SURREY COUNTY COUNCIL

CABINET

DATE: **30 MARCH 2020**

REPORT OF: **MR MIKE GOODMAN, CABINET MEMBER FOR ENVIRONMENT AND WASTE**

LEAD OFFICER: **KATIE STEWART, EXECUTIVE DIRECTOR ENVIRONMENT, TRANSPORT & INFRASTRUCTURE**

SUBJECT: **GREENER FUTURES INVESTMENT PROGRAMME**

SUMMARY OF ISSUE:

In 2018, the United Nations (UN) Intergovernmental Panel on Climate Change (IPCC) released a landmark report highlighting that even half a degree rise in global temperatures beyond 1.5C would significantly worsen the risks of drought, floods, extreme heat and poverty for hundreds of millions of people. This was supported by the UK Climate Change Commission in their Reducing UK Emissions report to the Government in 2019. In June 2019, the Government, in a landmark move, committed that the UK would be net zero carbon by 2050.

In July 2019 Surrey County Council followed the Government's lead by declaring a Climate Emergency and committing to becoming net zero carbon by 2050. In order to meet this challenging target, the Council recognises that we must work with partners, residents, businesses and Government to deliver urgent action to reduce carbon emissions produced in our county. The Council is currently finalising an ambitious and forward-thinking climate change strategy for the county, working closely with our borough and district partners. The strategy will be published in April and will set out an emissions reduction pathway for a number of strategy themes, including transport, energy, housing and development and buildings and infrastructure. The strategy will commit Surrey County Council to reduce carbon emissions from our corporate estate to net zero by 2030. This target, although challenging, can be achieved as these emissions fall completely within our control, and this would demonstrate the Council's commitment to this agenda.

In addition to the strategy, which will ensure that climate change is embedded within all our decisions corporately, the Council recognises that significant investment will be required to trigger the step change required to reach net zero carbon in Surrey. This level of investment will far surpass previous investment by the Council in mitigating the effects of climate change and should place the Council in a strong position to leverage in additional funding from public and private sector partners and Government.

The Greener Futures Investment Programme (GFIP) proposed in this report sets out our initial investment approach over the next five years, but will continue to evolve as the climate change strategic framework is developed. An outline of the GFIP is set out in Annexes 1, 2 and 3 below. It includes funding for the following agendas:

- ***Re-thinking Transport***
- ***Renewable energy production and energy efficiency***
- ***Resources and waste management***
- ***Environmental protection and enhancement***

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In January the Council committed to invest £84m in response to the climate change emergency. Since that initial commitment was made, further work has been done to identify schemes which will help Surrey to adapt to a changing climate. As a result the proposed level of investment in the GFIP equates to an approximate total sum of £297.2m over five years. This is made up of the following:

- £173.9m - 2020-25 capital budget (shown in annex 1)
- £121.7m - 2020-25 capital pipeline projects (shown in annex 2)
- £1.6m - 2020/21 one off revenue investment (shown in annex 3)

The revenue allocation is predominantly from the Council's Transformation Fund or Feasibility Fund and has been allocated for new, one off initiatives and/or to support the development of capital schemes.

As this investment programme evolves, further investment may be required, and as such, would be subject to further decisions as necessary.

RECOMMENDATIONS:

It is recommended that Cabinet:

1. Endorse the proposed investment in our Greener Futures Investment Programme.
2. Note that officers will further develop the pipeline capital schemes so that they are fully scoped and costed, refining the information contained in Annex 2. Individual schemes will be brought to Cabinet for approval when they are developed to business case stage.

REASON FOR RECOMMENDATIONS:

Surrey County Council is directly responsible for carbon emissions resulting from our own estate and operations. Due to the nature of the services we provide, there are also carbon emissions within the county which we can reduce through investment in infrastructure, planning policy and other measures.

To tackle our own emissions, and those which fall within our scope of influence, to meet our 2030 and 2050 carbon reduction targets, we will be required to make significant changes to the way we deliver services across the spectrum of local authority activities. This will require additional resource, significant investment in our buildings and infrastructure and other associated costs.

The Council is not starting from scratch in our efforts to reduce carbon and adapt to a changing climate. Many of our approved capital schemes will directly reduce carbon emissions. A list of these schemes is included in Annex 1.

However, there is more that the Council will need to do to ensure that our capital investment maximises carbon reduction opportunities and that these schemes, once delivered, are monitored to determine that expected carbon reductions are realised. Baseline emissions research for Surrey, produced by Leeds University, has identified that there are a number of proven cost-effective and technically viable carbon reduction options that the County Council could deliver in addition to our existing capital programme to reduce carbon emissions. These types of initiatives and schemes are included below in Annexes 2 and 3. The majority of these schemes are still at feasibility stage and so further work is required by officers to

develop these to business case stage with accurate costings. This report requests approval from Cabinet to continue to develop these initiatives.

DETAILS:

Context

1. Surrey County Council recognises that climate change will directly impact upon the lives of our residents. This is reflected in the Community Vision for Surrey in 2030, which includes 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.

2. In June 2019, the Government announced that the UK would be net zero carbon by 2050. The following month in July 2019 Surrey County Council declared a climate change emergency and made a commitment that the county would be zero carbon by 2050, in line with Government's target. Since the declaration, a focused programme of work has been undertaken to develop the climate change strategy and to understand the issues from a Surrey context, involving residents, partners and experts in shaping an approach.

3. A cross party Scrutiny Task Group was established to conduct research and produce a Call to Action, consisting of 17 recommendations for the County Council to further explore, develop and cost up. These recommendations have informed the development of the emerging climate change strategy, within which, one key recommendation was that Surrey County Council will be zero carbon across our organisational emissions by 2030. Although this is a challenging target, these emissions are fully within the control of the Council and this target sends a clear message to our residents and partners of our commitment to mitigating climate change.

4. To provide a robust emissions baseline and emissions reduction pathway, the Council commissioned Leeds University, who are leaders in this agenda. The research produced by Leeds University identifies that the county currently emits approximately 6.4 million tonnes of carbon a year from our buildings, transport and commercial and industrial operations. These carbon emissions have fallen by 35% since 2005, due largely to the decarbonization of the national grid; however, projections show that following a 'business as usual (BAU) approach' will only achieve a carbon reduction of 44% against Surrey's 2005 level of emissions by 2050, which falls far short of the target.

5. Leeds University have calculated that the gap between Surrey's BAU emissions in 2050 and the net zero target could be closed by 65% through the adoption of both cost-effective and technically viable low carbon options. This means that there are many opportunities for investment in schemes and initiatives which will result in carbon savings, many of which will pay for themselves over the lifetime of the programme (or less) from the resulting reductions in energy costs.

6. The Greener Futures Investment Programme (GFIP) proposed in this report brings together a list of schemes and initiatives which will result in carbon reductions and/or will better enable the county to adapt to climate change. They fall within four groups which align closely with the emerging climate change strategy and action plan. This

programme will continue to evolve as the county's climate change strategic framework is further developed, and includes:

- Re-thinking Transport
- Renewable Energy Production and Energy Efficiency
- Resources and waste management
- Environmental protection and enhancement

7. Many of these initiatives will result in revenue savings and will have additional benefits beyond carbon reduction including: improving air quality, health and wellbeing benefits associated with more active travel, economic benefits, and biodiversity and habitat creation benefits.

8. The four GFIP themes are described in more detail below.

Re-thinking Transport

9. Currently 46% of Surrey's emissions come from the transport sector and transport represents Surrey's biggest challenge in the journey to become a net zero carbon county. Surrey has a high dependency on car use, with 86% of households in Surrey owning a car, compared to 73% nationally.

10. Reliance on private car use in Surrey has a multitude of impacts. Congestion has grown to the extent that Surrey has the lowest mean traffic speeds during peak times outside of London. In addition, there are 27 Air Quality Management Areas in Surrey due to excessive levels of nitrogen dioxide and particulate matter caused by traffic. Furthermore, concerns over transport difficulties are starting to have an impact on economic development and are increasing costs to businesses, with negative impacts on people and places.

11. As part of its Rethinking Transport work, Surrey County Council is working with its partners to ensure that policy, planning and investment decisions are coordinated and help to achieve that ambition, supporting a 'modal shift' away from single-occupancy journeys in high-emitting vehicles towards multiple-occupancy journeys, public transport and active travel (e.g. walking and cycling). The county's transport infrastructure also needs to enable a step change in the introduction of ultra-low emitting vehicles. The schemes and initiatives in the annexes below will contribute towards the required modal shift and move toward ultra-low emitting vehicles, as well as facilitating increased walking, cycling and public transport use. The Council is also committed to increasing the electric vehicle (EV) charging infrastructure across the county.

12. The Council is also committed to improving public transport and is working closely with the bus companies that serve the county to achieve this ambition. Funding has been identified in both the capital budget and capital pipeline for improvements in bus corridors as well as improvements in the customer experience, such as real time information and mobile apps, to make buses more attractive and increase passenger numbers.

13. The ultra low emission schemes set out in Annex 2 below, involve the Council using its unique position to accelerate the introduction of ultra low emission buses into community transport (including SEND) services and public transport. This involves

exploring different partnership and commissioning models and working with partners to lever in significant sums of Government funding for low emission/electric buses.

Renewable Energy Production and Energy Efficiency

14. Renewable energy and energy efficiency advances realised since 2005 have made the greatest contribution of any sector to the 35% reduction in carbon emitted within Surrey's borders over the same period. However, energy from homes and commercial (including public) buildings currently accounts for 43% of Surrey's emissions and this is due to increase to 47% by 2050 in a business as usual scenario due to the projected increases in housing.

15. In order to meet our 2030 carbon reduction target for Surrey's corporate estate it will be necessary that all of our buildings are powered, heated and/or cooled via renewable energy sources or 100% renewable energy gas/electricity tariffs. Currently only 9% of the Council's corporate electricity use is from renewable energy sources (via our electricity tariff) which demonstrates the extent of the challenge. From 1 April 2020, the Council's energy will be 100% green energy.

16. The initiatives and schemes in the GFIP demonstrate our commitment to reducing emissions from energy use in Surrey through the generation of renewable energy and/or energy efficiency measures. These measures will result in carbon savings as well as reductions in energy expenditure. The Council's street light LED replacement scheme will replace 89,000 street lamps with LEDs over the next three years. This will result in savings of £2M p/a and annual carbon reductions of 6200 TCO2.

17. We are also committed to reducing emissions from our corporate estate and using the Moving Closer to Residents programme as an opportunity to do so. Over the coming months, the Council will have a clearer idea of the investment it will make in Midas House to improve the energy efficiency of the building. This includes an opportunity to connect to the new Combined Heat and Power plant in Woking town centre in order to access low carbon heat.

18. The Council is also committed to generating its own energy and will be developing an initiative to install a 5MW solar PV array on a closed landfill site in the county, sleeving the electricity produced to the grid to offset the electricity used in on our corporate estate. This will be the first of a number of renewable energy installations that the Council will explore.

19. We will also seek every opportunity to enable households and the public and private sector organisations that are located in the county to reduce their reliance on high carbon sources of heat and power through energy efficiency measures, switching tariffs and investing in zero carbon technologies and renewable energy generation. Step change initiatives, such as this are much more effective when done at scale and through partnership working.

20. In addition, Surrey County Council is a named delivery partner on an exciting European Regional Development Fund (ERDF) bid called Low Carbon in the South East (LoCASE). The purpose of the programme is to radically increase the uptake of energy efficiency and low carbon technologies by SME businesses through match funding support, in order to reduce CO2, reduce overheads for small businesses, create green job opportunities and skills etc. LoCASE also offers match funding for

the public sector to install zero carbon technologies in buildings and can therefore help us to reduce our corporate CO2 emissions. The LoCASE funding bid has been shortlisted and the final bid is due in March, and if successful funding will be available from Autumn 2020. As Surrey is a named delivery partner, this opportunity is open to all boroughs and districts in the county.

Resources and waste management

21. The waste management sector was responsible for 4% of UK greenhouse gas (GHG) emissions in 2016, amounting to 19.9MtCO2e – mainly arising from methane released from landfill sites.

22. Research prepared by Leeds University shows that emissions from waste in Surrey have dropped from 644ktCO2e in 2005 to 138ktCO2e at present, a reduction of nearly 79%. However, due to levels of incineration, production of waste per capita and rates of effective recycling and composting, emissions of the waste sector in Surrey are projected to grow slightly year on year in a business as usual scenario. It is therefore imperative that we take action to reduce waste produced in Surrey and to increase recycling rates, which, although are high compared to performance of other counties, have plateaued in recent years.

23. The Greener Futures investment initiatives proposed below will make a significant contribution towards this improved resource and waste management in the county. On one level, our resident campaigns and marketing will have a renewed focus on waste minimisation and re-use as the priority.

24. The proposed Surrey-based Materials Recycling Facility (MRF) (identified in Annex 2) is a pipeline project which would reduce emissions in the transport of waste and maximise the quantity and quality of recyclables processed (avoiding unnecessary disposal to landfill), while producing materials that will generate the highest possible revenues in the market.

25. **Environmental protection and enhancement**

26. Looking ahead to how land will be used in Surrey by 2050 reveals a number of challenging issues. Alongside the current issues associated with balancing protection of the green belt and maintaining habitats and biodiversity with development pressures, it is also necessary to consider the role that the land and natural environment plays in mitigating climate change through carbon capture and storage. In addition, whilst our land and countryside will be vulnerable to a changing climate such as adverse weather patterns including flooding and heatwaves, the decisions that we make about our countryside will also help us adapt to climate change. For example, planting trees in areas of flood plains can help reduce flooding by soaking up water and keeping soil in place.

27. Surrey is already suffering the consequences of climate change and extreme weather events, and we are investing in measures to minimise these impacts where possible. Our largest capital scheme is the Surrey Flood Alleviation programme, which has been allocated £135M over the five year Medium Term Financial Strategy (with further funding allocated beyond 2025) to put in place protections from the River Thames flooding between Teddington and Datchet in order to protect 15,000 homes

which are directly at risk. An additional £15M funding has also been allocated for a number of smaller scale local flood alleviation schemes designed to reduce flooding risk for residents, businesses and infrastructure across the county.

28. Further, the Council recognises the important role that trees play in mitigating climate change through the capture and storage of carbon emissions as well as the role that they play in adapting to climate change, by minimising the impacts of flooding and providing shading and cooling in hot temperatures. Due to these benefits, along with biodiversity benefits, the Council has committed to facilitate the planting of 1.2M new trees by 2030, one for every head of the population. This ambitious initiative will result in an additional 800 hectares of trees planted in the county and will result in approximately 300,000 tonnes of carbon captured and stored over the lifetime of the trees. To align with this initiative, the Council is planting a new area of woodland in Elmbridge, along the A309 Kingston bypass, consisting of 40,000 whips, before the end of the current planting season. Once these trees mature, they will have the potential to sequester approximately 10,000 TCO2.

29. To this end, the Council's New Tree Strategy will be launched in April and will set out the Council's position on ensuring that the right trees are planted in Surrey and that they are planted in the right places to ensure that they grow to maturity and subsequently sequester the maximum possible carbon.

CONSULTATION:

30. In preparing this report Select Committee has been consulted. Further consultation will be required for each pipeline capital scheme on a case by case basis.

RISK MANAGEMENT AND IMPLICATIONS:

31. The Greener Futures Investment Programme pulls together a set of schemes and initiatives which will result in carbon savings and climate change adaptation. These schemes and initiatives are being delivered and developed by different services across the Council and, in some instances, partners.

32. Financial and non-financial risks will be considered by programme managers for each of the schemes and initiatives independently.

FINANCIAL AND VALUE FOR MONEY IMPLICATIONS

33. The report sets out the initial proposed investment programme. In some cases, proposals are at an early stage of development and estimated costs are therefore subject to change as plans evolve.

34. Annex 1 includes the Greener Futures schemes within the approved capital budget which will reduce carbon emissions in the county and which will help Surrey to adapt to the impacts of climate change.

35. Annex 2 lists the capital "pipeline" schemes which are proposed to be added to the existing capital programme as part of the proposed GFIP. The pipeline is comprised of schemes which are at feasibility stage and so further work is required by officers to develop business cases, including accurate costings. As a result, these figures will evolve as the schemes are developed.

36. Annex 3 lists the estimated revenue expenditure for the 2020/21 financial year. This is predominantly from the SCC Transformation Fund or Feasibility Fund and is for new initiatives and/or to support the initial development of capital schemes.

37. This programme will continue to evolve as the climate change strategic framework is developed, and as such, further investment may be required, which would be subject to further decisions as necessary.

38. It is important to note that the County Council alone does not have access to the level of resources and investment required to achieve our net zero targets for Surrey and so it will be necessary to work in partnership with public and private sector partners as well as Government.

SECTION 151 OFFICER COMMENTARY

39. Although significant progress has been made over the last twelve months to improve the Council's financial position, the medium term financial outlook is uncertain as it is heavily dependent on decisions made by Central Government. With no clarity on these beyond 2020/21, our working assumption is that financial resources will continue to be constrained, as they have been for the majority of the past decade. This places an onus on the Council to continue to consider issues of financial sustainability as a priority in order to ensure stable provision of services in the medium term. In agreeing its Medium Term Financial Strategy, the Council recognised the importance of responding to the climate change emergency. As such, the Section 151 Officer supports the proposals in this report, which are consistent with the approved Medium Term Financial Strategy.

LEGAL IMPLICATIONS – MONITORING OFFICER

40. In carrying out its many functions, the Council has the ability via the wellbeing power contained in the 2000 Local Government Act, supplemented by Local Government & Public Involvement in Health Act 2007 and Sustainable Communities Act 2007, to engage directly and work with other agencies in helping to tackle climate change.

41. The specific legal implications of the projects identified in the report will be identified as the projects progress.

EQUALITIES AND DIVERSITY

42. Each of the schemes listed in the annexes below will need to be assessed to determine their impact, if any, on residents and staff with different protected characteristics.

43. EIAs will be completed as each scheme is developed to business case phase.

ENVIRONMENTAL SUSTAINABILITY IMPLICATIONS

44. An Environmental Sustainability Assessment (ESA) will be required for many of the schemes listed in Annex 2. This will be produced as and when these schemes are further developed.

PUBLIC HEALTH IMPLICATIONS

45. Some of the initiatives and schemes will have public health benefits. These will be highlighted in the relevant reports as these initiatives and schemes are further developed.

WHAT HAPPENS NEXT:

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a. Officers will continue to deliver the schemes in the approved capital budget and revenue funded initiatives
b. Pipeline capital schemes will further developed by officers to business case stage including accurate costings and will then be brought to Cabinet for approval

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Contact Officer:

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Consulted:

Officers from Finance, Transport, Property and Waste services

Select Committee

Annexes:

- Annex 1: Schemes in Capital Budget 2020/21 - 2024/25
- Annex 2: Schemes in Capital Pipeline 2020/21 - 2024/25
- Annex 3: Revenue 2020/21

Sources/background papers:

- N/A

Annex 1: Schemes in Capital Budget 2020/21 - 2024/25

Theme	Scheme Name	Description	Total scheme costs	2020/21 estimated spend
			£m	£m
Resource and Waste Management	Automatic number plate recognition cameras at CRCs	Installation of Automatic Number Plate Recognition cameras at our community recycling centres to prevent unauthorised waste.	0.150	0.150
	Closed landfill sites	Maintenance and enhancement of pollution control systems including for the reduction of fugitive emissions of landfill gas which is a powerful greenhouse gas	0.200	0.050
Energy	Street Lighting LED Conversion	Converting 89,000 street lights to LED luminaires to reduce electricity consumption by 60%	16.275	5.741
Re-Thinking Transport	Electric Vehicle Charging Point Pilot Study	Pilot project to install 80 on-street fast charge EV points	0.500	0.500
	Surrey Quality Bus Corridor Improvement	Bus route improvements	0.850	0.345
	A series of active travel schemes	Schemes which facilitate walking, cycling or public transport	3.306	3.306
	Public Rights of Way	Improving footpaths and bridleways across the county to encourage active travel	2.200	1.300
Environmental Protection and Enhancement	Surrey Flood Alleviation - Wider Schemes	Range of measures to reduce flooding risk for residents, businesses and infrastructure	15.320	1.100
	Surrey Flood Alleviation - River Thames	To reduce the risk of flooding for 15,000 homes between Datchet and Teddington (this figure is for the period between 2020-2025)	135.100	2.600
Total			**173.901**	**15.092**

Annex 2: Schemes in Capital Pipeline 2020/21 - 2024/25

Theme	Scheme name	Description	Total scheme costs
			£m
Resource and Waste Management	CRC Improvements	Construction of two new CRCs and a new waste transfer station	23.100
	Materials Recovery Facility	The facility is needed to contain the future costs of dealing with recyclables and to respond to the opportunities that are likely to arise from the Government's Resources and Waste Strategy	27.800
Renewable Energy Production and Energy Efficiency	Solar Farm on SCC land	Installing a 5MW solar PV farm on SCC land and virtually sleeving the electricity to offset SCC's corporate electricity consumption	5.000
Re-Thinking Transport	A series of active travel schemes	Schemes which facilitate active travel	16.800
	Passenger Transport Information	Providing more in time information for Bus Journeys and Investing in Route Planning to enable to travel more sustainably.	1.400
	Ultra Low Emission Vehicles - Bus Companies	Accelerate the introduction of Electric or Ultra Low Emission vehicles into Community Transport (SEND) and Public Transport	41.300
	Ultra Low Emission Vehicles - Community Transport - In House		3.000
	Ultra Low Emission Vehicles - Community Transport - Third Sector		3.300
Total			**121.700**

Annex 3: Revenue 2020/21

Theme	Scheme Name	Description	Estimated Revenue 2020/21 £m
Resources and Waste Management	Refocused and Additional Campaigns and Marketing	Initiatives aimed at encouraging residents to reduce, reuse and recycle their waste	0.050
	Re-thinking the way we manage waste	Revenue funding required to develop the waste schemes in the capital pipeline	0.150
Renewable Energy Production and Energy Efficiency	Solar PV farm on SCC land	Development of a proposal to install a 5MW solar PV farm on SCC land and virtually sleeving the electricity to offset SCC's corporate electricity consumption	0.210
	MCTR	Investigating energy efficiency and low carbon improvements to Surrey's New County Hall building	TBC
	Low Carbon in the South East (LoCASE)	SCC match funding to administer the LoCASE programme which offers grant funding (from EU ERDF programme) for SME businesses for investment in energy efficiency and low carbon technologies. County wide programme to be administered by SCC, subject to funding award.	0.150
	Renewable energy strategy	A Surrey wide strategy which assesses the opportunities for renewable energy infrastructure in the County and identification of suitable sites	0.050
	Renewable electricity offset opportunities	Energy efficiency measures for SCC's corporate estate (possible match funding for Salix finance investment) and energy tariff offset opportunities	0.080
Re-Thinking Transport	Ultra low emission community transport	Development of projects to accelerate the introduction of Electric or Ultra Low Emission vehicles into Community Transport (SEND) and Public Transport	0.200
	Rethinking Transport Pilot 2	This pilot aims to shift transport use by private sector employees from to modes that reduce pollution and congestion, where possible, journeys will be avoided altogether. The target group for this pilot consists of employees of businesses based at the Surrey Research Park. Funded by LGA.	0.030

	Improvements to bus journeys	Providing more in time information for Bus Journeys and Investing in Route Planning to enable to travel more sustainably.	0.100
	Planning Policy Framework	Revising our Planning and Policy framework as a Highway Authority and in our Transport Planning advice	0.050
	On street parking and highways enforcement	Improved enforcement to keep traffic moving (for example bus lane enforcement) to reduce emissions resulting from congested traffic	0.100
	Low Emission Zones	Develop a more coordinated approach to air quality – Low Emission (LE) zones	0.100
	Low Emissions / Electric Vehicle strategy	Surrey Wide Low Emissions / Electric Vehicle strategy and review of future EV charging options to inform the Council's approach	0.100
Environmental Protection and Enhancement	1.2M New Trees	SCC to facilitate the planting of 1.2M new trees by 2030 to mitigate carbon	0.120
	Land use strategy	Review planning and policy framework for land to adapt to and mitigate the effects of climate change	0.100
TOTAL			**1.590**

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