Matrix to Assess Climate Change Impacts

The sustainability impacts of Waltham Forest's Climate Action Plan and ambition to be net Zero by 2030 will be wide ranging and highly impactful. Positive impacts will deliver collective action against climate change which will benefit all residents of Waltham Forest. Any potential negative impacts would be mitigated. These impacts will be promoted as individual programmes of work and as part of a wider Behaviour Change Strategy.

Aim is to reduce Carbon Emissions (CO2) by 80% by 2050	Positive impact	Negative impact	Mitigation measure	Effect on CO2 emissions (+ or - tonnes of CO2)	Opportunity to promote
Water Water Use and Flooding	Collective action to build flood resilience Implement Sustainable Drainage Systems (SuDS) through planning requirements				Waltham Forest's Behaviour Change Strategy and individual projects from the Climate Action Plan will be used to promote climate action with local residents, businesses and communities.
Energy Energy efficiency and energy saving in buildings, including opportunities for installation of renewable energy generation	Deliver deep retrofits for all fuel poor homes across the borough. Encourage quick-win energy improvements for households Launch a retrofit loan for homes Create a Waltham	Retrofit projects: Embodied carbon of building materials.	Prioritisation of materials with low embodied carbon. Sustainability requirements to be set out in any contracts with developers or suppliers.	24.5ktonnes CO2e. through retrofitting fuel poor homes to EPC C. An additional 24ktonnes of CO2e could be achieved through EPC B Between 380 – 950 tonnes CO2e by retrofitting 200-500	Waltham Forest's Behaviour Change Strategy and individual projects from the Climate Action Plan will be used to promote climate action with local residents, businesses and communities.

Aim is to reduce Carbon Emissions (CO2) by 80% by 2050	Positive impact	Negative impact	Mitigation measure	Effect on CO2 emissions (+ or - tonnes of CO2)	Opportunity to promote
	Forest Retrofit Company Provide tailored support for top 20 business emitters across the borough			homes to EPC B 1,070 tonnes CO2e by retrofitting 564homes from EPC G to B 3,060 tonnes CO2e potential mitigation potential from top 20 energy consumers across the borough	
Air Air quality, pollution	Overall reduction in emissions from actions across the CAP will have a cumulative positive effect on air quality & pollution			Cannot be quantified at this stage, but will form part of monitoring of CAP.	Waltham Forest's Behaviour Change Strategy and individual projects from the Climate Action Plan will be used to promote climate action with local residents, businesses and communities.
Waste – reducing, reusing and recycling waste	Improve and expand the waste collection system through food waste collection and fortnightly residual waste collection Run targeted	Potential emissions from transportation/redistribution of food surplus.	Where possible would ensure that transportation is Zero/low emission.	10 ktonnes CO2e consumption-based emissions assuming the repair cafes and library of things result in 10% reduction in the consumption of	Waltham Forest's Behaviour Change Strategy and individual projects from the Climate Action Plan will be used to promote climate action with local residents, businesses and communities.

Aim is to reduce Carbon Emissions (CO2) by 80% by 2050	Positive impact	Negative impact	Mitigation measure	Effect on CO2 emissions (+ or - tonnes of CO2)	Opportunity to promote
	communications campaigns around food and other recyclable wastes Redistribute surplus food to minimise avoidable food waste Increase and support access to reuse and repair initiatives Provide a Library of Things in every library Place climate at the heart of everything that the Council purchases Eliminate single use packaging from all Council operations Showcase sustainable choices across Council-run events and			consumer goods Reducing food waste could help to reduce food-related consumption-based emissions up to 5%	

Aim is to reduce Carbon Emissions (CO2) by 80% by 2050	Positive impact	Negative impact	Mitigation measure	Effect on CO2 emissions (+ or - tonnes of CO2)	Opportunity to promote
	destinations				
Land Use of brown-field and green-field sites					
Bio-diversity Effects on bio-diversity including green space, trees, rivers and streams	Make Waltham Forest a haven for nature Extend tree planting schemes More effectively and equitably manage our green spaces Boost biodiversity across the Council estate Expand Biodiversity expertise within the Council			Indirect impact to boost biodiversity across the borough 12.15 tonnes CO2e sequestered per year for 10,000 trees	Waltham Forest's Behaviour Change Strategy and individual projects from the Climate Action Plan will be used to promote climate action with local residents, businesses and communities.
Transport	End the waiting list	Carbon impact of	Would be offset by the impact and	400 tonnes CO2e could be mitigated	Waltham Forest's Behaviour Change

Aim is to reduce Carbon Emissions (CO2) by 80% by 2050	Positive impact	Negative impact	Mitigation measure	Effect on CO2 emissions (+ or - tonnes of CO2)	Opportunity to promote
Travelling to deliver service. Discouraging car use and encouraging walking, cycling and use of public transport	for cycle hangars Break the mould of car ownership by expanding access to car sharing Reclaim streets for people Pedestrianising the town centre or high-street roads on Develop 15-minute neighbourhoods to ensure the needs of residents and businesses can be met locally Extend 20mph limit zone to all residential areas Repurpose borough car parks for other uses. Expand EV charging	building/materials.	effectiveness of final delivered solutions.	with a 1% shift from car to active travel London's last car-free day saw NO2 concentrations between 40-60%lower If car free days could shift car use by 1%, approximately could be 400 tonnes CO2e mitigated 400 tonnes CO2e could be mitigated with a 1% shift from car use 30-41 ktonnes CO2e per year as a result of shifting to EVs Between 25 – 2,000TCO2e each year	Strategy and individual projects from the Climate Action Plan will be used to promote climate action with local residents, businesses and communities.

Aim is to reduce Carbon Emissions (CO2) by 80% by 2050	Positive impact	Negative impact	Mitigation measure	Effect on CO2 emissions (+ or - tonnes of CO2)	Opportunity to promote
	across the borough Halve commuting emissions of Waltham Forest employees All Council's fleet (including leased vehicles) to be fully electric by 2030				
Buildings Adaptability of buildings to heat or flooding. Use of green roofs, rainwater harvesting etc.	Build like it's 2030: go further on the standards of our own developments Retrofit all Council owned, occupied or developed buildings to an average of EPC level B or higher by 2030 Install solar panels on all viable Council-owned buildings by 2030 Incorporate adaptive	Developments & construction: Embodied carbon of building materials.	Prioritisation of materials with low embodied carbon. Sustainability requirements to be set out in any contracts with developers or suppliers.	12.475 ktonnes CO2e for building 27,000 new homes to Future Homes Standards when compared to current building regulations Mitigating approximately 60 tonnes CO2e each year	Waltham Forest's Behaviour Change Strategy and individual projects from the Climate Action Plan will be used to promote climate action with local residents, businesses and communities.

Aim is to reduce Carbon Emissions (CO2) by 80% by 2050	Positive impact	Negative impact	Mitigation measure	Effect on CO2 emissions (+ or - tonnes of CO2)	Opportunity to promote
	measures when retrofitting buildings and create new building codes				

Commentary on any differences in financial costings for climate change mitigation / adaptation measures including energy efficiency and potential external grant sources
Individual cost implications will be assessed at project stage.
Potential "whole life costing" savings ie: increased installation costs will achieve running cost savings over lifetime; including reduced use of resources eg: water saving devices
Individual cost implications will be assessed at project stage.
Explanation of Proposal chosen in context of results matrix assessment, including what mitigating steps can and have been taken

Mitigation steps will be considered at individual project stage and be the subject of future Cabinet reports as appropriate.
Total Tonnes of CO2 & DEC rating of building to be occupied: **TO BE QUOTED DIRECTLY IN CABINET REPORT**
Cannot be quantified at this stage – but will be included in project monitoring of CAP implementation