication Technologies for Organization & Society (ICTO): Telecommunications radiation and green roofs: A challenge or an opportunity for the deployment of smart and intelligent systems?, with M. Czerwinski (Poznan University of Life Sciences, Poland), A. Thielens (Department of Information Technology, Ghent University-imec, Belgium & Advanced Science and Research Center, The City University of New York, US). ICTO conference on [“Augmented Intelligence for Smarter Cities”](#), De Vinci Research Centre, France.

Conference 2023 Bioelectromagnetics: The determinants of legislation for radiofrequency electromagnetic fields (RF-EMF) with the onset of 5G: An empirical analysis with a worldwide cross-sectional dataset, with M. Czerwinski (Poznan University of Life Sciences, Poland), J. Froidevaux (Faculty of Natural Sciences, University of Stirling, United Kingdom & Museum National d'Histoire Naturelle, France). [Bioelectromagnetics](#), Oxford, UK.

Conference 2023 Information & Communication Technologies for Organization & Society (ICTO): The determinants of legislation for radiofrequency electromagnetic fields (RF-EMF) with the onset of 5G: An empirical analysis with a worldwide cross-sectional dataset, with M. Czerwinski (Poznan University of Life Sciences, Poland), J. Froidevaux (Faculty of Natural Sciences, University of Stirling, United Kingdom &

Museum National d'Histoire Naturelle, France). ICTO conference on "[Ethical & Responsible Artificial Intelligence for Sustainable Societies](#)", De Vinci Research Centre, Paris I, France.

Stakeholder seminar 2023 ShipTRASE (funded by the Agence Nationale de Recherche (ANR), France) (coordination): ShipTRASE project: Linking policy and economics to biogeochemical cycling and air-sea interaction. Key stakeholders seminar on environmental, economic and legal aspects of ship emission reduction and control mechanisms (near-term perspective i.e., focus on scrubber; long-term perspective, in which alternative fuels e.g., LNG are introduced). Organised by the ShipTRASE consortium: Dennis Booge (Chemical Oceanography, GEOMAR, Germany), Johan Mellqvist (Remote Sensing, Chalmers University, Sweden), Vladimir Conde (Engineering/Remote Sensing, Chalmers University, Sweden), Maxime Sèbe (Environmental Economics, Polytechnic School of Paris, France), Shams El Din El Hajjaji (International Law, Kiel University, Germany), Anna Rutgersson (Atmospheric Sciences, Uppsala University, Sweden), Christa Marandino (Chemical Oceanography, GEOMAR, Germany), Kent Salo (Mechanics and Maritime Sciences, Chalmers University, Sweden), Laura Recuero Virto (Environmental Economics, Polytechnic School of Paris, France), Nele Matz-Lück (International Law, Kiel University, Germany).

Conference 2023 Shipping & Environment Conference (funded by the Agence Nationale de Recherche (ANR), France): Global shipping: Linking policy and economics to biogeochemical cycling and air-sea interaction. A. Rutgersson (Uppsala University, Sweden), C. Marandino (GEOMAR, Germany), D. Booge (GEOMAR, Germany), S. Hajjaji (Kiel University, Germany), R. Kumar (Uppsala University, Sweden), N. Matz-Lück (Kiel University, Germany), L. Recuero-Virto (Polytechnic School of Paris, France), K. Salo (Chalmers University, Sweden), M. Sebe (Polytechnic School of Paris, France), F. Yao (Polytechnic School of Paris, France). [Joint TAP and S&E Conference 2023](#), Gotenbourg, Sweden.

Expert seminar 2022 ShipTRASE (funded by the Agence Nationale de Recherche (ANR), France) (organizer): Expert seminar for ShipTRASE project: Linking policy and economics to biogeochemical cycling and air-sea interaction. Assistance: Dennis Booge (Chemical Oceanography, GEOMAR, Germany), Johan Mellqvist (Remote Sensing, Chalmers University, Sweden), Vladimir Conde (Engineering/Remote Sensing, Chalmers University, Sweden), Maxime Sèbe (Environmental Economics, Polytechnic School of Paris, France), Shams El Din El Hajjaji (International Law, Kiel University, Germany), Anna Rutgersson (Atmospheric Sciences, Uppsala University, Sweden), Christa Marandino (Chemical Oceanography, GEOMAR, Germany), Kent Salo (Mechanics and Maritime Sciences, Chalmers University, Sweden), Laura Recuero Virto (Environmental Economics, Polytechnic School of Paris, France), Nele Matz-Lück (International Law, Kiel University, Germany). Location: Uppsala, Sweden.

INTELLECTUAL CONTRIBUTIONS (TO COME)

Articles submitted to peer-reviewed journals

> **ABS 4 (submitted):** "Can Large-Scale Free-Evolving Forests Take Root in Western Europe? How Distance Shapes Nature", with A. Locquet (International Union for the Conservation of Nature), M. Onida (European Commission). Environment and Planning D: Society and Space, August 2025.

> **ABS3 (submitted):** "Survey on the willingness to pay and on risk perception on research on the potential effects of electromagnetic fields on plants and animals: India", with Nassiri (Université de Brest, France), A., Thielens (Department of Information Technology, Ghent University-imec, Belgium & Advanced Science and Research Center, The City University of New York, US), A. Business Strategy and the Environment, Septembre 2025

> **ABS3 (submitted):** "Survey on the willingness to pay and on risk perception on research on the potential effects of electromagnetic fields on plants and animals: UK", with A. Nassiri (Université de Brest, France), A. Thielens (Department of Information Technology, Ghent University-imec, Belgium & Advanced Science and Research Center, The City University of New York, US), P. Saba, (DVRC), Information Systems Frontiers

> **ABS3 (submitted) (funded by the Agence Nationale de Recherche (ANR), France):** "Socio economic analysis - Shipping fuel pathways in a Changing Climate," with F. Yao (Ecole Polytechnique), M. Sèbe (Ecole Polytechnique), A. Rutgersson (Uppsala University, Sweden), R. Kumar (Uppsala University, Sweden), Transportation Research, Part D: Transport and Environment, September 2025

> **ABS2 (submitted):** "The impact of corruption in privatization decisions of the telecommunication sector: an empirical study", with F. Gasmi (Toulouse School of Economics), I. Berte (Ecole Polytechnique), L. Demoury (Ecole Polytechnique), N. Patzig (Ecole Polytechnique), P. Saba (DVRC). Journal of Regulatory Economics, July 2025

> **ABS2 (submitted):** "The determinants of economic growth in countries with high marine biodiversity", with Denis Couvet (Museum national d'histoire naturelle), Frédéric Ducarme (Museum national d'histoire naturelle), Farid Gasmi (Ecole d'Economie de Toulouse). Review of Development Economics

> **ABS2 (submitted) (funded by the Agence Nationale de Recherche (ANR), France):** "Insights into future trends in investment costs of shipping emission abatement technologies". Recuero Virto, L., M. Sèbe and F. Yao (Ecole Polytechnique). Maritime Policy & Management, Septembre 2025

> **ABS1 (submitted):** “Linguistic diversity, information technology, and economic growth”, with P. Saba (ELMV), Yann Balgobin (Télécom ParisTech). To come

> **Non-ABS (environmental sciences – World of Science) (submitted):** “Radiofrequency electromagnetic field (RF-EMF) effects on green roofs ecosystems: An unexplored topic” with M. Czerwiński (Poznan University of Life Sciences, Poland). A. Vian (Univ Angers, Institut Agro, INRAE), P. Palha (European Federation of Green Roof and Green Wall Association), A. Thielens (Photonics Initiative, Advanced Science and Research Center, The Graduate Center of the City University of New York), Global Ecology and Conservation, August 2025

Articles in progress for peer-reviewed journals

> **ABS 4:** “How the diversity of human concepts of nature affects conservation of biodiversity: An illustration with data”, with Couvet, D. (Museum National d'Histoire Naturelle, France), F. Du Carme (Museum National d'Histoire Naturelle, France), C. Pryce (DVRC). To be submitted in 2025 to Environment and Planning D: Society and Space

> **ABS4:** “Cost-benefit forecasting analysis for the implementation of a wild large-scale forest in Vosges”, F. Salvarini (DVRC/ESILV), R. Lopez (DVRC). To be submitted in 2025 to Environment and Planning D: Society and Space

> **ABS4:** “How social media influences environmental perceptions in young people”, P. Saba (DVRC). To be submitted in 2026

> **ABS4:** “Why Japan performs better than France in AI: reflections on perceptions”, P. Saba (DVRC). To be submitted in 2026

> **ABS3:** “Natural Capital Accounts in Practice: Surveying Government Policy Usage Ten Years On”, Jan-Erik Petersen (European Environmental Agency). To be submitted in 2026 to Ecological Economics

Case studies - Policy briefs

Policy Brief Ocean University Initiative 2025/6: “Posidonia”, with I. Perret (Ministère de la transition écologique, France), F. Hallé (Association Francis Hallé, P. Scemama (AMURE Research Unit, University of Brest, European University Institute for the Sea), F. Villers (Office Française de la Biodiversité)

SCIENTIFIC PRIZES AND AWARDS

2021-2024: French National Research Agency (ANR) grant (250K€): SHIPTRASE project under [BELMONT forum](#) (international consortium with 1 million €)

2004-2007: Three-year grant for PhD studies awarded by the Ministry of Education and Research in France for Honours in Master Degree (*Allocataire de Recherche*)

June 1995: One-year university tuition exemption awarded by the Ministry of Education in Spain for Honours in Secondary Education

OTHER RESEARCH ACTIVITIES – ACADEMIC ORGANISATION / RESPONSABILITIES

Coordination of conferences (*selected*)

Feb 2023, Stakeholder seminar ShipTRASE (funded by the Agence Nationale de Recherche (ANR), France): ShipTRASE project: Linking policy and economics to biogeochemical cycling and air-sea interaction, online (coordinator)

May 2019, Synergies and gaps between research and policy priorities in the Southern Atlantic ocean for the next decade, European University Institute for the Sea, South Africa (coordinator)

Jun 2015, Coastal blue carbon: What scope for mitigation projects, French Ministry of Foreign Affairs and International Development & European University Institute for the Sea, Paris (coordinator)

Jan 2015, Obstacles in the use of environmental accounts for public policy, French Ministry of Foreign Affairs and International Development & WWF, Brussels (Belgium) (coordinator)

Apr 2015, Natural resource management in Africa, French Ministry of Foreign Affairs and International Development & Global development network, Dakar (Senegal) (coordinator)

Jan 2014, Sanctions in development cooperation, French Ministry of Foreign Affairs and International Development & Institut de recherche et débat sur la gouvernance IRG, Paris (France) (coordinator)

Dec 2013, Post-2015, Global action for an inclusive and a sustainable future, French Ministry of Foreign Affairs and International Development, European development report 2013 (EC), Paris (France) (coordinator)

Jul 2013, Food security and price volatility, West Africa and Sahel Club at the OECD, Paris (France) (coordinator)

Oct 2012, E-learning in higher education in Iberoamerica, OECD/AIESAD (Distance Learning Higher Education Iberoamerican Association) conference to produce a report for the OECD Development Centre, Cartagena (Colombia) (coordinator)

May 2012, Innovation and competition for new development strategies, OECD conference for the production of Perspectives on Global Development 2013, Paris (France) (coordinator)

Nov 2010, Open access regulation in infrastructure in Africa, African Development Bank (AfDB) / OECD expert meeting, Tunis (Tunisia) (coordinator)

Dec 2008, Innovation and new technologies in Africa, African Development Bank (AfDB) / OECD / United Nations Economic Commission for Africa (UNECA) ministerial conference for the production of the special theme chapter for the African Economic Outlook 2009, Paris (France) (coordinator)

Oct 2008, Infrastructure and economic growth, Conference of the research chair on Innovation and Regulation in Infrastructure (IREN) sponsored by l'Ecole Polytechnique, Télécom ParisTech and Orange, Paris (France) (coordinator)

Participation in academic committees, referee & content production for policy (selected)

Management of research budget & studies at the French ministry of foreign affairs as head of the Unit of Economic Analysis (2013 – 2017): (i) 'Post-2015: Global Action for an Inclusive and Sustainable Future', 'Combining Finance and Policies to Implement a Transformative post-2015 Development Agenda': European development reports with EC, Germany, Finland and Luxembourg; (ii) development sanctions: IRG; (iii) food security: Sahel and West Africa Club, OCDE; (iv) emerging economies and climate (China, India, Indonesia): Asia centre, Sciencepo; (v) fisheries in developing countries: Ifremer (Pacific), OECD (West Africa); (vi) blue growth: OECD; (vii) climate change (blue carbon, ocean acidification): UMR Amure; (viii) environment and policy decisions: WWF; (ix) natural resource management in Africa: Global development network

Content for NEPAD ministerial meeting (2011): "Public investment in infrastructure: an approach for sustainable development," With Papa Amadou Sarr et Eugenio Santagata. Accelerating reform in Africa: Mobilising investment in infrastructure and agriculture, [NEPAD-OECD Africa Investment Initiative](#). 5th NEPAD-OECD Ministerial Conference on 26-27 April 2011 in Dakar, Senegal.

Content for the African Union ministerial meeting (2010): "Open access principles," 2010, [proceedings](#) of the African Union 3rd Ministerial Meeting on Information and Communication Technologies in Nigeria, August 2010

Referee for conferences and reports (2008 – 2012) for World Bank, AfDB, UNCTAD, African Union

Supervision of master theses (2008-2014) on public sector policies in infrastructure (ICT) from professionals in Burkina Faso, Togo, Mauritania, and Gabon (performance evaluation, innovation and competitiveness, regulation and finance). Télécom ParisTech and World Bank BADGE master

Jury in a PhD defence (2008) on infrastructure public sector management (Télécom ParisTech), 2008

OTHER RESEARCH ACTIVITIES – BOOKS

> "Governance, Governments and Legislation", (with Magnan, A., Turley, C., Al-Moghrabi, S., Celliers, L., Hall-Spencer, J., Holthus, P., Isensee, K., Papathanasopoulou, E.) In: Hilmi, N., Allemand, D., Metian, M., Osborn, D., Reynaud, S. (eds). **Bridging the gap between ocean acidification impacts and economic valuation: impacts of ocean acidification on coastal communities**. pp. 25-28. Ocean acidification international coordination centre, International atomic energy agency and Centre Scientifique de Monaco, 2015

> "Infrastructure for Structural Change in Less Developed Countries", **Chapter in Independent Partnership for the Monitoring of the Outcome of the Fourth United Nation Conference on the Least Developed Countries 2013** (LDC IV 2013), Publication co-drafted (Centre des Recherches Économiques Appliquées, Sénégal, Centre for Policy Dialogue, Bangladesh, Commonwealth Secretariat, UK, OECD Development Centre, France, Economic and Social Research Foundation, Tanzania, Fondation pour les Études et les Recherches sur le Développement International, France, Galatasaray University, Turkey, International Centre for Trade and Sustainable Development, Switzerland)

- > “Natural Resources and Structural Change”, (with Jan Rielaender, OECD, Bakary Traore, OECD and Gregory de Paepe, OECD), **African Economic Outlook 2013 (OECD)**, OECD Publishing. Sustainability in the use of natural resources – virtual water (continental analysis)
- > “Tunis Country Note 2013”, (with Emanuele Santi, African Development Bank), **African Economic Outlook 2013 (OECD)**, OECD Publishing. Structural analysis and special theme on Natural Resources and Structural Change
- > “Infrastructure for Structural Change”, (with Sebastian Nieto-Parra, OECD), **Perspectives of Global Development 2013 (OECD)**, OECD Publishing. Infrastructure policy cycle and public and private financing
- > “Case Studies: Arab Republic of Egypt, Brazil, China, France, Kenya, Republic of Korea, Senegal”, seven Chapters in The Relationship between Local Content, Internet Development and Access Prices, 2011, **OECD/UNESCO/ISOC** Co-Publishing, Paris
- > “Does Political Accountability Matter for Infrastructure Regulation?,” (with Farid Gasmi, Toulouse School of Economics and Paul Nomba, World Bank), Chapter in **Infrastructure Regulation: What Works, Why, And How Do We Know It? Lessons from Asia and Beyond**, 2011, World Scientific Publishing Co. Pte. Ltd. Eds., Singapore
- > “Telecommunications reforms in developing countries: The role of market and institutions”, **LAP Lambert Academic Publishing** (2011)
- > “Angola Country Note 2011”, (with Sebastian Nieto-Parra, OECD), **African Economic Outlook 2011 (OECD)**, OECD Publishing. Macroeconomic analysis and participation to forecasting exercise
- > “Mozambique Country Note 2011”, (with Gregory De Paepe, OECD), **African Economic Outlook 2011 (OECD)**, OECD Publishing. Macroeconomic analysis and participation to forecasting exercise
- > “Cape Verde Country Note 2011”, (with Bakary Traore, OECD), **African Economic Outlook 2011 (OECD)**, OECD Publishing. Macroeconomic analysis and participation to forecasting exercise
- > “Mozambique Country Note 2010”, (with Joel Muzima, African Development Bank). **African Economic Outlook 2010 (OECD)**, OECD Publishing. Structural analysis, participation to forecasting exercise and special theme on Taxation
- > “Cape Verde Country Note 2010”, (with Nicoletta Berardi, OECD). **African Economic Outlook 2010 (OECD)**, OECD Publishing. Macroeconomic analysis and participation to forecasting exercise
- > “Remittance Flows and Financial Development”, (with Sebastian Nieto-Parra, OECD and Rolando Avendano, OECD), **Latin American Economic Outlook 2010 (OECD)**, OECD Publishing. New technologies for remittance flows
- > “Innovation and New Technologies in Africa”, (with Gregory de Paepe, OECD and Papa Amadou Sarr, OECD). **African Economic Outlook 2009 (OECD)**, OECD Publishing. Special theme of the African Economic Outlook 2009 (continental analysis)
- > “Togo Country Note 2009”, (with José Gijón, IMF). **African Economic Outlook 2009 (OECD)**, OECD Publishing. Structural analysis, participation to forecasting exercise and special theme on Innovation and New Technologies
- > “Mozambique Country Note 2009”, (with Federica Marzo, OECD). **African Economic Outlook 2009 (OECD)**, OECD Publishing. Structural analysis, participation to forecasting exercise and special theme on Innovation and New Technologies
- > “Croissance Économique et Nouvelles Technologies,” (with Maya Bacache, Télécom ParisTech), Chapter in **Les Dilemmes de l'Economie Numérique**, 2009, FYP Eds., Limoges

PROFESSIONAL ENGAGEMENT ACTIVITIES

Media interviews

TV: Le Monde, Financial Times, Les Afriques, African Economic Outlook 2009 Press Launch, America.Gov, L'Atelier, AufaitMaroc, The Courier (acp-eucourier.info), The Africa Report

Radio : Radio France International (Afrique Économie), France Culture (Place de la Toile)

OTHER

Languages

English: Mother tongue (Proficiency level, Cambridge - 1995)

Spanish: Mother tongue

French, Portuguese: Fluent

Russian: Advanced beginner (4 year level)

Statistical packages

R, Stata, E-views, Matlab, Microsoft Project, Visual Basic, SAS, Limdep