

CONSTRUCTION ENGINEERING MASTERS DISSERTATION ABSTRACT

Accelerating the Pace of Infrastructure Solutions to Climate Change in Defence

The purpose of the research is to explore opportunities to accelerate the Ministry of Defence's (MOD) climate change and sustainability infrastructure projects. This study intends to examine the factors inhibiting Defence's ability to meet its Net Zero aspirations and explore whether the climate change emergency can function as a catalyst for an innovative approach.

By peering through the lens of organisational design and decision making, the research will draw insights into the type of transformational change needed to meet ambitious sustainability commitments. These insights are brought together in a proposed Framework for Sustainable Organisations in Crisis (FSOC). This framework is drawn from a series of qualitative research interviews and aligns the thematic areas of: 'crisis and emergency,' 'strategy,' 'structures,' 'processes,' 'funding', and 'people'. The framework guides decision-makers to the opportunities presented by crisis/emergency management while encouraging the Ministry of Defence to exploit the best of its own organisational DNA. This DNA broadly relates to the institutional strengths that enable the organisation to compete and succeed in complex environments. These strengths are frequently associated with empowered leadership, resilient command and control structures, decisive action, and high levels of trust.

The FSOC offers immediate implications for academia and the new sub-stream of sustainable organisations. The research also provides further evidence of sustainability's growing influence on organisational design and decision making. In doing so, it seeks to add a new dimension to traditional models of management theory and encourages the discipline to consider the potential benefits of emergency and crisis management. The FSOC also encourages practitioners to align their business models better, build more resilient information networks, challenge bureaucratic inhibitors, and seize funding opportunities that are uniquely available to climate change initiatives. Most importantly, the FSOC should nudge policymakers into unlocking the energy and collaborative potential that already exists within their respective organisations.

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