| Sector | Headline target | Programme/ project | Description | Status | Projected carbon reduction (TCO2 p/a) | Total carbon reductions TCO2 (over project lifetime) | Cost | Cost per tonne of carbon saving (lifetime) | Assumptions |
|----------------|-------------------------------|---|--|----------------|--|---|------|--|-------------|
| All sectors | Net zero carbon by 2050 | Greener Futures Investment Multiplier Framework | Creating a Climate investment multiplier framework to develop a pipeline of investable projects and programmes (Renewables, retrofit, natural capital, new development and infrastructure) SCC makes best use of its funds by using them to attract or leverage-in investment from the community (through green municipal bonds, crowd funding etc) or from grantf funding or institutional investors through a Surrey low carbon investment prospectus. | Leeds and SCC. | Estimate to be included for June delivery plan following baseline production | | | | |

| Sector | Headline target | Programme/ project | Description | Status | Projected carbon reduction (TCO2 p/a) [initial estimate] | Total carbon reductions TCO2 (over project lifetime) | Cost | Cost per tonne of carbon saving (lifetime) | Assumptions |
|---------------------------|---|--|---|--|--|---|-------------|---|---|
| | | Street lighting LED conversion Decarbonising SCC corporate estate | Converting 89,000 street lights to LED. Focused on energy efficiency | In progress, due to be completed 21/22 In progress, data available from March | 6,200 Estimates and Modelling | 124,000 | £19,900,000 | | Assumptions to be provided and reviewed. Based on estimate provided in cabinet report (January 2018). The conversion to LED will reduce annual electricity consumption from 21.3 million KwH down to 8.3 million KwH. This saving of 12.7 million KwH translates to a saving of around 6,200 tonnes of carbon dioxide each year. Lifetime is assumed to be a minimum of 20 years. |
| | | (McBain) Decarbonising the corporate estate (PSDS) | gains from better management £1.9m Salix funding for a number of measures for highest emitting buildings - includes solar and air source heat pumps. Ameresco estimates provided. | | available March /April | 3,766 | £1,900,000 | | Assumptions to be provided and reviewed. Finalised lost of buildings to receive measures under review. Funding may be cut to £1.6m. Based on estimates provided in the public sector decarbonisation scheme calculations, based on estimates of measures in 10 buildings. |
| | | Decarbonising SCC fleet | Exploring decarbonising SCC own fleet. EST are providing fleet review. | Fleet Manager will start 1 April to lead work on fleet purchase and vehicle | Estimates to be provided following baseline development | | | | |
| Organisation emissions | Net zero carbon For Surrey's organisational emissions by 2030 or sooner | Decarbonising SCC's supply chains | Reducing SCC's emissions from our contractual services by working with supply chains through procurement and contract management processes. | to be produced by end of 2021, then produce carbon reduction target. Carbon reduction from highways contract expected to be | Estimate to be included for June delivery plan following baseline production | | | | |
| | | Decarbonising Surrey's Schools | Providing resource to enable schools to identify decarbonisation measures which will lead to carbon and energy cost savings and access funding from Salix | Recruiting post | 2490 | 34739 | £16,976,071 | | Assumptions to be provided and reviewed. Projects are subject to funding outcome and finalised schools list. Based on energy efficiency measured proposed as part of low carbon skill fund application led by Ameresco. Projects include LED, controls, PV, insulation and heat pumps across 25 schools. Safety |
| | | Estate consolidation programme - travel planning | Travel planning for employee commuting to new offices and agile working patterns | | Estimate to be included for June delivery plan | | | | |
| | | | Decommissioning of county hall, estate review and new offices (e.g. Woodhatch) | | | | | | Assumptions to be provided and reviewed. Calculations are for decomissioning only and will include repalcement offices when data is available. Based on estimates provided in Surrey's Agile Office Estate Strategy, which states the environmental benefits of closing county hall as 804 tonnes pa. However this does not currently factor in new offices or increases in energy consumptions of home offices. Project lifetime is 1 year but savings remain every year |
| | | Estate consolidation programme - building efficiency | | | 850 | 7650 | | | so lifetime is given as to 2030 (in line with SCC's net zero target) |

| Sector | Headline target | Programme/ project | Description | Status | Projected carbon reduction (TCO2 p/a) [initial estimate] | Total carbon reductions TCO2 (over project lifetime) | Cost | Cost per tonne of carbon saving (lifetime) | Assumptions |
|---------------------------|--|--|---|---|---|---|------|---|-------------|
| | | Design Principles for SCC developments | Set standards to ensure new developments will not increase carbon emissions | ТВС | | | | | |
| | | Active travel schemes | | £6.2M awarded to deliver 10 schemes in the county | Data to be included in June Delivery Plan following establishment of baseline | | | | |
| | | LCWIPS | This will inform future active travel schemes TBC until commissioning and | | | | | | |
| | 60% emissions reduction in the Transport sector by 2035 against BAU as a minimum | Ultra low emission bus scheme | procurement confirmed. No information at present on the number or type of low emission vehicles. | Cabinet approved the scheme in Dec 20. | Estimate to be produced in second half of 2021 once schemes are confirmed | | | | |
| Transport and air quality | | EV infrastructure pilots | OLEZ funded scheme funding EV infrastructure in 4 B&Ds | | Data to follow | | | | |
| | | Electric vehicle infrastructure roll out | SCC is seeking to deliver a large scale roll out of EV infrastructure on public highway across the county to meet the demand resulting from the ban on petrol and diesel vehicles,. | Strategy is being finalised and will be published in Sept 20 | Data to follow | | | | |
| | | Local Transport Plan 4 (LTP4) | Consultants to review and refresh the LTP to focus on decarbonising the transport sector emissions in Surrey along with other accompanying policies to promote active travel | Draft Apr 21 with full public consultation and approval by Dec 21 | Future carbon reduction transport programmes to be included in delivery plan | | | | |
| | | | A number of Transformation funded pilots which explore solutions to reducing congestion and emissions from transport - NB these are on hold | | | | | | |
| | | Rethinking transport pilots | due to COVID at present - projects are TBC. | Funded for 20/21 | Pilot programmes are to be confirmed | | | | |

| Sector | Headline target | Programme/ project | Description | Status | Projected carbon reduction (TCO2 p/a) [initial estimate] | Total carbon reductions TCO2 (over project lifetime) | Cost | Cost per tonne of carbon saving (lifetime) | Assumptions |
|-------------------|------------------|----------------------------|---|--|--|---|------------|---|--|
| | | Renewable energy | Renewable energy produced by anaerobic digestion plant and gasifier | | TBC following meeting on 23 Feb | | | | |
| | | | Letters sent out to residents for scheme which they can register for, then a rigorous process of identifying and assessing suitable suppliers. No financing is offered to residents at present. | Mail out to residents. Aiming for roll-out in summer. | 492 | £30870 - | | Assumptions to be provided and reveiwed. Estimate may chnage as project is finalised. Based on provisional estimates from solar together emissions model. Number of households reached tbc - model assumes 105,000 letter sent and 1tCO2 saved per installation. Estimates are provisional and must be confirmed with Solar Together. | |
| Energy generation | solar PV by 2032 | | 5MW solar PV array and battery storage | Suitable site being identified through Land Assessment by Buro Happold | 1,325 | 39,779 | £5,000,000 | | Assumptions to be provided and reviewed. Estimate will be updated as further data is provided. Based on estimates provided in Trumps estate feasibility study. Using estimates for 5MW solar PV - sleeved PPA to SCC which calculates 4,911 MWh/year and 30 year asset life. Savings calculated based electricity grid factor from DEFRA factors 0.27 kgCO2e/kwh |
| | | Solar or wind installation | твс | Pipeline budget for 2024/25 | 1,325 | 39,779 | £5,000,000 | £125.69 | As above. |

Appendix 1 - Draft Climate Change Delivery Plan

| Sector | Headline target | Programme/ project | Description | Status | Projected carbon reduction (TCO2 p/a) [initial estimate] | Total carbon reductions TCO2 (over project lifetime) | Cost | tonne of carbon saving (lifetime) | Assumptions |
|--|--|--|--|--|---|---|-------------|--|--|
| Housing and planning To create low carbon, healthy homes for our residents that reduce emissions, have lower running costs and improve the wellbeing of our community | 66% emissions reduction in the domestic housing sector by 2035 against BAU as a minimum | Green Homes Local Authority Delivery (GHLAD) Private sector decarbonisation loan scheme | efficiency and low carbon measures for low income households living in in-efficient housing (EPC E,F,G). A consortium bid has been submitted and will be delivered by Action Surrey if successful. SCC is a named partner along with 10 of the B&Ds. Interest free decarbonisation loans offered | £6M awarded for GHLAD 1a currently being delivered as Green Jump Surrey with 10 B&Ds. An additional £3M awarded to the consortium. Additional £3M GHLAD 2 will be allocated to Surrey in 21/22 Funding included in capital pipeline | | Project lifetime not yet available. | £15,000,000 | | Assumptions to be provided and reviewed. Recalcualtion will be carried out when data is available from GHLAD by June update. Based on GHLAD model of SCC match funding - based on £15m funding across D&Bs, split equally across 4 home improvement measures (acknoweldge actual split may not be equal). Match funding of £3.75 million leads to the following installtions: 288 solid wall (external), 507 solid wall (internal), 375 air source heat pumps and 277 ground source. |
| | | Urban Design Strategy | The Surrey Futures Partnership is developing an Urban Design Strategy which will include a climate change guide to inform planning decisions. In addition, a Developers Forum is being established which will be a useful tool to influence decisions around development and environmental issues. | In progress | | | | | |

| | | Programme/ project | Description | | p/a) [initial | Total carbon reductions TCO2 (over project lifetime) | | Cost per tonne of carbon saving (lifetime) | Assumptions |
|-----------------------------------|----------------------|--|------------------------|---|---------------|---|----------|---|--|
| Buildings and p infrastructure se | nuhlic huildings - l | Low Carbon in the South East (LoCASE) | low carbon measures to | Funding awarded, expected to start Oct 2020 | 1334 | 4,002 | £316,234 | £79.02 | Assumptions to be provided and reviewed. Based on original proposal document, includes 502 enterprises receiving support for energy efficiency and renewable energy use plus 512 enterprises recieiving support, 79 new enterprises created, 55 co-operating with research entities and 89 enterprises supported to introduce new to the firm products through funding for innovation and adoption of low carbon technologies. Based on 3 year project timeline. |

| Sector | Headline target | Programme/ project | Description | | p/a) [initial | Total carbon reductions TCO2 (over project lifetime) | Cost per tonne of carbon saving (lifetime) | Assumptions |
|---------------------------------|--|--------------------------------------|--|-------------------------|--|--|--|-------------|
| Waste, reources and circular | 70% of all local authority collected waste reused, | | Resident focussed campaigns aimed at reducing waste at source through consumer behaviour and to increase the proportion of waste that is reused or recycled, including food waste. | SEP to deliver in 20/21 | Baseline available from March and potential savings from schemes from March onwards | | | |
| economy | composted or recycled by 2030 | Materials Recovery Facility (MRF) | A site has been identified for an MRF to improve quality of recyclates and reduce quantity of items going to landfill | | TBC - requires feasibility results | | | |

| Sector | Headline target | Programme/ project | Description | | Projected carbon reduction (TCO2 p/a) | Total carbon reductions TCO2 (over project lifetime) | Cost | Cost per tonne of carbon saving (lifetime) | Assumptions |
|-------------------|-------------------|------------------------------|--|---------------------------------------|---------------------------------------|---|------|--|---|
| Land use and food | 1.2 million trees | | | areas of land are being | | N/A | | | Indicative estimate only. Based on Ashden 31 cliamte actions for councils who estimate 22kg of CO2 absorbed each year by trees. Assuming 120,000 trees plated each year. Improved estimates which account for type and age of trees to be provided in June Delivery Plan, subject to data availability. |
| systems | planted by 2030 | Land Management Framework | A framework is being produced to ensure that decisions made by SCC and external partners in Surrey considers and maximised opportunities for a range of benefits including climate change mitigation and adaptation. | In progress, to be completed by March | To follow in June Delivery plan | | | | |

| Sector | Headline target | Programme/ project | Description | | | Total carbon reductions TCO2 (over project lifetime) | Cost per tonne of carbon saving (lifetime) | Assumptions |
|----------------------------|---|----------------------------------|--|----------------------|----------------------------|---|---|-------------|
| Industry and green economy | 56% emissions reduction across industry by 2035 against BAU as a | | Consultants will assess the ability of Surrey's green economy to meet the expected surge in energy efficiency and low carbon markets and will recommend | Expected Oct – March | To follow in June Delivery | | | |
| | | green economy GH LAD (see above) | how SCC can stimulate supply chains. | 21 | plan | | | |
| | | LoCASE (see above) | | | | | | |

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