

PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Urban Planning and Design
Supervisors	Principle supervisor: Dr Joon Sik Kim (XJTLU, Urban Planning and Design) Co-supervisor: Dr Hyung-Chul Chung (XJTLU, Urban Planning and Design) Co-supervisor: Professor Alex Lord (UoL, Geography and Planning)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Financing Clean Air: the potential of Land Value Capture (LVC) to secure sustainable urban development supporting air quality enhancement
Contact	Please email joon.kim@xjtlu.edu.cn (XJTLU principal supervisor's email address) with a subject line of the PhD project title

Requirements:

- The candidate should have a first class or upper second class honours degree, or a master's degree (or equivalent qualification), in urban planning (or relevant disciplines such as economics, geography, real estate, environmental planning, etc.).
- As the research project involves spatial and statistical analysis with urban Big Data, it would be desirable to have data analysis skills (Python, R, and GIS would be ideal but not limited to the above programming language skills).
- Given research scope, evidence of good spoken and written English and Chinese is essential. The candidate should have an IELTS score of 6.5 or above, if the first language is not English.

Degree:

The student will be awarded a PhD degree from the University of Liverpool (UK) upon successful completion of the program.

Funding:

The PhD studentship is available for three years subject to satisfactory progress by the student. The award covers tuition fees for three years (currently equivalent to RMB 80,000 per annum) and provides a monthly stipend of 5,000 RMB as a contribution to living expenses. It also provides up to RMB 16,500 to allow participation at international conferences during the period of the award. It is a condition of the award that holders of XJTLU PhD scholarships carry out 300-500 hours of teaching assistance work per year. The scholarship holder is expected to carry out the major part of his or her research at XJTLU in Suzhou, China. However,

he or she is eligible for a research study visit to the University of Liverpool of up to three months, if this is required by the project.

Project Description:

Poor urban air quality is a threat to human life, a detrimental impact on quality of life and potentially hindering economic growth. The causes of poor urban air quality are varied and prevailing winds can cause regional and international disruption to high quality air environments. The contribution of local housing heating and efficiencies, combined with local low-emission transport networks could have a sizeable impact on localised air quality.

Whilst more sustainable transport and housing efficiencies promise to enhance air quality they require investment. The cost of creating of new mass transit systems or the adaptation of road networks to support low polluting options, such as cycling, can be a hurdle for municipal governments investment. For individual households and for landlords the benefits of reducing emissions through investment in insulation and low-carbon heating systems may not outweigh the individual costs, requiring some form of incentive to act in the public interest.

This project will investigate the relationships between air quality, transport and housing and one potential financial mechanism to fund investment: Land Value Capture (LVC). Capturing a proportion of land values in the development process offers an innovative way of improving housing- and transport-induced poor air quality which could enhance the economic, social and environmental sustainability of our cities.

In collaboration with an international research team (see <https://jpi-urbaneurope.eu/project/financingcleanair/>), this project will explore the impact of air quality on economic activity and quality of life in China (primary focus), the Netherlands, France and the UK. To provide a critical state of the art evidence review of the impact of air quality improvements on quality of life and sustainable economic growth, including best practice examples in divergent urban contexts, the following key tasks have been defined:

- 1) To undertake a systematic review of the extant evidence of the relationship between air quality and quality of life/economic growth indicators;
- 2) To provide comparable data on the core institutional variables that can be applied to particular cities and create appropriate LVC models for case study cities; and,
- 3) To investigate best practice examples in divergent urban contexts.

For more information about doctoral scholarship and PhD programme at Xi'an Jiaotong-Liverpool University (XJTLU): Please visit

<http://www.xjtlu.edu.cn/en/study-with-us/admissions/entry-requirements>

<http://www.xjtlu.edu.cn/en/admissions/phd/feesscholarships.html>

How to Apply:

Interested applicants are advised to email joon.kim@xjtlu.edu.cn (XJTLU principal supervisor's email address) the following documents for initial review and assessment (please put the project title in the subject line).

- CV
- Two reference letters with company/university letterhead
- Personal statement outlining your interest in the position
- Proof of English language proficiency (an IELTS score of 6.5 or above)
- Verified school transcripts in both Chinese and English (for international students, only the English version is required)
- Verified certificates of education qualifications in both Chinese and English (for international students, only the English version is required)

Informal enquiries may be addressed to Dr Joon Sik Kim (joon.kim@xjtlu.edu.cn), whose personal profile is linked below,

<https://www.xjtlu.edu.cn/en/departments/academic-departments/urban-planning-and-design/staff/joon-sik-kim>