Hello and welcome to Watson Farley and Williams’ ‘Countdown to COP: Financing and Fuelling the Future’ podcast series.

I’m your host, Mhairi Main Garcia. In today’s chapter we’ll be discussing the infrastructure sector and the drive towards net zero.

I would like to welcome our guest José María Anarte. José María is a partner in the firm’s finance group based in Madrid specialising in project finance transactions with an emphasis on energy and infrastructure.

He advises both sponsors and lenders on a large variety of strategic transactions, as well as advising on public concession agreements and public procurement.

José María has more than 20 years of experience advising on all types of infrastructure assets and is currently co-leading Watson Farley & Williams’ infrastructure campaign, coordinating the firm’s infrastructure capabilities on a global basis.

Welcome, José María, and thank you for joining us today.

Many thanks, Mhairi. Glad to be here. By the way, congratulations for this initiative.

Thank you and I’m delighted to have you participating in it. Let’s begin this discussion and set the scene.

Where is the infrastructure sector in the drive towards net zero?

Well, we have seen that the sector is inevitably moving towards net zero targets. But we should be aware as well that this is a process, and like any process, it entails a series of objectives to be achieved. We need to recognise that achieving net zero in infrastructure, in practice, will take time. And that real transformation in how we design, build and operate our properties needs to begin immediately but cannot be fully achieved overnight.
Obviously, climate change is pressing, we have seen public and private sectors increasing their commitments to achieving net zero targets by 2050, but only a few of them have developed comprehensive infrastructure programmes to enable this transition. So, to conclude, in my view infrastructure has the power to support net zero transition. I think that the energy and transport sectors have given us good examples of how to do it. But the net zero pathway in infrastructure must be pursued with greater urgency and on a global basis if emissions targets are to be met.

Host: Mhairi Main Garcia

Thank you. And so, then the question is: how we can enable such a deep and fast transition when many governments have record debt levels and the required technology is still being developed?

Guest: José María Anarte

This is a very good question. I think that data are critical bricks in the net zero pathway. We definitely need better data to enable required innovation and to meet urgent deadlines. With better and actionable data and scenario modelling, decision makers should be enabled to prioritise the funding of net zero infrastructure.

Currently, I think that the lack of clear and global data impedes governments’ ability to design long term solutions and to fund those solutions during comparatively short political cycles and governing terms.

I also think that investment decisions remain to be taken based on existing local precedents rather than integrating global knowledge and innovation.

So, for the decision makers to make the right decision, I think that we need to collect data on a global basis and an aggregated scale. Probably we need a global agency within the sector to process and monitor all this information and definitely we need more transparency and more projects. But, at the end, we have to bear in mind that infrastructure assets have been historically attractive for investors based on their certainty and stability. So, with better data and coordination between the public and private sectors the net zero transition and infrastructure should be feasible.

Host: Mhairi Main Garcia

So up-to-date, global data, global knowledge and global innovation is critical in your view?

Guest: José María Anarte

Absolutely. I think that all these actions have to be coordinated at a global scale. Actually, it should be one of the ways to tackle one of the main challenges that we have to face in net zero infrastructure, which is the lack of infrastructure.

Host: Mhairi Main Garcia

What do you mean when you’re talking about infrastructure and net zero?
Guest: José María Anarte

That's a good question, Mhairi, because the infrastructure concept is evolving into new places nowadays. But when we talk about infrastructure in this area, social infrastructure for example, it includes housing, schools, hospitals, at the end, buildings that support social and spiritual relationships, health and well-being, education, employment, leisure, et cetera. So, we need to consider how we heat our buildings with low carbon and/or renewable heating to improve the efficiency of our buildings. I think it's vital to change our behaviours in helping lower emissions and we need to start using all our energy efficiency technologies that are in our hands for such purposes. From digital infrastructure including fibre, data centres or towers, to energy infrastructure including renewables, including grids, for example, gas transmission or storage.

In addition to social infrastructure, we also need to talk about transport infrastructure. It includes roads, rail, ports, airports. At the end, transport covers everything from street lighting and traffic management to electric vehicles, logistics and sustainable travel. In this regard, we must remark that the transition to electric vehicles is one of the most important actions in achieving carbon net zero. So, charging infrastructure is vital.

And finally, at the end, we have to recognise that in practice, all infrastructure sub sectors are facing low carbon and net zero challenges.

Host: Mhairi Main Garcia

Thanks. So, we’re looking at a broad remit capturing both social infrastructure and transportation infrastructure, as well as a number of significant and growing sub-sectors.

Given such a broad sector as the infrastructure sector, what are the main challenges for achieving net zero?

Guest: José María Anarte

Well, I think that globally, we see two main challenges on this. The first one, very obvious, is the ageing of infrastructure. Ageing infrastructure needs continuous follow-up and support and maintenance. Keeping up this infrastructure and updating it, it’s a preserving effort that normally is financed through tax money. So, this may imply political preferences to delay the implementation of these necessary maintenance actions. At the end, the maintenance of this infrastructure must be made on a life cycle assessment basis, because otherwise cumulative investment gaps can easily exceed available funding.

The second challenge that we need to bear in mind is the lack of infrastructure. But, on this, the question is: could a lack of infrastructure investment derail the ambitious climate goals or, can the governments turn these obstacles into opportunities? To me, in fact, it should be considered as an opportunity and the construction of the new infrastructure should be based on a life cycle assessment, low carbon materials, and a deep use of energy efficiency technologies. Also, I think it should be coordinated on a global basis, following coordination between public and private sectors and taking into account global data and scenario modelling collected at the scale.
Host: Mhairi Main Garcia

So, two main challenges: ageing and inefficient infrastructure; and a lack of infrastructure. How can these challenges be tackled?

Guest: José María Anarte

That’s a good question. I think that there are multiple ways of tackling these challenges which vary depending on the type of infrastructure we are talking about. If we talk about social infrastructure, we need to refer to district heating, for example. District heating is about generating heat in a centralised location and then distributing it to residences, businesses and industry in a local area. To me, district heating networks represent great potential to use low carbon energy for consumption. Also, I think we need to refer to smart cities as a great opportunity – to reduce energy consumption, for example, while meeting service demand.

But, if we talk about transport infrastructure, we also need to refer to airports and airlines. Airports are quite conscious to get to net zero although the airline situation is trickier, given that electrified planes or hydrogen planes won’t be available at scale for a long time. So, the best solution for this particular sector seems to be sustainable fuel aviation.

We also need to talk about gas. Investment in gas is key. We have seen that in practice all gas transmission projects and networks have developed transition strategies like hydrogen and it is also due to that gas is seen as a transitional fuel within the European Union taxonomy. So, at the end, continuing investment in gas will be key in my view.

Finally, in cities where there has been a rapid urbanisation process, there is a need to shift away from private cars to electric vehicles in order to tackle climate change, improve the air quality or reduce traffic injuries.

Host: Mhairi Main Garcia

Thank you for that. And what about new infrastructure? Is there a lot that can be done there in terms of tackling the challenges?

Guest: José María Anarte

That’s a very good point indeed. We need to see new infrastructure as an opportunity to tackle all the challenges for net zero and infrastructure and particularly, we need to talk about decarbonisation in construction. So, nowadays, manufacturers are developing low carbon materials to reduce carbon in new buildings. Examples of these include low carbon concrete, low carbon steel or standard timber frames. At the end, I think that we need to change the way that the infrastructure is designed, built, operated and how its materials are discarded with the ultimate aim, and I think it’s very important, the ultimate aim is to refuse or reduce significantly the amount of new materials that are entering into the system.

Finally, I think that we should also mention as an important measure to tackle infrastructure challenges for the purposes of net zero transition, is the refurbishing of existing infrastructure and
also land uses. Refurbishing assets is a great and cost-effective way to reduce the carbon footprint, I think LED lighting is a good example of it.

And finally, in relation to land uses, tall buildings offer a good opportunity to developers, to leverage more value into a single plot of land. I think all of this will maximise value and will balance emissions which, at the end, will be crucial for the drive to net zero for the city.

Host: Mhairi Main Garcia

Indeed, there's a lot that can be done and needs to be done, José María. But, if we look at what has to be done, given that there is so much to be done, how can it be funded? If the energy transition in the drive towards net zero is going to be achieved, how is the development of new infrastructure and repurposing existing infrastructure going to be funded?

Guest: José María Anarte

Well, obviously the scale of change that is required over the next decade to move towards net zero targets will demand unprecedented levels of funding, financing and regulatory coordination. All these changes can only be achieved if public and private sectors fund and finance infrastructure that is greener and more circular. There is no secret that financing net zero must be a principal priority but, obviously innovations into financial innovations have to be also implemented.

One example could be structured financial incentives and also the creation of a scale through sponsored collaboration in order to attract private investment. At the end, we have to recognise that investors have record levels of cash reserves available and that they are seeking projects that are commercially attractive.

So, in addition, ESG ratings and metrics are increasingly being attached to financing and the issuing of social debt products is also growing across all sectors.

Host: Mhairi Main Garcia

So, it's clear that financiers are looking for more green and sustainable projects, but is there enough funding for the scale of change that is required?

Guest: José María Anarte

I think there is, but the main challenge for the governments is to make all these projects bankable to tap available financing. The question is: how to do it? Well, so traditionally there have been different ways to incentivise this kind of initiative. Just to give some examples, we see financial incentives like cash in the form of grants, loans, equity or credit guarantees for example. The governments can also use fiscal incentives in the form of tax abatements, exceptions or accelerated depreciation. Also, subsidised inputs like the provision of water, electricity or fuel stock at a lower cost than usual. Finally, regulatory incentives in the form of the approval of regulations to promote the feasibility and attractiveness of these kind of projects.

So, in summary, government intervention and policy mechanisms are key to reducing risks and to incentivise financial investments in circular infrastructure projects. I think we need comprehensive
national action plans and road maps for the circular economy to attract funding for projects and this includes setting targets of resource recovery for example and defining priority government interventions.

**Host: Mhairi Main Garcia**

Thank you. So, on the financing side, it does seem that there's quite a bit of work that needs to be done and, particularly from a policy perspective, in order to tap into the financing that's required to develop the right type of infrastructure projects to meet or to achieve net zero.

**Guest: José María Anarte**

I fully agree with that. You know, let me just remark that all these initiatives should be made on a coordinated basis and on a global basis based on global data, integrating global knowledge and innovation. That's why I think would be good to have, as we were saying a few minutes ago, a global agency within the sector to collect and process and to prioritise and follow-up the implementation of these kind of funding policies. But the government and public decision makers have a lot to do to promote the net zero transition, that's for sure because at the end, once again, finance for projects is abundant, infrastructure assets have been traditionally attractive to investors based on their stability and certainty. Funding is there so, it's just a matter of making sure to match projects with funding with the support of the public sector and decision makers.

**Host: Mhairi Main Garcia**

Thank you José María. Let's take a look towards the future. What in your view will be the most important steps in the next five years to help the infrastructure sector in the drive towards net zero?

**Guest: José María Anarte**

Difficult question because the situation is evolving as we speak, but if I had to select five steps that would be critical in my view to achieve net zero targets on time, I would firstly: define what low emission production thresholds means in terms of direct carbonisation trajectories. On top of that, I think it would be important to set a public private agenda to decrease the cost of clean technology, which is quite expensive in some cases nowadays. Also, we need to promote low carbon demand and establish transparency and visibility among producers, that's an important step to be taken. Also, we need to strengthen net zero policies and regulations to level the playing field for low-carbon producers. And, finally, I think that we need to develop risk sharing mechanisms, green taxonomies and public funding to risk investments and attract capital.

**Host: Mhairi Main Garcia**

Gosh, those are indeed substantive steps. Could I perhaps just pick one of those and ask you to elaborate further on how net zero policies and regulations can be strengthened to level the playing field?
**Guest: José María Anarte**

Sure. I think the maintaining global competitiveness is a top priority for industry leaders and governments for sure. First movers investing in higher cost, low emission production facilities assume a higher risk of seeing their competitive position deteriorate. So, to face this situation, in my view we need stable and ambitious policy frameworks to level the playing field and also to incentivise firms to venture into low carbon markets. All of these while governments need to facilitate at the same time the most economically viable ones.

**Host: Mhairi Main Garcia**

Thank you José María for such an informative discussion. To sum up some of the key points that you've gone through infrastructure captures both social infrastructure and transport infrastructure as well as emerging sub-sectors such as data centres.

There's a two-fold challenge around ageing infrastructure and a simple lack of infrastructure. There is a lot that can be done, however, in the drive to decarbonise the infrastructure sector, but the steps will depend to a large degree on the type of infrastructure and whether we're looking at new or existing infrastructure.

However, the infrastructure can and is contributing to towards achieving net zero. There are a number of material steps that will need to be taken including strengthening net zero policies and regulations to level the playing field for low carbon producers and strengthening net zero policy mechanisms, along with a public private investment agenda that incentivises financial investment in infrastructure projects.

We need to build neutral now and we need to integrate global knowledge and innovation.

I hope that summed up accurately the discussion.

**Guest: José María Anarte**

So, thank you for making that summary, which makes total sense. Thank you.

**Host: Mhairi Main Garcia**

José María many thanks for taking the time to share your expertise today. And thank you to you, the listeners, for joining us today.

Please do get in touch with your feedback or if you have any questions about the subjects we have discussed. To listen or view the transcripts of all the episodes in this COP28 series, please visit wfw.com.

Thank you.