

Press Release: AECB publishes biomass discussion paper

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Biomass – not a green fuel after all?

Defining biomass as a low-carbon fuel is not only mistaken, it is also the cause of higher carbon dioxide emissions and lower building efficiency, according to a paper published today.

The discussion paper, commissioned by AECB, argues that it is fundamentally wrong to define biomass burning as low-carbon, when burning biomass leads to similar carbon dioxide emissions per unit of heat as burning coal.

As the UK prepares to scale up initiatives encouraging more and more biomass to be used as fuel, the AECB decided that it needed to think more rigorously about the issues arising. While it is true that trees do take up carbon dioxide when they grow, this does not mean that the best use for biomass is to burn it.

Instead, the paper argues, the timber can be left unburnt, and put to other uses - for example, as structural timber or other wood products like insulation. Meanwhile we could use other heat sources, that emit a good deal less carbon dioxide than the trees have absorbed, to provide for the same heat requirements.

There is certainly not enough biomass available to both usefully sequester and burn. The paper does not argue that we can sequester our way out of climate change by planting trees and stimulating wood product industries alone. However it clearly makes the case that burning wood is one of the least sensible things to do.

The paper, commissioned by AECB from Nick Grant and Alan Clarke, both experienced building energy consultants, shows how the low-carbon definition for biomass burning is used as a "get out of jail free" card in project design – a biomass boiler then becomes a substitute for good design and energy efficiency. By specifying a biomass boiler, design teams feel they have met their carbon targets, and investing time and budget into efficient, truly low-energy design and construction seems superfluous.

According to the authors, the consequences of current mainstream thinking on biomass as a fuel leads to a 'lose-lose-lose' situation:

- Once when the biomass is burnt, releasing twice as much carbon as burning gas for the same heat output
- Again when the building leaks energy, because insufficient attention was paid to energy efficient building fabric and plant design – i.e., the biomass boiler "did it all".
- And further, there is a risk that the timber price is pushed so high by the competition from a growing number of biomass burners, that concrete, bricks and steel have to be created, at very high energy and carbon costs, to make building components that could otherwise have been made from wood.

Explaining why he had written the paper, co-author Nick Grant commented: 'There is a lot of confusion around, with people mixing up the terms renewable, sustainable and low carbon. We need to take a step back from the seemingly endless arguments about the definition of zero carbon, and ask ourselves – what are we really trying to do here? I believe when you do this, it is clear that we need to go back to the simple principle of using less energy, in whatever form.'

The full discussion paper "Biomass: a burning issue" is available as a pdf download from the new releases area of the AECB website; go back to http://www.aecb.net/new_releases/ and click on the heading "Biomass - a burning issue".

In order to gain valuable feedback from AECB members on the issues discussed in this paper, and to invite questions and challenges to the thinking, the AECB has set up a thread on its online discussion forum. Non members can watch the debate – members can post.

Please go to <http://www.aecb.net/forum/index.php?topic=2649.0>

Ends

Notes to editors

For enquiries and further information please contact Sally Hall, sally@aecb.net, tel: 0845 4569773 AECB, the sustainable building association (www.aecb.net), is a networking organisation, bringing together individuals and companies with a common aim of promoting sustainable building. Members include builders, architects, designers, manufacturers, housing associations and local authorities.

The AECB is run by its members and is an independent, not for profit organisation. Tackling climate change is an urgent priority for the AECB and it has amongst its membership many of the UK's leading practitioners in low energy building.

The AECB has been promoting excellence in sustainable design and construction for over 20 years.

To receive regular updates on AECB and other sustainable building news, register for our free newsletter *Network*, at www.aecb.net/network.php

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