

# Initial SECAP Work Programme

The Angus Council SECAP provides a long list of the potential activities that could be delivered to reduce carbon emissions and adapt to climate change. This following work programme has been designed to enable Angus Council to implement the SECAP with a shorter, more actionable list of 13 priority projects across most of the original SECAP themes.

This shortlist of priority projects has been informed in consultation with key stakeholders within Angus Council, combined with learnings from best practice elsewhere.

These project activities have been specifically prioritised to build and add value to existing council plans (across all departments), by filling delivery gaps and joining-up resources to support Angus Council commitments to sustainable development, environmental management and a low carbon economy.

The 14 priority projects put forward are distributed across thematic areas as follows:

Project Type	Project name
4 x Buildings Projects	<ol style="list-style-type: none"> <li>1. RUN a pilot programme on a hard-to-treat archetype by comparing and testing the efficiency of different retrofit technologies at Boyle Park Lodge.</li> <li>2. CONTINUE to deliver high quality, energy efficient homes using a 'fabric first' approach in alignment with the statutory compliance with EESSH 2 by 2032, starting with Letham &amp; Edzell.</li> <li>3. UPGRADE four sheltered complexes across Angus to provide PV and bulk battery storage for monitoring.</li> <li>4. RUN a pilot programme to carry out the monitoring of and upgrades to Orange Lane properties.</li> </ol>
3 x Energy Projects	<ol style="list-style-type: none"> <li>5. EXPLORE the potential for repurposing the Restenneth landfill site for renewable energy generation through either Solar PV deployment or biofuels.</li> <li>6. CONTINUE installing solar PVs on high energy use buildings and investigate/pilot battery storage solutions. Further installation to be undertaken at Brechin Community Campus High School and Websters High School (2021/2022).</li> </ol>

	7. IMPROVE the efficiency of public lighting infrastructure and the performance of the supporting energy network through opportunities presented by the streetlight replacement programme.
2 x Transport Projects	8. IMPLEMENT an EV charging hub in Arbroath. 9. CONDUCT Angus Council Fleet Review.
3 x Agriculture, Land Use & Forestry Projects	10. ASSESS Montrose Coastal Erosion Protection Options for Implementation. 11. IMPLEMENT Biodiversity and Green Infrastructure for Climate Change Mitigation and Adaptation. 12. DEVELOP a Local Agriculture and Sustainable Food Initiative.
1 x Waste Projects	13. IMPLEMENT new kerbside collection services, in line with Scotland's Deposit Return Scheme, supported by the current "Right Stuff, Right Bin" campaign.

The projects specify how they will be delivered and by whom. To achieve this, each project will have a PACE acronym model applied to it. The PACE model is designed to enable fast decision making, accountability and consensus building needed to co-ordinate different stakeholder groups. Each letter within PACE specifies the level of ownership and responsibility for a given stakeholder as follows:

Role		Responsibility
P	Project Owner	Responsible for planning and monitoring projects to ensure they are on time, on-budget and meet requirements. They coordinate and inform other stakeholders and seek necessary approvals.
A	Approver	Responsible for reviewing key project milestones and approving any final decisions (usually a budget approver).
C	Contributor	Responsible for providing expert consultation and enabling support (not a decision maker).
E	Executor	Responsible for "on the ground" project implementation.

# Buildings

There are 4 buildings projects proposed to be prioritised for the launch of the Angus Council SECAP.

Improving building energy efficiency is one of the most cost-effective and impactful ways for Angus Council and partners to reduce emissions across the region. Meeting Angus Council’s Net Zero target will require interventions for the sustainable design/construction of new buildings and for energy efficiency improvements of the existing building stock.

There are around 52,500 households in Angus and this number is expected to rise to just over 55,000 in the next 17 years . The social housing sector accounts for approximately 21% of the total housing stock, with Angus Council owning and managing around 67% of these. Angus Council is currently estimated to have around 7,800 tenanted properties which it is responsible for, delivering both planned and reactive maintenance, including energy efficiency improvements.

The following table and summaries present a shortlist of refined priority building’s projects that Angus Council can lead in conjunction with key partners for delivery in the short to medium term, and where potential funding is likely to be readily available. Connections with previous SECAP long list projects are also captured in table below.

Table 1: Buildings Projects.

Project No.	Project Name	Connection to original SECAP long-list actions
1	RUN a pilot programme on a hard-to-treat archetype by comparing and testing the efficiency of different retrofit technologies at Boyle Park Lodge.	B3
2	CONTINUE to deliver high quality, energy efficient homes using a ‘fabric first’ approach in alignment with the statutory compliance of EESSH 2 by 2032 starting with Letham & Edzell.	B4
3	UPGRADE four sheltered complexes across Angus to provide PV and bulk battery storage for monitoring.	B5
4	RUN a pilot programme to carry out the monitoring of and upgrades to Orange Lane properties.	B3 & B6

Project 1: RUN a pilot programme on a hard-to-treat archetype building by comparing and testing the efficiency of different retrofit technologies at Boyle Park Lodge.

Why:	Angus Council is committed to embracing innovation to improve energy efficiency of the existing building stock.
What	<p>The Council will seek funding through the Social Housing Decarbonisation Fund Demonstrator, to run a pilot programme comparing and testing the efficacy of different retrofit technologies in improving energy efficiency. Working together with academia and experts in the industry, the findings from the pilot will help inform future investments in the region and ensure that any retrofit projects maximise performance, practicality, and value for money.</p> <p>Boyle Park Lodge is a substantial stone-built property situated at the Glamis Road entrance to the Boyle Park in Forfar, which has been identified as an ideal demonstrator property for a pilot. This old building has sat vacant for many years and is a good representation of some of Angus Council’s oldest and historic housing assets. This property archetype will provide the ultimate “stress” test for evaluating the energy efficiency of retrofit technologies and their ability to make the most “hard-to-treat” housing stock compliant with Scottish Government EESSH standards. Retrofit energy efficient technologies can also be tested on Boyle Park Lodge to assess low carbon heating systems. For example, exploring whether electric powered heat pumps can replace oil or gas systems in similar property types across Angus.</p> <p>This project will also provide an excellent example of Angus-wide multi-stakeholder collaboration, an approach that the council is keen to promote across its own departments, academia, and social enterprise energy organisations such as SCARF.</p> <p>This project will be funded through HRA capital programme and government new build grants.</p>
Who	<p>P = Housing Assets (AC)</p> <p>A = HRA Capital Programme Manager</p> <p>C = Property Assets(AC), SCARF, Tenant Steering Group (AC), Communities Team (AC), Community Housing Team (AC), Dundee and Angus College, University of Abertay</p> <p>E = Housing Assets (AC), Property Assets(AC), University of Abertay</p>

**Project 2: CONTINUE to deliver high quality, energy efficient homes using a ‘fabric first’ approach in alignment with the statutory compliance with EESSH 2 by 2032 starting with Letham & Edzell.**

<p><b>Why:</b></p>	<p>The Energy Efficiency Standard for Social Housing (EESH) is a Scottish Government standard which supports the vision of warm, high quality affordable and low carbon homes. EESH also forms a crucial part of helping Scotland meet its climate change targets. Introduced in 2014, EESH 1 set targets for energy efficiency in social housing across Scotland up to 2020.</p> <p>Angus Council had planned to achieve its target of EESH 1 compliance for all existing and new council housing stock by the end of 2020. However, due to challenges of COVID this was delayed and is currently still in the process of being completed.</p> <p>EESH2 proposes a longer-term approach to improving energy efficiency across the social housing stock. Angus Council is now beginning its work on achieving EESH 2 compliance of all its housing stock by the target deadline of 2032.</p>
<p><b>What</b></p>	<p>To help meet the EESH 2 requirements, Angus Council is applying a “fabric first” approach to housing design. The “fabric first” approach seeks to maximise the performance of the building fabric itself, for example through measures such as increased insulation and natural ventilation, before considering the use of mechanical or electrical systems. This approach requires less maintenance whilst providing a high level of energy efficiency, thereby saving money as well.</p> <p>The initial work will be carried out on housing stock located in the villages of Letham &amp; Edzell. This will be funded through HRA capital programme and government new build grants.</p>
<p><b>Who</b></p>	<p>P = Housing Assets (AC)</p> <p>A = HRA Capital Programme Manager</p> <p>C = Property Assets(AC)</p> <p>E = Housing Assets (AC)</p>

Project 3: UPGRADE four sheltered complexes across Angus to provide PV and bulk battery storage for monitoring.

<p><b>Why:</b></p>	<p>Approximately 33% of households in Angus experiencing fuel poverty<sup>1</sup>. A household is defined as experiencing fuel poverty when more than 10% of their income is spent on fuel. Fuel poverty and climate change are inextricably linked, as taking action to improve the energy efficiency of homes not only reduces the energy demand, and associated carbon emissions, but also reduces the amount households need to spend on fuel. This is important as a core principle set out in the SECAP is that climate action in the region does not inadvertently burden the most vulnerable.</p> <p>Solar Photovoltaic (PV) and Battery Storage Decarbonation technology is seen as a key enabler for Angus Council to help vulnerable residents in sheltered housing and retirement homes, whilst also contributing to meeting the EESSH2 standards by 2032 by producing zero carbon electricity. PV operates by converting sunlight (solar radiation) into direct current electricity. Solar PV technology is generally deployed on a panel. A solar PV project is a term used to describe the installation of solar panels, either on an existing building roof, a purpose-built structure, or on the ground. Electricity generated from these can then be stored and used later and reduce energy bills</p>
<p><b>What</b></p>	<p>Four sheltered housing accommodations located at Balmain Court, Andy Stewart Court, Murray Court and Springfield need urgent heating upgrades, as they are not on gas network. Therefore, these sheltered housing locations are to be given quantum heating upgrades, and where required, insulation to achieve a built standard compliant with EESSH2.</p> <p>A large-scale solar PV and battery storage project for the purposes of research and monitoring will be installed across the 4 sites. This project will demonstrate the impact of battery storage and assess the impact on alleviating fuel poverty amongst vulnerable elderly residents. It will monitor the potential savings and provide data to determine if these measures should be rolled out more widely across Angus Council housing stock. Each sheltered complex has a different geometric construction and roof profiles that need to be considered. These upgrade project will be funded via HRA capital programme works specific to EESSH2, with additional funding from The Mercury Programme.</p> <p>This research also provides potential additionality by making the case for further Tay Cities Deal funding to pay for research on sheltered accommodation's relationship to other council tenanted properties within a short radius (e.g.,100m) and how PV can be situated on these properties and connected to a central battery, helping create a mini energy network in the area.</p>
<p><b>Who</b></p>	<p>P = Housing Assets (AC)</p> <p>A = HRA Capital Programme Manager and Mercury Programme Manager</p> <p>C = Property Assets (AC), SCARF, Tenant Steering Group (AC), Communities Team (AC), Community Housing Team (AC), Dundee and Angus College, University of Abertay.</p> <p>E = Housing Assets (AC)</p>

<sup>1</sup> Fuel poverty and extreme fuel poverty estimates. [Available here.](#)

#### Project 4: RUN a pilot programme to carry out the monitoring of and upgrades to Orange Lane properties.

<b>Why:</b>	Orange Lane in Montrose is a residential area that has been identified by Angus Council as needing urgent upgrades, including enclosed balconies and over cladding to improve building energy efficiency. This part of Montrose is also susceptible to flooding during heavy rain.
<b>What</b>	<p>Existing building performance to be monitored prior to staged energy improvements with monitoring periods interspersed with upgrades. As the residents and tenants in Orange Lane have not been engaged by the council previously, they will need to be consulted and informed of the proposed research and monitoring and the benefits of delivering energy efficiency improvements to their properties.</p> <p>Upgrade opportunities for the Orange Lane properties include solar PV due to its large roof areas, battery storage and over cladding to achieve a built standard compliant with EESSH2. The intent of this project is to make the upgrades and monitor for a year. This will help determine if there is further work needed to be done, such as stripping out boilers or electric heating for air source heat pumps. Upgrades will be funded via HRA capital programme works specific to EESSH2, with additional funding from The Mercury Programme.</p> <p>Potential additionality for this project is to use Tay Cities Deal Funding for the grass area at the front of the Orange Lane Properties, and understand what grants are available for an innovative SuDS (Sustainable Drainage Systems) to help alleviate flooding issues during heavy rain. SuDS are environmentally beneficial drainage systems, causing minimal or no long-term detrimental damage. They are designed to transport surface water and slow runoff before entering watercourses. They also provide areas to store water in natural contours and can be used to allow water to soak into the ground or evaporate. SuDS are a series of control strategies and structures to efficiently manage and sustainably drain surface water, while minimising pollution and the impact on water quality of local water bodies. The SuDS work will require engaging with Council Park's team and local schools to aid in its design, so they understand the technology and its benefits to achieve buy-in.</p>
<b>Who</b>	<p>P = Housing Assets (AC)</p> <p>A = HRA Capital Programme Manager and Mercury Programme Manager</p> <p>C = Property Assets (AC), SCARF, Tenant Steering Group (AC), Communities Team (AC), Community Housing Team (AC), Parks (AC), Dundee and Angus College, University of Abertay</p> <p>E = Housing Assets (AC), Parks (AC)</p>

# Energy

There are 3 energy projects proposed to be prioritised for the launch of the Angus Council SECAP.

Using renewable energy rather than fossil fuels can significantly decrease emissions. Therefore, key targets of Scotland’s Energy Strategy (2017) are to generate over 50% of Scotland’s energy consumption from renewable sources by 2030 and increase the productivity of energy use across Scotland by 30%.

To date, Angus has achieved significant reductions in energy usage by replacing street lighting with LEDs. The Council has also invested in renewable technologies, including the installation of Photo Voltaic Cells on key high-energy demand buildings such as Montrose Sports Centre. An emphasis on the continuation and development of similar innovative energy projects in the region, will help position Angus as one of the leaders in sustainable and renewable energy generation in Scotland.

The following table and summaries present a shortlist of refined priority energy projects that Angus Council can lead in conjunction with key partners, for delivery in the short to medium term, and where potential funding is likely to be readily available. Connections with previous SECAP long list projects are also captured in table below.

Table 2: Energy Projects.

Project No.	Project Name	Connection to original SECAP long-list actions
5	EXPLORE the potential for repurposing the Restenneth landfill site for renewable energy generation through either Solar PV deployment or biofuels.	E4
6	CONTINUE installing solar PVs on high energy use buildings and investigate/ pilot battery storage solutions. Further installation to be undertaken at Brechin Community Campus High School and Websters High School (2021/2022).	E5
7	IMPROVE the efficiency of public lighting infrastructure and the performance of the supporting energy network, through opportunities presented by the streetlight replacement programme.	E9



Project 5: EXPLORE the potential for repurposing the Restenneth landfill site for renewable energy generation through either Solar PV deployment or biofuels.

<b>Why:</b>	<p>An objective for Angus is to grow renewable energy generation in the region, positioning Angus as a leader in renewable technologies, creating new employment opportunities, fostering innovation and supporting long term sustainable growth in the region. These investments align with several of the SECAP key principles, including enabling opportunities to contribute to the local economy, supporting skills development and embracing innovation.</p> <p>Angus Council is currently exploring the potential of repurposing disused landfill sites for renewable energy generation. The positive long-term benefits through reduction in brownfield/ derelict/ contaminated land such as this will decrease carbon emissions from energy generation from nearby properties or provide electricity to the national grid.</p>
<b>What</b>	<p>Following its closure in 2017, Angus Council is currently examining the feasibility and business potential of remodelling the Restenneth landfill site in Forfar for renewable energy generation through different technologies, such as solar panels or biofuels. This programme will require the installation of solar thermal panels on restored areas of the former landfill site.</p>
<b>Who</b>	<p>P = Environmental Management (AC)</p> <p>A = Budget Holder (TBC)</p> <p>C = Property Assets (AC)</p> <p>E = Property Assets (AC)</p>

Project 6: CONTINUE installing solar PVs on high energy use public-sector buildings and investigate/ pilot battery storage solutions. Installation to be undertaken at Brechin Community Campus High School and Websters High School (2021/2022).

Why:	Investment in solar PVs on public buildings bring multiple benefits to local authorities and local public bodies. They enable organisations to reduce their net carbon emissions whilst demonstrating leadership through visible action. The energy generated can either be sold to the national grid or used on-site, instead of purchasing electricity from the grid. Both options bring financial benefits.
What	<p>Solar PV installations are taking place across public sector buildings in Angus with SALIX funding already in place. Battery energy storage solutions can help manage both on-site energy usage and grid connections. Storing energy can provide a local supply when solar generation is lower, help manage smart-grid systems and support electric vehicle charging.</p> <p>Angus Council should run a market testing exercise to engage companies who supply storage systems, for example those who convert used electric vehicle batteries into large storage units, which reduces waste. A pilot will help test the effectiveness of energy storage in this context and will inform whether it should be rolled-out across other public sites which have solar PV installations.</p>
Who	<p>P = Property Assets (AC)</p> <p>A = Budget Holder (TBC)</p> <p>C = Housing Assets (AC)</p> <p>E = Building manager (AC), Procured suppliers (TBC)</p>

**Project 7: IMPROVE the efficiency of public lighting infrastructure and the performance of the supporting energy network, through opportunities presented by the streetlight replacement programme.**

<p><b>Why:</b></p>	<p>An effective street lighting service contributes significantly to the Angus carbon reduction agenda. Almost a decade ago, the roll-out and upgrade to LED (Light Emitting Diode) street lighting systems began to reduce energy consumption and hence CO2 emissions. LED achieves these carbon reductions by producing white light in various intensities at very low wattage levels. The lamps have very long service intervals thus significantly reducing maintenance costs.</p> <p>The existing partnership arrangement between Angus Council, Dundee City Council, Perth &amp; Kinross Council and Tayside Contracts is responsible for the shared service delivery of street lighting across the geographical area of the three Councils. The partnership operates as an integrated team under a single Street Lighting Partnership Manager. To date, the partnership has achieved significant reductions in carbon emissions through its LED streetlight replacement scheme. In total, 90% of Angus, approximately 22,550 streetlights, have already been upgraded with LED lights, with around 2,206 still outstanding. A large portion of the remaining 10% are decorative lighting, which is more expensive to replace.</p>
<p><b>What</b></p>	<p>The key objective for the programme is to provide an effective street lighting service that minimises the street lighting carbon footprint but without negatively impacting on Angus community safety. A continuation of this important streetlight replacement programme is helping the council to; maximise energy savings, provide more reliable lighting to residents and motorists, achieve the council's net zero carbon target and maximise financial savings to support other council services.</p> <p>The Street Lighting Partnership still has some of last years "Invest to Save" budget left, which they were not able to spend last year due to COVID and has been carried over to this year. This leaves an approximate budget of £307,000 remaining for this fiscal year (Ending March 2022), which will roughly cover about ~1000 LEDs, so almost 5% of outstanding stock. However, some of the original LED lighting installations are now starting to fail and need replacing. Whilst the LED bulb itself is not failing, the LED drivers have a lifetime of ~10 years, so additional ad-hoc replacements are starting to be required.</p> <p>Given budgetary constraints, prioritisation of LED replacements should be given to units which have the potential to save the most energy first. The biggest opportunities are the larger streetlights located on high-traffic main roads. Past street lighting strategy has meant these have been left towards the end of the programme due to the expense involved in replacing these. Yet some 250W metal halide lights, 250W SONS and other non-LED 150W lights located on these roads that have been identified, can enable a 60-70% energy saving if they were converted to LED. Therefore, they should be targeted for replacement this year. Areas these are located include Forfar, New Kyle, and some higher mountain and distributor roads spread across Angus.</p>
<p><b>Who</b></p>	<p>P = Street Lighting Partnership</p> <p>A = Budget Holder (TBC)</p> <p>C = Transport (AC)</p> <p>E = Tayside Contracts</p>

# Transport

There are 2 transport projects proposed to be prioritised for the launch of the Angus Council SECAP.

As a largely rural area, most households in Angus own one or more private fossil-fuelled cars. This contributes significantly to Angus' carbon emissions. Therefore, tackling transport-related carbon emissions in the region is largely about enabling people to access meaningful and cost-effective alternatives to using private fossil fuelled cars for services and destinations.

Alternative active travel options (e.g., walking, cycling etc.) which have a positive impact on the environment should be encouraged and enabled. They also have additional benefits, such as improving citizens health and wellbeing through increased physical activity. However, in rural parts of Angus, it is often too impractical and inconvenient to travel long distances without the use of a car.

Therefore, Angus Council has already begun taking measures to develop electric vehicle (EV) charging infrastructure to enable the use of low emission vehicles to increase uptake of EVs by citizens and its own workforce.

The following table and summaries present a shortlist of refined priority transport projects that Angus Council can lead in conjunction with key partners, for delivery in the short to medium term, and where potential funding is likely to be readily available. Connections with previous SECAP long list projects are also captured in table below.

Table 3: Transport Projects.

Project No.	Project Name	Connection to original SECAP long-list actions
8	IMPLEMENT an EV charging hub in Arbroath.	T7
9	CONDUCT Angus Council Fleet Review.	T8

## Project 8: IMPLEMENT an EV charging hub in Arbroath.

<b>Why:</b>	<p>As a largely rural area, most households in Angus own one or more private fossil-fuelled cars with the primary mode of transport in Angus being cars/vans (approximately 68%). Due to the rural nature of many of the areas within Angus, it is sometimes difficult to travel long distances without the use of a car. Although many services, facilities and employment opportunities can be found in the town centres, for many people long distance travel is a necessary part of daily life.</p> <p>Tackling transport-related carbon emissions in the region is largely about enabling people to access meaningful and cost-effective alternatives to using private fossil fuelled cars to access services and destinations. In support of Scotland’s ambition to phase out petrol and diesel cars and vans by 2032, Angus Council has taken measures to develop electric vehicle (EV) charging infrastructure. The use of EVs has increased dramatically over the last few years.</p> <p>In 2019, Angus Council carried out a feasibility study to look at best potential sites for EV Charging hubs. This resulted in Angus Council opening its 1st EV hub at Orchardbank in Forfar in February 2021, funded by the Scottish Futures Trust. The “Angus on the Go” Project has seen the development of a charging hub comprising of a mix of charging types (4x 50kW rapid, 3x 22kW fast and 2x7kW slow chargers). The feasibility study also identified the best locations in Arbroath where similar EV hubs should be deployed to increase the uptake of non-fossil-fuelled travel by commuters to and from Angus Council’s largest town.</p>
<b>What</b>	<p>Following on from the success of the Orchardbank installation, the council have sought funding through Transport Scotland’s Switched On Towns and Cities Programme to implement EV charging hubs in Arbroath. The locations are based on the 2019 feasibility study of potential for EV infrastructure in Arbroath, which narrowed down potential hub sites to 3-4 locations.</p>
<b>Who</b>	<p>P = Road and Transport (AC) A = Budget Holder (TBC) C = Property Assets (AC) E = Road and Transport (AC)</p>

## Project 9: CONDUCT Angus Council Fleet Review.

<b>Why:</b>	<p>A key aim for Angus Council is reducing carbon emissions and pollution from its fleet and operations. The various vehicle fleets used by the Council and its contractors are a major source of carbon and air pollution, therefore it is an important issue to address to seriously tackle climate change. A clear scoping of existing fleet emissions and a strategy to operate more efficiently, without compromising quality of service or incurring unsustainable costs is needed.</p>
<b>What</b>	<p>In 2019, a proposal to instigate an Angus Council fleet review to deliver financial savings was targeted for 2020/21 but was delayed due to COVID. Instead, a fleet review will be scheduled for later this year (2021) to not only deliver financial savings but establish the carbon emission benefits as well.</p> <p>Angus Council will need to carry out a review of all council and council partner organisations approach to fleet, including a full review of current methods of procurement, operations, maintenance and disposal. It will also include developing a full options appraisal, aimed at developing a fleet upgrade model and plans for implementing EV technology to reduce emissions (both GHG emissions and air pollutants) from vehicles used in all Council's operations. All this must be achieved with minimal disruption to current service delivery requirements.</p> <p>However, currently ownership for the various fleets within Angus Council are disparate. For example, bus fleets currently sit with road and transport department, waste and maintenance fleets reside within parks department and another fleet located within social work, to name a few. Therefore, a key aim of the review will be to identify where full fleet management and operations should sit within the council, to provide a holistic overview and strategy for managing the existing fleet across different parts of the council efficiently and effectively going forward.</p> <p>This Fleet review is to be led by Angus Council Road and Transport team as part of its change programme, with significant support from other fleet managers from other departments contributing.</p> <p>No specified date has been set for the delayed fleet review; however, Road and Transport are looking to initiate this around August 2021 and see what can be achieved in last 4 months of the year. Budgets implementing findings for the plan should be ready in Feb 2022, so recommendations from the review will need to be established by Jan 2022.</p>
<b>Who</b>	<p>P = Road and Transport (AC)</p> <p>A = Budget Holder (TBC)</p> <p>C = Any AC departments with fleets e.g. Parks (AC)</p> <p>E = Fleet Managers</p>

# Agriculture, Land Use & Forestry

There are 3 Agriculture, Land Use & Forestry projects proposed to be prioritised for the launch of the Angus Council SECAP.

Angus has some of the best growing land in Scotland with over 40% of the A class agricultural land in Scotland making farming a vitally important industry in the region. Agriculture is particularly susceptible to the impacts of climate change, given its reliance on weather. In addition, agriculture is a large contributor to carbon emissions, and as such is a critical sector to address in helping to meet national climate change targets.

Angus' natural environment is one of the regions strongest assets and therefore it is essential that it is protected and enhanced for future generations. Angus Council has already taken steps to increase the resilience of the region's natural environment to the impacts of climate change.

When it comes to climate change adaptation, flooding is of particular concern in Angus. Together with the Scottish Government, the council has secured funding to deliver the multimillion-pound Arbroath Flood Protection Scheme, a national priority under the Flood Risk Management Strategy.

The following table and summaries present a shortlist of refined priority land use & forestry projects that Angus Council can lead in conjunction with key partners, for delivery in the short to medium term, and where potential funding is likely to be readily available. Connections with previous SECAP long list projects are also captured in table below.

Table 4: Agricultural, Land Use & Forestry Projects.

Project No.	Project Name	Connection to original SECAP long-list actions
10	ASSESS Montrose Coastal Erosion Protection Options for Implementation.	L3, L4, L5 & L6
11	IMPLEMENT Biodiversity and Green Infrastructure for Climate Change Mitigation and Adaptation.	L5, L6, L9 & L11
12	DEVELOP Local Agriculture and Sustainable Food Initiative.	A1, A6, A8 & A10

## Project 10: ASSESS Montrose Coastal Erosion Protection Options for Implementation.

<b>Why:</b>	<p>The effects of climate change have had a significant impact on vulnerable coastal and marine areas, as well as to the function and structure of their ecosystems. Increasing sea levels change the shape of coastlines, contributes to coastal erosion and lead to flooding. Angus itself has a geography that includes several such vulnerable coastal areas that need protecting.</p> <p>There is particular concern raised about the coastal erosion affecting Montrose. It is projected that the Montrose coastline could wear away by up to 80m over the next 50 years. Coastal erosion is also inextricably linked to flooding. Both these issues are set to worsen in Montrose in the not-too-distant future. Angus Council have acknowledged this risk to Montrose's coastline as a unique natural asset for residents and tourists, but also the nearby affected local stakeholders, such as Montrose Golf Links.</p>
<b>What</b>	<p>The Council commissioned a flood risk study for Montrose to identify options to manage coastal erosion and flood risk in a coordinated way. The options will be considered for inclusion in the second-generation Local Flood Risk Management Plan and apply for Scottish Government funding for flood risk capital monies available from 2022-28.</p> <p>The next step for Angus is to prioritise the next activity as part of this co-ordinated approach, including engaging with SEPA. Prioritisation will include:</p> <ul style="list-style-type: none"><li>• Assessing the urgency of need: how soon will flood and erosion mitigation be needed.</li><li>• Assessing the impact of flood and erosion risk: what economic activity, communities or ecosystems are at risk.</li><li>• Assessing network effects: what role does a location play in Angus-wide coastal erosion and flood management, for example by slowing water flows upstream and impacting on flooding further downstream.</li></ul> <p>This prioritisation and co-ordination will create a forward programme of interventions, for which funding bids will be created. The council must also ensure that Shoreline Management Plan (SMP2) policies are integrated into development control activities developed. Finally local community groups will need to be engaged to raise awareness amongst the public of flooding to enable resident buy-in to any proposed plans.</p>
<b>Who</b>	<p>P = Coastal and Flooding (AC)</p> <p>A = Planning (AC), Budget Holder (TBC)</p> <p>C = SEPA, Emergency Planning/Resilience (AC), Communities (AC), River South Esk Catchment Partnership</p> <p>E = Coastal and Flooding (AC)</p>



## Project 11: IMPLEMENT Biodiversity and Green Infrastructure for Climate Change Mitigation and Adaptation.

<b>Why:</b>	<p>The current Tayside Local Biodiversity Action Plan (2016-2026) shows a commitment to conserving and enhancing the range of different habitat types and species in the local authority areas of Angus and Perth &amp; Kinross to promote the many benefits of biodiversity in the region through multiple projects. However, there is still further opportunity to adopt the ecosystem approach of the Scottish Government's 2020 Challenge for Scotland's Biodiversity into this plan.</p> <p>Increasing biodiversity in a planned manner can mitigate climate change and help Angus adapt to effects of climate change. For mitigating climate change, some soil types are more effective at capturing and storing carbon from the atmosphere than others. Whilst adapting to the effects of climate change, different plants have different properties in terms of reducing surface water flows, supporting a wider range of insects, birds and pollinators and physical resilience to being in places with high visitor numbers. Mixed tree planting can also be designed in ways which not just reduces flood risk or soil erosion but increases resistance to disease as well as absorbing carbon.</p>
<b>What</b>	<p>To deliver climate mitigation focus on delivery of the actions of the Tayside Local Biodiversity Plan 2016-2026. As a priority, the most important work from this will be delivering the Catchment Management Plans. For example, a key central water asset for the region is the River South Esk catchment area, which provides drinking water, irrigation for crops, watering for livestock and a valuable habitat for wildlife. For this area, catchment management plans are written by a partnership of organisations to protect the river and its surrounds. This partnership includes Angus Council, Scottish Natural Heritage, Esk District Salmon Fishery Board and Esk Fisheries Trust, Cairngorms National Park Authority, NFU Scotland, SEPA, Montrose Port Authority and the Scottish Wildlife Trust.</p> <p>The rural and agricultural land in Angus can also act as a carbon store, but more detailed research and analysis of the best locations and ecosystem conditions for this is needed. This means working with farmers and landowners, for example, to design initiatives to help them access DEFRA Environment Land Management scheme payments. In places, initiatives should go beyond existing tree planting programmes across Angus. Extra focus should be placed on dune, salt marshes, grasslands, wetlands and other types of habitat restoration. These diverse habitats have the potential to store more carbon than trees, but are rarer and more complex, meaning farmers and landowners will need more support to implement.</p> <p>To deliver adaptation against effects of climate change, a whole ecosystem approach to the delivery of the Tayside Local Biodiversity Action Plan 2016-2026 and further green infrastructure development is required. For example, the replacement of hard surfaces with SuDS (as described in Project 4) and installation of nature-based solutions including meadows, rain gardens and other vegetation in built-up and rural locations to manage rainwater flows.</p> <p>Taking an ecosystem approach across the whole of Angus means that green infrastructure can be planned to be upstream of areas which suffer from surface flooding, as well as in and downstream from these areas to slow water flows. In turn this allows for a wider range of green infrastructure to be used with a wider range of biodiversity.</p>
<b>Who</b>	<p>P = Environmental Strategy Project Officer, Planning (AC)</p> <p>A = Budget Holder (TBC)</p>

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C = INNS Project Team, Scottish Invasive Species Initiative, NatureScot, Coastal and Flooding (AC)

E = Planning (AC), River South Esk Catchment Partnership, Tayside Biodiversity Partnership

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## Project 12: DEVELOP Local Agriculture and Sustainable Food Initiative.

<b>Why:</b>	<p>The Community Empowerment 2015 (Scotland) Act, Part 9, requires every local authority to prepare a food growing strategy. The Angus Food Growing Strategy 2020-2025 was developed by Angus Council through consultation with local growers and citizens of Angus. The actions recommended in this food strategy reflected local conditions, such as Angus being a largely rural area with a significant agricultural industry. This enables Angus to be a major contributor to Scotland's farming, food and drink industries and economy. However, agriculture is also a significant contributor to greenhouse gas emissions, accounting for 15% of Scotland's total emissions in 2018.</p> <p>Therefore, strong local agricultural expertise which, whilst renowned at a national level, is not being fully utilised for the benefit of communities within Angus or the wider environment. There are still opportunities to further integrate local capabilities into the local supply chain. A dedicated Local Agriculture and Sustainable Food Initiative is recommended to not only help address food poverty in certain Angus communities, but also reduce carbon emission. Producing food locally would help reduce carbon footprint of Angus through reducing reliance on transportation of food into the region from further afield. However, currently there is a lack of local evidence and analysis of impact of different local food production, supply and consumption models and innovation that could be used to lower the carbon footprint of Angus, so further research is needed.</p>
<b>What</b>	<p>A collaborative and multi-stranded intervention is required to reduce carbon emissions from rural land-use and food. As well as building the evidence base, projects will need to be delivered to produce sustainable local food sources. The existing network of local food producers would benefit from working with the Centre for Agricultural Sustainable Innovation (CASI) in Forfar, that is being set-up as part of the Mercury Programme, to see how Agri-tech could help promote sustainable agricultural practices. Together these would quickly bring momentum to this project, although co-ordination is needed to bring together the activity of this network.</p> <p>A Local Agriculture and Sustainable Food Initiative would start by establishing a regional 'food forum' which engages Angus Council, local producers, Angus Foodbank, CASI and various beneficiaries. This forum would then attempt to develop a stronger link between suppliers of local produce and local people. This includes promoting use of local producers through existing networks but also considering how to better integrate local produce in schools, care homes, hospitals and throughout Angus e.g., explore best practice models being used in East Ayrshire who supported small suppliers to develop their skills and capacity to bid for tenders in a way that made them competitive with larger national suppliers.</p>
<b>Who</b>	<p>P = Strategic Policy (AC)</p> <p>A = Budget Holder (AC), Corporate Procurement Group (AC)</p> <p>C = Communities Team (AC) Centre for Agricultural Sustainable Innovation (CASI), Angus Food Bank, Local Food Producers, Agrico, SoilEssentials, James Hutton Institute, Sustainable Kirriemuir</p> <p>E = Strategic Policy (AC)</p>

# Waste

There is 1 Waste project proposed to be prioritised for the launch of the Angus Council SECAP.

The way in which materials are obtained, used and disposed have a significant impact on carbon emissions. According to a report by Zero Waste Scotland, material consumption is responsible for approximately 60% of carbon emission in Scotland.

When it comes to recycling, Angus Council has some of the highest household recycling rates and diversion rates from landfill. Angus Council is committed to continuing to improve its waste services and recycling rates through use of circular economy principles. By developing initiatives that utilise waste in new and innovative ways, Angus council, residents and businesses can create new revenue streams whilst minimising their impact on the environment.

The following table and summary presents a single refined priority waste project that Angus Council can lead in conjunction with key partners, for delivery in the short to medium term, and where potential funding is likely to be readily available. Connections with previous SECAP long list projects are also captured in table below.

Table 6: Waste Projects.

Project No.	Project Name	Connection to original SECAP long-list actions
13	IMPLEMENT new kerbside collection services in line with Scotland's Deposit Return Scheme, supported by the current "Right Stuff, Right Bin" campaign.	W1 & W2

Project 13: IMPLEMENT new kerbside collection services in line with Scotland's Deposit Return Scheme, supported by the current “Right Stuff, Right Bin” campaign.

<b>Why:</b>	<p>Across Scotland a new Deposit Return Scheme will be launched in July 2022. The scheme is designed to make it easy for people to “do the right thing” and will help tackle ‘throw-away’ culture. With the new scheme, people will pay a small 20p deposit when they buy a drink in a single-use container and then get the deposit back when they return the empty bottle or can. Similar schemes are already in place across Europe and have been very successful in reducing litter and tackling climate change.</p> <p>The Deposit Return Scheme has been designed for consumers to take single-use containers back to any retailer selling drinks covered by the scheme to redeem the 20p deposit. The scheme will include drink packaging made from polyethylene terephthalate (PET) plastic, aluminium and steel cans, and glass bottles. For non-retail spaces, recycling centres, schools or other community hubs will act as return locations. While retailers will be required by legislation to provide a return service, non-retail spaces will operate on an “opt-in” basis.</p> <p>Provisions for household plastic, glass and metal containers recycling is already widely provided, via Angus Council recycling centres and regular kerbside collections. However, there is a big opportunity to improve overall recycling rates from kerbside collections. Currently resident inconsistent waste sorting behaviour limits the level of correct waste segregation being achieved at the kerbside level. This is because the financial and operational constraints of Angus Council Environmental Services mean they do not have the capacity to re-sort and decontaminate resident’s waste for them. The Deposit Return Scheme is seen as a key method to incentivise residents to sort materials correctly into their bins first time round, thereby decreasing cross-contamination and increasing the overall amount of material collected that is suitable for higher-value recycling.</p>
<b>What</b>	<p>When it comes to recycling, Angus Council already has the second highest household recycling rate in Scotland and one of the highest diversion rates from landfill<sup>2</sup>. Angus Council however will demonstrate further commitment to improving its waste services and recycling rates by supporting the non-retail aspect of the Deposit Return Scheme. Therefore, Angus Council should update its “Right Stuff, Right Bin” recycling campaign, leveraging both on-line and print media to raise awareness of the upcoming Deposit Return Scheme and the financial incentive for “opting-in”. This updated campaign will also seek to target and recruit a small sample of early adopter Angus residents to sign-up to a 3-month pilot scheme, either just prior or upon launch of the national scheme.</p> <p>Early adopter residents who sign-up to the pilot will have their current 250ml grey bins, used to collect plastics, glass and cans (plus paper and card), monitored for separation compliance (e.g., measure % contamination rate in grey bin), after having the scheme explained to them. These early adopter residents will use this new service ahead of the rest of residents to provide their feedback and experience of the operation of the new kerbside collection service, ease/speed with which deposits are returned and any improvements needed. Further opportunities for other residents to “opt-in” will be scoped, rolled out and monitored, after improvements to the operations and communication of the scheme, resulting from the pilot feedback, are implemented.</p> <p>In addition, Angus Council could seek to claim deposits on empties put into resident’s grey bins who did not “opt-in” into the kerbside Deposit Return Scheme. Thereby generating revenue to offset some of the Council overall recycling costs.</p>
<b>Who</b>	P = Environmental Services (AC)

<sup>2</sup> Angus Council Website. [Available here](#).

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A = Budget Holder (TBC)

C = Zero Waste Scotland, Waste Management (AC)

E = Waste Management (AC), Environmental Services (AC)

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