AGENDA ITEM NO. 9 TITLE: ECDC ENVIRONMENT ACTION PLAN: PROGRESS REPORT; INTERIM TARGETS; AND PARTNERSHIP FORUM SET UP

Committee: Operational Services Committee

Date: 18 January 2021

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[V126]

1.0 <u>ISSUE</u>

- 1.1 On 8 June 2020, Operational Services Committee approved the Council's first 'Environment Plan', which provides a strategy and action plan to deliver (in part) on the commitments of the Climate Change Motion approved in October 2019.
- 1.2 This agenda item:
 - provides Committee with an update on progressing the Actions within the Environment Plan;
 - provides, for discussion, possible options for interim targets towards 'net zero' carbon emissions; and
 - provides further updates on progression of a community Partnership Forum.

2.0 <u>RECOMMENDATION(S)</u>

- 2.1 That the Committee:
 - (A) Welcomes the progress made to date, in respect of achieving the June 2020 Environment Plan's 'Top 20 Actions';
 - (B) Notes the progress made to date in terms of establishing a Partnership Forum and the establishment of district-wide baseline climate related data, and agrees that officers should continue to progress on the basis outlined;
 - (C) Notes the commentary on the options in respect of setting an interim carbon emissions reduction target for ECDC, and agrees that the options and commentary as set out form a reasonable basis for further investigation, with the intention of this Committee establishing an interim target at its meeting in June 2021;
 - (D) Agrees that a short preliminary investigation into the potential of ECDC generating its own commercial scale renewable energy be conducted, and brought to Committee at the earliest opportunity; and
 - (E) Nominates, from Members of this Committee, a 'Natural Environment and Climate Change Member Champion'.

3.0 BACKGROUND/OPTIONS

3.1 On 8 June 2020, Operational Services Committee approved the Council's first ECDC based 'Environment Plan'. We continue to make good progress on the 'actions' agreed in that Plan, as first reported to Committee in September and again as the following demonstrates:

Progress on the 'Top 20 Actions'

- 3.2 Committee will recall that the ECDC Environment Plan included a 'Top 20' of actions intended to be achieved by the Council over the course of the year to June 2021. Attached at Appendix A is a summary table setting out what those Top 20 actions are, together with commentary on progress and future milestones.
- 3.3 To pick out a few highlights from that table:
 - We quickly secured a new electricity contract in late June, meaning from October 2020 (the earliest date possible) the Council moved to a 100% renewable energy 'green' tariff, at very minimal additional cost. (Note: offsetting our gas usage is more challenging, with options still being explored) (Action 1)
 - We have replaced <u>all</u> our street / car park lighting to energy efficient LEDs (Action 2).
 - Our staff and Members Business Mileage has dropped by well over half, perhaps as much as 75%, compared with pre-March 2020. Whilst this has been Covid-driven, it will contribute to a carbon emission savings, and has given the Council an excellent 'trial' of what works well and could be maintained long-term, for carbon (and financial) benefits (Action 3).
 - An energy audit of The Grange and E-space North has been completed we are currently determining what measures can be implemented, and are scheduled to bid in January for Government grants to help pay for such measures (Actions 7 and 8).
 - We have received recommendations from the Wildlife Trust on establishing where and how we could transform some of our own land assets into more biodiversity rich areas (as per Action 11). We are assessing those options, with a view to acting on the most advantageous as soon as possible (this winter/spring).
 - Supplementary Planning Documents on Natural Environment (adopted September) and Climate Change (consultation Nov-Dec) have progressed very well, and with high levels of interest in them (Action 12).
 - Three Parish Councils are working with us to establish a template parish action plan which all parishes can use, should they wish to do so (Action 15).
- 3.4 Overall, we have made solid progress on delivering actions in the Plan. However, in the interest of transparency, it is worth also highlighting where progress has not yet started or perhaps slower than we would have liked:
 - Expansion of electric vehicle charging points has made some progress, but the expected county-wide Strategy has not been progressed by the Combined Authority as we expected. If this continues to be delayed, we may have to progress our own district-only strategy, but this is not a preferred option. In the meantime, we are hopeful of progressing in the short term at least some new charge points in our own car parks, and our nearly complete Climate Change SPD helps the Council to encourage developers to include charge points in their development schemes.

- ECTC and ECSS are reviewing their waste collection methods and rounds to determine whether more efficient route collections can be secured. A report on this project is scheduled for review and consideration in the first quarter of the financial year 2021/22. However, ECTC and ECSS have not progressed as far as hoped their review into alternative options for its vehicle fleet, or been able, to date, to set out a programme of how its vehicle fleet will become less carbon intensive. The primary reason for the vehicle fleet review pause is that Government has delayed from the Autumn (2020) to Spring (2021) its long awaited 'waste strategy'. Without knowing the explicit information detailed within the strategy and how it will conclude, which will have a substantial impact on the way we collect waste in the future, it is difficult to plan (and make purchases) locally, as such plans (and purchases) might not fit national plans and policy. Provided there are no further national delays, we hope by June that this target will be back on track.
- Other targets may also have not progressed to conclusion yet, but were always planned to be concluded in the second half of the year, and remain broadly on track.
- 3.5 Overseeing progress on the Plan is a Project Group comprising the Director of Operations, various Service Leads and myself. That group tracks progress and approves day-to-day activities.
- 3.6 As we have now entered the second half of the action plan year (full year is June 2020 to June 2021), the Project Group believes the overall progress has been good to date, and we are confident of meeting most, if not all, of the Top 20 Actions in full.

Partnership Forum and District Wide Environment Plan Progress Update (Action 14)

- 3.7 Committee will recall that at your meeting in November 2020 you agreed the headline principles for establishing a partnership forum, as part of progressing Action 14. As promised, a further update is given on this matter in this report.
- 3.8 As a reminder, Action 14 is as follows:

"Action 14: Put in place arrangements, by April 2021 (including a district wide partnership forum), to facilitate the preparation of a district wide Action Plan ('District-EnvPlan'). This Action Plan, which is prepared in partnership with a wide range of stakeholders, will set out how we can cut our carbon emissions and boost the natural environment collectively across the East Cambridgeshire area."

3.9 Broken down, Action 14 has, in effect, three steps:

Step 1: establish district wide baseline carbon emissions data

Step 2: establish a partnership forum

Step 3: partnership forum prepares a district wide Action Plan

3.10 The first two steps are targeted to be complete by April 2021. The last step is more open ended, and depends on the activities and progress the forum makes. It is hoped such a district wide Action Plan would be completed at some point in 2021 (or early 2022), and regularly reviewed, by the forum, thereafter.

Baseline data (step 1) update:

- 3.11 We have made good progress at establishing some of the headline baseline data, for emissions at the district level, which then will form the basis of discussions with the forum as to what areas do they want to target action first. It also, of course, sets a baseline to monitor progress over years to come.
- 3.12 Some headlines, taken from Appendix B (see step 3 for an explanation of Appendix B), include:
 - East Cambridgeshire (as a district) emits over 700,000 tonnes of Carbon Dioxide (equivalent) (tCO2e) greenhouse gas emissions.
 - Per person, on average, we emit more (7.8 tCO2e) than the UK average (5.2 tCO2e) the reasons for this are not yet clear, but could be due to the rural nature of our district, and the high level of commuting and oil use. For context, the global average is around 6.8 tCO2e (with US at 18 tCO2e, and India at 2.4 tCO2e, for example).
 - Transport makes up over 40% of East Cambridgeshire emissions, the vast majority of which are 'on-road' (i.e. mostly cars).
 - Buildings cause nearly half our emissions, and of that, our homes contribute more than half. Put another way, our homes emit around a quarter of all emissions in East Cambs.
 - On the positive side, in 2018 (latest available known figures) the district generated 430,000 MWh of renewable energy. That's enough electricity to power over 100,000 homes. Put another way, and very roughly speaking, the amount of renewable energy produced in East Cambridgeshire we think is broadly similar to the amount of electricity used in the district by residents and businesses combined. This is a significant achievement. However, over 80% of our total emissions are from other sources (such as petrol, diesel, gas, etc), so we have a long way to go to address that gap.

Partnership forum (step 2) update:

- 3.13 As agreed by Committee in November, as a guiding principle the partnership forum should be (and should be seen to be) independent of the Council. Nevertheless, it requires the Council to act as facilitator to get the forum going, and assist with (at least in the early days) with communications and administration of the forum. Thereafter, the aim is for the Council to be an active participant of the forum, but not controller of it.
- 3.14 During December, potential organisations, businesses and other potentially interested people were started to be asked whether they would be interested in being part of the forum. Those people were selected following suggestions made by service leads during November. Further suggested organisations are being sought.
- 3.15 At the time of writing, the following sorts of organisations have been invited (and, to date, positive responses are being received):

- known local environment groups or groups keen to promote environmental awareness;
- national or regional organisations, which are known to have a particular local interest in the area
- landowner (farm) interests
- Local Drainage Board
- A local architect company
- A local housing association
- A small number of parish councils (3), which ECDC has been working with recently on a parish action plan.
- The County Council
- 3.16 We continue to explore potential additional representation on the forum, especially from the wider business community (and suggestions from Members would be welcome). Inevitably, if the forum is successful, it should generate its own interest and new organisations may come forward to ask if they could join. Overall, and as a starting point for the forum, we think the above set of organisations, together with one or two more, would provide a range of views to feed into the preparation of the district wide Environment Plan.
- 3.17 A next step will be to establish a 'terms of reference' (ToR) for the partnership forum, and a draft of that will be prepared shortly.
- 3.18 If Committee is broadly supportive of the emerging structure for the forum, then officers will proceed to the next step of setting up the first meeting, probably for March.

District wide Action Plan (step 3) update

- 3.19 As stated, it is for the forum to develop and agree the district wide action plan. Nevertheless, the intention is to provide the forum with a basic structure of such a Plan (which can be used or adapted as they see fit), together with introductory and baseline data which can be included within it.
- 3.20 Attached (appendix B) is an early draft of such a template for a Plan, and Members 'in principle' views on it are welcome. Within it, Members will note a variety of baseline data collected to date, and which we will continue to refine and build upon as any Plan is prepared.

Ideas Forum

3.21 Separately, we have given fresh impetus to the already established 'Ideas Forum', reminding people to submit their ideas by end of February if they would like them considering/researching for inclusion in the 2021/22 action plan year. Views received could also be fed to the Partnership Forum, once established.

Interim Targets

- 3.22 Moving away from the Partnership Forum and other community engagement matters, this Report now turns to the issue of Interim Targets.
- 3.23 As a reminder, the original Climate Change Motion passed at Full Council (October 2019) included the following:

"Operational Services Committee... will explore and consider...measures required and feasibility of reaching net zero carbon emissions by the Council by 2050"

- 3.24 Thus, as it stands, the Council has committed to exploring the feasibility of reaching, for its own operations, net zero carbon emissions by 2050 (which, for information, is the same year legally committed to by UK government, whereby UK greenhouse gas emissions by 2050 should be net zero emissions see The Climate Change Act 2008 (2050 Target Amendment) Order 2019).
- 3.25 However, Committee agreed in 2020 that the second ECDC-based Environment Plan (scheduled for June 2021) should include interim target(s) towards our long-term carbon emissions ambitions.
- 3.26 By way of further background, and as set out in the first ECDC based Environment Plan (and reflecting matters which are considered 'in scope' for calculating an organisation's 'carbon footprint'), ECDC emitted 1,317 tonnes CO2e in the financial year 2018/19. Preliminary data is showing that ECDC emitted a very similar amount of CO2e in 2019/20, though we should be very cautious about noting change from one year to the next, as external factors can play a major role (hot summers or cold winters, for example; and, for 2020/21, covid-related factors). What is more important is to monitor the trend, year on year.
- 3.27 Some of the largest contributors to that footprint in 2018/19 were (% figures are approx.):
 - Fleet Vehicles (fuel and 'well to tank') 70% of all ECDC emissions, with the vast majority of that arising from our waste collection vehicles.
 - The Grange (predominantly heating, electric use) 10% of ECDC emissions
 - E Space North 5% of ECDC emissions
 - Vehicle business mileage, from staff and Members undertaking site visits or meetings etc (but does not include staff commuting; such mileage would form part of an individual's carbon footprint) – 7% of ECDC emissions
- 3.28 Interestingly, preliminary data for 2019/20 is indicating that, whilst overall emissions are broadly flat compared with 2018/19, the proportion associated with our fleet vehicles has increased (to perhaps around 80%) whereas our emissions arising from our buildings has gone down. There is no immediately obvious reason for these shifts, though diesel consumption increased in 2019/20 compared with the year before. However, as a reminder, we should monitor trends, not changes from a single year.

- 3.29 To get to net zero emissions, then obviously each of the above contributors needs to reduce their fossil fuel consumption to zero (or close to zero) and rely more on renewable sources of energy; or, produce more renewable energy than it consumes, to offset any remaining fossil fuel or other combustion fuel usage.
- 3.30 To get there (i.e. net zero) will require a combination of national measures (primarily, the decarbonisation of the electricity grid, and the likely outlawing of fossil fuel direct combustion in vehicles) and, potentially, voluntary ECDC organisational change.
- 3.31 The voluntary organisational change might only be a 'potential' action because in reality change may well be mandated on all organisations to make that change well before 2050, in order to meet the legal UK requirement to become net zero by 2050. For example, the electricity grid may well be 100% decarbonised well before 2050, meaning all electricity used by any organisation would be zero carbon. It also appears highly likely that, by 2050, vehicles will no longer be run on petrol, diesel or other fossil fuel, particularly as a ban on production of fossil fuel run vehicles is likely from 2030. To put it a different way, there simply will, it appears highly likely, be no fossil fuel market ('petrol stations') remaining by 2050 to service the very low number of pre-2030 vehicles that are still running on petrol/diesel.
- 3.32 But, it is not in the spirit of the Motion to simply 'wait for change to happen' and wait for measures to be mandated on organisations such as ECDC. Indeed, many would argue we have a moral duty to make change happen, and quickly, in order for ECDC to do its bit to help avert the worst of the emerging environmental crisis. As such, setting challenging organisational-targets towards net zero is a sensible and appropriate measure for all organisations, including ECDC.
- 3.33 So, what should those interim targets be? The following paragraphs set out a number of options, for discussion, in no particular order.
- 3.34 One option is to align with the research emerging from the Tyndall Centre. The Tyndall Centre is a partnership of universities bringing together researchers from the social and natural sciences and engineering to develop sustainable responses to climate change. The Centre works with leaders from the public and private sectors to promote informed decisions on mitigating and adapting to climate change. Whilst we have not engaged directly with the Centre, local authorities which have, often go on to adopt the principle that their (or their geographical area) CO2e emissions should be reduced by an average of **13.5% per year, or 50% every 5 years**.
- 3.35 By taking this approach, deep cuts in emissions are made early, and the more difficult (smaller) cuts are made latter. One of the principles behind their approach is the idea that to meet Paris Agreement (2015) commitments and IPCC recommendations (2018) (i.e. limit global temperature to 1.5C increase), we have around 7 years of BAU carbon left to emit i.e. if we carry on as normal, within about 6-7 years from now, we would have used up our entire 'budget' of carbon that can be emitted if we are to stay within 1.5-2% rise in global temperatures. To stretch out those years beyond 7 years requires cuts to be made now, and the deeper the earlier cuts are, the longer you can stretch it out before you need to eliminate carbon emissions (on a net basis).
- 3.36 More broadly, as an alternative option, the IPCC recommended in 2018 that "holding temperature rise below 1.5°C will mean global emissions of CO2 will need to

decline by 45% from 2010 levels by 2030, and reach net zero by 2050." ECDC could therefore adopt a similar target i.e. **45% cut by 2030**, albeit from 2018/19 levels as that is the starting point of our data (rather than 2010). This is clearly a much less onerous target than the Tyndall Centre approach, and the flaw in using it is that developed nations should contribute a much greater percentage of reduction than less-developed nations, because it is much harder for less developed (less emitting) nations to make cuts.

- 3.37 In December 2020, the UK Climate Change Committee published a 'world first' detailed route map for a fully decarbonised UK, and set a target of 78% cuts in emissions by 2035 (from a 1990 base by 2019, UK emissions are already down 41% from 1990 base). Interestingly, such cuts by 2035 are not recommended to be evenly spread across all industries and uses, with some operations targeted as 100% net zero before 2035, and others (such as "trucks") being low carbon "by 2040" this point is relevant to discussions later in this report. Turning the CCC 78% target by 2035 into an ECDC target is difficult, because of the 1990 baseline adopted by CCC. But, roughly speaking, and reflecting the 41% reduction already made nationally, it equates to a **65% emissions cut by 2035** (from 2019), and this could be adopted as an ECDC organisational target.
- 3.38 Another example target that could be followed is that of near neighbouring councils. One, for example, has pledged (May 2020) a reduction in its carbon footprint of at least 45% by 2025 (on a 2019 baseline), and at least 75% by 2030. This example target is very similar to the Tyndall Centre example given above, perhaps just slightly less ambitious. ECDC could, therefore, adopt a similar target of **45% by 2025 and at least 75% by 2030.**
- 3.39 Many other councils, including local ones such as Peterborough, have declared a climate emergency with a headline target of being net zero by 2030. However, it is not evident, from preliminary research of such councils, precisely how that target is going to be practically achieved, and, therefore, such targets appear more an aspiration, rather than a worked up deliverable target. Nevertheless, it is another option which could become ECDC's target i.e. **net zero by 2030**. Some other councils, of course, have made no specific target commitments at all.
- 3.40 It is also worth being mindful of the local Climate Commission work, as commissioned by the Combined Authority for Cambridgeshire-Peterborough area. That Commission commenced work in Autumn (following a delay from earlier in the year) and is due to publish interim findings and conclusions in February 2021, and a final report in summer 2021 (slightly delayed by a few months from the original timetable). Whilst the final report is likely to be too late for ECDC, at least for our June 2021 Plan, it is understood that the interim report in February 2021 is likely to indicate a recommended Cambridgeshire-Peterborough wide emissions cut for local authority operations. This could, therefore, form the basis for our own target.
- 3.41 The most ambitious target found from research undertaken is that of Extinction Rebellion UK, which seeks the UK to become **net-zero by 2025**.
- 3.42 Finally, on a more crude and simple sliding scale basis, interim targets could simply be based on a straight line trajectory to net zero at 2050 (roughly 4% cut per year to 2030).

- 3.43 In summary, therefore, targets described above are summarised as follows:
 - 13.5% per year, or 50% every 5 years
 - 45% cut by 2030
 - 65% cut by 2035
 - 45% by 2025 and at least 75% by 2030
 - Adopt the target as recommended by the Cambs-Pboro Climate Commission, if one is forthcoming in Feb 2021.
 - net zero by 2030
 - net-zero by 2025
 - straight line trajectory to zero at 2050 (roughly 4% cut per year to 2030)
- 3.44 Whichever option above is taken (or based upon), it has to be ambitious yet realistic. And, on that basis, it is a statement of fact that the biggest source of emissions by ECDC is from its vehicle fleet, and of that (and by far), its refuse collection vehicles.
- 3.45 Thus, if we adopt the position of, say, a 50% cut by 2025, it would likely have to mean that our waste vehicles would have to move, at least to a significant degree, away from fossil fuel consumption. And to do that would require not only low carbon vehicles to be available on the market to undertake the job, but also the budget to purchase such vehicles.
- 3.46 Even if these two hurdles can be overcome by 2025, getting rid of perfectly useable vehicles 'early' (i.e. before end of life) in order to switch to a low carbon vehicle could arguably be a counter-productive measure from an emissions point of view due to the huge embodied carbon in a new vehicle, with such embodied carbon in a vehicle often greater than the carbon emissions emitted in the entire operating life of a fossil fuel consuming vehicle (it is, for example, accepted internationally that most petrol or diesel cars produced in the world consume more energy (and hence emission of CO2e) during the manufacturing of that car, than the car will ever emit through its entire life of (petrol/diesel consuming) use).
- 3.47 Thus, buying an electric waste vehicle or other low carbon vehicle may appear a good measure, and will actually reduce a council's headline annual footprint (especially if the vehicle is charged via renewable energy), but the net consequence on the environment may be worse due to the hidden carbon footprint of embodied carbon put more simply, you could be doing wrong, when you think you are doing right. Taking the right decision, therefore, is not always a simple calculation, irrespective of the amount of money involved.
- 3.48 Another alternative approach to potentially explore is whether the Council would prefer (for financial, practical or net emission saving reasons) to explore the direct investing in renewable energy generation, on its own land, on a commercial scale. For example, rather than the Council focussing only on reducing its energy use, it

also focusses attention on generating renewable energy in the first place. And, in doing so, determines how, for each £1 spent, the greatest net CO2e savings can be achieved.

- 3.49 For example, once the easier and relatively inexpensive energy efficiency saving measures have been taken (on our buildings or vehicle routes), chasing the final (and harder) savings may cost a lot of money for very little CO2e saving. A more effective measure could be to generate electricity ourselves, so that overall our emission are net zero. Of course, land will be needed to make this happen (and will likely have to be bought if not available). There will also be planning issue to consider, as well as local community views on installing renewable energy infrastructure. But, very approximately, and subject to those issues and constraints, an investment of around £2m in renewable infrastructure (eg for a relatively small solar PV farm (5-8ha), or 1-2 wind turbines) would likely generate enough electricity and CO2e savings equivalent of the entire CO2e that ECDC presently emits, per year. That investment would, of course, also deliver an annual financial return from the selling of such generated electricity.
- 3.50 For the avoidance of doubt, no detailed research on this matter has been undertaken (and the above figures should be taken as a very rough guide), though if Members consider it desirable, a more detailed preliminary investigation could be conducted. Of course, for a smaller investment, a smaller proportion of ECDCs emissions could be 'netted' off, though this would only likely efficiently work with a solar PV farm (wind turbines lose considerable efficiency and £/return if smaller turbines are used).
- 3.51 Thus, the report so far has set out some preliminary thinking on possible issues and options relating to the setting of interim targets for ECDC CO2e emissions. In order to set such interim targets in our June 2021 Environment Plan, the Council will need to reflect on the following sorts of questions:
 - How ambitious a target is it willing and able to set (having taken account of the issues, deliverability and costs)?
 - On the basis that, at this stage, it appears unlikely that commercial electric waste vehicles ('bin lorries') will be available in the period to 2025 (that have the range capable of serving a rural district such as ours) – how can that be reflected in the interim target(s) we set?
 - Would the Council be willing to compensate for the high levels of emissions arising from our vehicle fleet through the direct installation of renewable energy (wind or PV solar) on its own land (or purchased land)? Does it have the financial resource, or willingness to borrow funds, to do so, and what financial returns and risks would that entail?
 - Should there be two targets one for its vehicle fleet (which will show a lower, if at all, reduction in early years) and one for its buildings (which could show a higher % reduction)? It may be possible, for example, for our building assets to be getting close to, or even at, net zero by 2025 (likely via energy efficiency improvements and PV solar installations), but our fleet vehicles to perhaps only have a 10-20% reduction by 2025, at best. The overall reduction target would then be in the region of 20-30% by 2025.

- Should there be a target to 2025 (eg 20-30% as described above), but also a second interim target for 2030 (eg 75%+) which, in turn, will rely on low carbon fleet vehicles being available prior to that point (and/or commercial scale renewable energy investment)?
- 3.52 As a reminder, Committee is not asked to make a decision on interim targets at today's meeting, but a steer is welcomed so that officers can continue their research leading to the recommending of interim targets in June (as per Committee request to do so). If any of the options should be discounted at this stage, then that would be helpful so officers can focus on the more likely candidates. If the prospect of commercial scale renewable energy (PV solar or wind) is not, in principle, supported, then that would also be helpful to know, though officers recommend at this stage that at least a more worked up costs and options on the potential of commercial scale renewables be prepared for Committee consideration.

Natural Environment and Climate Change Member Champion

- 3.53 As Members of this Committee will fully appreciate, the Council has considerably stepped up its activities in terms of plans to boost the local natural environment and helping to tackle climate change (as have other partner organisations, such as the County Council), and this activity is only set to grow over the coming months and years. This paper alone demonstrates the wide ranging agenda.
- 3.54 To help with the coordination and communication of these activities, it is suggested that this Committee considers the option of appointing a 'Member Champion', with a Member from this Committee perhaps being a sensible choice. Such a Member Champion would not, of course, have decision making responsibilities, but would: help with communicating activities, both internally and externally; help to bring various strands of activities together in a coordinated way; and more generally be expected to be briefed in more detail on activities underway or planned. A recommendation to this effect is included at the head of this report.

4.0 ARGUMENTS/CONCLUSIONS

4.1 As well as a general update on activities, the purpose of this paper is to seek endorsement on how we progress community engagement on a district wide environment plan, and also to seek any preliminary views on the setting of interim emission targets for ECDC operations.

5.0 <u>FINANCIAL IMPLICATIONS / EQUALITY IMPACT ASSESSMENT /</u> <u>ENVIRONMENTAL IMPACT ASSESSMENT</u>

- 5.1 There are no direct implications arising from the recommendations, because no firm decisions or spend is being made, though future recommendations linked to this paper may result in implications, and these will be assessed at that stage.
- 6.0 <u>APPENDICES</u>
- 6.1 Appendix A Top 20 Targets update Appendix B – emerging template for a district wide environment plan

Background Documents	Location	Contact Officer
	Room 12, The	Richard Kay
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Completed Dates 20 Commitments for Comments / progress Resources / Budget Lead Target dates 2020/21: Officer 18/6/20- Green tariff for Review its entire electricity Electricity: Critical deadline of 30 100% renewable elec is 1 Spencer electricity confirmed. June 2020 to make a decision for 0.075pkwh 'premium'. Total and gas contracts, and, where Clark 1/10/20 - ECDC electricity now practical to do so, will seek to Oct 2020 supply. est annual premium cost = running on 100% renewable amend to 100% renewable aprox £500. Gas: current contract does not have electricity tariff. electricity tariffs and 100% a tariff option for offsetting gas carbon off-set gas tariffs as emissions. Alternative offsetting to Contract does not allow a ongoing - meetings with soon as possible. be explored. gas offset option, so CUPSE, with CUPSE report alternative offset options due Jan 2021. needs exploring, and CUPSE (a Cambridge University Ongoing – potential to offset cost/vfm determined. student led programme), LNP and gas continue to be explored. partners exploring potential of setting up a local carbon offset fund and delivery programme. National and international offset mechanism also already exist. Growing national consensus that offsetting is an approach that should not be pursued, especially international offsetting. 18/12/20 - all lights replaced 2 Likely an 'invest to save' Appraise the impact of its Replacement of lighting to LEDs on-Spencer with LED (and early data streetlights and consider the going, and now almost complete option i.e. upfront capital, Clark monitoring indicating reduced options to move to LED future revenue saving. energy use arising) lighting, if feasible, taking account of the carbon Cost c£5,800 31/3/21 - determine whethersavings, financial savings and Saving unknown (but dimming of any lights is public opinion of doing so, recurring annually). practical: and, if so, determine including consideration as if desirable. whether dimming of lights is practicable and safe during certain low-use hours (note: most street lights are not under the control of ECDC).

Appendix A - Progress Table - Version for Ctte 18 Jan 2021 (information correct as at 5.1.21)

3	Embed a greater culture of home working (to reduce commuting) and less business travel (eg for site visits), taking advantage of lessons learnt during the Covid-19 lockdown, with the aim of encouraging staff to undertake less, and more coordinated, site visits and meeting attendance.	HR / CMT	Chief Executive-led surveys of service leads undertaken in June and July, to help establish lessons learnt from COVID working practice, and what elements can be maintained permanent. Lessons still being learnt / evaluated. 'Virtual' meetings likely to continue long term, saving mileage.	Likely some costs (mostly IT equipment upgrade), though such spend is COVID related rather than for environmental reasons. Potential to save revenue costs (business mileage claims). Overall, aim to be cost neutral.	Business mileage (i.e. for site visits) down approximately 75% during April-July 2020, and only rose back up slightly over Autumn 2020. Ongoing - evaluation of emissions benefits arising from COVID enforced working practice. Winter – continue to monitor business mileage claims, to see changes pre-Covid / lockdown / recovery stages.
4	Undertake a thorough appraisal of the potential to expand electric car charge points.	Sally Bonnett	The Council has engaged two companies (Instavolt and BP Charge Master) to carry out a feasibility study regarding the suitability of installing EV charging points in ECDC owned car parks. Charge Master are also looking at the feasibility of installing 7Kw to allow overnight charging for residents. The Council has been committed, since June 2020, to working with the Cambridgeshire and Peterborough Combined Authority (CA) and other local Councils to produce a CA area wide EV strategy to address the growing demand for electric vehicles and associated infrastructure across the area. However, delays at CA mean the CA has not yet scoped out the work for the project. The consultation Climate Change SPD (Oct 2020) includes a policy	Nil, other than staff time for the appraisal. Will need funding for implementation, but intention this work will be predominantly grant/private funded.	Autumn 2020 - Companies engaged by ECDC to investigate potential Oct – Climate Change SPD consultation commenced Dec 2020 – ChargeMaster finalised options for installing in ECDC carparks: Barton Rd and Newnham Street identified as most promising to start. Funding being investigated. TBC – scope of CA work to be agreed TBC – options for progressing expansion of charge points in East Cambs prepared. By 31/3/21 – adoption of Climate Change SPD

			encouraging the provision of electric car charging infrastructure.		
5	Roll out further guidance and training for staff in relation to the recently introduced 'Carbon Impact Assessment' procedure – a new assessment which requires all Council decisions to be assessed for the carbon implications of the decision being made.	Richard Kay	Carbon Impact Assessment (CIA) process in place, as a trial.	Nil, other than additional staff time.	Late 2019 – CIA process commenced. Committee template report includes a section for reporting on likely impact arising. Autumn 2020 - survey of service leads on CIA process to date 28/2/21 - Greater CIA guidance issued to service leads, following appraisal of CIA process to date.
6	Work with ECTC and ECSS, the Council's wholly owned companies responsible for matters such as waste collection, street cleansing and maintaining public open spaces, conclude a review into alternative options for its vehicle fleet, and set out a programme of how its vehicle fleet will become less carbon intensive, plus review our waste collection methods to determine whether more efficient route collections can be secured, thereby reducing vehicle fuel consumption (and consequently reduced CO2 emissions).	James Khan	ECSS is committed to review options, as and when fleet needs replacing. Currently there are no suitable low carbon vehicles on the market that can effectively deliver the standards required for the collection of waste across our district. However, vehicle manufacturers have been able to successfully produce fully electric vehicles for the waste industry, albeit which only meet the requirements of more urban districts, which evidences the industry is moving in the right direction and shows willingness to develop vehicles that meet all geographical requirements in the future. A proportion of our existing fleet was scheduled for replacement in 2020, however, with the next consultation on the Government's Waste and	Capital costs will be significant to cover the additional cost of carbon neutral vehicles when available Substantial additional cost will be needed to implement sufficient charging infrastructure and further investigation will be required to ensure this is sustainably sourced But, some revenue (fuel) savings could materialise in the short term as part of the round reconfiguration project Nil additional resource for 2020/21	Work commenced on round reconfiguration with the intention to present a report within the first quarter of 2021/22 financial year. Spring – review Government waste strategy with the intention to procure replacement vehicles within the financial year 2021/22

	Resource Strategy now set to be	
	released in Spring 2021 (delayed	
	from Autumn / Winter 2020) the	
	revised aim is to change the waste	
	collection vehicles in line with the	
	Strategy, to ensure vehicles are not	
	changed unnecessarily early.	
	resulting in incorrect specifications	
	procured and/or time and money	
	wasted on having to re-procure after	
	we have understood the next wave	
	of national standards and strategy.	
	It is likely, however, that the next	
	vehicles procured will be powered by	
	diesel engines as there are no	
	suitable carbon neutral alternatives	
	available at this time.	
	The remainder of the fleet is due for	
	renewal in 2025 at which time further	
	advances in carbon neutral / low	
	carbon vehicles may have been	
	completed and further specifications	
	on offer that meet our district's	
	requirements.	
	Overall, work on-going (though	
	partly dependant on Government	
	progress with its waste strategy).	
	Our smaller vehicles, which electric	
	Vorsions are more widely evallable	
	are not due for replacement until	
	2027/28 Full consideration will be	
	given to earbon neutral / low earbon	
	alternatives for these vehicles	
	during the procurement process	
	auting the producement process.	

	Separately, ECSS are currently working through a large scale round reconfiguration project for all of its waste collection vehicles and schedules. The plan is scheduled for implementation in the financial year 2021/22. The main objective of this plan is to ensure that all vehicles are running as efficiently as possible, maximising their productivity across the working week and reducing any lost time. This would see vehicles working collectively in combined areas, reducing any unnecessary travel time. Additionally, maximising the collection areas in the district, creating a natural flow through the week, rather than zig zagging across the district each day, would assist in reducing additional travel time and resource required for collecting missed collections the following day. Secondary outcomes of this plan include possible but not guaranteed round reductions. Any reduction in rounds would result in less vehicles required, reducing the daily carbon output. Although round optimisation has already been completed for street cleansing operations, there may be some further efficiency savings and carbon reductions realised as part of the larger waste collection project.	
1		

7	Complete an energy opportunity assessment for The Grange to identify measures that can be taken to reduce consumption and/or generate renewable energy and deliver at least one of the measures identified within a year.	Spencer Clark	Other local authorities in the local area have done similar work, which help establish a framework. Contractors being approached to quote. Potential to link work to recent Govt grant schemes (eg SALIX)	Survey cost = est £3,000 Implementation of recommendations = TBC, but to come from existing agreed budget or, if possible, from grants.	Oct 2020 – brief issued, quotes received 19.12.20 – Audits of building completed. 31/1/21 – use results to help bid for Govt funding 31/3/21 - implement at least one recommendation
8	Complete an energy opportunity assessment for E- Space North to identify measures that can be taken to reduce consumption and/or generate renewable energy and deliver at least one of these.	Spencer Clark	(See Action 7)	Survey cost = est £3,000 Implementation of recommendations = TBC, but to come from existing agreed budget or, if possible, from grants.	See Action 7 – work being done jointly See Action 7 – work being done jointly
9	Develop a Customer Access Strategy, which at its heart will enable customers to undertake activities with the Council without the need for physical attendance at Council Offices.	Annette Wade	COVID lessons learnt can help develop this strategy Pre-COVID, approx. 1,500 customers per week accessed reception. We are now trying to understand in more detail how those customers are accessing the services they want (whilst reception closed) and what could be improved (eg website) so customers don't have to come to reception in the long term.	Costs/savings unknown. Hopefully net neutral cost, with some upfront costs (e.g. website /online capability) offset by reduced 1-2-1 customer contact costs. Should result in carbon savings for individuals (rather than the council)	31/3/21 Draft Customer Access Strategy circulated to Corporate Management Team.
10	Finalise the Council's bus, cycling and walking review (which commenced over winter 2019/20), and work with a wide variety of partners to try to implement its findings,	Sally Bonnett	Public consultation ended on 31 st May. The aim is to identify priority routes and seek funding to deliver these. A Member Seminar was held in October, and Finance and Assets	Likely other funds utilised rather than ECDC.	 31 May 2020 - Comprehensive public consultation completed. October 2020 – Member seminar held, and Working parties being set up.

	taking advantage of new Government funds, linked to Covid-19 recovery, to boost cycling and walking infrastructure.		Committee in November. Consequently, the 'New Bus Service Proposals for East Cambridgeshire' document was submitted to the CPCA in December 2020. The Council is seeking funding from the CPCA to help with the Proposals which are a combination of new scheduled services, improvements to existing services and demand responsive transport services (DRT). These will deliver improved connectivity to transport interchanges and corridors e.g. railway stations and the Busway, improve links to employment areas, local shops and services and support better connected communities. The Bus, Cycle, Walk Working Party aiming to meet in January to commence work on a cycling and walking strategy for East		Dec 2020 – Bus Proposals and funding request sent to CPCA Winter - Working Parties and Cttes to review results / consider options / contact CPCA. (28 Jan 2021 for next Working Party meeting)
11	Undertake a thorough appraisal of the Council's land assets, and determine whether a programme of tree planting and/or meadow planting can take place on any of it. If so, commence that programme during the 2020/21 winter and spring planting season.	Richard Kay	Project commenced. Historically, some willingness for community groups to deliver and manage sites themselves (though that has issues of safety and insurance etc). Dec update: three most promising sites, for early delivery and effectiveness are: Victoria Green, Witchford; Gateway Gardens, Ely; West of Ely, St Johns Road to Downham Road.	Commission expertise to advise on most appropriate sites and what could be planted = £5,000. Budget to implement findings = TBC, but to come from existing agreed budget.	30/9/20 – contract and brief agreed with Wildlife Trust; candidate sites being looked at. w/c 2 Nov – WT commenced detailed look at candidate sites 18/12/20 – overview of 15 possible sites concluded. Three most promising sites chosen, and a more detailed action plan being prepared. 31/1/21 – final WT work completed

12	Prepare, consult and adopt	Richard	Large parts of the Action complete.	Nil. other than staff time.	31/3/21 – commence delivery of some of the recommendations 31/3/20 - Draft Natural Env
	two Supplementary Planning Documents, one on the Natural Environment and the second on Climate Change.	Kay	Remaining elements underway	from existing budgets.	SPD consulted upon 24/9/20 – Natural Env SPD adopted 13/10/20 Draft climate change SPD 6-week consultation commence 31/3/21 - Climate change SPD adopted
13	Identify / develop a training course for all staff and Members on climate change issues, minimisation, mitigation, adaptive measures, and key environmental policies (possibly Open University's Environment: treading lightly on the Earth). Aim for all staff and Members to have completed training by 2021. All new starters from 2021 to complete training within 2 months of start date.	HR / Richard Kay	OU course (free, other than staff time up to 15 hours) being trialled on a few staff– mixed feedback to date. Alternative, perhaps shorter, package of 'pick and choose' options being explored.	Depends on training agreed.	14/9/20 – Chair / VC of Operational Services Ctte agreed to trial the OU Course, and other Members interested 1/12/20 – agreement, in principle, to wider choice of courses (content and time) 31/3/21 – 10% of staff and Members completed training. 31/5/21 – 25% of staff and Members completed training 31/12/21 – 95% of staff and Members completed training.
14	Put in place arrangements, by April 2021 (including a district wide partnership forum), to facilitate the preparation of a district wide Action Plan ('District-EnvPlan'). This Action Plan, which is prepared in partnership with a wide range of stakeholders, will set out how we can cut our	Richard Kay	Early drafting of structure being established, and preliminary data collection. Options for partnership forum being considered.	Staff secured, via PCC plus will require ECDC staffing input. In addition, may require, for robustness, external expertise to audit results (eg Carbon Trust). Assume £5,000.	 16/11/20 – paper to Operations Ctte on Partnership Forum and related matters – principles agreed. Dec 2020 – initial contact made with potential Forum attendees. 18/1/21 – update paper to Operations Ctte

	carbon emissions and boost the natural environment collectively across the East Cambridgeshire area.				31/3/21 – community engagement agreed and programmed.
15	Work with a willing Parish Council, to prepare a template parish-based Action Plan ('Parish-EnvPlan'), and subsequently encourage all Parish Councils to come up with their own targets and projects.	Richard Kay	Three PCs approached us for a preliminary discussion. Work ongoing, and good exchange of ideas.	Staff secured, via PCC	June 2020 – preliminary discussions with 2x PCs underway (third joined later). Nov 2020 – first three-parish meeting took place, and next steps agreed. 31/3/21 - publish a template action plan for PCs to use.
16	Prepare a second Council- EnvPlan by June 2021 (ie a review of this document), setting out progress over 2020/21, and proposals and targets for 2021/22.	Richard Kay		Nil, apart from staff time. First version required 0.4fte for 3 months, plus wider staff input. Estimate similar resource, for 2 months in 2021.	22/12/20 - updated energy use data for 2019/20 now collected. 18/1/21 – Ctte to review progress of 2020/21 targets; 31/1/21 - cut off for annual public Ideas Forum (may be extended) 31/3/21 - reflect on emerging recommendations arising from (17) below. June 2021 – Second Environment Plan put to Committee for approval, with new set of targets for 2021/22.
17	Work proactively with the Combined Authority, as part of its recently launched Climate Change Independent Commission	Richard Kay	Commission launched in early June. CA engagement with public (and ECDC) commenced on 27 Oct 2020. Initial and final reports delayed (was Nov 2020/Feb 2021, now Feb 2021/Summer 2021)	Nil, other than staff time from existing resource.	28/02/20 - CA interim report due (delayed from Nov) Summer 2021 - CA final report due (delayed from Feb)
18	Support Cambridgeshire County Council in its delivery of its recently adopted Action Plan.	All	Final version adopted of CCC Plan adopted in June 2020	Resources depends on degree we are able to assist. May require limited additional staff resource.	Ongoing

19	The Council also acknowledges that in recognising there is a climate emergency, the actions needed to be taken are not all about mitigating the impacts, but also adapting to the inevitable changes of climate change. As such, the Council also commits to commence preparation of a Climate Adaptation Plan over the next 12 months.	Richard Kay	Preliminary work underway	The Plan itself should be nil cost other than staff time. In the medium term, it could lead to costs depending on actions it proposes	28/2/21 - draft Adaptation Plan 30/4/21 - final adaptation plan
20	Work with Palace Green Homes (PGH), the Council's commercial property and development company, to establish a new sustainability policy for the company; this will then inform how it can progress its development schemes in the most sustainable, yet viable, way.	Richard Kay / Rebecca Saunt (plus Phil Rose from PGH)	Well advanced	Policy drafting itself should be nil, and probably from existing staff resource. Implementing what it says is a PGH matter.	Summer 2020 – preliminary conversations with PGH Dec 2020 – final draft completed – awaiting Board consideration and sign off 31/3/21 - final sustainability policy published by PGH

Appendix B: Emerging Template for a District Wide Environment Plan

Covering Note:

The following document is an <u>emerging template</u> that could be used as a starting point by the Partnership Forum to help prepare a district wide Environment Plan. However, the intention is that the structure, content and detail of the Plan is a matter for the Partnership Forum to decide, once it is set up and running.

The attached document is therefore only for information at this stage, and detailed comments are not being sought.

[Front Cover / contents / introduction - to be added in due course]

2 East Cambridgeshire's Current Position

2.1 Calculating a baseline

To understand our pathway to net carbon zero, we first need to understand our district's current position. In knowing what we emit today, and from where, we can prioritise our future action accordingly. The method through which we do this is called 'carbon footprinting'. A carbon footprint is a process which allows us to measure the amount of carbon emissions at a given scale, such as a geographical area, an organisation or even for an individual. This process is undertaken by developing an inventory of all the carbon emitting activities, quantifying these activities, and multiplying these totals by what is known as an 'emissions factor'.

It should be noted that in developing a carbon footprint there is no perfect, simple, 100% certain method for calculation, as it relies on a number of assumptions. The Government Department for Business, Energy and Industrial Strategy (BEIS) annually publishes detailed CO_2 emissions data at local authority level, detailing not only the total emissions for East Cambridgeshire but also breakdown by end user sector (*Figure 1*).



Figure 1: East Cambridgeshire's CO₂ emissions by end-user sector, 2005 – 2018 (**BEIS, 2020c**)

Using BEIS statistics provide a reliable and consistent breakdown of CO_2 emissions across the country, building on nationally available data sets going back to 2005. However, a limitation of this publication is that it does not provide data on the other recognised Kyoto Protocol Greenhouse Gas (GHGs) emissions, collectively known as CO_2 e emissions, and as such, it 'misses' 19% of all GHGs¹.

¹ Nationwide, emissions of CO₂ make up 81% of GHG emissions, with the remainder from methane (11%), nitrous oxide (4%) and fluorinated gases (3%), when weighted by Global Warming Potential (**BEIS, 2020a**).

It is therefore follows that there is greater benefit in using CO₂e emissions data when available, as it provides a more complete picture of our impact. A new project funded by BEIS, in collaboration with several other local authorities and academics², has developed a local authority focussed emissions tool known as SCATTER (Setting City Area Targets and Trajectories for Emissions Reduction). This tool, which adheres to the Global Protocol for City-wide Greenhouse Gas emissions framework, provides CO₂e emissions data at local authority level (**BEIS, 2020a**). A comprehensive data set, this information is not only broken down by end user, but also the emissions 'scope' (see next paragraph for an explanation of this term). The latest East Cambridgeshire data is as follows, and on the following page the data is presented (*figure 2 and figure 3*) in graphic form to help capture the key areas of emissions:

		Scope 1	Scope 2	Scope 3	
Sector	Sub-sector	Total tCO2e	Total tCO2e	Total tCO2e	Total tCO2e
		DIRECT	INDIRECT	OTHER	TOTAL
Stationary energy	Residential buildings	88,039.30	57,772.98	26,521.77	172,334.05
	Commercial buildings & facilities	6,792.74	8 <i>,</i> 508.59	2,882.87	18,184.20
	Institutional buildings & facilities	17,160.58	42,995.71	9,357.47	69,513.76
	Industrial buildings & facilities	27,288.53	24,923.82	8,714.70	60,927.05
	Agriculture	6,149.84	4.68	1,470.68	7,625.20
	Fugitive emissions	NO	-	-	-
Transportation	On-road	222,261.99	IE	IE	222,261.99
	Rail	8,010.31	IE	1,909.92	9,920.22
	Waterborne navigation	NO	IE	IE	-
	Aviation	NO	IE	46,986.06	46,986.06
	Off-road	2,222.62	-	NE	2,222.62
Waste	Solid waste disposal	29,171.73	-	IE	29,171.73
	Biological treatment	NO	-	IE	-
	Incineration and open burning	NO	-	IE	-
	Wastewater	5,543.15	-	NO	5,543.15
IPPU	Industrial process	14,151.85	-	-	14,151.85
	Industrial product use	0.00	-	NE	0.00
AFOLU	Livestock	14,795.94	-	-	14,795.94
	Land use	- 29,107.96	-	-	- 29,107.96
	Other AFOLU	NE	-	-	-
Generation of grid-	Electricity-only generation	NO	-	NO	-
supplied energy	CHP generation	NO	-	NO	-
	Heat/cold generation	NE	-	-	-
	Local renewable generation	6,442.24	NO	-	6,442.24

Table 1: SCATTER Inventory for East Cambridgeshire: Summary Greenhouse Gas emissions (tonnes CO2e) (**SCATTER**, **2020**). In the table, the abbreviations used are: NO = Not Occurring; NE = Not Estimated; IE = Integrated Elsewhere; IPPU = Industrial Processes and Product Use; and AFOLU = Agriculture, Forestry and Other Land Use

² The SCATTER tool was developed by the Anthesis Group, a global sustainability consultancy, in partnership with the Department for Business, Energy and Industrial Strategy, Nottingham City Council and The Tyndall Centre for Climate Change Research. The tool was originally piloted with the Greater Manchester Combined Authority. (SCATTER, 2020)



Figure 2: East Cambridgeshire's emissions by sector, adapted from SCATTER Inventory data (**SCATTER, 2020**) – see Table 1



Figure 3: East Cambridgeshire's emissions by sector and scope, adapted from SCATTER Inventory data (SCATTER, 2020)

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What is meant by 'scope'?

The idea of scope is important, as activities taking place within an area can generate emissions that occur both inside and outside an area boundary. In order to calculate an accurate carbon footprint, emissions are grouped depending on where they occur in the form of three categories known as the emissions scopes. At a district level, scope 1 emissions are from sources located within the district boundary, scope 2 emissions occur as a consequence of the use of grid-supplied electricity, heat, steam or cooling within the district boundary, and scope 3 emissions are those which occur outside the district boundary as a result of activities taking place within the district boundary (**Figure 4**).



Figure 4: Sources and boundaries of district GHG emissions (WRI/WBCSD GHG Protocol, 2014)

2.1.1 The Inventory Boundary

For the purposes of this plan we will consider all emissions relating to the district of East Cambridgeshire (*Figure 5*). The rationale for selecting this geographic boundary is threefold; this is the geographical extent of the council's responsibility; it is a recognised and established boundary; and, as such, relevant government data is available at this level.



Figure 2: Map of the District of East Cambridgeshire (East Cambridgeshire District Council, 2020)

2.2 What else do we know about local emissions?

The data detailed earlier in this chapter provides essential information about the scale of local emissions. However, it doesn't provide detail at a sufficient granular level to allow us to understand the activities that lead to these emissions, whether or not activity has already taken place to limit emissions or if further projects to reduce emissions may be viable.

2.2.1 Individual emissions

The total emissions for East Cambridgeshire in 2018 amounted to 7.8 tCO₂ per person, higher than the national average of 5.2 tCO_2 per person. It is not clear at this stage why we are higher than average, but this is clearly something to investigate further.

Section 3 [it is suggested] of this report details ideas for actions individuals can take to reduce emissions.

Call to action one [illustrative example only]:

Every individual in the district has a key role to play in order to drive down emissions, and help the district become a net-zero district as soon as possible. We therefore ask individuals to:

- a. Review the ideas suggested in section 3 of this action plan and tell us which ones you are already doing or will try out going forward.
- b. Talk to people about climate change and encourage them to take action too.
- c. Suggest further actions, via the Ideas Forum, which residents across the district may consider undertaking.

2.2.2 Business / Commercial emissions

An analysis of publicly available data provides minimal further information to allow us to understand more specifically where emissions in the district come from. The majority of small to medium size businesses (SMEs) are not required to collate or publish their emissions and therefore in order to develop a more comprehensive picture it will be necessary to engage with stakeholders at a local level.

Call to action two [illustrative example]:

The Partnership Forum is keen to understand more about activity that is happening at a local level. As such, during 2021-xxx, the Council and Partnership Forum will work with key local stakeholders to:

- a. Contact organisations who are likely to have a significant impact to seek their support to help deliver the district's net-zero carbon target.
- b. Identify any current actions being undertaken that support this ambition.
- c. Identify opportunities for collaboration to allow the district to go beyond current commitments.
- d. Promote action plans prepared by partners (such as ECDC, the County Council and some Parish Councils), and see whether other organisations could use these as a 'template' for their own Action Plan.

2.3 East Cambridgeshire District Council's Emissions and Commitments

The carbon footprint of East Cambridgeshire District Council (as an organisation) comprises emissions that occur as a result of the Council's own operations. The footprint is calculated using data for the financial year 1 April 2019 to 31 March 2020 and amounts to 1,315 tCO₂e. To put this into context the Council are therefore directly responsible for approximately 0.2% of district wide emissions.

ECDC is committed to driving down its own carbon footprint, as well as helping others do likewise.

Call to action three [illustrative example]:

The Council is committed to undertake and support projects that help the district's transition to netzero. As such we would like you to:

- a. Suggest ideas for projects that the Council can undertake, using the Ideas Forum.
- b. Review projects and actions we suggest in our own annual ECDC Environment Plan, and let the Council know what actions could be included in future years.



Figure 3: East Cambridgeshire District Council's areas of influence (not to scale)

2.4 Renewable Energy Generated within East Cambridgeshire

It is important to not only understand what emissions are arising due to activities within the district area, but also what renewable energy is being generated. Such energy generated can help 'balance out' the scale of emissions. This is important information to know, because the overall target is to be 'net zero' not 'absolute zero' i.e. some carbon emission might still arise (and be unavoidable), but if we generate enough renewable energy, or have sufficient levels of sequestration, then the 'net' amount of emissions we make could be 'net zero'.

Detailed data relating to the scale of renewable energy generated in the district has not yet been collated (though we are aware that renewable energy capacity in the district continues to grow, year on year). But, to date, the best available data we have is contained in *figure 7*:

Renewable electricity generation by source

East Cambridgeshire, 2018



Figure 7: Renewable Energy Generation in East Cambridgeshire

Figure 7 demonstrates that across East Cambridgeshire, as at 2018, approximately 430,000MWh of renewable energy was produced, with Plant Biomass at 235k MWh; solar photovoltaics at 93k MWh and Anaerobic Digestion at 98k MWh. We are going to investigate in more detail what this means, compared with the energy used (and emissions arising) in the district, but very preliminary calculations indicate that the amount of renewable energy produced in the district is probably, albeit very approximately, similar to the amount of total electricity used in the district. However, electricity is only a small amount of energy use (and emissions produced), and therefore overall, renewable energy generated is perhaps equivalent to something like equivalent to 10-20% of our total energy use. Put another way, renewable energy generated is not compensating for (or 'netting out') the large volume of emissions arising from burning other fossil fuels (such as gas, petrol, diesel and oil).

Nevertheless, if East Cambridgeshire does indeed currently produce approximately the same amount of renewable energy electricity as the amount of electricity it consumes (we need to confirm this point), it could provide the framework for a future headline target: to at least produce as much renewable electricity energy as total electricity energy used in the district. This would mean the continued growth in renewable energy capacity in the district, because the demand for electricity will continue to grow (to compensate for fossil fuel use declines, such as via electric vehicles rather than diesel / petrol).

Figure 7 is also interesting in demonstrating the categories of renewable energy generated in the district. The large 'yellow' box we believe is associated with the straw burning plant near Sutton. Photovoltaics (PV) solar farms is generating around a quarter of all renewable energy in the district. Also notable is the negligible amount of renewable energy via wind turbines. This compares with our near neighbours Fenland district, for example, where the vast majority of its renewable energy is via wind (225k MWH approx.), but has very limited other renewable energy generation.

[additional chapters could then follow, depending on what the Partnership Forum wants to focus 'action' on.

For example, possible chapters could be on:

- 1. What action individuals could take
- 2. What actions could we do to tackle transport emissions
- 3. What actions could businesses take
- 4. What should the district approach to renewable energy be?
- 5. What natural environment actions could we take, to boost biodiversity, aid 'carbon sequestration', etc
- 6. Adapting to climate change

Each chapter could have background information, including the 'baseline' situation, and a series of targets, actions, etc, by certain dates.]

References

BEIS, 2020a. Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance. [online] Available at: <u>https://www.gov.uk/government/publications/environmental-reporting-guidelines-including-mandatory-greenhouse-gas-emissions-reporting-guidance</u>

BEIS, 2020b. *Road transport energy consumption at regional and local authority level.* [online] Available at: https://www.gov.uk/government/statistical-data-sets/road-transport-energy-consumption-at-regional-and-local-authority-level

BEIS, 2020c. *UK Government GHG Conversion Factors for Company Reporting 2018: full set for all users.* [online] Available at: <u>https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting</u>

BEIS, 2020d. *UK local authority and regional carbon dioxide emissions national statistics: 2005 to 2018.* [online] Available at: <u>https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-to-2018</u>

Environment Agency, 2018. *Climate Change impacts and adaptation*. [online] Available at: <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/758983/Climate_change_impacts_and_adaptation.pdf</u>

IPCC, 2018. Global Warming of 1.5°C: An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. [online] Available at: https://www.ipcc.ch/sr15

East Cambridgeshire District Council, 2020. *Map of the District of East Cambridgeshire*. [online] Available at: <u>https://www.eastcambs.gov.uk/east-cambs-district-council/district-east-cambridgeshire</u>

SCATTER, **2020**. *Common Reporting Framework reporting table - East Cambridgeshire*. [online] Available at: <u>https://scattercities.com/data/crf-reporting</u>

The Climate Emergency Declarations and Mobilisation, 2020. Climate emergency declarations in 1,830 jurisdictions and local governments cover 820 million citizens. [online] Available at: https://climateemergencydeclaration.org/climate-emergency-declarations-cover-15-million-citizens

Trafford Data Lab, 2020. *Climate emergency slide pack - East Cambridgeshire*. [online] Available at: <u>https://trafforddatalab.shinyapps.io/climate_emergency</u>

Tyndall Centre, 2020. Setting Climate Commitments for East Cambridgeshire: Quantifying the implications of the United Nations Paris Agreement for East Cambridgeshire. [online] Available at: <u>https://carbonbudget.manchester.ac.uk/reports/E06000031</u>

WRI/WBCSD GHG Protocol, 2004. *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)*. [online] Available at: <u>https://ghgprotocol.org</u>

WRI/WBCSD GHG Protocol, 2014. Global Protocol for Community-Scale Greenhouse Gas Emission Inventories: An Accounting and Reporting Standard for Cities. [online] Available at: https://ghgprotocol.org/sites/default/files/standards/GHGP_GPC_0.pdf

WWF, 2019. *EU Overshoot Day: living beyond nature's limits*. [online] Available at: https://www.footprintnetwork.org/content/uploads/2019/05/WWF_GFN_EU_Overshoot_Day_report.pdf