

## Notice of Meeting

# Surrey's Greener Future Task and Finish Group

**Date & time**

Tuesday, 12  
November 2019 at  
1.30 pm

**Place**

G10, County Hall

**Contact**

Ross Pike, Committees  
Business Manager  
Room 122, County Hall  
Tel 020 8541 9122

### Task Group Membership

Nikki Barton, Paul Deach, Jonathan Essex, Andy MacLeod (Chairman), Professor Richard Murphy, Becky Rush, and John O'Reilly (ex-officio)

### Role of the Task and Finish Group

Surrey's Greener Future Task Group will focus on Surrey County Council's recent declaration of a climate emergency and the actions the council needs to take to achieve [net zero carbon emissions](#) as soon as possible. The task group will also consider the role residents need to play in their local community and the wider impact of other public sector organisations and the private sector on the county's environment to develop a system-wide position.

<https://mycouncil.surreycc.gov.uk/mgCommitteeDetails.aspx?ID=802>

## **AGENDA**

**1 APOLOGIES FOR ABSENCE**

To receive any apologies for absence.

**2 MINUTES FROM THE PREVIOUS MEETING: 29 OCTOBER 2019**

(Pages 3  
- 8)

To agree the minutes as an accurate record of the meeting.

**3 DRAFT SELECT COMMITTEE REPORT**

(Pages 9  
- 36)

To finalise and agree the task group report to be presented to the Communities, Environment and Highways Select Committee on 22 November 2019.

**4 BASELINE DATA**

**5 ACTIONS/NEXT STEPS**

**MINUTES** of the meeting of the **SURREY'S GREENER FUTURE TASK AND FINISH GROUP** held at 11.30 am on 29 October 2019 at G44 - County Hall.

These minutes are subject to confirmation by the Committee at its meeting on 12 November 2019.

**Elected Members:**

- \* Mrs Nikki Barton
- \* Mr Paul Deach
- \* Mr Jonathan Essex
- \* Mr Andy MacLeod (Chairman)
- \* Mr John O'Reilly (ex-officio)
- Mrs Becky Rush
- Mrs Fiona White

**Co-opted Members:**

Professor Richard Murphy, University of Surrey

**1 APOLOGIES FOR ABSENCE [Item 1]**

Apologies had been received from Fiona White and Becky Rush.

**2 MINUTES FROM THE PREVIOUS MEETING: 9 SEPTEMBER 2019 [Item 2]**

The Minutes were approved as an accurate record of the previous meeting.

**3 WITNESS SESSIONS [Item 3]**

**Witnesses:**

Katie Sargent, Environment Commissioning Group Manager  
Rachel Crossley, Director of Strategic Commissioning

**Key points raised in the discussion:**

Feedback and Reflections

1. The Environment Commissioning Group Manager explained that there were a few witness sessions left to re-arrange. This included Stroud District Council and Wiltshire Council and officers will circulate the details to Members before the Task and Finish Group's next meeting on 12 November 2019.
2. Members agreed that the notes from the witness sessions should be collated into a summarised document within the Draft Select Committee Report as this was useful to the Council as best practice.
3. Members agreed that there should be an all-Member briefing on the evidence from the witness sessions and the Task and Finish Group would look into presenting their ideas and challenges to all Members.

#### Any outstanding issues

4. Members felt that Community engagement needed developing and it would be useful if the Task and Finish Group received more specialists on this area.
5. It was agreed that there needed to be greater emphasis on increasing public participation and Facebook would be a useful tool to aid this.
6. The Environment Commissioning Group Manager stated that the Council's weakest theme area was: Countryside, food, farming, water and land use and asked Members for their ideas to address that.
7. The Royal Society for the encouragement of Arts, Manufactures and Commerce's (RSA) useful pamphlet on sustainable land use and farming titled 'Our Future in the Land' was suggested as a useful document to review.
8. It was suggested that Surrey Hills Enterprises was also a useful organisation and would help raise business engagement.
9. Key themes were summarised as follows:
  - Transport - the recent regional Local Transport Body consultation on sustainable transport was a helpful tool to the Council.
  - Building, development and infrastructure - the Council needed a focused plan in order for it to move towards zero carbon emissions.
  - Waste, resources and the circular economy - supported the Community Recycling Centres (CRCs) staying open.
  - Energy - a detailed follow-up was needed which focused on renewable energy.
10. In response to a Member query, the Director of Strategic Commissioning recognised that a more comprehensive plan on the economic development of Surrey was needed to develop the Council's Vision 2030 and to make use of the Local Enterprise Partnerships (LEPs).
11. Members agreed that a true commitment to Surrey's Greener Future required sufficient resources and a detailed revenue budget was needed which identified the orders of magnitude across relevant areas.

#### Cabinet Member engagement

12. Members were reminded of the Cabinet Member for Environment and Waste's recent visit to the 'Cut the Pollution' campaign in Farnham.
13. It was felt that it would be useful for Members to receive the baseline data from the University of Surrey on the Council's emissions, before Cabinet Member engagement.
14. The time constraints of producing a report to December's Council meeting was highlighted and it was agreed that it was essential to have the data from the University of Surrey as soon as possible.

#### **4 SCC EMISSIONS [Item 4]**

##### **Witnesses:**

Katie Sargent, Environment Commissioning Group Manager  
Rachel Crossley, Director of Strategic Commissioning

### **Key points raised in the discussion:**

1. The Environment Commissioning Group Manager explained that Surrey County Council did not have annual emissions data since 2013 as that was not a statutory requirement.
2. Members were informed that the Council's focus was on its 2018-2019 emissions data on scope one and two areas: which included estates as well as schools and vehicle mileage/emissions of all staff travel, which did include Members' travel in response to a Member query.
3. Data was not collated on contracted out services such as bus journeys and waste emissions - scope three. Unlike scope one and two data, scope three data would not be ready for the Draft Select Committee Report going to December's Council meeting.

## **5 DRAFT SELECT COMMITTEE REPORT [Item 5]**

### **Witnesses:**

Rachel Crossley, Director of Strategic Commissioning  
Katie Sargent, Environment Commissioning Group Manager

### **Key points raised in the discussion:**

Feedback on initial structure

1. In response to concerns over the generic nature of the recommendations in the Draft Select Committee Report, the Director of Strategic Commissioning stated that there was room for greater specificity as the project developed.
2. It was questioned whether there were common strands from the witness sessions which would inform the updated recommendations. Real initiatives would provide guidance to the Council - such as Bristol City Council's advice against in-house electricity generation.
3. The Environment Commissioning Group Manager noted that the witness sessions on sustainable school transport was useful and highlighted the need for funding and investment for such projects.
4. Members were happy with the initial structure and asked for the summarised notes from the witness sessions to be collated within the Draft Select Committee Report.

Themes (discussion on level of detail and key points)

5. In response to a query on public sector partnerships, the Director of Strategic Commissioning noted that finance and procurement were central to the Surrey County Council theme, public sector partnerships would follow on.
6. The Director of Strategic Commissioning agreed to the request that best practice and distilled evidence from witness sessions should be included within the emerging themes.

## Call for Action

7. The Director of Strategic Commissioning informed Members that the draft Call for Action required more long-term and clearer phasing and had been shown to Cabinet.
8. Members felt that that point 13: 'plant 1.2M trees by 2030', could be made more tangible and potential actions could be to focus on increasing woodland coverage in the county, protecting ancient woodland, tackling Ash dieback and developers should commit to a net planting of trees.
9. It was also felt that planting more trees was beneficial as it increased air quality and the maintenance of planted trees must also be assured.
10. In response, the Director of Strategic Commissioning suggested that point 13 be further developed rather than removed completely.
11. Members suggested that that housing and insulation were important and should be considered within the 'As Residents' column.
12. Members stated that the table was a good engagement tool to lay the foundations of the developing strategy and sustainability was crucial.
13. A discussion around the language used in the table was held and it was agreed that this should be strong and consistent, that 'consider' climate change in point 2 should be replaced with 'embed'.
14. In response to Members' suggestions, the Director of Strategic Commissioning stated that a standalone 'Communications Plan' was not necessary as work was being done with the Surrey Environment Partnership to create a Surrey-wide approach.
15. It was agreed that it was important that there should be a continuous campaign for a greener Surrey after completion of the Task and Finish Group and it could consider its own draft vision for the future. It was explained that the 'officer delivery group' - in the second recommendation - was essential as it would be a cohesive body.
16. Members requested that the second recommendation, the 'zero carbon board' and 'officer delivery group' should be specified as cross-party/cross-department; and a resources plan should be included in their Terms of Reference.
17. Members suggested that the fourth recommendation should be wider than its Surrey focus, to include the Thames Flood Alleviation Scheme and the Strategic Transport Board for example.
18. Members thought it useful if the 'increased powers' from the Government - in the sixth recommendation - sought by the Council were specified and the Director of Strategic Commissioning stated that this would include locally devolved powers.

## **6 DESIGN CHALLENGE [Item 6]**

### **Witnesses:**

Rachel Crossley, Director of Strategic Commissioning  
Katie Sargent, Environment Commissioning Group Manager

### **Key points raised:**

1. The Director of Strategic Commissioning drew Members' attention to a recent briefing note sent to all Members updating them on the design challenge. Ten projects had been shortlisted and were participating in a number of design workshops between now and December. The

- projects were being led by residents and covered a number of issues such as tree-planting, cycle-mapping and reducing waste in schools.
2. The Task and Finish Group were also informed that there was a podcasting project and it would be useful if Members helped with this.
  3. It was felt that greater creativity was a positive way to increase engagement and to be accessible to all generations.

## **7 ACTIONS/NEXT STEPS [Item 7]**

### **Witnesses:**

Rachel Crossley, Director of Strategic Commissioning  
Katie Sargent, Environment Commissioning Group Manager  
Vicky Hibbert, Governance Lead Manager

1. The upcoming witness sessions will be confirmed with Members prior to the next meeting of the Task and Finish Group on 12 November 2019.
2. The Draft Select Committee Report including the themes, Call for Action and collated witness evidence sessions will be circulated to Members as a word document so they can add track changes - before the next meeting on 12 November 2019.
3. Baseline data from the University of Surrey will be included into the Draft Select Committee Report.
4. A representative from the University of Surrey to come to the Task and Finish Group's next meeting on 12 November 2019.
5. The Communities, Environment and Highways Select Committee will review the Task and Finish Group's Draft Select Committee Report at its next meeting on 22 November 2019.
6. The Environment Commissioning Group Manager would include an explanatory paragraph on adaptation within the Draft Select Committee Report.
7. Members to liaise with officers on the podcasting project.

## **8 DATE OF THE NEXT MEETING [Item 8]**

The next meeting of the Surrey's Greener Future Task and Finish Group will take place on 12 November 2019.

Meeting ended at: 1.25 pm

---

**Chairman**

This page is intentionally left blank

## Communities, Environment and Highways Select Committee

8 November 2019



### Surrey's Greener Future Task Group Final Report

#### **Purpose of report:**

To provide the Communities, Environment and Highways Select Committee with a detailed report on the findings and recommendations of the Greener Future Task Group which was set up to consider the council's role in tackling climate change.

#### **Acknowledgements:**

Members would like to take this opportunity to thank all who have taken time to share their experiences with the Task Group which has helped to shape the findings of this review.

Any errors, factual inaccuracies or inconsistencies contained within the report are the responsibility of the Task Group alone and not of those who contributed their knowledge, insight and experiences to the formation of this report.

#### **Recommendations:**

#### **The Greener Future Task Group recommends that the Select Committee:**

- i. recommends the Call For Action (Annex 1) to Council for approval.
- ii. notes the full range of opportunities in Annex 2 and requests that these are taken forward as part of the wider strategy development to test the deliverability.
- iii. asks the Cabinet to include sufficient investment within the Medium Financial Term Strategy to support climate change programmes and initiatives, reviewing this on an annual basis.
- iv. Supports proposal that the council works together with Districts and Boroughs through the Surrey Environment Partnership to develop and deliver a joint zero carbon strategy and action plan, to be approved by April 2020.
- v. Recommends the council continue to support the emerging Surrey Climate Commission.
- vi. calls for increased powers and resources to enable local authorities to lead on delivering on the commitment for the UK to be net zero by 2050 and asks officers to build a case for change with clear asks for the new government.

## Introduction:

### Context

1. Climate change is occurring earlier and more rapidly than expected. The world's leading climate scientists have warned there is only 12 years for global warming to be kept to a maximum of 1.5C. The UN Intergovernmental Panel on Climate Change (IPCC) released a landmark report in October 2018 highlighting that even half a degree beyond 1.5C would significantly worsen the risks of drought, floods, extreme heat and poverty for hundreds of millions of people.
2. People across the world are becoming more concerned about climate change, with mass demonstrations taking place over the last year and an increase in media attention around the causes and impacts of climate change. In response to the growing concerns and recognition of the need to act, the UK Government declared a climate emergency earlier this year and made a commitment to reach net zero carbon emissions by 2050. The commitment to the environment was re-stated during the recent parliamentary session with the Environment Bill being introduced, which includes a number of measures that will increase local authorities' powers to address environmental challenges in local areas.
3. Since 1990 UK GHG emissions have fallen by 40% despite the economy having grown by 75% in the same period. However, these current policies remain insufficient to meet the fourth or fifth carbon budgets. Despite showing global leadership in setting a legally binding net-zero target, the UK Climate Change Committee recognises that the national government must draw up new plans to effectively deliver on this.
4. The County Council has recognised how important the environment is to residents and the [Community Vision for Surrey in 2030](#) include a clear ambition that '*Residents live in clean, safe and green communities, where people and organisations embrace their environmental responsibilities*'. Tackling climate change is a key part of this ambition.
5. At its meeting on 9 July 2019, the County Council declared a climate emergency and made a commitment to work closely with the Government, the Environment Agency, our Borough & District colleagues, local businesses, our residents and other partners in reducing emissions; and deliver a strategy in 2019/20 involving a task group that clearly outlines how we plan to deliver the net zero including actions that will be taken.
6. To initiate this work, the select committee agreed to set up a task group to identify the key principles of a draft 'environment call for action' through engagement with residents, staff and partners and what action needs to be taken to address these.

## The Task Group

7. A Task Group was established by the Communities, Highways and Environment Select Committee in July 2019 with a focus on Surrey County Council's recent declaration of a climate emergency and the actions the council needs to take to achieve net zero carbon emissions as soon as possible. The task group also agreed to consider the role residents need to play in their local community and the wider impact of other public sector organisations and the private sector on the county's environment to develop a system-wide position.
8. The Membership of the Task Group was agreed as the following:
  - Andy MacLeod (Chairman)
  - Paul Deach
  - Jonathan Essex
  - Becky Rush
  - Fiona White
  - John O'Reilly (ex-officio)

Nikki Barton subsequently joined the task group in October 2019 and due to time commitments, Fiona White was unable to continue on the task group.
9. In order to reduce the impact on the environment through unnecessary travel and accommodate the different work commitments of the Task Group, the Members agreed to adopt an agile working approach. This meant a focus on using technology where possible to enable remote working and encouraging the use of video conferencing. The Task Group also agreed that they would work in smaller sub-groups where appropriate in order to cover a larger number of stakeholder sessions in the short timeframe.
10. The Task Group initially met on 5 August 2019 to agree their work programme, proposed key lines of enquiry, and the methodology for interacting with witnesses. At this meeting it was agreed that the committee would adopt a call for evidence approach over the summer which would then be followed by a more detailed programme of witness sessions with key officers within the council, external experts and councils seen as leading the way on tackling elements of climate change.
11. This report provides detail of the key themes and discussions that have taken place over a five month period. Views collated from witness sessions have been considered by the group and a set of recommendations have been agreed for consideration by the Select Committee, Cabinet and Council in November/December 2019.

<b>Engaging with Key Stakeholders</b>
---------------------------------------

12. The Task Group has met numerous times since it was first established, hearing evidence from a diverse range of stakeholders in an effort to understand the full range of issues that contribute to climate change. The task group was also keen to consult residents to gain an understanding of their concerns for Surrey in relation to climate change and to gain a resident perspective on how the Council itself can work to reach net zero carbon.
13. Various methods were used to engage with stakeholders, starting with an open call for evidence which ran from 14 August 2019 to 15 September 2019 and received 142 responses via the survey with 15 responses sent to the democratic services email, making a total of 157 responses. Out of the survey responses, 19 (13.38%) responded as an organisation and the remaining 123 as individuals.
14. The information received via the call for evidence was collated and analysed for the task group and helped to identify a number of working themes for the task group to structure the remainder of its work around. These themes were:
  - Energy
  - Building, development and infrastructure
  - Waste, resources and the circular economy
  - Countryside, food, farming, water and land use
  - Transport
  - Surrey County Council
15. Following the broad call for evidence, the Task Group undertook a series of witness sessions, focussing on three key groups:
  - SCC officers with a key role within the themes above
  - External Experts working in this field
  - Councils identified as leading the way in tackling elements of climate change
16. For a small Task Group with limited resources, Members were pleased with the number and range of stakeholders they were able to speak to and appreciative of the generosity of others in putting time aside to share this knowledge and expertise.

<p><b>Key themes emerging from the Key Lines of Enquiry</b></p>
---

17. Climate Change is a complex issue with a wide range of contributing factors. This meant that the remit of the task group's work was necessarily broad and the Members were keen to ensure that a key outcome of the work would be providing a structure and framework within which the county can develop its response to climate change and in particular, to focus on the factors that contribute most directly to carbon emissions.
18. The following section takes each of the themes in turn, outlining its role in relation to the environment, the evidence the task group has gathered and thoughts on the potential solutions. A number of case studies have been highlighted within this section along with any suggested areas of focus.

19. In addition, a wider range of opportunities that have been identified are included in Annex 2. This includes areas that the county council could look to implement itself alongside opportunities to deliver in partnership and changes that all residents and communities would need to make. It is recommended that the select committee ask officers to take these forward as part of the wider strategy development to test the deliverability of these schemes and, where appropriate, put forward costed business cases as part of Surrey's climate change strategy.

## Energy

20. Energy production and use is the largest source of global greenhouse gas (GHG) emissions and therefore a key sector which will need to change if we are to limit the global temperature increased to less than 2degree Celcius.
21. Data published by the Department for Business Energy and Industrial Strategy (BEIS) for 2017 (the most recent data currently available) shows that the Domestic CO2 emissions within Surrey (predominantly power and heat) were 1,990 ktCO2. This represents a 33% reduction from 2005. Similarly the industrial and commercial emissions within Surrey, which again would predominantly be for heat and power, were 1,303 ktCO2 in 2017, which represents a 45% reduction on the 2005 emissions.
22. These reductions are due largely to improvements in energy efficiency of heating systems and efficiencies in electrical appliances and lighting. It is also reflective of the greening of the UK national grid. The UK's low carbon policies and abundant natural resources have seen renewable electricity capacity increase by more than three times since 2010. In 2017, renewable electricity accounted for more than a quarter (27.9%) of the UK's electricity generation. The UK has a leading offshore wind sector thanks to significant investment in recent years.
23. The challenge still remains for heating and cooling. In 2017, only 7.7% of UK energy for heating and cooling came from renewable sources. Through the Renewable Heat Incentive (RHI), the UK Government is spending £4.5 billion between 2016 and 2021 to support innovative low carbon heat technologies in homes and businesses, such as heat pumps, biomass boilers and solar water heaters. Beyond the RHI, Government's ambition is to phase out the installation of high carbon fossil fuel heating in new and existing off gas grid residential buildings during the 2020s, starting with new homes as these lend themselves more readily to other forms of low carbon heating.
24. The Council's current electricity use of our corporate buildings for 2018-19 was 27,488,230 kwh, which equates to X TCO2. In 2018-19, 2.6% of the Council's corporate electricity demand was from renewable energy sources.

25. The gas consumption for the same period was 26,397,075 kwh which equates to X TCO<sub>2</sub>. During this year 0% of the Council's heat was provided through a renewable/zero carbon heat tariff.
26. In terms of the wider policy context, UK's Draft National Climate and Energy Plan (2019) (Department of Business, Energy and Industrial Strategy) sets out how the UK's energy and climate legislation and strategies support the five dimensions of the Energy Union. In summary:
- a) Energy security - The UK is committed to ensuring there are secure supplies for consumers, regardless of the energy mix, and the CGS sets out actions to enhance energy security by delivering a more diverse and reliable energy mix. The UK is supporting smarter, flexible networks thereby enabling the integration of clean generation.
  - b) Energy efficiency - To meet the UK's 2050 climate change target, emissions from buildings will need to be near zero, coupled with action on industrial processes. This requires improving energy efficiency and energy management, and decarbonising nearly all heating and cooling of buildings. To achieve this, the UK is taking a range of actions including addressing barriers to energy efficiency and low carbon investment, such as supporting organisations to access finance.
  - c) Decarbonisation - Through the Climate Change Act, the UK has established in law the first five carbon budgets covering the period from 2008-2032, with the sixth carbon budget due to be set in 2021. The UK has outperformed the target emissions reduction of its first carbon budget (2008 to 2012) and is projected to outperform against the second and third budgets (2013 to 2022).
  - d) Internal energy market - The UK Government strongly supports greater electricity trading with our European partners, a further 9.5GW interconnection is expected, beyond the projects which have been commissioned or are in train, in the early to mid-2020s. The CGS outlines the UK's commitment to move towards a more dynamic market, empowering the consumer and realising the potential of renewables, small scale generation, greater flexibility, smart metering and the digital revolution.
  - e) Research, innovation and competitiveness – Capturing part of the global opportunity while continuing to drive down carbon emissions from our own activities provides a huge economic opportunity for the UK. By one estimate, the UK low carbon economy could grow by an estimated 11% per year between

2015 and 2030 – 4 times faster than the rest of the economy – and could deliver between £60 billion and £170 billion of export sales of goods and services by 2030

### Opportunities identified from the witness sessions

27. Surrey County Council's Energy Manager highlighted the importance for continual investment in energy efficiency measures for the Council's corporate buildings as well as investment in SCC's new buildings assets. He stated that the move to the new headquarters in Woking could result in significant energy savings. The Energy Manager explained that many Local Authorities were beginning to generate their own electricity through solar PV installations on land and buildings, whilst others such as Woking, Bristol and Nottingham had gone further and had established energy companies to sell inexpensive and clean energy to residents, investing the profits back into further energy efficiency and zero carbon technologies within the communities.
28. In 2004/5, Bristol City Council became the first council to install a solar panel on a council building. Its energy service then developed significantly, and this was largely driven by a realisation that one of the main challenges was taking ideas through to approval and implementation, but that once you get flowing, renewable energy projects start to become more self-regulated and flow from one to the other. Regarding the data collected on emissions, the Task Group heard that Bristol City Council use real-time monitoring so they know how much energy is being used. This has resulted in a 72% reduction in corporate emissions over the last decade.
29. Woking Borough Council first created an energy efficiency ring-fenced recycling fund for their corporate properties in the 1990s and this is still being used to fund these types of measures. Thameswey is an energy company which is wholly owned by Woking Borough Council. The profits from the company are ringfenced and used for environmental projects in Woking – such as Action Surrey (providing energy advice and grants to residents).
30. From the evidence provided and best practice identified, there are a number of areas where the county council, partners and residents across Surrey could look to increase both energy efficiency and use of renewable energies. The full range of suggestions are included in the table on Annex 2 but examples include:
  - Adopting a green energy supplier and looking at opportunities for the county council to generate its own energy;
  - Establishing a council-owned energy company;
  - Residents committing to reducing home energy in the short-term and longer term, installing zero carbon heating systems into homes.

### **Building, development and infrastructure**

31. This section focused on the opportunities to reduce energy consumption of the buildings and infrastructure sector, through considering both energy and water efficiency in residential and non-residential settings, and the development of new builds to high efficiency standards.
32. Emissions from buildings make up roughly 34% of the UK's total emissions, with half of this originating from heating (space and water) and the remainder split between lighting and appliance use. The total embodied carbon of buildings makes up a further 13% of UK total emissions – thus effective action on the built environment has the potential to impact nearly half of all emissions.
33. Water efficiency in the UK is currently behind other neighbouring and European Countries, with the Energy Saving Trust estimating the average household in the UK uses 330 litres a day (2010 Building regulations stipulate to design to 110 litres per day/per person.)
34. Decarbonisation of buildings can be achieved through reduced usage, switching to low carbon heating solutions and improving efficiency. However, average UK decarbonisation rates per person in buildings amounts to just 0.8% per year with low uptake of energy efficiency measures, and limited deployment of low-carbon heating options.
35. There needs to be further roll-out of technologies such as heat pumps, district heating, combined with high levels of energy and water efficiency. By 2035 the share of low-carbon heating needs to have increased from 4.5% compared to today and to 90% in 2050.
36. In October 2017 the UK Government published its Clean Growth Strategy setting out its aspirations for improving building energy performance to reduce energy consumption, and ultimately emissions.
37. The strategy looked at both residential and commercial properties, that are existing and future developments. The key policies contained within this document included:
  - An ambition to upgrade all homes to Energy Performance Certificate (EPC) Band C by 2035, with all rented and poor fuel homes to be upgraded by 2030
  - Introducing an industrial energy efficiency scheme, to improve commercial energy efficiency by 20% by 2030
38. Other key strategies have focused on energy efficiency in new builds e.g. Part L Building Regulations, public and private sector builds e.g. The Carbon Reduction Commitment Energy Efficiency

Scheme and energy poverty e.g. Energy Company Obligation (ECO).

39. The UK Committee on Climate Change and the House of Commons, Business, Energy and Industrial Strategy Committee, have identified that major policy gaps still exist with the UK's building stock remaining one of the most inefficient in Europe.
40. Surrey County Council has been working to implement some of these national level policies e.g. identifying qualifying households under the ECO, as well increasing awareness and action amongst residents through education schemes and 'leading from the front'.

#### Opportunities identified from the witness sessions

41. The Planning Group Manager identified that the National Planning Policy Framework sets out sustainable development as a central pillar. However, it needs to be further developed so that it can play an active role in driving forward sustainable solutions. Currently it does not provide any specific guidance to the local authority as to how embed climate change mitigation into the planning approach.
42. There needs to be a switching in the approach to planning, thinking longer term rather than just focusing on meeting demand for infrastructure. This needs to be a consistent approach across Surrey with all Districts and Boroughs adopting the same standards.
43. The Planning Group Manager identified that Surrey could work to integrate sustainability into development policy i.e. Surrey Place Ambition and the Asset and Place Strategy. There is the potential that investment will be required, but the Transport Development Planning Manager highlighted that installations of renewable energy can provide revenue payback on loans.
44. Officers recognised that the County Council needs to lead by example and retrofit their existing properties with necessary measures to reduce energy and water consumption to drive wider change across the county.
45. One of the expert witnesses the task group spoke to was EnergieSprong, who develop net zero energy homes through highly effective insulation and local low carbon energy sources i.e. air source heat pumps and batteries. The cost of the works is offset by the savings from the energy bills, furthermore house prices have been shown to increase by 25% following installation. Districts and Boroughs could consider installation within social housing.

46. Representatives from the Centre for Alternative Technology highlighted the need for energy efficiency measures alongside grid decarbonisation, and should be a key consideration in the procurement process for retrofitting municipal buildings. These measures could be supported by passivhaus design of new builds – although there are significant costs challenges associated with this.
47. Woking Borough Council have financed energy efficiency upgrades across the portfolio of their buildings through the establishment of a ring fenced energy efficiency fund in the 1990s, they have most recently extended this funding to social housing.
48. The New Economics Foundation highlighted to SCC that some communities may have a negative reaction to some measures and the community needs to be fully involved. This is the same for the private sector where partnership working will be critical.
49. For the full list of potential opportunities, please refer to the table in Annex 2.

#### **Waste, resources and the circular economy**

50. The waste management sector was responsible for 4% of UK GHG emissions in 2016, amounting to 19.9MtCO<sub>2</sub>e – mainly arising from methane released from landfill sites. Emissions have reduced by a significant 70% since 1990 driven by a reduction in biological waste sent to landfill, investment in methane capture technology and improved management at landfill sites.
51. Efforts in recent years have focused on increased recycling however, thinking about the lifetime of materials, moving towards the reduction of waste and encouraging re-use of materials is key, particularly considering that annual municipal waste continues to grow at 2.7% annually.
52. Surrey has reflected these national trends, with recycling rates averaging at 54.4% across the borough, although initial progress has begun to plateau in this sector.
53. Emissions from waste have largely reduced thanks to stringent EU regulation e.g. Landfill Directive and the UK landfill tax. The next stage is to focus upon reducing the production of certain waste types altogether namely plastic waste, with the 25-year Environment Plan targeting “zero-avoidable plastic waste by the end of 2042”. The 2019 Environment Bill is also seeking to utilise legal powers to set resource-efficiency standards on products, and drive a shift in the market to reduce overall consumption and waste production.

54. Most recently, Surrey has launched two waste-centric policies:
- The Surrey Waste Local Plan (2019-2033) setting out how and where different types of waste will be managed in the future
  - A Single Use Strategy Policy for Surrey which includes objectives pertaining to ending the sale of SUP products and use by our suppliers and contractors through awareness raising and changes to procurement practice and policy.

Opportunities identified from the witness sessions

55. The Director of Joint Waste Solutions highlighted that the work undertaken to change resident behaviour on recycling may have reached its limit of impact – although to date it has been highly effective through its partnership programme, with Surrey ranking in the top two counties for recycling rates. Any further focus on educating residents should move away from recycling towards cutting down on waste generation altogether and reducing or reusing materials.
56. At the national level a new National Waste Strategy has been developed focusing on producer responsibility and packaging tax – consultations on this approach at a local level need to be better aligned moving forward. The Environment Delivery Group Manager noted that infrastructure changes are needed to allow Surrey to deal with some of the materials placed in the marketplace themselves as well as working outside the county to improve efficiencies.
57. The Head of Procurement identified that waste production could be reduced on county council and district and borough sites through the procurement process. The evaluation criteria needs to be adapted to award more points for added environmental value, and allocating a greater percentage of the environmental score to the environmental assessment.
58. The Head of Procurement also highlighted that there needs to be legislation changes that place greater responsibility on the manufacturers for producing products that have a lower environmental impact.
59. Looking at other local authorities, Stroud District Council established an award winning partnership with Ubico (a local authority owned company which Stroud DC has a share in) which now manages their waste and recycling collections. The approach offers flexibility as changes to the service can be made quickly without requiring a lengthy tendering process. The council is also working to reduce single use plastics and prosecuting those who burn commercial waste.

60. Derry City and Strabane District Council adopted A Circular Economy / Zero Waste Strategy in December 2017. A Zero Waste Circular Economy is identified in the Council's Strategic Growth Plan as one where: *“Resources are used for as long as possible, have maximum value extracted from them and are recovered and regenerated at the end of their service life.”* The Strategy was co-funded by the Department for Agriculture, Environment and Rural Affairs and Derry City and Strabane District Council. Policies include:

- Communicating the benefits of the Zero Waste Circular Economy to residents and businesses, committing resources to this, embedding in education programmes.
- Supporting initiatives such as home composting, reusable nappies, re-use and repair workshops and cafes.
- Developing networks of merchants to act as reuse hubs for small construction firms.
- Redistribution of surplus edible foods by publicly run canteens (schools etc.) and supporting businesses to do similar.
- Zero Waste Circular Economy principles to be adopted in procurement, purchasing, planning, economic development plans, business funding, construction.

61. Although not specifically targeted at Local Authorities, Zero Waste Europe has produced 'Zero Waste hierarchy for Europe'. This sets out a hierarchy of waste management approaches, with Refuse/Rethink/Redesign at the top, aiming to eliminate waste before it is created as the first preference. The model shows the steps that can be taken at each level.

62. There a number of approaches that the Council could look to adopt in order to tackle waste reduction and increase recycling. These are outlined in the table in Annex 2.

### **Countryside, food, farming, water and land use**

63. The scope of this theme covers the (rural) land within Surrey and looks at how this land is being affected by a changing climate and human activity and the role of land in mitigating against climate change as well as adapting to the changing climate.

64. The loss of soil fertility and biodiversity in rural areas in the UK are now very apparent, and have, in large, been driven by intensive food production. The Green alliance building on the work of the Committee on Climate Change (CCC) and the Royal Society, predict that by cutting emissions from agriculture, locking emissions into restored ecosystems, sequestering more carbon in trees and soil, and promoting demand for low carbon foods, the UK could reduce its land use emissions by nearly 60 per cent, from

47MtCO<sub>2</sub>e per year in 2016 to approximately 19.6MtCO<sub>2</sub>e per year by 2030.

65. According to the Committee on Climate Change, the UK needs to increase the volume of carbon stored in forests and land and the supply of sustainable biomass harvested from UK sources should also increase.
66. They suggest that Government must increase tree-planting from 9,000 hectares per year on average to 20,000 hectares by 2020 and 27,000 hectares by 2030, alongside planting energy crops on low quality land.
67. Reforestation was also recognised as a priority climate change solution in a landmark 2017 peer-reviewed study led by scientists from over 15 institutions, published in the Journal Proceedings of the National Academy of Sciences. Conservation or the avoidance of forest conversion was noted as the second priority solution.
68. Another key contributor to carbon emissions is food production with a fifth of UK greenhouse gas (GHG) emissions are associated with food and drink, mostly created during production (agriculture and manufacturing). By switching to a vegetarian diet it is possible to reduce one's carbon footprint from food by 35%, from an average of 1800 kg CO<sub>2</sub>-eq per year to 1100 kg CO<sub>2</sub>-eq per year. A vegan diet only causes about 40% of the emissions of an average diet at 700 kg CO<sub>2</sub>-eq per year.
69. According to the Annual Review of Environment and Resources, food system emissions could account for as much as a quarter of all human emissions. That is 12% from agricultural production, another 9% from farming induced deforestation, and a further 3% from things like refrigeration and freight.
70. In the UK alone, an estimated 10 million tonnes of food and drink are wasted post-farm gate annually, worth around £20 billion. Excess food waste costs us money and is environmentally damaging.
71. Surrey is the most wooded county in England with 23% coverage compared to a national average of 10% (Forestry Commission, 2017). This means it already makes a significant contribution to mitigating the effects of CO<sub>2</sub> emissions.
72. Surrey's open landscape is owned by many different landowners and joint working towards a strategy for landscape management to mitigate and adapt to climate change would necessitate an AONB/County-wide partnership approach with key organisations

such as the Forestry Commission and the National Trust as well as landowners such as the Albury, Puttenham and Wootton Estate.

73. Whilst Surrey's landscape is the most wooded in the county, woodland is discouraged for conservation purposes on its heathland and chalk downland which are heavily designated for conservation at a European level. Preventing ecological succession remains crucial to protecting birds such as the Dartford Warbler.
74. Surrey County Council's 10,000 acres of countryside has a significant role to play in reducing carbon emissions and boosting resilience to the effects of climate change. The estate has been managed in partnership with Surrey Wildlife Trust since 2002 and is hugely important to the wellbeing of Surrey residents and visitors as well as having a high nature conservation value.
75. The Partnership has made good progress in this area with over 99% of the Estate's Sites of Special Scientific Interest (SSSI) sites now deemed to be in favourable/ favourable recovering condition by Natural England. Adaptation to climate change already presents modern challenges to the estate where vegetation and trees face devastation from imported diseases and predators, for example Ash Die back affects wooded stock in areas such as Norbury Park and Sheepleas.
76. Whilst the estate also contains England's principal concentration of lowland heath, and large parts of chalk downland where further trees are discouraged, there is potential to improve the quality of woodlands through thinning and the full impact of the contribution to open spaces without tree planting to mitigation needs further investigation. Wooded pockets of the estate can also be identified to support climate change mitigation and adaptation.
77. In 2018, the government announced its [25 year Environment Plan](#) which includes a section dedicated to using and managing land sustainably. In implemented in the next parliament, the plan seeks to embed an 'environmental net gain' principle for development, including housing and infrastructure, improve the management and incentives for land management, improve soil health and restore and protect peatlands, expand woodland cover and make sure existing woodlands are better managed.
78. In June 2019, DEFRA commissioned Henry Dimbleby to conduct an independent review to help the government create its first [National Food Strategy](#) for 75 years. The review sought to address the environmental and health problems caused by our food system, to ensure the security of our food supply, and to maximise the benefits of the coming revolution in agricultural technology.

## Opportunities identified from the witness sessions

79. The task group spoke to the Centre for Alternative Technology (CAT) about the importance of food production and consumption and the impact this can have on carbon emissions. One of CAT's main focuses is promoting a healthy low carbon diet, which can be achieved through dietary change, food waste reduction and improved agricultural practices. This could result in greenhouse gas emissions from agriculture being reduced by as much as 75%. CAT's Zero Carbon Britain report found that the UK's annual GHG emissions can be reduced by 94% by using renewable energy resources and making changes to agricultural system and diets and the remaining 6% could be balanced out with carbon capture from forests.
80. The task group also identified a number of case studies which the council and wider partners could learn from:
- Cambridge University has reduced carbon intensive foods by removing beef and lamb from its menus, which has cut food-related carbon emissions by a third. The university's catering service replaces the meat with plant-based products for its 14 outlets and 1,500 annual events from October 2016.
  - Bristol Green Capital Partnership as part of its 2019-2022 priorities – 'Going for Gold' – is mobilising city-wide action to become a Gold Sustainable Food City by making positive changes to food practices and policies.
  - West Sussex built a Solar PV farm on a former landfill site, the first publicly-owned solar farm to be developed with large, on-site batteries.
  - Cambridgeshire County Council are developing a solar-plus-storage projects on existing landfill sites which aim to be the first of their kind in the UK.
  - Forest for Cornwall: Project will see trees planted in urban areas, hedgerows and creating new woodlands. In 10 years the forest will cover around 32 square miles (about 2% of Cornwall's land mass). Over time, this forest will have the potential to consume around 1% of Cornwall's annual carbon footprint.
81. In line with the other themes, additional suggestions of areas to explore in the short, medium and long term are set out in the table in Annex 2.

## **Transport**

82. The environmental impact of transport is highly significant as transport is a major user of energy, therefore creating air pollution and contributing to global warming through the emission of carbon dioxide. In 2018, transport accounted for a third (33%) of all carbon dioxide emissions, with the large majority of these emissions from

road/surface transport - cars and vans being the greatest contributor nationally. According to the European Strategy for low-emission mobility, transport represents almost a quarter of Europe's greenhouse gas emissions and is the main cause of air pollution in cities. Aviation is one of fastest growing sources of greenhouse gas emissions, with direct emissions from aviation accounting for about 3% of the EU's total greenhouse gas emissions and more than 2% of global emissions.

83. Emissions from transport do not just impact climate change but also have health impacts. Transport and electricity generation are two of the most significant sources of climate change and air pollutants which impact health. Particulate matter causes health concerns such as breathing difficulties but also contributes to the warming effect on the climate.
84. Due to Surrey's location next to London, and the proximity of both Heathrow and Gatwick Airports, there is considerable demand for movement within, to, from, and through the county. This leads to congestion, with Guildford being ranked the seventh most congested major urban area in the UK out of 111 surveyed. Issues Surrey face regarding transport also include the limited uptake of public transport and high levels of private car use, due to public transport being considered unreliable and inefficient. The 2017 CO<sub>2</sub> estimates published by BEIS for Surrey, show that the CO<sub>2</sub> emissions from transport (excluding airports, motorways and railways) were 1,892 ktCO<sub>2</sub>. This represents an 11% reduction on the estimated emissions in 2005. This reduction is due largely to improved fuel efficiency of vehicles and the uptake in diesel vehicles.
85. The Office for Low Emission Vehicles (OLEV) proposed the Ultra-Low Emission Scheme, which set a target, that by 2050, almost every vehicle in the UK will be a low or ultra-low emission vehicle, with key aims to increase the uptake of ultra-low emissions buses and support the improvement of air quality. Government also have long-term ambitions to decarbonise road transport, with a target of 50-70% of new car sales being low emission by 2030. The UK Low Carbon Transitioning Plan (2009) set a target to reduce transport related emissions by 14% on 2008 levels, by 2020, by continuing to improve fuel efficiency, supporting low carbon vehicles, helping people make low carbon travel decisions such as cycling and encouraging transport energy to be sourced from renewables. The government published a Clean Air Strategy in 2019, with a number of commitments surrounding health, protecting the environment, securing clean growth and innovation, reducing emissions from transport and reducing emissions from homes, farming and industry.

## Opportunities identified from the witness sessions

86. Strategic Transport Officers told the task group that there are many sustainable alternatives for fuel and it is necessary to find the most appropriate fuel for the local environment. Ultra-low emission diesel buses are currently the cleanest vehicles on our roads, integration between sectors within transport (buses & rail) is important to discourage private car use and, congestion can shape behaviour by discouraging car use.
87. A key opportunity within the council's control is to consider the placement of services in Surrey, encouraging the clustering of services to reduce travel distances. More system-wide, the sector needs to create a modal shift in transport by incentivising and improving the infrastructure of public transport and active travel whilst car use in town centres needs to be discouraged by introducing more Clean Air Zones. The officers also suggested identifying and focussing on particular geographical areas that are ready to make the zero-carbon shift when testing initiatives. A recommendation was made to roll out cycling travel planners, currently utilized in schools, to businesses and SCC staff.
88. The Safer Travel Team identified a number of services on offer to improve sustainable travel around schools (such as school speed watch, cycle training), however there remains a need to increase the amount and availability of school transport. Encouraging more schools to focus on sustainable travel and developing strategies around this could further reduce the impact of school travel.
89. Public Health Team emphasised the importance of understanding the difference between air quality and climate change, for example, some improvements made to reduce climate change can lead to a decline in air quality and therefore worsen health issues. From a health perspective, traffic is the worst contributor to air quality in Surrey. Focusing on active travel, therefore, has multiple benefits for health and the climate. It was suggested that air quality be used as a driver for climate change mitigation due to the public concern over health, however there is need to find an effective way to communicate the issues.
90. The task group spoke to experts at the University of Hertfordshire, which is based in a similar area to Surrey with regards to public transport infrastructure and reliance on private car use. They highlighted the new powers of local authorities introduced in 2017, giving more control to local authorities over commercial bus routes and how these are delivered. Hertfordshire pointed to some specialists supporting behaviour change, such as 'Go Travel Solutions' who specialise in employer engagement on sustainable forms of transport, using a variety of initiatives and 'Transport for

New Homes' who bring transport and planning together, supporting new housing that promotes walking, cycling and public transport use.

91. The witness sessions highlighted the importance of working with Boroughs and Districts to avoid unsustainable developments in unsustainable locations by considering accessibility and active travel networks and reviewing the Highways Standards and Design, place greater focus on pedestrians and cyclists over car users, create transport hubs at railway stations and create a sustainable transport community through travel planning.
92. This was reinforced in the discussions with Woking Borough Council and Bristol City Council, focusing on sustainable transport and the safety and ease of active travel. One way to do this is *by* encouraging public transport use through focussing on bus corridors with Districts and Boroughs and developing electric vehicle use. Another example included working with partners to introduce a 'polluter pays' concept with parking charges.
93. In order to create a genuine modal shift in transport, partnership working is key – both across the public sector and perhaps even more crucially, with the provider market. It is recommended that Surrey needs to create clear local visions and pathways towards net zero emissions from transport. Area to consider include a focus on demand reduction, scale-up public transport and shift to zero-emission buses, promote bus priority by increasing bus lanes, bus operated traffic lights and high quality bus stations, ensure cyclists and pedestrians are at the top of the road user hierarchy by improving networks, develop clear travel plans for major travel generators (workplace, schools, hospitals), review parking prices and availability and introduce car free areas by designing shared space. An outline set of recommended areas to consider in developing the climate change strategy are included in Annex 2.

<b>Call for Action</b>
------------------------

94. As evidenced through the five themes, Climate Change is a complex issue and it is easy for the scale of it to be overwhelming, with residents often feeding back that they want to make changes but are not clear on what is needed. In order to provide clarity to this issue and a focus for councils, partners and residents to work together, most leading Councils have adopted some form of call for action or statement of intent around climate change. To be effective, it needs to include a simple set of statements, which are easy to read and understand – providing a framework against which more detailed action plans can be developed.

95. It is recommended that this approach is adopted by Surrey County Council and the Task Group has developed a Call for Action as part of its work over the last five months, which looks at what the Task Group feels the County Council should prioritise within the organisation, with partners and businesses and encourage residents to do in support. The Call for Action is attached at Annex 1.
96. If approved by the Council, the call for action can be used to prioritise campaign activity and begin wider discussions with partners and communities about the behaviour changes needed at all levels to become net carbon zero. It also provides a starting point for developing a more detailed strategy and action plan which would build on the Call for Action and begin to test out the opportunities identified under each of the key themes (Annex 2) to ensure a realistic, costed approach to deliver net zero as soon as possible.

### **System-wide Approach**

97. Surrey is a two-tier area with the County Council and the 11 Districts and Boroughs sharing powers and responsibilities to tackle climate change. A number of the districts and boroughs in Surrey have also declare a climate emergency and it is clear that there is a collective ambition across the public sector to act now to reduce emissions.
98. In September 2020, the Leaders and Chief Executives of Surrey's 12 local authorities recognised this shared ambition and agreed to work together to combat climate change. A working group has been set up to provide oversight of and leadership for work to develop a Surrey-wide strategy and common targets that will help Surrey achieve net zero carbon emissions.
99. In addition, the Surrey Waste Partnership recently agreed to extend its remit to broader issues around the environment and has been re-named as the Surrey Environment Partnership. This partnership – which includes Surrey's 12 Environment portfolio holders (with officer support from the Joint Waste Solutions team) – will be well placed to connect work across Surrey's local authorities and to drive the development of the strategy and common targets. It is hoped that the Greener Future 'call to action' will provide a helpful framework for developing a Surrey-wide approach.
100. It will be important to engage all sectors of Surrey's communities in this work, including residents, health, business, education and voluntary, community and faith organisations. A number of cities

have adopted a climate commission approach to coordinate this with evidence that this is helping to deliver improved outcomes. Modelled on the Leeds Climate Commission, the recently established Surrey Climate Commission has the potential to provide overarching, apolitical system leadership, through both its core group (of which Surrey County Council is a member), and the broader steering group that will have representation of all key stakeholders. The Task Group would encourage the County Council to continue to contribute to the emerging work in this area and look at how the Climate Commission might take a more prominent lead role in future.

#### **Conclusions of the Task Group:**

101. Throughout the course of its work, the Task Group have received a valuable amount of evidence from witnesses covering a broad range of issues. The Task Group would like to thank all who have taken time to engage with the group and share their experiences.
102. Climate Change is a complex and far-reaching issues and the Task Group chose to group its work by theme in order to provide clarity and structure as well as a focus for questioning witnesses. The evidence heard at witness sessions has helped the group formulate a series of recommendations for consideration by the Select Committee, Cabinet and ultimately Council.
103. The recommendations agreed by the Task Group are based on evidence gained about the causes of climate change, experts views on the best ways to tackle this and the ability of the council to intervene. It is recognised that this is the start of Surrey's journey to tackle climate change, with the work of the Task Group providing the basis for the call for action to be approved by Council. Following Council's consideration in December, further work will be needed by officers to develop a more detailed action plan against this, as outlined in the recommendations.
104. The Task Group is confident that the recommendations contained within this report, along with the draft call for action and further development of the table of opportunities annexed to this report will help focus the council's effort in tackling climate change and provide a strong platform for taking forward this work with partners, businesses and residents across Surrey as only through collective action will the county be able to be net carbon zero.
105. It also recognises, however, that without wider support and resourcing from ventral government, it will not be possible to make the changes needed at the pace required. It will therefore be critical for the next phase of the work to focus on costing the

changes needed and working with the Government immediately following the election to agree increased powers and level of resources needed to enable local authorities to lead on delivering on the commitment for the UK to be net zero by 2050

106. The Task Group hopes that the County Council will fully support these recommendations and looks forward to continuing to work in support of this important issue.

#### **Next Steps**

107. The Task Group's report will be considered by the Communities, Environment and Highways Select Committee on 22 November 2019 with a report submitted to Cabinet on 26 November 2019 and recommendations to Council on 10 December 2019.

108. Officers will look to take forward the proposals with Surrey Environment Partnership, building on the work of the task group, the call for action (Annex 1) and the opportunities within Annex 2 to develop a Surrey climate change strategy by April 2020.

---

**Report author:** Andy MacLeod, Chairman of the Surrey's Greener Future Task Group

**Report contact:**

**Contact details:**

---

**Sources/background papers:**

IPCC Report

Community Vision for Surrey in 2030

**Annexes:**

Annex 1 – Call for Action

Annex 2 – Potential Interventions

## Annex 1 - CALL FOR ACTION: SURREY'S GREENER FUTURE

Surrey County Council...	With Partners and Businesses...	As Residents...
<ol style="list-style-type: none"> <li>1. Be zero carbon for our own organisational emissions by 2030.</li> <li>2. Ensure climate change is at the centre of the work we do and in any decision that is made.</li> <li>3. All SCC's electricity delivered through a green energy supplier by 2020.</li> <li>4. The council's vehicle fleet will be zero emissions.</li> <li>5. We will use our buying power and influence in our supply chain to require and incentivise environmentally responsible commissioning</li> <li>6. Work with pension funds and other investors to divest from fossil fuels and increase investment in energy efficiency, low carbon transport and low carbon heat solutions.</li> </ol>	<ol style="list-style-type: none"> <li>7. Commit to measure, report on and set long term targets to reduce both our direct and indirect emissions.</li> <li>8. Improve our communications and engagement on climate change.</li> <li>9. Work with staff to drive behavioural changes that help reduce business emissions, for example, travel less.</li> <li>10. Improve transport links and active travel infrastructure to reduce car use.</li> <li>11. Enable electric transport with infrastructure and incentives</li> <li>12. Introduce a zero emission bus fleet across Surrey by 2030</li> <li>13. Plant more trees and increase number of green spaces.</li> <li>14. Require all new developments to leave the natural environment and biodiversity in a better state than before.</li> </ol>	<ol style="list-style-type: none"> <li>15. Live and breathe reduce, reuse, recycle in our daily lives.</li> <li>16. Look to walk, cycle or use public transport instead of driving where possible.</li> <li>17. Switch energy suppliers to a green tariff for electricity and gas.</li> <li>18. Encourage low carbon dietary choices.</li> <li>19. Play an active role in the decisions we make about climate change and help deliver the necessary changes.</li> </ol>

## ANNEX 2 – POTENTIAL INTERVENTIONS

Through the call for evidence, wider research and witness sessions, the task group has gathered a range of insights and examples of interventions that could contribute towards reducing Surrey’s emissions and becoming net zero carbon. This includes areas that the county council could look to implement itself, opportunities to deliver in partnership as well as changes that all residents and communities would need to make.

A summary of these opportunities is included within this annex to provide a flavour of the type of interventions that could be included in a more detailed strategy. It is recommended that the select committee ask officers to take these forward as part of the wider strategy development to test the deliverability of these schemes, continue to add others as they arise and, where appropriate, put forward costed business cases as part of Surrey’s climate change strategy.

<b>ENERGY</b>		
	<b>SCC</b>	<b>Partnership and communities</b>
<b>Short-term</b>	<p>Switch to a green electricity supplier by 2020.</p> <p>Install a large scale solar PV array on SCC land to generate electricity.</p> <p>Set annual reduction targets for electricity and gas consumption.</p>	<p>Switch to a green tariff for electricity and gas.</p> <p>Install energy efficiency measures in homes – e.g. LED lighting, insulation, efficient boilers, smart heating controls.</p> <p>Local planning processes to prioritise local renewable energy generation.</p> <p>Establish district heating networks.</p> <p>Lobby Government to accelerate decarbonisation of UK power networks.</p>
<b>Medium-term</b>	<p>All heating provided via 100% renewable tariff.</p> <p>Renewable energy installations will meet 100% of electricity demand.</p>	<p>Promote and enable investment in zero carbon heat technologies.</p> <p>Generate energy through micro renewable installations.</p>
<b>Long-term</b>	<p>Establish an energy company to provide clean and cheap electricity for Surrey.</p>	<p>Create a dynamic energy system to link supply, demand and storage patterns across power and heat.</p> <p>Install zero carbon heating systems in homes – i.e. air/ground source heat pumps</p>

<b>BUILDINGS, DEVELOPMENT &amp; INFRASTRUCTURE</b>		
	<b>SCC</b>	<b>Partnership and communities</b>
<b>Short-term</b>	<p>Lobby Government to help with insulation installation, focusing on a 'whole street' approach.</p> <p>Support and educate residents about home energy efficiency measures.</p> <p>Introduce a Housing Energy Action Team to help residents keep their homes warm.</p> <p>Set local carbon targets.</p>	<p>Focus on behaviour change to reduce home energy and water usage.</p> <p>Reduce home energy use by installing energy efficiency measures such as LED lighting, insulation, efficient boilers with smart heating controls.</p> <p>Set local carbon targets.</p> <p>Prepare for district heating networks.</p>
<b>Medium-term</b>	<p>Review and strengthen existing building standards.</p> <p>Retrofit existing municipal portfolio incorporate energy efficiency measures, supported by procurement process.</p>	<p>Install energy efficiency measures in social housing portfolio.</p>
<b>Long-term</b>	<p>Make carbon mitigation a central principle of the planning process.</p>	<p>Install zero carbon heating systems in homes.</p>

<b>WASTE, RESOURCES &amp; THE CIRCULAR ECONOMY</b>		
	<b>SCC</b>	<b>Partnership and communities</b>
<b>Short-term</b>	<p>Introduce compulsory recycling.</p> <p>Encourage waste reduction.</p> <p>Increase producer responsibility.</p> <p>Draw on expert advice and good practice elsewhere.</p>	<p>Change waste behaviour patterns – seeking to reduce waste and increase recycling.</p> <p>Introduce a set of shared priorities to support work across partners.</p>
<b>Medium-term</b>	<p>Increase investment in behaviour change.</p> <p>Further develop partnership work.</p>	<p>Develop reuse alternatives for products and deposit return schemes to support producer responsibility.</p>
<b>Long-term</b>	<p>Invest in infrastructure for material recycling.</p> <p>Transformational activities to maximise partnership work.</p>	<p>Join up collection across the districts and boroughs and, where possible, work outside county borders to improve efficiency.</p>

<b>COUNTRYSIDE, FOOD, FARMING, WATER &amp; LAND USE</b>		
	<b>SCC</b>	<b>Partnership and communities</b>
<b>Short-term</b>	<p>Protect existing trees and landscapes in order to store carbon, support nature, improve soils and water quality, and aid flood protection and urban design.</p> <p>Ensure food served at all SCC events is plant based and/or from local food banks, and that no food waste goes to landfill.</p>	<p>Encourage low carbon dietary choices – e.g. locally-sourced and plant-based options.</p> <p>Protect biodiversity and encourage natural habitats to thrive – e.g. re-wilding.</p> <p>Reduce food waste by encouraging re-use of leftovers and/or composting.</p> <p>Ensure school meals are healthy and sustainable, delivering to the Soil Association’s gold award at a minimum.</p> <p>Ensure food served in hospitals is sustainable and locally grown where possible.</p> <p>Introduce a requirement for ‘biodiversity net gain’ in new developments (as set out in the Environment Bill).</p>
<b>Medium-term</b>	<p>Prioritise species that sequester high levels of CO<sub>2</sub> (and other pollutants) and can adapt to a changing climate on SCC land.</p> <p>Reduce use of pesticides and increase planting of hedgerows and wildflowers on SCC land to increase biodiversity.</p>	<p>Enable and encourage planting and growing of food via sustainable practices – set targets re % of food grown on local land?</p> <p>Ensure that food waste from school does not go to landfill.</p> <p>All decisions re land use in Surrey to consider climate change mitigation and adaptation.</p> <p>Public sector partners to obtain 40% of food from local/sustainable sources by 2021, and 80% by 2025.</p> <p>Create new woodlands in Surrey and facilitate the planting of 1.2 million trees by 2030 (ensuring the right trees are planted in the right places and grow to maturity).</p>
<b>Long-term</b>	<p>Install renewable energy installations on SCC land (see Energy section).</p>	<p>Install renewable power and heat technologies (see Energy).</p>

	<p>Use natural flood management approaches to increase carbon sequestration and improve catchment management.</p>	<p>Support farmers to promote and adopt best practice, inc. reduction in greenhouse gas emissions.</p> <p>Grow energy crops that can be used for local power generation – e.g. biomass.</p> <p>Become a Gold Sustainable Food County.</p>
--	---	---

<b>TRANSPORT</b>		
	<b>SCC</b>	<b>Partnership and communities</b>
<b>Short-term</b>	<p>Enable and incentivise staff and Members to travel via clean/green transport modes, inc. by:</p> <ul style="list-style-type: none"> <li>• reserving parking spaces for car shares</li> <li>• making zero-/low-emission vehicles available via car club</li> <li>• promote lift sharing</li> <li>• improving cycle storage and changing facilities</li> <li>• introducing sustainable travel plans for staff</li> <li>• senior staff and Members making personal commitments to travel sustainably</li> </ul>	<p>Agree long-term vision for transport in Surrey, supported by shared priorities.</p> <p>Introduce county-wide targets for reducing journeys by road.</p> <p>Prioritise development of active travel infrastructure, inc. cycle networks.</p> <p>Require minimum threshold for euro standard vehicles in all new contracts with providers.</p>
<b>Medium-term</b>	<p>Ensure all offices are accessible via public transport.</p> <p>Remove free parking for staff.</p> <p>Mileage for petrol/diesel cars will only be paid in exceptional circumstances.</p> <p>All fleet vehicles to be zero carbon.</p>	<p>Switch to low-emission or zero-emission vehicles.</p> <p>Majority of bus routes will be served by zero-emission buses.</p> <p>Enable and increase active travel and public transport use by improving infrastructure, accessibility, reliability and safety.</p> <p>Planning policy to require all new builds to include infrastructure allowing for zero carbon transport, inc. EV charging points.</p> <p>Ensure service provision models reduce need to travel.</p>
<b>Long-term</b>		<p>All SCC provider vehicles to be zero carbon.</p> <p>All bus routes in Surrey served by 100% zero emission buses.</p> <p>Ensure infrastructure supports zero-emission transport.</p>