

Appendix B - High Level Corporate Risks

Climate Change	Current Risk Rating	Target Risk Rating	Target Reduction Date
<p>Risk: Cardiff is not able to manage the effects of climate change and energy security due to lack of future proofing for key (social and civil) infrastructure and business development</p>	<p>A1 (very likely/ major)</p>	<p>B2 (likely/ significant)</p>	<p>(phased reduction – A2/B1 by March 2022)</p>
<p><u>What we've done/are currently doing to achieve the Residual Risk Rating</u></p> <p>The Council has declared a Climate Emergency and instigated a One Planet Cardiff Strategy as its strategic response to this (approved October 14th 2021).</p> <p>The following specific risk areas have been identified:</p> <ul style="list-style-type: none"> • Coastal Erosion (reported separately) • Flooding • Extreme Weather • Energy Security & Decarbonisation • Biodiversity <p>Number of initiatives progressed to help mitigate risk including:</p> <ul style="list-style-type: none"> • Introduction of Flood Incident Management software to provide better understanding of spatial distribution of flood events filtered by source, and determine priority areas for future flood alleviation schemes to be implemented • Ongoing CCTV and asset capture work taking place in drainage networks to review high risk areas • Applications to WG have been successful for further grant funding in 2021/22 to support studies and implementation of localised flood preventions schemes • Development of Flood Risk Management Strategy • Working with Partners in the LRF to warn them of anticipated heatwave impacts upon vulnerable groups and support response to such a risk • Implementation of Council's Cold Weather Response Plans • Winter Service review undertaken to consider the potential impact of Covid-19 - Despite challenging & sub-zero weather conditions, plus resource pressures, service was delivered in line with statutory requirements in 20/21 • Established internal and external partnership and governance boards to steer our response to the climate emergency 			

- Energy efficiency measures being installed through Re-Fit and Salix projects
- Lamby Way solar farm completed and operational in 2020.
- District Heat Network - funding in place, contractor appointed and Special Purpose Vehicle for delivery established - construction planned to start in January 2022
- Electric Vehicle strategy – WG funding secured to install EV chargers at council buildings for small fleet vehicles and charging infrastructure in car parks.
- Carbon baselining and impact modelling process now finalised to assess progress against One Planet Cardiff Objectives
- Developed a Biodiversity and Resilience of Ecosystems Duty Forward Plan, to implement the statutory duty to seek to maintain and enhance biodiversity and in doing so to promote ecosystem resilience (includes Action Plan)

What we plan to do to meet target

- Development of a new iteration of the Local Flood Management Strategy & Flood Risk Management Plan in conjunction with WLGA steering group (due for completion October 2023) - an enhanced engagement programme with partners supporting the public in enhancing their own resilience is a key aspect of the Plan.
- Develop enhanced engagement programme with partners supporting the public in enhancing their own resilience - this will be a key aspect of the above Plan - initial discussions with Dwr Cymru/Welsh Water and Natural Resources Wales (NRW) have taken place
- Improvements to the service provided by the SuDS Approval Body (SAB) – planned with additional resource
- Develop a 20-year heat mitigation strategy for the city
- Implement and monitor the One Planet Cardiff Strategy with carbon reduction targets and associated action plan for delivery over to 2030
- Implement the Cardiff District Heat Network
- Complete a Private Wire connection from the Lamby Way Solar Farm to the Welsh Water treatment works nearby to help decarbonise the city's waste-water processing activities
- Work with WG Energy Services advisors to assess future renewable generation and carbon reduction schemes - ongoing as part of the One Planet Cardiff Project
- Electric Vehicle strategy – Proposals to convert council fleet to electric being reviewed/ assessed to allow for impact of Covid-19 and changes to requirements / working practices
- Implement Coed Caerdydd Programme to increase tree canopy cover within Cardiff to 25% of land area by 2030, subject to funding bids
- Update the Cardiff Biodiversity and Resilience of Ecosystems Duty Forward Plan, including the Action Plan, in 2022 in line with legislative requirements
- Biodiversity Declaration to be signed as agreed in OPC report
- Seek opportunities for partnership working under the 5 main themes of the South Wales Area Statement (building resilient ecosystems, working

with water, connecting people with nature, improving our health, improving our air quality)

- Develop the local Nature Recovery Action Plan through the Local Nature Partnership (LNP)

Key indicators/ measures:

- Storm Events that meet silver & gold emergency intervention
- Annual number of flooded properties and severity (statutory reporting)
- Energy use / renewable energy production of Cardiff Council
- Extent of Green Infrastructure in the City

Air Quality	Current Risk Rating	Target Risk Rating	Target Reduction Date
<p>Risk: Air quality in Cardiff does not meet statutory requirements set by legislation and continues to have a detrimental impact on health for residents and visitors to Cardiff</p>	<p>B2 (likely/ significant)</p>	<p>C3 (possible/ moderate)</p>	<p>March 2022 (<i>subject to ongoing review & evaluation of Castle Street changes to ensure compliance – further measures may be required</i>)</p>

What we've done / are currently doing to achieve the Residual Risk Rating

Monitoring:

- Non-automatic nitrogen dioxide (NO2) monitoring sites at 136 locations.
- Data includes monitoring at schools as part of the TRO pilot projects at schools
- There are three live 24/7 monitoring stations:
 - Cardiff Frederick Street: measuring levels of NO2, PM10 & PM2.5, SO2, CO and O3
 - Richard's Terrace, Newport Road: measuring levels of NO2 & PM10
 - Castle Street measuring levels of NO2 PM10 and PM2.5
- 7 near real time indicative automatic analysers located predominantly in Cardiff's City Centre (5), one in Llandaff within the established AQMA and one in Canton on Lansdowne Road. These sites measure on a 24/7 basis, continuously monitoring for Nitric Oxide, Nitrogen Dioxide, Ozone, PM10 & PM2.5, and does so every 15 minutes
- Funding secured via One Planet to implement Ph1 of wider real-time monitoring network - to be established Q3/4

Air Quality Management Areas (AQMA's)

- Cardiff has 4 existing declared Air Quality Management Areas (AQMA's) all as a result of elevated NO2 concentrations from road traffic emissions.
- Ongoing recovery measures e.g., closure of Castle Street has enabled maintenance of reduced air quality concentrations. 2020 APR indicated compliance at all monitoring locations across Cardiff, but results are influenced by COVID impacts and overall reduced traffic volumes.
- Construction of Ph1 City Centre West scheme (Wood St & Central Square) - ongoing.
- Completion of Bus Retrofitting Programme of 49 buses – buses have been fitted with exhaust technology which reduces NOx emissions from the buses by 90%
- Ongoing discussions with WG on Castle Street Options, as contract for Interim arrangements has been awarded.

Taxi Scheme

- T&Cs for Scheme signed off from legal advisors and website being updated.
- 5 WAV EV taxis delivered ongoing discussion with CTS regarding management of lease scheme
 - awaiting political decision for launch

Clean Air Strategy and Action Plan

- A wider Clean Air Strategy and Action Plan has been developed to satisfy the requirements of LAQM. The strategy includes measures that will likely provide further AQ improvements including AQMAs.

What we plan to do to meet target

Implement Clean Air Plan:

- Package of measures as detailed in Final Plan
- Continue ongoing discussions with Welsh Gov on future of Castle Street and funding of permanent scheme. Agree with WG ongoing monitoring plan to assess impacts of interim scheme.
- Finalisation of Evaluation Plan following comments from expert panel on existing proposals.
- Work with Public Health Wales to quantify future health benefits and improvements from reduced emissions/ NO2 concentrations

Clean Air Strategy and Action Plan:

- Roll out of measures (subject to grant bids / funding and COVID restrictions:
 - Risk assess wider roll out of real time monitoring project which would look to target sensitive locations such as primary schools, health centres, nursing homes etc
 - Pilot project – Non-Idling Zones, targeted around schools and work with active travel team to launch

- Living Walls and other Green Infrastructure projects where funding has been secured.
- Progression of EV Infrastructure and Council Fleet working with CTS.
- Air Quality Planning Guidance
- Schools Active Travel
- Behavioural Change Promotion, Car Free Day, Clean Air Day etc.

Key indicators/ measures:

- Implementation Plan for measures (funding dependent)
- Monitoring and Evaluation Plan for Clean Air Plan
- Ongoing monitoring and reporting under LAQM

Coastal Erosion	Current Risk Rating	Target Risk Rating	Target Reduction Date
Risk: Breach of current defences resulting in widespread flooding (current defences are ad hoc and are in a very poor condition)	B2 (likely/ significant)	C2 (possible/ significant)	March 2024
<p><u>What we've done/are currently doing to achieve the Residual Risk Rating</u></p> <ul style="list-style-type: none"> • Incident management arrangements are in place, which whilst not preventative, represent a level of emergency management for a flood and coastal erosion risk event occurring in a significant storm event. • Awareness and consultation events undertaken to raise awareness to those who could be affected <p>Coastal Defence Scheme:</p> <ul style="list-style-type: none"> • The Flood Risk Management Team are undertaking detailed design for the coastal defence scheme • The necessary works are holistic and cannot be phased. Therefore, the residual risk rating cannot be lowered until the completed construction of the coastal defence scheme in its entirety • The inundation risk will be improved by implementing the coastal defence scheme. The scheme will provide defence for a 1 in 200-year severe weather event, plus an allowance for climate change influence of 40% • Formal application has been submitted to Welsh Government (WG) under the WG Coastal Risk Management Programme and development of the Detailed Design and Full Business Case (FBC) for the coastal defence scheme was programmed for completion in May 2020, however this has been impacted by Covid-19 • Ground Investigation commenced February 2020. Due to Covid 19 restrictions, ground investigations were postponed during March 2020 			

- Work ongoing with Emergency Management to formulate interim measures
- Draft Full Business Case submitted to Welsh Government for review
- Prequalification questionnaire (PQQ) procurement process commenced in September and 6 returns assessed.
- The Marine Licence application has been submitted to NRW and has been advertised, as per licence requirements, in the local press on two occasions. The Flood Risk Management Team will now continue to work with NRW through their consideration and review of the application

What we plan to do to meet target

We will be designing & delivering an effective coastal flood protection scheme as a matter of priority - Detailed design and full business case ongoing

Key steps:

- Full Business Case (draft) submitted to WG & refined as necessary - final Welsh Government approval & funding confirmation anticipated by late 2021 /early 2022
- Tender scheme promptly following support from Welsh Government. Contract will be developed as part of detailed design process to support tender process.
- Extensions for timescales due to Covid 19 delays, and complexities of the ground conditions and therefore design, have been agreed with WG - funding for FBC has been increased to cover additional costs (plus WG grant % increase) and extended to 16 March 2022.
- Anticipated construction starting 2022, subject to the above, with completion 2024.
- The costs associated with the Outline and Full Business Cases and Design have been 100% funded by WG. To allow for the increase of the allowance for climate change to 40% and additional works required from the ground investigation results the construction phase is now estimated at £25m (Welsh Government 85% funding = £21,250,000 and CC 15% funding = £3,750,000)
- Following assessment of returns, the full tender process will begin with the 5 successful PQQ candidates. The submission, assessment, selection and award process are forecast to be completed by early 2022

Key indicators/ measures:

- Award of contract for detailed design and Full Business Case - achieved

- Completion of detailed design and Full Business Case by Feb 2021 & submitted to WG for final approval (was May 2020 – extension granted due to pandemic)
- Delivery programme of coastal protection scheme