

From: Gavin McPherson
Sent: 03 December 2007 18:24
To: Clair Hogg
Subject: RE: Question on the Cutting green customer confusion consultation

Dear Clair

Many thanks for the rapid response (I suspect that you've been asked this question already!).

Note that the IPCC figures refer to the Net Calorific Value of the fuel, not units of electricity supplied (see the first bullet under 1.2.2 of the 1996 IPCC report). This isn't necessarily a problem, as long as a consistent measure is used, but it's not clear what "kWh" refers to in the headings for figure 6.

More importantly, the 1996 IPCC report says that biomass is included "for completeness", and "should not be included in national CO2 emissions from fuel combustion" (final bullet under 1.4.1), and again in 2006 (see 2.3.3.4), since "Emissions of CO2 from biomass fuels are estimated and reported in the [Agriculture, Forestry and Other Land Use] sector".

In essence, the IPCC methodology recognizes that it is necessary to perform a degree of lifecycle analysis when considering CO2 emissions from biomass, since the benefits only appear when CO2 emissions at the point of use are offset by CO2 absorbed in production. That is why biomass emission figures are only reported as "information items" in the IPCC guidelines you refer to.

For this reason, I don't believe that carbon intensity at the point of generation is a good way of banding the different energy technologies.

I wouldn't suggest that biomass be awarded a carbon intensity of zero, since fugitive emissions are associated with growing the fuel and land use changes. However, the degree of lifecycle analysis which would be appropriate is a difficult question (for biomass and other technologies), and not one I propose to answer here.

In a related point, I suggest that greenhouse gas emissions – reported in terms of CO2 equivalent – are a better measure of environmental impact than CO2 emissions. In terms of impact on climate change from electricity generation, CO2 only gives part of the picture.

Kind regards,

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