

Carbon accounting for small businesses – video script



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[A global survey of the views of smaller accountancy practices](#) was published in March 2015. The survey concluded that the biggest challenge faced by firms was attracting new clients and half of those surveyed said they were concerned about differentiating their firm from the competition.

In this video I'm going to explain how an ACCA-registered practice in the UK has met those challenges.

I was delighted when David Wilsdon and his team at [Green Accountancy](#) agreed to share their expertise, so that ACCA could issue practical guidance on advising small businesses on carbon accounting.

In September 2014, we issued [Technical factsheet 190 as interim guidance](#)¹. This has been a free download on the ACCA website and crucially it was issued copyright free, to encourage firms, other accountancy bodies, or indeed anyone, to tailor it to their own needs: translate it, change UK to local figures, or include it in their own materials.

If you call yourselves 'Green Accountancy' the differentiation from competitors is about as obvious as it can get. But any firm can add a service line that gives an edge in attracting new clients. In this case, clients that benefit from it may also get a 'green advantage' with their own customers.

But, before we go any further, what is carbon accounting?

Carbon accounting, otherwise known as 'greenhouse gas accounting', is a way to measure and report the environmental performance of a business. 'Measurement' is the important word. When something is measured it can be managed. The management objective is to reduce the output of greenhouse gasses and help 'save the planet'. The connection between greenhouse gasses and global warming is now generally recognized. You can probably think of ways you have observed the impact of global warming.

I was on a rail holiday last year in Switzerland and saw first-hand how alpine glaciers are shrinking. This one on the Gornergrat near Zermatt has lost hundreds of meters over recent years.

¹ A revised version including 2015 carbon conversion factors will no longer be described as 'interim'. The IFAC Global Knowledge Gateway has published an article on TF190, under the title of 'Carbon Accounting for Small Businesses: How Accountants Can Help Everyone Be Greener' see <https://www.ifac.org/global-knowledge-gateway/sustainability/carbon-accounting-small-businesses-how-accountants-can-help->

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Plenty of organisations have been trying to make measurable and reportable the environmental (and other) impacts of business. But almost without exception, these initiatives have been aimed at, and only been taken up by, large corporations.

The vast majority of business globally are small businesses and their efforts to reduce carbon dioxide and other greenhouse gas emissions are more important collectively than the activities of the large corporations.

But the existing initiatives are not readily scalable down to very small businesses. The Global Reporting Initiative G4 Sustainability Reporting Guidelines for example have over 90 pages and are issued with a 260 page implementation guide. The authoritative Greenhouse Gas Protocol corporate standard is over 100 pages.²

Besides, the motivations of large corporations and (obviously) their resources are different to those of small businesses.

External reporting is very important for the type of corporation that over the last couple of decades has been pleased to receive ACCA sustainability reporting awards.

To give practitioners the right tool for their small business clients, ACCA has produced guidance, the core of which is contained in just ten pages.

This makes it potentially accessible to all, so that businesses are not deterred by either the amount of time it will take to complete the carbon accounts or the complexity of the process. The guidance has been developed in conjunction with Green Accountancy, an ACCA registered practice that successfully provides this service in the UK; so it is practical and proven.

How can it be so short, yet still deliver a useful outcome? It does this by introducing a simple and effective form of carbon accounting. The simplification comes primarily from narrowing down the scope of reporting to concentrate on common businesses activities that have significant measurable emissions, typically energy use and transport.

The factsheet explains this form of reporting, provides a methodology, and sets out 'conversion factors' – the means to convert physical measures, such as distance travelled by bus, into a carbon equivalent.

Guidance is also provided on the relevant professional responsibilities, such as a suitable engagement letter, and on marketing this new service. There is even an introduction to the wider sustainability reporting picture and the current initiatives like integrated reporting; because small clients can grow and because large customers want suppliers to understand their needs.

² TF190 includes hyperlinks to such initiatives.

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I'm going to explain firstly how the simplified form of carbon accounting fits in to an overall scheme for a client and then move on to accounting for the various business activities, and how that is reported.

This form of carbon accounting is broken down into nine decisions or stages:

First, set the relevant business objectives.

That will determine whether the whole business or just parts of it will be included; and help to

Identify the business activities that are responsible for greenhouse gas emissions and (after preliminary investigation) those to be accounted for

Then a practical decision has to be made: when to start – when the base year is going to be – and then how frequently will data need to be collected.

As ever, appropriate systems need to be designed and implemented for data capture, processing and reporting.

Reporting depends on the business objectives. Why is it being done? It might be being done because customers are demanding it, or a provider of finance wants it. It might even be just a matter of motivating staff to get more involved in what the business is doing. A key by-product of this decision is whether the carbon accounting results are going to be kept completely internal or whether some or all of them will be reported externally.

Systems for carbon accounting can be anything from the back of an envelope through to a parallel with the businesses accounting data flows, although the software necessary to do that will only be suited to the larger end of small businesses. Typically, ad hoc data capture with processing and reporting via a spreadsheet system will be suitable for most small business clients.

There is no point in carbon accounting for business activities that are only responsible for immaterial emissions. Typically, a business will look to its costs of heating or air conditioning, other electricity use, all of its various uses of transport and its consumption of water and perhaps consumables such as paper and packaging. There may be exceptions to this, which is why objectives were looked at first. If staff motivation is a key objective then it may be worth measuring all the areas that they can directly affect.

The next stages are to:

Collect primary data for the first or base period and convert it to its carbon dioxide equivalents.

Evaluate the outcome and decide future emissions reduction targets.

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Take steps to achieve the targets.

Monitor progress by evaluating later outcomes against the base period.

Carbon accounting is a bit like financial accounting in different currencies. In financial accounting, there may be a need to translate say dollars into a reporting currency of say euros using a conversion factor, an 'exchange rate'.

In carbon accounting, primary measurements are physical one: for example kilometres of travel on a particular form of transport, or kilowatt hours of electricity use. These are converted to a common reporting 'currency' for carbon by applying conversion factors that have been worked out and agreed for particular physical circumstances. Some of these conversion factors are fairly accurate but others are less so and indeed, in the case of air travel, choices remain available to an organisation as to which impacts it recognises in its carbon accounting. To a large extent, ACCA has taken the hard work out of this in its guidance, by selecting conversion factors obtained from reliable external sources.

I'm going to look at one of these conversions before moving onto the form of carbon report and a key element in it that allows comparison from one period to another, even when a business is undergoing rapid expansion.

Electricity use is normally metered, allowing a meter reading to be taken at the start and end of the reporting period. If that is not done it may be possible to examine electricity bills to work out the consumption for a period. Electricity bills themselves normally give the energy supplied in terms of kilowatt hours - this is priced up by the electricity company using the particular tariff applied to the supply.

Using an appropriate conversion factor the number of kilowatt-hours is converted to its carbon equivalent. A kilogramme of carbon dioxide equivalent is emitted for every 1.6 kWh of electricity consumed.

There are a couple of complications with this. The greenhouse gas emissions associated the consumption of electricity arise mainly at the stage where it is generated, for example from gas burnt in a gas-fuelled power station. But further emissions are associated with the losses in the electricity transmission between the power station and the consumer; so two separate conversion factors might have to be applied to the electricity. Using the figures available in the United Kingdom, the ACCA guidance provides a conversion factor that combines these two.

In the UK, consumers often have a choice of paying a different tariff for energy sourced from renewable sources such as wind or wave power. This may be allowed for in the carbon accounting if the energy supplier gives relevant data on its bills. If the supply is mainly from renewable sources there may be very little actual carbon for a business to report.

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Overall, the carbon attributable to electricity supply depends on the fuels used in power stations and the mix of traditional generation and that from renewables. Countries that are more reliant on nuclear power will generally report less carbon attributable to electricity supplies because nuclear power is preferable to power from coal or gas, at least as far as the production of carbon dioxide is concerned.

These country differences can feed through to other conversion factors. Emissions due to train travel reflect the mix of electric and diesel power used in a country's railways. Within this the mix of electricity generation can also be important. For example, the Eurostar trains that run through the tunnel between France and the UK claim a low carbon footprint because they use electricity from France with a high proportion of nuclear generation.

It is very simple to examine bills for energy supply, total the consumption for the year and use an appropriate factor in a simple multiplication to arrive at the carbon equivalent. Sometimes, however, a client may have difficulty in finding out consumption directly. This may be the case with shared premises or where the costs of energy are included in service charges. Depending on the need for accuracy, consumption can be estimated from knowing which devices consume electricity, times when they are normally in use and their power ratings.

The results for the various business activities can be brought together in a report. The form of the report will be determined by the business objectives and could be anything from a full external report through to a text message to staff.

Here is an example of a full report which can be produced even if it is decided not to publish it or use it in the manner that it is presented here.

The results have been aggregated to show what is important for the particular business and a key further stage has taken place. This is normalising.

Normalising is achieved by showing the figures against an indicator of activity, in this case per thousand currency units of turnover. By looking at this measure it is possible to compare one period to another, so that even a rapidly expanding business can see whether it is maintaining its efficiency, in terms of carbon, when its turnover is expanding.

For some businesses a different normalising figure might be appropriate such as the number of units manufactured or sold but the financial normalising factor is often to be preferred because it is not dependent on a particular industry or activity.

Looking briefly at some lines in the report:

Commuting is shown as one of the travel emissions, that is the carbon cost of employees travelling from home to the business. It's included because a business can take steps to reduce this.

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It is better for a business to get its most pessimistic view of attributable carbon because, that way, there is more scope for its actions to achieve benefits.

Paper use for many businesses is a significant matter. It has a higher impact than might be guessed, with as little as 60 sheets of paper resulting in the release of a kilogram of carbon dioxide.

Carbon attributable to the use of water is that expended by the water company in both supplying the water and dealing with related waste. For many businesses it will not be a large contributor to the carbon footprint but, if one of the objectives is to engage with staff, then promoting conservation of water is a worthwhile objective.

In the UK one chain of coffee shops took some damage to its reputation when it was revealed that staff had been instructed to leave a tap running to allow quick rinsing of used cups; so paying proper attention to a scarce resource is often sensible.

The report shows separate lines for potential deductions. In this case this is from the use of what is described as 'green tariff electricity' but it could involve own energy generated or the purchase of carbon offsets. Carbon offsets involve paying others to make carbon reductions, usually through an intermediary.

The problem with carbon offsets is that they are not as beneficial as direct carbon savings, nor are there guarantees that those supplying them are providing full carbon value as claimed. This is why they are shown in accounting terms, 'below the line'.

If a report is to be published it would be normal to attach appropriate notes, or 'carbon accounting policies', to explain: which parts of the business have been included, how aspects are measured, where conversion factors been sourced and so on.

The report could provide further analysis of emissions and comments could be made on any significant changes from the basis of preparation in the prior year. The report can also be used to comment on performance and look forward to future planned actions.

Reducing carbon emissions is not rocket science it is generally a case of reducing an existing activity, such as driving fewer miles, increasing the efficiency of an activity, for example driving a more fuel-efficient car or finding a better way to do something, for example videoconferencing rather than driving to a meeting.

A small business will often be faced with a choice between short-term and long-term actions. And it may be difficult to put in place the long-term actions for reasons that are not just affected by cost.

So, there we have it.

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That has been a run through of Technical fact sheet 190 and now it is up to you to have a look at it in more detail, and to decide whether it's something that you want to be doing for your clients. Appendix 2 of the guidance helps because it sets out for small businesses the reasons why they will benefit from carbon accounting.

There are two ways a client and indeed a practicing accountant can differentiate themselves from the competition. They can stand out because they take the lead - that's good. They can also stand out if they get left behind – that's bad.

Closing slide:

ACCA Past President, Brendan Murtagh

'ACCA believes that our members' accounting and financial reporting skills have a key role to play in the transition to and management of the low carbon economy. By providing additional green accounting skills . . . professional accountants will have a pivotal position measuring and managing carbon emissions.'