Potential to Enhance School Environments through the EBNT

This pilot programme trialled the use of the Environmental Benefits from Nature Tool (EBNT) in order to create more sustainable school environments. By promoting collaboration between diverse stakeholders and data-driven decision-making, the EBNT can support design solutions set to put sustainability at the centre of the design process.

Background to the Pilot Project:

Educational institutions face a challenge in working towards sustainable development: ensuring that school environments serve as effective learning spaces while also contribute positively to the surrounding ecosystem. The Department for Education (DfE), in collaboration with Natural England, initiated a pilot programme aimed at integrating environmental considerations into school projects. Central to this project, was the utilisation of the Environmental Benefits from Nature Tool, which provided a framework for assessing and enhancing the ecological performance of a school's outdoor environment.

The Challenge: Supporting both Curriculum Activities and Recreational Opportunities while balancing BNG, UGF and Ecosystem Service Requirements

Schools will have to provide outdoor environments that support curriculum activities and recreational opportunities whilst enhancing and conserving natural habitats. The project's primary objective was to reconcile these requirements – incorporating Biodiversity Net Gain (BNG), Urban Greening Factor (UGF) and ecosystem service commitments alongside educational requirements.

To address this challenge, the pilot programme tested two key tools: the Environmental Benefits from Nature tool and the External Facilities Tool (EFT). By using these tools, project stakeholders aimed to evaluate the environmental benefits and ecosystem services provided by primary and secondary school's outdoor environment.

Implementation of the EBNT:

Technical advisors, including multidisciplinary firms, landscape architects, and ecologists, played key roles in implementing the EBNT within the pilot programme. The Urban Greening Factor was integrated within a pilot version of the EBNT so that the metrics could be considered simultaneously. Landscape architects merged curriculum, socialisation and physical educational needs with ecological outcomes, thereby supporting multifunctional school environments.

Results and Feedback:

The pilot programme produced promising outcomes, as evidenced by stakeholders' feedback and project evaluations. Landscape architects successfully demonstrated how

school projects could deliver biodiversity net gain and environmental benefits through considered design interventions.

The EBNT helped identify ways to use spaces for multiple outcomes. For example, the creation of a courtyard with ‘urban SuDS trees’ provided both biodiversity net gain and environmental benefits within the school grounds. The trees provided shade and a social space, showing that designing with nature can help meet the social and ecological outcomes required by BNG, UGF and the EBNT.

The EBNT provided teams with confidence in their proposals' environmental efficacy, and alignment with existing legislative frameworks and specifications.

Key feedback highlighted the EBNT's usefulness in simplifying environmental assessments and integrating urban greening factors into projects. Moreover, there is consideration of incorporating the EBNT into future initiatives within the DfE.

Future Directions and Recommendations:

As the tool evolves, enhancements that facilitate Biodiversity Net Gain assessments and quantify environmental improvements may be incorporated into tangible metrics; looking ahead, further integration of the EBNT into school infrastructure planning and design is being explored.

Additionally, there is a growing interest in using the EBNT's mapping capabilities to inform climate change adaptation plans and promote sustainable school development practices. Following the pilot, DfE are exploring how the EBNT might be used to help school settings develop their climate action plans. It’s alignment with the existing DfE-commissioned National Education Nature Park will also be considered.

By using tools like the EBNT, educational institutions can incorporate an integrated approach to sustainability, encouraging learning environments that are not only conducive to academic growth but also enhance and conserve natural habitats.

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