

ABERDEEN CITY COUNCIL

COMMITTEE	URGENT BUSINESS COMMITTEE
DATE	6 May 2020
EXEMPT	No
CONFIDENTIAL	No
REPORT TITLE	Net Zero Vision and Infrastructure Plan
REPORT NUMBER	PLA/20/088
DIRECTOR	Commissioning
REPORT AUTHOR	RICHARD SWEETNAM
TERMS OF REFERENCE	UBC 1

1. PURPOSE OF REPORT

The purpose of the report is to update Committee on the work done on the development of a Net Zero Vision for Aberdeen and associated infrastructure investment needed to support the achievement of the vision.

2. RECOMMENDATION(S)

That the Committee: -

- (i) Approves the Net Zero City Vision for Aberdeen;
- (ii) Agree the governance framework to drive and lead the vision for the city and instructs the Chief Executive to report back to the June 2020 Urgent Business Committee on the proposed governance model, its composition and the terms of reference (including monitoring of delivery to target emissions);
- (iii) Approves the Strategic Infrastructure Plan – Energy Transition and the outline prioritisation of projects;
- (iv) Instructs the Chief Officers City Growth and Strategic Place Planning to update the evidence base and baseline data in order to provide a monitoring and evaluation framework against which progress can be measured;
- (v) Instructs the Chief Officer City Growth and Strategic Place Planning to engage external partners to develop business cases for priority projects; and
- (vi) Instructs the Chief Officer – City Growth, in consultation with the Chief Officer – Finance to develop a supporting cohesive finance and investment plan to support delivery of the city's energy transition, including those projects with national and transformational significance.

3. BACKGROUND

- 3.1 A 2018 report by the Intergovernmental Panel on Climate Change highlighted the need for rapid, far reaching change if the planetary consensus to limit global warming to 1.5°C, set under the Paris Agreement, is to be achieved.
- 3.2 In 2008, the Council was a signatory of the European Covenant of Mayors for Climate and Energy. This led to development and adoption of Powering Aberdeen in 2016, that set out priorities, targets and a programme of mitigation actions to address the city's contribution to climate change that focuses on emissions reduction within the city.
- 3.3. The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, which amends the Climate Change (Scotland) Act 2009, sets targets to reduce Scotland's emissions of all greenhouse gases to net-zero by 2045 at the latest, with interim targets for reductions of at least 56% by 2020, 75% by 2030, 90% by 2040.
- 3.4 In December 2019, the Council's City Growth and Resources Committee adopted Aberdeen Adapts framework for longer term adjustments or adaptation to the risks of climate change and preparation for that. The Committee also instructed the Chief Officer Strategic Place Planning, to align the governance arrangements for Powering Aberdeen with Aberdeen Adapts.
- 3.5 The UK Government and Scottish Government Targets in response to Climate Change present huge implications for cities – as business locations and regional economic drivers – and are particularly relevant Aberdeen as 'home' to a global energy cluster and supply chain.
- 3.6 The Moody's annual credit rating report that supports the Council's £370m bond issue notes that while environmental considerations are not material to Aberdeen's credit profile, its main exposure relates to water shortages, flood risk, extreme weather events, in line with places in the rest of the UK. Some of the financial burden for implementing such infrastructure projects rests with local government. In its annual report (November 2019) that supports the annual credit rating assessment, the Aberdeen Economic Policy Panel, an independent group of economists, highlighted the scale of the structural changes needed to reduce emissions to net zero, and the increased pace of change for that. Key recommendations included:
 - That there is a place-based net zero strategy and plan
 - There is a new prioritised approach is needed to how infrastructure is delivered
 - At the national level, infrastructure plans should support Aberdeen's transition to net zero, and
 - That Aberdeen takes a lead on managing its assets in the transition to net zero
- 3.7 In December 2019, in noting the report of the Panel, the Council's City Growth & Resources Committee noted that the Economic Policy Panel recommended that the city develops its own approach to net zero transition and agreed that a

place-based plan is produced, supported by a framework of supporting leadership and governance actions; and that a new prioritised Infrastructure Plan and a Net Zero Transition Plan is developed that can be used to support the business case for any future bids to anticipated investment funding from the UK Government and the Scottish Government.

- 3.8 The coronavirus crisis is having an unprecedented impact on the economy and for Aberdeen, and the wider city region, it has coincided with the global pandemic coinciding with a collapse in oil prices to their lowest levels for many years. These two external shocks to the city region economy underlines the importance of showcasing the wider city region economy, and in particular Aberdeen's place in the vanguard of a future renewables' revolution. The case for responding to energy transition is strong, given the world class strengths that exist in the city region. But progressing on a just energy transition is even more critical now than it was even just a few months ago – this vision and corresponding infrastructure plan is pivotal to realising a resilient recovery following the pandemic.
- 3.9 This report presents the results of the work on a Net Zero Vision and the supporting Infrastructure Plan that reflects the work to date of Powering Aberdeen, Aberdeen Adapts and the Council's 2013 Strategic Infrastructure Plan. In the period since, the Council has successfully invested £883m in delivery of major transformational projects including The Event Complex Aberdeen, Aberdeen Western Peripheral Route, Hydrogen Aberdeen, or Aberdeen Art Gallery Refurbishment.
- 3.10 On account of the progress towards delivery of the 2013 Plan, to reflect the new challenges in response to low carbon economic development and to respond to the immediate and specific challenges facing Aberdeen, this second infrastructure plan, provides the framework for delivery of energy transition infrastructure in the years ahead.

4. NET ZERO VISION

- 4.1 In January 2020 the Council worked with Hillbreak consultants to develop a Vision and Prospectus for Aberdeen's response to both the challenges and opportunities from climate change. This is provided in Appendix 1 to this report.
- 4.2 The rationale for the vision, and intervention in response to climate change, is both to deliver environmental and economic benefits. It positions Aberdeen as having to respond, as a city and place, to the environmental imperative, but also its role as a world leader in the energy sector as an economic driver for the city, region, Scotland and the UK. This provides an opportunity for the city to become an exemplar in the energy transition towards net zero, and failure to respond could have an adverse impact on the city's economy. In the current 'perfect storm' of exposure to the effects of Covid-19 and a substantial fall in oil barrel prices to \$22, the city's recovery phase will not be like previous downturns and makes the case for Aberdeen's role energy transition even more compelling to the UK Government and the Scottish Government.

4.3 Simply put, the scale and pace of transformation that is now needed in order to respond to economic recovery and in due course economic restructure, is key to the city's economic development. Although the Scottish Government's update to the Climate Change Plan has been delayed as a result of COVID-19, this does not compromise what needs to be delivered in Aberdeen and it aligns to the national approach. Indeed, the UK Climate Change Committee has been clear that decisions over the next 12 months are likely to determine the direction of places over the next 25 years. The report makes the point that this is a sprint and not a marathon, and a matter of urgency for the city and its economy.

4.4 In line with this, the vision for city is:

"We want Aberdeen to become a climate positive city at the same time, helping to lead the world on the rapid shift to a net zero future by leveraging its unique assets and capabilities to support the global energy transition"

4.5 In support of the vision, the prospectus recommends five co-dependent strategic objectives that will support the economic imperative to transition to a different energy future beyond oil and gas - anchoring talent and the energy supply chain; innovation and technology transfer; a new energy destination of choice; and leading and advocating for the city and energy sector:

- i. Leading the Global Transition - Our city is a world-class destination for inward investment in alternative energy research, innovation, and commercialisation, underpinned by our credentials and track record;
- ii. Accelerating Transition Demand - Our city and its institutions are an anchor of demand and aligned local investment for alternative energy technologies, infrastructure and services, particularly those relating to hydrogen, offshore wind, carbon capture, utilisation and storage, and decommissioning
- iii. Resilient, Productive and Dynamic Place - Our city is recognised the world over as the resilient, productive and dynamic place at the heart of a world-class energy transition cluster
- iv. Climate Positive Exemplar - We play our full part – as a climate positive advocate and exemplar – in meeting the headline global goal of the Paris Agreement on Climate Change by limiting average global warming to no more than 1.5°C above pre-industrial levels;
- v. Putting People First - Everyone contributes to and shares in the proceeds of an equitable, sustainable and prosperous transition and future

4.6 The report highlights the need for a wider approach to strategic leadership around the vision and a governance that drives the vision, that also aligns to the instruction from the Council's City Growth and Resources Committee in December 2019. It proposes a new City Leadership Board for the energy transition towards net zero and beyond, recognising the scale of structural shift needed for a successful energy transition.

4.7 This board would provide the leadership and strategic direction for the vision and would be led by the Council. Below that, a separate 'Transition Delivery Unit' would be formed to drive the implementation of the Infrastructure Plan

itself, and having oversight of complementary programmes, for example the Council's own action plan to reduce its carbon footprint.

- 4.8 The report concludes with a set of immediate 'next steps', including the championing of the vision at the city, UK and Scotland levels. These highlight the need to develop implementation and financial plans at delivery level and establishing a detailed and up to date baseline against which to compare actual performance and relevant KPIs. Officers have already been discussing this approach with the University of Aberdeen's Centre for Energy Transition to potentially develop an appropriate evaluation framework that reflects the urgency required in terms of actions and timescales.
- 4.9 Another key next step is the recognition that a cohesive finance and investment strategy for the transition is developed that maximises government, public, institutional and private investment, including through better alignment of local capital sources, including the Council's own capital resources.

5. STRATEGIC INFRASTRUCTURE PLAN – ENERGY TRANSITION

- 5.1 The previous report calls for the preparation of detailed implementation plans, and the supporting Strategic Infrastructure Plan – Energy Transition aims to do that. A copy of this report is provided in Appendix 2. The Plan takes the vision and objectives from above, and categorises the infrastructure commitments under three headings:
1. Net Carbon Zero – public sector, for example, the Council and its public sector partners
 2. Net Carbon Zero – city, for example, the wider city projects, and
 3. Climate Positive City – the ultimate transformational interventions
- 5.2 The plan aligns to the overall objective of Aberdeen meeting the net carbon zero target by 2045 and, ultimately, to achieve climate positive status, and the goals of:
- Clean energy supply for the city, UK and internationally
 - Aberdeen's infrastructure is adaptable to changes in climate
 - Sustainable mobility
 - Building Energy Efficiency
 - Sustainable Waste Management
- 5.3 It advocates the use of various policy levers to support delivery of the infrastructure projects – economic development, procurement, planning and local taxation/ levies. The Plan concludes with the projects that will drive Aberdeen to be a positive climate city are the ones that are based around the cluster of hydrogen-based, global focused climate city projects, such as offshore wind, which with significant central government support will deliver for the regional, Scottish and UK economies.
- 5.4 The Plan also stresses that decisions will need to be taken on public sector and city wide projects to push the city towards a net zero carbon position, and notes

the Council's role to create initial demand for those projects that are also supporting the wider energy transition, anchoring the global supply chain and skills for future benefit of the city.

6. IMPLICATIONS

6.1 Committing to be a net zero city, Aberdeen will need to embrace all the types of actions suggested for Scotland by the UK Climate Change Committee such as setting a net-zero greenhouse gas emissions target for 2045. To achieve this journey to net zero, actions in the 2020s and 2030s are needed and may represent a step-change in ambition for Scotland requiring urgent action towards meeting the ambitious it. Every sector of the economy must contribute fully, and will reflect:

- Ensuring that by 2032 (or even earlier if feasible) there is no need for anyone in Scotland to buy a petrol or diesel car or van - electric vehicle charging infrastructure and supporting policies need to be in place, as well as infrastructure for public transport and cycling;
- Ensuring that all buildings are as energy efficient as can be practically achieved and that 'low-regret' (relatively low cost/ high impact) forms of low-carbon heating (e.g. hybrid heat pumps, low-carbon district heating) are being rolled out at scale in the 2020s;
- Support the necessary changes in Scottish land use that will underpin net zero.
- Incentivise switches to low-carbon heat and improve energy and resource efficiency in industry, embracing the work of the energy sector and offshore sector in becoming a net zero producing basin and the Energy Transition Zone
- Working with the UK Government to ensure that policy mechanisms and infrastructure, including transport, hydrogen clusters, renewable electricity support are developed in a way that allows Scotland to decarbonise industry, roll-out greenhouse gas removals, and transform low-carbon electricity generation and distribution to enable electrification of other sectors
- Tackling skills gaps that would otherwise hinder progress (e.g. construction sector, low-carbon heating, energy efficiency, ventilation and thermal comfort) and deliver the commitment for new 'green' jobs
- Engaging with the public on emissions reduction opportunities to make lifestyle changes, such as more walking and cycling, having healthier diets, and adopting new low-carbon technologies including electric vehicles and low-carbon heating

6.2 Both reports suggest that there may be a need for Council services to develop and align service plans that show how the Council, as an institution, is contributing to the new vision. This is the focus of the Council's Energy and Climate Route Plan which is the subject of a separate report before this Committee and demonstrates the leadership of the Council, as an institution, in tackling climate change.

7. FINANCIAL IMPLICATIONS

- 7.1 At its meeting on 3 March 2020, the Council approved the General Fund Revenue Budget and Capital Programme 2020/2021 which contained a commitment to invest approximately £100 million towards achieving Net Zero emission targets. This budget programme contained funding for initiatives that will support work under this Vision and Plan. Given the scale and pace of change required, the implications therefore are that the case for funding by the UK Government and Scottish Government needs to be made.
- 7.2 Therefore in financing the energy transition of the city, it is important that existing and new funding mechanisms are identified to respond to the challenge and opportunity, and priorities here may include: State Aid block exemptions that are flexible so that cities like Aberdeen can more effectively support economic growth – and in this case energy transition; potential alignment of the UK Shared Prosperity Funds to the UK Industrial Strategy – that emphasis on making clean technologies cost less than high carbon alternatives and the specific reference to low carbon hydrogen production; the work of the Infrastructure Commission and the Scottish National Investment Bank, and the emphasis on energy transition; investment by the North East of Scotland Pension Fund in infrastructure; and influence around decision making according to the economic growth potential and not solely deprivation.

8. LEGAL IMPLICATIONS

- 8.1 Work towards a Net Zero city and a Climate Resilient Aberdeen contributes to the Council's and other public bodies duties under Part 4 of the Climate Change (Scotland) Act 2009 and the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019.
- 8.2 The Environmental Assessment (Scotland) Act 2005, requiring Strategic Environmental Assessment for relevant plans, programmes and strategies, will be considered, as well as any requirements either individually or in combination with other plans or projects.
- 8.3 It should be noted that the duty to report to particular timescales has been relaxed to a certain extent by the Coronavirus (Scotland) Act 2020.

9. MANAGEMENT OF RISK

	Risk	Low (L), Medium (M), High (H)	Mitigation
Financial	Budget pressures - costs of developing/ implementing energy and climate actions.	H	Budget constraints across public and private sectors provide incentive to reduce

	Risk	Low (L), Medium (M), High (H)	Mitigation
	<p>Lack of funding mechanisms to implement actions.</p> <p>Increase in costs for all from not implementing measures to address their climate risks.</p>		<p>resource consumption and carbon emissions.</p> <p>Unlock external funding opportunities, making the case that Aberdeen is key to the success of the UK Government and Scottish Government's reaching its climate change goals.</p>
Legal	<p>Failure to meet public sector climate duties.</p> <p>Failure to meet existing and emerging legislative and regulatory requirements on climate and energy in public and private sectors, as well as contribute to the delivery of national targets/ programmes.</p> <p>Failure to keep abreast of legislative changes.</p>	H	<p>Ensure that legal ramifications of regulatory changes are understood, communicated to relevant stakeholders and built into decision making processes.</p> <p>Respond to relevant strategic and legislative consultations.</p>
Employee	<p>Insufficient staff resources to progress action/ competing priorities.</p>	M	<p>Managed in collaboration with the Council's Energy and Climate governance framework and associated internal communications plan.</p>
Customer	<p>Lack of understanding about climate change and planned approach.</p> <p>Insufficient stakeholder engagement and involvement.</p>	M	<p>City Leadership and Delivery Unit.</p> <p>Complementary business and public communications strategy.</p>
Environment	<p>Failure to meet the Net Zero target. That the approach is not sufficiently robust to</p>	H	<p>Establish governance framework to ensure time/</p>

	Risk	Low (L), Medium (M), High (H)	Mitigation
	<p>support the financing, delivery and monitoring of carbon reduction and adaptation projects.</p> <p>Failure to address environmental impacts associated with the development of energy infrastructure.</p>		<p>resource allocated to drive delivery.</p> <p>Establish clear monitoring and reporting procedures.</p> <p>Identify enough projects to deliver carbon savings and climate resilience.</p> <p>Undertake relevant environmental assessments.</p>
Technology	<p>Failure to invest in renewable and nature-based technology to reduce emissions and manage climate risks.</p>	M	<p>Development and delivery of this Vision and Plan.</p>
Reputational	<p>Failure to lead with ambition in tackling the climate and associated economic risks and opportunities. Risk if commitment conflicts with other ambitions and decisions.</p> <p>Risk of delays to establishing governance/ progress with Plan, i.e. Covid-19.</p> <p>Failure to deliver a commitment to the Vision, and associated action may risk Aberdeen's ability to attract talent to drive economy and higher education</p> <p>Covid-19 recovery – and the challenges now facing the oil and gas industry and the</p>	H	<p>Development and delivery of this Vision and Plan.</p> <p>Establish strong citywide leadership and governance framework.</p> <p>Ensuring elements of the Net Zero Infrastructure Plan are delivered</p>

	Risk	Low (L), Medium (M), High (H)	Mitigation
	implications for the city region's economy		

7. OUTCOMES

<u>COUNCIL DELIVERY PLAN</u>	
Impact of Report	
Aberdeen City Council Policy Statement	<p>The proposals within this report support the delivery of following Policy Statement objectives:</p> <p>Economy 14. Work with both governments in order to unleash the non-oil and gas economic potential of the city</p> <p>People 11. Reduce fuel poverty across our most deprived communities through combined heat and power schemes including the Energy from Waste Plant</p> <p>Place 1. Build up existing strength in hydrogen technology 2. Support efforts to develop inward investment (including Energetica corridor)</p>
Aberdeen City Local Outcome Improvement Plan	
Prosperous Economy Stretch Outcomes	<p>The development and delivery of net zero and resilience actions directly support the delivery of LOIP Stretch Outcome 1 – 10% increase in employment across priority and volume growth sectors by 2026. The overall outcome target must be to maintain and grow 36,000 jobs in the energy sector, including renewables.</p> <p>At the heart of the Energy Transition Zone project is the commitment to develop an ‘academy’ approach to developing vocational skills around energy transition involving schools, localities and North East Scotland College.</p>
Prosperous People Stretch Outcomes	<p>The proposals in this report support the delivery of stretch outcome 11 - Healthy life expectancy (time lived in good health) is five years longer by 2026. Actions to reduce carbon emissions; and protect and improve the environment can have a positive impact on health and wellbeing.</p>

Prosperous Place Stretch Outcomes	The proposals in this report support and go beyond the delivery of stretch outcome 14 - carbon emissions reduction by 42.5% by 2026 and adapting to the impacts of our changing climate. It can contribute to stretch outcome 15 – 38% of people walking and 5% of people cycling as main mode of travel by 2026
Regional and City Strategies	The net zero vision and infrastructure plan within this report support the Regional Economic Strategy, the Strategic Development Plan, Local Development Plan and Regional Transport Strategy by recommending the proposals and projects to meet objectives delivery an energy transition that supports economic development, reduction in carbon emissions and addressing climate change.
UK and Scottish Legislative and Policy Programmes	<p>The report sets out the City’s response to the Intergovernmental Panel on Climate Change set under the Paris Agreement Annual Child Poverty Action report and the UK Governments ambition to have Net Zero emission by 2045.</p> <p>The report also set out the City’s plans to me the Scottish Government’s Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, which amends the Climate Change (Scotland) Act 2009</p>

8. IMPACT ASSESSMENTS

Assessment	Outcome
Equality & Human Rights Impact Assessment	A full EHRIA is not required
Privacy Impact Assessment	Not required

9. BACKGROUND PAPERS

- 9.1 City Growth & Resources Committee 5 December 2019 - Economic Policy Panel Annual Report 2019 - PLA/19/457
- City Growth & Resources Committee 5 December 2019 – Aberdeen Adapts: Climate Adaptation Framework – PLA/19/40
- 9.3 Full Council 3 March 2020 - General Fund Revenue Budget and Capital Programme 2020/2021 – RES/20/065

10. APPENDICES

10.1 The Vision and Prospectus for Aberdeen is provided in Appendix 1.

10.2 The Net Zero Infrastructure Plan is provided in Appendix 2.

11. REPORT AUTHOR CONTACT DETAILS

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