

Action plans against recommendations within *'Net Zero: Making Essex Carbon Neutral'*



Updates

- Land Use and Green Infrastructure
- Energy and Waste
- Built Environment
- Transport
- Community Engagement
- Green Growth





Land Use and Green Infrastructure



Land Use & Green Infrastructure Essex Climate Action Commission Update



Commissioner: Jo Roberts, CEO, Wilderness
Foundation





Recommendation: Creating 30% Natural Green Infrastructure Progress

Local Nature Partnership & Local Nature Recovery Strategy

- ECC is working with partners to establish an independent Essex LNP, to support development of a new Nature Recovery Strategy
- Currently a Chair and Board member are being approached
- It has been the result of consultation with the Wildlife Trust, RSPB, Natural England and others
- ECC are funding secretariat support and a nature recovery strategy officer.

Highways GI Maintenance £1.925 million

- Essex Highways are the custodians of the public realm and there are multiple benefits to green the public realm, principal amongst these are flood reductions and urban heat stress reduction
- In order to reduce the uncertainty about annual revenue of tree maintenance **a Green Infrastructure Maintenance Reserve** which was agreed by ECC cabinet 24/11.21





Recommendation: Creating 30% Natural Green Infrastructure

Partners across Essex have committed to plant a million trees by 2025/6.

EFI has successfully attracted £360,000 to plant 6000 trees on Essex Highways and other land

Increased demand has meant ECC have planned for another Forestry and Woodland officer for 4 years

Two Farms of 220 hectares are being converted from arable to mainly wooded natural Green infrastructure – see next slide





Hole Farm creating Natural Green Infrastructure

Highways England on behalf of the Forestry Commission have completed the purchase of the 100 hectares Hole Farm in Brentwood, which is near to the route of the Lower Thames Crossing.

The benefits are:

- Hole Farm will deliver 150,000 trees in Essex
- Forestry Commission have 250 acres of new woodland in Essex
- It creates another connected woodland in Thames Chase Community Forest





Wildfell creating Natural Green Infrastructure

The Evergreen Trust will invest funds to transform the 120ha of arable land and woodland into **the largest rewilding site in Essex** and open a centre on the site to share the best biodiversity and sustainability practices in land management.



The Wildfell Centre for Environmental Recovery in Wethersfield will be dedicated to helping landowners unlock the potential of their land to use it more effectively as part of industry efforts to reach net-zero carbon emissions by 2040 and boost biodiversity.





Recommendation that 75% of Flooding solution will be Natural Flood Management

Several Natural Flood Management schemes have taken place:

- **The Laindon Natural Flood Management project** that was delivered in partnership with Colchester and Basildon Borough Councils. The scheme consists of rechannelling an existing open watercourse, improving the hydraulics and increasing the capacity.
- **The Thorndon Natural Flood Management scheme** reduces flood risk to downstream residential properties by slowing the flows within the upper hydraulic catchment through the use of “10 leaky dams”.





Recommendation that 75% of Flooding solution will be Natural Flood Management

- Park Avenue, Canvey is the **first road in Essex to have new “rain gardens”** installed to help reduce the risk of local flooding. The launch event on Monday 27th September was attended by Councillor Lee Scott, Essex County Council Cabinet Member for Highway Maintenance and Sustainable Transport, Rebecca Harris MP and ECC Climate Change Tsar Cllr Peter Schwier.



Route map to deliver Recommendations: Climate Focus Area



The CFA needs to be area led.

ECC and Commissioners are supporting with work focused on 7 core themes to deliver all aspects of the LUGI recommendation, including creating 30% Biodiversity and 100% Sustainable Land Stewardship





Questions



Energy and Waste





Rooftop solar schemes

Commitments

- Installing solar panels on every available roof on both domestic and industrial and commercial by 2050, 25% of rooftops by 2030
- 100% of fuel poor households retrofitted and supplied with affordable renewable energy by 2030

Solar rooftop can save households up to c. £300 a year and on commercial properties, matched with demand, can have a payback period of around 5-7 years.

What have we been doing?

To increase installation of rooftop solar in the absence of subsidy, separate schemes are being developed / currently in delivery to support different types of buildings:

1. Council buildings (direct ownership): 506kW by March 2022 on 17 ECC buildings
2. Public sector and commercial: plan to work with anchors
3. Social housing and housing associations: applied for £2.2 m from Social Housing Decarbonisation Fund which includes solar
4. Domestic: Solar Together c900 households have solar installs via this bulk purchase scheme over 2019 – 2021.





Renewable Energy - Planning and Communities

Commitments

- Essex produces enough renewable energy within the county to meet its own needs by 2040 and Builds 1.43 GW of large scale solar on available land without unduly compromising agricultural land by 2030
- All large-scale renewable developments should have an element of community ownership from 2021
- All new build houses and I&C units to have solar panels installed immediately
- Build a network of community energy neighbourhoods across every district in Essex, to generate, store, share and use energy local by 2035

What have we been doing?

Large scale solar will mainly be market-led. However, there are a number of local authority levers we are using to support renewables and solar:

- Planning permission & guidance within Local Plans: solar guidance for inclusion in Essex Design Guide
- Development of a **network of Community Energy groups**, with four new groups already set up and another three in the pipeline.





Heat and Energy Efficiency

Commitments

- Use bioenergy for all rural homes that are hard to decarbonise through electrification by 2030
- All waste heat from industrial and commercial use should be captured and reused (where local demands exists) by 2035
- Retrofit across the whole housing stock by 2040, introduce an incentive to accelerate the shift to low carbon heating solutions

What have we been doing?

- Retrofit for low income and fuel poor households - £6m of funding secured for rollout via Sustainable Warmth (further £17m applied for), GHG Local Authority Delivery Scheme working with Districts
- Community-led heat decarbonisation (off gas grid) – a “whole village” approach being explored
- Waste heat mapping and heat network opportunities being explored





Convening, Innovation and Future technologies

Commitments

- Create facilities to produce green hydrogen to fuel heavy good vehicles on Essex roads by 2040
- Create hydrogen storage facilitate to store excess renewable energy (off-shore wind and solar) by 2030
- Make Essex a centre of innovation for emerging renewable technologies (eg small scale nuclear & manufacturing of renewables products such as solar tiles)

What have we been doing?

Future technologies are providing us a number of **opportunities to convene key players and support innovation clusters. Working with partners to develop projects under:**

- Net Zero Innovation Network
- Development of renewable energy zones
- Zero-Carbon Transport Hubs / Energy Centres





Waste Strategy and System Design

Commitments

- Develop a strategic vision for waste with the circular economy at its core
- Adopt life cycle analysis to ensure climate change impacts are considered in waste system design
- Develop the Essex Waste Partnership to engage with all
- Achieve zero waste to landfill by 2030

What have we been doing?

Enhanced public sector joint working to develop integrated waste system architecture which delivers beneficial change

- Development of a new Joint Waste Strategy for Essex for consultation, and future options modelling is underway
- Development of environmental impact assessment tool to assist future decision making
- Market engagement activity underway with waste disposal sector
- Local Authority network has been established to facilitate the embedding of the Circular Economy into decision-making





Reducing Waste

Commitments

- Reduce waste by 10% by 2030
- Establish a network of community-based reuse and repair hubs by 2024
- Provide support to businesses and residents to enable them to make the right choices

What have we been doing?

Upstream intervention to avoid waste at source, coupled with practical solutions for repair and reuse are necessary

- Optimisation review underway to identify and develop reuse sites at ECC recycling centres
- Circular Economy directory published to share good practice solutions
- Shift pilot projects to test waste reduction approaches are in development and launch phase
 - Food Waste Reduction
 - Love Your Period pilot – tackling sanitary waste
 - Love Essex Champions pilot – to develop local volunteering opportunities to embed actions into communities
 - School pilot activity booklet – waste reduction education in schools
 - Essex Library of Things pilot – loaning service
- Net Zero Innovation Network exploring cross-sector opportunities for greater upstream intervention





Maximising Recycling

Commitments

- Recycle at least 70% of local authority collected waste by 2030
- Ensure all Essex homes and businesses have kerbside recycling services* by 2025
- Ensure all biodegradable waste is put to beneficial use by 2025

*these will collect a comprehensive range of core material streams to ensure almost all waste can be segregated for recycling

What have we been doing?

Accessible services and user awareness are essential if high performance diversion is to be achieved

- Kerbside recycling services are being aligned with emerging Environment Bill requirements
- Recycling centres to be refocused on users to maximise disposal diversion as part of a relaunch in 2022
- Bio-waste treatment procurement to secure required treatment capacity being prepared for 2022 launch





Built Environment





New Build



New carbon zero Schools: Swayne Park primary school is the first school in Essex to benefit from being built to a net zero carbon design. Two more net-zero buildings to be handed over to schools by Christmas. Other schemes in pipeline.



Net zero viability study & toolkit: Study commissioned - Aim of study to consider a fabric first and range of technological solutions to achieve net-zero carbon and evaluate their impacts in terms of a series of economic, social and environmental criteria. Timetabled to be completed April 2022.



Essex Planners and Member Training: Online self-training module underway with bespoke workshop 9th December delivered by Building Research Establishment (BRE). All Districts have Members attending.



Planning Officer Training: working with the Centre for Sustainable Energy to scope a climate change training package for policy and development management Planners. This work is awaiting being funding.





New Build



New Carbon Zero Homes: Essex Housing have secured funding to deliver their first net-zero carbon housing scheme. Brentwood Council have granted planning permission for 62 net zero homes on a site they own. Chelmsford Council working with Homes England and Countryside properties are bringing forward a scheme for 80 homes built to the future homes standard.



Climate Action Charter for Developers: Essex Developers Group leading supported by representatives from EPOA Chief Officer Group to create a strategic level document that may be supported by an action plan. Draft form shared and being reviewed.



Climate Action Team (CAT): ECC has agreed to establish a small team to support planning officers with climate change matters in planning applications and development of Local Plan policy. Three posts initially proposed – 1 x Climate Action Planning & Communication Officer and 2 x Climate Action Engineers. Due to advertise first post shortly.



Essex Design Guide (EDG) Update: Phase 1 – creating a dedicated climate change section and pulling out existing climate change related guidance and refocussing it. Due to be completed prior to Christmas. Phase 2- work with EPOA representatives to commission further climate change guidance to update EDG in the spring.





New Build



Walkable Neighbourhoods: work being progressed with Place Services to establish concepts and review of current guidance. Commission two evidence base studies to support the delivery of local plan policies and masterplanning and well in scheme practical implementation of model.



Business Innovation Hub for Construction The BREEAM Excellent-rated building next to the Braintree Enterprise Centre has been designed to support individuals to start up a business in construction and construction-related sectors, nurture early-stage SMEs and facilitate the commercialisation of new ideas, technologies and research into construction markets.





Retrofit



ECC Estate and Anchor Institutions: ECC has a policy to transform its own estate to net zero by 2030. ECC will continue to work with other anchor intuitions who are also taking action on their estates. ECC is working with The Essex Partners and anchor institutions across Essex to establish a climate group to develop joint working in delivery of Commission recommendations



Retrofit Homes: Work on a Strategy and Action Plan for housing retrofit is underway.



Retrofit Homes: ECC delivered fuel poor grants totalling £0.8m Between Feb-Aug 2021 upgrading over 80 Essex homes with up to £10k worth of free energy efficiency improvements The South East Energy Hub currently holds a further £5.2m in grant funds to support retrofitting fuel poor homes. This is a grant funded programme delivered in partnership with the Districts and BEIS. ECC has worked with 11 District, Borough and City authorities to bid for a further £17,2m in grant funding (outcome pending - funding tbc).



Retrofit Homes: ECC has further worked with social housing providers to bid for £2.58m to upgrade 769 housing association properties across Essex.



Community Renewal fund: We were successful in our Community Renewal fund bid in Partnership with the Retrofit Academy to develop a "retrofit pipeline for economic renewal" in Harlow and Tendring **Businesses:** Outcomes will focus on supporting SME businesses to gain TrustMark accreditation, enabling local residents to gain the skills to support retrofit, to become Coordinators, Assessors or Advisors





Retrofit



Retrofit Schools: Funding secured to support work on building fabric, through installation of double glazing on schools and core sites to a value of c. £3m. This will significantly reduce their heating costs and carbon emissions, as well as generating a better learning environment.



Retrofit Schools: £1.5m of solar has been installed, generating £200k of annual savings.



Smart meters : A programme to roll out smart meters to ECC controlled schools: to date 125 maintained schools have a meter fitted: a further 47 are in train. ECC also rolling out of smart meters across the public estate



Retrofit Schools: We are funding a new team to support schools to develop a net zero investment plan to enable them to apply effectively for grant support for required investment.



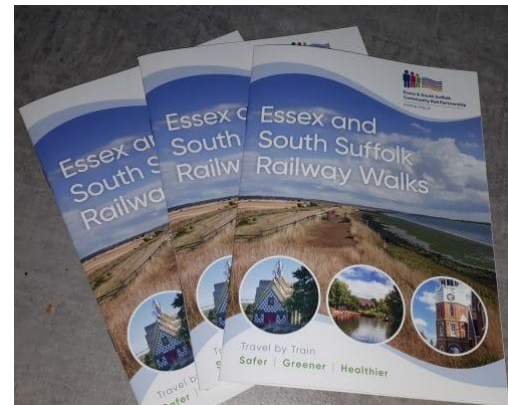


Transport



Active travel update

- Successful active travel consultation - ~2500 responses
- 5 transformation walking and cycling schemes approved
- Final designs being produced now, with delivery expected from Spring 2021 onwards
- ATF 3 bid submitted to progress local walking and cycling, and Essex Pedal Power - decision due Nov / December
- Volume 2 of the Essex & South Suffolk Railway walks – vol 1 'sold' out
- Launched Walking Strategy - warmly received by central government.



Would our proposals persuade you to cycle more?	YES / NO
Braintree	27%
Brentwood	45%
Chelmsford	29%
Colchester	66%
Wickford	50%



Cycling update

- Free Adult Cycle Training*
- Ride London
- Essex Pedal Power
- LTN 1/20 – formal acceptance
- Cycle map upgrade
- Cycle path maintenance programme
- Asset register*
- Station access review
- Braintree District council Cycling Strategy

* Co-funded by ECAC



School streets update



- Winstree Road started – next phase in Easter
- School street model developed for 10 within ATF programme - working with Sustrans and Living Streets on delivery
- Developing a School Streets toolkit with Jacobs
- Taken over PT's School Zones project – next step consultation
- Home run app



Evs and ev strategy

EV & EVCP Strategic lead recruited (*) – 3 key priorities:

- Writing strategy
- Submitting OZEV bid for ~70 on-street residential chargepoints, across the districts
- Electrifying the ECC car pool fleet – pilot with social care (*)

Gridserve has submitted a Planning Application for another electric forecourt on the A127 in Wickford

Future priorities:

- Destination charging (P&R)
- Freight – electrification
- Other vehicles / fuels...

* Co-funded by ECAC



First / last mile update

- Ecargobike trial in Colchester
 - Averaging 1046 miles p/m
 - 2387kg of CO2 and 93kg of NOx saved so far
 - Champions: bakery, juice bar, bike mechanics, town council and hospital, Spin escooters, Parks staff
- Working with NZIN to identify business partners e.g. Amazon, parcel distribution companies
- ECC High Street Summit
- Ecargo bike conference



Behaviour change update

- Two successful behaviour change campaigns
- Partnerships with walking and cycling gamification apps
- Working with schools, children and parents on education
- Exploring launch of new Net Zero hero programme
- New Behaviour Change role approved*



Escooter and ebike update

6 escooter trials launched

- 500K+ trips
- 82% used escooter instead of car
- High use for first / last mile
- DfT extending trial to Nov 22 – all but Clacton expected to continue

‘Try before you buy’ ebike scheme to be explored next year



Passenger Transport Update

- ECC have created a Bus Service Improvement Plan to rebuild the Essex bus network:
 - Recover from the impact of COVID-19
 - Develop an attractive, sustainable, and affordable bus network, offering an alternative to car use
 - Reverse the long-term decline in passenger numbers, in absolute terms and as a modal share of all journeys.
 - Improve public health and addressing climate change by reducing pollutants
- Developing an Enhanced Partnership
- Park & Ride expansion as part of the Army & Navy Sustainable Transport Corridor package
- E-DRT pilots starting in the spring.
- 6 event trains



Car use reduction update

All major projects feature active travel front and centre
e.g. A&N, A133 Link Rd

Relaunched Smarter Travel for Essex Network (STEN)

- ECC free support to promote active and sustainable work travel
- Best practice organisations can apply for National Travel Plan Accreditation

Jacobs commissioned to investigate user charging model suitability for Essex

Car-free day for Chelmsford in 2022 – expand county-wide in 2023.

Transport Select Committee inquiry into road pricing



Policy update...

New Local Transport Plan underway

- Underpins EVERYTHING we do, and vital for future DfT funding
- Existing LTP is 10 years old and needs a narrative refocus, particularly around decarbonisation

Addition transport policies / guidance on new developments including parking strategy, 15 minute walkable neighbourhood design guide and net zero transport assessment guidance

Transport East Transport Strategy

- Public consultation launched in November
- 4 priorities: decarbonisation, supporting our growing towns and cities, energising rural and coastal communities, and improving connectivity to our ports and airports.
- Avoid-Shift-Improve pathway
- Includes carbon trajectories and targets





Community Engagement



Essex Climate Action Commission
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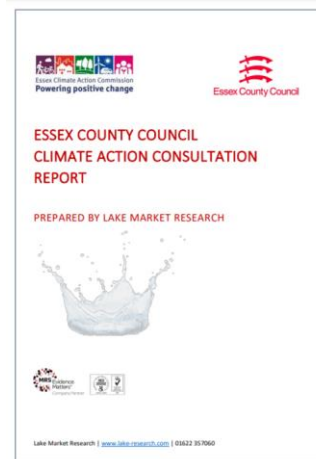
Research

- Consultation report on Commission's recommendations
- Resident research on attitudes to climate change
- About to launch town and parish survey



Overview

Closes 1 Feb 2022
Opened 19 Nov 2021



Essex Climate Action Commission
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Training

- Carbon Literacy training
- Learnfest
- [EALC webinars](#)
- EALC Climate Conference in Jan 2022
- Potential training/webinars for businesses in conjunction with IoD





Events

- [Report launch virtual event](#) – 20 July.
- [Zero carbon bus tour event](#) – 1 September.
- **Manifesto for Essex youth summit** – 11 September
- [Electric road to COP26](#) – 29 October.
- [Epping Forest Youth Conference](#) – 19 November.



Zero carbon bus tour



Youth summit



Electric road to COP26



Epping Forest Youth Conference



Campaigns

- [Green Homes Grant Local Authority Delivery Scheme](#) – Phase 1 £800,000/80 homes. Phase 2 - £5.2m.
- **D-DRT** – Six demand responsive electric buses launching soon.
- [Climate Action Challenge Fund](#)

GHGLADS case study
video



GHGLADS ITV interview





Toolkits

- Residents
- Schools
- Businesses



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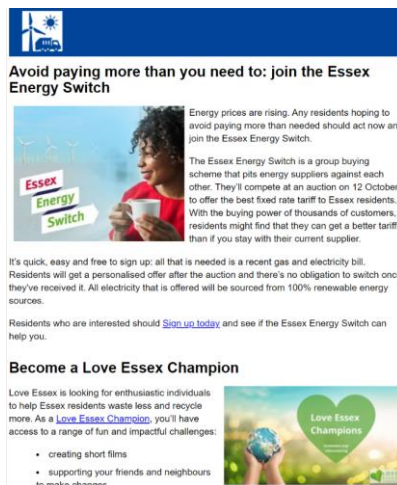




- **Social Media** – new ECAC Facebook and Twitter pages. Essex is Green (8,363 Facebook followers).
- **Website** – Currently undergoing second phase development.
- **Newsletter** – Internal (117) and External (1,200).
- **Apps** – Trylife and Cut Carbon apps – gamification, carbon credits for residents, schools, businesses.



Commission website



Newsletter



EiG post

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Media

- **Prof. McGlade interview** – BBC Essex, Launch event, 16 Jul
- **Prof. McGlade interview** – BBC Essex, COP26 and ECAC, 22 Sep
- **Cllr Schwier interview** – BBC Essex, Electric Road to COP26, 29 Oct
- **Cllr Schwier interview** – BBC Essex, ECC adopts recommendations, 24 Nov



Maldon MP visits climate-conscious classroom

By Jessica Day-Parker
Trainee Reporter



f t in m 0 comment

THE Maldon MP visited a primary school to see how its inspiring its pupils to take action against climate change.

Most read Commented

- 1 High street set for Christmas festival - everything you need to know
- 2 Popular family-friendly festival set to return to Promenade Park
- 3 Supporters of convicted killer Jeremy Bamber set to march on police HQ
- 4 Campaigners claim police must release

@Essex_CC adopted recommendations put forward by the Climate Action Commission last night.



New chair of Essex Climate Action Commission signals action to reduce emissions

News / Wed 24th Nov 2021 at 08:45am



Essex Climate Action Commission
Powering positive change



Green Growth



ECAC Green Growth

Green growth for the future: Year Two Focus

“we will look at ways we can embrace a greener economy where we not only care about business, but we care about our planet too. This will un-lock new opportunities for businesses, but also for residents in the form of more sustainable homes and jobs”



ECAC Green Growth



We need to ensure the recovery is as green as possible and takes us further towards our net zero ambitions not stores up more problems for the future.



Some of the key growth sectors of the future are green - we must ensure those businesses and jobs come to Essex



The size of the prize is vast: the investment in transitions to zero emission vehicles, housing and commercial retrofit for example runs into millions of pounds of spend



The businesses, residents and skills providers need our help to take advantage of the opportunity. We need to create a pipeline of demand for businesses and skills providers.



The Net Zero Innovation Network: Harnessing Innovation and Opportunity

The Community



Public
Sector



Education



Developers



Businesses



Energy
Suppliers

Aims and objectives:

- Working together to create partnerships Maximise the appetite for innovation in Essex
- Bringing together key and enterprising players: universities; training providers; developers; and businesses
- Explore how cross-sectoral innovation can help to support the move to Net Zero.

Our approach:

During three facilitated sessions over the course of 2021, we will work together to create the partnerships and appetite for innovation in Essex focussed on achieving carbon zero outcomes for the County.



Build the foundations for partnership working; identifying the challenges and agreeing the overall aims, outputs and timelines for delivery of the Network.



Enable project delivery: task and finish groups to work remotely on the projects, and update via the second workshop: share updates and helpful information check progress and share feedback



Report, evaluate, disseminate next steps: The final series of activities (group workshops) to pull together the outcomes of project work as well as learning gained throughout the process and to prepare and disseminate final outputs. This could include further support workshops to help people in other councils and universities to implement a similar project.

Our ambition

- Building on the Climate Action Report, we will focus on the areas of synergy where we can support green growth outlined in the emerging Sector Development Strategy:
- And make the most of the recommendations outlined in the ECAC report
- ALL of the recommendations will have potential for residents and business in Essex – our focus will be on how we harness that and ensure that where jobs are created and there are business opportunity that we can keep those local.
- We will include our residents in our plans and ensure that the power of the community is used and heard in the design and implementation of our projects. We are Increasing investment in communication and community engagement to support residents and businesses to take their own climate actions.



Our Growth Sectors



**Clean Green
Energy (including
low emission
vehicles tech)**



**Green
Lifesciences
(focusing on
med & care
tech)**



**Digitech
(including Fin,
Insure, Agri,
Marine)**



**Green
Construction
and Retrofit
(including
NSIPs)**



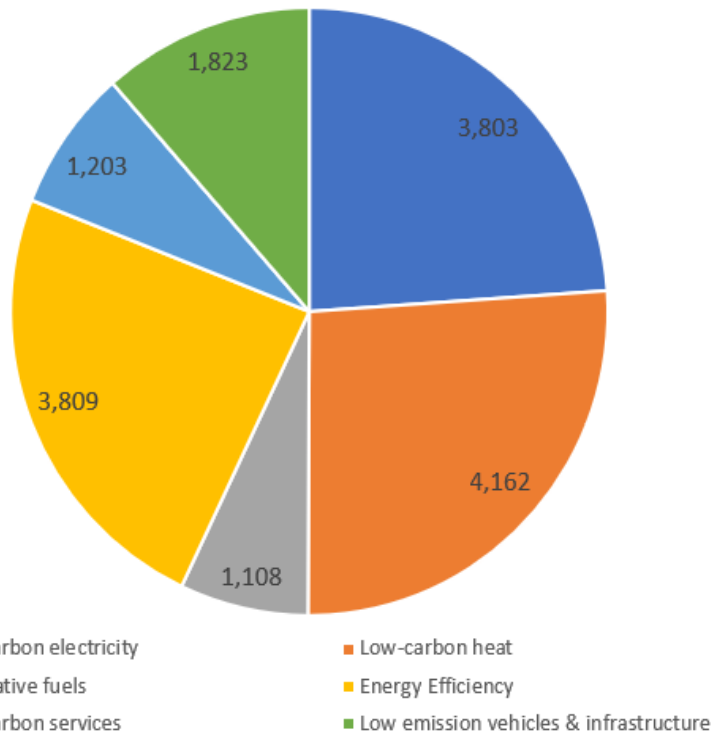
**Advanced
Manufacturing
& Engineering**

How did we arrive at
these sectors?

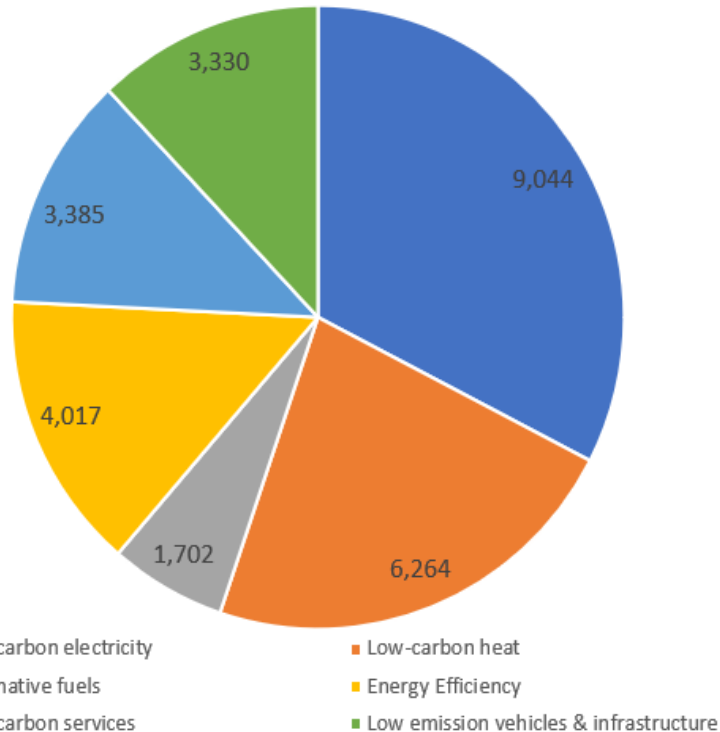
- Baseline quantitative data and Cambridge Econometrics predictive data
- Qualitative research
 - What is driving demand now and in the future?
 - Ecosystem supporting the sector in Essex
 - Universities - research programmes and teaching
 - Existing business clusters
 - Supporting Government policy & funding opportunities
 - Types of employment now and predicted
 - Challenges/Opportunities

An example: green jobs growth in Essex

Projected Distribution of 2030 Jobs



Projected Distribution of 2050 Jobs



Green Growth: Outcomes

- Our plan is not exhaustive - the Commission report has milestones and recommendations that stretch out to 2050. ECC will continue to develop its climate action plan in the future.
- ECC will work with partners across Essex to play its part in the delivery of the Commissions vision for a net zero, climate resilient county. It will establish a climate action group with the anchor institutions to drive collective action across Essex on the climate agenda and help Essex deliver the Commission recommendations. But we cannot do it alone. And nothing is changed without action.
- Raising aspiration and ambition amongst Essex businesses
- Increasing awareness and expectation amongst our communities
- Supporting equality of access to, and awareness of green jobs and skills
- Spending wisely: use our procurement power well
- Investing differently: using the existing infrastructure and assets and attracting more investment and opportunity

