Climate Emergency Panels - Energy

How can we reduce energy use and generate energy cleanly?
Tonight

1900 - 1920  Welcome and panel snapshots
1925 – 1955  Join a table
1955 – 2015  Change table
2015 – 2035  Change table
2035 – 2050  Feedback, temperature check and next steps

Three themes:
1) How to reduce energy in our homes
2) How to reduce energy in businesses, schools and buildings
3) How to generate energy cleanly
Climate Emergency Plan

November:
• Climate panels 12\textsuperscript{th} Energy  
  19\textsuperscript{th} Transport  
  26\textsuperscript{th} Resources  
• Climate panel Frome College 29\textsuperscript{th}

December:
• Draft and review plan linking in with CSE’s Climate Emergency Programme  
• Establish working group

January: Climate emergency plan published  
Mendip climate summit?

Feb: 15\textsuperscript{th} Somerset climate summit
The Energy Panel

• Anna Francis
  Resilience Manager
  Director FRECo and
  Sustainable Frome

• Philip Morris
  Evobead – Development
  Director

• Lizzie Boyle (or Liz Warren):
  Frome Town Councillor,
  Director SE2 and FRECo

• Simon Proctor:
  Bristol Energy –
  Renewables and Origination Manager
  FRECo Director
CLIMATE SUMMIT

WHAT IF IT'S A BIG HOAX AND WE CREATE A BETTER WORLD FOR NOTHING?

• ENERGY INDEPENDENCE
• PRESERVE RAINFORESTS
• SUSTAINABILITY
• GREEN JOBS
• LIVABLE CITIES
• RENEWABLES
• CLEAN WATER, AIR
• HEALTHY CHILDREN
   ETC. ETC.
Our Footprint

Frome's Carbon Dioxide Emissions

Source: Scatter

Climate Works – Clean Healthy Future report: [www.frometowncouncil.gov.uk/clean-future](http://www.frometowncouncil.gov.uk/clean-future)
Who does what

• National government – legislation, funding, regulation
• Somerset – highways, school and public buildings, pension fund, transport – public and transport planning, country strategy for climate change
• Mendip – planning, business rates, car parks, land, private sector housing, environmental health
• Frome Town Council – allotments, parks, innovative projects
Clean Energy

- Solar Streets
- FRECo / Somerset Community Energy
- Big Clean Switch: www.bigcleanswitch.org
Clean Energy

- Saxonvale – community owned microgrid and zero carbon heat network.
- Free solar for business – Green Nation
Reducing Energy Demand

27 million  80%
## UK Housing Stock

<table>
<thead>
<tr>
<th>Energy Efficiency Rating Band EHCS 2008</th>
<th>National %</th>
<th>South West %</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>B</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>C</td>
<td>10%</td>
<td>8%</td>
<td>-2%</td>
</tr>
<tr>
<td>D</td>
<td>36%</td>
<td>31%</td>
<td>-5%</td>
</tr>
<tr>
<td>E</td>
<td>38%</td>
<td>38%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>F</td>
<td>13%</td>
<td>15%</td>
<td>+2%</td>
</tr>
<tr>
<td>G</td>
<td>3%</td>
<td>7%</td>
<td>+4%</td>
</tr>
</tbody>
</table>
Energy bills

- Average band ‘B’ bill is £530 – band ‘G’ is £2200
- Moving from ‘D’ to ‘B’ is likely to half your bills
- 91% of the properties in the south west are band ‘D’ or below
What this means in terms of carbon emissions: Over 27% of the UK's carbon dioxide (CO2) emissions come from the residential sector.
Motivations

What motivates people to make their homes more energy efficient?

- To Cut Waste
- For Comfort/ Better Health
- To Cut Costs
- Home Improvement
- For the Climate/ Environment
Labour is pledging to cut UK carbon emissions by 10% through the largest home improvement programme for decades.

A Labour government would fund £60bn of energy-saving upgrades, such as loft insulation, enhanced double glazing and new heating systems, by 2030.

Launching the policy on Sunday, Jeremy Corbyn said it "will create a sustainable energy network", adding: "We cannot go on polluting our planet."

The Conservatives said the plan would "wreck the economy" and "put up bills".

Speaking about the policy - called "Warm Homes for All" - in south-west London, Mr Corbyn said that climate change would be a major part of the party's election campaign.

"We cannot go on standing by while climate warming increases," the Labour leader said.

- How much could Labour’s nationalisation plan cost?
- Labour pledges ‘zero carbon’ homes by 2022
- Reality Check: Labour’s green energy plans

Labour says low-income households will receive a grant to carry out the work on their homes, while wealthier households would receive interest-free loans for enhancements.

Households which take out the loan would pay it back through savings on energy bills, the party added.
Fuel Poverty

Currently being consulted on by BEIS

Affects 2.55 million households in England (2016) using the new Low Income High Costs definition

Governments in the devolved nations have retained the traditional ten percent definition

Estimated by NEA that fuel poverty affects 3.5 million UK households – roughly 12.9% of all households.
Party wall insulation
Reducing energy in other buildings

Factors

- How is the building used?
- When is the building used?
- What is the building like?
- Who owns the building?
- What systems and controls are there?
- Do people know how to use them well?
Reducing energy in other buildings

Factors

- How is the building used?
- When is the building used?
- What is the building like?
- Who owns the building?
- What systems and controls are there?
- Do people know how to use them well?

How do people use systems and controls?
Reducing energy in other buildings

Factors

- How is the building used?
- When is the building used?
- What is the building like?
- Who owns the building?
- What systems and controls are there?
- Is there the expertise to manage them well?

- Lighting: 40%
- Space Heating: 28%
- Space Cooling: 12%
- Water Heating: 7%
- Ventilation: 6%
- Computers: 5%
- Office Equip: 1%
Reducing energy in other buildings

Factors

- How is the building used?
- When is the building used?
- What is the building like?
- Who owns the building?
- What systems and controls are there?
- Is there the expertise to manage them well?
- How do people use systems and controls?
What are we already doing?

• **Energy sparks** – excellent free website which links schools with their energy data. Includes curriculum linked activities. 5 Frome schools already signed up, promote to others

• Good Business Framework – visits to local businesses to talk through environmental, social and economic approaches to being a sustainable business and develop action plans

• Working with FRECO and Green Nation on a Solar for Business scheme

• Non-energy initiatives such as Plastic Free Frome, SHARE and Fridge
Generating clean energy

COMMUNITY

POWER

FRECO
We’ve done it!
Group Discussions

1925 – 1955  Join a table
1955 – 2015  Change table
2015 – 2035  Change table
2035 – 2050  Feedback, temperature check and next steps

We’ve met our targets – how did we enable this to happen?
1) How did we reduce energy in our homes
2) How did we reduce energy in businesses, schools and buildings
3) How did we generate energy cleanly

Different roles, what can we do as a community, council, business etc
Which actions are quick / easy, which are more longer term
Choose top three actions
Next steps

• Leave your name and an action
• Climate Panels: Transport - 19\textsuperscript{th}, Resources – 26\textsuperscript{th} Nov
• SHARE’s Swap Shop, 23\textsuperscript{rd} Nov, 10-12 Frome Town Hall
• Rob Hopkins – Unleashing the Power of Imagination, 5\textsuperscript{th} December 7pm, Cheese and Grain

• Report drafted by January:
  www.frometowncouncil.gov.uk/climate-emergency
• afrancis@frometowncouncil.gov.uk