

Investing to transition our energy systems — and the whole economy

To achieve Net Zero, infrastructure investments must think beyond renewables and across the entire economy.

Renewables are essential to achieving Net Zero, but other infrastructure investments that enable their distribution and empower industries to deploy emissions-reducing strategies are just as critical.

Here, EQT's Benjamin Bygott-Webb and Crosby Cook discuss the role of private capital in driving decarbonisation across the entire economy.

Beyond renewables, what energy solutions are exciting for investors?

Benjamin Bygott-Webb: Renewables have rightly been front and center, but they won't solve the energy transition alone. Significant investments in other areas are required if we're going to keep within the 1.5°C target. We need to invest in the grid to cope with the shift in how power is produced and consumed, in decarbonising the transportation sector, and in Long and Short Duration Storage. For example, UK energy storage company Statera was an investment EQT made to help address grid intermittency that can be caused by deployment of renewables. We also back InstaVolt, which is helping lead the rollout of the public EV rapid charging network in the UK.

Crosby Cook: We invest in renewables because energy generation is the number one emitter of greenhouse gasses, and there are scalable technologies that can be invested in today. But we also invest in businesses critical to the supporting infrastructure, such as Osмосе Utilities Services, which provides resiliency services for upgrading the transmission and distribution grid. We also look for opportunities that enable the consumption of clean energy and electrification of everything. Our fleet charging business Voltera was spun out of our global data center business, EdgeConneX, and leverages expertise from building hyperscale data centres to work with utilities to upgrade connections and distribute electricity for fleet charging.

How important is resource efficiency and circularity?

Bygott-Webb: The circular economy is fundamental in reducing emissions from the production of new materials as well as avoiding harmful waste. There are already opportunities to invest in new technologies to improve how we manage and treat waste. Encyclis, a waste-to-energy company in our portfolio, is one of a handful of sites selected by the UK government to build out carbon capture. If you can get cost-effective carbon capture working, and roll that out across the waste-to-energy sector, it will be a silver bullet for the circular economy. You're removing waste, producing electricity, and removing carbon – it would be one of the few sectors that could be truly net negative, let alone net zero.

As we move to an electrified economy, we're also going to have a completely different structure of waste. Recycling batteries is difficult, but essential, and there will be interesting solutions for second-life batteries. For example, a degraded battery may not be useful for driving a bus, but it could be repurposed for grid support.

Cook: We own a battery recycling business, Cirba, that is recycling lithium; there are significant tailwinds to this business, such as the use of lithium in car batteries and larger scale storage batteries, but also the knock-on effect of reduced demand for mining activity. Similarly, our waste solutions company, Reworld, is primarily focused on zero-waste to landfill and renewable energy generation, but it also recycles around 500,000 tons of steel annually, avoiding over 1.2 million tons of greenhouse gas generation from the mining and production of new steel. Mining accounts for 4-7% of the world's greenhouse gas emissions, so finding a way to make things we pull out of the ground go farther is an important piece of the decarbonization puzzle.

When do opportunities in other hard-to-abate spaces become investable?

Cook: The entire economy is going to change. But it won't happen all at once, and we can make significant progress by investing in areas with proven and scalable technologies, such as renewable generation and electrification of transport. Other areas will come later as technologies advance and become more economical. Steel and cement production are major contributors to greenhouse gas emissions and are therefore logical next targets for decarbonization looking 5-10 years ahead. We're monitoring the relevant technologies, such as hydrogen and waste-derived fuels.

Bygott-Webb: We do a lot of work to stay ahead of the curve and get in at the right stage of investment. Our value-add strategy looked at destination charging for about four years before we invested in InstaVolt, for example.

What role does private capital play in speeding up the energy transition?

Cook: The role of private capital is to work with companies to promote proven technologies by investing in the necessary resources and providing outside expertise and governance to help manage the transition. Our portfolio company, First Student (see box), is North America's biggest and market-leading provider of student transportation with over 40,000 buses in operation. EQT has installed a board with relevant expertise and built a dedicated electrification team to work with government bodies and school districts to ensure grant money for electrification is used effectively and efficiently. We believe this is where



the student transportation market needs to go, and First Student is well-positioned to lead.

What's needed to increase investment momentum towards Net Zero?

Bygott-Webb: The biggest obstacle is the pace and efficiency of government support. We saw it in renewables — it started with subsidies, and then the industry stood on its own two feet. You will see this again in support of new technologies and innovation, for example hydrogen. Luckily there is support from governments around the world as they realize the fundamental need to decarbonize. This trend will be amplified by technological innovation, irrespective of policy.

Case Study: First Student

Acquired by EQT Infrastructure in 2021, First Student aims to have 30,000 electric buses on the road by 2035. It also plans to inject electricity stored in bus batteries back into the grid when not needed.

So far, First Student has been awarded \$425M in rebates from the Environmental Protection Agency's Clean School Bus Program, which will enable over 1,200 buses to be deployed across the US. First Student is also partnering with utilities companies to pilot vehicle-to-grid charging. Already, First Student has driven over 3.5 million electric school bus miles — providing children cleaner, safer trips to school.

