

Zero Carbon (and Bears)

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BedZED - The Grizzly Facts

- **Great try – all credit to Peabody and the team**
- **It was extremely expensive**
- **The Biomass CHP failed - we retrofitted gas boilers (although we are looking to fit biomass boilers)**
- **The biggest carbon saving come from the cheapest intervention – the car club**

Paws for thought

- **Why try to generate all renewable energy on-site?**
- **High voltage grid transmission losses? (7.5 - 9%)**
- **“ghost of the autonomous house”?**

Food production

One of the biggest environmental problems we face – possibly bigger than global warming:

- GHGs**
- Soil Erosion**
- Pesticides**
- Deforestation**
- Water depletion**
- Geopolitical instability**

98.5% of all food is consumed in buildings*

*
I made up this figure

Logical thought process

We are building new homes in which people will eat food

We cannot let these homes contribute to increased pressure on the environment

Ergo all new homes must be “Food Neutral”

Government Edict

By 2016 all new homes will be Zero Food

- **All food must be grown on-site (ZED Standards)**
- **Can't do it at higher densities (HBF)**
- **If not on-site then at least on land connected to it by a wire (Treasury)**
- **We need “Net Annual” Zero Food - so we can trade our peak production of runner beans in August to compensate for lower turnip output in February (Arup)**

- **the developer should pay into a food offset fund which is no less than the cost of growing all food on-site (UK-GBC recommendation)**
- **Must have post construction review – all food receipts must be kept for a period for 5 years (BRE)**
- **bizarrely carrots are C-rated and Big Macs A-rated in the BRE Green Food Guide**
- **CLG - Not sure this is working – let's set up a Zero Net Food taskforce or commission some consultants, perhaps Faber Maunsell, to do a study on it**

Zero Carbon Stamp Duty Exemption?

- Was it all just Hullabaloo ?
- How many homes sold with stamp duty exemption?
- Cost of certifying more than stamp duty saving?



Are we pandering to the consultants and bureaucrats?



....or should we try to get a life

Barely Believable – the origins of Zero Carbon

- **BioRegional started using the term in 2002 specifically learning the lessons of BedZED and get away from Zero fossil Energy Development**
- **Original simple definition – “buildings run on a combination of on and off-site renewables using fossil fuels only as back-up**

one brighton



Zero Carbon

The Bare Necessities

Keep It Simple, and Sustainable



“KISS principle states that design simplicity should be a key goal and unnecessary complexity avoided. It serves as a useful principle in a wide array of disciplines, such as software development, animation, journalism, photography, engineering, and strategic planning.”

KISS Zero Carbon

- **don't mix up energy efficiency and renewable energy supply**
- **Building Regs/Code/Planning should focus on energy efficiency**
- **Renewable Energy should be in Energy Policy**

Let the sunny countries have the PV



- It will save more Carbon
- Germany's great PV initiative generates about 0.5% energy need; wind generates 6%

Government should be Like Bringing up a Family

- **regulation must be simple & clear to set boundaries**
- **Then encourage best practice**
- **Trying to force performance through complex regulations and standards unlikely to work**





Happy Winterval



.....and apologies if I have offended anyone