Kia ora,

I am writing to comment on Section 22 of Draft CS 1, particularly par 22(e)(ii), which requires that entities must disclose whether their GHG emissions target is "aligned with science". I suggest you substantively clarify this reference to alignment with science. In its current form this requirement is too vague and not conducive to entity-level targets that are consistent with the ambition of the Paris Agreement.

The key problem with the statement as currently written is that it does not make clear what 'science' is being referred to, and the criteria to be used when translating a global emissions pathway into an organisation-level target.

A minimum clarification would be that 'aligned with science' means 'consistent with global and sectoral emission pathways assessed by the IPCC as limiting warming to 1.5 degrees with no or limited overshoot'. We assume that this is indeed the intent behind the current draft.

However, even if such a clarification were provided, this does not answer the question of *how* a *global* emissions pathway (which is often only crudely specified at sectoral level) should be translated to the level of individual organisations, which are engaged in a mix of activities and whose business is located in a specific social and economic context.

This statement is extremely vague. It should be clarified exactly which science it is referring to. One could easily claim that continuing to increase emissions is aligned with science. There is plenty of science on this topic. One could equally claim that not having a target at all is aligned with science. There's plenty of science on that topic too. The sentence should clearly state which piece of science it relates to or ask disclosers to clarify which piece of science their target is aligned to.

The default approach has become to consider a relative reduction target that matches the global rate of reductions in modeled pathways that limit warming to 1.5C as "science-based". However, these pathways are global, and most of these pathways do not make explicit assumptions about global equity, environmental justice or intra-regional income distribution. There is no science that says that any individual organisation should set relative emission reduction targets equal to the global rate of reduction in these pathways.

In fact, if the largest individual organisations headquartered in a highly developed and wealthy country (which are the focus of the XRB standard and that, one might assume, have the highest capacity to act on climate change) achieve only the global average rate of emission reductions for their respective sectors, then those global pathways may in fact become unachievable. This is because it will generally be more difficult for smaller organisations and organisations in less developed countries to achieve the same rate of emission reductions (because they are starting from a lower baseline and have less access to capital, human and technological resources), and could create conflicts with basic global development needs.

Even within the same country, this method of target-setting amounts to grandfathering and can therefore be highly inequitable across organisations. For example, consider two organisations (A and B) with targets of a 50% reduction in carbon dioxide emissions by 2030 on 2010 levels (which would be considered "science-based"). If A has very high current and historical emissions and B has very low current and historical emissions, then, although they appear the same, these relative reduction targets are extremely different. A is essentially allowed to continue to be a high emitter, while B is restricted to remain a low emitter. This approach would confer on A a greater future 'right to emit' than on B, only because it has historically emitted more. This would result in a highly inequitable distribution of effort even within New Zealand.

## Targets reflect organisational values, not (natural or economic) science

In reality, all targets represent the entity's values. They reflect what the organisation considers its fair share of the global burden of reducing emissions. Setting targets at organisational level consistent with 1.5C is inevitably a question of **equitable burden sharing**.

There is no universally-accepted way to determine an individual organisation's role in the 1.5C challenge, and the scientific literature on how to apply burden sharing at organisational level is underdeveloped. However, four broad principles associated with burden sharing that are commonly used when considering fair shares among countries could be used to partially inform an organisation's target consistency with 1.5C:

- Historical responsibility the principle that countries should takes responsibility for their contribution to total warming including from their historical emissions when setting a target
- Equality the principle that each person has an equal 'right to emit', i.e. an eventual convergence towards similar emissions per capita across countries.
- Capacity to pay the principle that efforts to reduce global emissions, including by supporting mitigation efforts overseas, should be proportional to a country's wealth.
- The right to sustainable development the principle that mitigation must not inhibit a country's ability to achieve basic societal development goals such as poverty eradication. This generally implies that more developed countries need to take a greater share of the global mitigation burden.

Setting targets using the typical "science-based" methodology (e.g. "the world has to reduce emissions by 50% by 2030, so we also set a target for our company to reduce our emissions by 50% by 2030") does not apply any of these principles. In contrary, if organisational targets mirror the global rate of reduction only, this would imply that this organisation considers that it should *not* take any responsibility for its historical emissions, that everybody does *not* have the same right to emit GHGs, that organisations with less wealth should invest a greater share of their income into mitigation than wealthier organisations, and that fundamental development rights should *not* be considered when setting mitigation targets.

Other considerations at organisational level may relate to the degree to which the products and services provided by the organisation meet essential human needs and the degree to which high-emissions products and services could be substituted by lower-emissions ones, but also

the consequences for the work force of this organisation and the ability to re-train and transition workers towards other, lower-emitting products and services or other industries.

We therefore suggest that the standard explicitly request organisations to demonstrate how their ambition aligns with the urgent global transformational change that is needed in all sectors to limit warming to 1.5 or well below 2 degrees, taking into account their relative wealth, human and technological capacity, relative to the global context; and that achieving a global target inevitably means that some organisations need to reduce their emissions more rapidly than the global target, to allow others (those with less capacity, resources, and currently or historically lower emissions, and greater development needs) to achieve the target later

For reference, recent draft net-zero guidelines developed by ISO (ISO/TMBG, final draft IWA 42) states that:

"The organization should take into account the principle of equity and justice when determining fair share and how it should contribute to a just transition to global net zero. Large organizations and those based in developed countries should aim to reach net zero earlier (potentially well before 2050) than low-emitting countries to contribute to global efforts to limit warming to 1.5°C.

In determining what a fair share is for the organization, it should consider its context and take into account:

- resources and technology;
- its historical GHG emissions;
- historical GHG emissions of the nation(s) it operates in;
- historical and current GHG emissions of the sector(s) it operates in;
- current socio-economic situation of the territories it operates in."

We suggest that at least some of those elements are incorporated in the standard to give a sense of direction of what consistency with 1.5 degrees at organisational level might imply, and to avoid unambitious targets that in effect would jeopardise global efforts to limit warming at levels consistent with the Paris Agreement even while claiming science-based consistency.