# **Funded PhD position in transitions studies and industry destabilisation** LISIS, Paris (France)

### Summary (English)

The Laboratoire Interdisciplinaire Sciences Innovations Sociétés (LISIS) is delighted to offer **a funded PhD position in transitions studies focussed on the destabilisation and phase out of socio-technical systems**. This 36-months position in the Paris Metropolitan region (France) is inscribed within the WAYS-OUT project, under the scientific direction of Dr Bruno Turnheim.

The destabilisation of existing systems is an emerging research and policy concern related to socio-technical transitions. Accelerating low-carbon transitions requires not only the deployment of alternative options, but also dealing with inertia and lock-in of existing systems and actors that tend to resist, slow down or prevent transition efforts. The main objective of the WAYS-OUT project is to generate systematic and interdisciplinary knowledge on destabilisation processes to inform policy in support of more ambitious and feasible transitions pathways. The research strategy mobilises and compares in-depth destabilisation case studies across a large number of empirical settings (different sectors, countries, and historical periods). WAYS-OUT contributes to efforts anticipating destabilisation arising from decarbonisation pathways and exploring the prospects for turning destabilisation challenges into opportunities for managed transitions.

In this context, we are looking to recruit a PhD student within the broad theoretical fields of innovation and transition studies. The PhD student will focus on the sources and mechanisms of destabilisation of existing socio-technical systems in particular regional contexts. The research will mainly rely on a qualitative longitudinal case study strategy, but also explore opportunities for regional transformation strategies.

The **empirical focus** of the PhD project will be on historical and contemporary socio-technical dynamics at play in one of the following sectors:

- naval industries and/or port cities in different European regions
- meat production and consumption in different European countries
- cross-border passenger travel in Europe (long-distance rail and flight).

# Résumé (français)

Le Laboratoire Interdisciplinaire Sciences Innovations Sociétés (LISIS) est heureux de pouvoir recruter **un.e doctorant.e en études de transitions in transitions, sur le thème de la déstabilisation et du démantèlement de systèmes socio-techniques**. Le financement de 36 mois en région parisienne s'inscrit dans le cadre du projet WAYS-OUT, sous la direction scientifique de Dr Bruno Turnheim.

La déstabilisation des systèmes établis est un front de recherche émergent dans le cadre des études de transitions socio-techniques, en lien direct avec des questions sociétales et de politiques publiques. L'accélération des transitions bas-carbone requiert, en outre du déploiement de solutions et de pratiques alternatives, de s'atteler au verrouillage et à l'inertie des systèmes et acteurs établis qui ont tendance à résister, à ralentir et à empêcher des efforts de transition. L'objectif principal du projet WAYS-OUT est de développer des connaissances systématiques et interdisciplinaires sur les phénomènes de déstabilisation et d'offrir un éclairage en vue de soutenir des chemins de transition plus ambitieux et faisables. La stratégie de recherche s'appuie sur le développement et la comparaison de cas d'études dans des contextes empiriques variés (différents secteurs, pays, et périodes historiques). WAYS-OUT contribue aux efforts de recherche visant à anticiper les déstabilisation issues de chemins de la décarbonation de divers secteurs et à explorer la possibilité de formes d'accompagnement défis liés auxdits processus de déstabilisation.

Dans ce contexte, **nous recrutons un.e doctorant.e dans le domaine des études d'innovations et de transitions**. La thèse portera sur les sources et mécanismes de déstabilisation des systèmes socio-techniques









établis dans des contextes régionaux spécifiques. La recherche s'appuiera principalement sur une stratégie d'étude de case longitudinale, tout en explorant la variété d'opportunités de transformations possibles au niveau régional.

Le **travail empirique** portera sur l'analyse de dynamiques socio-techniques historiques et contemporaines dans un des secteurs suivants :

- industrie navale et/ou villes portuaires dans différentes régions européennes
- la production et la consommation de viande dans différents pays européens
- le transport transfrontalier de passagers en Europe (rail et vols longue distance)

# Job overview

**Post Title**: Funded PhD position in Socio-Technical Transitions, focussed on system destabilisation and phase out processes

**Project**: Governing destabilisation pathways and phase-out: Pluralising knowledge in support of deliberate low-carbon transitions governance and strategies (WAYS-OUT)

Supervision: Dr Bruno Turnheim and Dr Mireille Matt

School/department: Université Gustave Eiffel / Laboratoire Interdisciplinaire Sciences Innovation Sociétés

Location: Noisy le Grand, Paris Metropolitan Region (France)

Contract: 36 months fixed term (full time)

Salary: 1770 € per month, based on experience

Closing date: 22 March 2020. Applications must be received by midnight of the closing date.

Expected Interview date: 20-24 April 2020

Expected start date: 1 September 2020

### Job description

### The institutional environment

**Université Gustave Eiffel (UGE**, <u>https://www.univ-gustave-eiffel.fr/en/</u>) is a multidisciplinary university situated in the Eastern Paris region. UGE is the first French higher education and research institution to bring together a research institute (IFSTTAR), a university (UPEM), a school of architecture (Éav&t) and three engineering schools (EIVP, ENSG and ESIEE Paris). By pooling its many strengths in the areas of education and research, Université Gustave Eiffel pursues a strategy based on complementarity between its founding institutions. By creating better synergies in this way, the university can offer the groups it serves a wider range of expertise. Educating young people, employees or citizens at all levels, providing the whole of society with scientific insights – the ultimate aim of Université Gustave Eiffel is to help raise everyone's level of qualification.

The **Interdisciplinary Lab on Science Innovation and Society** (**LISIS**, <u>http://umr-lisis.fr/en/</u>) is a leading European research unit in the field of Innovation Studies and Science & Technology Studies (STS), located on the Noisy campus of UGE. LISIS brings together 40 researchers and professors and 30 PhD and postdoctoral fellows from three main interdisciplinary research disciplines: Science and Technology Studies (STS), Organization Studies and Digital Studies. The aim of LISIS research is to understand the social and political transformations linked to scientific and technical innovation in our relationship to the environment, to economic globalization and to the digitization of social and professional worlds. The study of transitions and transformational research is a key research priority of LISIS.

LISIS is embedded with a regional research network bringing together various labs focussing on different aspects of innovation as social phenomenon. The **Institut Francilien Recherche Innovation Société** (**IFRIS**, <u>http://ifris.org/en/</u>) is a collaborative research institute on research, innovation and society. Since 2007, IFRIS is a consortium of research units in Ile-de-France (Paris and surrounding areas) working on









issues related to the interactions between science, technology and society, as well as research and innovation policies.

The project is supported by the **FUTURE Initiative** (<u>http://www.future-isite.fr/li-site-future/future-en-resume/?L=en</u>). Focusing on the theme of the city of tomorrow, the FUTURE Initiative's scientific project is structured around three challenges: the resource- and energy-efficient city, the safe and resilient city, the citizen-centred smart city. Its goal is to "foster cross-fertilisation between the knowledge and skills present in the so-called hard sciences, the engineering sciences and the social sciences".

The project is hosted and supported by INRAE, the French National Research Institute for Agriculture, Food, and the Environment (<u>https://www.inrae.fr/en</u>). As a targeted research institution, INRAE aims to generate, disseminate, and exploit knowledge, technology, and expertise to inform and promote transitions in agricultural systems and food systems and to develop strategies for preserving the environment.

#### **Research domain**

**Socio-technical transitions**. The research project is inscribed within the fields of socio-technical transitions and sustainability transitions. Socio-technical transitions are typically long (30-80 years) processes involving significant concomitant changes in technologies, markets, infrastructures, user preferences and practices, institutions, and cultural repertoires. Such systemic shifts involve multiple actors of change (new entrants and established industry actors, policymakers and regulators, various users and publics, civil society and activists) in field struggles. Transitions are rare and difficult processes because existing socio-technical configurations are inherently stable. Socio-technical transitions involve three related core processes:

- 1. the emergence of innovations (e.g. radically new technologies, user practices, or business models) often in protected spaces allowing for experimentation referred to as niches with the potential to compete with established configurations;
- 2. the destabilisation of established regimes and actors, often resulting from a conflation of external pressures and crises (shocks and more gradual stresses), that can generate windows of opportunity for niche-innovations to breakthrough, and/or lead incumbent actors to substantially re-orient themselves (e.g. in terms of core mission, identity, activities); and
- 3. transformation pathways that articulate meaningful and working linkages between emerging dynamics and established configurations.

**Research style**. Sustainability transitions research is inherently interdisciplinary and hosts varied strands and analytical perspectives. It is firmly grounded within the broader field of Innovation Studies and Science and Technology Studies, and rests on a number of foundational theoretical approaches and disciplines which are mobilised as building blocks to study long-term socio-technical change. Research into Sustainability Transitions hence requires an ability to combine knowledge derived from Innovation Studies (particularly the management of innovation and innovation policy), Science and Technology Studies (particularly the social construction of technology), Sociology (particularly institutional theories and historical sociology), Economics (particularly evolutionary economics) and Political Sciences (particularly policy and governance studies).

#### **Research objectives**

The destabilisation of existing systems is an emerging research and policy concern related to socio-technical transitions. Accelerating low-carbon transitions requires not only the deployment of alternative options, but also dealing with inertia and lock-in of existing systems and actors that tend to resist, slow down or prevent transition efforts. Relying only on emerging options and innovations without considering the destabilisation and discontinuation of incumbent systems considerably reduces the possibility of socio-technical transitions. Accelerating low-carbon transitions requires the active phase-out of high-carbon activities, with destabilising effects on existing systems which can only be appropriately handled if their potential trajectories and outcomes are anticipated.









The main objective of the **WAYS-OUT project** is to generate systematic and interdisciplinary knowledge on destabilisation processes to inform policy in support of more ambitious and feasible transitions pathways. The research strategy mobilises and compares in-depth destabilisation case studies across a large number of empirical settings (different sectors, countries, and historical periods). WAYS-OUT contributes to efforts anticipating destabilisation arising from decarbonisation pathways and exploring the prospects for turning destabilisation challenges into opportunities for managed transitions. The WAYS-OUT project is led by Dr Bruno Turnheim and involves a team of researchers from LISIS and CIRED (Centre International de Recherche sur l'Environnement et le Développement).

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# Job requirements

### Work duties

The main duties of doctoral students are to devote themselves to their research studies towards the completion of a doctoral degree, and to participate in the research project through independent research (under supervision). The former includes literature studies, research design and planning, empirical studies and communication of results in writing and orally at seminars and conferences. For this position, communication and collaboration with researchers at LISIS as well as with other relevant groups will also be an integral part of the work. The PhD student is expected to contribute to writing scientific articles, based on the results of the research. The PhD student is also expected to take an active part in collective project activities.

### Admission requirements

- Applicants must hold a completed degree (M.Sc. or MA-level) or equivalent in Science and Technology Studies, Sociology, Political Science, Management, Innovation, or other relevant discipline
- experience with research at the interaction of science/engineering and society is desirable
- Experience with qualitative research methods is desirable
- Applicants must be highly motivated to conduct cutting edge research
- The successful candidate will have an aptitude for both collaborative and individual work
- Experience in interdisciplinary research is an advantage
- Applicants should demonstrate relevant research experiences, either within social science and humanities studies or through past analyses of the role of technology in society.
- The applicant should have an interest in, and experience in qualitative research methods
- Excellent English skills are required (written and oral)
- Fluency in French language will be considered an advantage.

### <u>Skills</u>

Relevant experience and skills include:









- Documented experience applying social science research methods, preferably both qualitative and • quantitative
- Knowledge of innovation/transition frameworks •
- Knowledge of other relevant literature will be considered an advantage: Science and Technology Studies, Institutional Theory, Historical Sociology, Economic Sociology, Organisation Studies, Economic Geography, Evolutionary Economics, Policy and Governance Studies
- Interest and ability in reading a wide range of social sciences and to mobilise it for creative ٠ conceptual elaboration
- Ability to write according to academic standards
- Experience conducting research activities independently
- Ability to understand written and spoken French (to enable document studies, interviews and • communication with stakeholders)

# **Application procedure**

For more information, please contact Dr Bruno Turnheim bruno.turnheim@u-pem.fr

Applications must be sent to <u>bruno.turnheim@u-pem.fr</u>, by 22 March 2020.

Applications must include:

- 1. an **application letter**
- 2. a Curriculum Vitae summarising education, positions held and academic work (including scientific publications, if any)
- 3. a research note (max 3 pages) in which the applicant outlines their interest in a particular empirical area of the project and their proposed approach to contribute to the core objectives of WAYS-OUT.
- 4. A copy of the Master's degree diploma
- 5. A copy of the Master dissertation (if in English or French), alternatively a summary of the Master dissertation project
- 6. the names and e-mail addresses of at least two referees who may be contacted by those in charge of evaluating applications. These referees should not have conflicts of interest because of family or emotional ties.









