May 28, 2020

Honourable Jonathan Wilkinson, PC, MP
Minister of Environment and Climate Change
200 Sacré-Coeur Boulevard
Gatineau, QC K1A 0H3

Dear Minister Wilkinson:

**Subject: Clean Stimulus Opportunities for Canada's Steel Sector**

On behalf of the members of the Canadian Steel Producers Association (CSPA), I want to thank you for the government's leadership efforts to combat COVID-19. We appreciate the whole of government approach that has been taken to tackle the pandemic, and we are grateful for many of the helpful economic measures rolled out that support Canadian businesses and employees.

Restarting the economy quickly and safely will be crucial coming out of this pandemic and can also create an opportunity to support the environmental and climate objectives of our country and of your government. In this regard, and as your office and department deliberate on potential clean stimulus measures, I am writing to urge that strong consideration be made to establishing spending priorities and policies that recognize the economic, social and climate benefits of Canadian steel.

Earlier this year, the Canadian steel industry put forward an exciting new climate vision for our sector – an industry first – aimed at achieving net zero carbon dioxide emissions by 2050. This long-term plan outlines the significant opportunity for our industry, through collaboration with partners including government, to reduce emissions and find new solutions that will ensure low carbon steel is made in Canada for generations to come.

Please find below our initial recommendations on how to stimulate the economy in the near-term, as well as establish a foundation towards the longer-term low carbon transformation of Canada's steel sector.

**Canadian Steel in Domestic Infrastructure Projects**

The use of Canadian steel in domestic infrastructure projects would mean the acceleration of a return to business for our members, who have been deeply impacted by COVID-19. It would also help to ensure our industry's ongoing competitiveness as we face challenges from unfairly traded steel imports in our domestic market – a situation that will likely get worse as the economy recovers. Canadian steel has a greenhouse gas emission profile that is significantly less than foreign steel shipped to Canada from overseas. Canada should follow the lead of California and Europe by implementing green public procurement policies for construction materials that help to establish a level playing field for Canadian businesses. We recognize that the Government of Canada and some provinces have already taken steps to lay out guidelines for greener procurement and we support the development of a fair system.

**Recommendation 1:** That the Government of Canada give strong consideration to establishing procurement and infrastructure spending priorities and policies that recognize the economic, social and climate benefits of using Canadian steel in domestic infrastructure projects.

**Supporting Greenhouse Gas Reductions and Investment in Competitiveness**

Since 1990, the Canadian steel industry has voluntarily invested to reduce its energy and carbon footprint, achieving a 31.5% reduction in absolute GHG emissions by 2016. This has been achieved through improving overall operational performance; adopting strong energy practices, such as heat recovery and cogeneration; improving energy efficiency throughout its operations; and optimizing raw material selection and use. The sector has available energy and GHG reduction projects that would also support our sector's competitive position (e.g. increasing the efficiency of combustion processes; blast furnace fuel rate improvements; heat recovery; fuel switching; variable speed drives; automation and digitization of process controls; increased use of by-product fuels). These projects would benefit from funding to enable their implementation in these difficult economic conditions and improve the business case of these projects. Our members may independently provide further details on these projects following this submission.

Further, it is the steel sector's view that as large emitters, we have the potential to invest in projects that would make a significant contribution to Canada's GHG reduction target, well beyond that of many other sectors. We encourage the government to therefore consider how revenues collected under the carbon pricing scheme could be recycled back to sectors with the most significant gains to be made towards these important goals. We do not see the efficacy of simply returning revenues to a value limited to the revenues collected from each sector.

**Recommendation 2:** That the Government of Canada redirect revenues collected under the carbon pricing scheme back to the steel sector to further efforts to transition to a low carbon economy.

Another very important aspect of achieving net zero GHG emissions by 2050 will be continued investment in new capital equipment and processes that enable improved competitiveness and productivity. Improving the existing competitiveness of the Canadian industry is a critical foundation to achieving our longer-term net zero objectives. The Canadian operating environment for manufacturers of steel and steel products is higher cost than in other countries and our members face challenging environments to attract investment. Under the new COVID realities the need for more investment is acute. To support the industry in the immediate future, the Strategic Innovation Fund should be maintained as a valuable tool for incenting investment.

**Recommendation 3**: That ECCC work with ISED and others for the recapitalization of the Strategic Innovation Fund to enable investment in the steel sector to enhance competitiveness and productivity.

**Enhancing Low Carbon Steel Innovation and the Circular Economy**

The Canadian steel industry is involved in research and development efforts in a number of areas that have the potential to significantly reduce steel sector GHG emissions. These areas include further developments in high strength novel steel formulations that improve the life cycle for steel by improving the carbon footprint of our customers (e.g. automotive efficiency) as well as finding non-fossil carbon

sources, such as the use of biocarbon or biochar, for use within existing coke-making, ironmaking and steelmaking processes.

Through the efforts of the Canadian Carbonization Research Association (CCRA), the steel industry is leading research into several promising technologies for the next 10 years and has also mapped out a longer term low carbon research agenda aimed at new processes that support our net zero objective (see attached "CCRA Steel Industry GHG Research Overview"). The CCRA is a collaboration of Canada's integrated steel producers, Canadian metallurgical coal suppliers, as well as CanmetENERGY – Bells Corners, one of the federal government's main research laboratories that supports the steel and coal sectors.

To achieve CSPA's net zero goal, the development of breakthrough technologies is crucial. Government support is needed to create an innovation ecosystem that drives research, clean technology development, demonstration and adoption across the steel sector's supply chain uniquely focussed on its low carbon transformation, taking into account the specificities of Canadian plants.

**Recommendation 4:** That the Government of Canada provide increased financial support for research and development into advanced low carbon iron and steel technologies including, but not limited to, the areas of:

- The production and use of biocarbon suitable for coke-making, ironmaking and steelmaking;
- The production and use of hydrogen for the purpose of fossil fuel substitution in a blast furnace;
- The production of Direct Reduced Iron (DRI) using a low carbon reducing gas;
- The production of iron electrolytically (e.g. by electrowinning);
- The alteration and recycling of off-gases into existing processes for the purpose of reducing carbon base inputs into the manufacturing process;
- Developments in carbon capture and utilization to take industrial off-gases and create new products for the circular economy; and
- Developments in high strength novel steel formulations that improve the carbon footprint of the products of our customers.

This work would be the co-ordinated efforts of CanmetENERGY, the CCRA, CSPA member companies and other industry partners and would be accomplished through expanded collaborations with research institutes, international bodies and clean technology suppliers.

Another important aspect of low-carbon research for Canada's steel industry relates to the importance of steel in our national supply chain. In a truly circular economy, steel products can be restored to "as new" conditions in a process known as remanufacturing. Steel is 100% recyclable, easily recoverable from waste streams, and can be repurposed infinitely. This, in combination with a long history of significant efforts to increase recycling rates, has resulted in steel's place as a leader in the circular economy as well as leading the country's and the world's recycling statistics.

Whether it is a wind turbine, construction panel, vehicle, or a steel can, the development and application of high-strength steels means that less steel is required to provide the same strength and functionality. Steel's durability also enables some products to be reused at the end of their life. As well

as extending the product's life cycle, reuse avoids the need to transport and re-melt the steel and to create new products. This has significant advantages for the environment, maximizes the use of existing resources and aids progress on the path towards a circular, zero waste economy. Similarly, maximizing the utility of our process co-products, including off-gases, to close the carbon loop and create new products is another way in which innovation in steel can support a circular economy.

> **Recommendation 5:** That the Government of Canada provide incentives for new investments in circular economy initiatives. For example, tax incentives for businesses that want to establish new facilities or transform existing facilities.

**Cross Sectoral Collaborations for New Technology Platforms**

While much work needs to be done to transform the steel sector's industrial processes, we also see that some of the potential solutions require new platforms and infrastructure to support our transformation.

For example, hydrogen gas use in the production of DRI for steelmaking will not be possible without the needed production, transportation and storage capacity of this potential low carbon input source.

It is important to recognize that the solution and timing of the low carbon transition will be unique to each facility. Certain transitions will not be possible on a sector-wide basis (e.g. there is insufficient scrap supply for scrap-based electric arc furnace production). However, abundant and affordable renewable electricity will be required in all scenarios, and investments in this area will be critical to our future success.

> **Recommendation 6:** That the Government of Canada provide financial support for collaboration on the development of technology platforms that will support the transition to net zero for multiple industrial sectors (2030+) as well as other sectors of the economy. This includes investments in infrastructure to ensure the availability of abundant and affordable renewable electricity as well as renewable hydrogen and bio syngas. Collaboration is required between utility producers, industrial sectors, governments and academia. Significant funding, that increases over time, will be required for this effort.

**Establishing a Canadian Steel Climate Council**

The steel sector must work with all governments, stakeholders, customers, and the supply chain to achieve our vision of a low-carbon steel sector. A robust approach of policies, tools and programs are critical to enabling the deployment of low-emissions steelmaking.

> **Recommendation 7:** That a Canadian steel climate council be established with key federal departments to monitor and report on the progress of the sector's climate strategy, to share practices, to engage with other stakeholders, and to evolve the plan as new information and insights emerge.

We remain committed to working with you and your government colleagues to ensure we are addressing our short-term needs while also capitalizing on every longer-term opportunity.

Thank you for your ongoing leadership and for your consideration of our recommendations. We would welcome further discussion on them with you and/or any of your Cabinet colleagues. In the meantime, should you have any questions or require more information, please do not hesitate to reach out.

Sincerely,

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cc:
Hon. Navdeep Bains, P.C., M.P. Minister of Innovation, Science and Industry
Hon. Catherine McKenna, P.C., M.P. Minister of Infrastructure
Hon. Bill Morneau, P.C., M.P. Minister of Finance
Hon. Seamus O'Regan, P.C., M.P. Minister of Natural Resources
Christine Hogan, Deputy Minister, ECCC
Simon Kennedy, Deputy Minister, ISED
John Moffet, Assistant Deputy Minister, ECCC
Matt Jones, Assistant Deputy Minister, ECCC
Mitch Davies, Assistant Deputy Minister, ISED
Drew Leyburne, Assistant Deputy Minister, NRCan
Paul Halucha, Assistant Secretary to the Cabinet, PCO

Attachments:
Canada's Steel Industry: A Sustainable Choice
CCRA Steel Industry GHG Research Overview