**University of Leicester**

**Future 50 PhD Scholarship**

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| **Project Reference** | GGE Wilde |

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| **First Supervisor** | Dr Matt Wilde – Lecturer in Human Geography | | |
| **School/Department** | Geography, Geology and the Environment | | |
| **Email** | [mw419@le.ac.uk](mailto:mw419@le.ac.uk) | **Telephone Ext** | 3315 |

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| **Second Supervisor** | Dr Ben Coles – Lecturer in Economic and Political Geography | | |
| **School/Department** | GGE | | |
| **Email** | [bfc2@le.ac.uk](mailto:bfc2@le.ac.uk) | **Telephone Ext** | 3838 |

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| **Additional Supervisor** | Dr Dan Smith (Geology) [djs40@leicester.ac.uk](mailto:djs40@leicester.ac.uk) |

**Section 2 – *Project Information***

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| **Project Title** | Winds of change: analysing the social and environmental geographies of wind energy | |
| **Project Highlights:** | 1. | Produces a much-needed empirical analysis of the global circuits of investment, extraction, assemblage and generation that constitute wind energy and its supply chains |
| 2. | Uses interdisciplinary methods (economic anthropology, economic geography and economic geology) to understand pressing contemporary challenges around Net Zero and energy security |
| 3. | Informs policy-making on just energy transitions by analysing the social and environmental impact of wind energy development in UK/Europe on sources of extraction and production in the Global South |
| **Project Summary** | | |
| This project aims to analyse the financial circuits, productive processes, social relationships and economic practices that constitute the global wind industry. It will do so using a multi-sited, mixed methods approach that examines how wind energy is produced through interconnected sites of investment, extraction, assemblage and generation.  In the wake of COP 26, ‘Net-Zero’ commitments for reducing carbon dioxide (CO2) emissions have become central to global environmental agendas and national energy strategies (UK GOV 2022). Within these commitments, ‘just transitions’ to renewable forms of electricity – namely solar and wind power – have taken centre stage (Lawrence and Laybourn-Langton 2021). Critically, however, the implementation of Net-Zero agendas, especially from within the Global North, may well have unintended consequences on the social-economic and environmental well-being of the Global South.  When it comes to wind-power, the sites and materialities of turbine manufacture – including raw material extraction, final assembly and circuits of international finance that underpin the industry – are largely hidden from scrutiny.  This project will illuminate the hidden materialities and socialities of wind energy by mapping the relationship between its supply chains (i.e. copper, steel, rare earths, concrete) and the financial actors and institutions that invest in Net-Zero. The intention is to improve understanding of both Net-Zero generally and wind-power specifically, and inform contemporary policymaking on ‘just’ energy transitions.  **Indicative methodology**  The project will adopt a multi-sited, multi-methods approach through three key phases. Sites will include those associated with wind power technology’s corporate/strategic operations in London and Aarhus (DK).  **Phase 1** will trace wind energy’s circuits of investment by examining the corporations, financial investors, nation-states and other actors who comprise the wind industry. Empirical analysis will be conducted on annual reports, financial documents, environmental assessments and policy white papers.  **Phase 2** will comprise ‘key person interviews’ (n. = c 30) with professionals across the sector in order to better understand decision-making processes around material procurement, site-location, financial services, investment and social responsibilities within wind energy supply chains.  **Phase 3** will use GIS to develop an interactive online map showing how wind energy’s constitutive sites are connected through sites of investment, extraction, assemblage and generation. | | |