

LGA Sustainability Programme

Frontline Communities and Inclusion

December 2023

Most residents are concerned about climate change...



of Essex residents say they are extremely, very or somewhat worried about climate change

Source: Essex Resident Survey 2022

“The UK public **are concerned** about climate change and the environment and there is a **widespread desire for action to be taken**.

There are several positive trends such as shifts in diets, purchasing behaviours and the growing uptake of electric vehicles. However, **most of us do not know what the most effective actions are** that we can take to reduce our emissions and environmental impacts, **nor do we appreciate the scale of change that will be needed** to reach net zero or adapt to climate change.”

In our hands: behaviour change for climate and environmental goals

House of Lords Environment and Climate Change Committee

“**Mission Zero**” by **Rt Hon Chris Skidmore MP** highlighted the role of community leadership and the need to “**turbocharge community energy and action**” and the benefits of a place based, place sensitive locally led approach to net zero as one of its six key pillars for action on net zero

Direct action

ECC control as owner/commissioner, potential for immediate action:

- Embedding climate action principles in ECC's £1bn supply chain
- Assets: Country Parks, woodland, Landfill, ECC estate, Schools estate
- Capital investment: Schools new build programme and Essex Housing
- Our supply chains and procurement choices e.g. electrification of ECC fleet, renewable energy
- Investment choices: Our investment portfolio, using Bank of England Climate-Related Financial Risk Assessment
- Flood Authority (adaptation policy), commissioner of services e.g. home to school transport

Influence & partnership working

ECC influenced, convening and negotiating with partners:

- Transport policies, sustainable growth and regeneration
- Planning: Local Area Plans
- Our convening power: engagement with District Councils, Government, LEP, businesses, anchor institutions and others
- Taking a low carbon, ethical investment stance

Empowering communities

Soft influence, leading by example and setting the agenda:

- Support for community projects
- Campaigns e.g. Love Essex, community energy,
- Facebook community work for climate commission (building on United in Kind model)
- Galvanising Business Community

Why community energy?

What is Community energy? Community Energy refers to a variety of schemes that all involve the generation, storage, efficiency or demand-reduction of renewable energy – for example, energy generated via wind and solar power – and are led by community members to benefit a local area and drive climate action

Benefits

For the local community and local economy:

- Circular benefits – reinvesting surplus funds
- New investment sources and business models – community investment
- Stimulates local economy

Tackling Fuel Poverty

- Doing low-cost, high-return energy saving measures.
- Reduced bills for vulnerable customers,

Energy and Climate Change:

- Carbon Reduction + Increased renewable energy generation at local level
- Increased energy awareness - behaviour change and advocacy
- Network enhancement/relief

Innovation & Investment

- Pioneering Innovation trials in the community



Our approach

- Strategic support for communities, innovation and inclusion
 - The Essex Climate Action Commission - set up to advise on tackling climate change and create a roadmap to get Essex (the County) to net zero by 2050.
 - ECAC has over 30 members - local councillors, academics, business people and members of the Young Essex Assembly.
 - 'Net Zero: Making Essex Carbon Neutral' report published in July 2021. 100+ recommendations across land use, built environment, transport, waste and energy – a specific focus on community engagement
 - A network of community energy neighbourhoods to be built across every district in Essex, to generate, store, share and use energy locally by 2035
 - All large-scale renewable developments to have an element of community ownership from 2021
 - A dedicated community engagement programme
 - Establish Essex as a centre of excellence for innovation in addressing the climate crisis
 - Net Zero Innovation Network
 - Everyone's Essex – our levelling-up strategy – 20 commitments including net zero, green communities, green growth and levelling up the environment

Net Zero: Making Essex Carbon Neutral

Essex Climate
Action Commission



2021 EV strategy; E-Scooter Pilots running;
Ten Liveable Neighbourhoods
Community owned renewables
Essex Design Guide; Green construction training
Smart meters in schools
All new builds to have solar panels

2022 New schools commissioned net zero
25 school streets
10 local delivery hubs
5 E-cargo bike schemes
Energy sector innovation hub

2024 Network community reuse
and repair hubs

2023 Essex Housing Demonstrator net zero development
Developers to fund flood risk management via CIL
Coastal flood resilience scheme in critical areas completed

2025 All New buildings net zero and support circular
economy recycling
50% Essex schools retrofitted to net zero
All residents & businesses to have kerbside recycling
All biodegradable waste to beneficial use

2030 25% all roofs have solar panels
1.43GW solar energy
Bioenergy in difficult rural homes
Hydrogen store for renewable energy
20 Liveable Neighbourhoods
3 new park and choose sites

2030 All public sector estates in Essex NetZero
100% fuel poor homes retrofitted & supplied
with renewables
2/3 Essex houses retrofitted
1/3 commercial buildings retrofitted
100% schools retrofitted
All new buildings carbon positive

2030 25% land natural green infrastructure
(urban and rural)
50% farmland uses sustainable land stewardship
30% Essex in a Climate Focus Area
Per capita waste reduced by 10%
70% recycling rate
Zero waste to landfill

2035 All waste heat reused
All gas fired power repurposed to bioenergy
Network of community energy neighbourhoods
in every district

2040 All housing retrofitted
Zero GHG emissions from housing
Essex renewables meets all county needs
30% all land natural green infrastructure
7.5% farm land adopts sustainable
land practises

2050 All roofs have solar panels
7.5% all developments have integrated natural water management
100% farm land uses sustainable land practises

Net Zero: Making Essex Carbon Neutral
can be found [here](#)

ECAC website www.essexclimate.org.uk

.....our approach

- Resourcing
 - November 2021: ECC published its four year, £200m climate action plan revised in July 2023 to £250m
 - BUT getting Essex to Net Zero by 2050 requires and investment of around £1bn/yr (HM Treasury)
 - Combined shortfall totals almost £3.57bn across councils in the three nations for 2024/25
- Partnership, collaboration and convening
 - De-risking our involvement with innovation – not the natural territory for local authorities
 - Attracting funding/investment – not just grants
 - Bringing experts to the table – we have part of the solution, but we cannot act alone at the pace and scale required
 - Building capacity and capability
 - Building on legacy and trust

Delivery to date

Building Blocks:

1. Movement Building
2. Training / upskilling / mentoring / start up support
3. Making finance work for local places and becoming self-sustaining
4. Local ownership

- **Pathways Programme:** Start up support to community energy groups led by local residents for local benefit - 4 new social enterprises to date, ambition is to grow to 12
- **South East New Energy & Innovate UK Pathfinder Places:** build capacity for local renewable energy projects + address “non-technical” barriers to these projects happening
- **Horizon 2020:** Community led energy planning in Jaywick
- DESNZ funded **Local Energy Advice Demonstrator (LEAD):** retrofit advice and support to hard to reach / hard to retrofit homes + building area based retrofit projects
- Government grant funded retrofit programmes – Sustainable Warmth, HUG



Community
Energy
Colchester

SUSTAINABLE DANBURY



SAFFRON WALDEN
COMMUNITY ENERGY



Community Energy England national awards 2023 – winner “Supportive Local Authority”



CommuniPower



CommuniPower

- Response to the Government's Local Energy Advice Demonstrator Programme (LEAD) which is administered by Department for Energy Security and Net Zero (DESNZ)
- Buro Happold, Local community energy groups, Parity Projects, Essex County Council, Community Energy South, Ovesco
- Focus on decarbonisation needs of 3-5 groups of rural villages, with a prioritising places without gas supply
- Deliverables - Train 30 people as 'Energy Champions'; support community energy groups to increase their capability; explore the feasibility of creating locally generated renewable electricity sources; support local retrofit companies to discover increased demand for services and increase local training; connect households to trusted finance mechanisms so they can finance energy efficiency improvements in their homes
- Kick off now! Approx 24 months activity

SHIELD

Addressing the need for a Just Transition



Smart Heat and Intelligent Energy in Low-Income Districts

- A response to Ofgem Strategic Innovation Fund (SIF) round 2 call for projects which address the need for a 'just transition' to net zero - Potentially three stages of funding: Discovery – 3 months of feasibility work, testing ideas and theories ✓ - Alpha – 6 months of limited trials, putting theories into practice ✓ - Beta – extended timeframe, £10ms, roll out to several hundred installations
- The Team - UK Power Networks, Power Circle Projects Ltd, UK Community Works, ECC, Citizens' Advice Essex, Eastlight Community Homes, Thermify , UrbanChain, Electricity North West
- The problem - the current approach to decarbonising heat and energy in homes is not inclusive of vulnerable and low-income households - 7.6% of Essex in fuel poverty (2022) could rise to 17% in a worse-case scenario.
- The solution – innovative tech, established tech, new business models, smart local energy systems
- Outcomes - financial savings for consumers and the network, carbon emissions reduction, revenue generation (grid services) and new to market products and services

EssNet (Pathfinder)

Addressing the non-technical barriers to net zero



Essex Net Zero Delivery Taskforce

- A response to Innovate UK's Net Zero Living, Pathfinder Places call addressing the non-technical barriers to net zero – two stages of funding, phase 1 – 3 months of feasibility work, testing ideas and theories and phase 2 – 17 months of development and implementation – up to £150,000
- The EssNet team – ECC, UK Community Works, UK Power Networks, Power Circle Projects Ltd
- The problem - policy and strategic support for net zero is strong, but non-technical barriers hinder delivery at the scale and speed necessary
- The solution - develop and launch an independent not-for-profit vehicle to aggregate community-scale energy generation opportunities, standardise practice and design and simplify delivery
- The outcome - improved access to and interoperability of data, access to finance at scale and across time, de-risking of feasibility stage project development, development of a independent delivery vehicle working with stakeholders to design and delivery energy generation projects

Tips and learnings

- Do things with people, not to them – co-creation, every voice counts
- Enabling others to take action themselves to address the pace and scale of change required
- Grass roots appetite for action does not rely on Government policy
- Addressing the non-technical barriers is key – finance, data, capacity and capability – none of this is easy or familiar
- ***“Every system is perfectly designed to get the result that it does.”*** — W. Edwards Deming.
- System-level change is required, a lot of ‘new’, local government is a key player and a trusted known quantity in people’s lives
- Power in partnership
- Power in our own hands
- Be ambitious and imaginative!

Thank you

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