

5 The Proposal: Sustainability

Sustainability aspirations

Social, economic, environmental

Our aim is through careful consideration and a collaborative approach, that Thameside House will become an exemplar new development in environmental design.

Sustainability has become an integral part of the design approach, with a commitment to continue this into construction and into the buildings operation. At the heart of this approach is the future tenants and the delivery of healthy, comfortable and affordable to run properties that can become the foundation for a sustainable community.

SPELTHORNE DECLARES CLIMATE EMERGENCY

Thameside House is being developed by Spelthorne Council with a commitment to it becoming 100% affordable housing. Spelthorne Council recognise the opportunity this presents for the building to set an important example its commitment to tackling the climate crisis. Thameside House is therefore seeking to become Net Zero Carbon in operation.

"We have always regarded climate change as a very serious threat and have made some great steps to reduce our carbon footprint. However, to avoid any doubt how serious this administration takes climate change we have taken the decision to declare a Climate Emergency. There now needs to be a greater step change to reduce carbon emissions and reduce the damage to the environment for our residents and future generations."

Clr John Boughtflower – Leader of the Council

ASPIRATIONS

AFFORDABLE FOR LIFE

As owner operator, this approach minimises capital expenditure, whilst minimising operational costs and future repair/replacement

BECOME AN EXEMPLAR

Providing the opportunity to create an exemplary affordable housing scheme in an urban setting for others to follow

MINIMISING RISK

Delivering a high performance building provides tenants with lower utility costs, reducing risk of rent arrears and complaints due to comfort

FUTURE PROOF

Delivering a building that minimises its carbon footprint, whilst also reducing susceptibility to the future impacts of climate change

ECONOMIC DEVELOPMENT

Retaining and creating jobs in Spelthorne, helping to activate the local economy with uses that promote wellbeing, business, cultural and educational exchanges between users and visitors in the community

SOCIAL RESPONSIBILITY

Creating healthy and safe housing and workspaces, aiming for a balance between living, working and leisure, and with that generating equal opportunities for all layers of our diverse society

OUR PROPOSAL

KEY CONSIDERATIONS

Reduce Demand

- An investment in the building 'fabric first' and energy efficient heating and ventilation systems
- Exceeding Building Regulations Part L 2021

Reclaim and Recapture

- Efficient heat pump technology (Ground and Air)
- On-site energy storage
- Utilising heat recovery ventilation

Low Carbon Sources

- Zero fossil fuel combustion on site
- Low-carbon electricity
- Minimum 10% on-site renewable energy generation



Fabric first



Buildings as generators



Heat pumps



Solar Pv



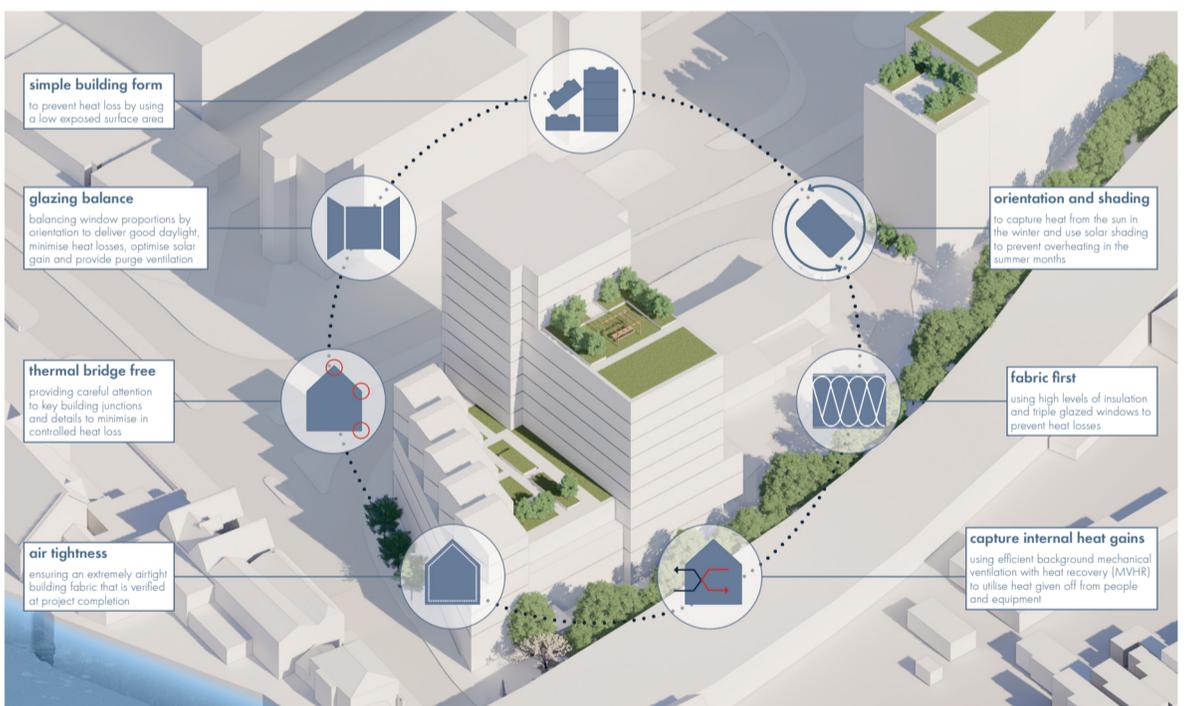
EV charging



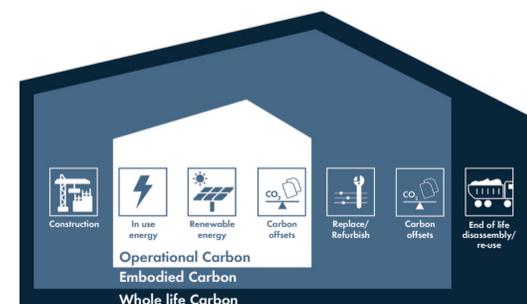
Energy storage

DESIGN FOUNDATION

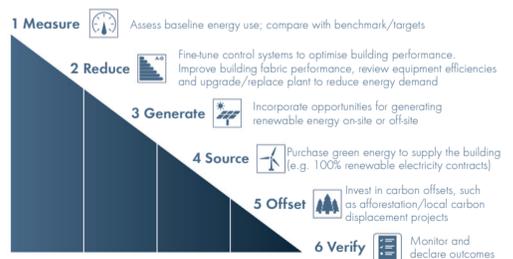
- Be lean:** Reduction in CO2 emissions - improvement above the new Part L 2021
- Be clean:** Electricity is becoming more efficient - no gas boilers proposed
- Be green:** Low carbon and renewable technologies will be adopted through the use of PV's and Heat pumps to satisfy the Spelthorne Development Plan policy CC1



WHAT DO WE MEAN WHEN WE TALK ABOUT NET ZERO CARBON?



Path to Net Zero - Operational Carbon



THAMESIDE HOUSE
Public Consultation 24/25 June 2022