WHY EFFICIENCY FIRST?

GRID CAPACITY

The peak thermal load our homes currently delivered by gas is 170GW! The UK's current electric grid capacity is 100GW. In 2050 as we electrify everything, all sectors, particularly transport, will be drawing from this source. Reducing demand is critical. Large infrastructure upgrades take time & are costly.

SEASONAL DISPARITY

Seasonal disparity between energy demand & renewable generation results in a need for inter-seasonal energy storage, which will lead to storage losses.

HEALTH & WELLBEING

Efficient buildings usually have better build quality which provides a catalyst for multiple co-benefits in terms of occupant health and to the wider society. No draughts, mould & condensation. Less overheating. Stable temperatures year round. Peaceful & quiet environments. Affordable & resilient.

FUEL POVERTY

Reducing energy demand makes buildings more affordable to run, and reduces our reliance on fuel. This shields us from energy price hikes - often a lifeline for the most vulnerable in society. Cold damp buildings can cause serious long term health effects. Better housing could save the NHS £1.4 billion in first year treatments alone.

PERFORMANCE GAP

The average home is likely to use around 60% more energy than predicted, with heating demand 2 to 3 times greater.. This adds pressure on the grid. Passivhaus eliminates this performance gap thanks to a rigorous quality assurance system.