



Saffron Walden Community Energy

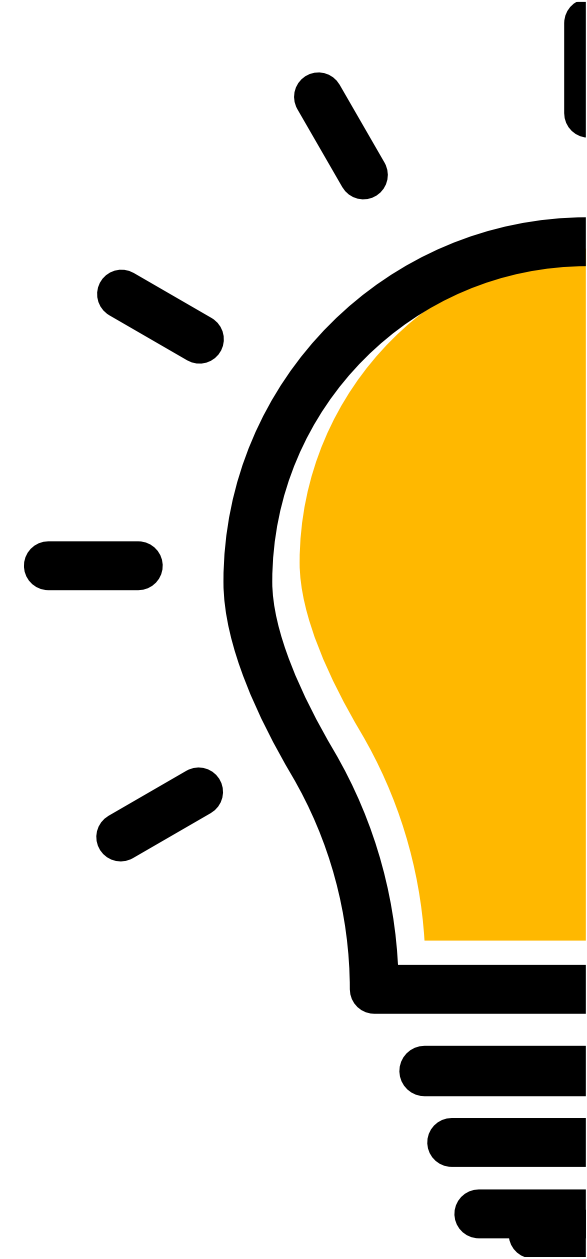


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Chair

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Start Up

- Idea of a CE group started in pre-2019
- First contact with Community Energy South in 2019
- Started on the Essex CC/CES Pathways Program in 2020
- Formally established as a CBS at the start of 2021



Early Small Projects

- **LoCASE:** Solar panels on our local community pub
- **Power Partners:** Providing energy savings advice



The Littlebury Energy Project

- What does it take to decarbonize a community?
- Initiated by a consortium of
 - Littlebury PC
 - UDC
 - Essex CC
 - Community Energy South
 - Saffron Walden Community Energy
- Phase 1: Information gathering in 2022
- Funding of £5K from Uttlesford DC + significant voluntary input



LEP Phase 1

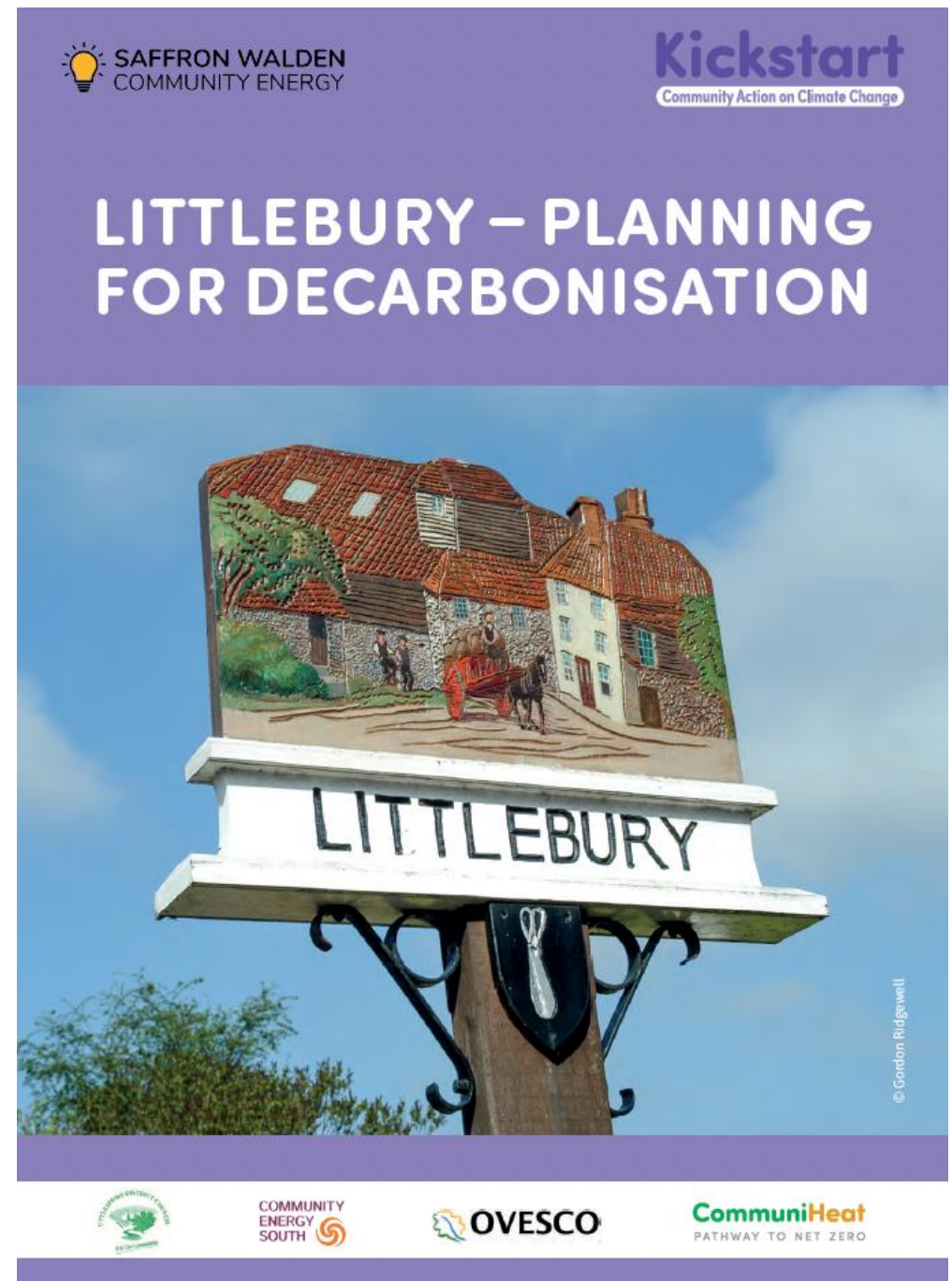
Following CommuniHeat route from CES:

- A questionnaire to the whole village
- Finding on-line data on village energy use
- Conducting home energy surveys
- A village open day



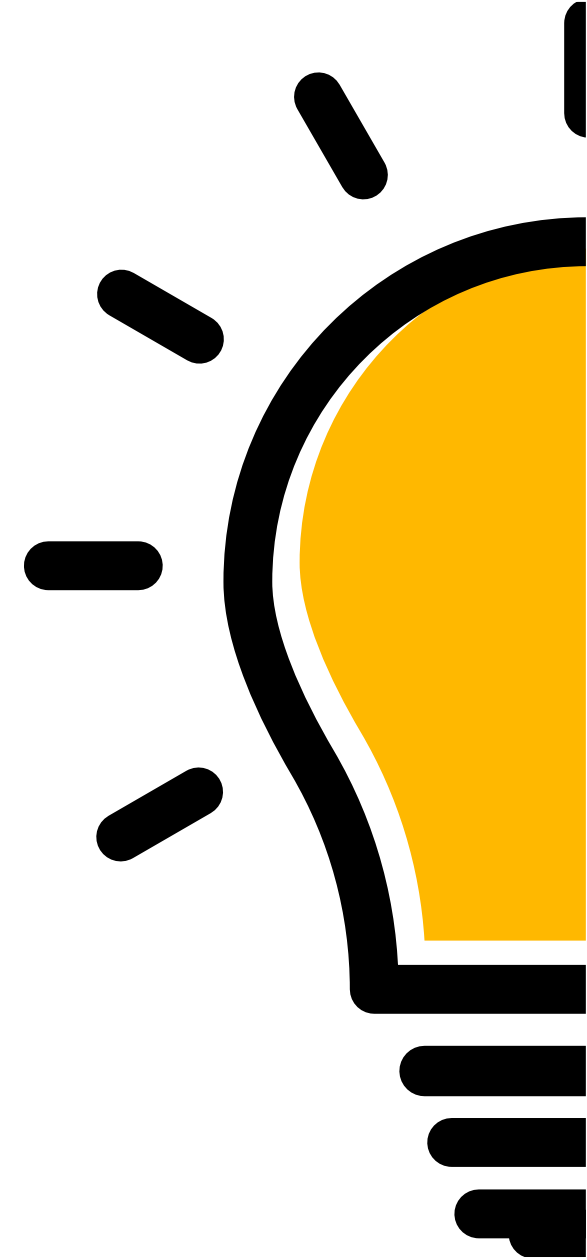
LEP I - Outcomes

- Barriers to decarbonisation: Cost, engagement, regulation & lack of expertise
- A report on the village energy use and routes to decarbonisation
- Evidence of enough interest to take what we learned and turn into concrete action.



LEP Phase 2 – 2023/24

- £34K funding from Uttlesford DC's Zero Carbon Communities Grant
- Have established a Working Group in the village.
- Employed a Project Worker (6 days/month)
- Training up two people to do energy and retrofit assessments



LEP II - Thermal Imaging Service

- Purchased two thermal cameras
- Have run our first village training session
- Started a free camera loan scheme
- Working Group members will do surveys for those not confident in camera use
- First step on journey towards more thermally efficient home



LEP II - Work in Progress...

- Collect more detailed data on overall village energy use
- Set up a one-stop-shop for information; case studies, grants, trusted installers
- Organising small scale group purchases, e.g. insulation
- Detailed discussions with planning authority regarding listed buildings
- Investigate community scale renewables

Littlebury Energy Project

Household Energy Consumption

V2 September 2023

Current energy consumption

Address 52 South Road
Saffron Walden

Number of bedrooms 4

Property type Bungalow/House/Flat 1930s semi detached + extended

Property size internal area m2 (approx) 186 m2

Insulation level

1 - 2022 standard
2 - 2003-2022
3 - 1985- 2003
4 - pre 1985

Extn 1 2007: Kitchen extn + loft conversion, Extn 2 2019: External s
Original 3-bed 1930s semi

Domestic electricity

Do you use electricity for heating your home? Yes - ASHP kWh

If so, what type of heating do you have?

Storage heaters No

Underfloor heating Partial

Radiant/convactor/portable heaters No

Total kWh imported from grid 4517

If you have dual rate or smart meter enter off peak usage Electricity off peak rate kWh

Peak rate usage kWh 4517

If you have PV (solar energy) panels how much do they produce PV Self generated kWh 3075

If you have PV (solar energy) panels how much do you export to the grid PV Exported kWh 841

PV self consumption kWh 2234

Total electricity consumption kWh 6751

If you have an electric car roughly how much do you use charging at home each year? kWh

Annual mileage

Total domestic electricity consumption kWh 6751

Space heating

Litres of oil per year 0 0

Oil 10.35kWh/litre

Bottled gas Kg LPG per year 0 0

LPG 14.02kWh/Kg

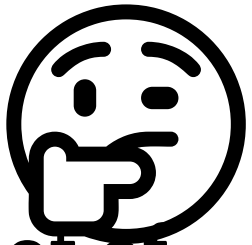
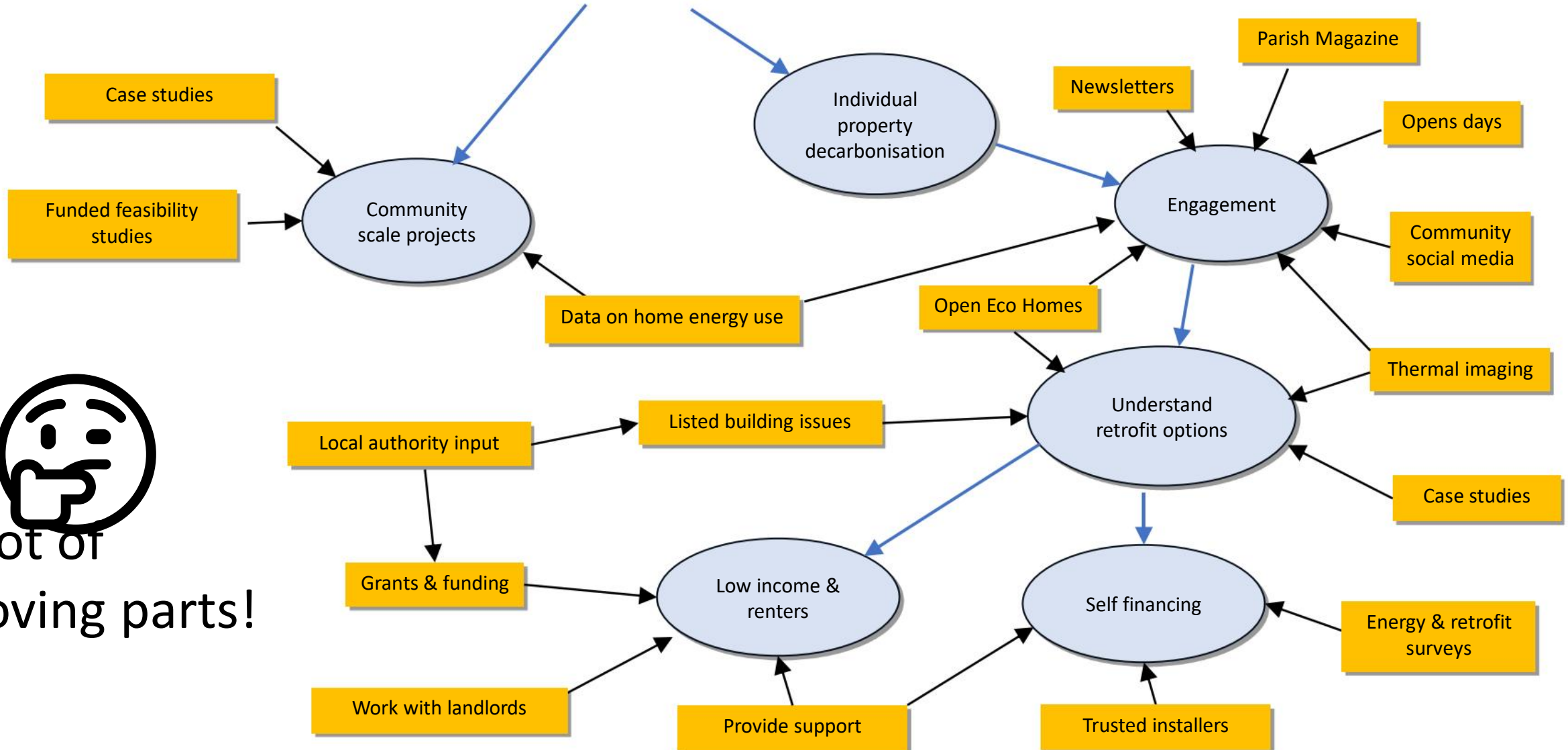
Tank gas Litres LPG per year 0 0

LPG Propane 7.08kWh/litre

Tonnes of Wood per year 0.1 0.41

4.1kWh/kg

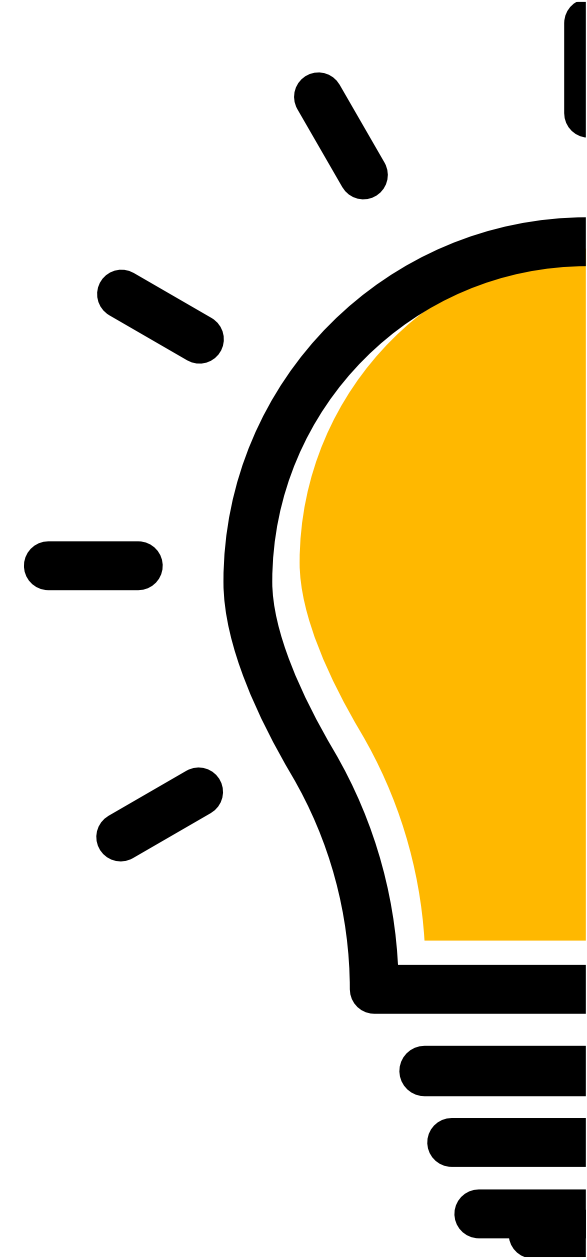
Community Decarbonisation



A lot of
moving parts!

Beyond Littlebury...

- A number of other villages are starting down the same path
- Aiming to build a cluster of villages in North Uttlesford as part of the CommuniPower project



Uttlesford

CHANGE

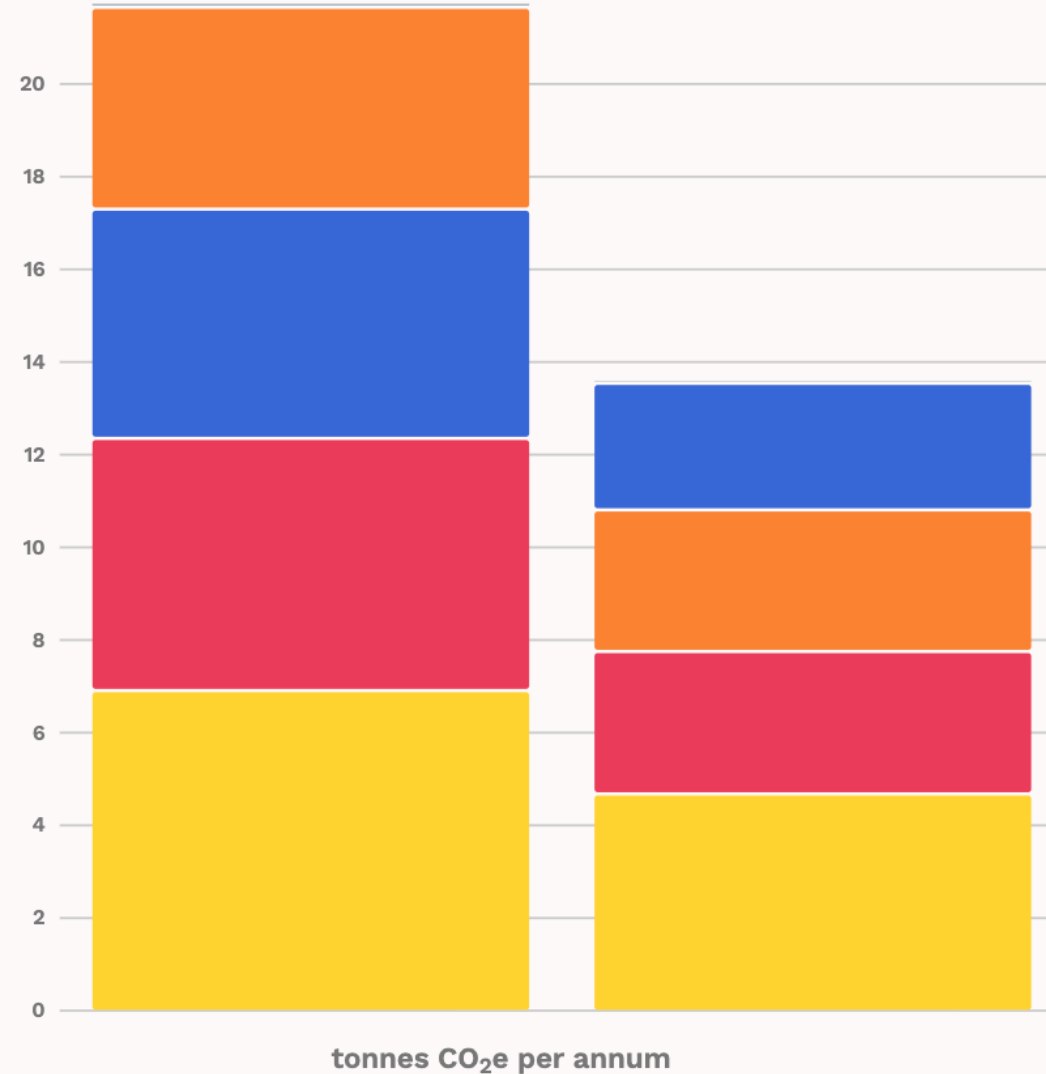
21.9t CO₂e*

per-household consumption footprint
(p.a.)

EMISSIONS BREAKDOWN (t CO₂e)

Consumption of goods and services	6.95
Housing	5.46
Travel	4.96
Food and diet	4.37
Waste	0.11

*CO₂e stands for "carbon dioxide equivalent" and is a standard unit of measurement in carbon accounting. It expresses the impact of a number of different gases collectively as a common unit.



Essex

CHANGE

13.7t CO₂e*

per-household consumption footprint
(p.a.)

EMISSIONS BREAKDOWN (t CO₂e)

Consumption of goods and services	4.72
Housing	3.09
Food and diet	3.07
Travel	2.75
Waste	0.09

*CO₂e stands for "carbon dioxide equivalent" and is a standard unit of measurement in carbon accounting. It expresses the impact of a number of different gases collectively as a common unit.