



## Macrodynamics & Systems Dynamics Modeling Climate Change & Sustainable Development Energy, Hydrogen & Arctic Agriculture & Environment (New) Space Economics

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- Associate Professor in Economics [MCF HC]
- Research fellow at the CEARC research centre, since 2016
- Deputy Director of the OVSQ (CNRS-UVSQ), UVSQ, since 2023
- Director of the Institute for Sustainable Energy, University of Paris-Saclay, since 2024
- Elected member of the Research Commission, University of Paris-Saclay, since 2024

### Profile

**Patrick Schembri**, PhD in Economics (Univ. Paris 1 Panthéon-Sorbonne/Academic Tutor: Prof. Emeritus René Passet), **Associate Professor in Economics** at Versailles University and University of Paris-Saclay. Current Deputy Director of the Observatory of Versailles Saint-Quentin-en-Yvelines, (CNRS-UVSQ), and research fellow at the Interdisciplinary Research Centre in Cultures Environments Arctic Representations Climate (CEARC-OVSQ). Current Director of the Institute for Sustainable Energy, University of Paris-Saclay. For his doctoral dissertation, he benefited from a Research Grant of Brown University (Providence, MA, USA). He has been a Postdoctoral fellow within the CRITINC European Research Project, *making sustainability operational: CRITICAL Natural Capital and the implications of a strong sustainability criterion*, funded by the DG XII of the European Commission and coordinated by the School of Politics, International Relations and the Environment, Keele University, U.K. He is member of the GDR AREES « ARctique: Enjeux pour l'Environnement et les Sociétés » (CNRS).

Dr. Schembri published several articles and chapters on environmental policy, innovation & green technology transfers, natural capital assessment, indicators for sustainable development and economic modelling of sustainability. His research activities led him to take part in several national and European research programs concerning sustainable agriculture and water quality, greenhouse gas abatement through fiscal policy in the European Union, the economic and social aspects of environmental issues such as consumers lifestyles and pollutant emissions, the application of monetary and non-monetary procedures of economic valuation for managing sustainable development, the role of electricity grid and hydrogen in the energy transition, the modelling of socio-economic scenarios of climate change.

### Research Activities

My research mainly focuses on the links between economic growth, innovation and environmental changes, as well as the transition to the so-called ecologically-adjusted growth regime and the associated development paths. During the last decade, the financial and economic crises raise the basic questions about the process of economic growth. They have led to rethinking financial and environmental issues, highlighting the question of the financing of investments in sectors that would allow for the generation of new areas of production with specific skills, jobs, and an increase in income. It is then important to explore the policies and actions that should be initiated in order to achieve the required transition. It is also important to take account of the characteristics of the region and of the individual countries, as well as their potential to effectively move towards a green or ecologically adjusted economy based on their own capacities, while embracing the concept of green growth in their policies and programs.

In this context, my research aims at building an analytical framework that integrates the notions of *threshold* and *conflict* with respect to *sustainability* treated here as both a system-oriented and asset-based approach. Sustainability is defined as a heuristic method that questions *consistency* between several goals through time. With respect to the time dimension of sustainability, we examine the extent to which current investment strategies facilitates or limits the ability of the system to adjust to *novelty*. This is an important matter which also refers to the notion of adaptation. Adaptation is addressed through how resilience can be treated in macrodynamics with reference to the modeling of economic growth and ecological transition.

## Current Projects

### PREDICTING THE EVOLUTION AND BIOLOGICAL IMPACT OF THE OCEANIC EXPOSOME IN A CONTEXT OF ENVIRONMENTAL TRANSITION [PREVENT], ANR Project, PPR Océan de solutions, défi 5: 2024-2028.

Interdisciplinary research project coordinated by the LSCE (CEA-UVSQ). Partners: Sorbonne University, IRD, INRAE, CNRS. Scientific coordinator of the WP3: Scenarios and impacts on society. I am co-supervising a doctoral contract (36 months) for modeling ocean exposome scenarios on a global scale. I am supervising a postdoctoral contract (12 months) to assess multilevel governance in the context of local regulation of relevant emissions (mercury, lithium and plastics).

### PRECIPITATION AEROSOLS RESILIENCE INTERACTION SOCIETE (PARIS): 2024-2025, winner of the Tremplin Call for Projects, GS GCEP, Paris-Saclay University. Partners: LATMOS, CEARC, LSCE, IPSL.

The objective of this research is to measure the impact of socio-economic dynamics on that of IUCs in the Greater Paris metropolis over the last 30 years. The research will contribute to assessing the role of urban forms and planning on the dynamics of densification (population, production, consumption) and their consequences for the trajectories of emissions and precipitation.

### PEDAGOGICAL SERIOUS GAME BRUCO: 2023-2024, winner of the OSER Call for Projects, Paris-Saclay University. Scientific coordinator. The development and dissemination of an educational tool for debate on the environmental and social issues of major societal challenges. <https://www.youtube.com/watch?v=UVEdanRreM4>

### NEW ENERGY SUSTAINABLE MOBILITIES (NESMO): 2023-2024, winner the Excellence Call for projects, IES Paris-Saclay & MSH Paris-Saclay, University of Paris-Saclay. Scientific coordinator (Social sciences & humanities). Partners: LISV (UVSQ), CEARC (UVSQ), the Institute of Sciences and Technologies for Sustainable Energy and Mobility (STEMS-CNR, Napoli-Italy) & University of Federico II (Napoli-Italy) <https://www.uvsq.fr/3-questions-autour-du-projet-nesmo>

PURPOSE - Assessing the PERFORMANCE of a technological solution aimed at responding to certain challenges of the current energy transition. APPROACH – Building a knowledge mediation approach with the perspective of developing collective and collaborative expertise around the notion of performance.

### CHANGEMENTS DE COMPORTEMENTS DE MOBILITE POST-COVID DANS UNE PERSPECTIVE DE TRANSITION ECOLOGIQUE, ECONOMIQUE ET SOCIAL (COMOCOPOV) : 2022-2023, winner of the Emergence Call of Project MSH Paris-Saclay. Partners: LADYSS UMR 7533 (CNRS, Univ. Paris 8, Univ. Paris 1, Univ. Paris 7, Univ. Paris 10), GRETTIA (Univ. Gustave Eiffel).

### INSTITUTE FOR SUSTAINABLE ENERGY – PARIS SACLAY (creation Autumn 2021).

This is an Interdisciplinary Object of the Paris-Saclay University. Director since 2024. Institutional coordinators: CNRS, CEA-LITEN, University of Paris-Sud, University of Versailles-Saint-Quentin-en-Yvelines, ENS Paris-Saclay, Centrale-Supélec. <https://www.universite-paris-saclay.fr/objets-interdisciplinaires/institut-de-lenergie-soutenable-ies>

### ENERGY TRANSITION: 2017-2021.

Scientific coordinator for the Social sciences and Humanities of the IRS MOMENTOM (MOlecules and Materials for the ENergy of TOMorrow), a Strategic Research Initiative of Paris-Saclay University. The economic evaluation of new materials for renewable energies and new strategies allowing the transition from a carbon-based economy to a sustainable economy. Partners: CNRS, CEA, University of Paris-Sud, University of Versailles-Saint-Quentin-en-Yvelines, University of Evry, Ecole Polytechnique, ENS Cachan, ENSTA ParisTech, Centrale-Supélec, Soleil.

<https://www.universite-paris-saclay.fr/en/node/12559#our-project-3385>

**CLIMATE-ECONOMIC MODELING: 2017-2021. IRS ACE-ICSEN** (Adaptation to Environmental Changes: a multiscale and transdisciplinary approach), coordinated by the CEARC-OVSQ. The study of adaptation processes of living organisms, natural habitats and human societies to environmental changes. The modelling of climate change mitigation. Partners: University of Paris-Sud (ESE, GEOPS), University of Versailles-Saint-Quentin-en-Yvelines (DAVID, VIMA), LabeX IPSL (LSCE). <http://www.icsen.ovsq.fr/>

## News

### Recent

10 April 2025, **Cities and the Energy Transition: Efficient and Sustainable Energy Governance**, International Workshop: Just Transition: Interdisciplinary Insights for Sustainable Pathways, organized by Audencia/ISM-IEA Larequi, Audencia, Saint Ouen, (in collaboration with Katia Radja & Arnault Barichella). <https://www.ism-iae.uvsq.fr/conference-larequi-audencia>

4 April 2025, **Prospects for hydrogen-powered internal combustion engines to reduce emissions in the transport sector: what are the main challenges in terms of multi-level energy governance?** Accelerating Transition, Fourth MOMENTOM International Congress, IES-PS, Paris-Saclay University, (in collaboration with Arnault Barichella & Katia Radja) <https://momentom2025.sciencesconf.org/>

13 March 2025, **Les enjeux de la transition énergétique dans un contexte de crises**, Cycle de conférences ALLCAN, Amphi. Michelin, Centrale Supélec, Paris-Saclay University.

02 July 2024, **Conférence à deux voix sur le climat**, Formation des cadres supérieurs du MEFSIN : la crise des ressources naturelles, Espace Jean Choussat, Vincennes, (in collaboration with Philippe Bousquet).

06 February 2024, **Quelle interdisciplinarité dans le projet de recherche NESMO ?** Communication, Scientific seminar « Travailler dans l'interdisciplinarité », IES-PS, the MSH Paris-Saclay & the OVSQ, Guyancourt

24 January 2024, **La performance de la solution « biocarburants » en tant qu'innovation**, Scientific workshop, Conference, Biofuels, ALLCAN, University of Paris-Saclay, Saclay (in collaboration with Julie Bulteau)

10 January 2024, **La « grande » transformation des systèmes énergétiques : enjeux, défis et leviers potentiels dans un contexte de crises**, Conférence, Formation des cadres supérieurs du MEFSIN : la crise des ressources naturelles, Espace Jean Choussat, Vincennes.

28 November 2023, **La transition énergétique dans un contexte de crises : quels enjeux ?**, Conference, Club Climat Energie de Saint-Quentin-en-Yvelines, Crise énergétique : décryptage et perspectives, Guyancourt <https://clubclimatenergie.org/conference-cce-2023/>

23 November 2023, **Intérêt des étudiants universitaires pour les recruteurs : une approche par les compétences**, Conference, Forum des métiers, GS Géosciences Climat, Environnement Planètes, Paris-Saclay University

14 November 2023, **Climat : la transition énergétique va-t-elle (enfin) débuter ?**, Interview, Journal L'Opinion <https://www.lopinion.fr/economie/climat-la-transition-energetique-va-t-elle-enfin-debuter>

08 March 2023, **Testing the impacts of disaggregated renewable energy sources on economic growth: evidence of spatial spillover effects for developing countries**, Energy at the Crossroads: Accelerating Innovation in the Age of Disruption, Third MOMENTOM International Congress, IES-PS and the MSH Paris-Saclay, ENS Paris-Saclay, Paris-Saclay University (with K. Radja & H. Yan) <https://momentom2023.sciencesconf.org/>

28 Nov. 2022, **Eco-responsabilité et frugalité dans la transition énergétique**, [Eco-responsibility and frugality in the energy transition], Table ronde, Séminaire Brainstorm Nano organized by l’Institut des NanoSciences PSiNano (LabEx NanoSaclay), C’Nano-CNRS & l’Institut Pascal de Paris-Saclay, University of Paris-Saclay, Institut Pascal, Saclay

25 Nov. 2022, **Exposition urbaine à la pollution de l’air : une expérience à l’aide de micro-capteurs individuels en Île-de-France**, [Urban Exposure to Air Pollution : an Experiment Using Individual Micro-sensors in Île-de-France], Séminaires du LIMEEP-PS, Fourth Edition, « Villes et qualité de l’air : expositions des populations et enjeux d’urbanisme », Observatory of Versailles Saint-Quentin-en-Yvelines, (with Nabil Touili).

24 Nov. 2022, **Quelles perspectives pour l’hydrogène sur Saint-Quentin-en-Yvelines ?** [What prospects for hydrogen in Saint-Quentin-en-Yvelines ?], Synthesis of the conference organized by the Club Climat Energie de Saint-Quentin-en-Yvelines, Banque Populaire Val de France.

8 Nov. 2022, **Peut-on compter sur l’intelligence des villes pour atteindre la neutralité carbone à l’horizon 2050 ? Une présentation de recherches en cours sur les enjeux de soutenabilité de la transition énergétique des villes**, [Can we count on the intelligence of cities to achieve carbon neutrality by 2050 ? A presentation of current research on the sustainability issues of the energy transition of cities], Journées ICOS-France 2022 [Integrated Carbon Observation System], Observatory of Versailles Saint-Quentin-en-Yvelines.

June 2022, **Variations spatio-temporelles de l’exposition individuelle aux polluants urbains : quelles adaptations individuelles et collectives ?** . *Cybergeo : Revue européenne de géographie / European journal of geography*, UMR 8504 Géographie-cités, 2022, [10.4000/cybergeo.39074](https://doi.org/10.4000/cybergeo.39074) (hal-03708067), (with Nabil Touli, Katia Radja, Ahmad Ktaish, Karine Zeitouni, Isabella Annesi-Baesano, Basile Chaix, Boris Dessimond, Jean-Marc Naude, Salim Srairi).

29 Apr. 2022, **La nouvelle économie de l'espace à la croisée de plusieurs mobiles sécuritaires : une comparaison entre les États-Unis et l'Union Européenne**, Journée d'étude intitulée « Géopolitique de l'espace et espace(s) de géopolitique », [Geopolitics of space and space(s) of geopolitics], LIMEEP-PS, Observatory of Versailles Saint-Quentin-en-Yvelines.

16 Feb. 2022, **La solution hydrogène pour la neutralité carbone à l’horizon 2050 : la question des usages et de la complémentarité avec l’électricité** [The Hydrogen Solution for Carbon Neutrality By 2050 : The Question of Uses and Complementarity With Electricity], communication in the webinar, sixth of a cycle on hydrogen in the energy transition [WTE H<sub>2</sub>] organized jointly by the Energy at Paris-Saclay [E@PS] and the CEA-LITEN, which presents the state of the art and the prospects for uses hydrogen. <https://www.youtube.com/watch?v=3nbbYD HdOPE>

9 Dec. 2021, **Énergies « nouvelles » et société : la transition énergétique actuelle à la croisée des chemins et des savoirs**, conference for the kickoff session of the Institute of Sustainable Energy Paris-Saclay, ENS Paris-Saclay.

26 Nov. 2021, **Is There Any Tradeoff Between Energy Security and Climate Stability for the Arctic Region? An exploration of the Potential Levers and Obstacles to the Required Energy Transition**, a communication during the Artic Days, an international conference organized jointly by the Saint Petersburg State Hydrometeorological University (RSHU) and the Moscow State Institute of International Relations (MGIMO), within the Trianon Dialogue. November 25 and 26 in St. Petersburg, Russia.

Sept. 2021, **Transition énergétique et défi climatique : quelle place pour l’hydrogène vert ?** *Maison des sciences de l’Homme Paris-Saclay : collection Actes*, 8, MSH PARIS-SACLAY Éditions, Gif-sur-Yvette, MSH Paris-Saclay Éditions, p. 85-113. Mis en ligne le 01/09/2021. DOI : <https://doi.org/10.52983/EWUS7854>

Sept. 2021, **Énergies « nouvelles » et société : la transition énergétique actuelle à la croisée des chemins et des savoirs**, *Maison des sciences de l’Homme Paris-Saclay : collection Actes*, 8, MSH PARIS-SACLAY Éditions (With Hynd Remita). DOI : <https://doi.org/10.52983/AXHC1128>

16 April 2021, **Transitions énergétiques et agenda climatique : le regard d’un économiste**, Conference, « Les vendredis de l’OVSQ », the Observatory of Versailles-Saint-Quentin-en-Yvelines (CNRS-UVSQ), University of Paris-Saclay.

URL : [https://www.universite-paris-saclay.fr/evenements/transitions-energetiques-et-agenda-climatique-le-regard-d'un-economiste](https://www.universite-paris-saclay.fr/evenements/transitions-energetiques-et-agenda-climatique-le-regard-d-un-economiste)

26 March 2021, **Les « villes neutres en carbone » seront-elles nécessairement des « villes soutenables » ? Une réflexion autour de la question de l'arbitrage entre les objectifs climatiques et les objectifs de développement**, Communication at the first Workshop Webinar organized by the LIMEEP-PS intitled « Villes durables », the Observatory of Versailles-Saint-Quentin-en-Yvelines (CNRS-UVSQ), University of Paris-Saclay.

URL : <https://www.cearc.fr/content/seminaire-virtuel-«-ville-durable-»>

25 March 2021, **Sustainable Finance for the Energy Transition: What Should be the Right Price for Energy?** Guest Speaker/Plenary Conference at the Third Edition of Ethical Finance and Sustainable Development Workshop organized by the EDC Paris Business School (OCRE) and the Cergy Paris University (THEMA).

URL: <https://www.edcparis.edu/fr/third-edition-ethical-finance-and-sustainable-development-workshop>

04 Dec. 2020, **Economic Loss and Damage From Climate Change: The Importance of The « Growth Effect » on The Cost and Timing of Climate Policies**, Communication at the second ACE ICSEN Workshop Webinar, University of Paris-Saclay and the Observatory of Versailles-Saint-Quentin-en-Yvelines (CNRS-UVSQ), (with Katia Radja & Huijie Yan).

04 Dec. 2020, **Variations spatio-temporelles de l'exposition individuelle aux polluants urbains : quelles adaptations individuelles et collectives ?** Communication at the second ACE ICSEN Workshop Webinar, University of Paris-Saclay and the Observatory of Versailles-Saint-Quentin-en-Yvelines (CNRS-UVSQ), (with Katia Radja & Nabil Touili).

04 Dec. 2020, **The Effect of Climate Change on Economic Growth: Evidence From a Cross-Section of Countries**, Communication at the second ACE ICSEN Workshop Webinar, University of Paris-Saclay and the Observatory of Versailles-Saint-Quentin-en-Yvelines (CNRS-UVSQ), (with Katia Radja & Huijie Yan).

07 July 2020, **Covid-19 : Quel développement soutenable pour demain ?** Quelles mutations économiques et sociales ? Communication at the third Webinar organized conjointly by the University of Paris-Saclay, the AUF and the Conversation.

[https://youtu.be/QVFZI3fnGPI?list=PLZ\\_pEg029575C0AalZ7QmFKHWoeSAQmcz](https://youtu.be/QVFZI3fnGPI?list=PLZ_pEg029575C0AalZ7QmFKHWoeSAQmcz)

02 July 2020, **The Effect of Climate Change on Economic Growth: Evidence From a Cross-Section of Countries**, the 8th Bordeaux Conference in Development Economics (BCDE), GREThA (UMR CNRS 5113) and the University of Bordeaux, Bordeaux, France, (with Katia Radja & Huijie Yan) [conference postponed to April 2021]

05 June 2020, **La crise de la Covid-19 entre rupture et continuité pour le “monde d’après”**, Paper presented at the First International Webinar: Le monde post-Covid-19: opportunités de développement économique et durable, organized jointly by the Department of International Relations, the Faculty of Economics and the Franco-Argentinian Center of the University of CUYO (UNCUYO), Mendoza, Argentina.

<https://www.cearc.fr/content/webinaire-universit%C3%A9-nationale-de-cuyo-penser-la-crise-du-covid-19-entre-rupture-et>

21 Nov. 2019, **Transition énergétique et défi climatique : quelle place pour l'hydrogène vert ?** Paper for the Second Workshop MOMENTOM : Energies nouvelles et société, Maison des Sciences de l'Homme Paris Saclay, Cachan.

08 Nov. 2019, **Défi climatique et transition énergétique : quelle économie politique pour l'Arctique ?** Communication for the Séminaire Hautes Latitudes, LSCE (IPSL) & CEARC, Université Paris Saclay.

19 Oct. 2019, **Les grands enjeux socio-économiques de la transition énergétique**, communication for the Conference on the Renewable Energy, organized by the Pôle d'Equilibre Territorial et Rural Ternois 7 Vallées (PETR), Abbaye de Belval, Commune de Troisvaux.

23 Sept. 2019, **The Tradeoff between Climate Policies and Development Policies: A Sustainability Issue**, paper presented at the International Conference on Arctic Crossroad, The Minister of Europe and Foreign Affairs, Paris, (with K. Radja)

18 June 2019, **Energy Transition, and US Urban Growth Path Dependency**, paper presented at the International Faculty Partnership Symposium California State University – MICEFA, OVSQ, (with F. Leriche)

11 Apr. 2019, **Transition énergétique et matériaux de rupture pour l'énergie : les enjeux socio-économiques du programme de recherche MOMENTOM (IRS Univ. Paris Saclay)**, communication presented at the Workshop Energy H2020, PCN SHS & PCN Energie, CEA, Ministère de l'Enseignement supérieur, de la Recherche et de l'Innovation (MESRI), Paris

18 Feb. 2019, **Economic Scenarios of Climate Change: The Methane Issue**, Lecture at the Second International MEMO<sup>2</sup> School: Learning more about Methane and Society, LSCE (IPSL), OVSQ. MEMO<sup>2</sup>: Methane goes Mobile – MEasurements and Modelling, is a European Training Network (MSCA-ETN) with more than 20 partners from 7 countries

13 Dec. 2018, **Energy Transition and The Arctic: An Issue of Conflicting Security Motives**, paper presented at the Arctic Week: An International & Transdisciplinary Conference Bridging Indigenous and Scientific Knowledge, OVSQ.

18 Nov. 2018, **Does disaggregated renewable energy consumption stimulate economic growth? The role of spatial effect and heterogeneity across countries**, paper presented at the Conference on International Development Economics, GDRI IDE 838, CERDI – university of Auvergne, Clermont Ferrand, (with H. Yan & K. Radja)

21 March 2018, **Energie, climat et croissance : les enjeux de la transition vers une économie « décarbonée »**, Plenary Conference, Université Paris Val de Seine, Cergy Pontoise.

23 Jan. 2017, **Energies et dérèglements climatiques : quels enjeux économiques ?** Ecole Supérieure de Journalisme de Lille, Lille, (with S. Huet).

20 Nov. 2017, **Dérèglements climatiques et croissance économique : quels enjeux pour l'évaluation des politiques climatiques ?** Workshop IRS ACE ICSEN, MSH Paris-Saclay, ENS Paris-Saclay, Cachan.

10 March 2017, **Echanges internationaux et environnement**, Conference, *Trump : sa politique et l'environnement, Association des Juristes en Droit de l'Environnement de l'université de Paris Sud*, Sceaux.

### **Congress, Workshop and Seminar: Organization, Scientific Coordination**

2024 Cycle of Scientific seminars, **Travailler dans l'interdisciplinarité: retours d'expérience**, IES-PS, the MSH Paris-Saclay & the DIM PAMIR, member of the organization Committee. <https://msh-paris-saclay.fr/travailler-dans-interdisciplinarite-retours-experience/>

16 November 2023, organization of the *Premières Rencontres de l'IES Paris-Saclay, La transformation des systèmes énergétiques dans un contexte de crises et d'urgence des grands agendas environnementaux*, IES-PS, the MSH Paris-Saclay & the OVSQ, ENS Paris-Saclay, Paris-Saclay University <https://rencontres-ies-2023.sciencesconf.org/>

09 November 2023, organization of the scientific seminar, **Environnements urbains**, Observatory of Versailles Saint-Quentin-en-Yvelines, Guyancourt.

08-09-10 March 2023, member of the organization committee, **Energy at the Crossroads: Accelerating Innovation in the Age of Disruption**, Third MOMENTOM International Congress, IES-PS and the MSH Paris-Saclay, ENS Paris-Saclay, Paris-Saclay University <https://momentom2023.sciencesconf.org/>

02 February 2023, Organization of the conference, **Urgence climatique**, Sylvestre Huet, IES-PS and ALLCAN, CS, Paris-Saclay University

**Sustainable Energy Institute – Paris Saclay (creation Autumn 2021).** An Interdisciplinary Object of the Paris-Saclay University. Scientific coordination for Social sciences & Humanities and Sustainable Development.

02 Nov. 2020, **The MOOC MOMENTOM**, The MOMENTOM Project as a Strategic Research Initiatives of paris-Saclay University. New Energies and Society (Scientific Coordinator Challenge 4: Social Sciences and Humanities) <https://www.fun-mooc.fr/courses/course-v1:ParisSaclay+71006+session01/about>.

9-13 Dec. 2019, **Arctic Week 2019: An International & Transdisciplinary Conference Bridging Indigenous and Scientific Knowledge**, (Organizing Committee), The Minister of Europe and Foreign Affairs, Paris

27 Nov. 2019, **Itinéraires maritimes et Arctique : contraintes et enjeux logistiques**, Séminaire de Recherche en logistique (SRLOG), (Scientific Coordinator & Organizing Committee), OVSQ, Guyancourt.

21 Nov. 2019, **Second Workshop MOMENTOM Energies nouvelles et société : les coûts de la transition énergétique**, (Scientific Coordinator), Maison des Sciences de l'Homme Paris-Saclay, ENS Paris-Saclay, Cachan.

29 & 30 Nov. 2018, **Deuxième atelier thématique de recherche Mobilité : Villes, transports et mobilité durable**, (Scientific Committee and local Organizing Committee), OVSQ, Guyancourt.

19 Oct. 2017, **First Workshop MOMENTOM Energies nouvelles et société : regards croisés sur la transition énergétique**, (Scientific Coordinator), Maison des Sciences de l'Homme Paris-Saclay, ENS Paris-Saclay, Cachan.

## Selected Publications and working papers

**2024**, La nouvelle économie spatiale à la croisée de plusieurs enjeux sécuritaires : une analyse des politiques d'innovation aux Etats-Unis et en Europe, *L'Espace Politique*, [online], 51-52, 2023-3/2024-1. DOI : <https://doi.org/10.4000/12ddw>.

**2024**, Numerical and Experimental Analysis of Dual Fuel Hydrogen/Diesel Combustion at Varying Engine Speed on a Single Cylinder Engine, *SAE Technical Paper 2024-24-0044*, 2024, <https://doi.org/10.4271/2024-24-0044>, (with F. Maroteaux, S. Sebai, E. Mancaruso, S. Rossetti, K. Radja, A. Barichella).

**2024**, Does disaggregated renewable energy stimulate economic growth? The role of spatial effect, *Applied Economics*, Vol. 56, Issue 2, pp. 213-232. DOI: <https://doi.org/10.1080/00036846.2023.2167917>, (with Huijie Yan & Katia Radja)

**2022**, Variations spatio-temporelles de l'exposition individuelle aux polluants urbains : quelles adaptations individuelles et collectives ? *Cybergeo : Revue européenne de géographie*, [online], Doc. 1019. DOI : <https://doi.org/10.4000/cybergeo.39074>, (with Nabil Touili, Katia Radja, Ahmad Ktaish, Karine Zeitouni, Isabella Annesi-Baesano, Basile Chaix, Boris Dessimond, Jean-Marc Naude, Salim Srairi).

**2021**, Transition énergétique et défi climatique : quelle place pour l'hydrogène vert ? *in* Patrick Schembri & Hynd Remita (dir.), *Énergies « nouvelles » et société. La transition énergétique actuelle à la croisée des chemins et des savoirs*, Maison des sciences de l'Homme Paris-Saclay : collection Actes, 8, MSH PARIS-SACLAY Éditions, p. 85-113. DOI : <https://doi.org/10.52983/EWUS7854>

**2021**, *Énergies « nouvelles » et société : la transition énergétique actuelle à la croisée des chemins et des savoirs*, Maison des sciences de l'Homme Paris-Saclay : collection Actes, 8, MSH PARIS-SACLAY Éditions (With Hynd Remita).

**2020**, Transition énergétique et défi climatique : quelle place pour l'hydrogène vert ? WP IRS – MOMENTOM, Paris-Saclay University, CEARC/OVSQ (CNRS-UVSQ).

**2020** Loss and damage from climate change: the importance of the « growth effect » on the cost and timing of adaptation, WP: IRS ACE-ICSEN, Paris-Saclay University, CEARC/OVSQ (CNRS-UVSQ).

**2020** The Effect of Climate Change on Economic Growth: Evidence From a Cross-Section of Countries, WP: IRS ACE-ICSEN, Paris-Saclay University, CEARC/OVSQ (CNRS-UVSQ).(with Katia Radja and Huijie Yan).

**2019** Does Disaggregated Renewable Energy Consumption Stimulate Economic Growth? The Role of Spatial Effect, WP: IRS MOMENTOM, Paris-Saclay University, CEARC/OVSQ (CNRS-UVSQ).(with Katia Radja and Huijie Yan).

**2018** Energy Transition and the Arctic Region: Does hydrogen part of the solution? WP: IRS MOMENTOM, Paris-Saclay University, CEARC/OVSQ (CNRS-UVSQ).(with Sarah Uzunova).

**2017** Dérèglements climatiques et croissance économique : quels enjeux pour l'évaluation des politiques climatiques, WP : IRS ACE-ICSEN.

<http://www.icsen.ovsq.fr/sites/icsen.ovsq.fr/files/membersfiles/Presentation%2020171120/11-SCHEMBRI%20Patrick.pdf>

**2016** Quels enjeux de soutenabilité pour l'agriculture indienne ? *Economie Rurale*, 352, Mars-avril, pp. 23-41, (with Katia Radja and Damien Bazin). [Which sustainability for the Indian agriculture?]

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## Current Teaching activities

### Graduate level:

Contribution to the **MOOC MOMENTOM**, The MOMENTOM Project as a Strategic Research Initiatives of paris-Saclay University. New Energies and Society

<https://www.fun-mooc.fr/courses/course-v1:ParisSaclay+71006+session01/about>.

Sequence 1: Energy Transition and Global Warming

Sequence 2: New Energies and Environmental Impacts: The IPAT Modelling Approach

Sequence 3 : « Green » Hydrogen in The Energy Transition: Which Potentials and Lock-in Factors?

M2 ACCES (Univ. Paris Saclay and ESJ Lille): Changement climatique, énergie et économie  
(in collaboration with Sylvestre Huet)

<https://esj-lille.fr/formations/formations-a-distance/master-changement-climatique-medias-a-distance/>

MOOC ACCES Climate-Economy Interactions : A Climate Bill Issue.

MOOC ACCES Climate, Economy and Decoupling : Do we have to wait to be rich to worry about the climate?

Univ. Paris Saclay and UVSQ: Environmental Economics and Environmental Policy, Energy Economics, Socio-economic Scenarios of Climate Change: Construction and Assessment, Eco-innovation and Society, Economic analysis of Sustainable Development, Business Ethics (the precautionary principle in Economics), Economic Assessment of Sustainable Development Projects, Newspace Economics

Undergraduate level: Macrodynamics (UVSQ)