Doctoral position on

Estimating the health cobenefits of climate change mitigation strategies

PARSEC (Paris Research in Health Environment and Climate)

IBENS (ENS Institute of Biology)
Inserm (National Institute of Health and Medical Research) and ENS-PSL (Ecole Normale Supérieure)
Paris, France

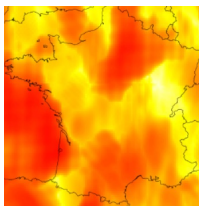
PARSEC (Inserm and ENS, Paris) wishes to welcome a doctoral fellow in the Autumn of 2025 to work on the estimation of the health cobenefits of climate change mitigation at the city and national levels.

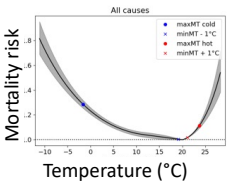
Climate change mitigation consists in tackling climate change at its roots (the emissions and/or atmospheric levels of greenhouse gas). The rapid greenhouse gas emissions reduction required to limit the temperature increase to below 2°C implies action in most sectors of human activity, and in particular those emitting the largest amount of greenhouse gases, which include the transport sector, the agriculture/forestry sector, the housing sector; cities, where more than three quarters of the population live, strongly contribute to these emissions. In all these areas, climate change mitigation strategies may have influences on human health. For example, in the transport sector, shifting to other sources of energy than fossil fuels and to more active transportation modes is expected to influence exposure to particulate matter and physical activity, leading to potentially very strong health co-benefits, which would add up to the benefits of limiting climate change but would possibly manifest on a shorter term. These cobenefits have recently been estimated at the UK scale [1], and reviewed [23]. These works concluded that the magnitude of these cobenefits is poorly documented and might be context-specific, and highlighted the need for a standardized framework to document the health cobenefits of climate change mitigation. **The aim of this PhD project is to document the health cobenefits of climate change mitigation strategies in France, using a standardized methodology allowing comparisons with other countries and in particular the UK.**

We seek very motivated applicants interested in climate change and its health consequences, mitigation strategies and environmental health. Applicants should have a training in (bio)statistics/data science, climate research, engineering or epidemiology with skills in data analysis (with R or Python), and preferably have experience working on climate or other environmental data, health impact assessment, or with geographic information systems. A good command of English is required. The project implies collaboration with the London School of Hygiene and Tropical Medicine (LSHTM) and will be mainly located in the center of Paris at ENS-PSL. It will be funded by Inserm.

PARSEC (Paris Research on Health, Environment and Climate) is a new research structure only dedicated to generating knowledge at the junction between climate change and health, supported by Inserm (the Institute of Health and medical research) and Ecole Normale Supérieure (ENS-PSL), two leading institutions in research and teaching, and located within IBENS, the Biology institute of ENS-PSL, Inserm and CNRS.

Applicants should send a CV and a motivation letter to Rémy Slama (Senior investigator, Inserm, remy.slama@inserm.fr), indicating "*PhD application 2025*" in the topic. Information can be obtained at the same address.





18 April 2025

Some references

1 Milner J, Turner G, Ibbetson A, *et al.* Impact on mortality of pathways to net zero greenhouse gas emissions in England and Wales: a multisectoral modelling study. *The Lancet Planetary Health* 2023; **7**: e128–36. Link

2 Whitmee S, Green R, Belesova K, *et al.* Pathways to a healthy net-zero future: report of the Lancet Pathfinder Commission. *The Lancet* 2024; **403**: 67–110. Link

3 Moutet L, Bernard P, Green R, *et al.* The public health co-benefits of strategies consistent with net-zero emissions: a systematic review. *The Lancet Planetary Health* 2025; **9**: e145–56. Link

4. Rigaud M, Buekers J, Bessems J, Basagana X, Mathy S, Nieuwenhuijsen M, Slama R. The methodology of quantitative risk assessment studies. Environ Health 2024; 23: 13. Link

5. Masselot P, Mistry MN, Rao S, Huber V, Monteiro A, Samoli E, . . . Gasparrini A. Estimating future heat-related and cold-related mortality under climate change, demographic and adaptation scenarios in 854 European cities. *Nat Med* 2025; 31: 1294-1302. Link