

Energy-efficient, high quality, affordable rented homes in South Ribble

South Ribble Borough Council
Friday 24 March 2023

Summary

South Ribble Borough Council is breathing new life into a vacant housing estate with high-quality, affordable rented homes that will help residents save energy. The neighbourhood of 15 townhouses and apartments, the McKenzie Arms scheme, is set to be completed in the coming weeks. It uses energy-efficient technology and materials to put the borough at the forefront of the shift to Net Zero.

Deputy Leader of South Ribble Borough Council, Councillor Michael Titherington, said: “We’re really excited about the delivery of the McKenzie Arms development as not only are these homes the first the Council has built in decades, they will be energy efficient, affordable rented homes built to a specific standard aiming to use very little energy for heating and cooling but at the same time as giving a high level of comfort.

“Residents of these homes should benefit from the energy saving technology implemented in this development, which should lower energy bills, which has never been more important, as well as providing excellent indoor air quality.

“As a council we’ve set a goal for South Ribble to be carbon zero by 2030 and this development is just one of the things that will help contribute to this. We’re also working with South Ribble residents and businesses on green initiatives to bring wider communities in line with Net Zero as soon as possible, as well as auditing our own estates and installing carbon reduction measures where we can.”

The problem

We have a requirement to deliver a high-quality housing scheme for residents at affordable rents. This is to meet the borough’s growing need for affordable housing stock, as evidenced by the Central Lancashire Strategic Housing Market Assessment in September 2017. The estimated level of affordable housing needed per annum for South Ribble is 603.

We are also working towards the goal of creating a Net Zero council and borough by 2030. Our climate emergency strategy recognises the need to make the best use of planning processes to ensure all new housing is sustainable in design and affordable to heat.

The solution

In 2019 we found a perfect location to help meet our housing and climate objectives.

The McKenzie Arms site is an old council housing estate in Bamber Bridge, South Ribble, that has been vacant for several years. Its location makes it ideal for new and affordable rented housing. The redeveloped estate comprises 15 three-bed townhouses and one- and two-bed apartments. Shops, schools, restaurants, and a variety of local independent businesses are all within walking distance. The development is close to good transport links, with junction 29 of the M6 a 5-minute drive away.

We designed the housing scheme in line with the council's objective to make the borough Net Zero by 2030. When the cost of living is soaring, the energy-efficient elements of the home contribute to this aim. They will also save future tenants money.

The homes' features include:

- solar panels: the homes have been built in positions that maximise their efficiency
- energy-saving technology such as mechanical heat ventilation units, insulation, and air tightness that make the homes more thermally efficient
- large windows and glazed doors that let in lots of light for residents to enjoy while reducing the need for artificial lighting
- EV charging points
- secure bicycle shelter
- access to local amenities via active or public transport
- 100% LED lighting

We also decided that the development will not receive a mains gas supply.

The townhouses and flats have also been designed to nationally described space standards and they are part M category 2 compliant.


Timeline

Planning permission for the scheme was granted in December 2020 with construction commencing just over a year later. It is expected that the development will be complete in the coming weeks with residents expected to move in during spring/summer 2023.

Stakeholders

We worked with Homes England to secure funding for the scheme. Council members approved all proposals and budget allowance for the scheme.

The new homes will be let on an affordable rent basis through the Select Move system, with Progress Homes managing the properties on behalf of the council.


Councillor Paul Foster, Leader of South Ribble Borough Council, with Scott Eastwood, Contracts Manager at Tyson Construction, the contractor for this development.

Impact

Beyond contributing to the council's objective of becoming Net Zero and to the delivery of affordable rented homes, this project helps solve several other problems.

Boosting local clean air measures

Building the development in the town centre makes it easier for residents to access nearby amenities – or to commute – using active or public transport. To encourage cycling, we provided secure cycle facilities at the development.

These measures also help to:

- improve air quality
- keep the council's air quality management areas running
- set an important example to others looking to develop within, or close to, our air quality management areas

Charging points have been installed in the car park to encourage residents to use electric vehicles when they do have to drive.

Helping the housing crisis

The development increases the number of affordable homes in the area, meeting local demand for smaller accommodation. In fact, it is our flagship development for future properties we build.

Saving green space

The scheme has used a brownfield site rather than greenfield land, saving valuable green spaces and places for nature to thrive.

There are always challenges when developing on brownfield sites. You need to take into consideration the site's history, undertake site investigations, and address contamination and environmental risks. Other challenges include factoring in costs associated with the demolition of existing buildings and the need to reconfigure services to suit new developments.

Reducing the cost of living

The development's solar panels will help residents rely less on mains electricity. The panels will also bring down their fuel costs.

Creating local jobs

The council's social value policy has been used to include use of local businesses, providing local employment. The contractor for this development RP Tyson Construction has committed to delivering social value benefits to the local community to the value of over £36,000.

Lessons learned

There were several lessons learned that will inform future projects and may be useful for other councils taking on similar projects to know.

Expensive sustainable alternatives held back the scheme's full potential

The cost of providing sustainable energy measures is greater than that of fitting standard gas boilers. The prohibitive costs mean we did not pursue additional measures like ground source heating.

Noise pollution disrupted plans for natural ventilation

At the project's initial design stages, the team did not fully consider the impact of noise pollution on residents. The development is close to a noisy main road and commercial developments. That meant we could not rely on natural ventilation through open windows as the main method of reducing overheating in the homes.

We did not use air source heat pumps in this project, but it's worth noting that they can also be noisy. Adopting methods to make them quieter can increase costs.

Passivhaus specification deterred contractors

Unfortunately, the initial Passivhaus specification picked up little initial interest from contractors. This forced us to make slight changes to specifications.

Involving future tenants could have meant more savings

Future tenants have not been involved in the design or present during the installation of the sustainability measures. So there is a concern that they may not make full use of the energy-saving measures. But we will look to make new tenants aware, before they move in, of how to maximise savings on energy costs.

Tech is expensive and legislation confusing

To make similar projects easier – and to really scale them up across the UK – a few factors need to change.

First, carbon reduction technologies would be more widely used if they were more affordable. While McKenzie Arms has limited space for ground source heat pumps, their prohibitive cost ultimately ruled them out for this project. The UK government should provide or fund specifications for schemes, or fund training schemes.

Second, the reams of legislation and guidance make the process complicated. Streamlining legislation and guidance nationwide would make the process simpler for all.

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The project would not have been viable if we had gone through standard borrowing routes. Instead, it has been funded with:

- £675,000 from Homes England
- £83,000 from land release
- £2.3 million of Section 106 funding

While the council is expecting to receive a small income from the development over time, our main aim is to provide local and affordable rented homes.

Next steps

We will apply our experience and knowledge gained from this scheme to other sites we're developing including:

- more than 70 new homes at the extra care facility Jubilee Gardens: planning application granted in September 2022 and completion expected in 2024
- more than 50 new homes in the heart of Leyland to be delivered as part of the town deal development

McKenzie Arms will be used to showcase best practice with local developers for future private schemes, in which lessons learned and the benefits created will be shared.

Links, contacts, and credits

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