

List of Publications

Dr Mouratiadou, Ioanna

Journal articles (peer reviewed)

- Mouratiadou, I., Stella, T., Gaiser, T., Wicke, B., Nendel, C., Ewert, F., van der Hilst, F.,** (2020). Sustainable intensification of crop residue exploitation for bioenergy: Opportunities and challenges. *GCB Bioenergy* 12, 71-89. <https://doi.org/10.1111/gcbb.12649>
- Stella T., **Mouratiadou, I., Gaiser, T., Berg-Mohricke, M., Wallor, E., Ewert, F., Nendel, C.** (2019). Estimating the contribution of crop residues to soil organic carbon conservation. *Environmental Research Letters*, 14, 094008.
- Luderer, G., Pehl, M., Arvesen, A., Gibon, T., Bodirsky, B.L., Sytze de Boer, H., Fricko, O., Hejazi, M., Humpenöder, F., Iyer, G., Mima, S., **Mouratiadou, I., Pietzcker, R.C., Popp, A., van den Berg, M., van Vuuren, D., Hertwich, E.G.** (2019). Environmental co-benefits and adverse side-effects of alternative power sector decarbonization strategies. *Nature Communications*, 10, 5229.
- Mouratiadou, I., Bevione, M., Bijl, D., Drouet, L., Hejazi, M., Mima, S., Pehl, M., Luderer, G.** (2018). Water demand for electricity in deep decarbonisation scenarios: a multi-model assessment. *Climatic Change*, 147: 91-106.
- Bauer, N., Calvin, C., Emmerling, J., Fricko, O., Fujimori, S., Hilaire, J., Eom, J., Krey, V., Kriegler, E., **Mouratiadou, I., de Boer, H. S., van den Berg, M., Carrara, S., Daioglou, V., Drouet, L., Edmonds, J., Gernat, D., Havlik, P., Johnson, N., Klein, D., Kyle, P., Marangoni, G., Masui, T., Pietzcker, R., Strubegger, M., Wise, M., Riahi, K., van Vuuren, D.P.** (2017). Shared Socio-Economic Pathways of the Energy Sector - Quantifying the Narratives. *Global Environmental Change*, 42: 316-330.
- Kriegler, E., Bauer, N., Popp, A., Humpenöder, F., Leimbach, M., Strefler, J., Baumstark, L., Bodirsky, B.L., Hilaire, J., Klein, D., **Mouratiadou, I., Weindl, I., Bertram, C., Dietrich, J.P., Luderer, G., Pehl, M., Pietzcker, R., Piontek, F., Lotze-Campen, H., Biewald, A., Bonsch, M., Giannousakis, A., Kreidenweis, U., Müller, C., Rolinski, S., Schultes, A., Schwanitz, V.J., Stevanovic, M.** (2017). Fossil-fueled development (SSP5): an energy and resource intensive scenario for the 21st century. *Global Environmental Change*, 42: 297-315.
- Mouratiadou, I., Biewald, A., Pehl, M., Bonsch, M., Baumstark, L., Klein, D., Popp, A., Luderer, G., Kriegler, E.** (2016). The impact of climate change mitigation on water demand for energy and food: an integrated analysis based on the Shared Socioeconomic Pathways. *Environmental Science and Policy*, 64: 48-58.
- Mouratiadou, I., Luderer, G., Bauer, N., Kriegler, E.** (2016). Emissions and their drivers: sensitivity to economic growth and fossil fuel availability across world regions. *Climatic Change*, 136: 23-37.
- Kriegler, E., **Mouratiadou, I., Luderer, G., Bauer, N., Brecha, R.J., Calvin, K., DeCian, E., Edmonds, J., Jiang, K., Tavoni, M., Edenhofer, O.** (2016). Will economic growth and fossil fuel scarcity help or hinder climate stabilization? Overview of the RoSE multi-model study. *Climatic Change*, 136: 7-22.

- Bauer, N., **Mouratiadou, I.**, Luderer, G., Baumstark, L., Brecha, R., Edenhofer, O., Kriegler, E. (2016). Global fossil energy markets and climate change mitigation - an analysis with REMIND. *Climatic Change*, 136: 69-82.
- Calvin, K., Pachauri, S., DeCian, E., **Mouratiadou, I.** (2016). The effect of African growth on future global energy, emissions, and regional development. *Climatic Change*, 136: 109-125
- Kyle, P., Johnson, N., Evan, D., Bijl, D.L., **Mouratiadou, I.**, Bevione, M., Drouet, L., Fujimori, S., Liu, Y., Hejazi, M. (2016). Setting the system boundaries of “energy for water” for integrated modeling. *Environmental Science and Technology*, 50: 8930-8931.
- Leimbach, M., Labriet, M., Bonsch, M., Dietrich, J.P., Kanudia, A., **Mouratiadou, I.**, Popp, A., Klein, D. (2016). Robust strategies of climate change mitigation in interacting energy, economy, and land use systems. *International Journal of Climate Change Strategies and Management*, 8: 732-757.
- Frieler, K., Betts, R., Burke, J., Burke, E., Ciais, P., Denvil, S., Deryng, D., Ebi, K., Eddy, T., Emanuel, K., Elliot, J., Galbraith, E., Gosling, S.N., Halladay, K., Hattermann, F., Hickler, T., Hinkel, J., Huber, V., Jones, C.D., Krysanova, V., Lange, Lotze, H.K., Lotze-Campen, H., Mengel, M., **Mouratiadou, I.**, Muller Schmied, H., Ostberg, S., Piontek, F., Popp, A., Reyer, C.P.O., Schewe, J., Stevanovic, M., Suzuki, T., Thonicke, K., Tian, H., Tittensor, D.P., Vautard, R., van Vliet, M., Warszawski, L., Zhao, F. (2016). Assessing the impacts of 1.5 C global warming - simulation protocol of the Inter-Sectoral Impact Model Intercomparison Project (ISIMIP2b). *Geoscientific Model Development*.
- Grunewald, N., Jakob, M., **Mouratiadou, I.** (2014). Decomposing inequality in CO2 emissions: The role of primary energy carriers and economic sectors. *Ecological Economics*, 100: 183-194.
- Van Sluisveld, M.A.E., Gernaat, D.E.H.J., Ashina, S., Calvin, K., Garg, A., Isaac, M., Lucas, P.L., **Mouratiadou, I.**, Otto, A.A.C., Rao, S., Shukla, P.R., van Vliet, J., van Vuuren, D.P. (2013). A Multi-model Analysis of post-2020 Mitigation Efforts of five major Economies. *Climate Change Economics*, 4: 1340012-1-1340012-24.
- Belhouchette, H., Louhichi, K., Therond, O., **Mouratiadou, I.**, Wery, J., van Ittersum, M., Flichman, G. (2011). Assessing the impact of the Nitrate Directive on farming systems using a bio-economic modelling chain. *Agricultural Systems*, 104: 135-145.
- Mouratiadou, I.**, Russell, G., Topp, C., Louhichi, K., Moran, D. (2010). Modelling Common Agricultural Policy-Water Framework Directive interactions and cost-effectiveness of measures to reduce nitrogen pollution. *Water Science and Technology*, 61: 2689-2697.
- Mouratiadou, I.**, Moran, D. (2007). Mapping public participation in the Water Framework Directive: a case study of the Pinios river basin, Greece. *Ecological Economics*, 62: 66-76.
- Lago, M., **Mouratiadou, I.**, Moran, D. (2006). Navigating the Water Framework Directive: Implications for Agriculture and Beyond. *Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources*. 1.No 061.

Book chapters

- Mouratiadou, I.**, Tarsitano, D., Topp, C., Moran, D., Russell, G. (2011). Using a bio-economic model to assess the cost-effectiveness of measures against nitrogen pollution. In G.

Flichman (ed.) Bio-Economic Models applied to Agricultural Systems. Springer, Dordrecht Heidelberg London New York.

Mouratiadou, I., Russell, G., Topp, C., Louhichi, K., Moran, D. (2011). Investigating the economic and water quality effects of the 2003 CAP Reform on arable cropping systems: a Scottish case study. In A. Sorrentino, R. Henke and S. Severini (eds.) The Common Agricultural Policy After the Fischler Reform. Ashgate Publishing, Surrey.

Kafetzis, A, McRoberts, N, **Mouratiadou, I.** (2010). Using fuzzy cognitive maps to support analysis of stakeholders' views of water resource management and water quality policy. In M. Glikas (ed.) Fuzzy Cognitive Maps: Advances in Theories, Methodologies, Tools and Applications (Studies in Fuzziness and Soft Computing). Springer-Verlag, Berlin Heidelberg.

Conference Proceedings

Mouratiadou et al. (2019). Sustainable intensification on crop residue exploitation for bio-energy. 27th European Biomass Conference & Exhibition, Lisbon, Portugal, May 27-31.

Mouratiadou et al. (2018). The effect of sustainable intensification on crop residue energy potentials. 26th European Biomass Conference & Exhibition, Copenhagen, Denmark, May 14-17.

Mouratiadou et al. (2018). Crop residue energy potentials: What role for sustainable intensification? LANDSCAPE 2018 Conference, Berlin, Germany, 12-16 March 2018.

Mouratiadou et al. (2017). Sustainable agricultural intensification: indicators and metrics for multi-scale modelling. MACSUR Science Conference 2017, Berlin, Germany, May 22-24.

Zhao et al. (2016). Assessing the impacts of 1.5° C of global warming - The Inter-Sectoral Impact Model Intercomparison Project (ISIMIP) approach. American Geophysical Union Fall Meeting Abstracts.

Mouratiadou et al. (2015). The impact of climate change mitigation on water demand for energy and food: an integrated analysis based on the Shared Socioeconomic Pathways. 8th Annual Integrated Assessment Modeling Consortium Conference, Potsdam, Germany, November 16-18.

Mouratiadou et al. (2013). Sensitivity of Emissions and their Drivers to economic Growth and Fossil Fuel Availability: a regional Analysis. In: Proceedings of the 6th International Scientific Conference on Energy and Climate Change, Athens, Greece, October 9-11.

Mouratiadou et al. (2013). Emissions and their Drivers: Implications of economic Growth and Fossil Fuel Availability across World Regions. In: Proceedings of the 20th Annual Conference of the European Association of Environmental and Resource Economists, Toulouse, France, June 26-29.

Mouratiadou et al. (2009). Meeting the challenges of bio-economic modelling in practice: a catchment study from Eastern Scotland. In: Aspects of Applied Biology 93, 2009, Integrated Agricultural Systems: Methodologies, Modelling and Measuring, Edinburgh, U.K., June 2-4.

Mouratiadou et al. (2009). Modelling CAP-WFD Interactions and Cost-effectiveness of Measures to Reduce Nitrogen Pollution. In: Proceedings of the 2nd International Conference on Water Economics, Statistics and Finance, Alexandroupoli, Greece, July 3-5.

- Mouratiadou et al. (2009). Investigating the Economic and Water Quality Effects of the 2003 CAP Reform on Arable Cropping Systems: a Scottish Case Study. In: van Ittersum, M.K., Wolf, J., and van Laar, H.H. (eds.) Proceedings of Integrated Assessment of Agriculture and Sustainable Development: Setting the Agenda for Science and Policy (AgSAP 2009), Egmond aan Zee, The Netherlands, March 10-12.
- Majewski et al. (2009). Impact Assessment of policy changes on the arable sector using the FSSIM model: Case study of the Zachodniopomorskie NUTS2 region. In: Proceedings of Integrated Assessment of Agriculture and Sustainable Development: Setting the Agenda for Science and Policy (AgSAP 2009), Egmond aan Zee, The Netherlands, March 10-12.
- Mouratiadou et al. (2008). Investigating the Economic and Water Quality Effects of the 2003 CAP Reform on Arable Cropping Systems: a Scottish Case Study. 109th EAAE Seminar The CAP after the Fischler Reform: National Implementations, Impact Assessment and the Agenda for Future Reforms, Viterbo, Italy, November 20-21.
- Mouratiadou et al. (2008). Modelling Agricultural Diffuse Pollution: CAP-WFD Interactions and Cost Effectiveness of Measures. 107th EAAE Seminar Modeling of Agricultural and Rural Development Policies, Sevilla, Spain, Jan. 29-Feb. 1.
- Mouratiadou and Moran (2006). Public Participation in the Water Framework Directive: an application of Fuzzy Cognitive Mapping in the Pinios River Basin, Greece. In: Proceedings of Participatory Approaches in Science and Technology Conference, Edinburgh, U.K., June 4-7.