

Catalyse Decarbonisation and Fund Transformation in Wales with Timber-Frame Social Housing

Llanbedr, Wales UK

Building Description:

2-storey, 2-bedroom
Semi-detached Home

Total Floor Area: 97 m²

Qualified Materials:

Timber-frame roof, walls,
windows, timber doors,
staircases, battens, and
wall cladding

Carbon Storage:

12.6 *aureus*^X
(tCO₂)

Per Home

479 *aureus*^X
(tCO₂)

38-Home Development

Potential Revenue:

£29,685

38-Home Development

In Collaboration With:



Contact Us to Register Your Project Today:

<https://www.aureusearth.com>

info@aureusearth.com



About \mathcal{A}

Aureus Earth (\mathcal{A}) is the world's premier carbon reduction and storage contract (\mathcal{A}^x) registry for building and infrastructure projects. The construction industry is a major contributor to global greenhouse gas emissions. \mathcal{A} views embodied carbon reduction and both mineralised¹ and long-term biogenic carbon storage in buildings (30+ years) as the most effective and immediate opportunity for industry-wide decarbonisation.



How \mathcal{A} Works

Step 1: \mathcal{A}^x Buyer Contracting

\mathcal{A} contracts Fortune 500 companies and other corporate buyers who are interested in committing to purchase verified \mathcal{A}^x (1 \mathcal{A}^x = 1 tCO₂) to catalyse decarbonisation of the built environment.

Step 2: \mathcal{A}^x Generator Contracting

\mathcal{A} invites building project stakeholders to register and contract their project(s) early in the design process. Projects can be registered from RIBA Stage 2 (Concept Design) through RIBA Stage 4 (Technical Design). Early registration is encouraged.

Step 3: \mathcal{A}^x Verification & Certification

\mathcal{A} provides guidance for submission of whole-building life cycle assessment (LCA) documentation that substantiates meaningful embodied carbon reduction (*i.e.*, avoidance) and/or long-term carbon storage (*i.e.*, mineralised and/or biogenic carbon). As an independent third party, \mathcal{A} rigorously *verifies* that all LCA calculations conform to ISO 14040, ISO 14044, the RICS Professional Statement on whole-life carbon (if applicable), and EN 15978, the global standard for whole-building LCA, and *certifies* total project carbon reduction and storage (tCO₂).

Step 4: \mathcal{A}^x Generation, Registration, Sales, and Retirement

Post-verification, \mathcal{A} generates and registers \mathcal{A}^x certificates for the building project. Sales transactions from buyers to project stakeholders are finalised post-construction upon issuance of a Completion or Final Certificate from the building control body. Revenue is distributed on a consignment basis. \mathcal{A}^x certificates are subsequently retired and cannot be traded or resold.

¹Mineralised carbon storage refers to *in situ* carbonation of lime- or cement-based materials and/or manufactured carbonates (e.g., aggregates, carbonation-cured concrete) mineralised on the human timescale.