

Meriem Hamdi-Cherif

36, avenue Laplace
94110 Arcueil – France

e-mail: meriem.hamdicherif@sciencespo.fr

mobile: +33 (0) 6 63 49 19 47

phone: +33 (0) 1 44 18 54 72



French/Algerian

CURRENT POSITION

Environmental economic researcher – OFCE (Observatoire Français des Conjonctures Economiques – Sciences Po)

Research fields: Transition to low-carbon economies - Links between energy, economic development and environment

Methods: Techno-economic and Socio-economic scenarios (medium and long term) – Integrated assessment modeling

PROFESSIONAL BACKGROUND

2009-2020 Research Fellow – *CIRE*D – *SMASH* (*Société de Mathématiques Appliquées et de Sciences Humaines*)

2006-2009 Research Engineer (Ingénieur de Recherche) – *CIRE*D – *ENPC* (*Ecole Nationale des Ponts et Chaussées*)

2003-2006 Study Engineer (Ingénieur d'Etudes) – *CIRE*D – *EHESS* (*Ecole des Hautes Etudes en Sciences Sociales*)

EDUCATION

2016 PhD. in Economics, EHESS (Ecole des Hautes Etudes en Sciences Sociale, Paris).
Thesis title: "*Aligning development and energy policies under climate constraints in China - Lessons from a second-best general equilibrium framework*".

2002 Master in Applied Mathematics, University Paris VI, P. et M. Curie

2001 Maîtrise, Licence (2 degrees) in Applied Mathematics, University Paris VI, P. et M. Curie

1998 DEUG M.I.A.S. (a two year degree in mathematics), University Paris VI, P. et M. Curie

1996 Mathematics High School Diploma. Lycée Henri IV.

PUBLICATIONS

IN PROGRESS

Hamdi-Cherif M., O’Broin E. and Li J., “The transportation sector as a lever for reducing long-term mitigation costs in China”. Under revision in *Climate Policy*.

Hamdi-Cherif, M. and Waisman, H., “Economic Globalization, Global energy issues and Climate Change - China in global perspective”. Submitted in *Energy Policy*

PUBLISHED IN PEER-REVIEWED JOURNALS

Malliet, P., , Reynes, F., Landa, G., **Hamdi-Cherif**, M. and Saussay, A., 2020. “Assessing short-term and long-term economic and environmental effects of the COVID crisis in France”. *Environmental and Resource Economics*. Volume 76, 867–883. doi.org/10.1007/s10640-020-00488-z

Fæhn, T., Bachner, G., Chateau, J., Fujimori, S., Ghosh, M., **Hamdi-Cherif**, M., Lanzi, E., Paltsev, S., Vandyck, T., Cunha, B., Garaffa, R., And Steininger, K., 2019. " Capturing key energy and emission trends in CGE models: Assessment of status and remaining challenges". *Journal of Global Economic Analysis*. Volume 5, N° 1, 196-272; doi.org/10.21642/JGEA.050106AF

Mejean, A., Guivarch, C., Lefèvre, J. and **Hamdi-Cherif**, M., 2018. "The transition in energy demand sectors to limit global warming to 1.5°C". *Energy Efficiency*. Volume 12, 441–462 (doi.org/10.1007/s12053-018-9682-0)

Cassen, C., **Hamdi-Cherif**, M., Toniolo, J. Cotella, G., Lombardi, P. and Hourcade, J-C., 2018. “Low Carbon Scenarios for Europe: An evaluation of upscaling Low Carbon Experiments”. *Sustainability*. 10(3), 848; doi:10.3390/su10030848

Li, J., **Hamdi-Cherif** M., and Cassen C., 2017. “Aligning domestic policies with international coordination in a post-Paris global climate regime: A case for China”. *Technological Forecasting and Social Change*. Volume 125, 258-274

Hamdi-Cherif M. and Waisman H., 2016. “Global carbon pricing and the “Common but differentiated responsibilities” - The case of China”. *International Environmental Agreements: Politics, Law and Economics*. Volume 16, 671–689.

Bibas, R., Mejean, A. and **Hamdi-Cherif**, M., 2015. "Energy Efficiency policies and the timing of action: an assessment of climate mitigation costs". *Technological Forecasting and Social Change*, Volume 90, Part A, 137-152.

Bauer, N., Bosetti, V., Calvin K., **Hamdi-Cherif**, M., Kitous, A., McCollum, D., Méjean, A., Shilpa, R., Turton, H., Paroussos, L., Ashina, S., Wada, K., 2015. "CO2 emission mitigation and fossil fuel markets: Dynamic and international aspects of climate policies". *Technological Forecasting and Social Change*, Volume 90, Part A, 243-256.

Kriegler, E., Riahi, K., Bauer, N., Schwanitz, J., Petermann, N., Bosetti, V., Marcucci, A., Otto, S., Paroussos, L., Rao, S., Arroyo Curras, T., Ashina, S., Bollen, J., Eom, J., **Hamdi-Cherif**, M., Longden, T., Kitous, A., Méjean, A., Schaeffer, M., Wada, K., Capros, P., van Vuuren, D., Edenhofer, O., 2015. "Making or breaking climate targets: The AMPERE study on staged accession scenarios for climate policy". *Technological Forecasting and Social Change*, Volume 90, Part A, 24-44.

Keywan Riahi; Elmar Kriegler; Nils Johnson; Christoph Bertram; Michel den Elzen; Jiyong Eom; Michiel Schaeffer; Jae Edmonds; Morna Isaac; Volker Krey; Thomas Longdon; Gunnar Luderer; Aurelie Mejean; David L McCollum; Silvana Mima; Hal Turton; Detlef P van Vuuren; Kenichi Wada; Valentina Bosetti; Pantelis Capros; Patrick Criqui; Meriem **Hamdi-Cherif**; Mikiko Kainuma; Ottmar Edenhofer, 2015. "Locked into Copenhagen Pledges - Implications of short-term emission targets for the cost and feasibility of long-term climate goals". *Technological Forecasting and Social Change*, Volume 90, Part A, 8-23.

Waisman, H., Cassen, C., **Hamdi-Cherif**, M. and Hourcade Jean-Charles, 2014. "Sustainability, Globalization, and the Energy Sector - Europe in a Global Perspective". *Journal of Environment and Development*, Volume 23 (1), 101-132.

Hamdi-Cherif, M., Guivarch, C. and Quirion, P., 2011, "Sectoral targets for developing countries: Combining "Common but differentiated responsibilities" with "Meaningful participation"", *Climate Policy*, Volume 11, Number 1, 731-751(21).

Quirion, P. and **Hamdi-Cherif**, M., 2007, "General equilibrium impact of an energy-saving policy in the public sector", *Environmental and Resource Economics*, Volume 38, Number 2. p 245-258.

OTHER PUBLICATIONS

Hamdi-Cherif, M., Landa, G., Malliet, P., , Reynes, F., Saussay, A. and Vona F., 2020. "L'impact économique et environnemental de la crise de la Covid-19", Chapter 18 in Lazar, M., Plantin, G. and Ragot, X. « Le Monde d'Aujourd'hui- Les Sciences Sociales au temps de la Covid », Les Presses Sciences Po.

Hamdi-Cherif, M., 2019, "Global carbon pricing - When and What flexibilities revisited in a second-best framework". **World Bank Working Paper Series** –Carbon Pricing Leadership Coalition.
<https://openknowledge.worldbank.org/handle/10986/32746?locale-attribute=en>

Hamdi-Cherif, M., C. Guivarch and P. Quirion, 2011. Une approche sectorielle pour la production d'électricité dans les pays en développement : enseignements du modèle Imaclim-R, dans *Economie du climat : des pistes pour l'après-Copenhague*, O. Godard et J.-P. Ponsard (dir.), Presses de l'école Polytechnique.

Crassous, R., Hourcade, J-C., Sassi, O., Gitz, V., Mathy, S. and **Hamdi-Cherif**, M., 2006. "Imaclim-R : a Modeling Framework for Sustainable Development Issues" . Background paper for *Dancing with Giants: China , India and the Global Economy*. Institute for Policy Studies and the World Bank, Washington, DC.

Hamdi-Cherif M., Ghersi F., 2012, "Correcting the 'self-trade' issue in the GTAPAgg software" - Technical Paper- CIRED working paper, DT/WP No 2012-39, <http://www.centre-cired.fr/spip.php?article1378&lang=en>

CONFERENCES, SEMINARS AND PRESENTATIONS

“Carbon pricing and Climate Finance: a new form of what and where flexibilities”

- Integrated Assessment Modelling Consortium 12th annual conference, Tsukuba, Japan, December 2019.

“Global mitigation costs- When and What flexibilities revisited in a second-best framework”.

- 38th International Energy Workshop (IEW) Conference – International Energy Agency (IEA) Paris, June 2019.
- International Research Conference on Carbon Pricing, Carbon Pricing Leadership Coalition (CPLC) and World Bank, New Delhi, India, February 2019.
- 23rd Annual Conference of the European Association of Environmental and Resource Economists, Athens, Greece, June 2017.
- Integrated Assessment Modelling Consortium 9th annual conference, Beijing, China, December 2016.

“The Paris agreement without US - Lessons from an integrated assessment exercise in a second best modeling framework”

- Integrated Assessment Modelling Consortium 10th annual conference, Recife, Brazil, December 2017.
- GTAP 21st Annual Conference on Global Economic Analysis, Cartagena - Colombia, June 13–15, 2018.

“The transportation sector as a lever for reducing long-term mitigation costs in China”.

- 5th Green Growth Knowledge Platform (GGKP) Annual Conference, World Bank in Washington DC, USA, November 2017.
- Interdisciplinary Ph.D. Workshop on Sustainable Development, Columbia University – New York City, April 03–04, 2015
- International BE₄ Workshop, Senate House – London, April 20–2, 2015.(UCL)
- 34th International Energy Workshop, International Renewable Energy Agency (IRENA), Abu Dhabi, June 03–05, 2015
- Our Common Future Under Climate Change, Side event (UC Berkeley/MINES ParisTech) Innovations in Decarbonization, Exploring the pathways and actions needed to prevent climate change, Paris, July 10, 2015
- Integrated Assessment Modelling Consortium 8th annual conference, Potsdam, November 2015. (Poster)

“Contrôle de la mobilité et objectifs de décarbonation en Chine”

- Journée de la Chaire Modélisation Prospective au Service du Développement Durable. Prospective pour les enjeux Energie-Climat, MINES ParisTech – PARIS, 2 mars 2015

“Economic Globalization, Global Energy issues and Climate Change - China in global perspective”.

- 33rd International Energy Workshop, Energy Research Institute - Beijing, June 04–06, 2014.
- GTAP 17th Annual Conference on Global Economic Analysis, DAKAR - SENEGAL, June 18–20, 2014.
- 6th Atlantic Workshop on Energy and Environmental Economics, A Toxa - Galicia - Spain, June 25-26, 2014.

“The costs of a global climate agreement for China- A tale of carbon price, “when flexibility” and quota allocation”.

- 26th PhD Workshop on International Climate Policy, Paris – 25-26 April 2013
- GTAP 16th Annual Conference on Global Economic Analysis, Shanghai, China– 12-14 June 2013
- International Energy Workshop, Paris, June 19-21, 2013
- 62nd Annual Meeting of the FRENCH ECONOMIC ASSOCIATION AFSE Aix-en-Provence, June 24-26, 2013.

“The determinants of mitigation costs: emission profile, revenue recycling and transport infrastructure”.

- GTAP 15th Annual Conference on Global Economic Analysis, Genève (Switzerland), June 27-29, 2012

“Mitigation costs in second-best economies: time profile of emission reductions and sequencing of accompanying measures”.

- 5th Atlantic Workshop on Energy and Environmental Economics. A Toxa, Galicia, Spain. June 25-26, 2012.
- 12th IAEE European Energy Conference- Ca' Foscari University of Venice, Ital, September 9-12, 2012.

“Reducing the costs of Copenhagen climate pledges in a post-Kyoto world”.

- International Energy Workshop – 31st edition. University of Cape Town. South Africa, June 19-21, 2012.

“Sectoral targets for developing countries: Combining "Common but differentiated responsibilities" with "Meaningful participation"”.

- EAERE Rome 29 June- 2 July, 2011.
- International Energy Workshop - 30th edition. Stanford University, USA, July 6-8, 2011.
- International Conference EAERE - Environment and Natural Resources Management in Developing and Transition Economies. CERDI - Clermont Ferrand, November 18-19, 2010.

“Addressing a self-trade issue in GTAPAgg”.

- GTAP, 14th Annual Conference on Global Economic Analysis, Ca' Foscari University of Venice - San Giobbe Campus. Venice, Italy, June 16-18, 2011.

“Using mini_ker tools for macroeconomic calibration: the IMACLIM-R model and the Entropy approach”.

- Pluridisciplinary seminar of the work group on the Evolution Formalism by Transfer (collaboration LMD, LE, CIRED, ENS), Tarbes. July, 2005.

EXPERTISE/ PROJECTS

UNDP Tunisia – OFCE, 2020-2021, L’élaboration de la Stratégie Nationale Bas Carbone dans le secteur de l’énergie en Tunisie- *L’évaluation des impacts macroéconomiques de la SNBC*

UNDP Tunisia – OFCE, 2019-2020, Impacts économiques de la levée des subventions énergétiques et l’introduction d’une taxe carbone pour alimenter les ressources du Fonds de Transition Energétique en Tunisie.

UNDP Tunisia – ALCOR, 2018-2019, NAMA project to support the Tunisian Solar Plan.

International expert in the development of prospective scenarios and the development of low carbon development strategies.

France Stratégie – Commission Quinet, 2018. The value of climate action – A social value of carbon to assess investments and public policies.

Developing, analyzing and assessing “zero emissions” scenarios with Imacлим-France

CFE (Conseil Français de l’Energie), 2016-2019, “Carbon price and “climate finance”: how to ensure an equitable access to development”.

Developing, analyzing and assessing scenarios with Imacлим-R: Impact assessment of carbon pricing and investment policies.

Milesecure-2050, 2013-2016, multidisciplinary EU FP7 Project, aims to understand and overcome the political, economic and behavioral traits and trends of energy security issues in Europe.

Evaluation of upscaling Low Carbon Experiments, in a multidisciplinary context

GLOBIS (Globalization Informed by Sustainable Development), multidisciplinary EU FP7 Project, 2009-2014, dedicated to reconciling the three global processes: globalization, development and sustainable development.

Design, analysis and evaluation of economic transition trajectories at European and global level under the dual challenge of energy sustainability and climate change and under alternative visions of the future of globalization processes (multidisciplinary context).

AMPERE, EU FP7 Project, 2011-2014, dedicated to the "Assessment of Climate Change Mitigation Pathways and Evaluation of the Robustness of Mitigation Cost Estimates", in collaboration with 21 partners from Europe and Asia.

Developing, analyzing and assessing scenarios with Imacлим-R, in a context of model intercomparison exercises.

EDF, 2010, Exploration of the triptych growth - carbon price - price of fossil fuels with the IMACLIM-R model.

Developing and analyzing scenarios with Imacлим-R.

CLIMA, European project within **Asia-Link Programme**, 2006-2009, dedicated to higher education networking between Europe (France, Italy and Netherlands) and Asia (Pakistan and China).

Supervision and development of the scientific content; Organization and management of workshops.

GICC (Management and Impacts of Climate Change), 2004; CNRS (CIRED-LMD-CEPII-LEPII-EPE). Consolidating Long-term Scenarios capacities: control data, coupling models. <http://www.centre-cired.fr/IMG/pdf/RapFinScen.pdf>

GTAP data processing.

TEACHING

“Modélisation prospective économie-énergie-climat - Paysage des modèles et analyse de scénarios” within the UE Economie de la transition environnementale (EOTRANS) at Sorbonne University chaired by l’Institut de la Transition Environnementale, AgroParisTech and CIRED.

“Aligning Development, Energy and Climate” (in French, *“Peut-on concilier développement, Energie et Climat?”*)

Master EEET-M2 Economie de l’énergie, Semaine Changement Climatique- Athens

AgroparisTech ENGREF, ENSTA/ParisTech, Master “Politiques et Actions Publiques pour le Développement Durable” /ENPC ParisTech .

“Climate change: statement and challenges of the COP21” with Valérie Masson-Delmotte (in French, *“Changement climatique : état des lieux et enjeux de la COP21”*)

Master "Environnement"-Université Paris-Saclay.

“Techno-economic modeling in the context of climate and environmental regulation” (in English).

Master “Climate, Land-Use and Ecosystem Services”, Université Paris-Saclay – AgroParisTech

“Development and climate issues and challenges...what are the links?” (in French, *“Enjeux de développement et enjeux climatiques...quels liens ? ”*)

Erasmus Mundus Master in Sustainable Territorial Development, Université Paris 1 Panthéon Sorbonne

“Assessment of GHG mitigation policies with a multisectoral macroeconomic modeling tool – the example of Imaclim-R” (in French, *“Evaluation des politiques de réduction des GES par une modélisation macro-économique pluri-sectorielle- L’exemple d’Imaclim-R”*)

Master Biosphère Continentale, AgroParisTech-Université Paris 6

Development Economics, International Economy, Money (Cash economy), Microeconomics, Public Economy. (Senior Lecturer in Economics for one year (ATER), in French)

University of Marne la Vallée

Macroeconomics, Statistics. Teaching assistant (chargée de TD) at University of Marne la Vallée.

STUDENT SUPERVISION

“Prix mondial du carbone, fiscalité carbone régionale et finance climat”

Within the modeling course of the master Economie de l’Energie, de l’Environnement et des Transports-AgroParisTech (2019-2020).

“Aligning the NDCs and SDGs, lessons from a second best modeling framework”

Within the modeling course of the master Economie de l’Energie, de l’Environnement et des Transports-AgroParisTech (2017-2018/2018-2019).

“Analyzing INDC scenarios with the Imaclim-R model”

Within the modeling course of the master Economie de l’Energie, de l’Environnement et des Transports-AgroParisTech (2016-2017).

NON-ACADEMIC SEMINARS AND CONFERENCES

Participation in the round table: "**Penser Prospérité plutôt que croissance – Les armes de la transition écologique pour les entreprises**".

Université de la CPME Drôme – Valence, June 2019.

Participation in the round table: "**Modelling for the new European Climate Strategy**" (in English).

Bruegel institute – Brussels, September 2018.

"**Algerian Energy scenarios with macro-economic modelling**" - Algiers – Algerian Energy ministry and GIZ, March 2018.

"**Introduction to Climate negotiations, Economic development, Energy and Climate**" – Alliance pour une Éducation à la Citoyenneté Planétaire (AECPE), Le amis de Circée - Interventions within high schools and colleges in Drôme/Isère – France, October 2017/ October 2018.

"**Climate negotiations and socio-economic prospective**" (in French).

Presentation at the people's university of Antony, within the cycle Chaud et froid sur le climat. November, 2015.

"**UNFCCC and climate negotiations- from 1992 to 2015**" (in French).

Presentation at the Journée scientifique de Météo et Climat - Enjeux et perspectives de la COP21- Ministère de l'Écologie, du Développement durable et de l'Énergie- Paris, 29 octobre 2015.

"**Links between Climate Change, Energy and Development**" (in French).

Presentation for inmates at the Bois d'Arcy prison. Organized by Champs Libre within the cycle Climat et Energie. October 2015.

Participation in the debate/round table : "**ISSUES AND PROSPECTS OF THE COP21**" (in French).

12^{ème} FORUM INTERNATIONAL DE LA MÉTÉO ET DU CLIMAT – PARIS CLIMAT 2015/COP21 – Parvis de l'Hotel de ville de Paris. Mars 2015.

"**History of the climate international negotiations**" (in English).

Presentation at the French embassy of Prague. Climate, Science, Knowledge and Governance. Prague, November, 2014.

LANGUAGES AND COMPUTER SKILLS

French (native), Arabic (native), English (fluent).

Programming: Scilab, Matlab.

SOCIAL SKILLS AND COMPETENCES

Good ability to adapt to multicultural environments - Work in various teams from social and voluntary sector to research teams.

Hobbies: Singing /Cooking.

REFERENCES

Stéphane Hallegatte

Lead Economist
Climate Change Group
World Bank

shallegatte@worldbank.org

Henri Waisman

Senior Researcher
IDDRI

henri.waisman@iddri.org

Celine Guivarch

Senior researcher
CIRED

guivarch@centre-cired.fr