# ANNEX: SUSTAINABILITY

West Dunbartonshire Council are committed to a sustainable future and it is in the process of agreeing a Climate Change Strategy. The Council embraces the pathway to net zero carbon by 2045 and the reduction of emissions through mitigation measures and projects is the most important means of reducing our environmental impact and associated costs. Development on the Queens Quay site has an important role to play in meeting zero carbon targets.

## District Heating Network

Queens Quay has an innovative district heating network that will supply every building on the site with low carbon heat. Heat energy is extracted from the River Clyde, using heat pump technology to achieve high temperatures and then distributed to each building through highly insulated pipes running beneath the roads. This heat energy is then used to provide space heating and domestic hot water thus helping to reduce Queens Quay carbon footprint and helping the development towards carbon neutrality, in line with the Council's ambition for West Dunbartonshire to be carbon neutral by 2045.

## Low Running Costs

The district heating network is owned by West Dunbartonshire Council but operated and managed by Vital Energy. The unit cost of heat will compare favourably with a traditional gas equivalent when costs for all regular plant maintenance and annual gas safety inspections are properly considered because the customer heat interface units are supplied and maintained by the District Heating company. Consumers are expected to benefit from annual cost savings from the extremely low carbon energy source.

## Building Performance

The tool used to evaluate building energy performance for statutory compliance purposes is known as Standard Assessment Procedure, or SAP. This tool considers a variety of factors to determine how well a building will perform. Connecting to the district heat network provides a significant improvement in the SAP results. This measure alone will surpass Silver Aspect 1 in Section 7 of the Domestic Technical Handbook set in the Building (Scotland) Regulations 2004.

## Fabric Performance

To ensure that carbon emissions and occupant running costs are kept low, it is necessary to ensure a minimum performance specification for the buildings at Queens Quay. Consequently, every new dwelling in Queens Quay must be designed to comply with Silver Aspect 2 of Section 7 in the Domestic Technical Handbook. This will ensure that buildings on Queens Quay are efficient in their consumption of energy. Simply by connecting to the district heat network and achieving Silver Aspect 2, most typologies can achieve Gold Aspect 1 of Section 7 in the Domestic Technical Handbook. This will ensure very low carbon emissions from the buildings on Queens Quay and is therefore the sustainability standard for Queens Quay

| The Sustainability Standard for Queens Quay | |
|---|---|
| Minimum Fabric Performance Standard | Silver Aspect 2. |
| Minimum Carbon Emissions Performance Standard | Gold Aspect 1. |

## Photovoltaics

Gold Aspect 1 will be achievable without the use of photovoltaics. However, if a developer chooses to install photovoltaic panels then the occupants running costs and carbon emissions will be further reduced. Developers may wish to consider this as a sales option, which could be offered to prospective home buyers.

## Working with Industry

West Dunbartonshire Council wish to ensure that Queens Quay remains attractive to prospective investors and future residents. The levels Silver Aspect 2 and Gold Aspect 1 can be achieved using current day building techniques and components