

Assessing the Transition of Sustainability Protocols from Buildings Towards Neighborhoods and Districts

Sustainability certification systems for buildings have played a pivotal role in advancing environmentally responsible construction and operation practices. However, the imperative to extend these certifications to encompass higher scales, including neighborhoods, districts, and cities, is becoming increasingly evident. This thesis aims to explore this crucial transition from building-scale to higher-scale certification.

This transition is investigated within four well-known sustainability certifications of LEED, BREEAM, DGNB, and WELL, based on different disciplines, such as the geographical expansion of boundaries, variations in performance metrics, variation of indicators' scores, etc. The analysis also concerns the policies, challenges, and regulatory frameworks that have motivated this transition. The result of this thesis provides critical insights and foresight vision for policymakers, sustainability practitioners, and framework developers.

Requirements: good knowledge of English, familiarity with Excel, and propensity to engage with sustainability certifications.