

CEW AWARDS WINNER - ESG - SPONSORED BY SEWSCAP

PROJECT: Bouygues UK – Pentre Awel Zone 1
Submission date: February 2025

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CONSTRUCTING
EXCELLENCE
IN WALES



OVERVIEW

Bouygues UK delivered Zone 1 of Pentre Awel, the largest project ever undertaken by Carmarthenshire County Council, with significant investment from the Swansea Bay City Deal. The development was conceived as a flagship for environmental, social, and governance (ESG) excellence in construction. From the outset, the project set a benchmark for sustainability by achieving net zero in construction, while also creating meaningful community and educational opportunities. Bouygues' holistic approach integrated environmental stewardship, social value delivery, and strong governance practices to ensure the project generated lasting benefits for local people and future generations.



Wales/Cymru

2025
Awards

Waste, Energy & Biodiversity Excellence

- Achieved a 10% reduction in waste production.
- Reached 100% diversion of non-hazardous waste from landfill.
- Deployed smart energy and water monitoring systems to reduce resource consumption year-on-year.
- Embedded biodiversity enhancement and achieved zero environmental incidents.

Recognition & Awards

- Winner of the Bouygues Sustainability Award 2023.
- Shortlisted for the Welsh STEM Award 2024 for best education project.

KEY ACHIEVEMENTS:

Net Zero in Construction

- Produced a Carbon Reduction and Management Plan at the outset.
- Deployed innovative digital tools such as Click LCA, Q-Flow, Smart Waste, and Gaia systems.
- Sourced sustainable materials, including 98% recycled reinforcement bars and a steel frame with 80% recycled content.

Social Value & Community Impact

- Delivered 5,205 weeks of training and employment against a target of 4,680.
- Generated £34m of verified social value, equal to 41.25% Social Local Economic Value (SLEV).
- Supported apprenticeships, STEM education, and meaningful engagement opportunities for young people.

Collaboration & Governance

- Produced a Carbon Reduction and Management Plan at the outset.
- Deployed innovative digital tools such as Click LCA, Q-Flow, Smart Waste, and Gaia systems.
- Sourced sustainable materials, including 98% recycled reinforcement bars and a steel frame with 80% recycled content.

Knowledge Sharing & Industry Leadership

- Hosted best practice forums to showcase Pentre Awel achievements and support industry-wide adoption of ESG practices.
- Shared lessons learned across Bouygues UK, with successful digital tools like Gaia now becoming standard practice on all future projects.

PROJECT TEAM

- Bouygues UK – Main Contractor, leading ESG integration across all project stages.
- Carmarthenshire County Council – Client, setting ambitious social and sustainability goals.
- Supply Chain Partners (including SMEs) – Contributed innovative low-carbon solutions.
- Specialist ESG Advisors – Oversaw carbon reduction, social value delivery, and governance compliance.



SME EXCELLENCE:

Bouygues worked with SMEs that shared their sustainability goals, strengthening the local supply chain while advancing ESG objectives. SMEs were engaged in sourcing sustainable materials, contributing innovation, and ensuring local economic benefits.

One highlight was sourcing reinforcement bars made of 98% recycled material and a steel frame containing 80% recycled content, achieved in partnership with SMEs willing to adopt circular economy practices. This collaboration not only reduced embodied carbon but also enhanced the knowledge base of local firms, positioning them as competitive players in sustainable construction.

LESSONS LEARNT AND FUTURE IMPACT

The Pentre Awel project became a model for embedding ESG at the heart of construction. Key lessons included:

- **Early Stakeholder Engagement:** Aligning ESG goals during pre-construction ensured the community's needs shaped delivery.
- **Digital Innovation:** Tools like Gaia and Smart Waste proved so successful that they will now become standard across Bouygues' UK projects.
- **Capacity Building:** Involving SMEs and upskilling the workforce created long-term regional resilience and competitiveness.

Looking forward, the project sets a precedent for Welsh and UK construction in achieving net zero and delivering tangible social value. It demonstrates how robust ESG integration not only benefits communities but also strengthens supply chains, enhances reputation, and drives industry-wide change.



FIND OUT MORE:



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