



Biomass - a burning issue

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Why we are worried

- Worse buildings
- Anecdotes of construction timber sold for chipping
- Can't get fuel for our own stoves!

Why others are worried

- Pollution
- Cancer
- Deforestation
- Soil carbon dynamics
- Loss of food growing land



Google 'AECB biomass'

AECB, Acute exacerbations of chronic
bronchitis

Specific factors may affect the prevalence in certain countries in the southern hemisphere. Exposure to firewood or other biomass smoke during cooking may occur in up to 50% of the world's households,¹¹ and woodsmoke in particular is thought to be responsible for almost 50% of all cases of obstructive airways disease. Wood and straw are used for cooking with inadequate or absent ventilation. In Nepal,

Our Case:

1. Biomass is not in itself a low carbon fuel – burning biomass does produce carbon – more than most fossil fuels.
2. If biomass is grown and not burnt, and an equivalent amount of gas burnt instead, then lower carbon emissions result.
3. Defining biomass **burning** as low-carbon, and then setting carbon-based energy standards leads to relaxation of building energy efficiency, and ultimately, higher carbon emissions.

How do we think this
mistake came about?

Accounting error

- The terrestrial biomass stocks haven't been included in the balance sheet
 - Standing trees
 - Soil
 - Timber in buildings etc
- The carbon emissions and uptake of biomass BOTH need to be counted.

Save or spend

- The carbon can be kept in the biomass bank
- Or spent by burning
- What we really need is **MORE** in the bank, not **LESS**

Look at the whole picture

- Measure carbon flow both in and out of the atmosphere
- Include the impact on stocks of biomass remaining
- Then clear-felling for biomass fuel clearly cannot be sustainable
- Short rotation and coppice are more finely balanced
- We need a method that tells the difference

Building materials

- Houses last for centuries
- There are millions of tonnes of timber in UK houses
- This is keeping a lot of carbon out of the atmosphere

Code 6 – FIT – RHI

- Current standards are supposed to be based on carbon emissions – which would be fine
- BUT they don't look at the biomass balance sheet
- Result: the standards encourage burning biomass, but not growing it

Building Regulations

- When you look at the whole balance sheet you see that the burning side of the biomass equation does result in carbon emissions
- So burning LESS is a good thing
- The regulations need to encourage this

Biomass in schools

- Extra funding for schools with “60% lower carbon emissions”
- This has been aimed at biomass heating
- Caretakers hate it!
- The “back-up” gas boilers get used instead – often from day one
- But designed for a “low carbon” fuel these schools are only insulated to 2002 standards

“It’s the power stations that we really need to worry about”

- True – plans for biomass use for electricity generation far exceed total UK timber production
- But this is just an inevitable consequence of saying biomass is carbon neutral

Vermont:



Power stations Hoover up whole forests

- In US becoming highly controversial
- - Just need to look at the carbon properly in the first place
- Can we say this is unacceptable for electricity generation but acceptable for heating buildings?

“We’ll grow it later”

- we’ll believe that when we see it!
- anyway, that’s too late
- and the high demand for biomass distorts the market away from use of timber in building
- My bank manager isn’t happy with me spending loads of money now, saying I’ll earn it in the next 100 years or so...



Easter Island



Iceland