



Timely thematic topic: Decarbonisation

Amazon becomes the world's largest corporate purchaser of renewable energy

Background: **Amazon announces 26 new wind and solar utility projects**, to rapidly decarbonise its business operations, and claims to be the largest corporate purchaser of renewable energy.. Amazon has made a corporate commitment within its own ESG framework and sustainability goals to **completely decarbonise its entire business on a net carbon basis by 2040**, 10 years earlier than required within the Paris Accord Agreement.

Three phases to this:

1. Decarbonise direct energy consumption – 100% Renewable Energy by 2025. That means energy going into giant server farms, warehouses, Amazon Prime online streaming service, everything it uses energy for to run its primary operations. Electricity is the main source of energy here, so renewable projects where Amazon buys the clean electricity decarbonises these 'Scope 1' emissions. Fortunately, switching to renewables results in no increase in cost, this is proverbial 'long-hanging fruit'.

Importantly, while Amazon is 'catching up' a bit with today's announcement, the company continues to grow >25% annually. All of that growth will need additional clean electricity infrastructure.

2. Decarbonise 'getting piggy to market' – 50% of all shipments net zero carbon by 2030. That means all the energy it takes to get their products to customers, decarbonising delivery trucks, planes, and the fuels that they use, which isn't totally commercially possible yet. They aren't waiting for the answer, they are helping to create it.
3. Decarbonise 'the things we sell'. Eventually they plan to decarbonise all directly-made Amazon goods, like a Kindle or Fire. Think for a moment about what goes into those things, how many individual chips and components. Things like TSMC in Taiwan makes for example — they just did their own big renewable deal precisely for this reason.

It is unclear yet if Amazon will ever require all products on their platforms from third party suppliers to also be entirely decarbonised by 2040. Those goods aren't part of the calculation of Amazon's carbon footprint—yet. But its possible many manufacturers aren't going to want to wait and find out — that is not a risk anyone will take. Equally in Europe these are requirements within their Green Deal regulations for all manufacturers and distribution businesses anyway. You could say Amazon is just taking the EU framework on climate change transition needed, and accelerating it.

26 separate projects in eight countries which would have the capacity to produce 3.4GW of electricity were announced in unison today by Amazon and its counterparties supplying the clean electricity. This beats the prior biggest corporate announcement by Google last year of 1.6GW.

What does it mean?

It is yet another sign of the tremendous activity underway to underwrite, with long-term contracts, new renewable infrastructure projects that will rapidly accomplish Amazon's goal towards zero net carbon. While the total value of the contracts has not been disclosed, if we used \$1,500/kw estimate for developer costs, it would represent almost \$5 billion of new capital expenditures by the renewable developers.

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