

The Importance of Additionality for Accurate and Relevant Scope 2 Accounting

July 2012

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Introduction

This paper provides four simple examples which illustrate why *additionality* is an essential condition if contracted renewable electricity is to be counted as zero in scope 2 inventories. Additionality is essential if scope 2 inventories are to fulfil the GHG Protocol principles of relevance and accuracy, and to ensure that the reported information is a “faithful, true, and fair account of a company’s GHG emissions”.

Example 1. Accuracy

Widgets Ltd begins purchasing non-additional renewable electricity and reports it as zero emissions in its scope 2 inventory. Previously it had a contract for a mix of generation technologies, and reported the associated emissions. Because the contracted renewable electricity is not additional (i.e. it would have been generated regardless of the purchasing contract) there is no increase in the total amount of renewable electricity generated, and therefore there is no change in total GHG emissions either.

Widgets Ltd’s management and customers look at the company’s scope 2 emissions over time and see that emissions have reduced from the previous year to zero with the renewable contract. The management and customers believe that real emissions to the atmosphere have reduced, whereas real emissions to the atmosphere are exactly the same. Most stakeholders would feel that the information in the GHG reports is not accurate (i.e. it looks like there is a reduction in emissions, but there is not a reduction in emissions).

Example 2. Relevance

Widgets Ltd purchases non-additional renewable electricity and reports it as zero emissions in its scope 2 inventory. Because the emissions in the scope 2 inventory are zero the company does not think about undertaking any actions to reduce its electricity consumption, or to develop on-site renewables (as scope 2 emissions are already zero).

However, if Widgets Ltd did reduce its electricity consumption or develop on-site renewables this would have the effect of reducing actual emissions to the atmosphere, as total demand for grid

electricity would be reduced (and grid generation would reduce correspondingly, including fossil-based generation).

In this case reporting non-additional renewable electricity as zero leads to poor decision-making (i.e. Widgets Ltd would genuinely like to reduce emissions but their GHG accounts don't help them to make decisions which reduce emissions). The information in the inventory is not *relevant* for supporting good decision making.

Note: if Widgets Ltd purchased renewable electricity which was *additional* then reducing their electricity consumption or developing on-site renewables wouldn't reduce emissions – and counting such electricity as zero *would* support good decision-making.

Example 3. Relevance

Widgets Ltd purchases non-additional renewable electricity and reports it as zero emissions in its scope 2 inventory. In this example Widgets Ltd nevertheless undertakes measures to reduce its electricity consumption, however, because its scope 2 inventory is already zero the real reductions in emissions caused by reducing consumption are not reflected in Widgets Ltd's GHG accounts. The senior management question why the company is spending money on reducing consumption when it doesn't make any difference to *reported* emissions. The company then decides to abandon the energy efficiency programme as it doesn't appear to have any impact on emissions. Again the information in the inventory is not *relevant* for supporting good decision making.

Furthermore, Widgets Ltd would have liked to show its customers that its energy efficiency programme is reducing emissions – but its GHG accounts do not show this. They are not fit for the purpose of faithfully communicating the GHG emissions associated with the company's activities.

Example 4. Relevance and Accuracy

Widgets Ltd purchases non-additional renewable electricity and reports it as zero emissions in its scope 2 inventory. Widgets Ltd's main competitor Didgets Ltd decides not to purchase non-additional renewable electricity as it understands that doing so does not increase the total amount of renewable electricity that is generated (and therefore does not reduce actual total emissions). Instead Didgets Ltd decides to take the money it would have spent on the premium for non-additional renewable electricity and spend it on an energy efficiency programme which cuts its scope 2 emissions by 20%.

An environmentally conscious customer is deciding whether to use Widgets Ltd or Didgets Ltd, and looks at the two companies' GHG reports. The customer decides to choose Widgets Ltd as it appears to have zero scope 2 emissions, whereas Didgets Ltd has some scope 2 emissions. This is a bad decision as Didgets Ltd has done more to reduce real emissions than Widgets Ltd – the information in Widgets Ltd GHG accounts would not be considered accurate or relevant by the customer.

Conclusion: Additionality is an *essential* condition if contracted renewable electricity supply is to be counted as zero emissions in scope 2. The GHG Protocol guidance for green power accounting must require this condition. Failure to do so would undermine the credibility, relevance, and accuracy or GHG accounting.