



SUSTAINABLE
STEEL
COUNCIL

25 March 2021

Re: Climate Change Commission Draft Advice for Consultation

The members of the Sustainable Steel Council, (listed at the end of this submission), are committed to a vision where steel is valued as a critical enabler in New Zealand's journey to a low emission economy. The vision is achieved by a financially sound industry taking leadership in delivering to the living standards framework, measured across human, social, natural and financial / infrastructure capitals.

We congratulate the Climate Change Commission on the 2021 draft advice to government. We look forward to further open consultation and are committed to doing our bit to ensure New Zealand achieves its international commitments.

For further discussion please contact nick@sustainablesteelcouncil.co.nz

The six big issues

The pace of change

Big issues question 1. Do you agree that the emissions budgets we have proposed would put Aotearoa on course to meet the 2050 emissions targets?

Strongly agree - Agree - Neutral - Disagree - Strongly disagree - Do not know Please

The Sustainable Steel Council (SSC) agrees that the emission budgets proposed by the Climate Change Commission (CCC) should put Aotearoa on course to meet the 2050 budgets conditional on the modelling and assumptions are correct/supported by good science.

Future generations

Big issues question 2. Do you agree we have struck a fair balance between requiring the current generation to take action, and leaving future generations to do more work to meet the 2050 target and beyond?

Strongly agree - Agree - Neutral - Disagree - Strongly disagree - Do not know Please

The SSC believes that the CCC has struck a fair balance.

The role of communication / awareness raising is critical and government agencies need to be directed to work collaboratively in their messaging focusing on all age / ethnic groups across diverse channels, with a particular focus on engaging youth, listening to and acting on their concerns.

Our contribution

Big issues 3. Do you agree with the changes we have suggested to make the NDC compatible with the 1.5°C goal?

Strongly agree - Agree - Neutral - Disagree (our changes are too ambitious)- Disagree (our changes are not ambitious enough) - Do not know

The SSC strongly agrees, with the proviso, that firstly we follow the science and secondly if circumstances arise beyond New Zealand's control and the ability to abate domestically, (e.g. a significant exotic plantation forest fire), then New Zealand is able to offset those unforeseen emissions with reliable off shore mitigation at a reasonable price.

Role and type of forests

Big issues 4. Do you agree with our approach to meet the 2050 target that prioritises growing new native forests to provide a long-term store of carbon?

Strongly agree - Agree - Neutral - Disagree - Strongly disagree - Do not know

The SSC strongly agrees, with the proviso, that new native forest plantings must not result in significant land use change – for example replacing arable farming to plant native forests. The CCC's advice needs to direct government agencies to support existing rural communities, and particularly SMEs located in rural communities during the transition.

Policy priorities to reduce emissions

Big issue 5. What are the most urgent policy interventions needed to help meet our emissions budgets? (Select all that apply)

Action to address barriers - Pricing to influence investments and choices - Investment to spur innovation and system transformation - None of them

The SSC encourages the CCC to direct government to place priority on getting alignment and consistency across government agencies. Maintaining affordable electricity pricing will be critical to enabling a fair transition across all budget periods.

Technology and behaviour change

Big 6. Do you think our proposed emissions budgets and path to 2035 are both ambitious and achievable considering the potential for future behaviour and technology changes in the next 15 years?

Strongly agree - Agree - Neutral - Disagree - Strongly disagree - Do not know

The SSC strongly agrees that technology transition needs to happen, particularly for the Metals sector. The technology to manufacture low/zero carbon steel is only now emerging internationally and steel, along with other products essential to the functioning of our economy, infrastructure and society will need that time for a fair and just transition.

The CCC advice is light on the potential that the circular economy.

Transitioning from the current *take, make, waste* business model to a circular business model, has the potential to deliver a significant reduction in GHG emissions, raw material extraction and waste. New Zealand has a proven commercial model for recycling ferrous and non-ferrous metals, which delivers significant savings in raw materials and energy, while diverting significant quantities of material from landfill¹.

¹ <https://www.nzamr.org.nz/What-We-Recycle/>

1. How we developed our advice

Consultation question

1. Do you support the principles we have used to guide our analysis?

Fully support - Partially support - Neutral - Do not support - Do not know

The Sustainable Steel Council supports the principles developed by the Climate Change Commission to guide CCC's advice on the transition to a thriving, climate resilient Aotearoa.

- **Principle 3: Create options.**

The CCC's transition pathway relies heavily on electricity and acknowledges the uncertainty surrounding what is ahead for New Zealand to achieve its goal. We make the following comments to build resilience in energy transition and to accelerate the trajectory.

New Zealand needs other energy pathways in addition to electricity.

Transitioning from a *take, make, waste economic model* to a circular economy has the potential to significantly reduce New Zealand's GHG emissions faster.

The SSC encourages the CCC to be bold in directing government to work in partnership with industry sectors to create alternative pathways supported by a mix of incentives and regulations. When faced with significant challenges business responds positively to partnership to develop innovative solutions.

- **Principle 5: Transition in an equitable and inclusive way.**

Fair transition is crucial for business and households. Achieving the budgeted transition is reliant on maintaining current energy pricing.

New Zealand's building, construction and infrastructure sectors depend on steel to deliver resilient structures able to withstand seismic, fire and extreme weather events. New Zealand's food exporters, particularly dairy and wine sectors rely on high quality stainless steel fabrication.

Just transition for steel will be critical to delivering on New Zealand's infrastructure and construction pipeline and providing resilience in face of disrupted supply chains post COVID.

2. Emissions budgets numbers

Consultation question

2. Do you support budget recommendation 1? Is there anything we should change and why?

	Too ambitious	About right	Not ambitious enough	Don't know
Emissions budget 1 (2022 – 2025)		√		
Emissions budget 2 (2026-2030)		√		
Emissions budget 3 (2031-2035)		√		

3. Breakdown of emissions budgets

Consultation question

3. Do you support our proposed break down of emissions budgets between gross long-lived gases, biogenic methane and carbon removals from forestry? Is there anything we should change, and why?

	Too ambitious	About right	Not ambitious enough	Don't know
Gross long-lived gases		√		
Biogenic methane		√		
Forestry		√		

The Sustainable Steel Council supports the breakdown of long-lived gases, biogenic methane and carbon removals from forestry.

The SSC acknowledges that while the science is clear with respect to increased global temperatures the detailed data is still emerging re embodied emissions. We would draw the CCC's attention to the emerging data re embodied carbon in soil and potential loss of soil carbon when exotic plantation forests are harvested – *“Of the five forest components.... soil carbon accounts for the largest reservoir of carbon (56.4 percent of total forest carbon as of 2016), followed by aboveground biomass (27.7 percent.”*²

4. Limit on offshore mitigation for emissions budgets and circumstances justifying its use

Consultation question

4. Do you support budget recommendation 4? Is there anything we should change, and why?

Fully support - Partially support - Neutral - Do not support - Do not know Please

The Sustainable Steel Council believes that reduction in domestic emissions should be first recourse.

The CCC must ensure New Zealand has flexibility, as circumstances may arise in the future which are beyond New Zealand's immediate control. We suggest that there needs to be a force majeure clause to cover unforeseen events, for example a significant forest fire might occur in an exotic plantation which creates significant unbudgeted emissions and results in significant loss of embodied carbon. New Zealand needs to be able to access reputable offshore credits to address unforeseen events if they arise.

Enabling an enduring climate transition - intro

5. Cross-party support for emissions budget

Consultation question

5. Do you support enabling recommendation 1 on cross-party support for emissions budgets? Is there anything we should change and why?

Fully support - Partially support - Neutral - Do not support - Do not know Please

Cross party support will be critical to achieving emission budgets.

Certainty is critical for business, communities and households to commit to pathways for a zero emission economy. The SSC suggests that not only should the CCC recommend that the Minister for Climate Change seek cross party support but that the CCC Chair directly guides/ supports the Minister in seeking cross party commitments that endure the next 30 years.

² <https://www.epa.gov/roc/carbonstorageinforests>

6. Coordinate efforts to address climate change across Government

Consultation question

6. Do you support enabling recommendation 2 on coordinating efforts to address climate change across Government? Is there anything we should change and why?

Fully support - Partially support - Neutral - Do not support - Do not know

The Sustainable Steel Council supports Enabling recommendation 2 – detailed policies, strategies will be critical to achieving budget targets.

Developing these policies and strategies in partnership with business will enhance success. While Ministerial and agency commitment is critical, so too is a whole of government approach, aligning all agencies actions across the first three budgets and successive budget periods. Fairness and transparency around funding is essential and specific multi agency appropriation will be critical. New Zealand needs strong alignment across government agencies, supported by adequate funding to ensure successful achievement of budgets.

Clear and urgent guidance to government agencies re detailed strategies, frameworks and tools to translate production emissions budget reduction to consumption targets to guide business and households to measure their footprints, access to best practice and benchmarking data.

This needs to happen quickly. Table 3.4: (*Production and consumption emissions options assessed in detail against the Commission's principles for emissions budget accounting*) explains the methodology production / consumption.

However, what is required urgently is guidance for business/households aligned to the pathways across **Transport, Heat, Industry and Power and Waste** to ensure the CCC's budget production targets are translated into meaningful consumption reduction targets for business and industry and that this advice is consistent across government agencies and local government.

In summary the CCC has detailed the top down budget production emissions. What is required are the bottom up consumption reduction targets. Failure to provide clear consistent guidance, strategies and targets will delay engagement and action.

The Sustainable Steel Council notes that the overall path is silent on the role of our major trading partners in supporting New Zealand on our transition pathway. We encourage the CCC to direct MFAT as to their role in negotiating Free Trade agreements to ensure that the obligations placed on our trading partners are consistent with those obligations on New Zealand business and households.

7. Genuine, active and enduring partnership with iwi/Māori

Consultation question

7. Do you support enabling recommendation 3 on creating a genuine, active and enduring partnership with iwi/Māori? Is there anything we should change and why?

Fully support - Partially support - Neutral - Do not support - Do not know Please

The SSC recognises, and fully supports the role that iwi/Maori have in partnership with the Crown towards our migration to a low-emission economy.

8. Central and local government working in partnership

Consultation question

8. Do you support enabling recommendation 4 on central and local government working in partnership? Is there anything we should change and why?

Fully support - Partially support - Neutral - Do not support - Do not know Please

Alignment across central and local government is critical to achieving a fair and just transition.

Aligning legislation and policy, empowering local government to make decisions and providing incentives. Consistency across the whole country, i.e., across all territorial authorities, will be essential.

Local government owns significant infrastructure, much of which is in need of upgrading/expanding to meet current and future population needs, opens the way to a systemic approach to ownership, operation and maintenance of infrastructure with local government in partnership with central government leading in emissions reduction will facilitate a more speedy transition.

Currently how infrastructure is funded doesn't drive a change to lower carbon outcomes. Central government needs to work with local government to resolve this and local government access to the GST from local expenditure is worthy of consideration to ensure added debt burden doesn't fall on local government.

9. Ensuring inclusive and effective consultation, engagement and public participation

Consultation question

9. Do you support enabling recommendation 5 on establishing processes for incorporating the views of all New Zealanders? Is there anything we should change and why?

Fully support - Partially support - Neutral - Do not support - Do not know Please

Education and ongoing learning is critical to supporting the transition.

In question 6 we drew attention to the need for simple, clear translation from production based emission reduction budgets which underpin New Zealand's international commitments and realistic strategies, guidelines and targets for addressing consumptions emission reductions across the key target areas.

10-11. Locking in net zero

Consultation questions

10. Do you support our approach to focus on decarbonising sources of long-lived gas emissions where possible? Is there anything we should change and why?

Fully support ~~Partially support~~ Neutral - Do not support - Do not know Please

The Sustainable Steel Council supports the approach to focus on decarbonising sources of long-lived gas emissions where possible and the Climate Change Commission, in its advice to government agencies needs to ensure that a fair and just transition is provided across early budget periods.

In Question 13 we provide evidence of the emerging global transition for carbon free steel production. Given the technology is at pilot stage there needs to be a bridge, through offsets, to ensure steel to transition to later budget periods when this technology is available and affordable.

11. Do you support our approach to focus on growing new native forests to create a long-lived source of carbon removals? Is there anything we should change and why?

Fully support ~~Partially support~~ Neutral - Do not support - Do not know Please

The Sustainable Steel Council partially supports the approach to focus on growing new native forests to create a long-lived source of carbon removals

While native forestry will enable much needed New Zealand offsets, we would refer CCC to SSC's response to Big Question 4 - that new native forest plantings must not result in detrimental land use change – for example replacing arable farming to plant native forests.

12. Our path to 2035

Consultation question

12. Do you support the overall path that we have proposed to meet the first three budgets? Is there anything we should change and why?

Fully support ~~Partially support~~ Neutral - Do not support - Do not know Please

The Sustainable Steel Council partially supports the overall path that we have proposed to meet the first three budgets.

ROAD TRANSPORT

Strongly support EV uptake light vehicle /servicing transport and the phasing out of ICE vehicles in third budget period.

The SSC draws the CCC's attention to our response to Question 1 and particularly the lack of options in the CCC's advice which is electricity centric. Hydrogen is another realistic pathway for road transport, the technology is available globally now and may prove a more efficient option for medium and heavy transport.

Is the CCC confident that New Zealand will have systems to recycle, reuse, repurpose EV / battery waste?

REDUCING TRAVEL DEMAND

Partially support and suggest that the CCC needs reference beyond Wellington and Auckland CBDs. For example it is extremely unlikely that shift workers across South Auckland (and in other manufacturing centres) will be able to walk, cycle or access public transport for work. It is also unlikely that in early budget periods that they will be able to afford to purchase EVs.

NON ROAD TRANSPORT

Fully support pathway and encourage the CCC to bring forward electrification of passenger ferries to budget 1.

The SSC notes that domestic air travel is omitted from table 3.1 and from the report. We would encourage the CCC to include future pathways for the electrification of regional air services as the technology is currently being trialled in New Zealand.

BUILDINGS

Partially support the pathway. Targets for improved thermal performance of our buildings need to be accelerated. New Zealand has had the technology for over a decade and reform of the relevant Building Code Clause H1 seriously lags behind international best practice, resulting in higher than necessary energy use and significantly impacts the health of lower socio economic households.

3.8.7 The CCC report makes the following generalisation –

Timber can displace emissions intensive materials such as steel and cement in buildings³.

The SSC cautions the CCC from assuming all structural materials are equal and able to be substituted. Steel and cement deliver different structure properties to New Zealand buildings. Use of combustible materials is limited in New Zealand residential dwellings above 10 metres and international research raises serious questions re performance of structural timber in fire⁴. Concrete floors, foundations and walls provide thermal properties which significantly reduce the need for additional heating. In the post-quake rebuild of Christchurch steel has provided resilient, cost-effective structural solutions.

New Zealand needs a mix of materials to deliver safe, resilient buildings for future generations.

ELECTRICITY

The CCC's analysis suggests that overall household electricity bills are unlikely to increase and *that emissions budgets are unlikely to change regional electricity prices⁵* .

³ <https://ccc-production-media.s3.ap-southeast-2.amazonaws.com/public/evidence/advice-report-DRAFT-1ST-FEB/ADVICE/CCC-ADVICE-TO-GOVT-31-JAN-2021-pdf>, p 68

⁴ Deeny, Haddon, Lane, Lawrence *Fire Safety in modern timber buildings*. Journal of Fire Engineering January 2018

⁵ <https://ccc-production-media.s3.ap-southeast-2.amazonaws.com/public/evidence/advice-report-DRAFT-1ST-FEB/ADVICE/CCC-ADVICE-TO-GOVT-31-JAN-2021-pdf>P81, 82

The transition to solely electric energy will require significant investment in transmission upgrades and in new generation capacity.

The SSC notes that a fair and just transition for households and business relies on electricity costs remaining at current pricing levels.

INDUSTRIAL PROCESS HEAT

The SSC supports the phase out of fossil base load generation and the replacing of coal with biomass and electricity.

The SSC seeks clarification re the certainty of future coal supply (over the three budget periods) to enable a fair and just transition for local steel production.

13. An equitable, inclusive and well-planned climate transition

Consultation question

13. Do you support the package of recommendations and actions we have proposed to increase the likelihood of an equitable, inclusive and well-planned climate transition? Is there anything we should change, and why?

Fully support - Partially support - Neutral - Do not support - Do not know Please

The Sustainable Steel Council fully supports an equitable, inclusive and well-planned climate transition, which is contingent upon electricity prices remaining at current levels.

For the building and construction sector this will require significant upskilling across design, engineering and trades.

Support for SME's will be critical as they generally lack specific skills to manage complex issues while focused on managing their businesses day to day.

With respect to an equitable, well planned transition for the steel sector the Sustainable Steel Councils provides the following background.

Commercially proven technology to make steel without coal is in its infancy in Europe. Several pilot plants to make steel using hydrogen as a reductant are under construction in Europe – the world's largest steel maker ArcelorMittal has stated it would start producing green steel in 2020⁶. In Sweden Hybrit is trialing hydrogen steel manufacture⁷. Mitsubishi Heavy is commissioning a hydrogen steel plant in Austria in 2021⁸. H2 Green Steel in Sweden is scheduled to come into production in 2024 with capacity of 5m tonnes of steel annually.

New Zealand's sole steel producer, New Zealand Steel, is small by global standards producing 650,000 tonnes of flat and rolled steel product annually - volume is approximately half of the steel consumed

⁶ <https://corporate.arcelormittal.com/media/news-articles/arcelormittal-europe-to-produce-green-steel-starting-in-2020>

⁷ <https://www.ssab.com/company/sustainability/sustainable-operations/hybrit>

⁸ <https://asia.nikkei.com/Spotlight/Environment/Climate-Change/Mitsubishi-Heavy-to-build-biggest-zero-carbon-steel-plant>

in New Zealand annually. The plant is unique in steel making in that it relies solely on iron sand (as opposed to iron ore) as the primary raw material in steel making.

Potential alternative technology solutions are being developed here in New Zealand. One such example is a project led by the MacDiarmid Institute to commercialise technology to make steel from iron sand with hydrogen⁹.

Whilst fully supporting such future technology initiatives, in order to practically implement this in New Zealand they first need to be proven at an industrialised scaled-up level and have the right logistics infrastructure to support their use, transportation, storage and safety – there is some complexity to this - it will require further in depth and careful consideration. It should also be acknowledged that New Zealand Steel's production is small by global standards and significant investment would be required to develop carbon free steel making based on iron sand here in New Zealand.

Post COVID there has been little disruption to the supply of heavy steel, largely due to long lead times. However the global commodity price of steel scrap has risen considerably in the last 12 months from approx. \$US300 a tonne to \$US450 (January 2021) posing the question as to whether it is critically important to invest in low/zero carbon steel technologies to provide resilience in steel production for New Zealand.

Emissions leakage

The CCC draft report focus is on production based GHG emissions, but New Zealand also needs to address consumption emissions, particularly with respect to emissions imported.

The CCC report identifies emissions leakage¹⁰, with imported product substituted for locally manufactured goods, and the risk of production and investment moving out of New Zealand. The CCC provides no guidance to government to address Emission leakage.

It is imperative for CCC to direct government to address Emissions leakage now. Emissions leakage cannot be left for the first three budget periods. Failure to do so will see the irretrievable loss of high value jobs, local production and supply resilience for local construction, infrastructure and manufacturing.

The EU have recognised the need to move quickly to address emissions leakage and as of 5 February 2021 have voted to adopt a carbon border adjustment mechanism which will place *“a carbon price on imports of certain goods from outside the EU, if these countries are not ambitious enough about climate change”*¹¹.

⁹ <https://www.macdiarmid.ac.nz/news-and-events/news/annual-reports-pages/taking-essential-metals-into-a-zero-carbon-future/>

¹⁰ <https://ccc-production-media.s3.ap-southeast-2.amazonaws.com/public/evidence/advice-report-DRAFT-1ST-FEB/ADVICE/CCC-ADVICE-TO-GOVT-31-JAN-2021-pdf> p92

¹¹ <https://www.europarl.europa.eu/news/en/press-room/20210201IPR96812/carbon-levy-on-eu-imports-needed-to-raise-global-climate-ambition>

14. Transport

Consultation question

14. Do you support the package of recommendations and actions for the transport sector? Is there anything we should change and why?

Support all the actions - Support some of the action - Do not support these actions - Do not know - Neutral

Proposed solutions to transition light vehicle network must be economically and environmentally sustainable.

Accelerating light vehicle network / uptake of EVs will require incentives to reduce vehicle age and to support low and medium income families to transition.

Is the CCC confident that New Zealand will have systems to recycle, reuse, repurpose EV / battery waste?

15. Heat, industry and power

Consultation question

15. Do you support the package of recommendations and actions for the heat, industry and power sectors? Is there anything we should change and why?

Support all the actions - Support some of the actions - Do not support these actions - Do not know - Neutral

In principle, the Sustainable Steel Council supports some of the recommendations / actions.

There has to be a just transition for hard to abate sectors. Energy prices need to stay at a level that ensures a just transition. Government needs to be proactive and address actively carbon leakage before it happens.

16. Agriculture

Consultation question

16. Do you support the package of recommendations and actions for the agriculture sector? Is there anything we should change and why?

Support all the actions - Support some of the actions - Do not support these actions - Do not know - Neutral

17. Forestry

Consultation question

17. Do you support the package of recommendations and actions for the forestry sector? Is there anything we should change and why?

Support all the actions - Support some of the actions - Do not support these actions - Do not know - Neutral

18. Waste

Consultation question

18. Do you support the package of recommendations and actions for the waste sector? Is there anything we should change and why?

Support all the actions - Support some of the actions - Do not support these actions - Do not know - Neutral

New Zealand's Steel sector already has a commercially successful model which manages the product stewardship for steel.

Very little steel finds its way to landfill at the end of life. Steel can be infinitely recycled. Steel enables the seismic repair of timber and concrete buildings. Steel is frequently re-used or repurposed at end of life.

Predominantly New Zealand's steel scrap is exported, for recycling offshore, effectively reducing steel's global footprint by reducing need to mine iron ore.

The CCC needs to be mindful that increases to waste levy charges have the potential to impact on recyclability goals as lower-grade contaminated steel (i.e. cars / whiteware) will become uneconomical to process.

Transition to a circular economy will accelerate New Zealand's pathway to emissions reduction

The SSC recommends looking more closely at the significant opportunity for GHG emission reductions through the adoption of circular economy principals and practice.

The Circularity Gap report 2020 identifies that the world is only 8.6% circular¹². The report identifies that 70% of GHGs result from materials handling and use and identifies enormous opportunities in transitioning to a circular economy – *“through smart strategies and reduced material consumption, we find that the circular economy has the power to shrink global GHG emissions by 39% and cut virgin forest use by 28%”*¹³

Given the scale of the challenge and the potential value which can be delivered through a circular economy the SSC encourages the CCC to direct government to focus on the circular economy opportunity.

¹² <https://circularity-gap.world/2020>

¹³ Ibid page 8.

19. Multi-sector strategy

Consultation question

19. Do you support the package of recommendations and actions to create a multisector strategy, and is there anything we should change?

Support all the actions - Support some of the actions - Do not support these actions - Do not know - Neutral

The Sustainable Steel Council supports the package of recommendations and actions to create a multisector strategy.

Specifically we would expect advice to government to

- develop / deliver industry engagement strategy transition delivered in partnership utilising industry experience and skills to realise the opportunities
- deliver, consistent across all government agencies a package of the bottom up consumption reduction targets which enable industry and households to get on the journey quickly
- get serious about behavioral change with respect to transport and energy in buildings
- lead through what they procure through Government rules of procurement, opposed the off shoring manufacturing to supply New Zealand's needs.
- measure and set targets to increase circularity of economy by 2025
- partner with the sector to extend product stewardship schemes to wider range of products, prioritizing those products with higher emissions potential
- legislate for and funding coordinated data collection across the waste industry

20. Rules for measuring progress

Consultation question

20. Do you agree with Budget recommendation 5 on the rules for measuring progress? Is there anything we should change any why?

Support all the actions - Support some of the actions - Do not support these actions - Do not know - Neutral

The Sustainable Steel Council is supportive of production based approach which will enable New Zealand to achieve our Nationally Determined Contributions.

Critical to achieving these budgets will be a consistent approach across all government agencies.

21-23. Our Nationally Determined Contribution (NDC)

Consultation question

21. Do you support our assessment of the country's NDC? Do you support our NDC recommendation?

Fully support - Partially support - Neutral - Do not support (too ambitious) - Do not support (not ambitious enough) - Do not know

The SSC acknowledges the CCC report indicates that current policy initiatives will not enable New Zealand to achieve our NDCs and supports the recommendation to strengthen reductions in line with the 1.5° target.

In raising New Zealand's commitments, and ensuring that we are not set up to fail, the SSC proposes the CCC permit offshore mitigation to reach those levels and reminds CCC that guidance to government needs to include strong recommendations to develop transition pathways for local manufacturers rather than favour imported products where embodied carbon content is unknown.

The SSC also proposes the CCC direct the Ministry of Foreign Affairs and Trade to ensure that in future Free Trade Agreements our trading partners commitments are strongly aligned with New Zealand's commitments.

22. Do you support our recommendations on the form of the NDC?

Support - Somewhat support - Do not support (too ambitious) - Do not support (not ambitious enough) - Do not know

23. Do you support our recommendations on reporting on and meeting the NDC? Is there anything we should change, and why?

Support - Somewhat support - Do not support (too ambitious) - Do not support (not ambitious enough) - Do not know

24. Eventual reductions in biogenic methane

Consultation question

24. Do you support our assessment of the possible required reductions in biogenic methane emissions?

Fully support our assessment - Somewhat support our assessment - Do not support our assessment - Do not know - Neutral

About the Sustainable Steel Council

Members of the Sustainable Steel Council are committed to a vision where steel is valued as a critical enabler in New Zealand's journey to a low emission economy. The vision is achieved by a financially sound industry taking leadership in delivering to the living standards framework, measured across human, social, natural and financial / infrastructure capitals.

Members of the Sustainable Steel Council



www.hera.org.nz

The New Zealand Heavy Engineering Research Association (HERA) was established in 1979 as a non-profit research organisation dedicated to serving the needs of the metals-based industries in New Zealand. Its membership consists of approximately 600 companies representing metals-based fabrication and manufacturing companies, the associated design and consulting industry, related education providers, and the supporting material supply and services industry. HERA is base funded through an industry generated R&D contribution in the form of a levy on heavy steel and welding consumables administered by the Heavy Engineering Research Levy (HERL) Act. HERA's current research is in the areas of steel construction, general heavy engineering industry development and welding fabrication innovation. HERA works with other research providers such as universities, independent research organisations and CRIs to deliver its programmes.



www.scnz.org

Steel Construction New Zealand Inc. (SCNZ) aims to advance the interests of New Zealand's diverse steel construction industry by promoting the benefits of steel solutions in building and infrastructure projects. Members include manufacturers of structural steel and steel products, distributors, fabricators, designers, detailers, galvanisers, and paint and building supply companies. SCNZ provides its members with technical advice on the latest in steel design trends and standards, networking opportunities, and a representative voice with key industry and Government decision-makers.



www.metalroofing.org.nz

The New Zealand Metal Roofing Manufacturers Association Inc. (NZMRM) represents companies that roll-form steel and other metals for roofing and cladding purposes. Commonly known as 'Rollformers', NZMRM has 30 member companies. Members are involved in producing a wide range of profiled product, both painted and unpainted. The Association is active in the development and promotion of industry standards, and in conducting research that promotes the use of metal roofing and cladding.



www.nashnz.org.nz

Formed in New Zealand and Australia in 1982, the National Association of Steel-Framed Housing (NASH) is an advocate for all forms of low and medium rise steel-framed construction. NASH represents the interests of suppliers, practitioners and customers of steel-framing systems, and provides a representative voice for the sector at Government level.



NZSSDA

www.nzssda.org.nz

The New Zealand Stainless Steel Development Association (NZSSDA) was formed in 1998 to promote and develop the stainless steel market in New Zealand. Its members include engineers, architects, fabricators, merchants and end-users with an interest in the supply or application of stainless steels. NZSSDA supports and encourages technical excellence in the industry and provides specialised training courses on stainless steel for the New Zealand market.



The NZ Association of Metal Recyclers is the national association for metals recycling. Membership in the Association is voluntary and shows the commitment of the member to professional practice and our Code of Conduct. Our varied membership ranges from individual metal recyclers through to large-scale processors and end-users of recycled metals. The majority of our members deal primarily or exclusively in metals.



Metals New Zealand (Metals NZ) is a membership organisation serving the needs of New Zealand's metals related industry. Founded in 2011 it is a pan industry organisation committed to the future of metals manufacturing and the future of metals to deliver robust, resilient buildings and infrastructure, essential to support New Zealand's transition to a low carbon future.