Hon. Wayne Easter, Chair
House of Commons Standing Committee on Finance
Sixth Floor, 131 Queen Street
House of Commons
Ottawa ON K1A 0A6 Canada

Dear Hon. Wayne Easter,

Enerkem is pleased to once again contribute to the House of Commons Standing Committee on Finance's pre-budget consultation process. In the past, we have identified several federal actions and initiatives through which the Government of Canada could stimulate nation-wide economic growth by unlocking the potential of high-impact cleantech businesses.

To begin, Enerkem commends the Government of Canada for its continued focus on leveraging Canada's natural cleantech advantages, such as its research capacity, skilled workforce of engineers and tradespeople as well as manufacturing capacity, to foster a thriving domestic industry that will be among world leaders in generating jobs and investment. We share this very same objective, and our team of 200 skilled employees in Quebec and Alberta as well as our network of Canadian-based suppliers of specialized manufactured equipment, continue to push forward to create disruptive commercial low carbon solutions to help realize Canada's full potential as a global cleantech leader. Our proprietary clean technology is producing low carbon transportation fuels and chemicals from non-recyclable garbage. Our advanced biorefinery facilities help communities reduce waste while producing greener everyday products.

2017 budget has laid the foundation for a strong commercial cleantech sector

As a flagship success story of our country's bourgeoning cleantech sector, Enerkem was greatly encouraged by the emphasis placed on Canada's cleantech advantage in Budget 2017. Indeed, the Government of Canada deserves congratulations for establishing a progressive vision of working with organizations such as the **Business Development Bank of Canada** (BDC) and **Export Development Canada** (EDC) to promise $1.4 billion in new financing to help innovative Canadian cleantech firms overcome the financing gap that has limited their commercial growth and to create the **Strategic Innovation Fund** which will support new high-quality business investments in the cleantech sector. The well-documented financing gap from demo to the first wave of commercial projects continues to stifle the growth of the cleantech sector, and limits the jobs and investment that could be benefitting communities from coast to coast.

The **Low Carbon Economy Challenge Fund** as well as the **Canada Infrastructure Bank** are also expected to stimulate investments in private green projects and infrastructure that are reducing emissions and generating clean growth in support of the Pan-Canadian Framework on Clean Growth and Climate Change. We look forward to having more details on these as they will be instrumental to accelerate cleantech commercial scale-up.

Capital must now be deployed to support the growth of domestic cleantech companies and stimulate private investments

In this light, we welcome the Government's commitments to providing support for the growth of domestic cleantech firms through equity investments, working capital, project finance, loans and grants, but we are compelled to remind the Government of Canada that this is only a first step. These new finance options are required urgently if Canada is to ensure the potential of this country's cleantech advantage is not squandered before it can be realized. **For these budget investments to make a true difference, as was intended, the immediate next step for government must be to ensure that the funds that have been allocated to green infrastructure, innovation and clean technology are accessible to private companies with innovative commercial green technology projects, and to complement these funds with appropriate tax-related mechanisms for attracting private capital.** The more quickly this capital can be made accessible to firms demonstrating a high-growth green business case, the more quickly the cleantech sector can begin transforming the future of this country's economy.

As the Government of Canada considers how to, in the next budget, leverage the momentum created by Budget 2017 for cleantech sector growth and investment, Enerkem is open to sharing its practical perspectives and experience in the commercialization of clean innovation in Canada.

Recommendations – Tax innovation and access to capital programs to address the financing gap and drive investment for the commercial scale-up and exports of clean technologies

Innovative clean technologies like Enerkem's continue to face a challenge to finance their commercial scale up and build out their green private infrastructure. The Government of Canada has shown forward-thinking leadership in taking the first step toward growing a globally important domestic cleantech sector. The next steps required to operationalize and follow through on the commitments of Budget 2017 must be moved on quickly. Enerkem's experience raising capital and scaling technology to commercial applications has revealed a number of areas where the Government of Canada can provide leadership to unleash large-scale economic benefits. The following practical solutions can help Canada harness the potential of a growing cleantech sector:

1) As part of the 2017 budget and over the months that followed, the federal government has created new programs and funds to stimulate clean growth and jobs and drive the transition to a low carbon economy, including cleantech funds from BDC and EDC, the Strategic Innovation Fund, the Canada Infrastructure Bank's green infrastructure funding and the Low Carbon Economy Fund. **The key is now in the implementation and execution of these funds. It is important to ensure that the funds are accessible to private firms for new green private infrastructure projects, at suitable terms and competitive rates, and on a continuous basis.** These funds can be leveraged by private firms to attract private capital which will multiply many times over the impact of Government of Canada investments. In this manner, the federal government will set the conditions for Canada's innovative cleantech firms to lead the low-carbon economic transition to clean growth, investment and jobs.

2) **Expand the Renewable Energy Capital Cost Allowance to include advanced biofuels equipment and provide access to the flow-through share system as available to wind power**. These tax incentives are currently limited to stationary renewable energy, creating a lopsided incentive system that distorts the clean energy market and arbitrarily penalizes renewable liquid fuels.
3) **Exempt advanced (second generation) biofuels such as advanced ethanol from the federal fuel excise tax.** Conventional biofuels benefited from this incentive prior to 2008, and natural gas, when used as a transportation fuel, is currently exempted from this tax. This cost-effective measure can not only help attract private investment but will also increase the competitiveness of the Canadian advanced biofuels industry (including second generation ethanol) with those of the U.S. and Europe and directly contribute to greening our transportation sector. This measure would support the current Renewable Fuels Regulations and is in line with the vision proposed by the government to also implement a Clean Fuels Standard.
4) **Modernize existing financial infrastructure to create a unique, Canadian-made flow-through share system (FTS) that would invest in cleantech industrial projects** and would require a greenhouse gas emissions reduction threshold for projects to be eligible. Canada would innovate with such an enhancement or redirection of its FTS system, which is today benefiting the oil, gas and mining industry. The risks associated with scaling up transformative cleantech innovation are similar to exploration risks. The government should consider facilitating access to the capital coming from our high net worth Canadians that is currently going to our mature resource–based sector instead of our growing clean innovation commercial-ready sector. This would send a clear signal to investors and enable the transition from a resource-based economy to a more innovation-based economy.

In conclusion, Budget 2017 represented a potential breakthrough for Canada's cleantech sector and Budget 2018 will be critical for carrying through and realizing this potential. Canada's cleantech firms are in a position to create a self-propelled domestic ecosystem of accelerated growth if the Government of Canada moves quickly to turn its budget commitments into accessible, industry-fitted programming for equity investments, working capital, and project finance.

However, timing and program parameters are paramount. This is a time-limited opportunity to establish a commercial cleantech sector that moves the needle as an economic force to change the future and well-being of communities from coast to coast. Canada's home-grown clean technology firms are among the best in the world, however there are still many obstacles slowing the growth trajectories of companies that are commercializing innovative clean technologies.

Enerkem's real-world growth which has been fuelled by over $350 million in private financing, and our domestic and export growth profiles are demonstrating how a Canadian cleantech innovation has the potential to change the marketplace. This is the time for the Government of Canada to move with urgency to help coordinate and enhance the many strengths and assets in this country's cleantech sector. Due to the extraordinary leadership demonstrated by Budget 2017, Canada is on the verge of creating a wave of successful commercial cleantech firms that are capable of seizing global markets for cleantech products and services and bringing

economic growth and jobs to communities across Canada. We look forward to working with partners in the federal government to help foster these next stages of success.

Thank you for considering Enerkem's contribution to the House of Commons Standing Committee on Finance's pre-budget consultation process. If you have any questions or would like to discuss further, please do not hesitate to contact me.

Marie-Helene Labrie
Senior Vice-President, Government Affairs and Communications

About Enerkem

A pioneer among Canada's flagship class of high-impact cleantech firms

Developed in the labs of the Université de Sherbrooke, Enerkem's proprietary technology is a Canadian-made clean innovation. Our high-impact cleantech company has significant market disruption potential, and is today positioned at the forefront of the advanced biofuels and renewable chemicals sectors in Canada and globally. Enerkem is ready to rapidly deploy its clean technology in Canada and around the world due to its modular and scalable manufacturing system, based on our strong Canadian equipment supply chain, which allows plant design to be replicated without significant re-engineering. We are poised to unlock the next stage of our growth trajectory, and we look forward to working with the Government of Canada to remove obstacles to growth and help lead the next generation of Canadian success.

Enerkem Alberta Biofuels waste-to-biofuels and chemicals facility in Edmonton

Enerkem and the Economy

Enerkem contributes significantly to the Canadian economy, by designing and delivering advanced biorefineries with a standardized modular build process that is perfectly suited for domestic expansion and export. Enerkem is a young and growing company. It employs 200 people with an average age of 36.

Enerkem Alberta Biofuels, located at the Edmonton Waste Management Centre, is the world's first commercial biorefinery to use municipal solid waste to produce biomethanol and ethanol. An independent study by Doyletech Corporation evaluated the economic impact of the facility at 610 direct and indirect jobs during construction, 152 direct and indirect permanent jobs during operations, a $199 million Canada-wide economic stimulus and a $64.5 million annual net economic spending increase in the local area.

The strong Canadian advanced manufacturing base that Enerkem developed to supply the equipment and modules for the construction of its Edmonton facility will be leveraged for each

new Enerkem project in Canada and abroad. Enerkem is currently developing its next commercial facility, a biorefinery in Varennes, Quebec which will transform industrial and commercial waste as well as construction and demolition debris into clean fuels, and which will mobilize the work of over 200 Canadian equipment suppliers with millions in contracts expected for Canadian advanced manufacturing. Enerkem's international growth—led by facilities currently in development in the Netherlands, in partnership with AkzoNobel, AirLiquide and the Port of Rotterdam, and near Minneapolis (MN), in partnership with SKB Environmental—will bring hundreds of millions of dollars more in contracts to Enerkem's Canadian equipment suppliers as well as high-quality green jobs within Enerkem itself and throughout its supply chain.

To fuel its growth, Enerkem has attracted, over the years, private capital from leading Canadian and U.S. industrial, institutional and cleantech investors such as Rho Capital Partners, Waste Management, Braemar Energy Ventures, Investissement Québec, Cycle Capital, Fonds de solidarité FTQ, The Westly Group and Fondaction.

Enerkem and the Environment

Enerkem's disruptive clean technology replaces the use of fossil transportation fuels with clean-burning low-carbon fuel produced from non-recyclable waste. The use of Enerkem's advanced biofuels reduces greenhouse gas (GHG) emissions through the displacement of gasoline and the avoidance of methane emissions from landfill, resulting in GHG reductions of 60% on a lifecycle basis.

Enerkem's business model is also representative of the circular economy, where waste from one industry or sector is a resource for another production process. Enerkem's technology has the potential to radically change the waste management landscape by unlocking the resources found within non-compostable and non-recyclable wastes that are currently disposed in landfill or incinerated, at a cost that is competitive with current charges for these polluting waste disposal practices.