



Parks & Landscape Services Section, Municipal Services Department

**Proposed Development of Myrtle Square &
Convent Lane, Dun Laoghaire, Co. Dublin
PC/PKS/01/20**

Appendix 9 – Climate Action Integration Report

Myrtle Square and Convent Lane Greening (Ref: 2471)

Document:	Stage:	Date:	Revision
Climate Integration Report	(ii) Design	16 th Sep 2020	0

1. Introduction:

Climate change action is embedded and integrated into the entire project and will be further considered in all aspects of the detail design, tender and construction. It is hoped that this project will be a catalyst for the businesses and residents to develop further climate led projects. The overall vision is for Dun Laoghaire to become a low carbon, climate resilient and sustainable town.

2. Alignment with National Policy on Climate Action:

The Climate Action Plan 2019 sets out ambitious plans to reduce Carbon Emissions by 2030. It sets out a plan to achieve net zero carbon energy systems objective for Irish society and in the process, create a resilient, vibrant and sustainable country. It also states that ‘Decarbonisation is now a must if the world is to contain the damage and build resilience in the face of such a profound challenge’.

The proposal will fundamentally alter the streetscape, greening and softening key areas, giving priority to pedestrians over car traffic, encouraging biodiversity and creating a new civic space to allow for relaxation, play and community events in the centre of Dún Laoghaire Town. The proposal for place-making through greening will help to stimulate increased demand for residential development. This will be high density and integrated with commercial and office use. It meets the aim in the National Climate Action Plan to increase the proximity of residential units “which will require less energy and make renewables-based systems of energy distribution such as district heating, or area-wide technology upgrades, more feasible”.

Dún Laoghaire Town has the existing infrastructure and spatial pattern that lends itself to the development of sustainable communities as envisaged in the National Planning Framework and in the National Climate Action Plan. In this regard, it is served with good public transport that includes DART, strong bus network and Aircoach.

The Town’s urban form and density imbue it with a sustainable urban character with the potential for place-related measures to reduce energy demand and emissions.

3. Alignment with Local Policy on Climate Action:

DLRCC's existing Climate Change Action Plan 2019-2024 sets out a range of climate-related policies that the Council is implementing, including energy and resource reduction, flood resilience, and transport. Nature-based solutions are a key area for action. The Project aligns with the Council's broader strategy to increase vegetative cover and add quality public open space in the built environment. New urban forests and transforming grass lands and roadside verges to meadows significantly increase biodiversity and local capacity for carbon capture and cooling of the air. As clearly stated in the Plan: "Trees have multiple benefits in reducing the risk of climate change impacts. Through their root systems they reduce soil erosion, attenuate water and sequester atmospheric carbon as part of the carbon cycle, meaning that over its lifetime, a single tree can absorb several tonnes of atmospheric carbon dioxide".

The Project will implement nature-based solutions by expanding the urban tree canopy and increasing green infrastructure and sustainable urban drainage. These are critical for local climate change mitigation and adaptation as emphasised in the Plan. These actions will help to prevent flooding and erosion, regulate temperatures, absorb carbon, and filter pollutants from the air. By delivering the place-making through greening with a range of amenities, the project will not only increase green infrastructure in a densely built-up environment but will also add value by increasing recreational amenities for residents and employees on the doorstep of their homes and workplaces.

The project will include programming of the newly developed public open spaces with the intention of involving residents and businesses in public education processes to increase awareness of the value of the open spaces and urban forests as well as the joint commitment to reduce the collective carbon footprint. This will include volunteer activities such as planting trees and calculating the urban canopy's sequestration impact. Smart technology can play a role in educating the public through interactive recording of local atmospheric and climate conditions. This education process will be part of a comprehensive place transformation where residents and businesses transition to more sustainable lifestyles including their choices of modes of transport and their active use and appreciation of a 'growing' natural environment in their locality.

The DLR Climate Change Action Plan 2019-2024 identifies the main climate risks facing Dún Laoghaire-Rathdown and includes both the Council's and the current levels of greenhouse gas emissions across the Council's administrative area. In response to this baseline, the Plan put forward a range of actions that are ongoing or planned within the Council, under five key areas - Energy and Buildings, Transport, Flood Resilience, Nature-Based Solutions and Resource

Management. This project will fully align with that plan and incorporate as many actions/initiatives as possible. This is summarised under the five action areas as follows:

Energy & Buildings:

- In the demolition process at Myrtle Square, the re-use and recycling of materials which would normally go to landfill will be strongly considered.
- Renewable energy (solar/pv) will be used to power streetlights and other elements.
- Robust materials will be sourced within a specific radius to reduce the carbon footprint.
- LED lighting, smart lighting and smart metering will be used throughout the project areas.

Transport:

- 20 on-street car-parking spaces will be removed supporting a target to reduce the prevalence of private cars.
- A traffic through-route will be removed, emphasising the priority for pedestrians and cyclists to use the space, improving air quality and allowing space to congregate or distance.
- Convent Lane will provide a safer route to the school planned for George's Place.
- Ample bike parking stands will be provided and will include capacity for bike-sharing schemes.
- The project will align with the Design Manual for Urban Roads & Streets (DMURS) to improve safety and place-making

Flood Resilience:

- These projects will manage all the rainfall runoff and use the rainfall to add to the greening through rain gardens and other SUDS measures.

Nature Based Solutions:

- Biodiversity and ecosystems will be enhanced through greening and pollinator-friendly planting schemes.
- Tree cover will be maximised through street trees and groves to create an urban forest with an emphasis on native tree species.
- The project will align and tie in with the DLR Green infrastructure Strategy and the corridor links with Dún Laoghaire.
- Drinking water fountains for re-filling water bottles and reducing single use plastics will be provided.
- Integrated SUDS will eliminate the requirement for irrigation systems

Resource Management:

- The project team are committed to interrogating materials and construction methods to reduce the carbon footprint during the build process.
- Climate change innovations will be used in the Award Criteria when assessing contractor bids for works.
- The project will provide real time information relating to climate change using smart technology to inform, educate and inspire the town's population.