

**CLIMATE ACTION PLAN PROGRESS UPDATE**  
**WDA/07/21**

**Recommendation**

That:

1. Members note the progress made in relation to measures included in the climate action plan.

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## **CLIMATE ACTION PLAN PROGRESS UPDATE**

**WDA/07/21**

### **Report of the Chief Executive**

#### **1. Purpose of the Report**

- 1.1 Members will recall that at a Special Meeting of the Authority held on 18<sup>th</sup> October 2019 a Climate Emergency was declared. The Authority followed this up by approving a revised Corporate Plan than reflected the emergency at a meeting on 22<sup>nd</sup> November 2019. The Authority then approved an initial Climate Action Plan on 7<sup>th</sup> February 2020. This report provides Members with an update on the progress made by the Authority since the Climate Action Plan was approved.

#### **2. Background**

- 2.1 The Initial Climate Action Plan (attached at Appendix 1) set out the climate challenge and scope of the climate emergency for the Authority with links to circular economy, the role of land and asset management and behavioural change.
- 2.2 At the Authority meeting on 22<sup>nd</sup> November 2019, Members agreed that the climate change impacts of waste and other sustainable waste improvements would be reported against the United Nations Sustainable Development Goals (UN SDGs). An Assessment Report will be presented to Members later this year.
- 2.3 The Initial Climate Action Plan made proposals about the Authority's immediate commitments for 2020/21 with nine core actions in the short- to medium-term (1-3 years).
- 2.4 The plan proposed that three of the core actions should have the following deadlines:

##### **Energy conservation, consumption and production**

To produce a scoping report by 31<sup>st</sup> March 2020 to identify opportunities for extending solar panel use across our portfolio of sites.

### **Closed landfill management - Gas control**

To produce a rationale report for Bidston Moss former landfill by 29 February 2020 laying out the basis of adopting passive methane oxidation with monitoring to control residual gas production and minimise methane emissions to atmosphere.

### **Waste stream and waste treatment impacts**

To produce a report by 31 March 2021 that identifies the carbon impact of different waste stream and treatment methods (including waste collection) and identify future priority materials. Timescales are dependent on confirming a 2 or 4 season compositional analysis.

- 2.5 The progress made by the Authority is set out in summary in the sections below, together with other initiatives that have been progressing throughout the year.
- 2.6 At the same time, there is a wider context to the City Region's response to the climate emergency, and that other organisations, especially the Liverpool City Region Combined Authority (LCRCA) are engaging in the process to ensure the regional response to the climate emergency is robust and co-ordinated.
- 2.7 The LCRCA approved the Liverpool City Region Year One Climate Action Plan 2021-22 at its meeting held on 19<sup>th</sup> March 2021. Whilst the overall plan reflects the LCRCA's wider responsibilities it also reflects the need to respond to the UN SDGs. There are some areas where the LCRCA plan, under the heading "Waste and Resources", overlaps with the MRWA responsibilities and we will continue to work alongside the LCRCA to ensure the best use of our resources in addressing issues that are raised.
- 2.8 Key features of the LCRCA Waste and Resources plan are laid out below and they demonstrate a clear need for MRWA to continue to work closely alongside the LCRCA to ensure the shared goals can be achieved.
- Develop a Zero Waste 2040 strategy for all wastes in the city region, including action plans to reach 55% re-use and recycling by 2025;
  - Move towards a circular economy through improving the effective material resources management by all organisations, and the promotion of positive behaviours from manufacturers and consumers;

- Conduct a Circular City Region Scan to understand how barriers can be overcome and opportunities taken, as well as guidance on how to embed the circular economy in the region;
- Conduct a waste composition analysis (What's in our waste?) to help inform future decisions around waste reduction, reuse and recycling;
- Develop and support the creation of an LCR Reuse Network consisting of reuse, repair, upcycling and sharing hubs to support waste reduction; and
- Implement the National Waste and Resources Strategy at the City Region level.

2.9 The Authority will continue to work alongside the LCRCA to in help them develop and implement the City Region Climate Action Plan.

### **3. MRWA Climate Action Plan priority areas**

As a part of the Authority's initial Climate Action plan, a number of Core Actions were identified. The Authority's progress in the delivery of some of these key outcomes has been delayed by the Covid-19 pandemic and its impact both on working arrangements and society more widely. However, some good progress has been made and this is summarised in the following paragraphs.

#### **Energy conservation, consumption and production**

3.1 The initial plan was to

- Identify opportunities for extending solar panel use across our portfolio of sites; and
- Determine whether or not actual energy supply as "renewables only" could be put in place.

3.2 An initial assessment has been completed in respect of the installation of solar panels and a more detailed scoping report / feasibility study will be prepared. Whilst at present 10% of the Authority's estates roof space has solar panelling, there is a need for additional input from the WMRC contractor – Veolia – for us to be in a better position to understand structural capacity to take additional solar panels. We are currently undertaking a feasibility exercise with solar panel providers for the installation and potential output of solar panels across the entire WMRC estate. We have received 5 quotations for the feasibility study and these

are currently being evaluated, including taking advice from structural engineers. A report for Members will be prepared later this year, which will provide Members with information on the evaluation and options and the recommended implementation plan.

- 3.3 We have engaged with the Green Energy Advice Bureau with a remit to provide a matrix of advice on their top 5 energy suppliers including 100% renewable providers. Thereafter decisions will need to be made on whether there is a cost/benefit comparison that should be made between the financial price of the power supply versus the renewable nature of the supply in climate change terms. This work is ongoing.

### **Closed landfill management - Gas control**

- 3.4 The initial aim of the project, at the Bidston Moss closed landfill site, was to determine if the existing landfill gas flare, used to manage the gas field on the site, could be removed and replaced with a more natural approach to the gradual release of increasingly small amounts of methane which will be largely absorbed by the surface vegetation on the closed landfill site. If successful, this would reduce the carbon impact associated with landfill gas flaring and would be accompanied by a reduction in operational costs.
- 3.5 Landfill gas detection and sampling was conducted to measure levels of landfill gas emissions from the surface of the site. This was undertaken on three separate occasions over a period of six months; at times when the existing gas control system was offline (without forced extraction).
- 3.6 The results indicate very low levels of landfill gas. The emissions levels recorded fall below the lower trigger level set out in Environment Agency guidance; and do not present a hazard of fire or explosion, nor is it toxic to flora or fauna on the site. It is evident from the data collected that bacteria in the restoration materials are utilising methane generated within the waste mass and a naturally occurring process.
- 3.7 The investigation found that biological methane oxidation is taking place and surface emission are at a level not likely to pose a threat to the environment, human health, or the wildlife and vegetation found on the site. There is potential for a reduction of 210tes CO<sub>2</sub>e/annum against existing operations (for information - current operations for managing landfill gas results in 397.21tes CO<sub>2</sub>e per annum; the Authority's proposed management via a more natural methane oxidation will result in an estimated 187.51 tes CO<sub>2</sub>e per annum); and a financial saving of up to £30k

### **Waste stream and waste treatment impacts**

- 3.8 The intention at the beginning of 2020 was for a Waste Composition analysis to be carried out during the year. To that end tenders were invited from suitable suppliers to provide estimates for either a four-season or a two-season analysis of the waste streams that the Authority deals with. The purpose of this exercise is to provide up to date information to both the Authority and to waste collection authorities in the district councils about the content and composition of household waste across Merseyside. This would then enable both MRWA and the collection authorities to review the services they provide to the public with a view to moving waste further up the waste hierarchy.
- 3.9 In the event, following the receipt of tenders, the Authority's progress was impacted by the Covid-19 pandemic. All the normal patterns of social and work like were changed for an undetermined period and initially it was felt that conditions were so unusual as to render a composition analysis less useful. The waste composition analysis exercise was therefore deferred.
- 3.10 More recently as the need for an analysis of the waste compositions has become increasingly important, and lockdown measures were planned to ease, the waste composition analysis tender was re-scheduled. On the basis of the experience of the previous tendering exercise it was recognised that a four-season analysis across Merseyside would have been prohibitively expensive, and so the revised tender was sought on a two season (spring and autumn) basis. This is not an unusual approach and is in line with industry practice.
- 3.11 The tenders have been received and assessed and a contractor has been appointed to carry out the waste composition analysis. The first season's analysis will take place in May 2021, with the second season analysis in Autumn, most likely towards the end of September. The outcomes of the analysis will be analysed and shared where appropriate to ensure service design and provision can be shaped to meet any changes in patterns that are noted.

### **Food Waste**

- 3.12 One of the projects identified in the initial climate action plan approach was a collaborative approach to the separate collection of food waste across the City Region. Despite initial goodwill between all partners and co-

ordination by the Authority, this project has not resulted in an agreed unified approach. Members received a report on progress and the need for Collection Authorities to consider the next steps if they wished to make progress at the Authority meeting on 7<sup>th</sup> February 2020.

### **Other Key projects**

3.13 The initial climate action plan identified a number of workstreams that could contribute to the Authority’s work on climate change in the medium term. A climate change action plan group of officers from across the Authority has been meeting during the year to ensure that action on these workstreams is monitored and collated. A summary of the projects and progress to date is provided in the table below:

<b>Climate change workstream</b>	<b>Progress to date</b>
Review relevant internal policies and strategies to ensure that circular economy and net zero carbon principles are embedded and consistent.	Review progressing to schedule
Complete a mid-term (10 year) WMRC contract review for future-proofing as we transition to a circular economy	Review work mostly complete. Final report expected in first half of 2021. Findings will require longer timescales for delivery  Delivery priorities have been affected by the impact of Covid19
Adopt full green procurement to minimise environmental impacts considering the whole supply chain and including end of life	Review progressing to schedule
Ensure circular economy and net zero carbon are embedded in our education and campaigns programmes	MRWA continues to develop a Zero Waste branded campaign and website which will promote circular economy and the role of zero waste in meeting net zero carbon. The branding element is complete, website design is agreed, the

	<p>content in development. The Zero Waste website will be published later in 2021</p> <p>An interactive and user-friendly Reuse Map is in development locating a wide range of waste prevention, reuse, repair services across the LCR. We aim to complete the map in Spring 2021 and it will be hosted on the Zero Waste website</p> <p>The 'RecycleRight' brand has maintained its social media presence with some improvements to graphics. Regular campaigns have continued in line with holidays, e.g. Xmas</p> <p>MRWA supported national Food Waste Action Week in March 2021 through a press release and social media messaging. Across our corporate social media channels, we used localised statistics on food waste to help the national WRAP messages resonate with our residents.</p>
<p>Continue to promote community reuse activities through the Community Fund</p>	<p>For 2020-21 there was a review of how to proceed with the Community Fund as a consequence of the Covid-19 pandemic. It was agreed that the Fund should continue to be allocated for community schemes and the awards were made. Some administrative changes were made including the introduction of 'stage payments' so that the Authority's funds would be protected in the event that a scheme could not continue. In addition due to the late</p>

	<p>start on allocation of the fund it was agreed that schemes could continue for a further three months beyond the usual year end to facilitate the best use of the allocated monies. In the event, one of the schemes was unable to complete its programme for the year and has returned funding to the Authority.</p> <p>For 2021-22 the approval of the Community Fund budget has enabled the fund to be commenced and applications have been invited and received.</p> <p>A separate report on the Community Fund will be presented to Members.</p>
<p>Work with partners to influence wider LCR climate and circular economy initiatives including leading the LCR Circular Economy Club and participating in the Good Business Festival</p>	<p>One of the senior managers from our contractor, (Suez) recorded a session for the Good Business Festival 08.10.20. This content was also made available early in 2021</p> <p>A LCR Circular Economy Club (CEC) textiles event successfully delivered October 2020</p> <p>LCR CEC 'Growing LCRs Circular Food Economy' event successfully delivered February 2021. In collaboration with Hope University, SMART Business School</p> <p>MRWA continuing to contribute examples of LCR circular economy best practice with the CEC, plus continued engagement via CEC e-newsletter and attendance at a</p>

	range of stakeholder meetings across LCR
Identify external funding opportunities for waste and carbon reduction	Links developed with LJMU Clean Growth team who support businesses to acquire funding.
Landfill avoidance - Negotiate the removal of landfill as the EfW contingency default for planned and emergency downtime.	<p>Agreement reached in principle with Merseyside Energy Recovery Ltd (MERL) for a shift to non-landfill routes which includes a financial incentive to support shift.</p> <p>Some of this has been delayed by management changes at the contractor – although a drafting clause for updating the contract has been prepared.</p> <p>At quarterly meetings with MERL we continue to discuss this, we also await legal updates.</p>
<p>Closed landfill management – Carbon sequestration</p> <p>- Deliver a pilot carbon sequestration project as a woodland and sink meadow at Foul Lane former landfill, Southport.</p>	<p>Sefton Council, the Mersey Forest and the National Wildflower centre were engaged and initially interested in delivering the outcomes of this proposal.</p> <p>The scheme is awaiting detailed proposals from the Mersey Forest, but this has been delayed significantly by the Covid-19 position.</p> <p>When proposals are in place and agreed a planning application can be made to the Council.</p>
Reuse and waste prevention	Review of re-use options paper to explore further re-use opportunities with Veolia. HWRCs reuse options

<ul style="list-style-type: none"> <li>- Work with our contractor to explore further reuse opportunities at HWRCs.</li> <li>- Reduce amount of residual waste and increase recycling rates, largely through the Behavioural Change Campaign and targeted education programmes.</li> <li>- Develop a business case for a reuse cooperative and scope opportunities to promote community sharing and reuse initiatives such as swap shops, repair cafes, refill networks and community fridges.</li> </ul>	<p>paper being drafted by Strategy / Contracts teams.</p> <p>Delivery of Behavioural change programme and targeted education programmes (including completion of 2020/21 programme). Ongoing delivery of 2020-21 programme, e.g. RecycleRight, online delivery of education activities.</p> <p>Develop a business case for a reuse cooperative and scope opportunities to promote community sharing and reuse initiatives. Paper drafted by Strategy</p> <p>Develop re-use opportunities</p> <p>Delivered 305 compost bins to 30 community groups / housing associations.</p>
<p>Transport emissions</p> <ul style="list-style-type: none"> <li>- Feasibility of implementing e-mobility by replacing MRWA diesel vans with electric vehicles</li> </ul>	<p>This project is completed for the time being..</p> <p>The key finding from the report is that the automotive industry's view is that the time to launch a procurement of electric vehicles to replace the two vans currently powered by diesel is 18 months off, when the technology is likely to take a significant leap forward in terms of the mileage capacity of the vehicles. At that point the review will be refreshed and options for moving towards electric vehicles may be proposed.</p> <p>When the technology is more developed the likely outcomes will conclude that:</p>

	<ul style="list-style-type: none"> <li>• Electric vehicles are more expensive to hire but cheaper to run. This balances out at approx. £12k - £13k per annum.</li> <li>• Based upon manufacturers information, three electric vehicles would produce 2tes of CO2e per annum compared with the current three diesels which produce 10tes of CO2e per annum.</li> </ul>
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3.14 The Authority has also agreed a number of other commitments within its Climate Action plan:

- To update the Climate Action Plan every two years,
- MRWA will take collaborative action with partners to contribute towards delivering a zero carbon LCR,
- Will prioritise helping LCR adopt circular economy principles as a means of reducing carbon emissions,
- Carbon Working Group (CWG) will determine contribution of landfills to our climate emissions – this has been superseded by the appointment of a contractor to provide the Authority with a clear and consistent way of approaching the measurement and reporting of carbon metrics. We now seek to develop our understanding and gain a comprehensive picture of carbon across the entire waste system including collections. Once we have measured our CO2e baseline, consistent with EMS integration, we will identify further priorities and actions; and
- Promote health & wellbeing benefits of our actions through social media, annual reporting, media releases.

- Authority Officers will work with the LCR CA to align the MRWA and LCRCA Climate Action Plans and in future all Climate Action by the Authority will be reported against both plans.

#### **4. Risk Implications**

4.1 There are no new risks arising from the auditor's review

#### **5. HR Implications**

5.1 There are no new HR implications

#### **6. Environmental Implications**

6.1 There are no new environmental implications

#### **7. Financial Implications**

7.1 There are no new financial implications associated with this report

#### **8. Legal Implications**

8.1 There are no legal implications associated with this report.

#### **9. Conclusion**

- 9.1 The Authority approved an initial Climate Action Plan in February 2020. The action plan included a number of Core actions with a 2020-21 delivery commitment and other actions with a later implementation.
- 9.2 This report draws Members attention to the progress made in the delivery of the Core and other actions over the last year, despite the impacts of the Covid 19 pandemic; good progress is being made.
- 9.3 Members are asked to note the report.

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The background documents to this report are open to inspection in accordance with Section 100D of The Local Government Act 1972 - Nil.