

**Written Submission for the Pre-Budget  
Consultations in Advance of the 2019 Budget**

**By: Enerkem**

## **ECOFISCAL RECOMMENDATIONS**

**Recommendation 1:** That the Government of Canada take action to strengthen economic competitiveness and the environment by levelling the playing field for second generation biofuels sector by providing access to the accelerated Capital Cost Allowance and flow-through share mechanism that are currently available to producers of “producer gas.” The Government of Canada could accomplish this, for example, by removing the exclusion of “producer gas that is to be converted into liquid biofuels or chemicals” under section 43.1 of Class 43.1 or by expanding the Renewable Energy Capital Cost Allowance to include advanced biofuels.

**Recommendation 2:** That the Government of Canada take action to strengthen economic competitiveness and the environment by exempting second generation ethanol from the federal fuel excise tax. Natural gas currently benefits from this exemption when it is used as an alternate transportation fuel, and grain-based ethanol benefitted from this exemption in the past.

**Recommendation 3:** That the Government of Canada take action to strengthen economic competitiveness and the environment by restructuring the flow-through share system to encompass the cleantech sector.

## **ACCELERATION OF CAPITAL DEPLOYMENT FOR HIGH-IMPACT CLEANTECH PROJECTS**

**Recommendation 1:** That the Government of Canada take action to accelerate and optimize the delivery of current cleantech programs including the funds allocated to EDC, BDC and ISED (Strategic Innovation Fund). More resources should be allocated to support the delivery of these programs. A combined \$2.3 billion has been allocated to cleantech programs since Budget 2017 but limited amounts have been actually allocated to projects. Canada needs to accelerate the pace, improve its competitiveness and increase its market share in the global cleantech sector.



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

Dear Hon. Wayne Easter,

Thank you for the opportunity to contribute to the House of Commons Standing Committee on Finance's pre-budget consultation process for 2019.

Enerkem's proprietary clean technology produces a growing range of low carbon transportation fuels and chemicals from non-recyclable garbage. As we have stated before, Enerkem is supportive of 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, investment, exports and diversifying markets for trade. It should come as no surprise that that our 200 skilled employees in Quebec and Alberta share these objectives, as do our network of Canadian-based suppliers of specialized manufactured equipment. We are driving toward our objectives through smart partnerships and private investments of \$600 million.

Our game-changing Edmonton facility is the first in the world to produce advanced biofuels and chemicals from nonrecyclable municipal solid waste, and we are building on this homegrown innovation as we develop and build a new advanced biorefinery in Varennes, Quebec. We are also growing globally, as we work on a new facility in Rotterdam in partnership with AkzoNobel, Air Liquide and the Port of Rotterdam, another facility near Minneapolis, Minnesota, in partnership with SKB Environmental as well as other projects around the world including in China.

We welcome the work of the Clean Growth Hub which is efficiently and proactively supporting the cleantech sector and enabling the deployment of cleantech at large-scale in Canada. Unfortunately, despite the progress being made and the political will that exists here in Canada to foster growth in cleantech and to make critical capital investments, the Government of Canada has not made the funds available at the pace required by market opportunities for our sector to remain competitive on a global basis. The government is also failing to leverage short-term opportunities and remove barriers to incentivize second-generation biofuels production and use as it is being done among Canada's global competitors. Our recommendations can help Canada catch up with the global marketplace and reap the economic and environmental benefits.

#### **RECOMMANDATIONS:**

**Improve access to clean energy Accelerated Capital Cost Allowance for level field of competition**

In order for the Government of Canada to ensure its cleantech sector is delivering on its full potential of economic and environmental benefits it will require a levelled playing field. Currently, companies like Enerkem are competing from a position of disadvantage with its peers in the clean energy sector, including those who are producing «producer gas» for electricity, in terms of accessing the accelerated Capital Cost Allowance (CCA) as well as its associated flow-through share (FTS) mechanism, which are both available to renewable energy producers.

The CCA covers clean energy generation and energy conservation equipment, including equipment for waste gasification. This measure incentivizes businesses to invest in clean energy generation and energy efficiency equipment by providing a 50 per cent accelerated capital cost allowance rate on a declining-balance basis. As stated above, the accelerated capital cost allowance also provides access to a FTS mechanism that allows eligible companies to transfer certain expenses related to the development of renewable energy projects—expenses that fall under the definition of Canadian renewable and conservation expenses (CRCE)—to their investors who can then apply them to lower their taxable income. By stimulating private investment in the renewable energy sector, this tax mechanism helps meet Canada’s objectives for the growth and diversification of the economy and for the reduction of greenhouse gas emissions.

By taking action on CCA, companies like Enerkem could see private investment stimulated in a similar way, and help contribute to Canada’s economic and environmental aspirations, if it wasn’t for the specific exclusion of biofuels (low carbon transportation fuels).

Indeed, key equipment used in Enerkem’s industrial processes for the preparation of waste fuel and for the generation, cleaning and conditioning of producer gas would be eligible for the accelerated Capital Cost Allowance under section xvi of Class 43.1 where “producer gas that is to be converted into liquid biofuels or chemicals” is not specifically excluded from this section. This same equipment is eligible today when it is used to produce electricity, which it could be in an Enerkem facility. However, what is unique and valuable about Enerkem’s technology is its ability to produce an ultra-clean gas that can be converted into higher value clean products such as biofuels and green chemicals. Second-generation biofuels reduce GHG emissions by 60-90 percent according to Natural Resources Canada, by displacing gasoline and through the avoidance of methane emissions from landfill. Enerkem should not be penalized if it decides to convert its producer gas into biofuels or chemicals, which like stationary renewable energy production helps reduce greenhouse gas emissions and the use of fossil fuel sources of energy.

Furthermore, other similar equipment types that transform wastes and residues into fuels are eligible, including:

- Equipment used for the collection of landfill gas (43.1 section viii).
- Equipment that converts wood waste or plant residue to bio-oil, if that bio-oil is used primarily for the purpose of generating heat that is used directly in an industrial process or a greenhouse, generating electricity or generating electricity and heat (43.1 section xi)
- Equipment that is used to produce and store biogas (43.1 section xiii)

Due to the timing of its commercial deployment, second-generation biofuels have not benefited from the programs and incentives that were put in place for the conventional biofuels industry. But that does

not mean that public policies should not be adapted to ensure Canadians can benefit from the maximum economic and environmental benefits from this sector that is emerging around the world. The United States for example has created a Depreciation Allowance for Cellulosic Biofuel Plant Property in order to stimulate private investment in the advanced biofuels sector.

### **Exempt second generation ethanol from federal fuel excise tax**

In order to fulfill the economic and environmental potential of the Canada's cleantech sector, it is time for the Government of Canada to exempt advanced (second generation) biofuels such as advanced ethanol from the federal fuel excise tax.

Presently, the federal excise tax (FET) on gasoline is 10 cents per litre. A Second-generation Biofuels Federal Excise Tax Exemption would transfer the value of the excise tax to the biofuels producer to enhance the competitiveness of second-generation biofuels and level the playing field with other alternative fuels.

Conventional biofuels like grain ethanol benefited from this incentive prior to 2008, and natural gas currently does when it is used as a transportation fuel. Second generation biofuels plants do not and have not benefitted from either of these incentives. By adjusting the scope of the exemption, this cost-effective measure cannot only help attract private investment but will also increase the competitiveness of the Canadian second generation biofuels industry (including second generation ethanol) with those of the U.S. and Europe. This would directly contribute to greening of Canada's transportation sector and help position it for a transitioning economy. 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. Taxing renewable fuels is a policy measure that goes against the objectives of the government to green the transportation sector and to fight climate change.

Exempting second-generation biofuels—which reduce GHG emissions on average by 60-90%— from the tax would drive investment and help cover the higher capital costs of this innovative technology and game-changing facilities. A wide range of economic and environmental benefits to Canada would result directly from this change.

### **Modernize financial infrastructure to create a made-in-Canada flow-through share system (FTS) for cleantech**

The Government of Canada has an urgent opportunity to innovate through its flow-through share (FTS) system, which currently benefits 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 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.

### **Accelerate of capital deployment for high-impact cleantech projects**

As stated above, Enerkem has applauded the major investment announcements included in previous federal budgets. However, we feel we must once again state that Canada's competitiveness cannot be strengthened until the Government of Canada ensures these funds are made available to the domestic

clean technology sector to accelerate growth. More concretely, the Government of Canada needs to accelerate and optimize the delivery of current cleantech programs including the funds allocated to EDC, BDC and ISED (Strategic Innovation Fund). The availability of these funds for projects is required urgently if Canada is to ensure the potential of this country's cleantech advantage is not squandered before it can be realized. 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 bolster Canada's competitiveness on the world stage.

## **Conclusion**

Enerkem's technological advances constitute a Canadian cleantech success story and is the result of more than 10 years of sustained efforts to scale up our technology and build the world's first garbage-to-low carbon transportation fuels facility. Today, we are successfully developing commercial-scale facilities to produce renewable energy for the transportation sector and low carbon chemicals in Canada, the United States and abroad. However, the Government of Canada must take action to ensure that tax policies and programs support the cleantech sector and that efforts are put to ensure the growth of the emerging and growing sector of second generation biofuels. 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 in a timely manner to private companies with innovative commercial green technology projects, and to complement these funds with appropriate tax-related mechanisms for attracting private capital. Canadians deserve to benefit from the GHG emissions reductions and the economic impact the growing biofuels and biochemicals sector can generate.