

Sustainability TechSprint 2021: TechSprint Demos

Thursday, 21 October 2021

HRMC-C

Presenter: David Leake, Jonathan Hamilton

Judges: Francesca Hopwood Road (Chair)

- Bruce Harrison; Managing Director, BlackRock
- Elena Strbac; Global Head, Data Innovation, Standard Chartered
- Emily Keaney; Director of Legislative Reform, Information Commissioner's Office
- Emily Pierce; Assistant Director, International Affairs, U.S. Securities and Exchange Commission
- Jayne Wickins; UK Banking Director, Microsoft
- Stephen Ingledew; FinTech Scotland Executive Chair
- Satoshi Ikeda; Chief Sustainable Finance Officer, Japan Financial Services Agency

David Leake

Hi everyone, we're going to talk today about introducing a new carbon attribute to digital payments as we believe this would simplify and standardize carbon reporting. So if we could go to the first slide, please.

The need here is for more transparency around the consumption of carbon in the economy. We see various requirements, so improving the E component of ESG disclosures so they are more standardized and include scope 3 emissions, reducing the burden on smaller businesses so they can start reporting all of their emissions for the first time and helping consumers to make more informed choices about products, services and investments based on their carbon intensity. So could we go to the next slide please.

The way we can do this, is to use spending data to measure carbon emissions. There are already established scientific approaches on doing this, which input and output models and other techniques to assign very specific carbon factors to key areas of activity. For example, petrol has a carbon factor close to three. Meaning for every £1 spent on petrol, three kilograms of CO2 are released into the atmosphere. So multiplying spending in different areas by these carbon factors, we can profile emissions in a very easy way.

Can we go to the next slide, please?

These approaches are already starting to be used. We have a number of start-ups and FinTechs offering carbon profiling based on spending and these are becoming adopted by banks and financial service providers. But crucially, there are as of yet, no universal standards of doing this and reporting isn't mandatory. Next slide please.

These approaches show real promises precisely because of how concentrated carbon emissions are. As this analysis on the household sector shows, just five payment types account for almost 50% of all emissions amongst households. We also see a similar principle in the corporate sector, where just three areas of activity account for almost two thirds of emissions. Next slide please.

So, recognising the value of this approach, our proposal is to introduce a mandatory carbon attribute to payments that carry the highest carbon intensity. This would make it much more easier to report on carbon. As these attributes would flow through the system into disclosures, accountancy systems, and even consumer bank statements. It would also allow regulators to verify a company's green status and bring much needed transparency to consumers. So to unpack this proposal and how it could work in practice I'll hand over to you, Jonathan.

Jonathan Hamilton

Thank you very much David. If we could go to the next slide, please.

So the way we imagined this working would be a kind of standardized framework that would be underpinned by a universal standard of carbon factors and you can think of this as the kind of a uniform data set. An analogy there would be the tax codes that we used with HMRC and this standard would allow carbon intensities to be assigned to the digital payment types, with the highest intensity of emissions. And what we would see here is opening up very interesting opportunities to standardize and simplify the corporate disclosure process. Open up a disclosure pipeline somewhat similar to how we imagine tax being disclosed and this in turn, would allow the HMRC-C, and in this case the extra C stands for carbon, to both aggregate and profile the carbon emissions captured within these accounts with the ultimate goal of building verified GHG profiles for those entities. And off the back of those profiles we see the potential to both influence and support three clear use cases.

So the use case, in this case, would be being able to verify ESG disclosures made by large corporate entities. It would allow us to think about sustainability labelling across the economy on most products, services, and potentially investments as well. And would also allow us to study that the macro level for things like ESG insight and potential regulatory intervention, and downstream of that we see a lot of potential in several different areas. So you can imagine this at a downstream consumer level in product and service labelling the way that we label food with carbohydrates, sugar, and fat, et cetera. We could imagine publicly available investment labelling and analysis, allowing investors to make informed choices. Business to business, we would imagine supply chain management would become much more transparent and would also allow the FCA and other entities to tailor specific transition plans for those large entities. There is also potential here to open this up to large financial services providers, which in turn would allow them to create consumer facing digital insights and products focusing around carbon. Thank you very much.

Francesca Hopwood-Road

Thank you very much team HMRC-C. Maybe I can come to Emily for your question clarifying how carbon spending would interface with GHG.

Emily Keaney

Yeah, so my question was how would the data on carbon spending interface with the disclosures related to GHG emissions?

David Leake

So I can take that one, Jonathan, if that's helpful. So typically, with carbon you look at carbon dioxide equivalence as a kind of a unit of analysis here so it would encapsulate the different GHG emissions as well as carbon. Any other questions?

Francesca Hopwood-Road

I'm just thinking we've got one from Stephen. Stephen are you going to come in and ask yours? Or shall I go to Jayne?

Stephen Ingledew

Thank you, yes. Does that apply across all types of payments? For example, business to business supply chain payments.

Jonathan Hamilton

I can take that one if you want.

David Leake

Yep

Jonathan Hamilton

Yes absolutely that would be the ultimate end goal with this. Of course, with multiple payment providers kind of working across the UK economy, there's a slight challenge on the coalescence of that, but for us that implies the kind of need for a centralized oversight and a standardized model in this kind of vein. So basically we can get them all signing of the same hymn sheet.

Francesca Hopwood-Road

And finally one last time for a question from Jayne.

Jayne Wickins

Thank you. How would you ensure it was easy and transparent for consumers to understand?

Jonathan Hamilton

Again I can take this one David if you want.

David Leake

Yes

Jonathan Hamilton

Yeah so, I think demonstrating impact on consumers here is one of the unlimited goals of doing such a standardized method. We imagined this kind of coexisting and taking a lot of inspiration from the way we label food products. So when you go to the supermarket to buy food products you normally get a kind of red, amber, green status indicating the sugar, fat, salt content of those products. We imagine a very similar thing could exist across many different products and investment types.