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Consciam's Carbon Data Sprint Challenge
Week two - Office data

SPEAKERS
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In this video, we're going to talk about the data you need to produce carbon footprint for your offices or warehouses or factories, whatever it might be for your business.

So these premises will tend to have a range of this type of impact. So that might be energy from heating or providing hot water. It might be a gas boiler or a diesel power generator. You might have some biomass, different things.

You're almost certainly using electricity across your site, so whether that's lighting and small power at desks or whether it's more significant for industrial processes.

Similarly, water, for a lot of businesses, will be relatively modest. It's water used in bathroom sinks, toilets, perhaps a shower. But again, you might be a business that has some sort of significant industrial water consumption, or maybe a holiday park or hotel.

There's waste, which can be in many different forms. So it could be traditional office-related waste - so mixed, mixed recycling, general waste, which is often called rubbish, or it might be something specific.

And then we're also going to look at refrigerant gasses. So if your offices or factories have air conditioning systems, then there's a good chance they'll have what are called F gasses in them, and if they leak, they can have quite a significant global warming potential. So we need to measure those gasses. But that's not as complex as it sounds.

So we're just going to look through some of the data and give you some points as to where you can get this from.

So when we talk about energy data, we're talking about things like natural gas. It could be bottled gas, which might be called Calor gas, or LPG or propane. Perhaps heating oil, sometimes called kerosene. Might be some diesel that's being used for industrial systems or backups, or you might be using fire mass, which might typically be in the form of logs or pellets.

So you can get this data from bills. They're our bessels. It's good primary data. It tells us exactly how much of something we've used, and sometimes those are through a supplier portal, and you can download the data, or it might be paper-based bills, or you might be taking on-site meter readings, which is also really good primary data.

In terms of who to ask for that information. Well, your finance team is always a good starting point. They're paying the bills. The procurement team may have arranged for it to be delivered in the first place and be able to give you information. And if you have them, office managers will also, most likely have some information, or you might need to talk to your landlord about this.

Our top tip related to energy data really is about units. You might find that data is expressed in multiple different ways on a bill, it could be in kilowatt hours, meters cubed and cubic feet. Or it might be in litres and kilograms. So you'd need to be aware of that and make sure you're consistent with what you do.

So in terms of electricity, this is a bit more simple for the most part. So we just look at purchased

electricity. So it's the electricity that effectively is shown on your bill that's been imported into your site.

Couple of things to watch here will be related to whether you're using renewable energy, because if you are, if you're using 100% renewable energy, you can use slightly different factors in your calculations that mean you have lower emissions.

Or if you're generating electricity through solar panels or potentially wind generation or something else, you don't include that generation in your footprint. You just include the purchased electricity, what you're buying from the grid.

In terms of data sources and who to ask, that's going to be the same as gas, so bills, supplier portals and meter readings, all key members of your team

Moving on to waste. So waste, as we've said, can be in many different forms, from our traditional waste through to specialist waste, such as electrical items. So that's WEEE or it could be toner, or it could be something from your industrial process You know, perhaps you produce a lot of pallets or other materials – off-cuts of materials that have to be dealt with in specialist ways.

Data Sources – similar. Hopefully, your waste contractor will be able to give you some really useful information, some statements or some invoices. And again, the people you would talk to would be much the same in within your organization.

I've put manual measurement on there as an additional data source. So particularly smaller companies, they may not have a dedicated waste collection partner, or they may not be able to give them specific data because it's been collected for a wider building.

Sometimes it's useful to go and do some bin measurements of your own on site. So weigh those bins for a week or two, get a sense of how much you use, and then you can use that in your footprint.

One of the important things about waste, actually, is generally not the carbon impact unless you send a lot of waste to landfill, it's more what happens to it and helping you to understand how much waste you're generating as a business.

And what the opportunities are to reduce those. Put a top tip on there of asking where your waste ends up. It's very easy sometimes to assume that waste that you think has been recycled is being recycled. So it's worth checking with your waste provider. The same goes for your general waste. Just double-check that that is actually

going to where you've been told it is. So whether that's energy from waste, perhaps, or combustion, and it's not going to landfill.

Terms of water, again, pretty simple. And for most businesses, is not a significant part of their impacts. But if you're a food processor or hotels or something like that, you might be using a lot more water.

So two things we're measuring here. One is the amount of water that you're using, the incoming water, and secondly, the wastewater that you're generating. Now, in most cases, water in is water out. So we can just take one set of results, maybe use 100 cubic meters of water, and we'll also insert that you're using 100 cubic meters of wastewater or sewage.

So again, very similar range of sources for this data.

The last one, as I mentioned, was refrigerant gasses. So these are leaks from your air conditioning system. Your, if you do have these sort of systems, they should be being serviced annually to check that they are working as they should, and your service record should indicate whether or not any top-ups of these F gasses, as they're called, were applied to system. If they were, you need to account for that in your carbon footprint.

So the sort of information you'll need will be the F gas type, which might be something like R410a or a whole bunch of other numbers, and then the amount, so that the kilograms that were added to the system.