

January 28th, 2019

Mr. Nathaniel Aguda
Environmental Policy Branch
Ministry of Environment, Conservation and Parks (MECP)
40 St. Clair Avenue West, 10th floor
Toronto ON M4V 1M2

ERO 013-4208: Preserving and Protecting our Environment for Future Generations: A Made-in-Ontario Environment Plan

Dear Mr. Aguda:

On behalf of the 2,500 members of Canadian Manufacturers & Exporters (CME), the tens of thousands of manufactures in Ontario, and their nearly 800,000 employees, we are pleased to provide you our comments on the Made-in-Ontario Environment Plan.

CME fully supports the intent and need to balance a healthy environment with a strong economy. As such, our recommendations for the Made-in-Ontario Environment Plan are as follows:

1. **Protecting our Air, Lakes and Waters:**
 - a. Amend the Local Air Quality regulation to ensure the methodology used to set air quality standards is based on a science and risk-based approach that is technically sound, aligned with but not exceeding, other leading jurisdictions, and informed by rigorous cost-benefit analysis.
 - b. Develop an even further streamlined approvals process for industry that is truly a risk-based permit process.
 - c. Streamline, and process environmental approvals for projects involving new capital investments, economic growth and job creation quicker than other approval applications should they effectively balances environmental performance.

2. **Addressing Climate Change:**
 - a. Ensure continued detailed and authentic collaboration to ensure that the 2030 GHG reduction targets are achieved while encouraging manufacturing investment in Ontario.
 - b. The Government of Ontario should move forward with paralleling the federal Accelerated Capital Cost Allowance to ensure investment in capital machinery, equipment and technology.
 - c. Implement emission performance standards that deliver GHG emission reductions through performance-based facility standards while protecting the competitive risk of Ontario's manufacturing sector that considers previous reduction efforts.
 - d. Encourage investment in continued investment in lower carbon production in Ontario's manufacturing sector to displace higher carbon production elsewhere in the world.

- e. Industry and government should co-develop an environmental benchmarking and sustainability study to show how Ontario manufacturing compares to international standards and target areas for possible improvement.
 - f. Model the Ontario Carbon Trust off Ontario's previous CME SMART Green Program to assist manufacturers investing in new clean technologies, capital machinery and equipment that have environmental benefits.
 - g. Allow for sector specific output-based performance standards and performance-based facility standards within the made in Ontario emission performance standards for manufacturing operations emitting at least 25,000 tonnes of CO₂e per year, while also allowing multi-site manufacturers to combine emissions as one entity if the manufacturer determines it to be economically feasible.
 - h. Consider the costs, particularly those costs associated with solid and gaseous fuels (outside the transportation sector) imposed by the proposed Clean Fuel Standard (CFS) within the Energy intensive Trade Exposed (EITE) assessment framework.
 - i. Advocate to the federal government to exempt manufacturing fuels from CFS to avoid costly and duplicative environment and climate change policies.
 - j. The Government of Ontario build infrastructure more resilient to climate change that is geared towards moving to more fuel-efficient vehicles, machinery and transportation options, cutting our reliance on greenhouse gas-emitting electricity generation and enabling the movement of goods and services across the province.
3. **Reducing Litter and Waste:**
- a. Create a new Ontario waste reduction strategy in order to further minimize waste, reduce emissions and repurpose, reuse and recycle materials wherever possible and reduce Co₂ associated with waste.
 - b. Work with all levels of governments to invest in improvements to standardize waste collection and sorting for manufacturers in Ontario.
 - c. Promote well-designed, industry-led extended producer responsibility systems to inform the behaviour of manufacturers and help establish markets.
 - d. Develop standardized, supportive policies across jurisdictions that consider energy recovery (or resource recovery) where non-recyclable plastics today can displace cement or petroleum fuels (e.g. plastic to diesel fuel).
 - e. Recognize the existing diversion markets and ensure that new policies do not sub optimize the markets that exist today.
4. **Stakeholder Engagement Process:**
- a. The Ministry of Environment Conservation and Parks should feature members of the manufacturing sector to be on the advisory panel to ensure balanced representation and authentic consultation.

Our submission can be found attached to this letter. We believe that given the critical role that manufacturing plays in the province, a Made-in-Ontario environment plan is important to help ensure the long-term growth and sustainability of the sector in the province.



Thank you for the opportunity to comment. We look forward to working with the Ministry of Environment, Conservation and Parks on the implementation of the plan. If you have questions or require additional information, please don't hesitate to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read 'A. Greco', is written over a white background.

Alex Greco
Director, Manufacturing Policy

BACKGROUND/CONTEXT:

CME is pleased to see that the Ministry of Environment, Conservation and Parks is focusing its climate change plan consultations on resiliency, adaptation and mitigation while also incorporating private capital, investment and growth. A combination of good investment, regulatory and environmental policy encourages local companies to invest in their future; it attracts new manufacturing opportunities and new foreign investment; and it puts manufacturers in a position to compete and succeed in global markets and maintain strong environmental performance.

Manufacturing is the single largest business sector in Ontario. Canadian manufacturing sales totaled \$610 billion in 2015 directly accounting for 11 per cent of Canada's total economic output, two-thirds of all exports and 45 per cent of all research and development. Manufacturers directly employ over 1.7 million Canadians in highly productive, value added, high paying jobs. More broadly, through the integrated supply chains of manufacturing, the sector is directly and indirectly accounting for nearly 30 per cent of Canada's total economic activity and 27 per cent of all employment. Simply put, manufacturing is critical for the wealth generation that sustains the standard of living of Ontario.

Manufacturing in Ontario also has a strong history of responsible environmental performance. The sector has historically supported and led government's efforts to balance environmental performance with economic growth, including most recently the objectives to reduce GHG emissions. In 1990, Ontario manufacturers emitted just over 112 mega-tonnes of CO₂ equivalent, or approximately 18 per cent of Ontario's total. In 2014, emissions from the manufacturing sector amounted to 96 mega-tonnes of CO₂, accounting for just over 13 per cent of total GHGs. No other sector in Ontario has made this type of progress. At the same time, this 14 per cent reduction in emissions occurred even though Ontario manufacturing sales revenue increased 150 per cent and production levels rose 33 per cent over the same period.

Lower emissions were achieved because of improvements in environmental performance. Ontario manufacturers reduced emissions per unit of real GDP by 35 per cent between 1990 and 2014. This was due to technological progress in the form of improvements in energy efficiency, the use of lower carbon fuels, and the adoption of new and less emission-intensive industrial production processes. Investment in new and improved manufacturing plants, technologies, machinery, and equipment has been a key driver of technological progress across the manufacturing sector.

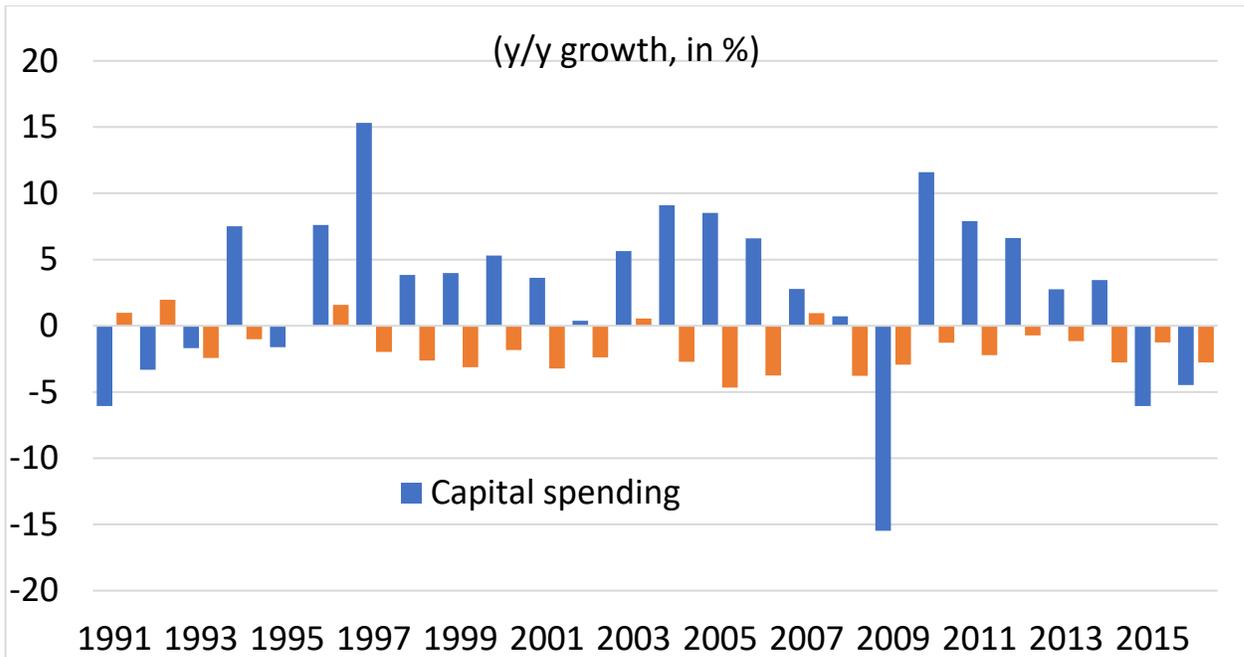
The evidence of the past 25 years clearly shows that improvements in environmental performance and economic growth are in fact co-dependent. As investment in new machinery, equipment and processes increases, companies are more productive, and emissions and energy intensity decrease. At the same time, these investments make manufacturers more competitive, enabling companies to invest further in their workforce, and in new products and technologies, as they expand their business.

There are a couple of factors to consider, however.

1. CAPITAL INVESTMENT AND GHG EMISSION REDUCTIONS

The lower levels of manufacturing investment are jeopardizing progress for manufacturers to reduce emissions in Ontario. Technological progress drives economic growth and GHG emission reductions. It consists of improvements in energy efficiency, the adoption of lower emission intensive technologies, the use of more efficient infrastructure and lower carbon-based sources of energy. It is also measured in terms of reductions in GHG emission intensity. Emission intensity reflects the GHG emissions required for any measured economic activity. Such as emissions required to produce a tonne of steel, emissions per kilometre of travel, emissions from use of appliances, emissions per unit of manufacturing output, among other factors. And, capital investment in, and the adoption of, new and less emission intensive buildings, technologies, and infrastructure to drive technological progress.

Capital investment drives technological progress and reductions in emission intensity



2. ENVIRONMENT SUSTAINABILITY AND PERFORMANCE

While these sobering realities are important to highlight, there are other challenges to consider as well. The challenge with current public discussions on environmental performance, GHG emissions, and the economy is that it attempts to pit the economy versus the environment. CME does not support that view of the world. We believe manufacturers have shown tremendous improvement



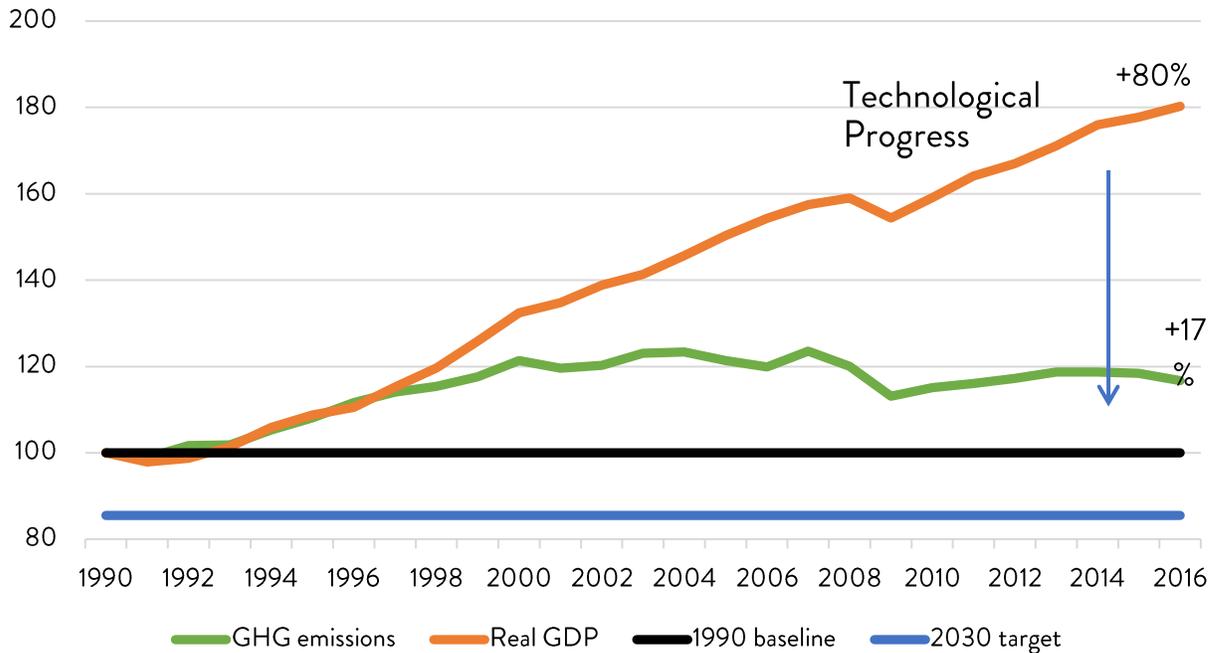
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over the past several decades and Ontario manufacturers are amongst the most environmentally-responsible worldwide. Companies certainly have a role to play in further reducing their environmental footprint and improving efficiencies. However, companies are moving to zero waste plants, most are investing heavily in energy-saving technologies and others are investing in and leading the expansion of the circular economy. While Ontario companies are already at the forefront of environmental sustainability, we believe that in partnership with governments, more can – and should – be done. However, this effort must take place in a supportive and not antagonistic manner and must also recognize the importance of maintaining global economic competitiveness. Simply taxing activities that are environmentally undesirable will, in the end, have a detrimental impact on both the economy and the environment. Higher costs for energy, infrastructure, transportation, and regulatory compliance will erode profitability and therefore the ability of companies to invest in the new technologies that are required to make further progress in reducing emissions. Furthermore, if costs are increasing only for domestic manufacturers, they will be placed at a significant economic disadvantage compared to international competitors. If companies leave Ontario for jurisdictions with lower environmental standards, the result could be fewer jobs and less economic activity in the province, along with higher global GHG emissions.

CANADA: ECONOMIC GROWTH & GHG EMISSIONS



Governments' role, therefore, should be to partner and support industry with a specific focus on clean technology creation and adoption. To start, Ontario needs to offer businesses a competitive environment in which to invest, as detailed earlier. New technology will naturally reduce emissions and environmental impacts. Second, Ontario should support the creation of new clean technologies for manufacturing processes. Demand for clean technology will only grow in the coming years and Ontario's manufacturing base already has strong competencies in machinery, equipment and

technology production. If local companies can develop the technologies, there should be a strong local demand from manufacturers, which will help commercialization and scale-up. Finally, the government should help companies develop the next generation of clean-tech in consumer goods, where we also have a strong history. This could include development of next-generation vehicle technologies, or food products as two examples.

ACHIEVING A BALANCE BETWEEN ENVIRONMENTAL PERFORMANCE AND INVESTMENT:

We believe that Ontario's current investment climate and environment plan need to go together as they are being developed and finalized. The goal must be to implement an environment plan that encourages investment in order to reverse the recent declines, prevent capital and carbon leakage to neighboring competitive jurisdictions, decrease emissions and ensure that Ontario has an approach to climate change that is adaptable and resilient. Manufacturers expect climate change policies to reduce greenhouse gas emissions while protecting their jobs, their communities and our economy. This can be achieved by the following policy design principles that strive for, and deliver, balanced results based on the principles identified in the Made-in-Ontario Environment Plan:

- *Transparency:* Transparent about the actual costs and consequences of GHG reduction policies, allowing manufacturers and their operations to make informed choices.
- *Clarity & predictability:* Clear, principled policy goals and predictable regulations with adequate notice periods to minimize disruption and promote compliance.
- *Cost-effective outcomes:* Including real GHG reductions confirmed by sound evidence; priority for lowest cost compliance options; market-based vs. prescriptive solutions; no duplication/overlap between jurisdictions and low regulatory burden/compliance costs.

CME and its member companies have experience with the design and implementation of climate policies across Ontario. Climate changes politics should be ambitious but achievable with realistic compliance pathways. Thus, CME urges the Government of Ontario to implement a Made-in-Ontario Environment plan that provides the tools and mechanisms to ensure that Ontario can effectively reduce GHG emissions, while at the same time ensure that Ontario is once again open for business and allows our critical manufacturing sector to compete and succeed globally.

With that in mind, CME is pleased to offer the following recommendations:

Detailed Recommendations:

1. PROTECTING OUR AIR, LAKES AND WATERS

CME is committed to the protection of the health of manufacturers and the environment and to an effective use of resources based on three key principles:

1. It is important to protect the environment and the health of Ontarians while balancing environmental performance to ensure people, processes and products are developed within the manufacturing sector that our province and community depends on.
2. We must develop new products and processes that meet the needs of the manufacturing sector and our communities in a sustainable way to ensure growth and investment are encouraged in Ontario.
3. We must develop sound, evidence-based and principled environmental policies that is balanced and achievable while minimizing the regulatory burden on Ontario's manufacturing sector.

Local Air Quality Regulations:

CME appreciates the recognition in the environmental plan regarding key initiatives that address air quality and improving the understanding of health impacts in Sarnia-Lambton. CME congratulates Clean Air Sarnia and Area (CASA) members and supports their efforts to share real-time air quality information with the community.

While recognizing the marked improvements in air quality in Ontario, CME supports the notion to examine more closely areas that continue to experience air quality challenges due to pollution from various sources. That said, it is important to recognize that current standards are set based solely on health-based outcomes using a methodology that is far more conservative than what is applied in other advanced jurisdictions using modeled, not actual data.

Recommendation:

1. **Amend the Local Air Quality regulation to ensure the methodology used to set air quality standards is based on a science and risk-based approach that is technically sound, aligned with but not exceeding, other leading jurisdictions, and informed by rigorous cost-benefit analysis.**

Approvals:

The length of time it takes to receive an approval in Ontario creates a barrier for manufacturers, increased investment and new economic growth. Recent efforts taken to speed up the approvals process in Ontario to streamline the process for lower risk projects (Environmental Activity and Sector Registry - EASR) and setting a 1-year service standard for complex environment compliance approvals were necessary and a good start. However, the time taken for the issuance of approvals continue to be a significant issue for Ontario's manufacturing sector. Long delays in receiving an ECA acts as a deterrent for companies to invest in Ontario, and ironically most of these new investments will yield environmental improvements over existing operations.

CME appreciates and continues to encourage and enable regulatory burden reduction efforts, like the cancellation of the Toxics Reduction Act (TRA). It is important for the Ministry of Environment, Conservation and Parks going forward to develop an even further streamlined approvals process for industry that is truly risk-based for both the ECA and EASR processes. The EASR process has not provided streamlining, but a more complicated, labor-intensive process for the applicant. It would be beneficial for Ontario to consider third-party certification for low risk applications.

Moreover, the regulatory burden in Ontario is a major impediment to business growth, investment and competitiveness. Ontario must conduct a deep analysis of its regulatory system and strive to be the best regulator in Canada and avoid layering regulatory burdens with respect to monitoring and reporting for multiple jurisdictions. Regulations should be improved to avoid duplication with federal systems and encourage growth and investment. Ontario manufacturers cannot compete if they must wait several years to get environmental approvals when it only takes a few weeks to meet the same requirements in the United States. As part of this analysis, the Government of Ontario must effectively address climate change in environmental approvals that considers climate change mitigation (i.e., reduce the likelihood that climate change will occur) and adaptation (i.e., ensure projects are prepared for future changes to climate) and in turn ensure a streamlined and efficient process with respect to approvals.

While the Ministry of Environment, Conservation and Parks has been accommodating in accelerating approvals on a one-off basis, the system needs additional changes so that it can deliver timely approvals consistently. As such, more structural change is necessary to see a step-change reduction in turnaround times to match other jurisdictions.

Recommendations:

- 1. Develop an even further streamlined approvals process for industry that is truly a risk-based permit process.**
- 2. Streamline, and process environmental approvals for projects involving new capital investments, economic growth and job creation quicker than other approval applications should they effectively balances environmental performance.**

2. ADDRESSING CLIMATE CHANGE

CME recognizes that climate change is an important public policy issue and that sound environmental stewardship and management of the manufacturing sector are fully consistent with good business practices.

Our sector has been a leading sector in managing and mitigating climate change. In 1990, Canadian manufacturers emitted a little more than 112 megatonnes (MT) of CO₂ equivalent, or approximately 18 per cent of Canada's total emissions that year. In 2014, emissions from the manufacturing sector amounted to 96 MT of CO₂, accounting for a little more than 13 per cent of total GHGs. No other sector in Canada has made this kind of progress. At the same time, this 14 per cent reduction in emissions occurred even though Canadian manufacturing sales revenue increased by 150 per cent and production levels rose 33 per cent over the same period. In Ontario, manufacturers reduced emissions per unit of real GDP by 35 per cent between 1990 and 2014. These achievements were due

to technological progress. Improvements in energy efficiency, the use of lower carbon fuels, and the adoption of new and less emissions-intensive production processes are some of the techniques that manufacturers have employed to improve their environmental performance. Now Ontario manufacturers are world leaders in responsible and efficient manufacturing, a fact that too few acknowledge. And Ontario's manufacturing is uniquely positioned as a low carbon leader amongst businesses globally through a combination of a low carbon energy grid and modern and efficient manufacturing sector.

We are thus pleased to engage in Ontario's climate change strategies and GHG emission reduction objectives. We are committed to working with the Government of Ontario to find a balanced solution that puts people first, makes life more affordable for families, and takes Ontario's role in fighting climate change seriously.

Ontario Matching the Federal Government Accelerated Capital Cost Allowance (ACCA):

The plan also commits Ontario to paralleling the federal Accelerated Capital Cost Allowance, to help attract investments in clean energy generation and conservation equipment. CME supports this action and it is critical to match several US tax reform changes, especially broadening the credit to include more types of investments, and most critically allowing for immediate investment write-downs.

Ensure the Government of Ontario makes climate change a cross-government priority:

CME has been actively working with governments across Canada to address the issue of climate change. Reducing our environmental footprint is a top economic and social vision. CME believes that Ontario must adapt to climate change and that this must be accomplished without undercutting the global competitiveness of Ontario manufacturing.

Manufacturing represents the single most important solution provider to the climate change problem. To meet the global climate problem, Ontario must plan, prepare and adapt to climate change and fully develop the potential of the manufacturing sector, so it can deliver innovations and solutions to effectively reduce emissions both within the industry and throughout Ontario's economy as well as globally through exporting these solutions.

Recommendations:

- 1. Ensure continued detailed and authentic collaboration to ensure that the 2030 GHG reduction targets are achieved while encouraging manufacturing investment in Ontario.**
- 2. The Government of Ontario should move forward with paralleling the federal Accelerated Capital Cost Allowance to ensure investment in capital machinery, equipment and technology.**
- 3. Implement Climate Change Measures that deliver GHG emission reductions while maintaining the competitiveness of Ontario's manufacturing sector.**
- 4. Encourage investment in continued investment in lower carbon production in Ontario's manufacturing sector to displace higher carbon production elsewhere in the world.**
- 5. Industry and government should co-develop an environmental benchmarking and sustainability study to show how Ontario manufacturing compares to international standards and target areas for possible improvement.**

Ontario Carbon Trust:

We are supportive of the approach proposed for the Ontario Carbon Trust to encourage private sector investments in clean technologies and green infrastructure. With that in mind, 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. To assist with the Government of Ontario with the implementation of the Ontario Carbon Trust, it should take into consideration and be modelled after Ontario's previous SMART Green Program to assist manufacturers investing in new technologies that have environmental benefits. Manufacturers should be eligible for funding in direct proportion to how much they pay into the pricing scheme. Such a fund would have the following benefits:

- Improvement of the day-to-day operations for manufacturers;
- Making process improvements, such as the process to install production equipment;
- Reducing their GHG emissions;
- Improving their energy efficiency practices;
- Developing a leading domestic industry for environmental technologies for export; and,
- Supporting investments in new technology and process and productivity improvements.

An emissions reduction fund of this kind would allow manufacturers to comply with their sector's performance standard. If they are unable to meet their sector-specific target through on-site actions, offsets, best performance credits or other approved mechanisms (such as those adopted from the Paris Agreement) they could make up the difference by paying into such a trust.

Recommendation:

- 1. Model the Ontario Carbon Trust off Ontario's previous CME SMART Green Program to assist manufacturers investing in new clean technologies, capital machinery and equipment that have environmental benefits.**

Ontario Output-Based Standards (OBS):

In Ontario, there are significant risks of trade exposure for all sub-sectors within manufacturing covered by an output-based performance standard. All Ontario sub-sectors would face competitiveness risk concerns under federal policy. Therefore, depending on the industry, an output- or performance-based standards system with flexibility to establish baseline emission levels and reduction targets for regulated emitters and multisite manufacturers with considerations for trade exposure and competitiveness is necessary. Emission reductions in the non-regulated sector through emission standards and energy efficiency projects also needs to be considered.

For Ontario's manufacturing sector, certainty must be created for future climate policies and maintaining a balance between environmental performance and reducing emissions is critical for future investment into Ontario's economy. As such, a performance-based system with flexibility to establish baseline emission levels and reduction targets for regulated emitters and multi-site manufacturers with considerations for trade exposure and competitiveness of the sector is crucial for its long-term sustainability.

Moreover, if the performance-based is approached from a North American benchmark/standard then manufacturing must obtain a reduction on emissions based on total energy consumption. In this manner, Ontario businesses will get credit for the clean electricity system that they are paying for and have a better chance of minimizing the emissions costs, resulting in additional reductions in GHG reductions.

By providing access to a range of flexible and affordable compliance mechanisms, including the ability to opt-in if a GHG threshold approach is used, to ensure that reductions occur throughout the entire economy.

Recommendation:

- 1. Allow for sector specific output-based performance standards and performance-based facility standards within the made in Ontario emission performance standards for manufacturing operations emitting at least 25,000 tonnes of CO₂e per year, while also allowing multi-site manufacturers to combine emissions as one entity if the manufacturer determines it to be economically feasible.**

Federal Clean Fuel Standard (CFS):

The Government of Canada's Clean Fuel Standard (CFS) will apply in Ontario regardless of the Made-in-Ontario environment plan. This is the first CFS worldwide to include carbon intensity reductions for gaseous and solid fuels along with transportation fuels (liquid). In our view, the CFS, that is currently being proposed will increase costs for the manufacturing sector and for all manufacturing fuels. It also increases the chances of a net increase in carbon leakage and add costs especially for our small medium manufacturers. We urge the Ministry of Environment, Conservation and Parks to do an analysis on our sector as it relates to the CFS as it implements its plan. CME would also encourage the Government of Ontario to actively engage in the federal CFS process to help Ontario's manufacturing sector avoid costly duplicative climate change policies.

Recommendations:

- 1. Consider the costs, particularly those costs associated with solid and gaseous fuels (outside the transportation sector) imposed by the proposed Clean Fuel Standard within the Energy intensive Trade Exposed (EITE) assessment framework.**
- 2. Advocate to the federal government to exempt manufacturing fuels from CFS to avoid costly and duplicative environment and climate change policies.**

Infrastructure Creation That is Resilient to Climate Change:

Growing Ontario's manufacturing sector is foundational for the prosperity of all Ontarians. To achieve this growth, building infrastructure that is resilient to climate change is crucial. More than ever, we need less carbon-intensive, and more cost competitive energy infrastructure. And, it must be built with simple and low-cost regulatory compliance requirements, that includes efficient approvals and mechanisms to enable improvements based on strong public-private partnerships.

Furthermore, the Government of Ontario must encourage municipalities' use of asset management planning. Asset management planning is the most appropriate means of assessing and addressing long-term green infrastructure needs that considers the impact of climate change. In order to build

resilient infrastructure, jurisdictions across Ontario need educational tools and predictable funding streams. Additionally, adjusting and modernizing building codes to assist with building green infrastructure can also be of assistance in this regard and we would strongly suggest that government officials work with the insurers and infrastructure specialists to understand these opportunities.

Recommendation:

- 1. The Government of Ontario build infrastructure more resilient to climate change that is geared towards moving to more fuel-efficient vehicles, machinery and transportation options, cutting our reliance on greenhouse gas-emitting electricity generation and enabling the movement of goods and services across the province.**

3. REDUCING LITTER AND WASTE

At CME, we believe that the circular economy is an alternative to the traditional linear make-use-dispose economic model. Which prioritizes the extension of product life cycles, extracting maximum value from resources in use, and then recovering materials at the end of their service life. An important principle for the circular economy is increasing the capture and recovery of materials in waste streams within manufacturing so that they can be recycled and reused in new products, technologies and processes. The idea of life cycle management and the manufacturing sector's ongoing effort to realize the environmental and cost benefits of reduced packaging must be supported. Products that rely on manufacturing can become end-products that are more efficient and have a longer lifecycle.

For manufacturers, rather than dispatching what might seem to be unusable materials to a landfill, it's about repurposing, reusing, and recycling those materials whenever possible. It's about creating a circular economy where we minimize waste and maximize resources. Manufacturers can thus reduce the environmental impact of our packaging through redesign, reuse, increased recyclability and the use of recycled content. The results are less energy use in processing packaging materials, reduced cost and emissions, and less storage and space requirements. We can reduce our emissions, avoid unintended consequences and capitalize on existing synergies. As part of this approach, we must focus on energy recovery under strict controls rather than focusing on landfill mechanisms to achieve such a goal. Initiatives should thus be established to support research and development that will ensure all plastics are recyclable, recoverable or biodegradable within the 21st century.

These products that enable our modern way of life, however, do not belong in our waterways or in the environment. Today in Ontario, as a result of inadequate sorting, contamination, limited end markets and not employing all the technologies available, nearly 80 per cent of all post-consumer plastics end up in landfills – three million tonnes annually. The current approach to producing, using and disposing of plastics poses a real threat to the environment and results in a significant loss of value, resources and energy. Improving waste management systems will require consulting with impacted stakeholders to identify inefficiencies and conducting detailed economic impact analyses of potential alternatives.

An important principle of the circular economy is increasing the capture of materials in waste streams so that they can be recycled, recovered and reused in new products. But a circular economy

involves far more than just upgrading traditional mechanical recycling, it's a new economic model. We will never be able to reach 100 per cent zero waste goals from recycling alone. Other waste management options of energy recovery and recycling are needed to advance a circular economy within Ontario's manufacturing sector.

Policy to Create a Circular Economy for Plastics in Ontario's Manufacturing Sector:

Implementing a circular economy for plastics will enable the manufacturing sector to sustain economic growth while improving environmental sustainability and competitiveness. Achieving goals to eliminate plastic waste in Ontario, however, will require major shifts in resources and policy.

Improve and standardize waste collection and diversion - The mantra of "reduce, reuse, recycle" must also include "recover." Many jurisdictions recognize the 4Rs (reduce, reuse, recycle and energy recovery). Ontario should adopt this 4R hierarchy within their strategy which would encourage reuse and recycling options ahead of recovery. This would ensure proper prioritization is given to the management of each waste stream. Furthermore, when a waste stream can't be reused or recycled from either a technical or economical point of view, the last few waste streams that can't be recycled could be sent for energy recovery. Getting to 100 per cent diversion of plastic packaging within manufacturing requires innovation, and the use of both recycling and recovery options. It will require an approach that involves the contributions of manufacturers with significant support and investment, not just from the sector but the Government of Ontario and other sectors too. Specifically, the manufacturing sector needs investments in collection and mechanical recycling, chemical recycling using pyrolysis and gasification technologies, energy recovery and enabling regulations.

Consistency in waste collection across Ontario to facilitate recycling and recovery for residential, commercial and institutions is imperative to our goals. It is also important to standardize and harmonize definitions and policies across Ontario to recognize plastic recovery and conversion to energy as diversion (e.g. Nova Scotia recognizes materials diverted from landfill to advanced facilities to make new plastic feedstocks, fuel replacement as diversion).

Promote and Enable Innovation - As we grow manufacturing in Ontario, we must ensure that systems are in place to recover the value of waste plastics. Ontario and its manufacturing sector can become a global leader in the advanced recovery of plastics by investing in technologies and other innovative forms of deriving benefits from waste.

Ensure Data Driven, Evidence-Based and Life-cycle Decision Making - We must ensure that policies for reducing plastic waste are evidence-based and principled. Best practices will be critical in making real progress to enable the circular economy within Ontario's manufacturing sectors. Materials within the sector should be judged on a life-cycle basis and with their value assessed. A material that can be recycled but has a much larger overall environmental footprint does not improve sustainability.

Recommendations:

- 1. Create a new Ontario waste reduction strategy in order to further minimize waste, reduce emissions and repurpose, reuse and recycle materials wherever possible and reduce Co2 associated with waste.**
- 2. Work with all levels of governments to invest in improvements to standardize waste collection and sorting for manufacturers in Ontario.**
- 3. Promote well-designed, industry-led extended producer responsibility systems to inform the behaviour of manufacturers and help establish markets.**
- 4. Develop standardized, supportive policies across jurisdictions that consider energy recovery (or resource recovery) where non-recyclable plastics today can displace cement or petroleum fuels (e.g. plastic to diesel fuel).**
- 5. Recognize the existing diversion markets and ensure that new policies do not sub optimize the markets that exist today.**

4. STAKEHOLDER ENGAGEMENT PROCESS

Authentic consultation will be critical for the implementation of the Made-in-Ontario Environment Plan to ensure that sound and balanced environmental policies are enacted to benefit Ontario's manufacturing sector. CME believes that it is important to ensure that timely authentic consultation with impacted stakeholders continues the implementation of this plan. We believe that consultation provides an opportunity for stakeholders to identify areas of concern or potential unintended consequences with government proposals prior to their finalization or implementation. How manufacturers are consulted can vary, however our sector has a history of providing sound, informed and practical opinions and advice.

Recommendation:

- 1. The Ministry of Environment Conservation and Parks should feature members of the manufacturing sector to be on the advisory panel to ensure balanced representation and authentic consultation.**

WHO WE ARE:

From the first industrial boom in Canada, Canadian Manufacturers & Exporters (CME) has been advocating for and representing member interests. Nearly 150 years strong, we have earned an extensive and effective track record of working for and with 2,500 leading manufacturers from coast to coast to help their businesses grow. The association directly represents more than 2,500 leading companies nationwide. More than 85 per cent of CME's members are small and medium-sized enterprises. As Canada's leading business network, CME, through various initiatives including the establishment of the Canadian Manufacturing Coalition, touches more than 100,000 companies from coast to coast, engaged in manufacturing, global business and service-related industries. CME's membership network accounts for an estimated 82 per cent of total manufacturing production and 90 per cent of Canada's exports.

CME Website: www.cme-mec.ca

Manufacturing Matters: www.manufacturingmatters.ca

Canadian Manufacturing Coalition (CMC): www.manufacturingourfuture.ca

PRINCIPLES:

We support evidence-based policy making that seeks to balance the reduction of emissions with the need to meet the manufacturing sector's growing expectations for sustainable manufacturing processes, technologies and services. With that premise in mind, CME recommends the following principles be adopted by the Government of Ontario to assist in guiding the development of climate change regulation in Ontario:

1. The manufacturing sector recognizes that climate change is real and that our sector must do its part to reduce emissions.
2. Governments recognize that the manufacturing sector has been effective in reducing emissions for several decades.
3. Governments must address the competitiveness of Ontario's manufacturing sector in the design and implementation of Ontario's climate change policy to allow companies to deliver the products, processes and solutions needed to meet the climate change challenge across domestic and global markets.
4. Climate change policy measures must define sustainable and economically efficient GHG emissions reduction targets that are balanced with economic-driven growth objectives in the manufacturing sector.
5. Provide certainty and predictability for continued operation and growth of the manufacturing sector in federal, provincial and cross-border regulatory frameworks, while also enabling the reduction of GHG emissions.

6. Climate change policy measures must be aimed to promote emission reductions and should be applied consistently across Ontario and internationally.
7. Unnecessary differences in compliance requirements should be eliminated in climate change measures to ensure that Ontario's manufacturing sector becomes more competitive.
8. Climate change policy measures should be thoroughly analyzed based on acceptable, reliable, and scientifically valid models of social, economic, and environmental impacts.
9. Climate change policy measures should be adopted only if the full extent of their economic and competitiveness impacts is clearly understood and considered.
10. Climate change policy measures aimed at reducing GHG emissions need to focus on increasing investments in and the adoption of more productive, less emission intensive technologies and organizational processes; applying broadly to all GHG emission sources allowing the participation of all Ontario companies.
11. Climate change policy measures should utilize a consistent, market and science based decision-making approach that encourage the development of technologies and solutions which can be commercialized and exported to contribute to the reduction in GHG emissions globally. Ontario should become a global leader in designing and manufacturing environmental technology.
12. Climate change policy measures must balance multiple policy priorities, including energy reliability and independence, and economic growth and sustainability.
13. Carbon pricing revenues should be allocated for reinvestment whereby the revenues are recycled back into industry to support investment into new technologies that will help reduce GHG emissions.

OUR STRATEGY FOR ENVIRONMENTAL PUBLIC POLICY:

The mandate of CME is to promote the competitiveness of Canadian manufacturers and enable the success of Canadian goods and services exporters in markets around the world. CME recognizes that climate change is an issue where Canadian industry needs to play a proactive role in reducing greenhouse gas (GHG) emissions and offering constructive recommendations for public policies aimed at meeting emission reduction goals.

As an association deeply committed to addressing the issue of climate change, reducing emissions and shared prosperity for all Ontarians, CME has a strong interest in creating a healthy business climate in the province that generates growth, reduces emissions, attracts investment and creates good-quality, high-paying jobs for workers. With this premise in mind, our four strategic objectives on environmental issues are as follows:

Achieving Environmental Sustainability: Manufacturers must balance sustainability against the costs it creates – an increased tax and regulatory burden – and the impact of those costs on their ability to

successfully compete for business. We must take steps to reduce our environmental footprint. However, this must be accomplished without undercutting the global competitiveness of Ontario manufacturing. An effective balance needs to be struck between social, economic and environmental sustainability as well as economic growth to ensure that a business climate is created to improve environmental performance and to preserve and/or enhance economic competitiveness.

Enabling Environmental Stewardship: Manufacturing's approach to climate change must allow industry to continuously enhance its competitiveness with respect to attracting investment, improving operating efficiencies, and developing new markets for its products and services. Industry must be good corporate citizens of the environment and continue to improve energy efficiency, reduce its carbon footprint, enable a circular economy as it has done successfully for several decades, and invest in new emissions reducing technologies.

Driving Economic Performance and Innovation: The only way that the manufacturing sector will be able to sustain strong economic growth and reduce greenhouse gas emissions is by accelerating the rate of technological progress in manufacturing. This can come in the form of improved energy efficiency best practices, capital turnover and replacement of older technologies with newer, more productive, and less emission-intensive technologies. We must also create investment support programs to help manufacturers invest in new and more efficient processes so that we can become global leaders in reducing GHG emissions and commercializing these innovations.

Creating Regulatory Certainty and Clarity: We must create a business climate that ensures all new or changing environmental regulations balances the needs of the environment and the economy. This includes improving education on environmental regulatory issues and look for new opportunities to reduce red tape and the regulatory burden for manufacturing, while also maintaining strong environmental performance track records.

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