

CABINET ITEM COVERING SHEET PROFORMA

AGENDA ITEM

REPORT TO CABINET

27 NOVEMBER 2013

**REPORT OF
CORPORATE
MANAGEMENT TEAM**

CABINET DECISION

Environment – Lead Cabinet Member - Cllr David Rose

GREEN VISION

1. Summary

This report outlines the need for a Council 'Green Vision' for a low-carbon future in order to meet longer term national and international targets, for a low-carbon economy, and for a community and services that are resilient to the impacts of climate change. It outlines the Council's leadership role which will be embedded in the Council Plan for 2014-17 for achieving the green vision across a number of sectors towards achieving the adoption of the Local Government Association's 'Climate Local' framework for reporting on progress and action plans.

2. Recommendations

It is recommended that:

1. Cabinet endorses the proposed statement of ambition for a 'Green Vision' 2050 and the approach to providing the detail and targets towards achievement.
2. Cabinet agrees that the authority signs up to the Local Government Association's 'Climate Local' Framework and subsequently set up an associated 'Climate Stockton-on-Tees' reporting mechanism.
3. Appropriate action plans with robust targets are set as part of the existing service planning arrangements that will ensure delivery of the green vision policy themes.
4. Cabinet agrees to set the aspiration of achieving a net carbon neutral status for its assets and services by 2030.

3. Reasons for the Recommendations/Decision(s)

There are significant pressures facing the local community and Council services in the future arising from the impacts of climate change, international regulation, energy costs, energy security, population growth, waste management and resource

availability. The Green Vision describes what is needed for a resilient, efficient and prosperous future for the Borough over the next 35 years.

4. Members' Interests

Members (including co-opted Members) should consider whether they have a personal interest in any item, as defined in **paragraphs 9 and 11** of the Council's code of conduct and, if so, declare the existence and nature of that interest in accordance with and/or taking account of **paragraphs 12 - 17** of the code.

Where a Member regards him/herself as having a personal interest, as described in **paragraph 16** of the code, in any business of the Council he/she must then, **in accordance with paragraph 18** of the code, consider whether that interest is one which a member of the public, with knowledge of the relevant facts, would reasonably regard as so significant that it is likely to prejudice the Member's judgement of the public interest and the business:-

- affects the members financial position or the financial position of a person or body described in **paragraph 17** of the code, or
- relates to the determining of any approval, consent, licence, permission or registration in relation to the member or any person or body described in **paragraph 17** of the code.

A Member with a personal interest, as described in **paragraph 18** of the code, may attend the meeting but must not take part in the consideration and voting upon the relevant item of business. However, a member with such an interest may make representations, answer questions or give evidence relating to that business before the business is considered or voted on, provided the public are also allowed to attend the meeting for the same purpose whether under a statutory right or otherwise (**paragraph 19** of the code)

Members may participate in any discussion and vote on a matter in which they have an interest, as described in **paragraph 18** of the code, where that interest relates to functions of the Council detailed in **paragraph 20** of the code.

Disclosable Pecuniary Interests

It is a criminal offence for a member to participate in any discussion or vote on a matter in which he/she has a disclosable pecuniary interest (and where an appropriate dispensation has not been granted) **paragraph 21** of the code.

Members are required to comply with any procedural rule adopted by the Council which requires a member to leave the meeting room whilst the meeting is discussing a matter in which that member has a disclosable pecuniary interest (**paragraph 22** of the code)

AGENDA ITEM

REPORT TO CABINET

27 NOVEMBER 2013

**REPORT OF CORPORATE
MANAGEMENT TEAM**

CABINET DECISION

GREEN VISION

SUMMARY

This report outlines the need for a Council 'Green Vision' for a low-carbon future in order to meet longer term national and international targets, for a low-carbon economy, and for a community and services that are resilient to the impacts of climate change. It outlines the Council's leadership role which will be embedded in the Council Plan for 2014-17 for achieving the green vision across a number of sectors towards achieving the adoption of the Local Government Association's 'Climate Local' framework for reporting on progress and action plans.

RECOMMENDATIONS

It is recommended that:

1. Cabinet endorses the proposed statement of ambition for a 'Green Vision' 2050 and the approach to providing the detail and targets towards achievement.
2. Cabinet agrees that the authority signs up to the Local Government Association's 'Climate Local' Framework and subsequently set up an associated 'Climate Stockton-on-Tees' reporting mechanism.
3. Appropriate action plans with robust targets are set as part of the existing service planning arrangements that will ensure delivery of the green vision policy themes.
4. Cabinet agrees to set the aspiration of achieving a net carbon neutral status for its assets and services by 2030.

DETAIL

1. There are significant pressures facing the local community and Council services in the future arising from the impacts of climate change, international regulation, energy costs, energy security, population growth, waste management and resource availability. These pressures will continue to grow and some are only just emerging. The Green Vision describes what is needed for a resilient, efficient and prosperous future for the Borough over the next 35 years.

Background and Context

2. We are facing potentially catastrophic changes to our daily lives and future well-being from the twin effects of climate change and excessive demand on finite sources of energy, food, water and materials.
3. Nationally and internationally an increasing awareness of climate change and rising demand upon scarce natural resources are requiring governments, industry and individuals to face sustainability issues, adaptation and mitigation head on. Whereas the mechanisms behind climate change are complex and still subject to detailed study, there are significant and irrefutable changes taking place globally and locally. According to the United Nations Intergovernmental Panel on Climate Change (IPCC) in data published in September 2013:-
 - Warming of the atmosphere and ocean system is unequivocal. Many of the associated impacts such as sea level change (amongst other metrics) have occurred since 1950 at rates unprecedented in historical record.
 - It is extremely likely that human influence has been the dominant cause of observed warming since 1950.
 - Further warming will continue if emissions of greenhouse gases continue unabated.
4. Due to a significant time lag in the impact of greenhouse gas emissions on the climate the effects of emissions to date will continue to result in adverse impacts of ice sheet depletion, sea level rise and more extreme weather conditions for centuries. Capping at current levels will therefore be insufficient to halt the degradation of the climate.
5. The Tees Valley Climate Change Strategy suggests that North East England will, without adaptation measures be increasingly at risk from:-
 - increased flooding from rivers, streams, drainage systems the sea, storm surge and coastal inundation
 - Increasing threats to health and wellbeing during weather extremes
 - increases in infectious diseases in humans and animals
 - increased damage to the structure of buildings and transport networks
 - loss of business/service productivity or community
 - increased pressure on emergency services and disruption to services
 - increased erosion of the coast line and sea level rises.
 - more frequent extreme weather events will disrupt food supplies
6. Concerns over energy security are caused by potential disruptions to physical supplies and spikes in energy prices. The UK's dependence on energy imports has increased to its highest level since 1976, according to statistics released by the Department for Energy & Climate Change (DECC March 2013). The UK is producing decreasing amounts of energy domestically. Between 2009 and 2011 the total amount of fuel the country imported in order to generate heat and electricity and keep vehicles on the road rose by 7.1 % per year. As the UK is increasingly a fuel importer the vulnerability of energy supply increases accordingly.
7. Between 2009 and 2011 there was an increase in the price of domestic electricity of 23% and 28% for domestic gas. According to DECC estimates domestic energy

prices will increase by a further 18% and gas by 28% by 2016 with obvious implications for the levels of fuel poverty within the borough. Fuel poverty is caused by a combination of factors including:-

- Low household income
- Homes with poor energy efficiency
- High fuel prices

Vulnerable households at most risk of fuel poverty tend to be

- Frail older people
- Young families on income support
- People with chronic disease or disability
- People in hard-to-heat homes

8. At the time of writing fuel prices are rising and predictions are for further increases. The risk that Stockton residents may become increasingly vulnerable to fuel poverty is a significant driver for change and has already provoked a variety of practical and effective interventions. The opportunity exists for good practice in helping tackle fuel poverty to be embedded in our collective efforts towards creating a Green Vision for the borough.

The Obligation to Change

9. With regard to climate change international and national laws now demand action to reduce greenhouse gas emissions. In the UK action on climate change is covered the Climate Act 2008. This act means that the UK was the first to introduce a legally binding framework to cut greenhouse gas emissions. This act also created the Committee on Climate Change, an independent expert body to advise the Government on how to achieve carbon savings. The Committee on Climate Change published their first report in December 2008 which supported the UK Government's target to reduce emissions of greenhouse gases by 80% by 2050 as a fair contribution to global action on climate change. The Government has a duty to meet this Obligation target through setting 5 year carbon budgets which require emissions reductions of at least 34% by 2020 from a 1990 baseline, followed by greater reductions towards the 2050 target. These will be very challenging to achieve - for example the Stern Review stated that to achieve an 80% reduction in CO₂ emissions from cars in the UK by 2050 this implies an 90% reduction in emissions per km, i.e. almost complete decarbonisation. In response the Department for Transport's Ultra Low Emission Vehicles (ULEV) Strategy (August 2013) has recognised that in effect no new CO₂ emitting vehicles can be sold from 2040. This will require a huge shift in the way we conduct our lives and businesses.
10. The Council's return to DECC (July 2013) concerning borough wide emissions data showed that emissions for the borough are falling, taken as a total reduction the Council can now show a 42.2% emissions reduction against the 2005 baseline. The majority of these reductions came from the industrial sector and can largely be attributed to the economic downturn. The challenge is to create the conditions in collaboration with the TVU, and aligned to the statement of ambition for a low carbon economy, whereby Stockton is a borough whereby a lower carbon economy can flourish.

Towards a Green Vision for Stockton-On-Tees

11. There is undeniable growing pressure to significantly change the way in which the authority conducts its business and delivers services to remain efficient and effective in the future. Part of the obligation to change is backed up by legislation. The Council must also use all its influence to encourage change towards sustainability and adaptation amongst our partners in delivering services, amongst business, industry and the wider community.
12. There have been some notable achievements within the Council towards Green Vision ambitions, and a wealth of good practice embedded, for instance:-
 - The 2012 CESP initiative to retro-fit 1670 solid wall homes with external cladding, helping address fuel poverty issues, reducing residents' fuel bills and fossil fuel requirements by an estimated 250,000 lifetime tonnes of CO₂. The work is planned to continue with external funding via the Energy Company Obligation (ECO) until 2016 with the target of tackling all solid wall properties throughout the Borough. Note that social housing under the control of Vela Homes is also undergoing a similar programme.
 - The installation of photo voltaic (P.V.) panels on Council buildings is reducing the Council's energy consumption and earning an income through the feed in tariff and is being expanded further.
 - The evaluation of ultra-low emission vehicles within the Council has shown not only carbon savings but also cost savings from displaced officer business miles, and can now be confidently mainstreamed for many applications of Council services.
 - The Northshore Academy was designed with sustainability from first principles, with high levels of energy efficiency and on-site renewable energy generation.
 - The Council completed a total carbon footprint analysis of its services and estates in 2009 which has influenced strategies and action plans.
 - The Council's Carbon Management Plan has over a five year period enabled a reduction of 20% (10,000 tonnes) of CO₂.
 - Excellent maintenance of green spaces throughout the Borough
 - Formation of the multi-agency Fuel Poverty Partnership and a variety of practical initiatives to promote affordable warmth
13. In summary there are a variety of pressures from climate change, economic considerations e.g. vulnerability from the increasing costs and scarcity of traditional fossil fuels and legislation that oblige the Council to adopt a Green Vision as a means of creating the conditions for a resilient, efficient and prosperous Borough in 2050 and beyond. In order to achieve this the Council will need to establish:-
 - a high level of energy independence
 - a high level of resilience to internal and external resource pressures

- a high level of adaption to an increasingly unstable climate in which extreme weather events become increasingly common, both in terms of infrastructure and also delivery of service.

Opportunities

14. Within such rapid change there are huge challenges but there are also opportunities. The Council and its partners have skills and resources to adapt to create a vibrant local economy built upon businesses, services and jobs in the low carbon industry, examples of this include:-
- utilisation of surplus low grade industrial heat for homes and businesses via inter connected district heating networks
 - opportunities for local on-site and off-site renewable energy generation such as PV electricity, ground source heat and offshore wind.
 - developing national excellence in the ultra-low emissions vehicles market.
 - sophisticated local management of waste and resources via extended industrial park networks
 - developing local skills, businesses and mechanisms involved with retro-fitting domestic and commercial buildings to achieve energy neutral status, and extreme weather resilience.
 - Developing an integrated transport system where vehicle journeys are minimised and local trips enabled by walking, cycling or public transport.

GREEN VISION - A STATEMENT OF AMBITION

15. To achieve a healthy, vibrant and successful low-carbon community, resilient to the challenges of climate change and resource pressures we will:-
- Need to live and work in highly efficient homes and buildings that generate their own energy or consume very little external power
 - Have businesses and workplaces that get their power needs from renewable or sustainable sources, and where waste is reclaimed in to new energy or raw materials
 - Have a transport network enabling people to get about under their own power, or in vehicles which have zero emissions.
 - Have businesses and public services which are largely independent from, or resilient to external pressure on energy waste and resources
 - Become resilient to a rapidly changing climate and increasing number of extreme weather events
 - Need to safeguard a diverse and healthy natural environment that protects our food and supports our well-being.

- Encourage a thriving green economy and local skill base where businesses have the opportunity to grow

What Action is Required?

16. The Green Vision needs to be embedded into the core of the Council's business approach and everyday operations. The development of the Council Plan for 2014-17 provides an opportunity to embed sustainability and resilience considerations across services, into the service planning cycle and into Business Unit Plans, and subsequent monitoring and review mechanisms.
17. A set of thematic route-maps is being developed towards these themes, attached as Appendix A to this report which can be refined to become the milestones towards achieving targets to ensure the realisation of the Green Vision.
18. A set of six thematic policy areas are proposed achieve these ambitions.
 1. Food supply, green space and the natural environment
 2. The low carbon economy
 3. Climate Change: mitigation and adaptation
 4. Fuel Poverty and energy neutral homes and businesses
 5. Sustainable energy supply
 6. Lifestyle, behaviour and well-being
19. To evidence the strategies and action plans to achieve these it is recommended that the adoption of the LGA's "Climate Local" Framework, which provides an opportunity to draw these together. Additionally the act of signing up as a Climate Local Council is a public statement of intent towards the Authority becoming robust in sustainability terms.
20. Stockton's Climate Local ambitions and actions will be summarised on the Council's website, reviewed on a six monthly basis, and reported to Stockton Local Strategic Partnership's annual Environment Forum and as part of the agreed performance management framework for the Council Plan. Attached as Appendix B to this report is an example of how a Climate Local commitment to 'measure energy consumption and greenhouse gas emissions on our estate, our services and our local area' might be expressed.
21. Whilst it is up to councils to determine their own local commitments and actions we need to ensure that as many of the themes are addressed as fully as possible, monitored and reviewed regularly. This should ensure that not only good progress is evidenced but that gaps are identified for targeting.
22. Stress-testing of services to cope with climate change impacts need to be carried out and reviewed routinely e.g. on a 5-yearly basis, and necessary measures for mitigation and adaptation put into place via business continuity plans. This will be necessary as the frequency and intensity of weather events and resource pressures increase as expected.
23. Route maps will be developed by the end of March 2014 that will set out the means by which these ambitions will be realised. These route mas will recognise and align

with the activities and priorities of key partners and stakeholders within these policy areas.

24. In order to achieve the legally binding international obligation of 80% carbon reduction by 2050, shorter term targets must be set. It is therefore recommended that the Council sets the aspiration of achieving a net carbon neutral status for its assets and services by 2030.

FINANCIAL IMPLICATIONS

25. There are no immediate financial implications from the recommendations in this report, however it is likely that there will need to be considerable investment and invest to save priorities to ensure progress towards the Green Vision ambitions. The £14 million investment in street lighting that has been proposed will deliver significant carbon savings but it is a one-off opportunity and other sources of funding will need to be secured to deliver elements of the green vision route maps.

LEGAL IMPLICATIONS

26. No immediate implications however the Council will need to be able to respond to future statutory requirements and may also need to create new partnerships e.g. formation of an Energy Savings Company (ESCo) which would be the subject of specific reporting.

RISK ASSESSMENT

27. Unless adaptation and stress testing is carried out and adaptation measures put into place the cost of responding to energy price rises and service disruptions from extreme weather events will be significant.

SUSTAINABLE COMMUNITY STRATEGY IMPLICATIONS

28. Contributes to a number of strategic objectives that include tackling climate change, reducing family and fuel poverty, securing employment, regeneration of lower super output areas and improving the borough's housing stock.

EQUALITIES IMPACT ASSESSMENT

29. No specific Equality Impact assessment is required at this stage however the impacts of extreme weather events and energy cost rises are likely to fall more heavily upon poorer and more vulnerable members of our community .

CONSULTATION INCLUDING WARD/COUNCILLORS

30. All Ward Councillors

Name of Contact Officer: Richard McGuckin
Post Title: Head of Technical Services
Telephone No. 01642 527028
Email Address: richard.mcguckin@stockton.gov.uk

Education related?

No

Background Papers

None

Ward(s) and Ward Councillors:

All

Property

N/A

Sustainable Energy Supply Route Map

		Current	Short Term Targets (to 2015)	Medium Term Targets (to 2020)	Long to Term Targets (2030)	Lifetime Target (to 2040)
Sustainable Energy Supply	Energy Efficiency Improvements	Switch to LED street lighting. Improved office lighting at refurbishment opportunities.	Further building rationalisation including new build schools.	Further consolidation of Council accommodation	New build low energy Council accommodation on minimum number of sites.	Link of energy efficiency to energy supply to achieve zero carbon footprint.
	Energy Supply PV	170kW of Council building PV installed and generating. Additional sites identified and procurement process initiated.	Large scale PV on Council and industrial land.	Remaining large scale PV opportunities identified and delivered.	PV incorporated in all new build.	Review efficacy of PV as part of generation mix and consider upgrades.
	Energy Supply Heat	Ground source heat pumps included in new build. District heating study using process heat developed with HNDU	Progress recovered industrial heat for district heating in Billingham area for possible (ambitious) commencement of construction from March 2016.	Northern phase of district heating scheme installed and operating (2018 alternate start date). Review of efficacy of southern scheme into Portrack, North Shore and Stockton centre.	Expanded district heating network with new build energy centres complementing industrial heat supply and serving wide areas of the Borough	District heating network linked north and south of River Tees and expanding into more distant parts of the borough resulting in large reduction in natural gas consumption for all sectors.

Sustainable Energy Supply Route Map

		Current	Short Term Targets (to 2015)	Medium Term Targets (to 2020)	Long to Term Targets (2030)	Lifetime Target (to 2040)
Sustainable Energy Supply	Energy from Waste		Preparation for planned approach to municipal waste disposal after end of current contract with SITA based on linked energy from waste supplied. NEPO development of PPA energy from waste contractual arrangements	Energy supply from SBC municipal waste under NEPO PPA.	Review energy from waste contracts taking account of new technologies.	Review energy from waste contracts taking account of new technologies.
	Energy Supply Offshore Wind		Developing dialogue with offshore wind farm developers to procure electricity supply on PPA basis.	Increasing proportion of Council electricity supply from offshore wind.	All electricity from renewable sources.	Zero carbon electricity supply.

Sustainable Energy – Climate Local Commitments

Suggested Climate Local Commitment	Suggested Climate Local - local action	Already existing in Stockton or requiring development
<p>Measure energy consumption and greenhouse gas emissions on our estate, our services and our local area</p>	<ul style="list-style-type: none"> • Quantifying the local authority baseline estate emissions if not done so already – this will probably have been done through the CRC or other commitments. • Undertaking a baseline review of the area's energy consumption and greenhouse gas emissions. • Reviewing the area's potential for energy efficiency improvements and renewable energy generation. 	<p>The Council has published its Climate Change Action Plan which pledges carbon reduction in the Borough by 21% by 2020 and also to improve the Borough's resilience to the effects of climate change.</p> <p>Reliable baseline for Scope 1,2 & 3 emissions established 2010/11, posted on council website and reported to DECC.</p> <p>CO2 emissions from Local Authority operations (kgs) already monitored. Business miles travelled by SBC employees already monitored.</p> <p>A Council-Wide Total Carbon Footprint exercise was undertaken in 2009, ambition to refresh this work in 2014</p> <p>District Heating pre-feasibility completed using recovered industrial heat from GrowHow.</p> <p>LED street lighting scheme being developed.</p>