

Wiltshire Council

Cabinet

13 October 2020

Statement from Adrian Temple-Brown

Agenda Item 10 – Chippenham Housing Infrastructure Fund

To Cllr Philip Whitehead – Leader of the Council and Cabinet Member for Economic Development, MCI and Communications

Statement:

This Cabinet has a core policy of economic growth, a leader who treats the council as a business and a plan to use Wiltshire County assets to generate as much money as possible.

Despite declaring a Climate Emergency and many requests to recognise the emissions related to construction, this Council still has no Planning Policy related to calculating project emissions.

The Chippenham Eastern Expansion provides an opportunity to educate cabinet and councillors on just how irresponsible it is to dig up the countryside for profit in a climate Emergency.

Previous questions established that this Cabinet has no intention of calculating the Carbon emissions from building industrial estates, housing estates and roads over the Wiltshire countryside and has no intention of asking developers to calculate total emissions either.

The current policy is to ignore the responsibility of Carbon budgeting, talk about anything but emissions, and 'Get Building Done' before any Carbon Accounting Policy exists.

Despite having over 5000 paid members of staff, it falls to a member of the public to make you people aware of the emissions you are planning.

Page 5 of the HiF Business case states that the Chippenham Eastern Expansion will cover **657.8 Hectares of Wiltshire countryside.**

This Cabinet is actively ignoring the potential release 6.5 million tonnes of CO₂ from Soil excavation.

State-of-the-art Direct Air Capture technology requires 2500kWh of energy to capture 1 tonne of CO₂ from the atmosphere.

To re-capture this amount of CO₂ requires 16.4 *Tera-Watt hours* of energy.

That's **53x** the total energy used by Chippenham Town in 2019.

If we covered *every inch of Chippenham* with solar panels, it would take **18 years** to generate this amount of renewable electricity.

Perhaps Cabinet is planning to use Carbon Offsetting for the CO₂ emissions ?

In that case, developers should pay **at least** the Carbon Market price for these CO₂ soil emissions (that's Eu30/tonne – or £180 million for 6.5 million tonnes)

If the WC Homes England HiF Business case (pages 5&6) allocates 20% profit for each house,

- at £200K/house,
 - 7500 houses,
 - 76% of houses are to be sold
- ... then 20% profit is £225m. Paying £180m in Carbon Offsets would be 80% of the allocated Developer profit.

Easy to see why Cabinet refuse to account for project Carbon Offset Costs - it makes the Chippenham Eastern Expansion project financially unviable.

Supporting Information:

State-of-the Art CO₂ DAC Capture real energy costs are detailed at [this link](#)

Chippenham Energy Usage figure is in the CSE-led Chippenham Energy Futures Workshop report Page 11.

Working used to derive these energy figures:

| | | |
|-----------|----------------|---|
| 657 | hectares | Is the area of the Chippenham Eastern Expansion |
| 6,570,000 | m ² | Is this area <u>converted to square meters</u> |
| 1.03 | tonnes | CO ₂ is released per tonne of soil given a 28% soil carbon content |

| | | |
|-------------------|-----------------|---|
| 6,570,000 | tonnes | tonnes of CO2 released by excavation at 1 tonne/cubic meter |
| 2,500 | kWh | of Electricity is required per tonne of CO ₂ sequestration by Direct Air Capture |
| 16,425,000,000 | kWh | of renewable Energy is required to re-capture the CO ₂ from site excavations |
| 16,425 | GWh | Is the amount of renewable energy required converted to GWh |
| 310 | GWh | Is the total Energy consumption of Chippenham, expressed in GWh |
| <u>53x</u> | | CEE CO ₂ capture cost shown as a multiple of Chippenham's annual energy usage |
| 10.24 | km ² | Is the current Land Area of Chippenham |
| 0.357 | GWh/Acre | Is a <u>reasonable figure for the Solar power generated by a UK Solar Farm</u> |
| 247 | | Is the number of Acres in a square kilometre |
| 903 | GWh/Year | Is the power generated if ALL of Chippenham were covered in Solar panels |
| <u>18</u> | | # of Years required to power sequestration of CEE CO ₂ emissions with DAC |