



# Masters Dissertation Scheme

## Project form



<b>Company Name:</b>	Knight Frank
<b>Team / Department:</b>	London Research
<b>Address:</b>	Knight Frank 55 Baker Street London W1U 5AN

**Provisional title for project:**

Understanding changing energy use in London's commercial buildings arising from climate change, and assessing their impacts upon landlords, developers and occupiers

**Short description of the problem that would be addressed by the project:**

Environmental, social and governance (ESG) issues are rising rapidly up the agenda in board room discussions. For now, most developers, landlords and occupiers appear focused on the 'E' in ESG. Linking ESG issues back to monetary gains or losses is important at this early stage as this nascent issue gains traction in the property market. With plans underway to raise EPC ratings for commercial buildings to 'B' by 2030 and the UK's move to become carbon neutral by 2050, and cognisant that commercial buildings form the bulk of built environment carbon emissions, we want to investigate the energy cost implications for London's commercial landlords, developers and occupiers in a changing climate. We would like to investigate energy usage trends in commercial office buildings in Central London during periods of extreme (hot or cold) weather and arrive at an energy usage cost per degree of temperature change. We would like to go further and apply the UN's climate change projections to estimate the future cost implications for landlords/developers/occupiers as the climate warms. We envisage the outputs to also include a variety of GIS maps and charts.

**Short description of the data sources that would be used in the project, and how they would be used.**

We envisage the data sources for this project to predominantly be from Ofgem (or similar), or the Consumer Data Research Centre (CDRC) and the UN, or related climate change papers. Knight Frank data on total occupancy costs for occupiers could also be used to build out a more detailed understanding of overall occupier costs and the proportion that might need to be attributed to energy usage in the future.

**Would any work by the student need to be carried out on site at the Company with the exception of supervisory meetings?**

Yes - at the London address (55 Baker Street) provided

**Any issues of data confidentiality and IPR that would need to be resolved**

Yes

**Essential skills**

Excel, Powerpoint, GIS, Programming (Python, R, etc.)

**Desirable skills**

[Empty box]

**Preferred degree programmes (if any)**

Geography, Real Estate, Spatial Analysis, Data Science

**Preferred selection method**

Face-to-face interview

**Support and training offered by the company**

Daily supervision

**Financial assistance offered by the company**

The organisation will pay the honorarium (£500)

**Any other comments**

This is a critical area of research for Knight Frank, so we encourage prospective applicants to get in touch with any questions they may have prior to applying.