REGENERATION TEAM Victoria Road Housing Scheme – Solarise Project

### With Thanks To Our Funders





### Climate & Biodiversity Emergency

- Brighton & Hove City Council declared a Climate and Biodiversity Emergency in 2018
- Brighton & Hove Sustainability Policy and Net Zero Carbon by 2030
- Renewable Technology and Sustainable Construction at the forefront of Council development projects



Highly sustainable homes



### The site

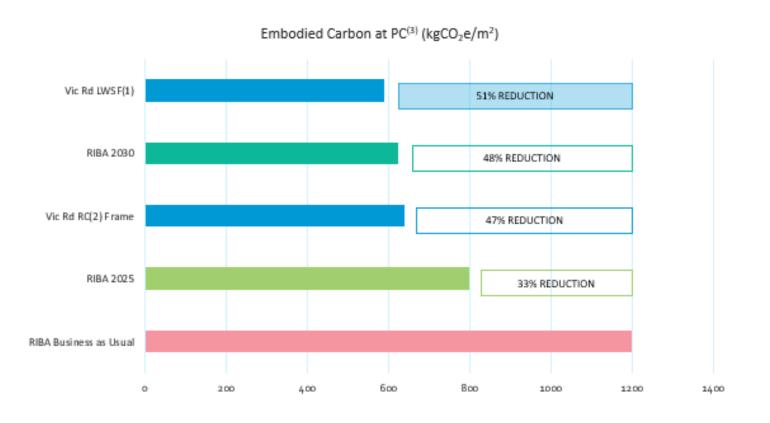
- The Project is being developed on brownfield land on the site of the Former Housing Office and is council owned.
- Victoria Road Housing Scheme consists of two residential blocks: Perching Court and Jay Court.
- The development is located to the west of Portslade Town Hall.



#### The scheme

- 42 new council homes arranged in two blocks of flats.
- 14 x 1 bed, 18 x 2 bed and 10 x 3 bed units.
- > 10% of units are suitable for people with disabilities.
- Generous space standards:
  - 1 bed 2 persons 51.5 sqm
  - 2 bed 4 persons 70.5 sqm
  - 3 bed 5 persons 86.5 sqm

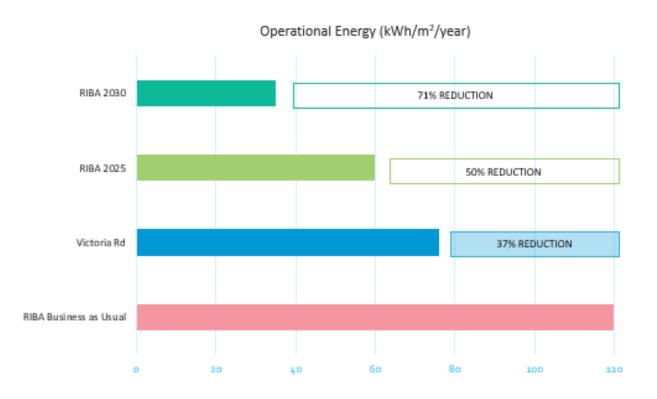
#### **Embodied Carbon**



LTSF<sup>(1)</sup> vs RC<sup>(2)</sup> Frame—177t CO2 (8% saving) Achieves RIBA<sup>(4)</sup> 2030 target

- (1) LTSF Lightweight Steel Frame
- (2) RC Reinforced Concrete
- (3) PC Practical Completion
- (4) Source "RIBA 2030 Climate Challenge for Domestic / residential"

# Operational Energy



37% reduction from RIBA(1) 'Business as Usual'

#### Sustainable measures

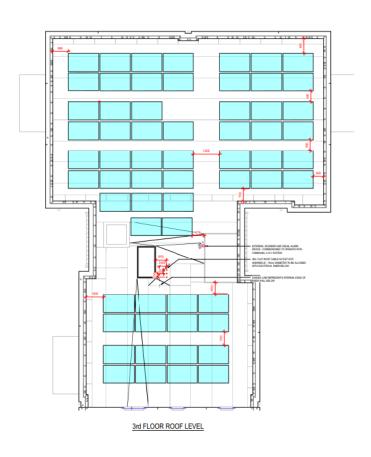
- ▶ Photovoltaic System with future vision to create a private network
- ▶ Ground Source Heat Pumps; Decentralised heat pump systems in individual flats supplied from a low ambient temperature loop.
- ▶ Living walls on 8 elevations fed by rainwater harvesting supplying irrigation.
- Living walls will also provide shading and a reduction in overheating.
- ▶ Permeable landscape design which integrates Sustainable Urban Drainage Systems
- Landscape design includes a small communal orchard for food growing and areas for socialising i.e. BBQ area.
- ▶ 8 No. Electric Vehicle Charging Points

### Focus on Photovoltaic System

#### **Benefits include:**

- ► 63,500kW of Solar Energy
- Expected to save 14 Tonnes of CO2 per year
- Decreased overhead costs
- Council exploring potential to establish its own electricity supply network
- ► Council supply network could save tenants 10% on electricity bills compared with the Big Six Energy providers.

# Photovoltaic System



- ➤ We have installed a total of 63,500kW of solar at Victoria Road consisting of 168 solar panels spread over the 3 roofs
- ➤ We have specified SolarEdge Inverters and optimisers for this project
- These systems have a 25-year optimiser warranty and a 12-year inverter warranty

### **Drone Footage**

# With Thanks To Our Partners



