#### HAMPSHIRE COUNTY COUNCIL

# **Decision Report**

Decision Maker:	Cabinet	
Date:	19 July 2022	
Title:	Hampshire County Council Climate Change Initiatives – Progress Report	
Report From:	Director of Culture, Communities and Business Services	

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### **Purpose of this Report**

- This report provides a progress update surrounding delivery of the programme of climate change initiatives relating to the operational activities of the County Council, as agreed by Cabinet in July 2021.
- The report presents the financial position of the programme following year one delivery, summarises completions to-date and outlines key milestones achieved ahead of programme completion in March 2023.

## Recommendation

3. Members note the positive progress in the first year of delivering the internal climate change initiatives programme.

## **Executive Summary**

- 4. In July 2021, Cabinet approved £1.2m one-off funding for an internal Hampshire County Council (HCC) climate change programme. The programme was developed in order to build on recent successes in reducing carbon emissions and, simultaneously, serve as the catalyst for further sustainable change. The two year delivery programme culminates at the end of 22/23.
- 5. The programme comprises a number of projects across several themes:

Table 1: Programme Overview

Theme	Project title	
Alternative	Enhancements to the electric vehicle fleet	
Fuels	Electric alternatives for operational heavy vehicles and electric	
	power tools	
	Expansion of Hydrotreated Vegetable Oil pilot	
Natural	Hillier's Propagation Unit – phase one Frontier Garden project	
Environment	Tree Planting	
	Rewilding / landscape-scale regeneration (proof of concept) and promotion	
	Climate positive carbon negative country park at River Hamble	
Waste & Recycling	Proof of Concept: Food waste station installation at Royal Victoria Country Park	
	Onsite composting to facilitate sustainable approach to	
	biodegradable and compostable food packaging in addition to food waste	
	Increased recycling facilities and signage at customer-facing sites	
Energy	Renewable Energy Studies including Solar Farm potential	
	Extension of LED lighting programmes at HCC corporate sites	
	Energy efficiency for community buildings (additional to Parish and Town Council Funding)	
	Renewable energy in HCC depot locations	
	Demonstration project for carbon neutrality at Runway's End Eco- Activity Centre	
	Feasibility, design and proof of concepts for building technologies to test reductions in carbon emissions and explore innovation	
Education	Range of initiatives to engage positively with schools and visitor	
	groups of all ages around climate change and to facilitate	
	community learning	
Resilience	Commission expertise to look at the need to adapt our land and	
	assets to be resilient to the impacts of climate change	
	Overheating research with University of Southampton	

- 6. At the end of May 2022, £342,000 of the £1.2m programme budget had been spent, representing slightly under 30% of the total. The majority of the spend is scheduled for 22/23. Original funding allocations as set out in the report to Cabinet in 2021 have been updated to reflect project closures or projects completed with underspend, as shown in Table 2 below. A new project has been added to the programme with a funding allocation of £20,000, this has been offset by reductions in the allocation to two research projects with University of Southampton that were provided pro bono and therefore the programme total is still £1.2m.
- 7. Considerable progress has been made across the programme to-date. Completed projects include:
  - Carbon negative country park at River Hamble

- Food waste station installation at Royal Victoria Country Park
- Commissioning expertise to look at the need to adapt our land and assets to be resilient to the impacts of climate change
- 8. The majority of projects are in progress and scheduled for completion before the end of 22/23. Notable milestones and achievements include:
  - Over 50 enquiries have been received and, to-date, almost £76,000 has been awarded to 12 projects through the Parish and Town Council Investment Fund to support energy-efficient community buildings. Grant funded projects include LED lighting replacements, installation of solar panels, replacing fossil-fuel heating systems, building insulation, etc.
  - The Hydrotreated Vegetable Oil (HVO) expanded pilot period is nearing completion with utilisation of HVO from HCC depots above 80%. HVO is produced from 100% sustainable renewable waste feedstocks, is a drop-in replacement and provides a range of benefits including reducing greenhouse gas emissions by up to 90%.
  - Phase 1 of the tree planting project has been completed with trees planted at a number of sites including Lepe Country Park and Manor Farm. In total, 337 standard trees and 6,300 whips have been planted which will ultimately help to increase carbon sequestration and contribute to the County Council's carbon neutral 2050 target.
  - Collaboration with University of Southampton on a number of projects to encourage collective intelligence and ensure the County Council is knowledge-rich in its climate change endeavours. This includes exploring the potential overheating impact on the schools estate and, separately, how to encourage customers at HCC catering sites to choose plant-based meal options.
- 9. The programme is on track for delivery by the end of March 2023. Beyond this, measures are in place to monitor direct benefits including forecast carbon and financial savings across the programme. Significant indirect benefits are anticipated as a result of engagement, influence and information sharing with staff and service users.

### **Contextual information**

- 10. In 2019, HCC declared a climate emergency and, subsequently, developed a Climate Change Strategy and Climate Change Action Plan to support targets to be carbon neutral by 2050 and resilient to the impacts of a 2 degrees Celsius temperature rise.
- 11. In the following years, the County Council has taken steps to decarbonise its own estate and operations through a range of programmes. The council was successful in receiving circa £30m grant funding through the Public Sector

Decarbonisation Scheme to mitigate climate change impacts across the built estate. A decision was taken corporately to transition to electric vehicles by default for in-scope vehicles at the end of their useful life. Procurement guidance was developed to enable commissioning managers to embed climate change and sustainability principles into the process of tendering for goods and services.

- 12. In July 2021, Cabinet approved £1.2m one-off funding for an internal HCC climate change programme to build on recent successes and demonstrate leadership by encouraging long-term sustainable change. The two year delivery programme culminates at the end of 22/23. The programme was designed to have a direct impact on carbon reduction, whilst simultaneously influencing staff and service users through engagement and information sharing to achieve indirect benefits.
- 13. Projects were identified for delivery through several climate themes including:
  - Alternative fuels
  - Natural environment
  - Waste and recycling
  - Energy
  - Education
  - Resilience
- 14. These themes, and the programme as a whole, offered the County Council the opportunity to act as a role model on climate change action, exploring new technologies and inspiring action across the county. As many of the projects are pilot schemes, they have the potential to be the catalyst for long-term sustainable change if proven viable, but many will not progress beyond pilot stage.

### **Finance**

- 15. At the end of May 2022, £348,000 of the £1.2m programme budget had been spent, representing slightly under 30% of the total. The vast majority of the spend is scheduled for 22/23.
- 16. Funding allocations within the £1.2m programme envelope have changed since Cabinet approval in 2021 following, for example, project closures resulting in funds being reallocated. However, the total programme funding remains unchanged at £1.2m. An overview of the allocated funding to individual projects is detailed in Table 2 below.

# **Summary of Programme Funding Allocations**

17. An overview of programme themes, projects, original and updated funding allocations and spend to-date is detailed below:

<u>Table 2 – Programme Funding Summary</u>

Theme	Project title	Original Allocation	Updated Allocation	<b>Spent</b> (£'000)
		(£'000)	(£'000)	(~~~)
Alternative Fuels	Enhancements to the electric vehicle fleet	30	30	0
	Electric alternatives for operational heavy vehicles and electric power tools	20	20	0
	Expansion of Hydrotreated Vegetable Oil pilot	57	105	38
Natural Environment	Hillier's Propagation Unit – phase one Frontier Garden project	150	150	150
	Tree Planting	200	200	70
	Rewilding / landscape-scale regeneration (proof of concept) and promotion	100	52	0
	Climate positive carbon negative country park at River Hamble	35	45	45
Waste & Recycling	Proof of Concept: Food waste station installation at Royal Victoria Country Park	10	10	10
	Onsite composting to facilitate sustainable approach to biodegradable and compostable food packaging in addition to food waste	45	45	0
	Increased recycling facilities and signage at customer-facing sites	5	5	0
Energy	Renewable Energy Studies including Solar Farm potential	10	0	0
	Extension of LED lighting programmes at HCC corporate sites	100	0	0
	Energy efficiency for community buildings (additional to Parish and Town Council Funding)	150	150	0
	Renewable energy in HCC depot locations	10	0	0
	Demonstration project for carbon neutrality at Runway's End Eco- Activity Centre	50	50	5

	Feasibility, design and proof of concepts for building technologies to test reductions in carbon emissions and explore innovation	100	200	0
Education	Range of initiatives to engage positively with schools and visitor groups of all ages around climate change and to facilitate community learning	118	118	30
Resilience	Commission expertise to look at the need to adapt our land and assets to be resilient to the impacts of climate change	10	0	0
	Overheating research with University of Southampton	0	20	0
Total		1,200	1,200	348

- 18. A number of customer-facing sites are strongly positioned to facilitate the programmes objectives. Sir Harold Hillier Gardens is to lead on the delivery of a number of projects, notably electric power tool alternatives and two education projects one of which is to engage schools in a Climate Unity project, and another to work with other customer-facing services to introduce climate-themed interpretation. To support this, in addition to the £150,000 grant specifically referenced in the table above for the Propagation Unit, it is planned to award Hillier Gardens grant funding of up to £30,000 for these projects.
- 19. Further information pertaining to project funding allocations is included in the 'performance' section below.

### **Performance**

- 20. Considerable progress has been made across the programme to-date. One of the most notable completions is the 'Climate positive carbon negative country park at River Hamble' project. The eco-barn, with its numerous climate credentials partly funded through this programme, opened in March 2022. It's anticipated to have both direct and indirect benefits the former will be achieved with new technology to minimise energy consumption including innovative heating solutions and solar PV, whilst the latter will be realised through visitor engagement and information sharing to raise awareness of positive actions that could be taken by visitors to be energy-efficient in domestic settings.
- 21. The 'Energy efficiency for community buildings' project is underway. Interest in the grant funding available through the Parish and Town Council Investment Fund to enhance energy performance has been high. There are

currently over 50 enquiries from applicants seeking improvements to village halls and community buildings including solar PV, LED lighting, insulation, energy reports, etc. Almost £76,000 has been awarded to-date to 12 projects for a range of measures which are forecast to achieve an annual carbon reduction of over 22tCO2e and annual financial savings of over £16,000¹ for the successful applicants.

- 22. One of the projects is an extensive programme of works at Newton Valence Village Hall. The building currently has very poor energy efficiency, rated 'G' which is the lowest possible energy efficiency rating. Proposals to insulate the building, replace windows, install LED lighting and replace the oil-fired heating system with an electric system are forecast to significantly improve the energy-efficiency of the building, increasing the rating to a 'C'. This project alone which is set to cost circa £30,000, will achieve an annual carbon saving of over 7tCO2e, on top of annual financial savings of almost £4,500 for Newton Valence Parish Council.
- 23. Funding to support the Hydrotreated Vegetable Oil (HVO) expanded pilot has successfully enabled an immediate direct reduction of the County Council's fleet-based emissions. HVO is produced from 100% sustainable renewable waste feedstocks and is a drop-in replacement for other fuels. Utilisation of HVO is high across the organisation with 80% of fleet fuel being HVO sourced from HCC depots. HVO has the potential to reduce carbon emissions by almost 90% it's forecast that over a 12 month period this could realise a carbon saving of 1,207tCO2e equivalent to driving over 2.7 million miles in an average passenger vehicle². Additional funding has been allocated to the project to offset fuel price increases, however the pilot has proven that HVO is a viable option to reduce fleet-based emissions and, consequently, will cease early because of rising costs. A decision will now be sought on continuing with HVO or reverting to diesel.
- 24. Phase 1 of the tree planting project has completed with phase 2 scheduled for the next 'window' in the autumn of 2022. £70,000 of the £200,000 allocated is spent to-date. Phase 1 included tree planting at a number of sites including Lepe Country Park, Manor Farm, River Hamble Country Park and Staunton Country Park. In total, 337 standard trees and 6,300 whips have been planted which will ultimately help to increase carbon sequestration and contribute to the County Council's carbon neutral 2050 target. These tree planting initiatives complement other ongoing programmes of work including delivery of the Tree Strategy and The Queen's Green Canopy initiatives.
- 25. Other notable achievements and milestones across the programme include the formation of a replacement plan to support the transition to electric power

<sup>&</sup>lt;sup>1</sup> Financial savings are calculated for each application on the basis of current energy prices and energy consumption and forecast energy consumption following completion of energy efficiency measures.

<sup>&</sup>lt;sup>2</sup> Emissions converted using the United States Environmental Protection Agency Greenhouse Gas Equivalencies calculator

tools at Sir Harold Hillier Gardens and Hampshire Outdoor Centres; proposals have been agreed to support nature recovery as part of the landscape-scale regeneration project; a renewable energy viability study has been completed for Runway's End carbon neutrality demonstration project; a menu carbon labelling project with University of Southampton has commenced, which is one of a range of educational initiatives designed to engage and influence through customer sites such as libraries, outdoor centres and country parks.

- 26. A small number of additional projects are completed including two research projects in collaboration with University of Southampton originally allocated £10,000 each and a food waste project at Royal Victoria Country Park. The research projects one of which focused on overheating in Hampshire schools and resilience to the impacts of a 2 degrees Celsius temperature rise were completed 'pro bono' allowing funding to be reallocated across the programme.
- 27. Two projects have been closed: 1) Extension of LED lighting programmes at HCC corporate sites; 2) Renewable energy in HCC depot locations. The former wasn't required following the successful rollout of an LED lighting programme through Property Services in CCBS, whilst the latter was delivered through the solar PV workstream of the Public Sector Decarbonisation Scheme. The original funding allocations have been reallocated across the programme.
- 28. One new project has been added to the programme, owing to the reallocations and the insight gathered from research with University of Southampton. A further research project is to be developed, focusing on overheating of schools and care homes, building on the findings of the initial research completed. To aid this project, match funding is being sought to resource a research fellow role, which would generate robust, academically-informed insight to support future decision making surrounding resilience of the estate.
- 29. Programme benefits are being monitored to not only recognise the impact of individual projects but to ensure lessons can be learnt and, if a project is particularly successful, scaled up and shared to enable wide-reaching impacts. Where relevant and as already noted in this section, carbon emissions savings are being projected for each project. An overall forecast carbon reduction saving will be available at the end of the programme before actuals are recorded in subsequent years. In some instances, financial savings are projected across the programme, although naturally there is also an uplift cost for new, innovative technologies in other areas.
- 30. Beyond carbon and financial impacts, several other benefits are anticipated including the invaluable insight obtained from research projects and the opportunity to engage and influence staff and service users to encourage impact beyond direct delivery of the programme itself. The former will ensure

the County Council is strongly positioned to make evidence-based decisions that have a long-term impact. The latter will enable increased awareness and knowledge at individual level on how to contribute, which when aggregated will have a significant benefit for Hampshire and beyond.

- 31. Risks and issues across the programme are being actively managed including:
  - Volatility of HVO pricing means the uplift cost exceeded the original funding allocation for the project. Funding has been reallocated to offset price increases.
  - A shortage of trees could threaten the ability for the tree planting project to obtain access to desirable species and/or deliver the project within defined time tolerance.
  - Delays in the supply chain and availability of supplies/equipment could threaten the proposed timescales for Hillier's Propagation Unit project delivery which could increase project costs.

# **Consultation and Equalities**

32. A high-level Equalities Impact Assessment (EIA) has been completed and no negative impacts have been identified at this stage. Individual project leads, where necessary, will undertake a detailed EIA if deemed appropriate to fully consider the equalities impacts at project level as they are developed.

### Climate Change Impact Assessment

- 33. Hampshire County Council utilises two decision-making tools to assess the carbon emissions and resilience impacts of its projects and decisions. These tools provide a clear, robust, and transparent way of assessing how projects, policies and initiatives contribute towards the County Council's climate change targets of being carbon neutral and resilient to the impacts of a 2°C temperature rise by 2050. This process ensures that climate change considerations are built into everything the Authority does.
- 34. The climate change tools were not applicable because this is a strategic programme. However, where appropriate, the tools will be applied to individual projects to assess carbon mitigation and vulnerabilities to adaptation to enable the best outcomes. The programme is anticipated to have a favourable impact on climate change, positively contributing towards carbon neutrality and increased resilience to the impacts of a 2 degrees Celsius temperature rise.

#### **Conclusions**

- 35. The programme is on track for completion by end of March 2023 and numerous milestones have already been achieved including the completion of the 'Climate positive carbon negative country park at River Hamble' project, the ongoing success of the 'Energy efficiency for community buildings' project and the immediate benefits realised through the 'Expansion of Hydrotreated Vegetable Oil pilot' project.
- 36. Funding allocations have been updated following project completions and closures, resulting in one new project in the programme. £342,000 representing almost 30% of the total funding has been spent as at the end of May 2022.
- 37. Carbon savings have already been realised for HCC, whilst the County Council has benefited from research projects to ensure its knowledge-rich in its efforts to tackle climate change. The County Council cannot tackle it alone, however, and considerable work has and will take place to engage, influence and educate staff and service users in support of climate change objectives.

#### REQUIRED CORPORATE AND LEGAL INFORMATION:

# Links to the Strategic Plan

Hampshire maintains strong and sustainable economic growth and prosperity:	yes
People in Hampshire live safe, healthy and independent lives:	yes
People in Hampshire enjoy a rich and diverse environment:	yes
People in Hampshire enjoy being part of strong, inclusive communities:	yes

**Other Significant Links** 

Links to previous Member decisions:		
<u>Title</u>	<u>Date</u>	
HCC Climate Change Initiatives - Decision Record	13 July 2021	
Direct links to specific legislation or Government Directives		
Title	Date	

# Section 100 D - Local Government Act 1972 - background documents

The following documents discuss facts or matters on which this report, or an important part of it, is based and have been relied upon to a material extent in the preparation of this report. (NB: the list excludes published works and any documents which disclose exempt or confidential information as defined in the Act.)

<u>Document</u>	<u>Location</u>

None

#### **EQUALITIES IMPACT ASSESSMENT:**

### 38. Equality Duty

The County Council has a duty under Section 149 of the Equality Act 2010 ('the Act') to have due regard in the exercise of its functions to the need to:

- Eliminate discrimination, harassment and victimisation and any other conduct prohibited by or under the Act with regard to the protected characteristics as set out in section 4 of the Act (age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation);
- Advance equality of opportunity between persons who share a relevant protected characteristic within section 149(7) of the Act (age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex and sexual orientation) and those who do not share it;
- Foster good relations between persons who share a relevant protected characteristic within section 149(7) of the Act (see above) and persons who do not share it.

Due regard in this context involves having due regard in particular to:

- The need to remove or minimise disadvantages suffered by persons sharing a relevant protected characteristic that are connected to that characteristic;
- Take steps to meet the needs of persons sharing a relevant protected characteristic that are different from the needs of persons who do not share it;
- Encourage persons sharing a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionally low.

# 39. Equalities Impact Assessment:

See guidance at <a href="https://hants.sharepoint.com/sites/ID/SitePages/Equality-Impact-Assessments.aspx?web=1">https://hants.sharepoint.com/sites/ID/SitePages/Equality-Impact-Assessments.aspx?web=1</a>

Insert in full your **Equality Statement** which will either state:

- (a) why you consider that the project/proposal will have a low or no impact on groups with protected characteristics or
- (b) will give details of the identified impacts and potential mitigating actions