16 December 2022

Mr Leigh Spencer
Project Manager
Queensland Competition Authority
GPO Box 2257
Brisbane Q 4001

Submission online via Submissions (qca.org.au)

Dear Mr Spencer,

Re: Discussion Paper: Approach to climate change related expenditure October 2022

Pacific National (PN) appreciates the opportunity to comment on QCA's *Approach to Climate Change Related Expenditure Discussion Paper*. PN has a long history of providing freight transport solutions in Queensland and we are a major user of coal and intermodal freight networks. PN is heavily invested in Queensland communities, and 59 per cent of our workforce are based in regional cities and communities. PN is also subject to the Federal Government Safeguard Mechanism and as such is funding our own significant decarbonisation strategy. PN is privately owned and in addition to being steered by national and state economic, policy and community issues, our investors are also guided by international regulation.

PN appreciates the work QCA has done in considering climate change related expenditure and as a key stakeholder to this process, PN wants the outcome of this work to result in an enhanced regulatory approach that reflects current and future climate change risks and opportunities. PN is committed to building climate resilience into our business and driving carbon efficiency in the supply chain to build long term sustainability for our customers.

The COVID-19 pandemic, and devastating floods and bushfires have demonstrated the need to build a resilient supply chain network, and this is particularly the case for the North Coast line that a year ago was impacted by floods and washouts resulting in its closure.

This submission addresses each of the 13 consultation questions. Our responses take a rail-industry focus and highlight opportunities for collaborative processes that can optimise outcomes of the entire network. It is important that policy and regulatory settings incentivise and foster resilience by providing collaborative, pragmatic solutions and prudent investment. For intermodal freight where transport modes are contestable, these solutions cannot result in higher access charges and pricing that disincentivises the use of rail for freight. This would have the perverse outcome of shifting freight to road and increase Australia's overall emissions. Rail is among the most efficient and lowest emitting modes of transport and as a nation we need mode shift to rail in order to significantly impact emissions.

PN congratulates QCA on its investigation into climate change related expenditure. We recognise the challenge in taking a forward-thinking approach to future uncertainty, while still needing a framework that meets the demands of today.

Our consultation responses are attached, and we trust you find them useful in informing your review. If you wish to discuss the contents please contact PN's Head of Strategic Access, Heidi Bailey Powell, on 0409 034 834 or at Heidi_BaileyPowell@pacificnational.com.au.

Yours sincerely,

Andrew Thomson
Chief Commercial Officer – Pacific National

Discussion of Consultation Questions

Pacific National

Pacific National is Australia's largest private rail freight operator, transporting average weekly haulage volumes of ~2.5m tonnes of coal, ~570,000 tonnes of freight, and ~18,000 twenty-foot equivalent containers of intermodal goods for our customers.

We operate nationally, with depots and terminals in all states and territories except Tasmania. We are privately owned, by an international group of investors.

Consultation question 1

To what extent are the risks of more frequent or severe extreme weather events already impacting the businesses of regulated entities? Please provide evidence where available and appropriate.

Pacific National has been impacted by several significant wet weather events that have occurred throughout Australia in the last year. They have been identified by the Department of Home Affairs as Australian Disasters as a result of flood, landslide, rainfall, thunderstorm and weather events. These wet weather events have impacted the rail lines we operate on, but don't have operational control of. These have been major events that have not only impacted the rail line but significantly impacted communities and businesses in the local areas.

It is important to note that the impact of these events has been acute and include track closures (generally for less than a week but sometimes for extended periods as noted below), as well as chronic, with tracks re-opening but with degraded performance, generally requiring trains to reduce their operating speeds.

Table 1 highlights major weather events that have impacted Pacific National's operations in FY22.

Table 1: Weather events affecting Pacific National in 2021-22

Date	Affected unit of measure	Route	Track Operator	Impact
Nov – Dec 21	Bulk (coal)	Queensland Coal Network	Aurizon Network	Impacting the electric and diesel fuelled services. Where the electric line is down additional diesel capability is brought into the region if possible
Nov – Dec 21	Non-bulk (intermodal)	North Queensland	Queensland Rail	Flooding over tracks and washouts resulting in closure
Nov – Dec 21	Non-bulk (intermodal)	Western NSW	UGL Regional Linx	Flooding over tracks and washouts resulting in closure

Nov – Dec 21	Bulk (coal)	Hunter Valley Coal Network	ARTC via Hunter Valley Coal Chain Coordinator	Flooding over tracks resulting in closure
Jan – Feb 22	Non-bulk (intermodal)	Trans – Australian Railway	ARTC	Route closed for 4 weeks following significant flooding and washout of the track with 300km of track requiring major repair. Subsequent temporary speed restrictions in place. Full details available if required.
Jan – Apr 22	Bulk (coal)	Queensland Coal network– (a mixture of diesel and electric trains operate on this network)	Aurizon Network	Flooding over tracks resulting in closure
Jan – Apr 22	Non-bulk (intermodal)	NSW North Coast line	ARTC	Flooding and washout over tracks resulting in closure
Feb – Oct 22	Bulk (bulk & coal)	Illawarra Mountain line (Moss Vale to Unanderra line (Pt Kembla Grain)	ARTC	Route closed following significant flooding and washout of the track

Consultation question 2

Is there evidence to suggest that regulated entities are facing difficulties in accessing insurance for their assets or accessing insurance at reasonable cost? Is self-insurance thereby becoming a more prudent option for these businesses?

There is strong evidence that all insureds, regulated and unregulated, that have infrastructure and business interruption exposure to natural catastrophes are experiencing insurance cost pressures. There has been significant growth in premiums for insureds in Australia and the Pacific Region, with an increase of 5 per cent in the Pacific Region in the third quarter of 2022.[1]

Factors underpinning the premium increases include the exposure Australia has to natural catastrophe's such as storm and flooding events.

Insurer mandates are making it difficult for some regulated entities, such as those with exposure to thermal coal, to secure insurance. By implication, there will be a higher degree of self-insuring. Many insureds may pursue a risk-transfer approach through an Insurance Captive to manage that self-insurance alternative.

[1] Marsh Global Insurance Markets Q3 2022: Financial and Professional lines pricing declines

Consultation question 3

Most organisations, including regulated entities, now have detailed climate change strategies and planning documents in place. To what extent are these strategies a response to government policies, and to what extent are they externally driven (e.g. in response to financing requirements or shareholder activism)? Do these external drivers put pressure on businesses to exceed the minimum requirements of government policies?

Pacific National has been developing decarbonisation approaches and recently published its Environmental, Social and Governance (ESG) report that outlines our commitment to taking action.[2] This development has been driven in part by investors and customer interest in this, but also by a desire to help the communities we operate in. Recent government activity such as the Safeguard Mechanism Reform has added to Pacific National's focus on decarbonisation.

While there is increasing interest in decarbonisation, we would note that in rail the decarbonisation solutions are not commercially available yet in Australia for alternate fuels; and the technology solutions for non-electrified networks, such as battery-electric locomotives or hydrogen locomotives are still in development. Pacific National will be activating solutions like these as they become commercially available.

Pacific National is also taking action towards reducing its carbon emissions using solutions that are available today. This includes improving the fuel efficiency of our existing assets through technology such as Trip Optimizer™; reducing locomotive idling times; purchase and deploy fuel-efficient locomotives; enhancing train-crew skills to operate trains safely and efficiently; and switching to LED yard lighting.[3] Pacific National is procuring more wagons that will allow us to increase the weight of our trains through double-stacking containers, with one container on top of another.

We expect customer, investor, government and community interest in decarbonisation to increase over time.

Consultation question 4

Are regulated entities being encouraged or pressured by their customers to take further action on climate change? For example, do customers want regulated entities to reduce their scope 2 emissions by using an increasing proportion of renewable energy in their businesses? How do customers value actions taken by regulated entities that might provide for the customers to claim reduced scope 3 emissions in their supply chains?

Pacific National has a broad customer base operating across diverse industries such as energy and resources, industrial manufacturing and agriculture, and transport a mix of general freight cargo, import and export goods, and bulk commodities, which reflect the broader Australian economy. As such, we engage across a broad customer base to understand how our efforts can contribute to their own ESG targets.

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[2] FY22 ESG Report https://pacificnational.com.au/pacific-national-on-track-to-reduce-emissions/

[3] Trip Optimizer™ is the equivalent of cruise control for trains, the software replicates the lowest fuel consumption path from origin to destination considering terrain, train makeup and operating conditions. The software reduces sub-optimal fuel burn and improves consistency of driving.

There is rising interest in improved transport sustainability from our direct customers and their end customers. At Pacific National we are working to minimise our environmental footprint and developing products and services to make rail more attractive as a sustainable modal choice.[4] Across freight supply chains where transport modes are contestable, increasing numbers of stakeholders have carbon emissions targets and strategies that seek to leverage the emissions reductions associated with the mode shift from road to rail.[5]

There is increasing awareness that rail is the most carbon efficient form of line-haul land transport (in addition to delivering reduced noise and air pollution, and safety benefits compared to road transport).[6] Pacific National has had customer requests to help calculate their scope 3 transport emissions. Across our coal, bulk and intermodal customer base Pacific National has helped customers to understand potential emission reductions and environmental benefits if they were to maximise their utilisation of rail as part of their transport task.

Many customers and stakeholders recognise the challenges associated with emissions reduction in our industry and are cognisant of:

- The long lead time for development and commercialisation of low emission rollingstock
- Skills shortage to fill the jobs needed to support commercialisation of alternative fuel technologies such as hydrogen
- The 30-50 year asset life of locomotives and the embedded emissions in existing assets that are a key consideration when considering asset renewal.[7]

There is also acknowledgement that for intermodal freight, rail prices must be constrained to remain competitive with road transport. The alternative would see a transfer of freight to road and an overall increase in freight supply chain emissions.

Consultation question 5

Do the QCA's existing regulatory frameworks create appropriate incentives for regulated entities to efficiently manage risks associated with climate change? If not, how might the frameworks be improved in this regard?

The underpinning QCA framework for approving expenditures by regulated entities considers whether the expenditures have been prudently incurred, and are prudent in terms of scope, standard and cost. The QCA Discussion Paper asks whether the framework remains relevant when firms undertake climate change related expenditures, particularly in an environment where entities seek to incorporate increased resilience into assets or engage in mitigation expenditure, where such expenditure may not be strictly necessary to provide the regulated service.

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[4] Pacific National is working to minimise our environmental footprint, focusing on the areas of land and resource management, air and noise pollution, water and waste as outlined in our FY22 ESG Report https://pacificnational.com.au/pacific-national-on-track-to-reduce-emissions/

[5] By way of example, one of the large supermarket chains acknowledges in their 2022 Sustainability Report that their value chain (scope 3) emissions are 14 times greater than both scope 1 and 2 emissions combined.

[6] Pacific National estimates rail freight transport is three to four times more carbon efficient than road freight transport.

[7] Replacement of locomotives comes with significant embodied carbon (scope 3) emissions.

Pacific National suggests the current approach to assessing expenditures and the application to climate change expenditure (as outlined in Figure 1 of the Discussion Paper) remains an appropriate base, however for rail it could be broadened to include:

- Incentives for harmonisation with other jurisdictions
- Additional transparency
- A collaborative approach to address risk and uncertainty
- Consideration of whether all alternatives have been considered, including technology solutions.

Pacific National would welcome the inclusion of a consultation policy on climate related expenditure and incentives, meaning rail providers would formerly engage with stakeholders including rail operators and customers, when undertaking new climate-related investment.

A comparable mechanism exists in the Aurizon Network's Undertaking (UT5) that sees a Rail Industry Group (RIG) come together to approve maintenance renewal and scope budget. This provides a formal avenue for Aurizon Network to approach customers and propose investment, including investment targeted at improving resilience. Customers then scrutinise the proposal and vote on whether to approve the expenditure. Under this concept for managing risk we see that all stakeholders would have a view.

A collaborative approval process for climate-change related expenditure is likely to optimise outcomes of the entire network. It should provide additional surety that it is prudent investment and minimise over-capitalisation on projects, particularly where expenditure may not be strictly necessary to provide the regulated service.

A collaborative approval model also provides more transparency and certainty for customers and stakeholders. As a rail operator, Pacific National needs a degree of investment certainty to support decisions such as investment in rollingstock and infrastructure, and our customers require price certainty. Increased transparency of future climate change related expenditure is appropriate, particularly for Pacific National as a private rail operator that is already funding extensive decarbonisation initiatives under the Australian Government Safeguard Mechanism.

When considering any change to the QCA framework Pacific National would support taking an approach that ensures all alternatives have been considered (including technology options), and that is consistent with the process for regulated entities in other jurisdictions. This could assist with harmonisation across the rail industry.

Consultation question 6

Are existing mechanisms in the QCA's regulatory frameworks for dealing with newly arising expenditure requirements (e.g. pass-through mechanisms, review events and draft amending access undertaking (DAAU) processes) sufficient to deal with climate change related expenditure? If not, how might these mechanisms need to be amended?

A transparent and collaborative approach to expenditure planning that adopts prudent expenditure principles can be combined with existing mechanisms in the QCA framework to deliver a framework that manages uncertainty and responds to changing needs.

As noted in our response to Consultation question 5, Pacific National supports taking a collaborative, partnership-based approach towards climate change related expenditure that incentivises stakeholders to work together to optimise the long term sustainability and efficiency of the network. Shared commitments and collaboration can increase the likelihood that investment is based on credible data and future need, rather than past practice.

A collaborative and transparent approach ensures we take advantage of the knowledge and expertise across the industry. It is more likely to foster agreed opportunities to adapt to the physical risks of climate change and reduce the risk that a rail provider locks in an investment pathway that could lead to higher future costs, without first getting consensus from customers and stakeholders.

Built in procedures to encourage consistency and harmonisation with other jurisdictions is also necessary to assist harmonisation across the industry.

Consultation question 7

The QCA's standard approach to assessing the prudency and efficiency of capital expenditure claims by regulated entities involves applying frameworks that assess scope, standard and cost. Are these existing frameworks suitable for assessing climate change related expenditures? And do they provide the right incentives for entities to appropriately have regard to climate change considerations—and alternative ways of achieving the desired objectives—when undertaking expenditure? If not, how should they be enhanced?

For example, in considering the prudency of capital expenditure, is there a trade-off between efficiency and least cost, and robustness and resilience? If so, how can these trade-offs be managed?

As discussed in our response to Consultation question 5, the QCA's standard approach to assessing capital expenditure appears an appropriate base for assessing climate change related expenditure, noting however that it could be broadened to incentivise harmonisation, transparency, and greater collaboration and alignment on agreed outcomes.

Trade-offs between efficiency and least cost, and robustness and resilience are best managed through a consultation mechanism that engages infrastructure providers, customers, operators and stakeholders. The degree of trade-off will be dependent on a number of factors, including the risk appetite of each party and the specific regulatory arrangements impacting them. Pacific National, for example, is a party to the nationally legislated Safeguard Mechanism and has private investors who are impacted by global reporting standards.

Impacts on price, particularly for the end-use customers, will also be a consideration. For intermodal rail freight, it would be detrimental to Australia's emissions-reduction ambitions if rail access prices increased to cover investment in rail infrastructure and resulted in a transfer of freight from rail to road. Shifting supply chain transport from a relatively low emission rail mode to higher emission road transport would lead to an increase in Australia's overall emissions.

Consultation question 8

Are processes in the regulatory frameworks that are designed to provide regulated entities with a degree of certainty to make investment decisions (e.g. provisions that allow for preapproval of the scope of projects or customer vote mechanisms) sufficiently flexible to enable climate change related investments to proceed where appropriate?

Pacific National would welcome more engagement to support the ongoing sustainability of rail, including liaising with network track operators to ensure the resilience of the tracks on which we operate, and resilience planning to ensure rail services continue to operate.

The customer vote process for expenditure in Aurizon's 2017 Undertaking (UT5) provides a mechanism for Aurizon Network and its customers to agree on the scope and standard for maintenance and capital expenditure. Currently it is only producers that vote. The process could be strengthened by allowing key stakeholders to also vote.

Along with customers, rail operators are negatively impacted when weather events impede operations, as outlined in Table 1. From a safety and operational perspective rail operators have a vested interest in wanting rail infrastructure that is fit for purpose and ensuring appropriate investment occurs to improve asset resilience. An example of this is the existing coastal rail freight route that is subject to frequent disruption, lacks resilience and will continue to be impacted through events such as floods or other natural disasters in the foreseeable future. On average, services on the Melbourne to Brisbane coastal rail route are impacted by incidents or scheduled maintenance 1 in every 10 days. In the first half of 2021 the coastal rail route was cut-off for 40 days.

Consultation question 9

How should differences between regulated entities' willingness to supply and customers' willingness to pay for adaptation and/or mitigation expenditure be reconciled? What if the willingness to pay differs among customers or groups of customers? In considering these matters, how should potential externalities be assessed? This includes positive externalities that may accrue to the broader community from increased mitigation activities.

Pacific National supports expenditure on solutions that mitigate or adapt to climate change, to the extent that:

- It is prudent or least cost expenditure
- It is backed by credible data and modelling
- There has been consultation and a process for stakeholders and customers to engage
- For intermodal freight it does not have the perverse outcome of raising prices and increasing overall emissions by shifting freight from rail to road.

The last point is critical, because once the cost of intermodal rail freight becomes more expensive than road the result is:

- More and bigger trucks on the road, increasing traffic congestion and requiring ever increasing greater investment in road asset maintenance
- An overall increase in emissions which is directly at odds with the government's targets for emissions reductions and climate change
- Greater exposure to external shocks for e.g., COVID-19 and the shortages of freight drivers
- Increased road fatalities and serious injuries, with more trucks sharing the roads with passenger vehicles.

Positive externalities such as those associated with a transfer of freight from road to rail, can be a reasonable justification for government provision or increased government funding of an infrastructure asset.

Moving freight to rail provides many benefits to the nation through reducing congestion on roads. Reducing congestion improves safety. Road crashes kill more than 1,000 and seriously injure approximately 40,000 people every year, costing the Australian economy $29 billion per annum.[8] In 2020, it was reported that road incidents involving heavy vehicles resulted in 177 fatalities.[9]

[8] Australian Automobile Association, 2022
[9] Bureau of Infrastructure and Transport Research Economics (BRITE), 2020

In the case of Queensland, these external benefits or positive externalities can be justification for greater government investment in the North Coast line to improve the speed and utilisation of the track.

Models to reconcile willingness to pay and willingness to supply and balancing competing objectives and risk appetites will vary across industries. Pacific National recommends that QCA develop high level principles, followed by consultation with stakeholders to work through options.

Consultation question 10

How do organisations justify climate change related expenditures to their boards and other internal stakeholders? To what extent can these processes inform the QCA's assessment of this type of expenditure?

Pacific National has processes in place to decide capital allocations and other key business decisions. The same processes are used to assess ESG related expenditures. The assessments made include risk, the financial business case, and the overall alignment to business strategy and any relevant targets that have been agreed internally.

As noted elsewhere in this submission, Pacific National is captured under the Safeguard Mechanism. Achieving the Clean Energy Regulator Safeguard Mechanism targets will likely require significant expenditure by Pacific National in all of the areas in which we operate.

Consultation question 11

How do organisations consider different types of mitigation expenditures? How do they decide between alternative options (e.g. direct mitigation versus purchase of offsets) and justify those decisions? What lessons can be learned for the QCA's regulatory processes?

Pacific National supports direct mitigation but notes the need to seek a balance between expenditure on direct mitigation and expenditure on offsets. This balance will likely change as the Safeguard Mechanism targets are reduced in support of 43% reduction in emissions by 2030 and to net-zero by 2050.

While the QCA has a focus on Queensland regulation of monopoly infrastructure, consideration should be given to how the users of that infrastructure are regulated, including regulation by other jurisdictions, and the interplay of Queensland regulation and other state, national and international regulations. For example, Pacific National has international investors and is a major user of Queensland Rail and Aurizon Network rail infrastructure. Pacific National is influenced by international regulations and also operates under the safeguard mechanism under the Clean Energy Regulator.

Achieving the Clean Energy Regulator Safeguard Mechanism targets will likely require significant expenditure by Pacific National nationally. This expenditure needs to be supported by our owners and investors who are internationally based, and by our customers.

If the cumulative result of multi-jurisdictional regulation is higher rail operator costs, it may increase the risk of carbon emission leakage to road transport, that produces more carbon emissions per net tonne kilometre than rail. Increased road-freight volumes have negative consequences for road infrastructure, congestion (further worsening carbon emissions) and to safety.

Consultation question 12

What lessons can be learned from the insurance industry's assessment of climate change related risks? How should the QCA approach the assessment of actuarial information provided to it as part of future expenditure claims? Does the QCA's approach to assessing self-insurance claims provide a model for assessing proposed climate change related spending? What might the criteria be for a climate change related application? What types of supporting material should an entity provide?

Lessons from the industry insurance include the need for engagement and collaboration among stakeholders on future risk associated with perils and natural hazards. Within the rail industry, adopting a collaborative mitigation approach would allow rail providers, operators and customers to collectively better understand and mitigate their risks.

The collaborative mitigation approach is aligned to the National Disaster Risk Reduction Framework (NDRRF) which outlines a coordinated approach to reducing disaster risk in Australia.[10] The QCA could consider leveraging some of the principles, strategies and action plans of the NDRRF when considering the approach to climate change related expenditure. NDRRF guiding principles include:

- Inclusive engagement:
    - All sectors connect with diverse stakeholders to ensure inclusive decision-making leading to more effective solutions.
- Data-driven decision making:
    - Data and information informs implementation planning and execution.

There is a recognition within the insurance industry that much existing data relates to historical natural hazard patterns, however this cannot be relied on as a sole predictor of future risk. To address this, the Insurance Council of Australia (ICA) has established a data hub that collates data from multiple government agencies for the purposes of better understanding natural hazard exposures.

A key risk to adaptation and resilience building for infrastructure is the lack of standardised, centralised and transparent data to support planning.[11] Similar to ICA data hubs, disaster risk information related to regulated entities could be collated and shared so it can be integrated into risk planning across sectors. Ideally this would take a harmonised approach within and across states and jurisdictions.

Exposure to Natural Catastrophe's is now considered Australia-wide. This is driving insurance premiums up and certain insurers out of the market in Australia. In terms of the approach to self insurance, an Insurance Captive with appropriate capital set aside – agreed with an insurance regulator based on the risk transferred – is a good way to manage self-insurance.

[10] https://www.homeaffairs.gov.au/emergency/files/national-disaster-risk-reduction-framework.pdf
[11] Infrastructure Australia, A National Study of Infrastructure Risk A report from Infrastructure Australia's Market Capacity Program, October 2021 P28

Consultation question 13

Do stakeholders have experiences with other regulatory work or frameworks, in Australia or overseas, that the QCA ought to have regard to in undertaking this climate change project? If so, what lessons could be learned from such experiences?

Pacific National is owned by an international operating group covered under varying jurisdictions. This means international regulations such as those that influence financial decision making are relevant to us. Of note are the sustainability standards of the International Sustainability Standards Board (ISSB). The Clean Energy Regulator has commented that such standards may well be imported into in Australia.[12]

As noted earlier, Pacific National is captured under the Safeguard Mechanism and achieving the Clean Energy Regulator Safeguard Mechanism targets will likely require significant expenditure by Pacific National in all the areas in which we operate.

Pacific National is committed to an equitable share of the investment needed to decarbonise Australia's supply chains through modal shift to rail. Pacific National expects to invest several billions of dollars in low and zero carbon assets over the next twenty years, including both rail vehicles (rollingstock) and the rail terminals which support them. We currently operate around 600 locomotives, and this number is growing with demand for rail freight. Today, a modern, fuel-efficient diesel-electric locomotive costs more than A$6m (subject to exchange rates), and Pacific National has committed over A$300m to purchasing 50 of these Australian-built locomotives.

Even the most efficient diesel locomotives will not get Pacific National to net-zero. A new Battery Electric Locomotive is estimated to cost A$12m - twice the cost of a diesel unit. Even this unit is limited as it does not have the horsepower and battery life for the length of journeys for freight-rail operations in Australia. The cost of a hydrogen locomotive is unknown as this technology has not yet been developed for rail freight. Finally, developing a new rail terminal, positioned close to capital city freight markets and capable of serving a meaningful share of the national freight task, will cost the better part of a billion dollars.

In light of Pacific National's existing commitment to the Safeguard Mechanism targets and significant expenditure, we would request that changes to any QCA funding approaches be flexible and consider the requirements imposed at a federal level as well. This would assist in the achievement of national decarbonisation goals as well as Queensland goals.

[12] The Clean Energy Regulator made this comment in an event hosting by Allens: Net-zero by 2050: Navigating Australia's evolving carbon market, 2nd Nov, 2022 https://www.allens.com.au/general/allens-online-learning/Net-zero-by-2050-Navigating-evolving-carbon-market/