



COMMUNITY
ENERGY
SOUTH



Essex County Council

Community Energy South & our Pathways Programme in Essex

Ollie Pendered, CEO

Powering Up

Communities developing and owning their own energy projects which save money and reduce carbon emissions: **heat networks, renewable energy and low carbon transport**

Harnessing community finance

Powering Down

A network of **community energy champions** who provide trusted and impartial local advice on energy and cost savings and support households struggling with their energy bills.

Enabling community resilience

Energy planning

Communities working together to coordinate and develop local **energy / decarbonisation plans** that are led by the community and encourage participation and ownership e.g. communiheat

Enabling community participation

A step-by-step approach to develop an area or county wide community energy movement

Communities can build and invest in their own renewable energy and energy saving projects

Supporting local leadership towards Net Zero targets – supporting existing groups and building new groups

Growing community led local energy awareness



Community Energy Groups in Essex:

Saffron Waldon

Colchester

Tollesbury

Danbury



Essex Community Energy Groups

- How we can work with Town & Parish Councils:
- Creating a local market place for net zero
- <https://www.swce.co.uk/littlebury-project/>



Saffron Walden CE Example

Example from
CommuniHeat

**500 heat pumps
installed**

Compared to 340 installed in the
uncoordinated approach

Retrofits

430 homes with building
fabric retrofits

**20% energy
saving**

In annual electricity demand vs
uncoordinated approach

**27% reduction in
household overall
energy costs**

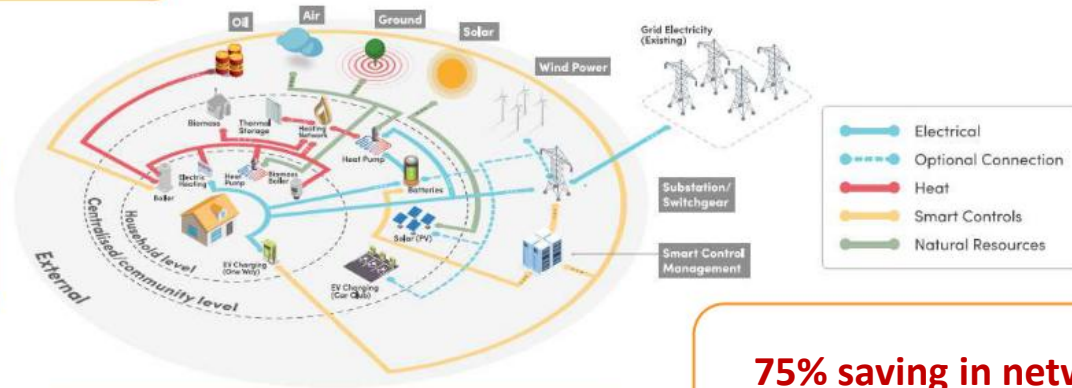
Compared to the uncoordinated
approach in both 2030 & 2050,
driven by lower energy costs

17 renewable sites

15 PV farms - 4.5 MWp
2 wind farms - 1.6 MWp

**Community renewables deliver
37% of total electricity demand**

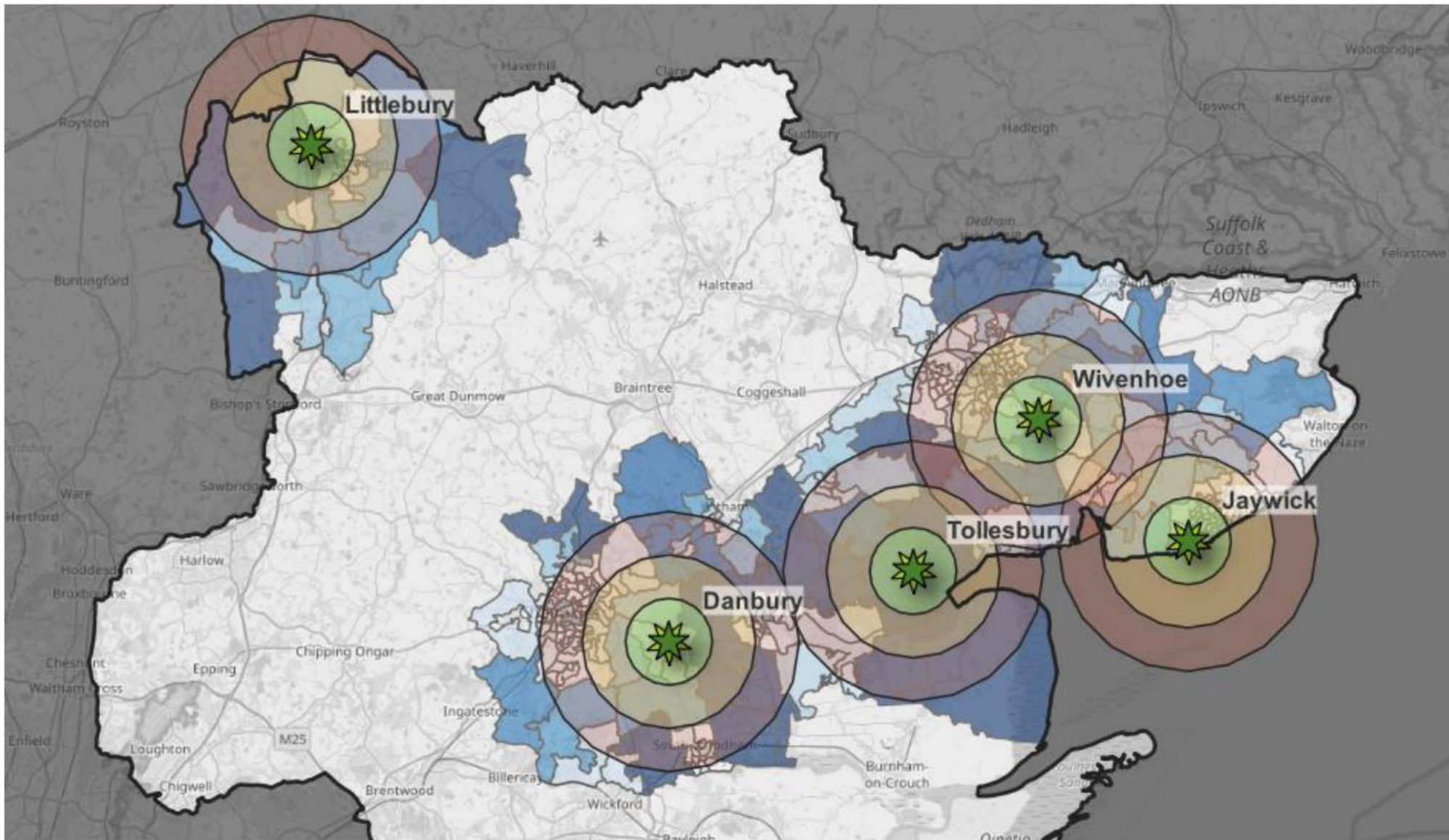
**£4m community
investment needed**



**75% saving in network
reinforcement costs**

Compared to the uncoordinated approach

Village Decarbonisation Plan



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CommuniPower Essex



COMMUNITY ENERGY SOUTH

• Thank-you

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www.communityenergysouth.org

Case studies in Essex

The impact of Community
Energy projects in local areas

07/03/2023

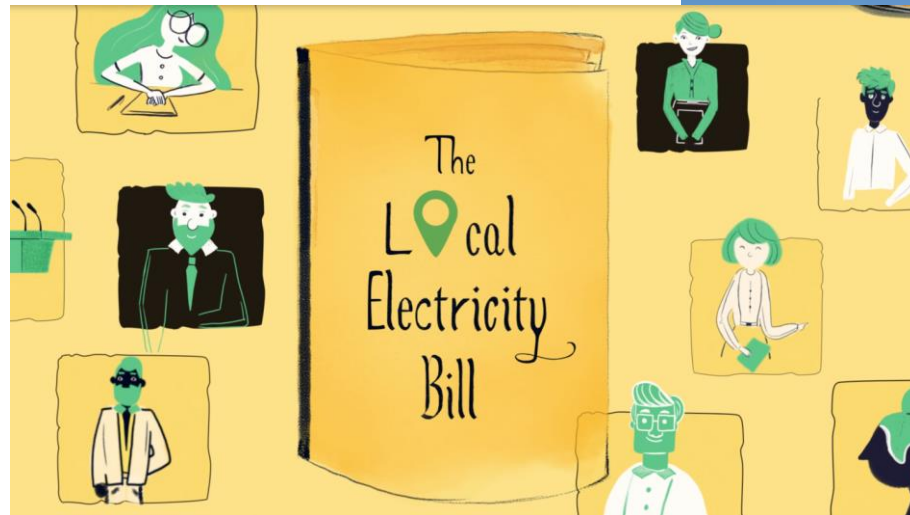
Luciana de Almeida

Energy & Low Carbon Team



Policy context

- Local Electricity Bill
- Chris Skidmore review
- Onshore wind Consultation



Tollesbury Climate Partnership



- Established in August 2021
- Leading on the Tollesbury Primary School Decarbonisation project:
 - First Essex community energy share offer to be launched early March to raise £250,000 match funding
 - To be combined with £400,000 of external funding from the Public Sector Decarbonisation Fund
 - Measures: solar panels, heat pumps, insulation, LEDs
- GIS mapping of solar energy generation potential in the whole Parish
- Local energy advice service - 133 households helped and over £100,000 potential savings
- Motivating other Parish Councils in Maldon district to create similar initiatives



Community Energy Colchester

- Established in xxx
- Install and fit of FREE energy saving measures in households in Colchester and Clacton
 - 124 home visits;
 - Over £40,000 potential savings
- Supporting 2 primary schools with energy saving and educational activities
- Helped 2 Parish Councils with the installation of EV charge points (more to follow)
- Leveraged £30,000 of external funding from Climate Challenge Fund and other funding sources
- Motivating Parish Councils in Colchester to create similar initiatives




Community
Energy
Colchester

South East New Energy

Exploring community ESCos to deliver local, affordable energy and provide a just transition to Net Zero



Danbury

Tendring

Southminster

Great Tey

Finchingfield

Manningtree

Steele Bumpstead

Toppesfield

Tollesbury

Saffron Walden

Witham

Earls Colne

White Colne

Wakes Colne

Chappel

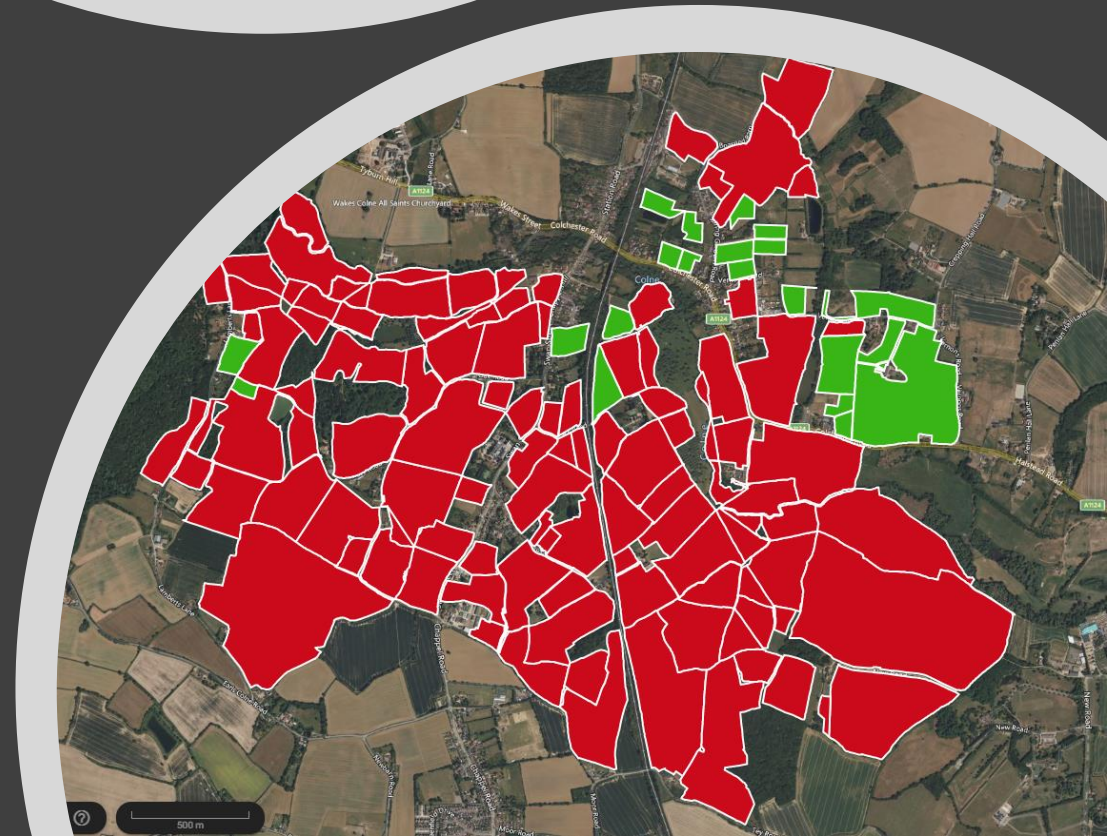
Dunmow



Scaling Up

Renewable Energy Resource Assessment

- Geospatial assessment of:
 - Roof tops (solar PV)
 - Land parcels (solar PV)
 - Wind resource
- Using data to unlock the potential for local energy generation



Scaling Up

CommuniHeat

**Essex Community Energy CIC –
a delivery vehicle for
community energy projects**

EssNet (Essex Net Zero Task Force)

Innovate UK funded - (Phase 1 funding secured, Phase 2 bidding Summer 23)

Exploring non technical barriers to net zero

