

Understanding Barriers and Drivers to Delivering Biodiverse Nature-based Solutions (NbS) in Social Housing Retrofit through the Lens of the Biome Development in Swansea

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PROJECT OVERVIEW:

- Project REPAIR explores how biophilic living, which integrates nature into the places where we live, work, and move through cities, can help urban areas adapt while improving wellbeing, strengthening communities, and supporting ecological recovery
- The project aims to develop evidence-based and replicable pathways for urban adaptation and retrofit, helping transform existing buildings and neighbourhoods into healthier and more resilient environments
- Through a transdisciplinary and collaborative approach, REPAIR brings together expertise from the arts, humanities, sciences, and professional practice



CASE STUDY: BIOME (SWANSEA, WALES, UK):

- The deep retrofit of a former Woolworths building into a community-centred, mixed-use biophilic development, incorporating social housing, community spaces, and nature-integrated design
- A unique real-world laboratory for studying nature-based urban transformation
- Evidence-based research and a public showcase of what biophilic urban living can look like in practice



KEY QUESTIONS FOR THE STUDY:

- 1) How do different stakeholders participate in the decision-making process of delivering urban NbS in social housing?
- 2) What are the key social, environmental, and economic factors determining the effective delivery of urban NbS in social housing?
- 3) How does multistakeholder engagement impact the delivery of urban NbS in social housing?

MAPPING KEY PROFESSIONAL STAKEHOLDERS:



METHOD:

- Sample size: 32 participants
- One to two-hour semi-structured interviews

RESULTS (EXAMPLES):

"I think there's a lot of profiteering from certain aspects on greening, which probably makes it start pushing the viability question, but we've, I think we've challenged that on several fronts and felt that, you know, we can deliver stuff at better values, but that requires exploration and value engineering." (Interviewee 5, construction and development)

"Well, the first thing we should say is that delivering urban NbS through social housing is not something that normally happens. So that isn't a path that people follow. It's normally social housing, just a type of housing and the other part of it, nature-based, is not part of that conversation. It might be bolted on, or it might be something that comes about, but that doesn't really happen." (Interviewee 4, consultancy)

PRELIMINARY FINDINGS:

- Multi-stakeholder participation is essential in the decision-making process for implementing NbS in social housing
- Engaging stakeholders throughout all stages of delivery—pre-development, construction, and post-occupancy—is crucial for the successful implementation of NbS
- Additionally, public-private partnerships can play a significant role in financing the integration of urban NbS in social housing projects

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