Canadian Manufacturers & Exporters (CME) Submission

INTRODUCTION
Canadian Manufacturers & Exporters (CME) is pleased to provide our comments on the latest Clean Fuel Standards (CFS) Technical Working Group Materials provided by Environment and Climate Change Canada (ECCC). As part of our comments, we are writing to ask the government to proceed with a full withdrawal of the CFS as it is currently designed until the serious issues raised by our sector are addressed. In the meantime, and as an alternative, we are proposing alternative solutions to reduce greenhouse gas emissions and meet Canada’s climate change goals in the appendix of the submission.

The CFS regulatory proposal is complex, with a very large number of unknown variables and has the potential to result in significant direct and indirect costs that will be passed onto the manufacturing sector that are difficult to prevent and that are disproportionately much higher than other abatement options that could be considered by the sector. While we fully support and agree that we need to address climate change and reduce emissions, the CFS as currently proposed will reduce the manufacturing sector’s ability to reduce emissions unlike federal and provincial carbon pricing programs that provide opportunities to have the revenue returned back to industry. Simply put, if the current proposal is implemented, it will simply add costs to manufacturers and restrict our sectors ability to do its share to reduce emissions and address climate change.

BACKGROUND
By any measure, manufacturing is critical to Canada. The country’s 90,000 manufacturers directly generate over 10 per cent of the country’s GDP and nearly two-thirds of its merchandise exports. Including direct and indirect impacts, the sector’s footprint amounts to nearly 30 per cent of Canada’s economic activity. More importantly, the sector directly employs 1.7 million Canadians and supports their families and communities through stable, high skill, high wage jobs, and supports over 3 million more through its massive integrated supply chain that touches all parts of the economy.

CME recognizes and appreciates ECCC’s decision for delaying the consultations on the CFS due to the COVID-19 pandemic. This delay was critical given the pandemic’s significant disruption to all aspects of Canada’s economy, including the manufacturing sector. CME believes that all Canadians, including the industrial sector, have a responsibility to do what we can to address climate change. We fully agree with the government’s view that a balance must be struck between the environment and the economy. We also agree that the solutions to our challenges are global and that Canada’s actions must be aligned to global efforts. The reason for this is simple: Canada is a small, open economy, that contributes a minimal amount of human-based GHG emissions.

According to the World Resources Institute, Canada accounts for about 1.6 per cent of global GHG emissions (745 Mt of CO2 equivalent). As such, if Canada’s emissions were to disappear tomorrow, those 745 Mt of GHGs would be replaced by new emissions growth from China alone in less than three years. Many will undoubtedly point out that Canada is one of the largest emitters in the industrialized world on a
per capita basis. However, this is not the result of indifference towards the environment or a lack of willingness to do our fair share, and does not account for geography, population, and economic structure. These factors all matter a lot but are mostly ignored and assumed to be the same across all advanced economic jurisdictions.

That said, the sector has been hit very hard, with its real output plunging by close to 30 per cent over March and April. But this crisis has also underscored the critical role that the manufacturing sector and its supply chain plays within the Canadian economy. In fact, since the middle of March, the spotlight has been on turned on manufacturing as most of Canada and the world shut down large parts of their economies to contain the COVID-19 virus. While much of Canada’s economic activity stopped, most manufacturers continued to operate. Many manufacturers also ramped up or shifted production in response to the crisis to make more food, personal protective equipment, and other health care products that are helping in the fight against COVID-19. Because firms have also had to contend with implementing physical distancing measures as well as depressed demand for certain products, the industry’s overall production has still declined sharply.

To make matters worse, the sector was already on shaky ground heading into the pandemic due to supply chain disruptions caused by both the coronavirus outbreak in China and the CN rail blockade in early 2020, a trade war-induced decline in global trade in 2019, and, before that, years of weak investment, stagnant employment, and disappointing output and export growth. In fact, in 2018, manufacturing investment in Canada was 17.3 per cent below 2000 levels. As a comparison, manufacturing investment in the US was 27.4 per cent higher in 2018 than in 2000. Moreover, Canada’s overall investment performance ranks poorly against its international peers. Since 2010, Canada has posted the seventh weakest growth in machinery, equipment, and structures investment among a group of 31 OECD countries. Reversing Canada’s poor investment performance of the last decade remains one of CME’s most pressing concerns in engaging with ECCC.
### IMPACT to-date summary
Per cent change since February 2020

<table>
<thead>
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<th>Indicator</th>
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<tbody>
<tr>
<td>Mfg. sales (Feb-Apr)</td>
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<tr>
<td>Real mfg. GDP (Feb-Apr)</td>
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<tr>
<td>Non-energy exports (Feb-...</td>
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<tr>
<td>Mfg. employment (Feb-May)</td>
<td>-12.8</td>
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Sources: CME, Statistics Canada

### Canada’s investment performance lags us
Business investment as a share of GDP (per cent)

Sources: Statistics Canada; US Bureau of Economic Analysis.
Investment levels are a clear leading indicator of a country’s economic health, especially in capital-intensive sectors like manufacturing. However, declining manufacturing investment has put Canada out of step with its international competitors and is a clear indication that the country is no longer considered a competitive place to invest.

That said, CME recognizes and believes that all Canadians, including the industrial sector, have a responsibility to do what we can to address climate change. We also believe, however, that a balance must be struck between the environment and the economy. But, the proposed CFS regulatory proposal along with the continuous review, change, and addition of numerous environmental policies and legislation has largely failed to explicitly consider the increasing costs of doing business in Canada. The bottom line is that Canada cannot make a meaningful contribution to fighting climate change without the support of a thriving economy. The wealth generated from strong economic growth is an essential resource to spark the investment and innovation needed to balance the environment and the economy. Indeed, not only will increased investment make companies more competitive, it will also make them more efficient and environmentally friendly as new technologies reduce their environmental footprint, even while output increases. Moreover, by reshoring production to Canada, we can play a leading role in reducing global emissions as domestic industry typically produces goods much more efficiently under stricter environmental regulations.

We explore our major concerns that remain with the CFS along with our proposed recommendations below.

**MAIN CONCERNS**

From the outset, CME has had many concerns with the proposed CFS. These concerns have included:

1. The technical feasibility of the 30 megatonne GHG emissions reduction target.
2. The impact that the standard will have on Canada’s already eroding business competitiveness, particularly on Energy Intensive, Trade-Exposed (EITE) industries.
3. The lack of a cost benefit, economic and regulatory impact analysis
4. The potential duplication and overlapping regulatory burden between the CFS and competing environmental and regulatory policy developments (i.e., Output-Based Pricing System – OBPS).

Below are six major concerns that we would like to highlight for ECCC as this time given the COVID-19 pandemic:

**Increased Costs on Manufacturers:**

Since our August 2019 submission, CME has continued to analyze how much the CFS will cost our members. After the first four years, the revised annual CI reduction targets are now more stringent. With the revised target of 12 g CO2e/MJ, and at a credit price of $300/tonne, there is now an even more
significant cost burden on the manufacturing sector. CME does not see much benefit with the decision to relax the requirements of the CFS in the early years. Many of our members are expecting a larger impact to their business from the gaseous fuel regulation, and that will be coming into force later anyway. Besides, shifting costs from the near to the long term does little to alter the expected long-term economic impact of the CFS. Our recent estimates show that the CFS for liquid fuels could cost our members as much as $300.00 to $350.00 per tonne based on member consultations.

With respect to the costs around gaseous and solid fuels, the Canadian Energy Research Institute’s (CERI) Economic and Emissions Impacts of Fuel Decarbonization report evaluates the potential GHG emissions reduction of fuel decarbonization scenarios and their overall economic costs. Their analysis of the CFS shows that the additional costs will range from $0.94 per GJ (10% CI reduction) to $1.88 per GJ (20% CI reduction) for gaseous fuels (natural gas, landfill and waste gases, still gas, and petrochemical coke oven gas). Using the average 2017 AECO hub (Alberta) price of CAD $1.62/GJ, these costs would result in a 58-116% increase in natural gas prices. This would have a particularly big impact on industry and on building owners because they are both large users of natural gas. In 2016, buildings accounted for 46% of total natural gas consumption, while industry accounted for 40%. Unfortunately, the ability to switch fuels without additional investments are very limited over the near term due to the limited options available for compliance under the current proposal. Without additional opportunities to recover costs, manufacturers will not be able to adequately reduce GHG emissions and embrace future technology adoption opportunities.

Beyond these concerns, however, there are other cost implications and concerns that will directly impact the manufacturing sector. First, energy is a major cost component in most manufacturing operations, and in many cases, it is the third largest cost after materials and labour. In many locations, a stable supply of energy remains a problem leading to brownouts, causing plants to cease operations and in some cases completely reboot, meaning lost production and increased costs. Energy costs are not a universal challenge across the country, but in several of the larger manufacturing provinces they have become massive impediments to production and investment. In Ontario, an average manufacturer faces an electricity bill that can be as much as 75 per cent higher than those of its competitors in many US states. The CFS will significantly worsen Ontario’s competitive disadvantage. And, second, in the recent rounds of consultation and in the Clean Fuel Standard Proposed Regulatory Approach it states that the CFS “will aim to stimulate investments and innovation in low carbon-intensity fuels while enabling low-cost compliance.” However, the current proposals create numerous constraints and increased uncertainty that will reduce investment opportunities, place limits on credit generation, and decrease compliance pathway options which in turn will raise compliance costs. There is a need for ECCC to moderate its proposals and to increase certainty in order to address ECCC’s objective to “stimulate investment/innovation in low carbon fuels & technologies.” For the CFS, millions of dollars in investment will be needed upfront and much more over
the first few years. On the heels of the COVID-19 pandemic, with a lot of uncertainty, the lack of time to invest will again drive up costs due to lack of cost-effective solutions.

**Economic and Cost-Benefit Analysis (CBA)**

We have been very alarmed by the fact that an economic and cost benefit analysis has yet to be released. The CFS currently does not recognize the increased vulnerability of the manufacturing sector to competitiveness impacts, carbon leakage, and reduced investment. Furthermore, it is understood that the Cost Benefit Analysis (CBA) of the CFS will be incremental only and not a cumulative analysis of all the recent federal carbon policies that impact the sector.

ECCC, before the publication of draft regulations should provide CME and members of the Canadian Manufacturing Coalition (CMC) a confidential preview of the economic, cost-benefit and RIAS of the CFS so we can provide additional and constructive input on the true cost of the CFS on our sector. This analysis should fully consider COVID-19 related impacts on manufacturing. As part of this process, we request that ECCC resurrect the Multi-stakeholder Committee lead by John Moffet, Assistant Deputy Minister, Environment Protection Branch at ECCC which was to look at the cumulative impacts of all climate change regulations for a select number of EITE sectors.

**The Impact on Manufacturing Fuels**

CME considers a manufacturing fuel to include the following types of fuels: transportation, feedstock, biofuels, diesel, and self-produced fuels. The CFS, as currently proposed, will have a major impact on manufacturing fuels. This includes transportation fuels used in manufacturing as they will have higher bio-fuel requirements. There are several problems with this:

- Canada’s manufacturing sector does not and cannot create enough biofuels to meet possible demands required to meet the CFS annual targets.
- For certain manufacturers, shifting to biofuels would not be feasible due to the type of machinery they use or the products they produce.
- Decarbonization by displacing carbon-heavy fuels remains very challenging for our members. Any push to decarbonize feedstocks could be highly destructive for our sector, as significant infrastructure and process designs are built around feedstock composition and availability.
- Alternative fuels for industrial processes (e.g., biomass and hydrogen) may not be available. There must be considerations for how alternative fuels may be linked to the integrated processes within manufacturing to ensure stable and continuous sources of energy.
- The fuels that the CFS targets are used in manufacturing operations, equipment and processes that are already the subject of federal and provincial climate change regulations, as well as federal and provincial air quality regulations.
Manufacturers will also face higher transportation costs given that the CFS will result in higher fuel prices. This is on top of the fact that the CFS proposal risks double-regulating gasoline, diesel, and heavy fuel oil (under the liquid stream). Regulated entities subject to the Greenhouse Gas Pollution Pricing Act (GHGPPA) are already paying for the carbon associated with these liquids through the Output-Based Pricing System (OBPS). Specifically, on-site transportation emissions are subject to the OBPS and manufacturers are subject to increased transportation costs associated with the shipment (e.g. trucking) of raw materials to a regulated facility, and shipping products to customers in a GHGPPA covered jurisdiction through the fuel charge (an indirect carbon cost). Therefore, the CFS will add yet another pass-through cost that all manufacturers (particularly small-medium manufacturers) will incur as a result of this policy. Overall, the CFS, as currently proposed, will negatively impact Canadian manufacturers by increasing the cost of combustible energy in industrial uses and by increasing transportation costs within Canada. This, in turn, will exacerbate Canada’s competitive disadvantage relative to global competitors that are subject to lesser standards, thus further discouraging investment in Canada. These impacts are on top of those resulting from other federal/provincial carbon pricing initiatives, and do not account for the potential long-term impacts of COVID-19 on manufacturing.

The manufacturing sector, which has already made enormous strides to improve its efficiency, will require additional re-investments to ensure carbon reductions for specific types of equipment or fuel on top of investments already being made or in the planning stages to meet other regulatory requirements. This along with the cost implications mentioned above, explain why our sector has advocated for an exemption for manufacturing fuels, including fuels that are used as raw material feedstocks and self-produced (by-product) fuels. This exemption is required to prevent significant cost increases, so as to not further degrade the sector’s already deteriorating investment competitiveness.

The Impact on Energy Intensive, Trade-Exposed (EITE) Sectors
ECCC must be mindful of the trade exposure risk to the manufacturing sector that the CFS will create. Many sectors within manufacturing are recognized as among the most sensitive EITE sectors. In fact, provinces that have developed their carbon pricing programs have formally recognized the competitiveness challenges faced by the manufacturing sector by including transitional measures aimed at protecting trade-exposed sectors while preserving the market incentive to reduce emissions. In many cases, this includes funding support to help pay for investments in low carbon technologies. These transitional measures have, in many cases, been implemented with the benefit of economic modeling that considers both the direct and indirect flow-through cost impacts from carbon pricing as well as abatement cost curves. They do not, however, account for policies, like the proposed CFS, that will add significant costs in the form of more expensive industrial and transportation fuels. Therefore, we are very concerned that the CFS, without additional measures to assist trade-exposed industries, will upset the balance between competitiveness and environmental sustainability that has already been struck in provinces with carbon pricing plans. Perversely, the CFS could increase the risk of emissions “leakage” to plants outside of
Canada not subject to equivalent carbon pricing and CFS policies (an outcome most provincial pricing systems have worked very hard to avoid).

**Hydrogen Packing of Natural Gas**
Natural gas is a critical fuel source for the manufacturing sector and is a key reason why some manufacturers have the lowest carbon production worldwide. It is also an input feedstock for many of our members. Changes to feedstock composition and cost could have significant impacts on plant viability. If some of our plants will need to remove hydrogen from their natural gas feedstock, the additional costs to these manufacturers would be substantial. To that end, the proposal to provide credits for hydrogen packing of natural gas is concerning and we request further engagement from ECCC on this issue. We would also like to respectfully push back on any attitudes that ECCC does not need to understand the natural gas sector in order to regulate it. Given that no jurisdiction in the world has undertaken a low carbon fuel standard (LCF) for the natural gas sector should be reason enough for ECCC to tread carefully and with the full understanding of how the sector, and those that rely on it, works as they impose complex regulations. ECCC must directly engage directly with impacted industries to better understand our concerns in regard to the gaseous stream and how to mitigate them.

**Authentic Consultation**
It has been over three years that CME has been involved in this regulatory development process. Our concerns since the consultation process began remain the same and although there have been steps to address these concerns through the Multi Stakeholder Consultative Committee (MSAC), Technical Working Group (TWG) and the Energy Intensive Trade Exposed (EITE) Task Group, there have yet to be any concrete actions or solutions presented. This last round of consultations was difficult and lacked authentic engagement. It is understood that the pandemic limits the type of engagement the technical working group would normally have, however, we would strongly encourage ECCC to allow staff to reach out to stakeholders for more dialogue. This regulation will likely have large cost implications to our sector, yet there has been little direct consultation or opportunities for in depth discussions. As always, remains committed to collaboration and finding mutually beneficial solutions.

**RECOMMENDATIONS**
CME’s recommendations for the CFS regulatory design paper are broken down into three categories and are as follows:

Based on consultation with our members, our main recommendation to ECCC in response to the CFS regulatory design paper are as follows:

1. Proceed with a full withdrawal of the CFS as it is currently designed and implement a complete pause in the consultation process until the serious issues raised by our sector are addressed,
including its overlapping objectives with other climate related policy and legislation (i.e., the Output-Based Pricing System - OBPS).

If the CFS is not fully withdrawn as it is currently proposed, our recommendation to ECCC is to:

2. Exempt manufacturing fuels from the CFS given the increased costs manufacturers will incur under this current policy proposal and under the OBPS. This exemption should also include fossil-based raw material feedstocks used in industrial processes as well as self-produced (by-product) fuels that are regulated under the OBPS.

3. Incorporate feasible, conservative carbon intensity (CI) targets that consider likely credit generation. The revised 2030 target of 12 gCO2/MJ is now even more stringent and must be readjusted to be more conservative to ensure there are feasible compliance pathways to meet the annual CI reduction targets. Adequate time between Canada Gazette (CG) Part I (Fall 2020) and final regulation CG II (Spring 2021) must be allowed to all obligated parties to plan, prepare and deploy compliance actions.

If an exemption of manufacturing fuels is not granted, we recommend ECCC undertake the following measures:

4. Provide EITE industries competitive protections in the CFS based on the cumulative impacts of all policies that they face.

5. Allow adequate time between Canada Gazette (CG) Part I (Fall 2020) and final regulation CG II (Spring 2021) to all obligated parties to plan, prepare and deploy compliance actions. Compliance feasibility is at further risk given the uncertainty surrounding early and ongoing credit generation (including electricity) and given the limited time for compliance obligated parties and other credit generators to act before the regulation is applied.

6. Additional flexibility must be designed into the additionality assessment criteria so that it does not deter investments into Canada. The additionality assessment released by ECCC will restrict investments in GHG reduction projects due to the requirements set out in the TWG materials such as the red tape associated with the quantification methodology approval process/external assessment and the “penetration test”. This must be rethought and examined before the publication of CGI regulations.

7. Expedite completion and provide full interim transparency on the Life-Cycle Analysis (LCA) modelling tool, feedstock certification processes, and quantification methodologies since they are essential for robust compliance modelling and economic impact analysis. The LCA modeling tool needs to be made available well in advance of CG2.
8. Complete and share a comprehensive economic and regulatory impact analysis with industry prior to the publication of the CGI Regulatory Impact Analysis Statement (RIAS). In addition, ensure that this analysis fully accounts for the cost impacts on consumers and businesses, the post-pandemic impacts on fuel supply (including renewable fuel producers), obligated parties’ capital investment capacity, and regional impacts.

9. Test a revised version of the CFS within the first 1-2 years of the publication through a government and industry procurement collaborative process to ensure that reporting and documentation is administratively simple, user-friendly and does not add costly compliance requirements.

10. ECCC should engage directly with the manufacturing sector to better understand our concerns in regard to the gaseous stream and how to mitigate them.

Further to these recommendations, please find below additional solutions in the appendix below on how we can reduce emissions to help offset the costs of the CFS.

Appendix:

**Large Emitters Fund**
Canadian manufacturers may be low emitters compared to their foreign counterparts, but the fact remains that a small number of companies in specific industries account for the majority of Canada’s industrial emissions. For this reason, targeted actions are needed that are aimed squarely at 5-10 of Canada’s largest emitting sectors. A model should be considered for the largest emitters (and revenue contributors) whereas much money as possible is returned directly to the company for GHG reduction initiatives. With the potential that some companies may be required to pay ten to hundreds of millions of dollars over the next four years, these largest emitters need the most assistance and can likely make the largest reduction impacts. This fund would require funding outside of current carbon pricing proceeds since some projects may require more funding than a single province or company can accommodate, however, it would be set up to ensure funding for significant GHG reduction initiatives, research and development, and help keep industry competitive in Canada. It would also help mitigate competitiveness impacts from carbon pricing to allow for the 5-10 largest emitters choose the best emissions reduction projects to help reduce emissions. The timelines for this fund should be extremely flexible to recognize implementation factors for large emitters including turnaround/outage schedules. This is to ensure that large emitters have the flexibility to use the funds in a way that reflects their ability to implement upgrades and/or adopt new technologies.
Recommendation:

1. The federal government should create a $1-billion fund that specifically targets investment projects to reduce GHG emissions in Canada’s 5-10 highest-emitting industries.

Nation-Wide SMART Program

CME sees a focus on avoiding duplication, supporting the lowest cost reductions, addressing competitiveness, encouraging technological innovation and supporting low-carbon investments for the future low-carbon economy. There is also a need to improve the supports available for smaller-scale adoption of environmental technologies. As mentioned above, these supports should focus on low-hanging fruit – companies that are medium to high emitters in proportion to their industry counterparts. A national program modelled after the former SMART program delivered through FedDev Ontario could help medium to high-emitting businesses identify, adopt and implement new technologies that reduce their environmental footprint. Manufacturers should be eligible for funding in direct proportion to how much they pay into the carbon pricing scheme.

Recommendation:

1. The federal government should support the creation and delivery of a nation-wide environmental SMART program that would:
   - Be geared to medium to high-emitting companies, regardless of size and to companies that voluntarily opted into the OBPS;
   - Funding for breakthrough advanced manufacturing technology developments;
   - Offset the cost of technology assessment and diagnostic services; and,
   - Provide support for investment in reducing GHG emissions and improving energy efficiency.

Preventing carbon leakage from Canada

Uncompetitive economic policies create the risk that Canada will lower its domestic GHG emissions by exporting economic activity to countries where environmental standards are laxer. Poorly designed carbon pricing systems and other uncompetitive policies will drive manufacturing production out of the country. We will lose well-paying jobs and, through carbon leakage, global GHG emissions will increase. Accurate global benchmarks are needed to demonstrate the global benefit of manufacturing more in Canada. Canadian businesses in emissions-intensive industries have a generally lower emissions profile than many of their international competitors. For this reason, government policies that encourage the use of domestic inputs could have a net positive effect on reducing emissions at the global level.

Moreover, one of the results of these initiatives is that they raise the cost of doing business in Canada and erode our global competitiveness. Imports from high-polluting countries without comparable carbon pricing systems risk displacing our cleaner goods, while our manufactured goods exports will be at a
disadvantage in those markets. This result is counterproductive to the overarching goal of global GHG emissions reductions.

**Recommendation:**

1. The federal government should introduce an export tax credit for businesses that export to countries without carbon pricing systems comparable to our own.
CONCLUSION
CME believe that all Canadians, including the manufacturing sector, have a responsibility to do what we can to address climate change. But if the CFS moves forward as proposed, it will further discourage investment and growth in our sector at a time when it needs investment supports to survive and thrive in the years to come, especially considering the heavy damage it has sustained during the COVID-19 crisis. Any post-pandemic economic recovery measures that are introduced and implemented will be offset by the proposed CFS.

Canadian manufacturers, who are already leaders in emissions reduction and are setting world-class benchmarks for environmental performance, believe the most proven solution for reducing emissions is investment in new technology, not forcing costly and uncertain regulatory measures on industry. CME is committed to foster meaningful dialogue and understanding about the CFS, but we must ensure the sector is dynamic, profitable, productive, innovative, and growing.

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