The role of planning in responding to net zero carbon

GREATER CAMBRIDGE
SHARED PLANNING

Support renewable energy generation

Materials with low embodied carbon and circular economy

Zero carbon buildings

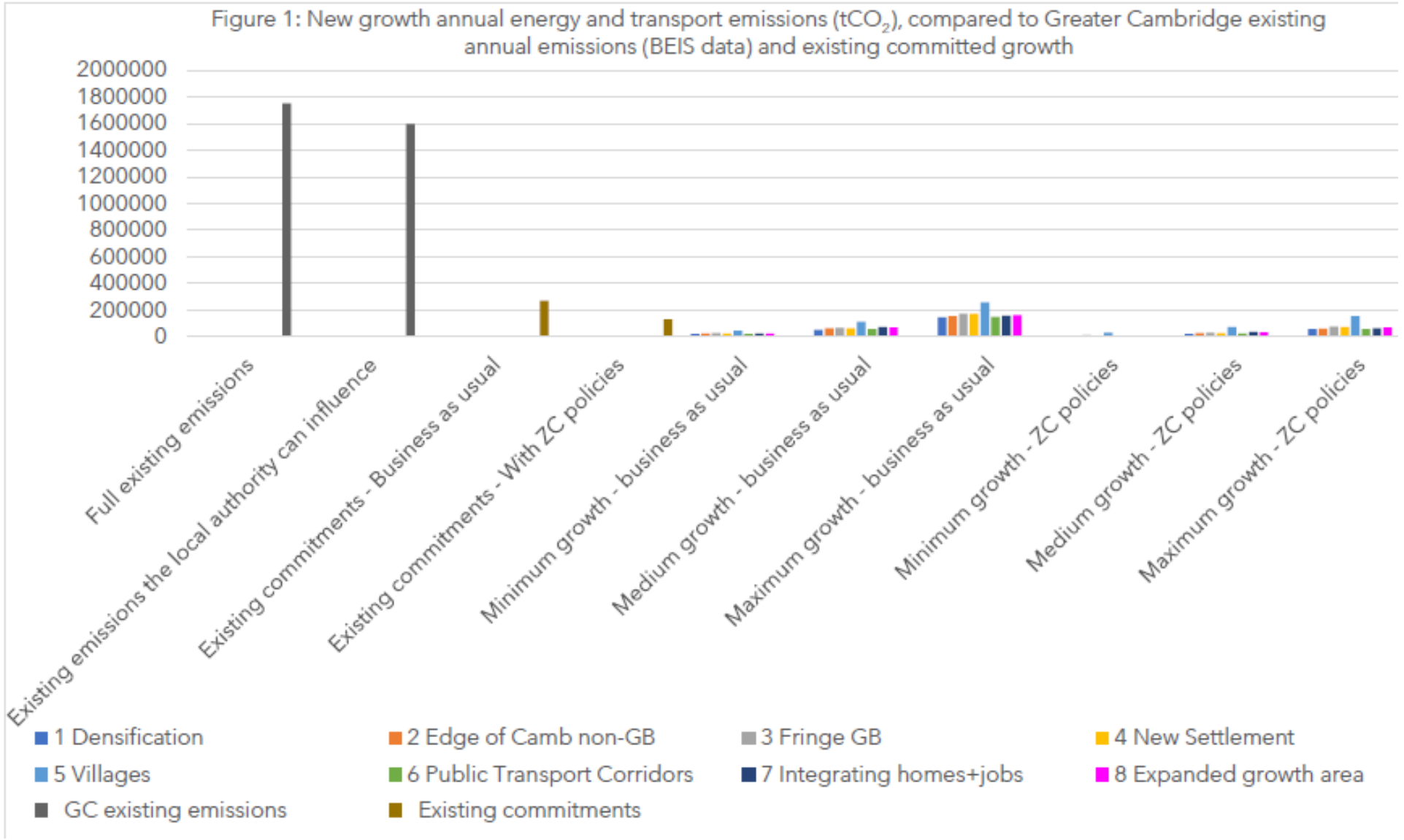
Support switch to sustainable transport and low emissions vehicles

Water efficiency standards

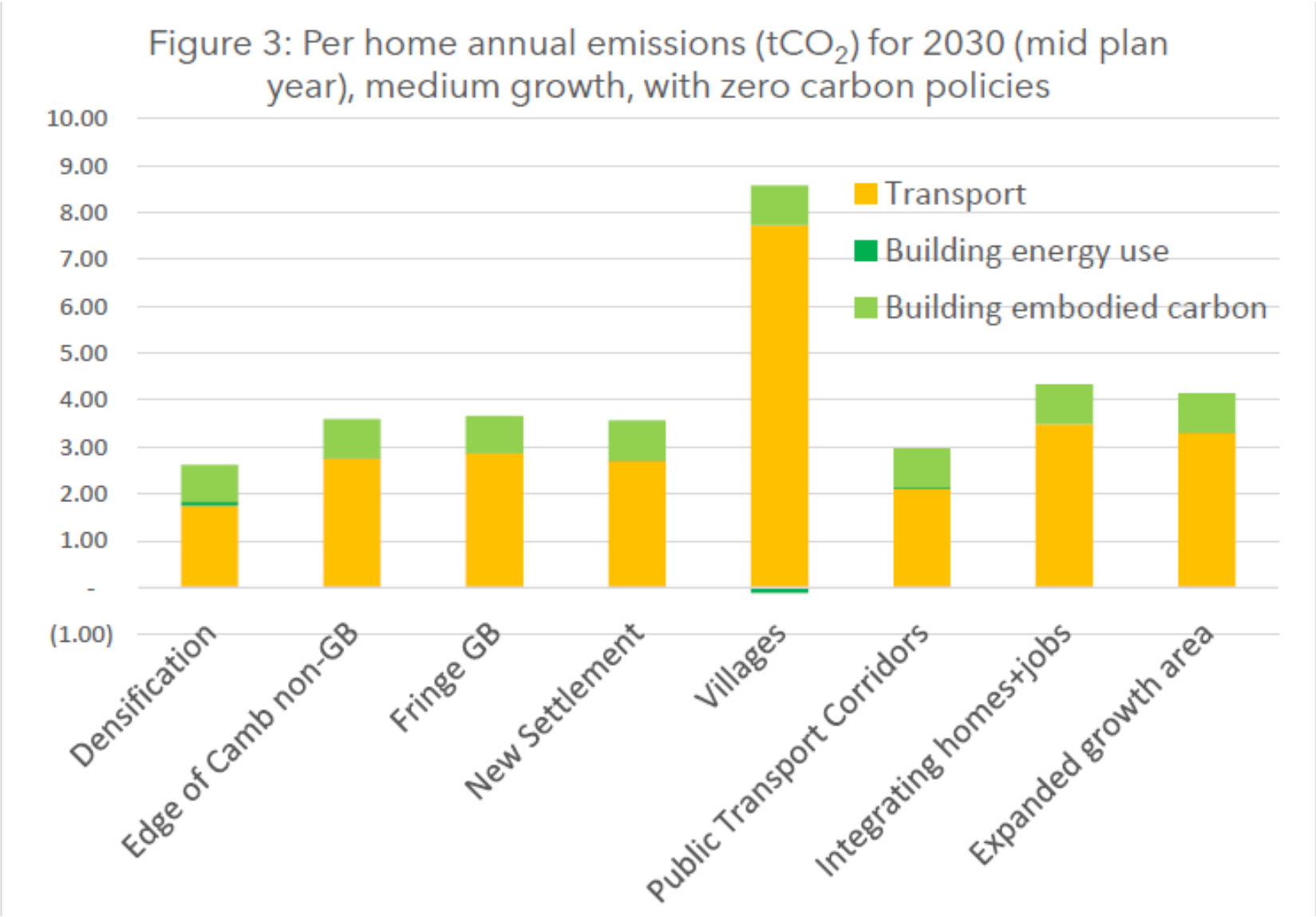
Role of green infrastructure and sustainable drainage systems along with wider climate resilience measures

Carbon emissions in Greater Cambridge

GREATER CAMBRIDGE
SHARED PLANNING



Net Zero Carbon – emissions per home



KPIs for net zero buildings

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Bioregional

Etude

Currie & Brown

mode

Space heating demand

The amount of **heat energy** needed to heat a home over a year (per square metre)

Space heating demand

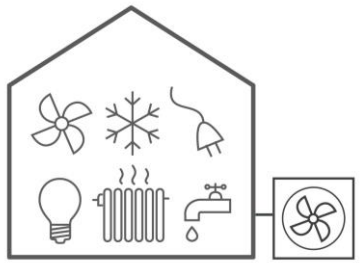
15-20

kWh/m²/yr

- Climate Change Committee recommendation
- LETI Net Zero Definition
- Passivhaus aligned

Energy Use Intensity (EUI)

The amount of **total energy** needed to run a home over a year (per square metre)



Energy use intensity

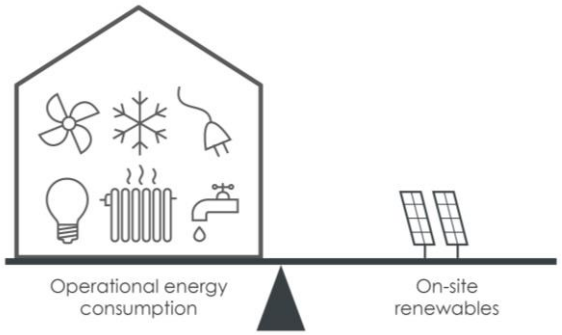
35

kWh/m²/yr

- LETI Net Zero Definition
- Based on likely available zero carbon electricity in the grid in 2050 (National Grid Future Energy Scenarios)

Energy balance

The amount of renewable energy generated in a year matches the EUI



Net Zero Balance

- Reduces demands on the grid
- Contributes to electrification of the grid
- Running cost benefits

Wider climate change policies

- Renewable energy projects and infrastructure
- Responding to our changing climate
- Reducing waste and supporting the circular economy
- Supporting land based carbon sequestration
- Role of design codes

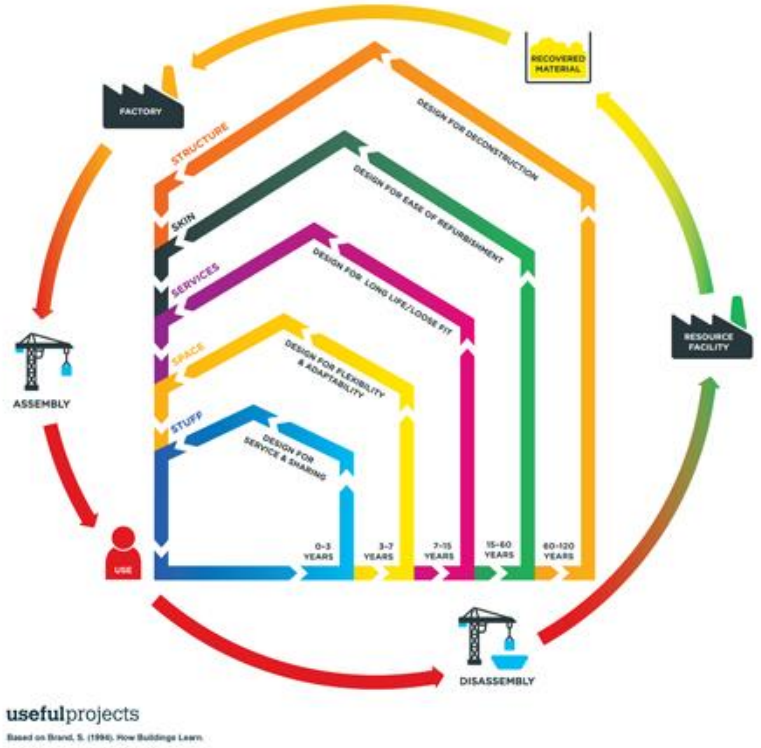


Image courtesy of Useful Projects