

Osborn Road Car Park Redevelopment

Carbon Impact Assessment

Osborn Road Multi-Storey Car Park Emissions

1. The Council owns several public car parks which contribute to the Council's Scope 2 electricity emissions. Osborn Road multi-storey car park is the largest emitter of all the car parks.

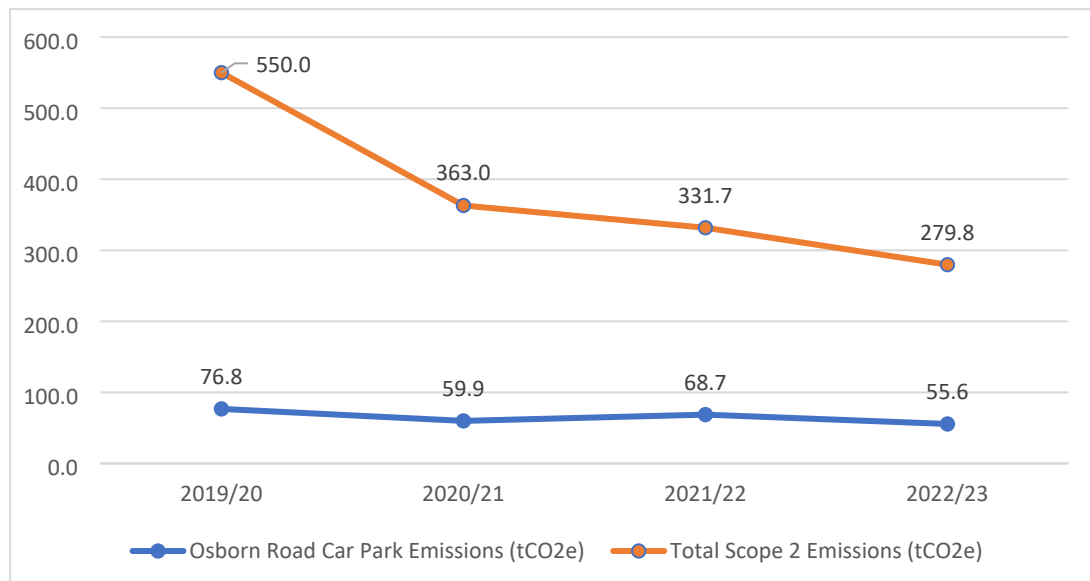
Carbon Footprint Scopes

2. To calculate the Council's carbon footprint, three scopes are defined for reporting purposes:
 - Scope 1 – These are all direct emissions released from the activities of an organisation. For example, fuel combustion from fleet vehicles;
 - Scope 2 – These are any indirect emissions from electricity purchased and used by the organisation. For example, the emissions linked to the lighting in the Car Parks;
 - Scope 3 – These are any other indirect emissions from the activities of the organisation, occurring from sources that we do not own or do not control. This is the greatest share of the carbon footprint, covering emissions such as those associated with our leisure centres and community centres.

Current Impact of Osborn Road Car Park on the Council's Carbon Footprint

3. Figure one below shows the carbon footprint of Osborn Road car park over the past four years and its relation to the Council's overall Scope 2 footprint.

Figure 1: Osborn Road Car Park Carbon Footprint



- The car park has seen a 28% reduction in emissions since 2019/20 but still produced 55.6 tCO₂e in 2022/23. In 2022/23 the car park accounted for 20% of the Council's total Scope 2 carbon footprint.
- The main cause of the car parks emissions is the electricity that is required to power the car parks lighting. The electricity cost of the car park in 2022/23 was £87,116.

Carbon Emissions Associated with the Construction Phase of the Redevelopment

- To reduce the carbon impact of the construction phase; when the current multi-storey building is demolished, we will work with the successful contractor to maximise the amount of recycled material used. It is estimated that over 90% of the existing material will be recovered and used as recycled material.

Effect of the Redeveloped Osborn Road Car Park on the Council's Carbon Footprint

- As the redeveloped car park will be a surface car park, the number of lights at the site will reduce significantly compared to what is currently at the multi-storey car park. The lighting will be LED and therefore, will be considerably more efficient than the existing lighting.
- It is estimated that the redeveloped site will use around 10% of the electricity consumption that the current site uses. This would mean that the car park's footprint would reduce to around 5 tCO₂e per year. The reduction in electricity consumption would also provide a significant financial benefit with the annual electricity cost of the car park estimated to reduce by around £75,000 based on 2022/23 prices.