**A Systematic Literature Review Exploring How the UNs SDGs have limited application to Welsh Specialist Trade-Contractors in the Construction Industry and their Sustainable Development.**

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**Abstract**

The Construction Industry has specific features that outlines this sector from all other sectors, (Lu et al, 2021). In Wales 99% of Specialist Trade Contractors can be categorised as Small Firms employing less than thirteen people, with 55% of these being sole contractors, (CEW, 2019). For almost the past two decades, specialist trade contracting has been largely utilised in the Construction Industry, (El-Mashaleh, 2009). Specialist trade contractors assist main contractors in overcoming problems that relate to the need for specialist expertise, to reduce resource shortage and financial implications, (Elazouni and Metwally, 2000). Specialist trade contractors have a critical role in the adoption of innovation within a construction project. However, because specialist trade contractors are likely to already have adopted innovation within their specialism it has to be noted that because of this specialist behaviour they tend to endure very different challenges in adopting new innovations as the innovation processes tend to differ from large firms, (Goh and Loosemore, 2017). Thus, Gadde and Dubois (2010) noted that the construction project process emphasises transactional cost rather that relationship exchange. This fundamentally discourages integration and limits sustainable behaviours in the construction industry particularly when combined with the industries overarching problems of environmental performance and the combination of obtaining financial stability, (Briscoe and Dainty, 2005).

There are limited studies that explore the role that construction activities and the built environment play in the UN’s 2030 sustainable agenda, (Goubran, 2019). The application of specific Sustainable Development Goals (SDG) within the broad entity of the construction industry has been identified to be achievable, (Wieser et al, 2019). However, a sustainable method of construction is needed to achieve these goals and has limited application to smaller sub-contractors, (Ogunmakinde et al, 2022). It’s important to outline that although formulated as individual goals, the SDGs are not interdependent of each other and are in fact accumulated interlinked as a unified framework, (Fei et al, 2021). Although the construction industry is identified as accumulating large social, economic, and environmental impacts during its project lifecycle, which can play a critical role towards achieving SDGs as the industry builds for the future world, (Alawneh et al, 2019) it is limited in its practical application. However, in Wales an act that has drawn vast attention globally is the Well-Being of Future Generations Act (WBFG) which focuses on building an environment that meets the legal obligation to improve social, cultural, environmental and economic factors that impacts sustainable thinking, (Construction Excellence Wales, 2021). In fact, Wales became the first government in the world to declare a climate emergency which was introduced in 2019, (Surminski and Rozer, 2020). However, the application to smaller specialist contractors is limited and doesn’t always consider the tangible benefits in terms of economic prosperity and sustained opportunities for construction projects, (Miller et al, 2004). Previous studies have argued that there is a developing argument to suggest that waste management can act as a profit generation in its entirety, with all stakeholders indicated to have a role to play within the supply chain including specialist trade contractors, (Dainty and Brooke, 2007). The wasteful approach that has been applied in the Construction Industry is not compatible with the WBFG act and instead this paper proposes that there is an opportunity of a circular economy underpinning that can ensure resources are kept in use with their value retained and apply to smaller players within a construction project, (CEW 2020, Ellen MacArthur Foundation 2021). Despite a growing number of circular economy strategies, reports, methods, and tools researchers have provided little empirical evidence on corporate practices in SMEs that are crucial to affect the transition towards a circular economy, (Norouzi et al, 2021). Overall progress in the built environment has been repeatedly criticised for being slow adopters of change, alongside the unevenly behaviours along the value chain and failing to have fundamental impact with the existing difference between embedded practice and what is technically possible, (MacGregor et al, 2018).

This study envisages to carry out a systematic literature review that focuses on a sample of most cited papers that have been published between 2000 and 2022 using two databases being Business Source Premier and Google Scholar covering specific areas of interest including:

* The construction environment and its stance on transitioning from traditional to current economic behaviours.
* Both the UNs SDGs and the Well-Being of Future Generations Act (Wales).
* Specialist Trade Contractor importance in the Construction Project.
* Production of Waste in the Construction Industry.

The systematic review aims to find the gaps within the literature that exists and contribute to the production of a policy document envisaged as the outcome of a wider PhD research project. Thus, produce a plan in moving forward by combining the circular economy framework and encourage its adoption into specialist trade contractors. In the aim to establish how specialist trade contractors can achieve environmentally sustainable behaviours despite the non-relevance of the UNs SDGs within smaller businesses in a construction setting.

***Keywords:*** *Specialist Trade Contractors, Construction, Innovation, Wales, Sustainability, UN SDGs, Built Environment, Waste, Value Chain*

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