



RESPONSE – Open PhD Position

Open PhD Position in

RESPONSE (GA No. 847585)

«RESPONSE - to society and policy needs through plant, food and energy sciences»

H2020-MSCA-COFUND-2018

ESR 24

FINCCS – Effective policy mixes to mobilize finance along the CCS/CCU supply chain

Within the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 847585, ETH Zurich is offering a 36-month PhD position for an early-stage researcher (ESR) in the area of sustainable energy systems.

Job Description

In light of the Paris Agreement 2015, several countries recently committed to reaching carbon neutrality within a few decades, e.g. by 2050 in the case of Switzerland. In addition to ambitious emission reductions activities, reaching this goal will likely require negative emission technologies, such as Carbon Capture and Storage (CCS) and Carbon Capture and Utilization (CCU). However, major hurdles for their deployment exist, and the feasibility of industrial-sized CCS/CCU applications remains contested. From a policy point of view, especially the economic and political feasibility need to be considered, given the immense financing needs and acceptance challenges of CCS/CCU.

Against this background, we are looking for a PhD student working on the financing challenge of large-scale CCS/CCU deployment. In collaboration with a larger project on CCS/CCU demonstrators at ETH Zurich, the student will use techno-economic modelling and expert interviews to study investment and financing needs along the supply chain of CCS/CCU and to evaluate appropriate financing sources. In a second step, the effectiveness of potential support policy instruments shall be evaluated, using financial modelling of the risk/return effects of policies for investors.

A planned secondment of 3 months with the International Institute for Sustainable Development (IISD) Geneva in Switzerland is part of the project. During this secondment, the PhD student will discuss her/his preliminary findings with policy stakeholders, using the extensive network of IISD. Under the supervision of the partner, the PhD student will be also be trained in methods for stakeholder consultations and advisory services for policy, and hence learn practical skills that complement the academic education.

The anticipated outcomes of this project are publications in high-impact academic journals, with important results for policy advice related to CCS/CCU.



Interested / Your profile

We are looking for candidates who wants to conduct a PhD (i.e. a cumulative PhD thesis) as part of the Climate Finance and Policy Group, and the Institute for Science, Technology and Policy (ISTP) at ETH Zurich. Relevant educational backgrounds include, but are not limited to: public policy, industrial engineering, business administration, finance, and economics. Candidates with interdisciplinary backgrounds are welcome. Your work will be scientifically rigorous and at the same time relevant to policy makers and financial actors. Some experience with quantitative methods (e.g. techno-economic modelling, financial modelling, or empirical data analysis) is required. Knowledge on CCS/CCU technology, climate and energy policies, as well as relevant practical experience, e.g. in infrastructure finance, plant engineering, or energy policy would be a bonus. You like working in teams and you have strong communication skills. You are highly proficient in English; further language skills are an additional asset.

Eligibility: Early stage researcher in the first 4 years (full-time equivalent) of their research careers, including the period of research training, starting at the date of obtaining the degree which would formally entitle them to embark on a doctorate either in the country in which the degree was obtained or in the country in which the initial training activities are provided.

At the time of recruitment (for call 4 = July 1, 2021) by the host organisation, researchers must not have resided or carried out their main activity (work, studies, etc.) in Switzerland for more than 12 months in the 3 years immediately before the reference date. Compulsory national service and/or short stays such as holidays are not taken into account.

RESPONSE is open to applicants of any nationality.

For submitting your online application: <https://join.lszgs.uzh.ch/> (select PhD Program Science and Policy). The online application should contain all information as indicated by the application portal. Moreover, the following documents have to be uploaded under "further documents": 1) a letter of motivation to join a) the RESPONSE doctoral programme and b) to apply for this specific position (ESR 24), 2) a comprehensive tabular CV, and 3) transcripts of records. If you apply for more than one RESPONSE position, please refer to them in your letter of motivation. Please note that we exclusively accept applications submitted through our online application portal. Applications via email or postal services will not be considered. The final deadline is July 1, 2021. If you consider applying, we also invite you to contact us early-on, please do not wait until shortly before the deadline.

Benefit

We are offering a highly interesting position at the interface of science and policy. While working in an international, interdisciplinary and innovative research environment at ETH Zurich, the ESR will be co-supervised by Prof. Bjarne Steffen (Climate Finance and Policy Group and ISTP), Prof. Tobias Schmidt (Energy Politics Group and ISTP) at ETH Zurich, and Dr Anna Geddes at IISD.

The complete 36 months will be under a 100% working contract.



The PhD salary follows the regulations of ETH Zurich and will be according to EU regulations for Marie Skłodowska-Curie Early Stage Researchers. The monthly gross salary will not be lower than CHF 3920.

The successful candidate will be matriculated and will have a working contract at ETH Zurich. He/she will work in Switzerland. The secondment will take place in Switzerland

For questions and further information on the position, please contact Prof. Bjarne Steffen (bjarne.steffen@gess.ethz.ch) early-on.

Further information

RESPONSE Doctoral Programme (DP): «RESPONSE - to society and policy needs through plant, food and energy sciences» is funded by the European Union's Horizon 2020 research and innovation program under the Marie Skłodowska-Curie Grant Agreement No 847585. RESPONSE DP builds on the academic expertise of three world-leading institutions - ETH Zurich, University of Zurich and University of Basel. The successful candidate will be integrated in the research network and infrastructure of the internationally renowned competence center [Energy Science Center](#).

All RESPONSE ESRs will follow the [PSC PhD Program Science and Policy](#) that is unique in its kind. Through the curriculum of this program, ESRs will be trained in the communication of scientific evidence to policy-makers and the public; the involvement of different stakeholder groups as well as in policy development and endorsement in Europe and at global scale.

For project, programme and application details:

<https://www.plantsciences.uzh.ch/en/research/fellowships/response.html>

Working location: ETH Zurich's campus in Zurich downtown



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