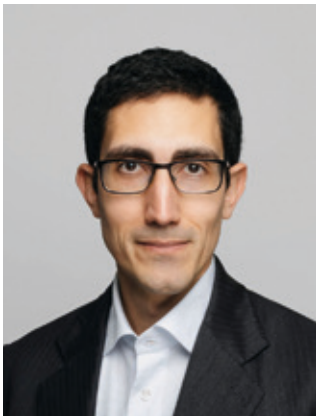
KEYNOTE INTERVIEW

Getting hands-on with climate adaptation



Rising climate risk demands a proactive approach to adaptation and mitigation, according to Cube Infrastructure Managers' Aurélien Roelens, Erwann Duquesne and Tiffany Yang

The UN Intergovernmental Panel on Climate Change predicts that, by 2100, greenhouse gas emissions will drive a 3.2C increase in global average temperatures compared to pre-industrial levels. That huge change is expected to result in amplified climate risks, more acute and adverse weather events, and the urgent need for adaptation – particularly in Europe, which is already warming twice as fast as other continents.

So, what might adaptation look like for investors in the various kinds of physical infrastructure exposed to these real-world climate risks? For Aurélien Roelens, head of ESG, Erwann Duquesne, senior ESG associate, and Tiffany Yang, ESG analyst at Cube Infrastructure Managers, it is a question of taking a systematic approach to assessing that risk, and working proactively with portfolio companies to ensure meaningful change is delivered on the ground.

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Q Thinking about climate adaptation, what needs to be considered in relation to the design, construction and people aspects of infrastructure projects?

Aurélien Roelens: Historically, when considering all the calculations involved in designing a new infrastructure project, you largely relied on past data. But that meant you would be building for a world that no longer exists, rather than a world with higher overall temperatures and more frequent extreme events. We need to build new projects and upgrade infrastructure while factoring in adverse climate scenarios and their potential consequences, as well as the larger mitigation measures already undertaken.

For instance, when building fibre networks in southern Europe, we have to consider the increased risk of wildfires, which might mean building critical parts underground, for example. This is the kind of solution that infrastructure investors can provide. It is something policymakers also need to incorporate more in their planning, both for the projects themselves and also at a wider level.

One question is where future infrastructure will need to be built. If it is built to serve people, we need to consider the shifts in population that may result from climate change. For instance, populations could be displaced in parts of Europe severely affected by droughts, clay swelling and shrinking, or coastal erosion.

Lastly, it is essential to consider evolving working conditions in light of climate change. Workers, particularly those involved in the construction and maintenance of infrastructure assets, are already exposed and will be increasingly exposed to extreme heat and other life-threatening climate-related events. We will need to adapt the way we operate to ensure the safety of workers and subcontractors, and that is an evolution that might also be mirrored in future labour regulations.

Q How does climate risk mitigation relate to the energy transition trend?

AR: Committing capex to the energy transition ultimately contributes to protecting assets from the consequences of climate change, as adaptation efforts naturally have physical limits.

After all, at its core, infrastructure investors' role – and that of portfolio companies – is to partner with public authorities to deploy capital into essential infrastructure that supports societal needs and enhances the population's quality of life over the long term. That means they will play a critical role in the energy transition in the years to come.

There is ample dry powder ready for investment, and a massive need across Europe for capital in areas such as renewable energy generation and new infrastructure such as EV charging stations, storage facilities, and hydrogen production and distribution. Equally important is investing in infrastructure that underpins this transition, such as strengthening our electricity grid, which is essential not only for the energy transition but also for the ongoing digital transformation.

Furthermore, we can drive transformation by deploying capital into existing operations, enabling a profitable transition to cleaner technologies. We can point to the example of two successful exits of our first fund: Boreal in Norway, a pioneer in clean mobility, and Idex in France, which introduced greener, more localised energy sources for district heating.

Q Why is systematic climate risk analysis essential for infrastructure investors, and what should that look like?

Tiffany Yang: Without a systematic approach, companies will not know what their future climate risks look like or the potential losses they face. Modifying infrastructure to prepare for climate change takes a long time, which makes the early, long-term assessment of climate risk even more critical.

AR: At Cube, we began adopting a more systematic approach nearly 10 years ago, mapping risks at the asset level prior to investment to account for potential impacts or adaptation costs. In addition to evaluating the risks directly affecting infrastructure assets, we also assess the indirect risks touching companies' supply chains. During the holding period, we work closely with management teams to deepen this analysis and drive further risk mitigation efforts.

While not all portfolio companies have a clear perspective on how climate change will affect their infrastructure over the next 30 years, we have developed specialised training programmes to support their understanding and the execution of comprehensive assessments. Only once you start understanding the risks can you start taking mitigating actions. These climate adaptation measures are then integrated into the ESG action plans, which are reviewed and updated annually.

For example, our fibre network operator dstelecom has potential exposure to wildfires in Portugal. With networks covering most of the less dense areas of Portugal, wildfires can, for example, affect the aerial sections of the network. This risk was carefully factored in while the network was being adapted and extensions were being designed. There are also indirect risks: the power supply to the network's "nodes" sometimes crossed at-risk wooded areas. Investing in more efficient cooling, coupled with local green energy generation, allowed the company to continue serving homes, businesses and towers

even during power outages. The minimal disruption caused by the dreadful wildfires in September 2024 has underscored the resilience of the network, the effectiveness of long-term planning and the high quality of the company's work over the past seven years.

Of course, when designing new infrastructure, we have more leeway to create something resilient, but it must make sense economically. For existing investments, a judgment call needs to be made on the cost of adaptation versus the risk during the technical and economic life of the asset, while also listing opportunities to build further resilience (planned renewal or large maintenance).

Q How can investors support climate adaptation measures?

TY: In recent years, we have seen the infrastructure community getting more and more aware and organised when it comes to conducting climate risk assessments systematically. For instance, we are participating in a workstream with the Initiative Climat International targeting the creation of shared climate risk mapping, which will help investors develop a common understanding, identify the most material hazards for different sectors and their financial implications.

Erwann Duquesne: Once you know there is climate risk around an investment, it is possible to look at the measures that public authorities are already taking to tackle those, to see how they are helping both the populations and the infrastructure itself to adapt. That has to be factored into investment due diligence, as that is what will help us foresee the measures we can leverage to protect the assets.

If any further adaptation measures are needed, the first consideration is whether they are 100 percent necessary and also suitable; those measures need to make sense from an economic and risk management perspective. Investors should also engage with policymakers, public authorities and other stakeholders. For instance, if in a public tender adaptation measures have not been factored in, it may be difficult to integrate additional investment and still be competitive.

Q How can infrastructure players support energy efficiency efforts and the phasing out of fossil fuels?

ED: Companies can take some easy steps to enhance operational efficiency. For example, public transport businesses can save fuel costs through better monitoring of routes, optimising tyres and lightening loads. Our former portfolio company Umove, the leading line bus network operator in Denmark, cut its fuel consumption per 100km by 12 percent using these kinds of initiatives. We have also achieved a reduction of 18 percent with Mekka Traffic.

The other option, which requires significant capital expenditures, involves both developing energy efficiency and greening the asset as much as possible. For instance, we have invested in Enetiqa, a district heating company in the Czech Republic. We have been encouraging the company on its decarbonisation journey and supporting the modernisation of heat distribution networks. Under our stewardship, the networks have been modernised by replacing steam with hot water, minimising energy losses. The firm has also accelerated its switch to greener energy sources, transitioning away from coal towards biomass and energy-from-waste, four years ahead of its original plan.

> *"Adaptation measures need to make sense from an economic and risk management perspective"*
>
> **ERWANN DUQUESNE**

Q What role does the formal adoption of sustainability certifications play?

AR: We see several advantages to formal certification frameworks.

First, even though all our companies have been engaged in material carbon reduction actions, clear credentials and certifications undoubtedly help demonstrate commitment and progress in front of public authorities during tendering, and in front of the end-users. For instance, our French temperature-controlled logistics operator Dispam has obtained the label 'Objectif CO2', showcasing its environmental excellence to its clients.

Secondly, it is a source of pride for companies when they achieve those certifications, and it often resonates with employees. In our infrastructure operations, where it can be hard to attract talent, cultivating and projecting a positive corporate image that aligns with workers' values is invaluable.

Thirdly, these initiatives establish clear guidelines that companies can commit to, introducing rigour and a systematic approach to these commitments, bolstered by the benefits of external verification. This standardises efforts across various organisations, ensuring consistency and, in some cases, enabling the development of plans that extend even beyond our holding period.

Finally, these formal initiatives have the potential to facilitate the sharing of best practices between companies in similar sectors and beyond – for instance, between our portfolio companies committed to the Science-Based Targets initiative, such as dstelecom and Enetiqa. ■