



Mr Lance Fritz
Chief Executive Officer
Union Pacific Railroad
1400 Douglas Street
Omaha, NE
68179, USA

30 November 2019

Dear Lance,

Carbon Emissions Disclosure

TCI Fund Management Limited manages over \$30 billion across a range of asset classes. Since inception of the business over 15 years ago, cumulative investment returns have substantially outperformed equity index benchmarks.

TCI is a major shareholder in Union Pacific owning around 1% of the company.

Investment approach and engagement

As part of our investment process we assess a range of ESG factors, particularly climate change risk.

TCI believes that climate change-related risks, in particular a company's greenhouse gas (GHG) emissions, will have a material effect on a company's long-term profitability, sustainability and investor returns. These risks include regulation, taxation, competitive disadvantage, brand impairment, financing, physical asset impairment and litigation.

We actively engage on ESG to help us understand, quantify and influence a company's exposure to climate change-related risks and the way it is managing those risks.

Emissions disclosure

We require companies in which we invest to make appropriate and timely public disclosure of carbon and other GHG emissions. Such disclosure should include targets for emissions intensity reduction and absolute level reduction.

TCI fully supports compulsory disclosure on a standardised basis and the use of the Task Force on Climate-related Financial Disclosure (TCFD) reporting framework (www.tcfhub.org).

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TCI Fund Management Limited is a private limited company incorporated and existing under the laws of England and Wales with registered number 08898250

Authorised and regulated by the Financial Conduct Authority

In our view, reporting to CDP (www.CDP.net) is the best way to implement TCFD. **We expect all our portfolio companies to make full annual public disclosure to CDP.**

Low-Carbon Transition Plans

We expect companies in which we invest to have a credible, publicly-disclosed plan to reduce GHG emissions. This plan should include measurable science-based targets that align with the Paris Agreement, which requires full de-carbonisation of economies (net zero emissions) by 2050.

Actions that should be included in a low-carbon transition plan are to:

1. Change business processes to reduce the company's carbon footprint;
2. Introduce efficient energy management into buildings and factories;
3. Source low carbon energy through direct generation or power purchase agreements;
4. De-carbonise transport fleets, e.g. through electric vehicles;
5. Offset emissions from corporate travel, e.g. through afforestation;
6. De-carbonise supply chains and helping customers lower their carbon intensity;
7. Advocate for regulations which drive the de-carbonisation of their industry to ensure its sustainability.

Voting

1. **We will typically vote against all directors of companies which do not publicly disclose their emissions and do not have a credible plan for their reduction.**
2. **We will also vote against auditors where the Annual Report and Accounts fail to report material climate risks.**

Divestment

We will also evaluate divestment where a portfolio company refuses to disclose its emissions and does not have a credible plan for their reduction.

Union Pacific disclosure to CDP

We are pleased to see that Union Pacific has provided disclosure to CDP for 2018 and 2019 and we have carefully analysed these submissions. **For 2018, CDP awarded Union Pacific an overall A- grade.**

This is a very good score that demonstrates Union Pacific's industry leadership on environmental actions and stewardship, thorough understanding of the risks and opportunities related to climate change and alignment with TCFD disclosure recommendations.

Our recent discussion with Jennifer Hamann and Mike Miller was very helpful in understanding Union Pacific's:

- Commitment to continuous operational improvement through Precision Scheduled Railroading and fuel efficiency;
- Online Carbon Emissions Estimator in 2011, which helps customers calculate emissions savings moving goods by rail rather than truck;
- Drive to improve sustainability in collaboration with environmental partners, such as GreenBiz Network.

It is also positive that you are now developing a low-carbon transition plan that integrates climate scenario analysis. Science-based targets, as advocated by CDP, should be used for this purpose.

The need to de-carbonise freight transportation

Our discussion also highlighted the important role Union Pacific has in the fight to de-carbonise freight transportation in North America.

You have highlighted that 93% of your direct emissions originate from rail operations. Hence, the main focus of your low-carbon transition plan is on Improving rail locomotive fuel efficiency (e.g. fleet renewal, technology and network fluidity).

While there is no current federal regulatory requirement to blend diesel with low-carbon fuel in the US, this may change in the future. In Canada, fuel producers blend an average of 2% biofuel with diesel. Over time, this has the potential to be 10-15% under the proposed Clean Fuel Standard (CFS). The CFS is due to come into force in 2022 and is a key part of Canada's climate plan to reduce national GHG emissions by 30% below 2005 levels by 2030, in line with Paris Agreement goals.

We recommend that Union Pacific continues to explore greater use of advanced biofuels to decrease the amount of diesel required in fuel blends.

Given the challenges of "gantry" electrification of the network, locomotives powered by lithium ion batteries and hydrogen fuel cells may offer an alternative to diesel blending:

- The Wabtec-GE lithium-ion battery-powered locomotive paired with diesel locomotives in a "consist" offers an interesting opportunity to improve fuel efficiency by around 15%;
- In Germany, the Alstom Coradia iLint hydrogen fuel cell passenger train is already in service;
- In the UK, the HydroFLEX passenger rail system is being pilot tested.

We encourage Union Pacific to continue to test these new technologies with other Class 1's and manufacturing partners, and to increase your R&D and collaboration efforts to accelerate all viable biofuel, electrification, hydrogen fuel cell technologies and other de-carbonisation opportunities.

On advocacy, we are pleased to see that you engage directly with trade associations and policy makers of federal and provincial governments on efficiency standards, carbon markets, clean fuel regulations and carbon finance.

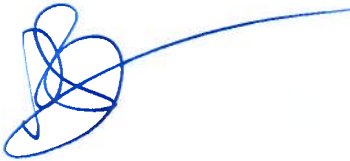
Union Pacific has an important role to play in increasing the modal shift from truck to rail freight, given the massive fuel efficiency advantage (4x) and 75% lower GHG emissions for an equivalent volume of freight. In particular, lobbying for tighter environmental regulations on trucks (including a carbon tax on diesel) would increase market share for rail. The company should actively market to customers the cost and environmental benefits of using rail transport over truck.

We appreciate the time and effort Union Pacific is making to de-carbonise its business. We found our discussion with you team very helpful and look forward to continuing the dialogue.

Yours sincerely,



Chris Hohn



Philip Green



Ben Walker