

# Climate Action Plan Update

## Waterford City- Our Decarbonizing Zone

Proposed actions



**Climate Action**  
A Smarter, Greener Waterford

## Contents

1. What stage is the Climate Action Plan at? .....	3
2. Next steps in formulating the Climate Action Plan .....	3
3. The Decarbonising Zone Chapter .....	3
3.1 Action Area 1: Coordination.....	4
3.2 Action Area 2: Climate Adaptation.....	5
3.3 Action Area 3: Biodiversity .....	7
3.4 Action Area 4: Energy.....	7
3.5 Action Area 5: Environmental Awareness.....	8
3.6 Action Area 6: Finance .....	9
3.7 Action Area 7: Social Housing .....	9
3.8 Action Area 8: Parks and Recreation .....	10
3.9 Action Area 9: Planning.....	11
3.10 Action Area 10: Waste.....	11
3.11 Action Area 11: Roads and Transport.....	12
3.12 Action Area 12: Water.....	15



**Climate Action**  
A Smarter, Greener Waterford

## 1. What stage is the Climate Action Plan at?

The Pre-draft consultation was completed in June and since then the Climate Action Team have been gathering input from Council staff. Inputs relating to the County and the information from the pre-draft consultation have been put together to create a vision and climate actions under the five heads of Governance, Built Infrastructure, Natural Environment & Green Infrastructure, Communities and Sustainable Consumption. In the case of the City information has been analysed to create a Register of Opportunities, groupings of actions that will allow the city to reduce emissions, improve air quality and save money.

## 2. Next steps in formulating the Climate Action Plan

Councillors are welcome to provide their feedback on the actions suggested after this meeting by emailing [gkennedy@waterfordcouncil](mailto:gkennedy@waterfordcouncil) or by phoning 087 3845102. Feedback should be received by **September 13<sup>th</sup>**. The completed actions list and chapters of the Climate Action Plan will be sent for designing and translation and the draft consultation will take place between October 23<sup>rd</sup> and December 5<sup>th</sup>.

The plan will go to Council in the New Year and if adopted will be in place between 2024 and 2029.

## 3. The Decarbonising Zone Chapter

In 2019 the Government asked Local Authorities to choose a Decarbonising Zone, this is an area where the Local Authorities will try out new technologies and methods to reduce greenhouse gas emissions. Waterford City and County Council chose Waterford City as our Decarbonising Zone and will dedicate a chapter in the Climate Action Plan to interventions in the city that will reduce emissions.

The breakdown of where emissions come from in the city is detailed below.

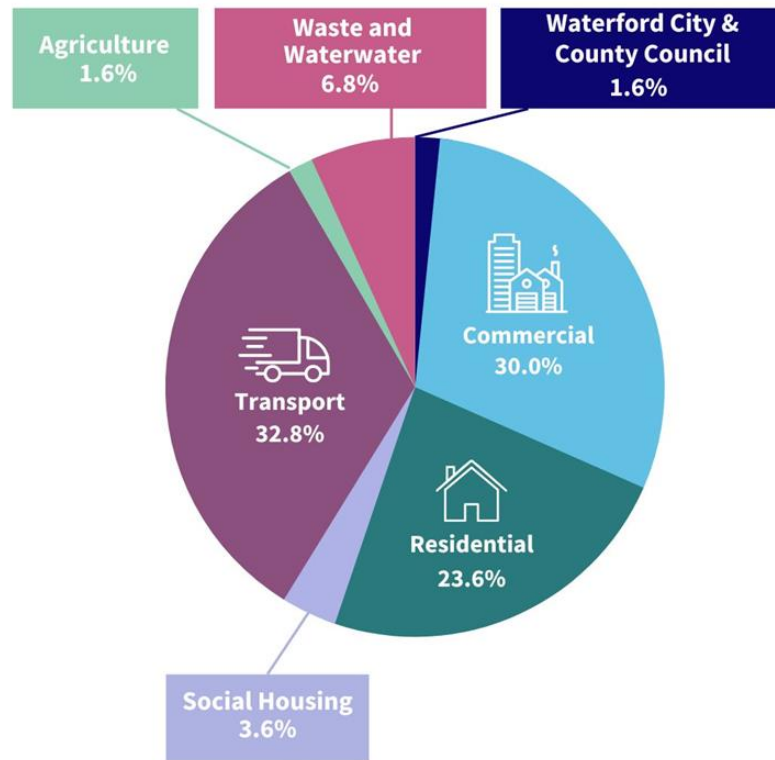
These emissions divide between areas where the Council has a lot of control and can make changes (social housing, lighting, roads, Council buildings etc.) to areas where the Council can influence change (business, planning, private households).

We have a legal obligation to reduce emissions from our own operations by 51% by 2030 and we are being asked to facilitate a 51% emissions reduction in the city too, although as mentioned above not all of those emissions are under Council control.

The actions proposed under 12 categories are laid out below.



**Climate Action**  
A Smarter, Greener Waterford



**Figure 1: Emissions breakdown in Waterford City.**

### 3.1 Action Area 1: Coordination

The Decarbonising Zone provides the Council with the opportunity to work on an area-by-area basis coordinating all services and working with communities to make energy savings, to change transport modes and to green their neighborhood with planting. Achieving the goals of improving quality of life, saving money and reducing emissions.



**Climate Action**  
A Smarter, Greener Waterford

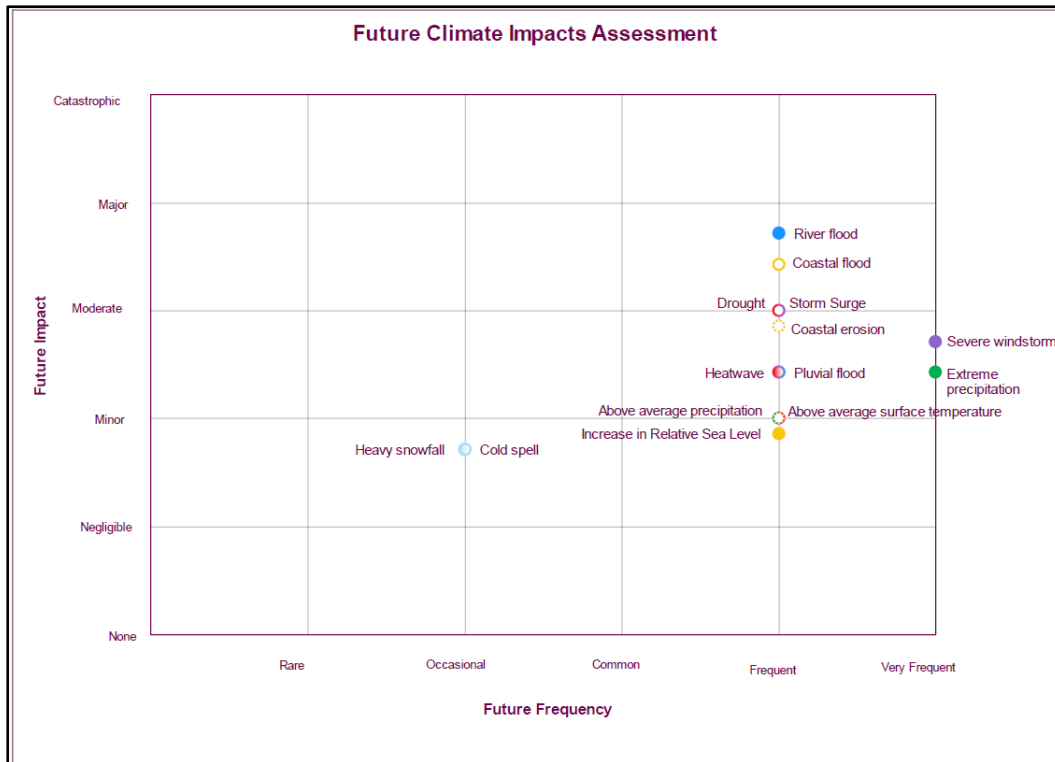
1.1	Facilitate a number of city groups to encourage collaboration on meeting the City's Decarbonisation goals - these will include large employers, the Chambers, SETU, Retailers
1.2	Coordinate Climate Action with Kilkenny County Council in relation to Ferrybank
1.3	Develop a Carbon Neutral Community programme where we establish an energy cooperative in a pilot community and deliver renewable energy and energy efficiency solutions for homes and transport
1.4	Work on an area by area basis (City Centre, Ballybricken, Carrickpherish, Poleberry etc) over a number of months to have a presence in the community to provide advice to the public and businesses while also delivering projects in Active Travel, Presentation, Roads, Climate Adaptation, Housing etc. To provide information on existing services and to collaborate with the community going forward to develop projects and source financing/funding. Breaking the Decarbonisation Zone plan down to manageable community actions

### 3.2 Action Area 2: Climate Adaptation

A Climate Risk Assessment has identified a number of extreme weather patterns that are likely to increase as greenhouse gas emissions continue to rise. Pluvial flooding or cloud bursts are likely to overwhelm gullies and to impact the city as there are few areas where the water can soak into the ground. Paved surfaces also lead to higher temperatures in the city and a phenomenon called Urban Heat Island Effect where the city is several degrees warmer than the surrounding countryside. High urban temperatures can greatly impact the older population in the city, so our Climate Adaptation actions need to take account of cooling as well as run off and flooding reduction.



**Climate Action**  
A Smarter, Greener Waterford



2.1	Sustainable Urban Drainage Systems (SUDS) to be incorporated in street upgrades, Council building projects and private developments.
2.2	Work with 4 regions in the city (e.g. Ballybricken, Carrickpherish) to co-design with the community climate adaptation interventions - planting, Sustainable Urban Drainage Systems, green roofs rainwater harvesting etc.
2.3	Increase tree-canopy cover to 20.9% uniformly across the city. A particular focus will be on areas of the city with limited tree coverage at present, areas that are likely to get uncomfortable warm due to the Urban Heat Island effect.
2.4	Work with the Presentation team to identify new methods of planting that take into account periods of drought - a particular focus on hanging baskets
2.5	Put in place a park of regional significance as per County Development Plan incorporating Nature Based Solutions to reduce flood likelihood
2.6	Climate Adaptation measures to be incorporated into all Council developments going forward - larger downpipes, SUDS, Nature Based Solutions
2.7	Implementing permeable surfaces (bioswales / rainbeds / pervious pavement) - requirement in new developments
2.8	Create a community competition for Parklets - areas that can be extended into a parking space that are planted or are rest areas



**Climate Action**  
A Smarter, Greener Waterford

### 3.3 Action Area 3: Biodiversity

3.1	Develop a nature corridor across the city - encouraging householders to use their gardens to facilitate wildlife
3.2	Incorporate practices as recommended by the National Pollinator Plan in city parks management
3.3	Whips and Wildflower planting/management in Williamstown Golf Course

### 3.4 Action Area 4: Energy

Energy use in Waterford City accounts for almost 60% of greenhouse gas emissions in the City. Waterford is also the County with the highest rates of fuel poverty in Ireland. People here are paying more of their income here, to heat buildings than anywhere else. Actions in the area of energy could save money and lead to a better quality of life in the City.

4.1	Complete a drone study of all suitable roof space for solar PV
4.2	Deliver a 50% energy efficiency improvement in Council owned buildings in the City
4.3	Equip existing Council buildings with a building automation and control system before 31 December 2024 where the effective rated output for heating, ventilation and air-conditioning systems is over a threshold of 290kW
4.4	Work with partners to deliver a District Heating Scheme for Waterford City
4.5	Ensure any new developments along any future District Heating route are District Heating compatible at the planning stage
4.6	Upgrade of public buildings to BER B
4.7	Do a review of Council owned land in the city for solar suitability and develop solar energy projects. Study to be done in conjunction with SETU
4.8	Deploy solar energy on all Council buildings with a floor area of greater than 250m <sup>2</sup>
4.9	Replace inefficient streetlights with LEDs
4.10	Development of a Smart City District on O Connell Street and the Quays (centralised at the Munster Express Building) that will use sensors to maximise energy production, efficient energy use, report risk of drain flooding and communicate air quality impacts
4.11	All new homes are constructed to a BER rating standard of A2 - A3
4.12	Through the Croí Conaithe scheme bring existing buildings up to a high energy efficient standard ensuring occupancy rates are high in our city centre
4.13	Removal of fossil fuel heating from all Council buildings



**Climate Action**  
A Smarter, Greener Waterford

4.14	In conjunction with the Local Enterprise Office compile a strategy for developing the Geothermal Industry in Waterford City Along with conducting a feasibility study for the city based on GSI recommendations
4.15	Investigate the potential for and funding sources to develop our approach to affordable net zero energy retrofits by city district e.g. Ballybricken, Ardkeen, Carrickpherish
4.16	Update Renewable Energy Strategy, within City and County Development Plan
4.17	Continue to support the general public on fuel poverty abatement schemes and assist in accessing such funded schemes such as the "Warmer Homes Scheme".
4.18	North Quays to be an exemplar example of sustainable energy technologies
4.19	Develop a "Hydrogen Energy Strategy" for Waterford City and resource implementation of aspects of the National Strategy that can be advanced in Waterford
4.20	Exploit Waterford's Shallow Geothermal opportunities by including Geothermal as a heat source for a District Heating and by including Geothermal heating where suitable in Council redevelopment projects
4.21	Develop Solar Car port projects (1MW) and a solar farm within the city (9MW)
4.22	Investigate the requirements for large scale installation of low carbon sources of heating (air/ground/water source heat pumps), using council owned homes as a test bed in partnership with grid operators and supply chains

### 3.5 Action Area 5: Environmental Awareness

The EPA's Climate in the Irish Mind study showed that over 80% of Waterford people were very worried about Climate Change but less than 20% of respondents felt that they could be active in this space. It is clear that there is a shortage of opportunities for the public to learn and take action to relieve their worries, and for that reason until the end of the decade we will run initiatives that the public can engage in.



**Climate Action**  
A Smarter, Greener Waterford



5.1	Through the libraries and Family Resource Centres run an Energy Poverty campaign informing households of their options for home upgrades
5.2	Host monthly Climate Cafes in different parts of the city where the community can get advice on sustainability in their areas
5.3	Hold an annual schools Climate Conference for City Secondary Schools
5.4	Develop a Carbon Neutral Waterford brand that can be used for signage for any emissions reducing projects. Signage would use QR codes to connect to an online record of projects in the public, community and private sector.
5.5	Focussed road safety campaign particularly focussed on parking of footpaths and cycle lanes near schools
5.6	Work with Waterford Walls and other arts campaigns to use art to facilitate Climate Action
5.7	Create and deliver the Commerce for a Carbon Neutral Waterford scheme where businesses can play their part in reducing emissions in Waterford City
5.8	Continue to engage with businesses encouraging them to save energy with the Commercial Energy Rates Discount Scheme
5.9	Actual energy monitoring for business SMEs
5.10	Reward scheme for pro environmental behaviours - Gamify action in conjunction with Waterford businesses/museums/

### 3.6 Action Area 6: Finance

New approaches will be needed to finance the change that will result in a low carbon Waterford City where residents have low energy and transport costs, and where they can access locally produced renewable energy.

6.1	Investigate the possibility of creating a Green Bond for the city which can be used to invest in renewable energy
6.2	Whole life cycle costing of energy in Council redevelopment or building projects

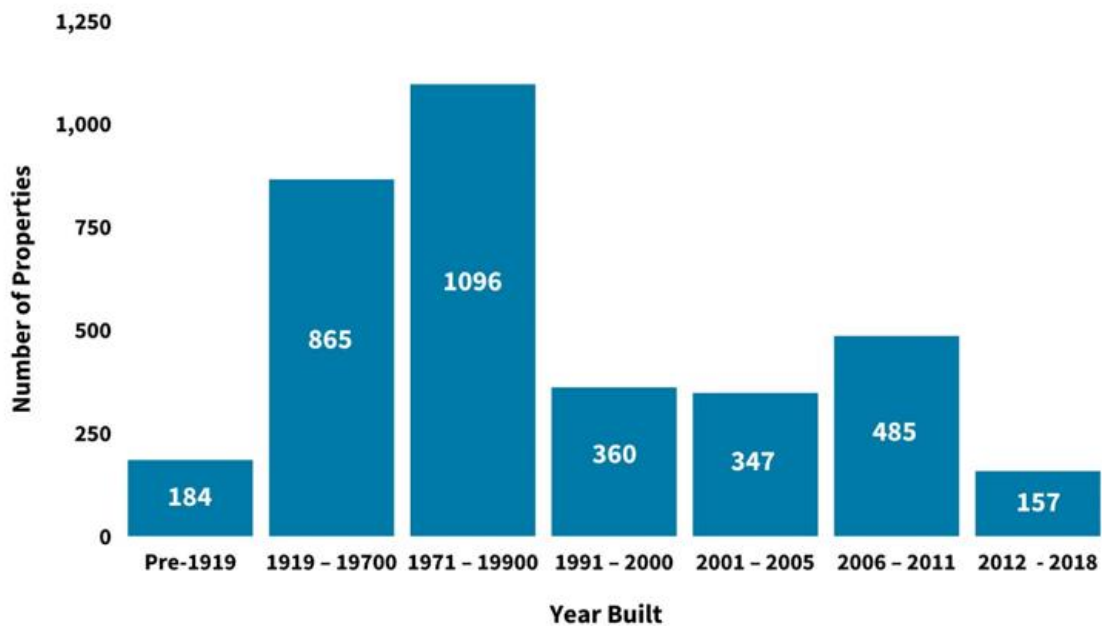
### 3.7 Action Area 7: Social Housing

Waterford City and County Council will work on upgrading as many homes as is possible to a Building Energy Rating of B2 or higher. The majority of building stock in the city is pre-1991,



**Climate Action**  
A Smarter, Greener Waterford

before building regulations prioritized energy efficiency so will need to be retrofitted.



Retrofitted, energy efficient homes are healthier homes with lower energy costs that reduce the risk of residents being in Energy Poverty. Actions to reduce emissions from social housing are listed below.

7.1	Complete a study of BERs across all social housing
7.2	Education campaign for how energy efficient properties operate - videos and guides
7.3	Develop financial instruments that will allow for the acceleration of social housing retrofits resulting in the upgrade of 1,200 homes (55% of the estimated homes below a BER of C) in the city to BER B2 or higher
7.4	Develop a pilot neighbourhood where homes are low energy, renewable energy producing, active transport connected and the site is designed to not contribute to local flooding as it will incorporate Sustainable Urban Drainage Systems

### 3.8 Action Area 8: Parks and Recreation

Green spaces across the city provide a place for residents to exercise, socialize and build community. From a Climate Change point of view these green spaces can help reduce the risk from extreme weather by providing a permeable surface for rain to soak into and by cooling the surrounding area.

Under the Climate Action Plan, Waterford City and County Council will expand the benefits of green spaces.



**Climate Action**  
A Smarter, Greener Waterford

8.1	Plant 100,000 trees within the Metropolitan area
8.2	Carbon sequestration through detailed tree / meadow planting / growing, rewilding, soil management, waterways and wetland planning, informed by habitat mapping, opportunity mapping and tree canopy surveys
8.3	Reduce use of fertilizers by increased use of locally produced compost and local allotment growing
8.4	Habitat mapping and biodiversity opportunity mapping to understand development opportunities and future habitat options for the open space network outlined in open and green space plans
8.5	Increase shade in public spaces (vegetation, retractable roofs, tensile structures, etc.)

### 3.9 Action Area 9: Planning

The planning process can ensure that all future developments are low carbon emitting and can make sure that consideration is given in project design to Nature Based Solutions that will prevent flood damage and overheating.

9.1	15% of the area of all new sites being set aside for nature - planning condition
9.2	Integration of renewable energy, EV charging, active travel infrastructure into new developments
9.3	In URDF projects facilitate a city centre cooperative community with a collective skill set that can tackle renovation projects from within its own resources. This work should have a focus on Circular Economy, making tools and skills available for people to do up properties that they can live in

### 3.10 Action Area 10: Waste

Ireland produces more packaging waste per person than any of our European neighbours and we recycle less than 30% of our waste. This is a missed opportunity to keep the materials that we use in use for longer, and there is also a missed opportunity to repair materials locally.

Through the Climate Action Plan, we will give people the opportunity to save money and goods while reducing waste.

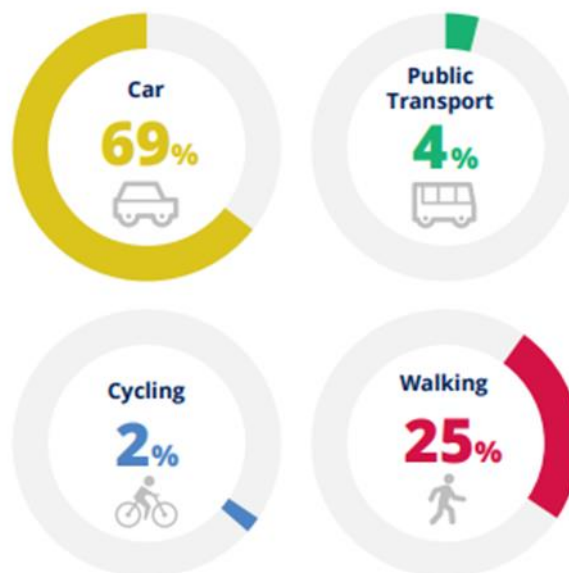


**Climate Action**  
A Smarter, Greener Waterford

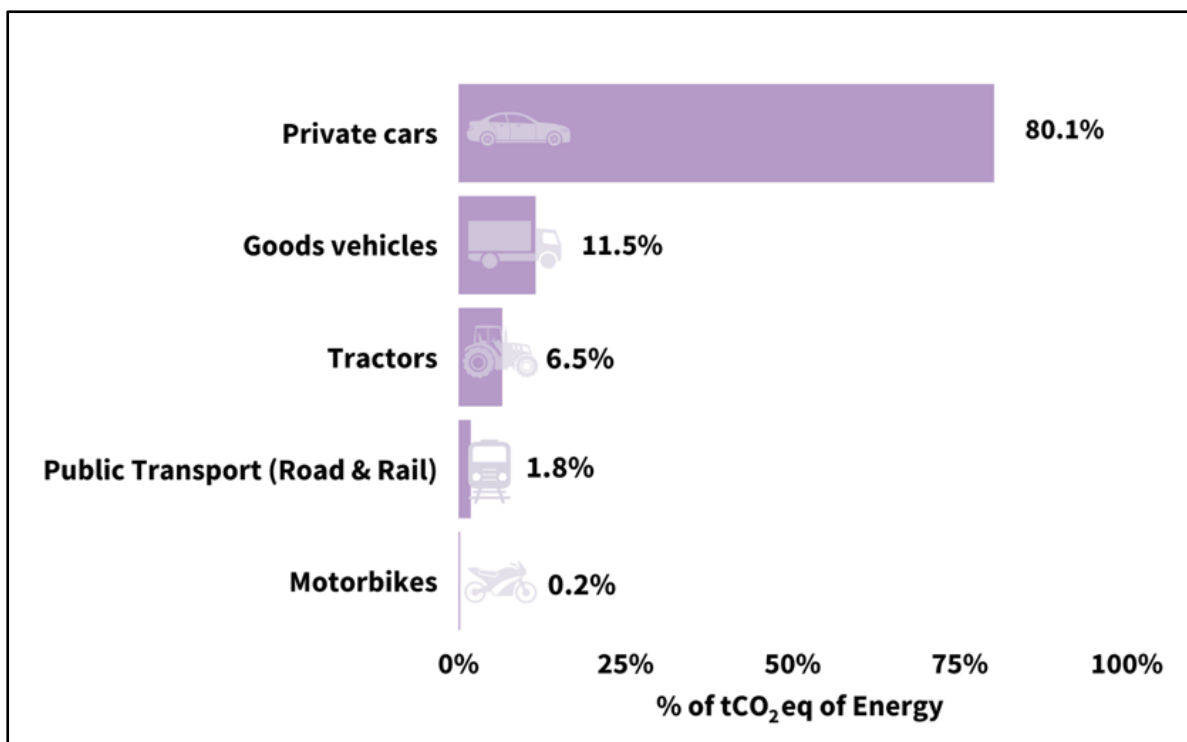
10.1	Put in place a bike library for citizens to trial bikes
10.2	Set up a Zero Waste Waterford Campaign to coincide with the changing Waste Management Law. The campaign will work with businesses to reduce paper waste, single use plastics, disposable cup waste etc.
10.3	Borrowboxes for sport equipment
10.4	Investigate the possibility of creating a Repair Hub in the city centre
10.5	Continue to facilitate the "Libraries of things" in city libraries.
10.6	Through the libraries host repair and swap events each year
10.7	Use public spaces for repair pop ups across the year

### 3.11 Action Area 11: Roads and Transport

Waterford City is an area that is highly reliant on single-occupied cars. As a result, there is a high amount of traffic and low numbers of people walking, cycling (Compared to 10% of Dublin people who cycle) or using public transport.



Transport also accounts for almost a third of all emissions in the city, with most of those emissions coming from privately owned cars.



The Waterford Metropolitan Area Strategy (WMATS) has laid out a number of measures that will be taken in the next few years to give city residents better options when it comes to public and active transport, the actions in the Climate Action Plan will either reinforce or build upon the WMATS.

11.1	Completion of the Sustainable Transport Bridge between Ferrybank and Waterford City
11.2	Enable cyclist priority on traffic lights in the city that have that feature and incorporate that feature when traffic lights need to be replaced
11.3	Install 33.9 Km of cycle lanes
11.4	Review public parking and staff parking to see the impact of car pooling, car sharing, public transport and active travel to identify areas where different usages could be applied for those spaces
11.5	Deliver a cycle parking initiative with large employers in the City
11.6	Install 3 Km of upgraded footpaths along with maintaining existing footpaths
11.7	Work with the City's large employers on achieving the Smarter Travel Mark and participate in the Mark as a Council
11.8	Develop a Mobility As A Service platform in partnership with public transport operators and service providers of shared transport solutions such as car clubs and bike hire



**Climate Action**  
A Smarter, Greener Waterford

11.9	Work with postal and delivery companies to set up a "Last Mile Delivery" trial in Waterford
11.10	Maintain and promote the public bike scheme - liaise with the NTA on the extension of the scheme
11.11	Install bike repair stands in busy cycling locations
11.12	Increase the number of Council staff walking, cycling , taking public transport and car pooling in the city to 50%
11.13	Adjust Council staff parking policy to encourage staff to travel actively, use public transport, car pool and use pool bikes where possible
11.14	Complete an EV charging strategy and apply for the Neighbourhood Charging Fund for the required number of chargers and ensure that all new plannings for developments include the legally mandated EV charger requirement
11.15	Deliver at least 5 Safe Routes to Schools campaigns at City Schools - this will depend on school demand
11.16	Air pollution monitoring programme at City Schools with education programme
11.17	Review of bus lanes in the city and extension as part of the Bus Connects programme
11.18	Deliver a car pooling app for the City and a campaign to encourage individuals to car pool - this will be done in conjunction with the large employers in the city
11.19	Car pool parking to be identified and marked out within car parks - citizens who car pool will have access to the best car park spaces and parking attendants will be able to verify car pooling.
11.20	Review of parking policy to reflect the benefit of people car pooling
11.21	Zero emissions vehicles will be used in for Council work in the City
11.22	Reduce speed limit to 30kph in the Metropolitan Area as specified in the Metropolitan Area Transport Strategy
11.23	Low Emission Zones in the City Centre and Demand Management
11.24	Run an anti-idling campaign at all primary schools in the city, educating the public on how bad air quality is for children
11.25	Put in place transport hubs where citizens can rent a bike, car or scooter.
11.26	Promotion of Playful City Guidance amongst communities that apply for funding for community events.Streets closed off to encourage cycling and walking to be considered as part of the funding requirement for small community festivals
11.27	City Centre involvement in European Car Free Day and Clean Air Day (Certain streets closed to traffic and events)



**Climate Action**  
A Smarter, Greener Waterford

11.28	Delivery of Park and Ride
11.29	Restriction of traffic of a certain axle through the city - extension of 5 axle ban to anything above 4 axles
11.30	Continue to work with the NTA to provide infrastructure for the bus network - the city bus network will be electrified and extended within this period with input from the Council
11.31	Facilitate a bike delivery trial in the city

### 3.12 Action Area 12: Water

12.1	Incorporate water conservation in all new developments
12.2	Work with communities to incorporate rainwater harvesting into projects



**Climate Action**  
A Smarter, Greener Waterford