



How can Suffolk create the environment for carbon neutral growth?

Suffolk Growth Partnership in conjunction with
Suffolk's Climate Change, Environment & Energy
Board

15th January 2021

Agenda

- **10am: Welcome & introduction - Karen Chapman, Partnership Manager Suffolk Growth**
- **10:10am: Suffolk's Climate Change, Environment & Energy Board (CCEEB) Jill Korwin, Strategic Director West Suffolk Council & Chair / David Walton, Suffolk Climate Change Partnership Lead**
- **10:30am Breakout session – what work is currently undertaken in Suffolk & what more can / should we be doing across the public sector?**
- **11:10am Comfort break**
- **11:25am Feedback from Breakout session – facilitated by Peter Gudde, Greater South East Energy Hub (GSEEH)**
- **11:40am GSEEH Hub Guide: presentation & Q&A – Peter Gudde**
- **12:00pm Open discussion on issues & next steps – All**
- **12:20pm Summary & follow up / thank & close – Karen Chapman**

Welcome & introduction

Karen Chapman, Suffolk Growth Partnership

Suffolk's Climate Change, Environment & Energy Board (CCEEB)

Jill Korwin, Strategic Director West Suffolk Council & Chair / David
Walton, Suffolk Climate Change Partnership Lead



In 2019, Organisations and Councils across Suffolk declared a climate emergency.
We are working together on this. (Suffolk Climate Change, Environment and Energy Board)

Objectives

Provide officer level strategic oversight and co-ordination to all pan-Suffolk Climate, Environment and Energy Initiatives.

Build on work of individual partners and co-ordinate opportunities to contribute to the following long- term objectives:

- a) Achieve climate change commitments including net zero 2030
 - b) Suffolk is recognised as a key part of the UK's clean energy offer and green recovery
 - c) Suffolk's unique environment continues to encourage people to live, visit and work in Suffolk.
 - d) Suffolk's natural capital is protected and enhanced.
2. Act as Suffolk's Environment Recovery Cell as part of Suffolk's Strategic Recovery from COVID 19.
 3. Provide strategic direction to the Suffolk Climate Change Partnership Funder's Group

Evidence
Base:
Suffolk
Climate
Emergency
Plan,
Technical
Report
(Ricardo
Report)



So you know:

1. Sponsored by Suffolk Public Sector Leaders
2. Board Membership: Directors and Senior Officers from Councils, Suffolk's Clinical Commissioning Groups, Suffolk Police, Environment Agency and New Anglia Local Enterprise Partnership (NALEP).
3. Green Recovery from Covid

Ambition:

Individual organisations and collectively across Suffolk reaching Carbon Neutrality by 2030



Some definitions

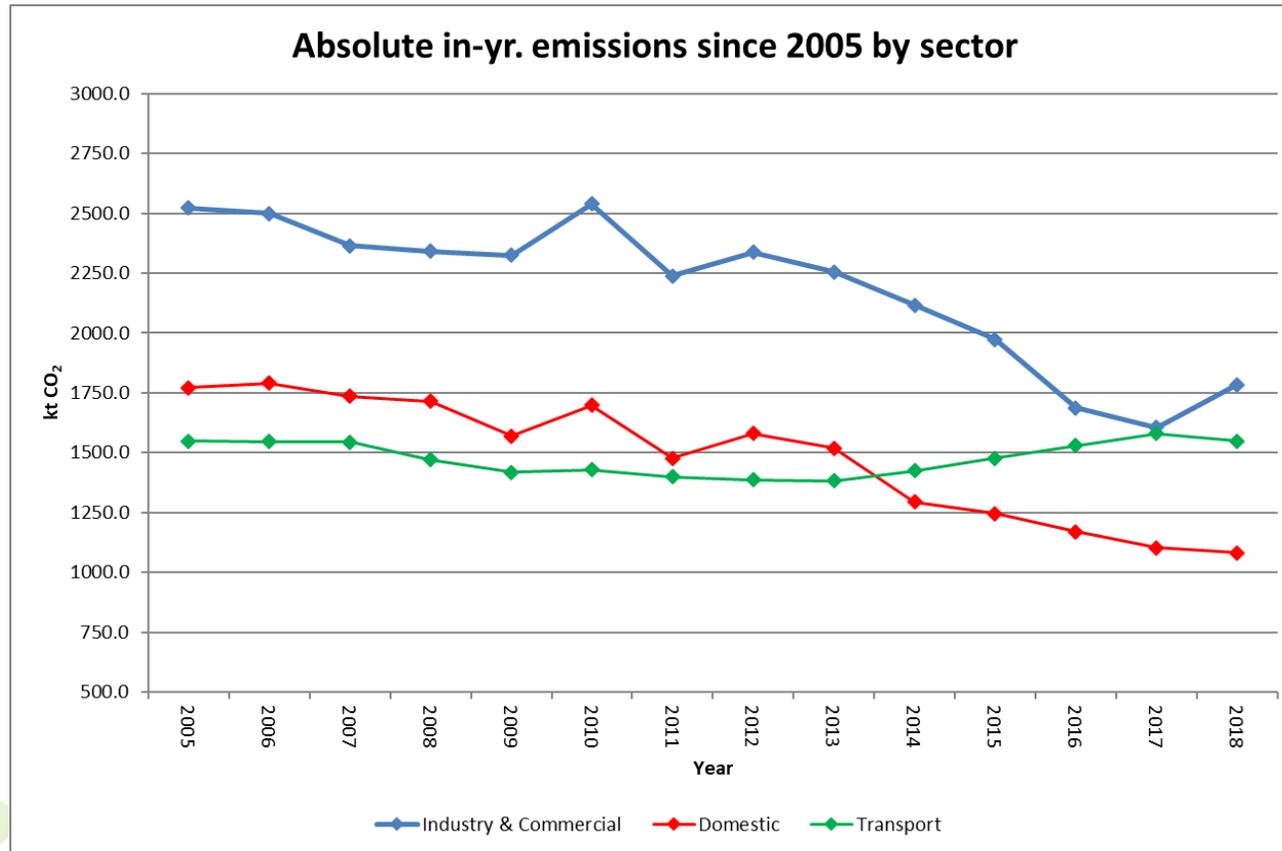


- Carbon neutrality = net zero = a balance between emissions to and removals from atmosphere
- Removals: e.g. forestry, technologies such as carbon capture & storage



- Clean growth = “growing our national income while cutting greenhouse gas emissions”, BEIS: Clean Growth Strategy

Suffolk's emissions



Suffolk Climate Emergency Plan development



- a. Undertake analysis of existing data to provide a clear, evidence-based baseline.
- b. Understand the extent to which we can reduce emissions identified by the analysis.
- c. Present opportunities for action across key sectors.
- d. Engage widely.
- e. Co-design and launch a delivery plan.
- f. Initiate delivery of the plan

Potential focus: Power

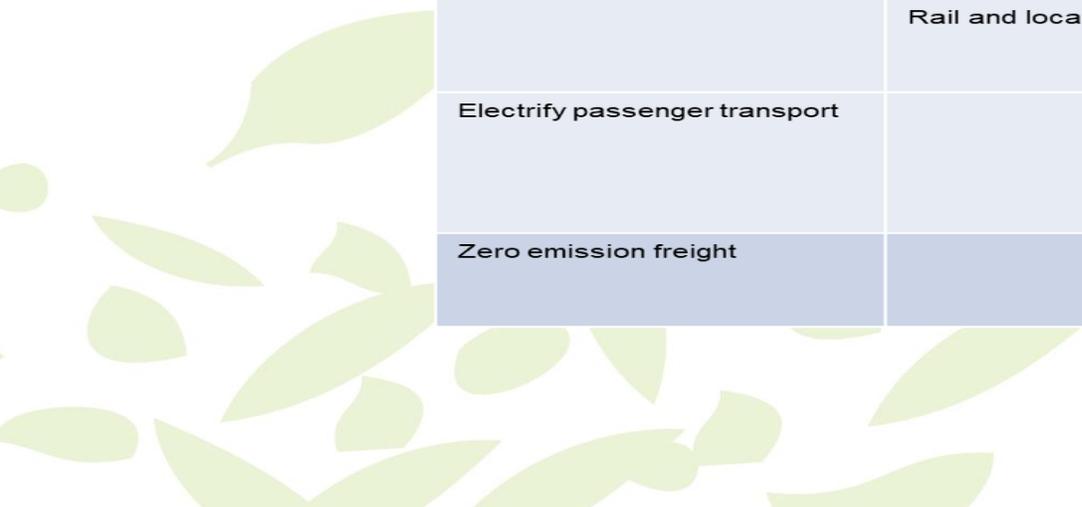


Theme	Suggested action
Grow local renewables capacity	Plan positively for renewables
	Support community energy
	Set a renewables/local ownership target
	Biodiversity net gain policy
Grid modernisation	Increase grid capacity for new connections
	Network innovation
	Local Area Energy Planning
National power infrastructure	Withhold support from fossil fuel infrastructure
	Promote Suffolk's nationally significant renewables
	Low carbon economy and skills
Public sector leadership	Renewables on public sector land/buildings
	Buy power from local renewables
Encourage and enable action	Renewable energy advice service
	Collaborating and convening
	Establish climate emergency fund for renewables

Potential focus: Transport



Theme	Sub-theme	Suggested action
Reducing car use	Reduce the need to travel	Broadband
		Community work hubs
	Active travel	Walking and cycling infrastructure
	Mode shift to public transport	Development of bus PT services
		Development of rail services
		Mobility as a service app
Reducing freight mileage	Consolidation	Delivery and servicing plans will all major businesses
		Assess potential for consolidation centre <ul style="list-style-type: none"> · Urban · Micro
	Rail and local sourcing	Support investments in rail freight links
		Local produce / procurement campaign
Electrify passenger transport		Zero emission buses and infrastructure
		Charging hubs for taxis
		Charging hubs at high volume locations
Zero emission freight		Last mile solutions
		Long distance freight – biogas/hydrogen



Potential focus: Buildings & Industry



Theme	Suggested action
Behavioural change to use less energy	Energy saving promotional campaigns and support
	Energy efficient operation of buildings
Energy efficiency	Cavity and solid wall insulation
	Loft insulation
	Heating controls
	Double glazing
	Floor insulation
	Draught proofing
Decarbonising heat supply	Individual heat pumps <ul style="list-style-type: none"> • Air source heat pumps • Ground source heat pumps • Hybrid systems (heat pump plus gas boiler)
	Low carbon heat networks
	Addition of biomethane in the gas grid
	Addition/use of hydrogen in gas grid
Industry	Fuel switching <ul style="list-style-type: none"> • Electrification • Hydrogen
	Energy efficiency
	Resource efficiency and product substitution



Potential focus: Community Action



Theme	Sector	Example of possible actions
Individual behaviour change	Buildings	Change to low carbon heating (biomass, biogas, solar or a heat pump), insulate homes for cold and hot weather, use efficient appliances, share your home (heating, lighting, cooking), parent consciously
	Power	Switch to green energy suppliers, generate your own RE, choose a career in the low carbon sector
	Transport	Work from home & community hubs, walk & cycle, use public transport and national rail, reduce and share number of fossil vehicles, use an EV, prefer local produce (food, tech, furniture etc.), catch trains not planes, avoid seasonal excess (stay close to home!)
Organise into groups to deliver climate action	Buildings	Eco-housing & eco-villages, energy efficiency community groups, collective purchase of EE equipment
	Power	Found or support a community energy company and/or collective purchase of RE technologies
	Transport	Car sharing clubs
Engage with government & business	Buildings	Engage with local energy hub Take up government funding for warm homes
	Power	Make use of energy hub and group buying schemes Campaign govt to support renewables & grid modernisation through target setting, local planning, climate emergency funding, purchase of local renewable electricity, support of local renewables jobs and supply-chain; fossil free UK
	Transport	Make use of EV grants & "try before you buy" schemes Support businesses with green transport options Campaign for walking and cycling infrastructure, public transport (buses, bikes) community hubs, broadband, and incentives to reduce private fossil vehicle use, vehicle sharing schemes



Engagement Workshops



Hot topics



- **Behaviour change and public engagement**
- **Need for accessible, straightforward trusted advice and financial support**
- Low carbon heat challenge: air source heat pumps, thermal efficiency, future role of hydrogen
- Ability of grid to cope with shift to ASHPs and EVs
- Inflexibility of national planning policy
- Need to involve businesses in local policy development

Breakout session – what work is currently undertaken in Suffolk & what more can / should we be doing across the public sector?

All

Comfort break



Feedback from breakout groups

facilitated by Peter Gudde, Greater South East Energy Hub (GSEEH)

•How have you already moved the carbon neutral agenda on through your role and what enabled you to do that?

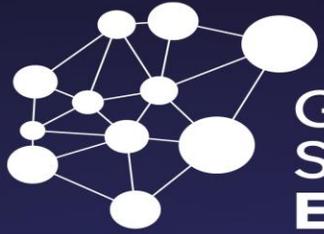
•What do you need to be able to develop further your impact on this agenda?

•What are your frustrations?

•How can colleagues from other services and councils support you?

GSEEH Hub Guide: presentation & Q&A

Peter Gudde, Greater South East Energy Hub (GSEEH)



Greater
South East
Energy Hub

Addressing the Net Zero Development Gap

Peter Gudde

15 January 2021

The need

Responding to a call from local authorities who are facing problems now

The challenge: Securing low carbon development when planning policies and developer building standards have yet to align with net zero carbon commitments

Objective: Explore how the challenge could be addressed, using the insights and experience of local authorities

Participation:

39 local authority (LA) delegates drawn from the fields of local planning, housing, energy and sustainability across the Energy Hub region

Output: Hub Guide due for publication at the end of January 2021

Outcomes:

- Shared insight of challenge and some solutions
- More dialogue between LAs across the Hub region
- Potential contribution to help LAs deliver on CE ambitions/ Net Zero target

Net zero ambitions

- UK Government signed into law a 2050 net zero carbon target
- Over 300 local authorities across the UK have declared climate emergencies of various shapes and to varying delivery timescales many ahead of the UK Government timescale
- 38% of CO₂ emissions in Suffolk in 2017 came from industry and commercial energy use, 37% from transport and 26% from domestic energy use
- Local Authority carbon emissions are a small fraction of overall emissions and LAs do not hold some of the direct levers of change
- LAs do have a key role to play in terms of leadership, coordination and policy direction
- New development should be setting the “gold standard” not adding to the carbon burden

Problem

There is clear evidence that a gap exists between the ambition of local authority zero carbon commitments and the actuality of current standards adopted by some developers, in the context of current development control policy and Building Regulations

The impacts:

- Local authorities not achieving area-wide net zero carbon commitments
- Households consuming “avoidable” fossil-fuel energy and the resulting carbon impact
- Higher running costs particularly affecting vulnerable households and businesses due to using more (fossil-fuel) energy
- Knock-on impact on public budgets, service delivery and wider economic sustainability
- Future retrofit requirements being “hard-coded” into places at higher net cost with intrusive, costly disturbance to properties infrastructure and the public realm

Solution: Theme 1

Encourage higher energy and carbon performance

- Introduce developer performance assurance standards to reduce poor build quality - benefits the builder by reducing snagging, increasing buyer confidence, less come back on developer affecting brand liability and financial value
- Simple design changes to facilitate higher standards – “design for deployment” e.g. space for future technologies, reconfigure utility and services infrastructure e.g. for future cabling, pipework
- In-construction oversight e.g. re-introduction of a “clerk of works”
- Post-occupancy monitoring and evaluation e.g. energy monitoring, simple occupant engagement

Solution: Theme 2

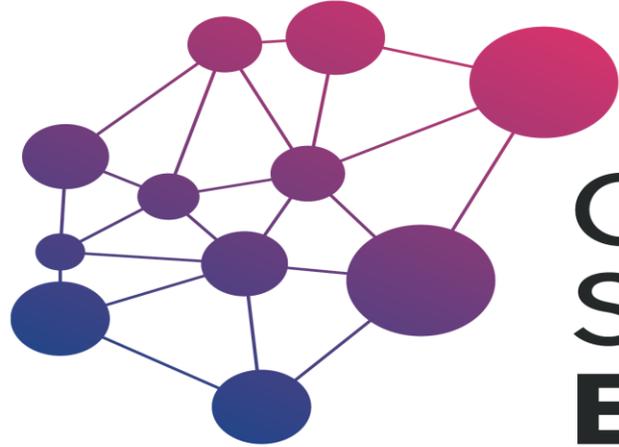
Promote new business models

- Co-investment in the development for low-zero carbon technologies
e.g. Rugeley (Engie)
- Residents can either purchase the equipment outright or become members of the long-term Energy Services Company (ESCo) for development
e.g. Burnside Community Energy
- Third party institutional investment in renewable generation
e.g. West Suffolk, Warrington

Solution: Theme 3

Change LPA practices to signal net zero carbon ambition

- The validation process could include questions about Net Zero, which although not a legal requirement again provides a means of evidencing the gap between the developers ambition and that of the council
- Assess viability in terms of higher standards versus post-occupancy retrofit costs (e.g. West Oxfordshire/Elementa; AECOM/Currie & Brown)
- Planning Committees could hear evidence of the wider retrofit cost when planning decisions are being considered so that the committee members are fully cognisant of the implications of not building to Net Zero
- The “planning advisory” issued alongside the planning permission can act as a means of marking the direction that the LPA wishes to go. Although it carries no weight in law it gives the developer visibility on the LA’s long term thinking at the time



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Open discussion on issues & next steps

Karen Chapman, Suffolk Growth Partnership

Summary & close

Karen Chapman, Suffolk Growth Partnership