## **REPORT TO EXECUTIVE**

Date of Meeting: 28th February 2023

Title: Net Zero Exeter

## Is this a Key Decision?

No

# Is this an Executive or Council Function?

#### Executive

## • What is the report about?

1.1 A progress report by the CE&GD on the work over the last 12 months with Exeter City Futures (ECF) supporting a Net Zero Exeter. It highlights the considerable progress that has been made to create an environment of collaboration across the city and to align the public sector institutions on a single vision that has informed their organisational ambitions.

1.2 It reflects on the reality of the challenge facing the city to achieve a Net Zero 2030 goal and the work that is taking place that could potentially accelerate progress. It reviews the work of Exeter City Futures to date, the limitations on resources and the scale of the challenge facing both the institutions of the city as well as the practical legislative and technical constraints that present very real barriers to achieving a Net Zero city. It invites the elected Members to consider in the context of the City Council's financial challenges how realistically it is for the city council to take leadership for a city wide agenda. Very specifically it invites the elected Members to reflect on where the expected level of investment will be found to translate worthy aims to practical implementation, and sets out a clear statement of what Members may wish to settle on as the City Council's defining measure of success without abandoning the declaration of a climate emergency and a Net Zero Exeter 2030.

# • Recommendations:

- 1. That Members confirm the City Council's position in relation to a Net Zero Exeter 2030 goal is to be a supportive council that fosters innovation within the city of Exeter in pursuit of a Net Zero Exeter 2030 and a willingness to pilot initiatives in a collaborative fashion with the city's institutions.
- 2. That Members acknowledge the work that has been done through Exeter City Futures to build collaboration between the public sector institutions and

to encourage progress on meeting the immediate challenges and opportunities arising from the Net Zero mission.

- 3. That Members note the proposed legacy projects as set out in Section 7.44.
- 4. That Members acknowledge that a step change in the Government's approach to delivering Net Zero is required to give any prospect for the city of Exeter to achieve a Net Zero Exeter 2030. The pace at which the city's institutions have to move to make the scale of changes required to achieve a Net Zero 2030 Exeter requires a no regrets approach to getting on with the task, a spirit of innovation.
- 5. That Members note a number of steps will need to be taken to satisfy itself regarding the market testing of heat network solutions ahead of any decision to enter into a contract with a heat provider.

## • Reasons for the recommendation:

3.1 Now that the two secondments to Exeter City Futures (Chief Executive & Growth Director and the Director for City Transformation) have come to an end, it is appropriate to reflect on the work to support the Net Zero Exeter 2030 Plan. Members are facing immediate financial pressures that are demonstrably more challenging because of inflation, higher energy costs and increased rates for borrowing, the identified shortfall in the Medium Term Financial Plan will therefore require a greater level of focus on the council's own immediate responsibilities. It is reasonable therefore to assume the Council's focus will necessarily shift to a focus on the Council's own greenhouse gas emissions with a reduced level of support for city wide work.

3.2 Members therefore will need to consider whether the commitment to a Net Zero council and supporting a Net Zero city by 2030 is to change. Members may wish to focus on providing a supportive local authority role that is creative in addressing the challenges, rather than leading the work at city scale. An example of this in action could be the delivery of a district heat network. Heat networks are identified in the greenhouse gas emissions inventory and are expected to be part of the mix in providing heat to homes and buildings. The Council has developed through the work of ECF a shared understanding of the challenge and this is evident in the support all of our organisations have given to promoting a district heat network solution. Playing a supportive role can continue even if ECC is no longer driving the leadership of the programme. A creative organisation that promotes collaborative solutions against the Net Zero goal is an important and worthy goal, even if that falls short of taking direct responsibility for delivery of the city wide Net Zero plan, stating the positon would be beneficial.

3.3 A significant gap in leading a Net Zero programme is access to private finance and capacity to deliver programmes and projects. An under resourced local government county and city will struggle to prioritise the work above statutory services. This resource constraint is a national issue for local government and the sector wishing to provide support for the Net Zero mission. 3.4 An ambitious city and a creative bureaucracy to address the challenges however would make for essential partners to this long term work. Under the heading "Leading Net Zero Exeter", the following commentary was provided in the Net Zero Exeter 2030 Plan:

"As we embark on this journey, it's important to recognise that a commitment to make a whole City carbon-neutral is beyond the authority of Exeter City Council alone. We will require strong collaboration and collective action from everyone across the city; individuals, businesses, community organisations and the local authority.

Our net-zero vision for the city is aspirational, but will be tempered by the funding we have to work with (whether revenue or capital) and the level of engagement that we can achieve.

Our public sector faces extremely hard times; with a rapidly growing population, increasing demand for services (including social care, transport and education), and previous and ongoing reductions in government funding. To achieve our net-zero carbon ambitions we must seek new ways of doing things and seek out new approaches to delivering services and accessing investment. We must work much more closely together, across the public, business and community sectors, sharing responsibility for finding joint solutions for the challenges we are all facing and seeking wherever possible to collaborate and join up our services locally. The role of Exeter City Futures CIC is to help the city collectively respond to the climate crisis and achieve a net-zero carbon Exeter."

5.5 In clarifying the role of the City Council in supporting an innovation agenda and helping create the conditions for institutional co-ordination and collaboration in pursuit of a Net Zero city Members are distinguishing between piloting projects and scaling up activity to meet a Net Zero linear trajectory of greenhouse gas emissions for the city of Exeter. This acknowledges the practical limitations of the city of Exeter responding to an agenda that requires critical Government and/or private sector investment to achieve delivery.

#### • What are the resource implications including non-financial resources.

4.1 At the heart of this report is the challenge facing local government in general and Exeter City Council in particular in wishing to deliver a Net Zero city. The City Council is not resourced to deliver a Net Zero city, it does not have the powers, legal or policy to effect the necessary change, it therefore needs the co-operation of everyone, from private individuals to institutions and business, the voluntary sector and government departments. The Council has convening powers but has limited funding to lead a structured programme of implementation work. The Council is pursuing actions designed to address its own greenhouse gas emissions, such as retrofit of the council's housing stock, retrofitting the leisure facilities and corporate properties but has limited additional resources to support place based initiatives where the Council's powers are more about influence and encouragement rather than direct responsibility.

4.2 Resourcing implications for any new initiatives identified in this report such as supporting a localised heat network will have to be addressed separately as part of any contract. The principal issue raised in this report is the capacity and resources to support the wider city wide work being captured by Exeter City Futures for which ECF has no capacity to progress and which is captured succinctly in the quote in para 3.4.

4.3 Access to funding has been raised as a consistent theme by ECF and was partly the reason for pressing the case for consideration of a city development fund.

"One of the most critical aspects to consider in our growing city is how to finance development and how to finance it in a way that ensures it delivers against our ambition of a carbon-neutral city and ensures Exeter remains a great place to live. A key goal is for Exeter to have 'Locally Controlled Finance'; striving to have the capability to invest in energy-positive, car-free developments as well as schemes that benefit our local businesses and communities." [Net Zero Plan – capability p50]

4.4 The Green agenda costs, it requires investment up front to ensure the transition is successful and therefore there is likely to be a significant gap between what the market can be obliged to do and what the city would want to achieve to deliver a Net Zero city. In the three years since the production of the Net Zero plan the challenge has not changed, the message from ECF has been the same, no one else will solve our problems, it needs a local and collective effort to make progress supported by determined leadership and with a significant amount of private and government investment.

#### Section 151 Officer comments:

- What are the legal aspects?
- Monitoring Officer's comments:
- Report details:

Background: Mission Zero

- 1.1 A good starting point to reflect on the Exeter 2030 Net Zero Goal and the role and limitation of local authorities in delivering on Net Zero ambition is the recently completed Independent Review of Net Zero, entitled Mission Zero, undertaken by Rt Hon Chris Skidmore MP.
- 1.2 In relation to catalysing local action: The Review is clear that "there must be more place-based, locally led action on Net Zero. Our local areas and communities want to act on Net Zero, but too often government gets in the way. The Government must provide central leadership on Net Zero, but it must also empower people and places to deliver. Place-based action on Net Zero will not only lead to more local support but will deliver better economic outcomes as well."
- 1.3 The Review says local authorities are a key partner in delivering Net Zero, but current central government funding arrangements are standing in the way of effective local action. The Review recommends "wholescale simplification of local Net Zero funding, including consolidation of different pots and a reduction in competitive bidding. These changes will save both central and local government time and money, as well as do more to encourage a systems-wide approach to delivering Net Zero Providing full backing to a set of 'trailblazer' places that want to go further and faster on Net Zero, with the aim of reaching Net Zero by 2030." [P.12]
- 1.4 On the challenge of translating bold ambition into action the review comments: "The Government's Net Zero Strategy sets out the UK's decarbonisation pathway out to 2037, based on modelling on the most cost-effective Net Zero energy system in 2050. New analysis conducted over the course of the Review shows that this is still the right pathway and the policies outlined in the Strategy should go ahead. Delay is a significant risk. Our engagement and own analysis have shown that the benefits of decarbonisation are larger if it is done sooner.[p.7]
- 1.5 The review concluded "we need a new approach to our Net Zero Strategy. One which identifies stable ten-year missions that can be established across sectors, providing the vision and security for stakeholders and investors. This 'Mission Zero' approach should set out long term missions across ten years, between 2025 to 2035, with clear mandates or missions to be achieved in this timescale. These Missions must include the infrastructure and governance requirements needed to achieve them."
- 1.6 In its concluding notes the review states: "There is an active, strategic choice to be made. Does the UK wish to compete in the Net Zero race, with the chance to lead, or do we wish to simply observe from the sidelines? On the one hand, to lead, and to seek first mover advantage, brings with it the opportunity to attract inward investment, to generate new supply chains and lower the costs of wider deployment of clean technologies and industries. On the other hand, to follow, risks witnessing the opportunities for jobs, infrastructure and investments that could have been on shored in the UK go elsewhere in the world. We have reached a tipping point. The risks of 'not zero' are now greater than the associated risks of taking decisive action on Net Zero now. The Review has outlined what is needed to effectively 'deliver' Net Zero investments: what must be achieved to deliver the certainty, clarity, and consistency needed from government policy and investment to de-risk the costs of private investment and capital expenditure."

- 1.7 The Mission Zero Review calls for Government to recognise the essence of acting sooner rather than later and for a series of no regrets and no excuse policy recommendations that can be delivered now, as soon as possible.
- 1.8 In this most helpful review of the Net Zero Mission whilst recognising the Net Zero 2050 date is still appropriate it highlights the need to act sooner rather than later and helpfully establishes the need for a new relationship between central government and local government to enable effective local delivery.
- 1.9 Recently the Devon Carbon Plan committed to a county Net Zero goal of 2050. There are good reasons for local government to adopt the national 2050 commitment for Net Zero for their localities. The national target is embodied in legislation and it provides the legal and policy framework for transitioning to Net Zero. There are significant barriers to delivery and in the absence of guaranteed long term planning and finance from government local areas rightfully may caution committing to a goal that is not within their powers to achieve. In itself 2050 - as the date to achieve Net Zero - genuinely addressing all emissions, including scope 3 emissions, is immensely challenging.
- 1.10 National Audit Office (NAO) has said: "[T]here are serious weaknesses in central government's approach to working with local authorities on decarbonisation, stemming from a lack of clarity over local authorities' overall roles, piecemeal funding, and diffuse accountabilities." This lack of clarity is creating blocks in the system for those local authorities that want to be proactive in delivering Net Zero.[Mission Zero P191]
- 1.11 The downside of sticking with a 2050 date is that it can be used to avoid taking difficult decisions today, and it is by definition not ambitious in a national context, and neither would it be exceptional in a global context. There has been calls for the county and the region to be a trail blazer when it comes to the Green agenda and Net Zero. Indeed, on a number of occasions Devon and the wider region have had conversations on devolution and county deals that have incorporated the Net Zero agenda as part of the proposition. Strengthening the link between devolution deals with the Net Zero agenda, and identifying a trailblazer Net Zero city is highlighted in the Mission Zero review. However, it reasonable to suggest a Net Zero 2050 goal is a statement of ambition and it is certainly not helpful in building a case for the city to be a trailblazer for Net Zero.
- 1.12 Exeter has to be exceptional in the area of addressing climate change and reducing greenhouse emissions to deliver on the Exeter 2040 Vision Statement:

"Exeter will be a carbon neutral city by 2030 and recognised as a leading sustainable city and a global leader in addressing the social, economic and environmental challenges of climate change and urbanisation. The Exeter of the future will have grasped the opportunities ahead of us today."

1.13 It is significant that the University of Exeter is committed to the 2030 Net Zero goal and other institutions are striving to be among the leaders in their field on the green agenda. The Met Office is a good example of a city institution with a clear commitment to achieve a Net Zero 2030 goal and every member of staff has a carbon budget and they are working with their international partners to address their wider carbon footprint.

- 1.14 When the CE &GD agreed to take on a secondment role it was explicitly stated that it would be unreasonable to assume he could achieve Net Zero targets for the city of Exeter in a traditional audited approach. With little resources and funding, and in the absence of necessary policy levers over key sectors, such an approach to measuring performance is in appropriate. This does not mean performance management is not important, it clearly is, but targets can be set that are credible and targets can be set that are clearly stretching. The climate emergency declarations pronounced by most local authorities were accompanied by different target dates. Any contribution to reduction of carbon emissions are to be welcomed but a good starting position would reasonably be that national commitments embodied in legislation ought to be the starting point for measuring performance. National legislation will address the policy framework for all businesses and institutions and will ensure investors have a clear long term plan for investment decisions. Therefore it reasonable to assume any plan that accelerates performance ahead of the 2050 goal is therefore ambitious by definition and should prompt decision makers to ponder on the cost and the type of issues such an accelerated programme raises that will have to be owned by the decision makers, put in a different way what is the additional cost and what are the risks that have to be accepted to accelerate delivery ahead of the national government goal?
- 1.15 For any organisation there are risks in pursuing a goal ahead of the government target date, for example investors in different types of technology are anticipating national policy decisions but we have many examples where standards get revised and technology is backed or abandoned by government. Individual businesses therefore are faced with investing in measures that may prove to be less than optimum investments, simply because they went early rather than waiting. It is not uncommon for companies to invest in what is believed to be an emerging market, such as EV vehicles, heat pumps, modular housing etc but the timing is not right. Although we would like to think early investment is the obvious thing to do for business it can be a costly mistake, competitors who do not make the early investments but then benefit from government grant or subsidies, such as the current incentive on heats pumps may have given their competitors an advantage. There are a range of issues that are practical consideration for company boards and other organisation. The City Council is no different, Exeter City Council's decision to become the leading authority in the country for delivery of passivhaus buildings incurred a cost premium and a lot of learning. The private sector with an efficiency model in the main has resisted this type of approach. Therefore it is relevant to ask the question why is the city council and the other organisations in the city that are signed up to the Exeter 2040 Vision committed to the 2030 Net Zero goal and why it is important not to confuse an ambitious and stretching goal with a traditional approach that assumes one can measure success in a simple pass or fail for a Net Zero 2030 goal?

- 1.16 The story of Exeter City Futures CIC is rooted in the desire to support innovation and collaboration to realise a liveable city that addresses many of the stubborn challenges facing urban areas and in the process addressing the sources of greenhouse gas emissions. It comes from a good place, a desire to support public and private sector institutions in a place based approach. It is an initiative to embrace innovation, to get organisations working together and to disrupt when appropriate business as usual to explore alternative approaches to problem solving. When such an approach is aligned to a Net Zero goal it suggests an ambitious and stretching target date is good for creating a climate for innovation and entrepreneurial activity in the areas of solving problems. Creating collaboration to solve a pressing challenge is therefore a desirable and positive outcome in of itself, as this is an enabling condition for a creative an ambitious city.
- **1.17** It therefore follows that I do not believe the city of Exeter should move the target date of Net Zero 2030, rather we should intensify our efforts, but it does point to part of the prevailing conditions that must be addressed and an honesty among all the elected Members regarding the scale and immediacy of the challenge and therefore what does success look like? If creating innovation and demonstrating a willingness to collaborate across the city for a common purpose is success then the city of Exeter is well on its way to showcasing a successful programme that is most powerfully showcased by the declarations of the University of Exeter's ten year strategy and focus on the Net Zero and innovation agenda.

#### Innovation, scaling up & capacity constraints

- 1.18 Pioneering and innovating solutions is not the same as scaling up. ECC has pioneered passivhaus construction, the University of Exeter has now adopted passivhaus standard for all its buildings (Even the Scottish Government has now adopted this standard for its buildings), but in England national policy does not require the construction sector to adhere to Net Zero standards (or *passivhaus*). It is therefore necessary for the decision makers to acknowledge that there are barriers to delivery of a goal and there are many such barriers across all sectors contributing to greenhouse gas emissions. Moving from innovation to scale is a classic problem for entrepreneurs. It is often described as bridging the valley of death. Entrepreneurs know how difficult it can be to scale up activity, scaling up requires finance, project management resources, legal and technical alignment and a whole raft of supply chain challenges, from skills and labour to logistics and manufacturing. It is one thing to say innovation has proven the case for heat pumps, rolling out to 50,000 homes in under 8 years is a different challenge.
- 1.19 The great value of ECF is as a vehicle that brings together a visible leadership of key public sector partners working in a collaborative fashion to address city wide challenges with a clear focus on the major challenge of our lifetime, namely, reducing greenhouse gas emissions. Importantly it is a private/public sector partnership with a body of work behind it. Outside of Exeter it appears positive and an unusual development in the space of place based

leadership. It is seen as innovative and worthy of emulation. In Exeter it has brand recognition and, for some people, an exciting initiative that is suggestive of both opportunity and endeavour. Positive qualities that should be valued. No single body speaks for the city of Exeter and therefore as a vehicle for bringing senior leaders of key institutions together it can speak with more clout and more promise of placed based co-ordination than would be the case if it did not exist.

- 1.20 However, unlike the perception, the company has very limited resources, other than a small team of three staff funded by the National Community Lottery to deliver a time limited specific programme called Change Makers there is no longer employed staff. In previous years partner organisations provided a resource to the team, and this ebbed and flowed, but in the main the heavy load fell to Oxygen House/Global City Futures and Exeter City Council.
- 1.21 The hands on involvement of Oxygen House was important in the early formative days of Exeter City Futures and brought an air of excitement and promise that attracted private sector businesses to want to be engaged with the initiative, and indeed, attracted colleagues from the leadership of the public sector partners. A distinctive private sector approach, combined with the promise of data and technology to offer different approaches to tackling our stubborn challenges was, and still is, exciting. However, much of the technical prowess and resource capacity required to drive progress at pace and scale did not transpire. For the sake of clarity it is not that resources were not provided, it is simply that the tasks required a significantly greater scale of investment.
- 1.22 Charles Landry author of 9 books exploring urgent urban issues, in his book The Creative Bureaucracy & Its Radical Common Sense shares his experience of how cities across Europe are shaping innovation systems. Cities can be laboratories for experimentation but it is not easy, in his observation municipal authorities can be one of the biggest obstacle to change because of their silo working and the difficulties in achieving real collaboration. The strength of Exeter's culture of collaboration should not be undervalued or taken for granted, it is not found everywhere.
- 1.23 Public sector culture can sit uneasily with working with private sector companies in a fashion that is required to support whole city and whole system change. Typically we don't always know what the solution is before the public engage the private sector. A shared journey often develops the solution in a collaborative fashion. By the time the solution emerges people can cry foul on procurement. It is frustrating and threatens a loss of confidence with investors and private sector companies. Local Authorities simply do not have the capacity to work on a raft of problems/challenges that require solutions that they can be put out to the market as projects. Indeed, they also do not have the capital to underwrite an investment programme of the scale required to support a city achieve such an ambitious goal.

- 1.24 A lack of capacity and skills were some of the reasons for setting up a special vehicle like Exeter City Futures in the first place, local authorities like Exeter and Devon could not deliver sufficiently at scale and at pace; the problem with public funding has got worse not better. Public sector finances is reducing and it is inevitable that different models for financing city infrastructure would be required. The tension between a lack of resource and therefore entering into a partnership with the private sector to secure resources can be perceived as losing control, and in some sense tainted; interestingly this negative opinion is rarely ascribed to property joint ventures even though it is the same outcome some degree of control is given up in order to secure funding to deliver the outputs/impact that matters to Members.
- 1.25 Having worked in the city of Exeter on delivery for over a decade the difference between strategy and implementation is stark. In the absence of public funding it is necessary to work with business and private funding. Innovation and scaling up requires investment and the Net Zero Plan presented early indications of the scale of investment required. This is the problem that still needs to be solved, how to pay for the measures?
- 1.26 Members will have their own individual opinions on working with the private sector to address the city's challenges, but in the absence of public sector funding the city has to be able to have conversations with private sector partners to help the city achieve the scale of transformation required to support a Net Zero city, and indeed sub-region. This is especially so to achieve a 2030 goal. It may be concluded that a devolution type of deal may be necessary to secure the scale of investment required from government to achieve such an ambitious goal as a Net Zero city.

#### **Reflections on the work of Exeter City Futures**

- 1.27 In concluding the secondment with ECF I would wish to share reflections on ECF and the important work that has been done to date.
- 1.28 From the inception of ECF there has been a strong desire to support innovation and enterprise, to create a culture that supports start-ups and a strong engagement with the research at the University of Exeter. From the City Council's point of view we have been striving to support a knowledge economy and improve business density, productivity and innovation. Relative lack of business innovation and lower productivity levels is a regional problem. ECF as a disrupter, and a thought leader, as a connector and story teller creating a culture within the public sector to support enterprise was part of the goal, broader than just Net Zero. It focused on supporting wellbeing, local resilience, sustainability, and creating a great place. It addressed the capability of the city to support the required change, and set out areas that needed to be addressed to support the journey, this included: building a culture among the public sector organisations to collaborate, the sharing of data, developing data analysts, developing local finance and mechanisms to support start-ups.
- 1.29 We can all testify to the spirit of collaboration that has been built in the city, there is a level of trust and confidence in the leadership of the city's

institutions that is conducive to working together. ECF has been an important building block on this journey and has put us in a better position to address problems and co-ordinate action at city and regional scale. The data analytics apprenticeship programme was a tangible development that came out of the work, and now points to work by Exeter College on green construction and other sector needs.

- 1.30 The Velocity programme was amazing and gave clear evidence of both the need and opportunity to support individuals establish businesses working in areas important to the city. It did many of the things that we would wish to see put in place to develop an innovation agenda for us in Exeter and the south west. The companies created through that programme are in their own way contributing to the goal, from Co-Charger to Binit there are good examples of entrepreneurs being supported and they are solving real life challenges.
- 1.31 ECF produced technical studies, such as Energy Independence 2025, that informed our knowledge of the task ahead in achieving a Net Zero city. Funding numerous pitches and bids to government as a response on behalf of the city of Exeter and sub-region in collaboration with the leading institutions, it helped under line our joined up approach. We have become used to collaborating in pursuit of government funding, but it was not always the case. ECF got out and about at national events promoting the city of Exeter as a leader in the field for tackling climate challenges and ECF has always being prepared to showcase practical work, from individuals celebrated as local heroes to challenging rules on procurement. Numerous, and too many to recall, catapult centres and national programmes have been invited and shown around the city by ECF to emphasise the innovation agenda that was supported by a city living lab concept backed by a visible leadership embodied in ECF. Presentations have been given to other local authorities interested in a whole system change approach to Net Zero and the learning from the city is a useful starting point for others wishing to tackle the challenge in a collaborative fashion among institutions.
- 1.32 The Exeter Vision statement 2040 is the product of ECF that has been adopted by the Liveable Exeter Place Board and is now embodied in the draft city plan that is out to consultation. This body of work is something to be proud of and has put the city of Exeter in a good position when facing up to the big challenges we face. There is a common purpose among the leadership of partner organisations that recognise our common goal and distinctiveness as a place. It is a proud legacy to build upon.
- 1.33 Some of the work of ECF has been consciously aimed at engaging private sector companies to assist the city with its mission, encouraging the private sector to see the potential and opportunities associated with partnering a city wide initiative in the areas of carbon reduction. This promotion of the city of Exeter and the transformational agenda ahead has been time consuming and it is not always possible to evidence tangible outputs. However, the leadership

skills of storytelling, resource weaving and designing system architecture have rooted the Net Zero work with a good sense of the implementation challenges and the interconnection of disciplines and connecting themes.

1.34 Exeter City Futures produced the Net Zero Exeter 2030 Plan. One of a handful of cities that had produced such a document. It set out the themes, key sectors, and identified the scale of the resources required to achieve a Net Zero city. It was not a fully costed plan based on powers and resources available to the city of Exeter. Rather it was working back from a 2030 goal and looking at the sectors and themes that would need to be addressed informed by knowledge gained from working with businesses and partners. It identified the scale of investment required under each theme, with big ticket items clearly identified. A comprehensive approach to address all aspects of city living to achieve a Net Zero 2030 city is beyond the work of a community interest company with a modest team of staff with no finance. However, building on some earlier work of WSP who had identified the key priorities areas that could be progressed towards the Net Zero goal, a small number of key issues were suggested by ECF Board to test the appetite from partners to progress at pace.

#### **Greenhouse Gas Emissions Inventory**

- 1.35 To anchor the work on the Net Zero agenda in a finer grained understanding of the greenhouse gas emissions and sector contributions, and to bring to life the scale of the challenge facing the city of Exeter to get to a Net Zero Exeter 2030, the Centre for Energy and the Environment at the University of Exeter was commissioned to establish a baseline greenhouse gas (GHG) inventory for the city. This would quantify the reductions required to achieve Net Zero in 2030 and identify more specific and timely metrics for monitoring progress towards carbon neutrality in each emissions sector. A linear decline in emissions from 2021 to zero in 2030 requires a decline of 50 kt CO<sub>2</sub>e (11%) per year and gives cumulative emissions over the period of 2.2 Mt CO<sub>2</sub>e. Under the extrapolated current trend these cumulative emissions would be exceeded in 2026. Members considered the inventory in July 2022.
- 1.36 Lack of progress in the buildings and transport sectors is particularly concerning. Growth in the city is leading to increases in emissions and the decarbonisation of electricity cannot continue to make up for the shortfalls in these sectors. The city needs to make significant progress in buildings and transport to deliver Net Zero. The findings were reported to Exeter City Council's Executive and Council, and ECF was asked to reflect on the challenges of resourcing the step change in activity to meet the Net Zero 2030 Goal and to suggest options for meeting these challenges.
- 1.37 The Council also called for immediate and concerted effort to be taken on one specific intervention required under the Greenhouse Gas Emissions Inventory, such as the goal of connecting homes and non-residential buildings to a district heat network, in order to explore the practical challenges to securing delivery with limited capacity against the 2030 time line and to report back to the City Council's Executive by December 2022 with a plan of action.

#### **Recent Workshops**

- 1.38 Following on from that report ECF has held a series of four themed workshops to explore the challenges and opportunities in making progress on transport, district heat networks, EV battery charging infrastructure and hydrogen.
- 1.39 The transport workshop facilitated by City Science illustrated the potential ingredients of a more ambitious plan and politicians and partners engaged constructively in the session. The options require tough decisions by the transport authority and there is a need for political frankness with the district council politicians about their willingness to support the transport authority on navigating interventions. Prior to the first round of austerity the county promoted a high quality public transport solution, a large capital investment designed to address the growth in traffic from the sub-region into the city. There is no longer any talk of such bold initiatives. Other cities have made greater progress in managing demands on road space, cities like Oxford and Cambridge have been bolder in their policies, but they have also had greater access to national funding and have been part of growth deals. The tension between the demands of a rural catchment and the needs of the city are not easy to reconcile. There is no single initiative that will make the difference, neither is there an easy route to funding. The county's financial challenges seem to be a constant theme, it could threaten their place shaping role, this combined with the city council's diminishing capacity to intervene with capital investment must raise guestion marks on our collective potential to reduce the transport emissions. Incremental changes won't be sufficient to meet the Net Zero goal. The step change in support of active travel requires a visible leadership and funding programme. Final word on transport is that we are only addressing existing traffic, not the new growth that is already built into the system over the next twenty years. What was a problem twenty years ago has not diminished today; albeit three new railway stations have been built since 2002, namely, Cranbook, Newcourt and Marsh Barton.
- 1.40 Heat networks: The City Council and Devon County Council have pursued heat networks and have had a good measure of success, the city has over 3,000 homes connected to a heat network, the City's Local Plan anticipated two further heat networks either side of the River Exe. Significant funding has been invested in business cases and we have learned a lot about the challenges. The workshop held with One Energy illuminated the opportunity to deliver a central network without the local authorities having to contribute to the cost. However, there is an assumption that Government and private sector investment would be required. The request of the local partners is to sign a letter of comfort to the effect that the partners would take the heat. The partners have a mature relationship and no single organisation wishes to disappoint. Individual letters to support a bid for a heat network has been forthcoming from each of the local partner involved with ECF. It is clear a lot of technical work will need to be done ahead of any commencement that partners satisfy themselves on the procurement tests. The work being done in support of district heat networks and the implications for our organisations illustrate how even relatively

straightforward programmes are challenging and poorly understood. ECF has had a positive impact in keeping the organisations engaged on the wider programme and creating a climate to encourage and support one another. The greenhouse gas inventory assumes 11,200 homes being connected to a heat network by 2030. A significant benefit of a city centre network is that it would open up heat solutions for buildings such as the Cathedral.

- 1.41 EV Battery Charging Infrastructure is an important enabling condition to achieve a rapid replacement of fossil fuel vehicles with electric cars. The elimination of all non-electric vehicles in the city depends on confidence that vehicles can be charged. The workshop identified some interesting examples of how charging could be provided in public places and how technical issues are being addressed elsewhere in the country. From software to hard infrastructure there are solutions. The workshop at least demonstrated what could be done. The County Council engaged with the workshop and there is a sense the County may pick up some of the learning to progress their policy and solutions.
- 1.42 Hydrogen, has a bit further to travel than many other aspects of the Net Zero work, however, there was a good deal of interest in the potential of hydrogen to contribute to the mix, including heat networks, energy storage and fuel for HGV vehicles. There are a number of work streams being developed in the city and there is a desire to do more in partnership with the city's organisations. Hydrogen would benefit from greater exposure and exploration with rural renewable energy as a possible solution to grid constraints.
- 1.43 The workshops illustrated the value of ECF as a convener to shed light onto technology, ideas and opportunities to learn and collaborate. This is a theme that has been constant throughout the company's existence. ECF opens up opportunities and connects in a fashion that is rare but essential if the city is to build an innovation agenda and seeks to collaborate to find solutions. Whilst it need not be ECF the activity is essential.

# Legacy projects

1.44 Following on from the workshops there are four legacy projects led by the CEO and GD that the Council is recommended to take forward in 2023 e set pout in the table below. Should additional funding be required for any of the projects this will be subject to the normal approvals process.

Project	Aim
Creating a vision for a low vehicle city centre	Engage the public and key stakeholders in the design of a blueprint for the City-Centre as a tool for use by stakeholders in their individual and collective development plans.
Community Energy Pilot	To bring forward a business case setting put proposals to test out models that could scale up domestic retrofit using community development approaches.

Co-ordination of the delivery of the Innovate UK funded Pioneering Places project	The Phase 1 bid provides funding to create a blue print for collaboration across sectors to enable more agile and flexibility joint working on major projects. Successful completion of the project (June 2023) has the potential to open the gateway for Phase 2 funding @£8 million which could be used on a real life project e.g. delivery of a Commercial DHN.
Facilitating the collaboration necessary for the delivery of a city centre commercial District Heating Network	Develop the collaboration that resulted in public sector support for a large funding bid to BEIS in Nov 2022. Should the bid be successful (announcement due Feb 23) this work will need to continue to bring together a single business case across the key public sector partners.

# Conclusions

1.45 In my opinion ECF has proven its worth, it has shifted the dial in terms of collaboration and key organisations working together, it pioneered an accelerator programme supporting start-ups and connecting business mentors and funders, it has shaped the vision for the city of Exeter, published the Net Zero 2030 plan and has raised the profile of the city as a leading location for environmental initiatives. Core funding for ECF has never matched the ambition and the scale of the opportunity, this is echoed at regional and national level. The City Council and County Council are financially challenged and the public purse will be under pressure for many years to come. But both organisations have worked well together to tackle projects in spite of the funding pressures. Meaningful progress has been made in many areas of the green agenda but this stops short of achieving the goal. However, today we see the University of Exeter investing in the innovation agenda focused on green futures and Net Zero. They have taken a step change in the innovation agenda and have set out their vision. Led by the VC, Lisa Roberts, it is the transformational opportunity acknowledged across the region and firmly in focus as the significant strategic programme and project for the city. The Council should feel a strong sense of satisfaction that we do have a clear direction of travel where collaboration and innovation are firmly established as the way we do things in Exeter. We see ambition across our institutions and a mature working environment.

# • How does the decision contribute to the Council's Corporate Plan?

The Exeter Vision 2040 is to be carbon neutral by 2030.

- 8.2 Exeter City Council has declared a climate emergency and set a goal to be carbon neutral by 2030.
- 8.3 The Net-Zero Exeter 2030 Plan contains actions that support the corporate priorities of:
  - Tackling congestion and accessibility

- Promoting active and healthy lifestyles
- Building great neighbourhoods

#### • What risks are there and how can they be reduced?

- 1.46 There is a wealth of evidence reviewed by the Mission Zero, Independent Review of Net Zero, the challenge is meeting the 2050 goal no one is talking about a credible plan to achieve a 2030 date, but this should not stop us pursuing an ambitious 2030 goal. There is a significant risk that a Net Zero Exeter will not be achieved by 2030 based on a linear trajectory to the target date. That is a reasonable reading of performance measured against the targets contained in the Greenhouse gas emissions report. The risk is mainly reputational rather than legal or financial consequences. There is a challenge to measure or weigh the benefits of early investment in energy, retrofit, and transportation changes ahead of the 2030 goal. Treating Exeter as a selfcontained carbon island does not make sense. The city functional area extends well beyond the city, new communities on the edge of the city will function as extensions of the city, travel patterns and pressures on resources will not respect municipal borders. Therefore it is reasonable for decision makers to question why would the city invest ahead of national targets should that investment come at the cost of reducing local authority services or switching funding from service in order to deliver capacity and investment to save carbon. However, if part of the reason for accelerating progress is to demonstrate a USP in the area of research and applied practice that would support new jobs and increase investment appetite in this location to support important technological breakthrough and positive economic returns for the city of Exeter, then that may suggest early investment is a sensible necessary condition to prove Exeter's global leadership in an area that the investment market is guickly realising is the future for all of us. The international and national advantage for any community to be at the vanguard of history is powerful in shaping the long term standing and reputation of cities and countries. This is the essence of the city pitch being made consistently to regional and national bodies as to why they should be supporting the transformational opportunity at Exeter. Reputation risk is therefore important.
- 1.47 Living with the impact of climate change is a reality for all of us, adapting to climate change will be necessary and Exeter is at risk from the impacts of climate change. The weight that Members give to leading this agenda is therefore something to be weighed alongside the real cuts that have to be found for the council as a whole. However, what is clear is that Members cannot expect to hold officers and fellow councillors to account for delivering on a most ambitious Net Zero 2030 goal without the appropriate resources to achieve. In that regard the Net Zero Plan identified a requirement for hundreds of millions of pounds to support the transition. However, it is important to point out that significant sums of investment has been found by government to support retrofit programmes, hydrogen, technical studies, and development of business case, transport initiatives and many more projects. It is clearly possible indeed probable that when the city shows evidence of collaboration and ambition

greater sums of money to support the Net Zero agenda will flow. There is therefore a risk that being seen to pull back from the good work done to date would impact negatively in future funding rounds. The City whether through the county or City Council has a good track record of securing one of pots of funding for projects.

1.48 Therefore it is important to understand the spirit in which such a strategy is pursued, establishing a USP that says the city is up for innovation and collaboration in pursuit of a Net Zero 2030 goal is one that could credibly be achieved, holding the Council to task to meet the Net Zero 2030 goal is altogether different. It is respectfully suggested that Members need to clarify what success looks like for the medium term.

# • Equality Act 2010 (The Act)

11.1 Under the Act's Public Sector Equalities Duty, decision makers are required to consider the need to:

- eliminate discrimination, harassment, victimisation and any other prohibited conduct;
- advance equality by encouraging participation, removing disadvantage, taking account of disabilities and meeting people's needs; and
- foster good relations between people by tackling prejudice and promoting understanding.

11.2 In order to comply with the general duty authorities must assess the impact on equality of decisions, policies and practices. These duties do not prevent the authority from reducing services where necessary, but they offer a way of developing proposals that consider the impacts on all Members of the community.

11.3 In making decisions the authority must take into account the potential impact of that decision in relation to age, disability, race/ethnicity (includes Gypsies and Travellers), sex and gender, gender identity, religion and belief, sexual orientation, pregnant women and new and breastfeeding mothers, marriage and civil partnership status in coming to a decision.

REPORT Authors: Delete/complete one of these paragraphs (see guidance link and EQIA Template)

11.4 In recommending this proposal no potential impact has been identified on people with protected characteristics as determined by the Act because: because

11.4.1 The report is for information only

# • Carbon Footprint (Environmental) Implications:

12.1 Important to complete this section in light of the Council declaring a Climate Emergency. Consider whether the recommendations you are making in the report will help, hinder or have no direct impact on delivering our carbon reduction target (carbon neutral by 2030).

12.2 You should think about things like:-

- Travel (and, if travel is unavoidable, whether lower carbon options will be pursued e.g. walking, public transport, electric car);
- Infrastructure (e.g. LED lighting, energy efficient heating/hot water, solar panels, electric car charging points);
- Waste (e.g. recycling, composting, reducing non-recyclable waste); and
- Any other specific carbon reduction initiatives.

12.3 If there are no direct carbon/environmental implications for the decision please state:

No direct carbon/environmental impacts arising from the recommendations.

• Are there any other options?

## Director Karime Hassan

## **Chief Executive & Growth Director**

Author: Karime Hassan

# Local Government (Access to Information) Act 1972 (as amended)

Background papers used in compiling this report:-

Council resolution 23<sup>rd</sup> July 2019 Executive report 9<sup>th</sup> July 2019 Exeter City Futures CIC Net Zero Exeter 2030 Plan report to Executive 2 June 2020

Exeter City Futures Net Zero Plan published April 2020

Mission Zero, Independent Review of Net Zero, Rt Hon Chris Skidmore MP, assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data /file/1128689/mission-zero-independent-review.pdf