Carbon Impact Assessment for flats on the site of the former United Reform Church, Clifton.

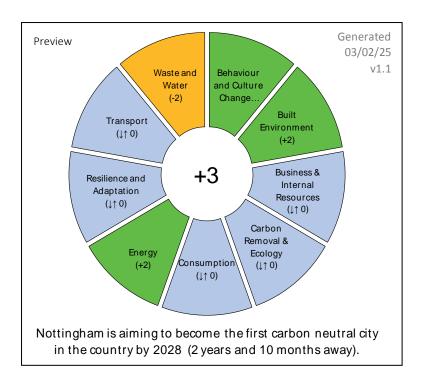
The proposed project is a block of flats on the site of the former United Reform Church in Clifton, to be socially rented by Nottingham City Council. The site is in the HRA and the development will be accounted for in the Housing Revenue Account, the scheme funded by a combination of Right to Buy Replacement Fund Receipts (RTB RF) and HRA revenue contribution if required. The scheme capitalises on the recently enhanced accessibility of RTB RF to entirely fund new social housing and would deliver 35 homes assisting in address of NCC's 10,000 plus waiting list and homelessness pressures to the General Fund.

The proposed scheme comprises around 35 1-bedroom apartments in one block of four storeys. This design will be subject to approval by planning and the homes will aim to be carbon efficient. The homes will be energy efficient with an aim to attain an 'A' SAP rating. Air source heat pumps will be used to replace gas boilers. Solar panels will be provided the building roof. The scope of this Carbon Impact Assessment is for the new build scheme only.

Carbon Impact Assessment Dashboard

The Carbon Impact Assessment Dashboard (CIAD) has been utilised to produce infographic below. This gives a modified RAG rating showing the estimated impact of a decision on different issues which influence climate change. There are both direct and indirect impacts to consider in the construction of the scheme and the subsequent use of the buildings which have been fed into the CIAD. The scoring applied takes account of the following: -

- This is a small scheme which will affect only part of a ward
- The impact of the scheme endures over the buildings' lifetime and so, long past 2028



Key Costs and Benefits

Behaviour and culture

- ✓ Working with communities The Home user guides given to tenants provide tangible examples of climate-positive and cost-saving measures to tenants. These include information on the benefits of solar panels and how to use smart meters to save water and energy.
- Wider Influence Delivery of carbon neutral/energy efficient homes illustrating the Council's Wider influence – commitment to carbon neutrality, enhances the Council's reputation and provides an exemplar project for others to follow.
- Working with partners NCC and contractors are bound by the specification and expectations of good practice in sustainability.

Built environment

- Building construction Homes will be built to the Future Homes Standard, with high-quality insulation. All homes will be EPC grade A and will have smart meters installed. However, new building comes with a carbon cost, due to emissions from construction and materials such as concrete.
- ✓ Building use Proposal includes bicycle stores, bin storage with recycling and automatic lighting in hallways, though active travel could be more directly encouraged.

✓ Switching away from fossil fuels - Air source heat pumps will be used to replace gas boilers. This avoids the installation of new fossil fuel systems and decreases demand for fossil fuels.

Business & internal resources

 Material / infrastructure requirement – Highest possible standard materials and products to be used where possible.

Carbon Removal & Ecology

 Biodiversity & Ecology - Limited low-level ruderal and low-quality grass has grown on the site during disuse. This will be removed for construction and any minor impacts mitigated by BNG requirements.

Energy

- ✓ Local renewable generation capacity The project will see new solar panels and ASHPs installed and therefore increase the generation of local renewable energy.
- Reducing energy demand Construction of flats in place of an unused building will create new energy demand, but this is negated by the renewable energy generation on site.

Resilience and Adaptation

- Blue/Green infrastructure Green/blue infrastructure will be considered in meeting BNG legislation.
- Natural flood management There is a change of land use, but the land is already built on. Flood management should be considered in planning application.
- Drought vulnerability To be considered in the planning application comments on building resilience and adaptation to climate change will be expected.
- Flooding vulnerability To be considered in the planning application

 comments on building resilience and adaptation to climate change will
 be expected.
- Heatwave vulnerability Tree cover will be retained, with benefits for water retention and shade provision.

• Transport

- Staff travel requirement There will be a minor increase in travel due to for construction and future maintenance.
- Improving infrastructure and Supporting people to use active travel - No new active travel infrastructure (eg. Cycle path) is being constructed. Bicycle storage already scored in categories above.
- Reduced need to travel Provision of new housing in close proximity to local services including schools, shops and health services may reduce tenants' need to travel for regular tasks. Where further travel is necessary, housing will be close to public transport links, including tram and bus travel. However, it is unknown whether residents will need to travel less due to moving into these flats.

Waste and Water

- End of life disposal / recycling The eventual decommissioning of the flats should be considered, but decommissioning is highly unlikely within the next decade.
- Waste volume Waste has previously been produced (within the previous 5 years) in the demolition of the Church building. The construction project will also increase the overall volume of waste.
- Water use Overall increase in water demand due to new flats and residents.

Paul Stanley, Head of Development, February 2025