



## FINANCING THE ROAD TO NET ZERO: RAIL

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**Host: Mhairi Main Garcia**

Hello and welcome back to Watson Farley & Williams' 'Countdown to COP: Financing and Fuelling the Future' podcast series. I'm your host Mhairi Main Garcia.

In this chapter we'll be talking about how transport by rail can contribute towards a net zero future.

I'm delighted to introduce our guest today, Frederik Lorenzen. Frederik is a Partner in the firm's Assets and Structured Finance group based in Frankfurt. He has almost two decades of experience advising on transactions in the transport sector. Thank you for joining us today Frederik.

**Guest: Frederik Lorenzen**

Thank you, Mhairi. Thank you for having me on this podcast. I think this is really a great opportunity to talk about this important topic.

When you travel by German train which I do quite a lot, when I visit clients for example, punctuality dropped to just 65% in 2022.

**Host: Mhairi Main Garcia**

Gosh, that's an interesting statistic and would you say that's a general trend globally towards net zero? If rail is meant to play a major role in the shift towards carbon neutrality how can this be achieved if the rail infrastructure is outdated and, in some cases, unreliable?

**Guest: Frederik Lorenzen**

Yes, that's a good question. 25% of the EU's overall greenhouse gas emissions are attributable to transport and, as part of its Green Deal, the EU wants to cut transport greenhouse gas emissions by 90% by 2050. And this is really where rail could help because rail traffic is mostly electric, which means that it's emission free, at least on a local level, then you ask yourself why isn't rail traffic developing more dynamically? Because, if you look at the share of freight, which is transported by rail in Germany, it just increased by 3.6% from 2000 to 2022. If you look at other European countries, that share is 25% in Austria and even 41% in Switzerland – in Germany it is 19%.

**Host: Mhairi Main Garcia**

These are really interesting statistics, there's clearly a real opportunity for rail to contribute towards achieving net zero but, from what you've said, it does seem that that potential is not being realised. What can be done to promote rail-bound traffic further and what are the impediments?

**Guest:** Frederik Lorenzen

That's a comprehensive question really, a lot can be done well, two main topics: the first one being financing and the second one being improving infrastructure and its use.

So, let's kick off with financing, what can you do in order to make financing of rolling stock and rail infrastructure more attractive and what's the status there in general?

So, I'd like to touch briefly on a couple of points. The first one is a point, very interesting at the EU level, the EU taxonomy. The EU has introduced a classification system which classifies economic activity into green and brown and electric locomotives fall within the green category. Now, that classification system does nothing more than create transparency so that people can see which economic activity is actually green and contributes to the road to net zero and which doesn't.

Well, it does one thing more: as of next year, banks have to publish what part of their loan portfolio actually is green and what part is brown. So, they become comparable in that respect. This is where people think that banks might want to invest rather in green loans than in brown loans. The financing of locomotives is obviously more attractive. So, the EU taxonomy is a good thing and will promote financing of rolling stock.

One other thing which is basically a good thing in the financing space is the Luxembourg Protocol. Now what does that mean? If a bank lends, it normally wants to take security in order to secure its loan, and if a bank lends some money to finance rolling stock, a locomotive or a rail car, that security, naturally, would be taken over that locomotive or over that rail car. But freight rail traffic is mostly cross-border. So, that locomotive or rail car travels from Germany to France and the security which you took over that locomotive in Germany will not be recognised in France. That might come as a surprise to many because you would think the EU has harmonised so many laws, but it hasn't harmonised the laws relevant for taking security. So, there is some uncertainty whether your security will still be valid when you travel abroad. You can structure around that and we do that when we advise on transactions, so that kind of uncertainty is basically good for us lawyers. But it's obviously an impediment when it comes to rail financing and this is where the Luxembourg Protocol comes in. The Luxembourg Protocol creates a security interest which is recognised by all member states which sign up to the Luxembourg Protocol – this is definitely something which will help the financing of rolling stock.

**Host:** Mhairi Main Garcia

Thank you, Frederik quite a few limbs there in relation to financing and, from what you said, there's some real potential for green financing but there are also some challenges if green classification requirements cannot be met and also some challenges in relation to the cost of financing.

You mentioned that there are two main areas that will promote rail development: financing which we just discussed, as well as infrastructure. So, what can be done to improve rail infrastructure?

**Guest:** Frederik Lorenzen

Yes, right. This is the other main topic and, to be honest, that's probably even more important. So, again I would like to concentrate on a few topics here.

There is an initiative which the EU proposes, that's the EU Commission's Greening Freight Proposal and that is just brand new, from July 2023, and it basically aims at making better use of existing rail infrastructure, management of rail traffic and focussing on cross-border rail traffic because rail traffic

and rail, up until 20-25 years ago, was a very national matter and it takes a lot of steps in order to harmonise it on the EU level and there is still a lot of potential.

One other interesting aim is that this EU proposal also tries to set a framework to measure greenhouse gas emissions across all transport services to increase transparency.

So, one other way to improve infrastructure and its use is ETCS, which is an acronym for European Train Control System and this is supposed to increase interoperability and the existing networks' capacity. Rail systems are managed on a very national basis although around 50% of freight traffic is cross-border. A train cannot be run on sight. Instead, a train track is divided into different sections and the train is only allowed to enter a section if no other train is driving in that section. This is obviously for security purposes. And, if a driver does not comply, the train is stopped automatically by the various security systems. So, this existing security system is different from a technical perspective in various member states.

If you want a locomotive to run cross-border, it needs to be equipped with technology which are compatible to all those various security systems which is obviously expensive and quite complex and ETCS aims at harmonising that with one single standard. What ETCS also might be able to do is reduce the distance between two trains which are running on the same track and, if it can do that, then more trains can drive on a network at the same time, which would increase the network's capacity.

**Host:** Mhairi Main Garcia

In terms of ETCS, talking about it in the future, is it in place and is it common at the moment in some of the member states or is it still quite new?

**Guest:** Frederik Lorenzen

No, it's unfortunately not new and it's not common either. There are some member states which use it already, but there are others which don't. So, typically, member states which have a much smaller network of rail tracks they might have implemented ETCS already.

**Host:** Mhairi Main Garcia

It seems there's a lot that can be done to improve rail infrastructure, interoperability, network capacity and so on but, clearly, there do remain a lot of challenges, both at the European Union level and at a member state level in order to realise those improvements.

Could we move on and look at a more general global perspective, perhaps? In countries where there's no or limited rail infrastructure or where there is aging rail infrastructure, how can that be developed and how can rail infrastructure contribute towards the achievement of net zero in those countries?

**Guest:** Frederik Lorenzen

Well, I think in countries where there is not much rail infrastructure there is a unique opportunity to set these things up right. Obviously, having said that, rail infrastructure is very beneficial and efficient when it comes to greenhouse gas emissions, so it definitely can play an important role in, say, developing countries and other countries where there isn't much rail infrastructure yet. So yes, this is very important and, I guess, this is also something where we see quite some activity in our advisory practice.

**Host:** Mhairi Main Garcia

Thank you. So, it seems that where there's a blank canvas perhaps, it is almost easier to contribute to achieving those net zero goals because you are really starting from a lower common denominator?

**Guest:** Frederik Lorenzen

Yes, this is really the case I think, and this is really the main impediment when you look at Europe, or even Germany, that there is already so much there, so many different interests to be balanced and that we can, to some extent, well, block things up and it's much easier if you start on a clean sheet.

**Host:** Mhairi Main Garcia

OK, we've already discussed reliability and efficiencies and perhaps we could add to that: affordability. So, what kind of impact will reliability, efficiencies and affordability have on the ability of rail to displace other types of transport. How can rail compete with other transport sectors which are evolving themselves and moving towards low-carbon solutions?

**Guest:** Frederik Lorenzen

If you make rail more reliable there is a tendency of it becoming more expensive as well but, of course, transport by truck, for example, is going to become green as well, it's going to be electrified, probably going to be done by hydrogen power trucks in, I don't know, five or ten years and that will make things or might make things more difficult for rail. The big advantage of rail is still that it's rather greenhouse gas free, or at least emits much less greenhouse gas than transport by a fuel-driven truck.

**Host:** Mhairi Main Garcia

It sounds like we have really an ongoing process within the rail sector, but also how rail will sit relative to other transport sectors. What will be the most important steps during the next five years to help the rail sector in the drive towards net zero?

**Guest:** Frederik Lorenzen

Yes, there will be many steps: it's a lot which has to be done. But, if I had to decide what's the most important one, then I would probably go for the improvement of the existing infrastructure. And then again, the financing element, basically the two topics we spoke about. Improving the infrastructure, the existing infrastructure, is going to cost a lot. So, these two elements I assume are the most important ones.

**Host:** Mhairi Main Garcia

Thanks, Frederik. There are certainly a lot of takeaways from our discussion. Rail has an important role to play in achieving net zero, but there's going to be quite a journey if that role is going to keep on track. Sorry, I couldn't resist mentioning 'keep on track' somewhere! If I can close with just a couple of highlights, firstly, the real and perceived issues around reliability, efficiencies and potentially also affordability will need to be addressed if rail's role in achieving net zero is going to reach its full potential. And secondly, there will need to be proactive and combined efforts across the rail sector. From manufacturers, developers, operators, lenders, that financing element that you mentioned, as well as regulators and governments and I think one of the key things there is it's not just at a domestic level, but it's also at a regional or, in Europe's case, an EU level, but also at an international level that rail is really going to reach its full potential in helping drive forward net zero.

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Frederik, thank you for being our guest today. It's really been quite insightful and thank you to the audience for listening.

We look forward to welcome you to our next episode of Watson Farley & Williams' 'Countdown to COP: Financing and Fuelling the Future' podcast series.

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