Insert Project Name: Walk, Cycle, Live, Stirling E-Walk

Insert Project Location – Town/City, Country: Stirling, Scotland

Insert names of Client(s)/Organisation(s): Stirling Council, Ironside Farrar Edinburgh, Sustrans Scotland, Transport for Scotland

BIG Biodiversity Challenge Award Category: Multi Benefits Awards

Project overview (50 words max)

- The Stirling e-walk, implemented in 2023, promotes sustainable transport through electric walkways and infrastructure, aiming to reduce carbon emissions, enhance biodiversity and enhance urban mobility. This project supports eco-friendly transportation and improves pedestrian safety and convenience.

What were the biodiversity conditions on site prior to the enhancement? (100 words max)

- The Stirling e-walk project began with ecological surveys to establish baseline biodiversity data, focusing on local flora and fauna. Planning permission objectives included habitat protection, green space enhancement, and native species planting. Additional voluntary efforts included creating wildlife corridors, installing bird and bat boxes, and engaging the community in biodiversity awareness. Policy drivers were both strategic, aligning with national biodiversity goals, and local, adhering to regional biodiversity action plans. These combined efforts aimed to mitigate the project's impact, enhance local biodiversity, and support broader conservation objectives

What were the reasons behind this project? (100 words max)

- The project sought high BREEAM ratings through sustainable practices and targeted Biodiversity Net Gain via habitat creation. Mitigation strategies minimised environmental impacts, while discharging planning conditions ensured compliance with biodiversity requirements. Corporate social responsibility and organizational KPIs focused on sustainability and environmental performance, aligning with broader Environmental, Social, and Governance (ESG) goals to promote environmental sustainability, social wellbeing, and strong governance.

What were the biodiversity measures taken? (300 words max)

Replicability
The Stirling e-walk project is replicable, offering a model for urban biodiversity enhancement that can be adapted to other cities.
Long-Term Management
Long-term management plans extend beyond five years, including habitat maintenance and biodiversity monitoring to ensure sustainable gains.
Innovation
The project is innovative with its integration of electric walkways, green roofs, walls, and Sustainable Urban Drainage Systems (SuDS) within rain gardens to manage stormwater and support biodiversity.
Creation of New Habitats
New habitats created include green roofs, native plant gardens, wildlife corridors, and rain gardens incorporating SuDS features. These provide essential resources and ecological connectivity for local wildlife.
Ecological Value
The habitats created are ecologically valuable, supporting pollinators, birds, and other wildlife, and enhancing overall urban biodiversity.
Biodiversity Net Gain
The measures result in biodiversity net gain by creating more and higher quality habitats than those impacted by the project.
Contribution to Local Biodiversity Action Plans
The project supports local Biodiversity Action Plans by increasing urban green spaces, supporting native species, and improving habitat connectivity.
Community Engagement
The local community was involved through public consultations, educational programs, and volunteer opportunities, fostering local support and engagement.
Reuse of Waste Materials
Waste materials were reused in habitat creation and green infrastructure, minimising waste and supporting sustainability.
These measures collectively aim to enhance urban biodiversity, support sustainable development, and contribute to broader conservation goals.

Further information (250 words max)

The Stirling e-walk project was meticulously planned and designed to integrate biodiversity features such as green roofs, SuDS-integrated rain gardens, and wildlife corridors. Site preparation was carried out with minimal habitat disruption, followed by the installation of electric walkways and green infrastructure. Native species were planted, and bird and bat boxes were installed, with community involvement in planting and educational activities. Baseline monitoring included initial ecological surveys to document species and habitats, establishing benchmarks for future comparisons. Post-installation monitoring involves regular surveys to track species diversity and abundance, as well as the effectiveness of SuDS in rain gardens, with adaptive management to address emerging issues. The project aims for a lasting legacy of enhanced biodiversity, improved ecological connectivity, and heightened community awareness and engagement in conservation. Notable increases in local wildlife populations and diversity have been observed, achieving objectives of biodiversity net gain, habitat creation, and community engagement. Lessons learned highlight the importance of continuous community and stakeholder engagement, adaptive management, and sustainable practices. Participation in the BIG Biodiversity Challenge provided recognition, knowledge sharing, and motivation to strive for higher conservation standards. Detailed planning, stakeholder engagement, continuous monitoring, and leveraging community resources were key tips for similar schemes, ensuring the project's success and serving as a model for urban biodiversity initiatives.

Project Team

- Client(s)/funder(s): Stirling Council, Ironside Farrar Edinburgh, Transport for Scotland, Sustrans Scotland Places for Everyone Scheme
- Other design team members: Hill House Quarry Group, Stirling and Clackmannanshire City Region Deal

What was the motivation for carrying out the enhancement? (100 words max)

In conclusion, the Stirling E-Walk Cycle Live Project exemplifies best practices in urban development by seamlessly integrating green infrastructure, actively involving the community, and incorporating innovative and essential best-practice planting products.
Through careful planning and collaboration with key stakeholders, the project addresses current environmental challenges and positions Stirling as a pioneer in sustainable urban development for future cycleways. Discover more on this case study here.