



DOCTORAL INPhINIT FELLOWSHIPS PROGRAMME – INCOMING FRAME  
INFORMATION CALL 2020

**PhD POSITION OFFER FORM**

**Position**

- 1. Project Title/ Job Position title:** Maximizing the potential of climate mitigation policies by cities
- 2. Area of Knowledge:** Life sciences
- 3. Group of disciplines:** Environmental science
- 4. Research project/ Research Group description (max. 2.000 characters)**

Cities are viewed by many as key battlegrounds in the fight against climate change. But in terms of actual regulation of emissions, the power of subnational governments is not evident. The object of the project is to undertake a detailed analysis of greenhouse gas (GHG) emissions that can be regulated by local governments, and to seek strategies for improvement.

The project involves 4 multidisciplinary stages: (1) examine which emissions can be attributed to cities; (2) assess effectiveness of local policy instruments to reduce such emissions; (3) upscale globally by taking into account the diversity of cities regarding size, development level or culture; (4) derive policy and political suggestions to improve emissions reduction. The method involves breaking down sources of GHGs to sectors (transport, housing, public services, etc.), and assessing emission shares for these as controlled by distinct types of local policies. This delivers insights about effectiveness of local policies and how to improve these.

The study applies a novel decomposition of the *effectiveness* of policy instruments into three factors: (i) an instrument's potential *reach* or coverage of polluters and emissions, (ii) its inherent *ability* to alter behaviour that causes emissions, and (iii) its *stringency*. The study uses a division into four types of instruments of urban climate mitigation policy: (a) *self-governance* of urban public sector activities; (b) *provision* of public services, such as public transport; (c) *enabling* emissions reduction by firms and households, such as through information or adoption subsidies; and (d) *regulation* of firms and households, such as zoning or levies.



Methods used will include statistical data analysis, questionnaire surveying and quantitative modelling. Given the optimism about the notion of 'low-carbon cities', the project is likely to provide an important contribution to ongoing debate.

#### **5. Job position description (max. 2.000 characters)**

The researcher will work on a PhD thesis about the impact of climate mitigation policies by cities. S/he will be intensively supervised, and be part of a team consisting of 4 postdocs and 6 PhD researchers, all of whom work on certain aspects of climate policy. Hence s/he will be doing research in a setting with many opportunities for collaboration and mutual learning. The project leader, professor Jeroen van den Bergh, has ample experience, having supervised more than 35 PhD students.

The research is planned to cover four stages: (1) examine which emissions can be attributed to regions/cities; (2) assess local policy reach and effectiveness in reducing such emissions; (3) upscale globally by taking into account the diversity of cities in terms of development level, size and culture; (4) derive policy and political suggestions to improve emissions reduction. This is intended to lead to several articles in reputed international academic journals, which together will be defended as a PhD thesis.

The research will be presented in international conferences and workshops. Funding for relevant data and travel is available. Contacts with representative cities will be sought to obtain particular data. It is also envisioned that a questionnaire will be undertaken to obtain consistent and comparable data from a variety of cities to undertake systematic, statistical analysis of cities ambitions, policies and impacts. To obtain an overall, global picture, quantitative modelling will be undertaken.

Suitable candidates have completed university studies at bachelor and master levels (300 ECTS credits). They have a background in economics, urban studies, or another social science, but also those with excellent analytical skills and an interest in use of quantitative methods (including students in engineering, natural or environmental sciences) are very welcome to apply. Candidates have an outstanding level of communication and writing in English language.

#### **Group Leader**

1. Title: Prof. Dr. Dr.
2. Full name: Jeroen van den Bergh
3. Email: jeroen.bergh@uab.es
4. Research project/ Research Group website (Url):  
[https://ictaweb.uab.cat/noticies\\_news\\_detail.php?id=3340&setLanguage=en](https://ictaweb.uab.cat/noticies_news_detail.php?id=3340&setLanguage=en)



5. Website description: ERC advanced grant project

**Additional website (optional, max. 5 websites)**

1. Url: <https://www.icrea.cat/Web/ScientificStaff/JeroenvandenBergh--424>
2. Website description: personal website of group leader at ICREA with cv and information about publications.