

Environment and Sustainability Panel

Thursday, 17 December 2020

Attendees: Councillor Peter Chillingworth, Councillor Mark Cory, Councillor Mark Goacher, Councillor Sam McCarthy, Councillor Lee Scordis, Councillor Lorcan Whitehead
Apologies: Councillor Nigel Chapman, Councillor Robert Davidson
Substitutes: Councillor Pauline Hazell (for Councillor Nigel Chapman), Councillor Paul Dundas (for Councillor Robert Davidson)

13 Environment and Sustainability Panel draft minutes - 29-10-2020

RESOLVED that the minutes of the meeting of 29 October 2020 be approved as a correct record.

14 Colchester Borough Council Greenhouse Gas Emissions 2019/20

Ben Plummer, Climate Emergency Project Officer attended the meeting to present the report and assist the Panel with their enquiries. The Panel were asked to consider the Council's Greenhouse Gas Emissions record for the financial year 2019/2020, together with how the emissions would be managed with the introduction of a Carbon Management Plan for 2020-2023. The Panel heard that the Council's emissions were recorded in accordance with the Greenhouse Gas Protocol, which was broken down into three 'scopes'; emissions from the burning of fuels, emissions associated with electricity consumption, and emissions associated with operations not directly within the Council's control. In line with the Council's aim to be carbon neutral net zero by 2030 a variety of emission sources were included, including elements of scope three as well as all of scopes one and two. Ben gave an update on some information contained in the report and explained that the Council's emissions had decreased by 351 tonnes of CO₂, and not 224 tonnes as stated. Much of the reduction had come from reduction in electricity consumption and the decarbonisation of the electricity grid, with 41.8% of the reduction in emissions associated with electricity consumption coming from more renewable energy generation. The Panel were invited to note that although there was an increase in the emissions associated with waste production, this was the result of the sourcing of more waste production data from additional Council sites with the main causes of emissions remaining as electricity and gas consumption. Ben further corrected some data contained in the report, explaining that the procured goods and services figures given had been re-calculated which had led to a slight increase in emissions and not the decrease that had been referenced. The Panel were advised that there was a need for a new Carbon Management Plan as the previous Plan had run from 2016 to 2020. The Plan was intended to identify actions and projects to be targeted for emission reduction in accordance with the Council's Climate Emergency Action Plan. It had been decided to work with the Carbon Trust over a period of three years, as opposed to the previous plan which had been over five years, with the aim being to make the Plan as adaptive as possible to take advantage of any emerging technology. It was also noted that the use of Council assets was changing as a result of covid, and flexibility was needed in the Plan to reflect this. The Plan for this year would include clear milestone targets for reducing

emissions, with a target being set for reduction of emissions by 2023 against the target set by the 2018-2019 baseline to ensure that the Council remained on target to become net emission zero by 2030.

Councillor Cory commented that he felt the Council had done a good job in reducing CO2 emissions, and he acknowledged that this became harder as changes were being made which left less scope for future change. He noted the adjustments that had had to be made to the scope three emissions, and spoke of the need to target change in procurement which he felt was being addressed by the inclusion of social values and environmentalism.

Councillor Dundas noted that the scope three calculation was based on the top ten contracts of the Council within a year based on their value, and enquired whether this figure was based on projects which may contain many more procurement projects, or the projects as a whole. He further enquired whether the top ten projects of Colchester Borough Homes and Colchester Amphora were also considered in addition to those held by the Council, and whether emissions from the commercial companies, for example when the events company held a large event, were evaluated in the same way. He also noted that the figures on emissions for 2021 were likely to be heavily influenced by the current events, and the associated lack of use of resources which may give some unusually low emission figures, and he suggested that this needed to be factored into any future targets. Councillor Cory commented on the longer term trajectory adopted by the Council, and agreed that this year should be treated as an anomaly, while he supported the flexibility of the plan to take advantage of new technology and ensure that targets were met year on year.

Councillor Chillingworth highlighted the fact that Council emissions had been reduced by 40% over the last few years, and commented that he felt that future progress had the potential to be made at varying speed, as new technologies were adopted. He recommended benchmarking the progress of the Council against other Local Authorities to ensure that progress was being made.

Ben Plummer confirmed that the contracts used in scope three calculation were based on projects as a whole, and cited the sports park as being one of the major contributors to the emissions from procured goods and services calculation. He explained that some of the contracts that were considered as part of the ten used in the calculation were from Colchester Borough Homes, and that in terms of allocating gas and electricity usage from an event, this would be included in the Council's overall emission data if events took place in Council buildings and was not recorded separately. Ben confirmed that he would be happy to undertake a benchmarking exercise, and Councillor Cory cautioned that there was a need to ensure that a 'like for like' comparison was made to ensure that any such data was meaningful.

Councillor Whitehead noted the inclusion of more waste data from other Council locations, and wondered whether there were any more locations to be considered in the future, or whether a comprehensive picture had now been obtained.

Rory Doyle, Assistant Director – Environment, gave the Panel assurance in terms of the anomaly expected in the data this year, that one of the Council's principles was that new baselines in terms of data and emissions would emerge, and that these would be used as a new starting point to drive future change and continue making improvements. He commented that the covid pandemic had changed behaviour in a number of ways and hoped that this would provide a once in a generation opportunity to make improvements.

In response to Councillor Whitehead, Ben Plummer confirmed that all the key Council buildings were now included in waste monitoring, including two car parks.

David Reilly of the Carbon Trust addressed the Panel, and confirmed that drawing direct parallels between the work of different Council's towards carbon neutrality was difficult, given the different approaches that were being taken towards the scopes of the Greenhouse Gas Protocol and determining carbon neutrality and 'net zero'. The Panel heard that over the past eighteen months, the Carbon Trust had worked with approximately forty councils of differing sizes, but in David's opinion, Colchester Borough Council was at the forefront of local government carbon management, an opinion supported by the fact that the Council was considering scope three emissions, together with its approach to procured goods and services. He applauded the approach that had been taken by the Council in addressing emissions it had control over first, before attempting to influence others, and echoed the previous comments that once the easier changes had been made, a slowing down in the rate of reduction was to be expected. David advised the Panel that he considered that the target that had been set of having net zero emissions from the Council's estate by 2030 was difficult but achievable, and he praised the work that had been undertaken towards this goal so far. In response to a question from Councillor Whitehead, David advised the Panel that there were a number of milestones that could be set to measure progress including setting a carbon budget over a five year period, but that the most significant element to be measured was tons of CO₂ emissions, and the percentage by which these were reduced. The Panel were advised that of key importance was to ensure that simple actions were identified and implemented, and lessons learnt were incorporated in forward thinking. David referred to the remarks of Councillor Chillingworth and agreed that the forward journey would not follow a smooth trajectory, particularly with regard to certain Council assets such as the fleet, when decarbonisation of the grid and technological advancements would lead to larger changes to operations taking place at once.

Councillor Cory referred to the Council's housing stock and acknowledged that although it may not be possible to include this in the net zero aspiration, investment had been made recently to reduce the carbon footprint of the this. He asked that housing emissions were measured as far as was possible. Councillor Goacher commented that a significant source of emissions from housing was down to gas boilers, and asked whether funding was available from central government to support transitioning away from their use. It was confirmed that although there were government schemes to assist with greening housing, these were predominantly targeted at privately owned dwellings, and it was unlikely that the Council would be able to obtain any direct support with this. David Reilly confirmed that it had been acknowledged that de-carbonising housing stock was likely to be a difficult process, and use of new technologies such as heat pumps and heat networks would form a large part of this, with support from national government a necessity.

RESOLVED that the contents of the report be noted.

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Fleet Transition Forward Plan

Rosa Tanfield, Group Manager – Neighbourhood Services, attended the meeting to present the report and assist the Panel with their enquiries. The Panel heard that it was intended to transition the Council's fleet of vehicles to a zero carbon fleet by 2030, and that working closely with the Energy Saving Trust had helped to inform and support this plan.

Steve Williams, of the Energy Saving Trust (the Trust) attended to address the Panel and explained that the Trust had been involved in transport since 2002, and transport was now the largest producer of greenhouse gasses in the United Kingdom. It was the

aim of the Trust to help cut harmful emissions by promoting sustainable and efficient use of energy, and in terms of fleet management, this aim was supported by reviewing the current fleet with a view to helping manage emissions and support the transition to ultra-low emission vehicles.

Rosa Tanfield addressed the Panel to explain that the Council had the aim of transitioning its current fleet to electric vehicles (EV) by no later than 2030, and the Fleet Transition Plan (the Plan) was supported by a number of principles and steps to ensure that decisions taken at each stage of the Plan were carefully considered, well informed and robust. The Plan showed that the Council would transition its fleet over the next ten years to EV or greener vehicles, and the first phase of this had already begun, with medium and small EVs being introduced from 2021, in addition to four hybrid vehicles. The Panel heard that there were five vehicles which could be considered as alternatives to diesel, but in accordance with the principles supporting the Plan, these would be considered in line with a robust evaluation of the operational needs of the fleet, including the financial viability of the vehicles. In evaluating potential fleet replacement vehicles, the number and size of vehicles would be challenged, and lease, hire, and hire purchase options would be considered, with final decisions being based on expert recommendations and guidance. It was anticipated that technology in the market would improve towards 2024, and Officers were hopeful that transition would be more effective at that point, however, the key to a successful transition towards an electric fleet was investment in infrastructure, and Officers were already considering a number of options in relation to this.

Steve Williams advised the Panel that the timeline proposed as part of the Plan represented a flexible, positive and pragmatic approach towards the electrification of the Council's fleet, and although organisations may wish to electrify their fleets all at once, it was important to understand that all elements needed to be present at the same time to enable a fleet to be electrified, including an understanding of the EV vehicles currently on offer and their suitability. The Panel heard that although there were small and medium vans, cars and refuse collection EVs available now which were financially viable and would save carbon, these were not available in other vehicle sectors, although this was changing. Larger EV vans of up to 4.2 tonnes were difficult to justify at the current time on a whole life cost basis, although they did exist. By way of example, Steve explained that he had carried out a recent costing exercise for another organisation which revealed that a 3.5 tonne van would have cost more than £10,000 per year to operate than the diesel vehicle based on their operating patterns. Some operators believed that by 2025 there would be price parity between EV and diesel vehicles, and at the point it was hoped that the larger vehicles would represent a monetary and carbon saving. Steve explained that many manufacturers planned to introduce EV heavy goods vehicles in the coming years, and anticipated that by 2025 there should be a full range of commercial and specialist EVs to choose from. The Energy Savings Trust recommended the use of whole life costings when making a procurement decision on an EV, including running costs, taxation and maintenance. Once this cost had been calculated it could be used to determine the greenhouse gas emissions that had been saved, and also help determine how best limited resources could be invested in the future to ensure the most effective investment. In addition to considering the appropriate EV for any given task, it was essential for the means of powering the vehicle to be considered to ensure that power was able to be provided efficiently at the right time and place, and Steve cautioned that unless this complete picture was considered when purchasing EVs, an organisation would run the risk of buying a very expensive but ineffective vehicle. He

praised the approach being taken by the Colchester Borough Council in carefully considering and understanding the power constraints and the power requirements that may exist, and considered that this would form the basis of a successful road to electrification.

Rosa Tanfield confirmed to the Panel that a key element of the Plan that was proposed was the flexibility to adapt to the changing environment and the market, and she confirmed that in addition to the planned electrification of the fleet, Officers were also considering a range of other options to reduce emissions, including driver training for fuel efficiency, better use of e-cargo bikes and better use of fleet telematics to improve driving efficiencies.

Councillor Cory praised the considered approach that was being taken by Officers, noting that as well as EVs being considered by Officers, other options would also be considered which may be more carbon neutral such as the use of e-cargo bikes where possible to reduce the use of cars and vehicles of any kind on the roads.

Councillor Scordis praised the report and considered that its content would be successfully in social media outlets to make people aware of the work that the Council was doing in this area. He expressed some concern at the length of time that it would take to replace some of the vehicles. He appreciated that technology was an issue, but noted that the steel caged trucks were driving around the borough constantly making repeated trips out to deal with issue like fly tipping, with attendant emission levels. He also noted that refuse collection vehicles occasionally broke down, and wondered whether it would be prudent to invest in an electric refuse collection vehicle to provide cover when this happened, and provide an opportunity for testing. He also considered that such a purchase would provide an opportunity for the Council to promote the use of EVs.

Councillor Dundas praised the thoughtful approach that was being taken by Officers, and noted the advice from the Energy Savings Trust on the necessity of considering the practicalities of energy and electric vehicles. He expressed his preference for caution when considering the purchase of EVs, stating that although leasing vehicles was generally more expensive, he considered it could be prudent with EV cars to lease and then operate them under warranty for a few years. He made the point that the operational life of the vehicles was considered to be between seven and ten years, but that if the batteries failed then the whole life calculation which had been made would be rendered extremely inaccurate. He noted that the Council needed to be practical when considering EVs, observing that if appropriate vehicles were not available then they could not be purchased, and that of primary importance was the Council's ability to deliver on operation needs such as refuse collection. Councillor Dundas made the point that EVs could not be considered zero carbon vehicles, as the electricity used to charge them was still creating carbon emissions, although these emissions would vary depending on the times that the vehicles were charged.

Although EVs would go some way towards addressing local air quality, he considered that carbon emissions would still have to be apportioned to an EV fleet in the same way that emissions were apportioned to the Council's buildings.

Councillor Goacher noted the need to provide the infrastructure to support an EV fleet, and enquired whether it was possible to set about installing this now before the types of vehicles that would be purchased were known? He referenced the fact that Nottingham had a fleet of electric buses, and wondered whether these would require the same infrastructure as a fleet of refuse vehicles or similar.

Councillor Chillingworth praised the pragmatic approach being taken by Officers, and anticipated that there would be future problems and difficulties that would arise,

requiring the Plan to be adaptive. He noted the large cost of £500,000 needed to put infrastructure to support EVs in to the Council's Shrub End site, and wondered why the cost was so high.

Rosa Tanfield addressed the Panel and confirmed that in respect of the length of time it would take to replace vehicles, leasing options would be considered at each step of the process. Excluding the EVs which it had already been agreed would be replaced in the coming year, Rosa explained that with the new fleet transitions, every replacement vehicle would need to be the result of a considered approach to ensure that any vehicle was suitable both operationally and financially. Steve Williams commented on the caged vehicles mentioned by Councillor Scordis, and explained that these had been replaced recently as, following analysis, it had been determined that the financial cost to run those vehicles as EVs was prohibitive. The Panel were advised that the cost of a diesel vehicle was approximately £30,000, but that at the time of sourcing there was only a single EV on the market capable of carrying out the same work, which cost approximately £75,000 and in the view of the Trust this was not a good use of the Council's money. He noted that the fleet of caged vehicles which had been replaced had old engines that were particularly inefficient and responsible for high emissions, and the advice had been to replace these as quickly as possible with newer, significantly more efficient Euro 6 engine vehicles and then replace these vehicles as and when the EV equivalent became available and was financially viable. Steve emphasised the need for a pragmatic approach to be taken when purchasing vehicles, and made the point that if significant expenditure had been made on an electric caged vehicle, this would have meant that other smaller EVs which save the Council money could not have been purchased.

With regard to the infrastructure necessary to support heavier vehicles, Steve confirmed that the cost of charging posts was related to the level and speed at which the charge would be delivered, and these would range in price from £500 to £50,000, excluding the associated costs of cabling and other infrastructure. He advised that one of the most significant costs associated with implementing the infrastructure for an EV fleet was the cabling that was required, and suggested that if cabling would be needed in the future to support charging posts that this was incorporated with other ground works in the area wherever possible to reduce costs. With regard to refuse collections vehicles, the Panel heard that it was possible to evaluate the power need of an EV fleet based on the usage of the current diesel fleet such as mile per gallon, changes in elevation, and the number of bins loaded into them, and that this information could be used to inform future decisions on the infrastructure that would be necessary. Rosa confirmed that planned works at Shrub End did include laying cabling as part of other ground works.

Considering the issue of the carbon footprint of EVs, Steve advised the Panel that although exhaust emissions from EVs would be zero, it was necessary to apply the emissions associated with production and transportation of the electricity used to power EVs when considering the overall carbon footprint. Notwithstanding this, electrifying a vehicle now would potentially lead to between 60% and 70% reduction in carbon emissions immediately, with the expected improvement in the carbon emissions associated with the national grid meaning that by 2030 that same vehicle would be run with a 90% reduction in emissions.

Councillor Scordis queried the money being spent on the Shrub End site, stating that he believed that it had been the intention to leave the site, and Rosa confirmed that money was available to improve the site and that works were underway. Councillor Cory explained that although it had been hoped to leave Shrub End, this had not

proved possible and it was now thought that the site would continue to be used in the short to medium term, with a move to a more sustainable site to be considered in the future.

Referring to his earlier comments, Councillor Dundas explained that as part of the consideration of the whole cost price of an EV, he had also been considering the residual value of EVs which was extremely unpredictable, with some holding their price very well, and some appearing to be unsellable. He enquired what factor had been considered in respect of battery degradation of EVs, commenting that although an EV may start life with a range of up to 250 miles, after many charges of the battery this may decrease, meaning that once a vehicle reached a certain age it was no longer able to carry out the function it had been purchased for. He also considered that although there was an initial capital cost associated with providing charging infrastructure, there may be opportunities in the future to generate income by levying a fee for use of charging points in the long term. In response to Councillor Dundas, Steve Williams confirmed that a variety of electric cars had a stated range of over 200 miles on a single charge, and that on the data that had been presented to him, none of the Council vehicles travelled anywhere near that mileage on a daily basis. He said that battery degradation had been predicted to be around 10%, leaving a charge of 90%, and on this basis there would be more than enough range in the EVs to fulfil the job that they were required to do. He re-iterated his earlier comments that understanding the EV to be purchased in terms of what it would be required to do, its range and proposed use was essential before purchase, and that this was the reason that the Trust was not advising rushing in and purchasing all EVs now as it was key to ensure that any vehicle purchased was fit for the purpose to which it was intended. Rory Doyle, Assistant Director – Environment, confirmed to the Panel that procurement currently being undertaken in relation to EV infrastructure also included the procurement of infrastructure for the Council's car parks, and all avenues for future income generation were being considered.

RESOLVED that the contents of the report be noted, and that the Panel endorse the rolling programme of electric or hybrid vehicle replacement as diesel vehicles came to the end of their recommended lifespan, or earlier where financially and operationally viable.

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Climate Emergency Action Plan – Progress Update

Ben Plummer, Climate Emergency Project Officer attended to present the report and assist the Panel with their enquiries.

The Panel heard that Officers has prepared a draft Community and Staff Engagement Strategy to encourage engagement from both residents and staff and encourage behaviour change, and a Memorandum of Understanding would be presented to the next meeting of the One Colchester Strategic Board.

A survey had been drafted by Officers that would seek to explore and understand resident's attitudes and behaviours in respect of climate change, and it was intended that this would be tested by circulation to the Council's 'Speak Up Now' staff group. It was intended to launch the survey in January 2021. The Panel heard that £18,000 of grant funding had been obtained from the Local Government Association and University College London to support an engagement project with two schools in Colchester around increasing environmental awareness of staff and parents. The project would consist of two phases, to determine what action the school was already taking to reduce its environmental impact, and a second phase of activities designed to increase environmental awareness. At the conclusion of the project, an action plan

would be prepared for each school to assist them with embedding environmental awareness in the school's ethos and lessons learned from the project would be shared with other schools. In January 2021 it was intended to launch a staff engagement challenge to encourage behaviour change in staff to adopt a greener approach, and staff would be invited to adopt more environmentally friendly behaviours.

Maggie Ibrahim, Sustainability and Climate Change Manager, addressed the Panel and explained that a bid had been submitted to the Public Sector Decarbonisation Scheme for £528,250 to increase the energy efficiency of Rowan House through retrofitting works. The works would include changing the gas boiler, increasing roof insulation and replacing lightbulbs. The Panel heard that £4.4m had also been made available in the budget for retrofitting works to be carried out on the Council's housing stock which again would look at replacing gas boilers and installing wall insulation together with looking at the energy efficiency of one hundred inefficient homes with the aim of raising the efficiency rating of the dwellings. This work would hopefully be supported by a Social Housing Decarbonisation Grant from central government. The planned tree planting activity in support of the Woodland and Biodiversity Project had been disrupted by covid, but this planting had now been re-scheduled for January 2021, when 145 trees would be planted across the Borough. The Colchester Natural History Society had reviewed the planting sites to ensure that they were suitable. The Panel heard that the Essex Climate Action Commission (ECAC) was a cross-party Commission which had provided recommendations on particular ecological themes. Although the Council broadly agreed with these themes and the recommendations which the ECAC had made, it was considered necessary to view them cautiously in terms of the feasibility and viability of the suggestions. The ECAC would present a viability study at some time in 2021, however, some of the recommendations which had been made were considered to be particularly ambitious, particularly that all new homes would be carbon zero by 2025. The recommendations would be considered by the Council and used to inform the content of its own Climate Emergency Action Plan.

The Positive Parking Strategy had been formally adopted by Cabinet, and a successful bid had been made for further funding to support active travel improvements. Some of this money would be used for infrastructure improvements in Colchester such as school streets and segregated cycle lanes. Work was underway to produce detailed design before consultation with key stakeholders was carried out. Additionally, a number of elements of the Town Deal bid which had been submitted aligned with the climate emergency, particularly in respect of improvements to transport such as secure bicycle parking. Work was being carried out with a local company which was looking to deliver green technology.

Councillor Chillingworth requested more information about the ECAC, what was the nature of the body, and who was its advice aimed at? He was concerned about the long term recommendations which were being made, which he considered would need to be supported by changes in government policy in order to be realistic.

Councillor Cory confirmed that he agreed with the stance that the ECAC had taken but also considered that national change was needed to support this. It was confirmed to the Panel that the ECAC was made up of Councillors and business partners, together with other partners, and Essex County Council Officers had worked with experts to produce recommendations which had been approved by the Commission. There were a number of focus groups including the built environment and energy and waste. The Panel heard that 'school streets' was an initiative which sought to implement

measures which offered the ability to reduce pollution, provide increased safety around schools and promote healthier lifestyles. The measures which would be taken were dependent on the location of the school, and what was considered to be most suitable for the location. Some of the proposed school streets were included in the Town Deal bid.

RESOLVED that the contents of the report be noted.

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Work Programme 2020-2021

Matthew Evans, Democratic Services Officer attended to present the report and assist the Panel with their enquiries.

Councillor Cory considered that work was needed in the future to further examine the Council's Environment and Sustainability Strategy and the associated Climate Emergency Action Plan. Mandy Jones, Assistant Director – Place and Client Services, advised the Panel that a reassessment of the framework of the Strategy would be undertaken and presented to the Panel for approval in the future.

RESOLVED that the contents of the report be noted.