

# News

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## **The first office development in the North East committed to being 'net zero in operation' receives council approval**

South Tyneside Council's planning committee has given approval to national urban regenerator, Muse Developments, to bring forward The Glassworks - a unique 50,000 sq ft office building in South Shields that will set a new standard for sustainable development in the region. The Glassworks is designed to be fossil-fuel free, ultra-low energy and achieve the UK Green Building Council's 2025 net zero office energy performance target. Both Muse and the council are also committing to verify the scheme's operational performance using the new NABERS UK rating system.

The new BREEAM 'Outstanding' building designed by Ryder Architecture, will run solely on 100% renewable electricity complete with a 3200 sq ft solar array on the roof; will repurpose a key area in South Tyneside and be built on brownfield land across five storeys with basement parking, a reception area offering co-working space and coffee bar, as well as a roof terrace with panoramic waterside views. The Glassworks aims to put down a clear marker in the region by promoting environmentally-conscious development and wellbeing.

A whole-building approach to sustainability was taken to make sure the building improved resource efficiency, with high levels of insulation to minimise heating demands; solar-control glass to minimise cooling demand; enhanced demand-controlled ventilation linked to daylight and occupancy sensors as well as a two-stage air source heat pump to provide low-carbon heating, coupled with an ambient loop system to reduce distribution losses and increase overall efficiency.

During the design stage of the scheme's inception, partners undertook early-stage whole life and upfront embodied carbon assessments to eliminate inefficiencies where possible and reduce the building's whole carbon footprint. The steel structure of the scheme has been designed to offer a reduction in embodied carbon of approximately 40%, as well as using 66% cement replacement for both the sub and superstructures. This results in the scheme reducing its upfront embodied carbon intensity down to 685kgCO<sub>2</sub>/m<sup>2</sup> compared with over 1100kgCO<sub>2</sub>/m<sup>2</sup> for a typical development of this type.

The southern part of the site will feature a landscaped area leading down to the Grade II-listed Customs House and Harton Quays Park. The scheme will improve links between the river and the wider town centre regeneration, being delivered by Muse and South Tyneside Council.

Andrew Fairest, projects director at Muse Developments, said: "To receive the news that we've been given approval to bring forward our latest sustainable development at The Glassworks, represents a strong endorsement of our commitment to building back better in South Tyneside and the work we've done to date in the town.

"Despite the challenging times we're in, we're still seeing a demand for high-quality office space, that not only provides an agile and positive environment to work from, but is also climate resilient and adaptable to our changing world.

"At Muse, we're committed to working with partners in a bid to deliver a tangible and meaningful contribution to reducing the sector's carbon footprint, while driving inward investment, opportunities and prosperity right into the heart of our communities."

George Mansbridge, corporate director, regeneration and environment at South Tyneside Council, said: "The design and construction processes will result in almost a third less carbon, which is the equivalent of planting four hectares of young woodland forest.

"Operational energy will be significantly reduced with highly efficient heating, lighting and ventilation systems.

"The building will also have the ability to connect to a future renewable district heating network in the town."

John Alker, director of policy and places at the UK Green Building Council (UKGBC), said: "It's great to see this ambitious project pass this crucial milestone. Going for net zero carbon in its operation, with a stringent energy-performance target is absolutely the right approach, and ensures the building is fit for the future. It's also encouraging to see the plans for significant reductions in embodied carbon through innovative product and material selection. It demonstrates fantastic leadership from Muse and the whole team."

The Glassworks would pave the way for further office space in a 4.5-hectare section of the 10.5 hectare Holborn site, which was awarded Enterprise Zone status after a successful bid supported by the Local Enterprise Partnership.