RESPONSE TO SENATE COMMITTEE ON ENERGY, ENVIRONMENT AND NATURAL RESOURCES

Follow-up Questions to CAC's March 30, 2017 appearance at the Hearing on the Study on the effects of transitioning to a low carbon economy

1. *What is the percentage of each cost (raw material, carbon tax, energy) for your industry;*

    - These costs can vary considerably from province to province due to factors such as electricity costs, distance to major markets etc. but as, a general, rule of thumb (without carbon pricing):
        - Energy (electricity and thermal): 30-40%
        - Raw materials (primarily limestone): 30-40%
        - Transportation: 10%
        - Labour, repair, maintenance, etc.: 15-20%
    - The carbon tax in BC is applied to fuels, so our facilities experience direct carbon tax costs on the thermal energy sources (coal, natural gas, and even shredded or whole end-of-life vehicle tires) needed to heat our kilns. We also experience indirect carbon tax costs that transportation fuel and electricity suppliers pass on to us.
    - At $30 per tonne, BC's carbon tax as much as doubles the cost of thermal energy and increases the baseline costs of cement (a low margin, high volume commodity) by about 10-15% in comparison to imported cement.
    - Indirect costs can also be significant, but are generally comparably offset by the corporate tax reductions applied as part of the "revenue neutrality" of the carbon tax.
    - In other provinces with pricing, the direct and indirect impacts are much smaller due to the EITE protection measures (such as free allocations) they have put in place.
    - It should be noted that these facilities, particularly with respect to implementing lower carbon technologies, like low carbon fuels, are very capital intensive. A best in class low carbon fuel system could cost well over $50 million. This is an investment any given facility must compete for with other facilities in each company's global portfolio (many of which aren't subject to the same competitiveness imbalances we see in BC from the carbon tax).

2. *How the two cement plants still in operation in BC are doing it (still working with the carbon tax) and what will happen to them with $50/ton carbon tax;*

    - As of 2016, cement imports remain at historically high levels, about 46%.
    - Without new measures to protect EITEs, $50 tonne would see the ongoing erosion of market share for domestic cement, which would increasingly come from Asia and

the US. Our facilities would have more and more idle capacity, which means further layoffs for our workers and those employed indirectly by our facilities.

- We remain hopeful that BC will implement EITE competitiveness measures similar to Alberta's Output Based Allocation system or, alternatively, that BC will renew their intention to join the WCI cap-and-trade market, which would significantly reduce impacts on our sector.
- We have also asked the federal government to strike a small independent legal advisory committee to explore the role that selective Border Carbon Adjustments could play to protect EITE competitiveness under the Pan Canadian Framework. Unfortunately, they have denied this request.

3. *How many plants had to shut down, jobs lost and the cost on the economic activity since carbon tax in BC?*

- One relatively small (~200,000 tonnes per year) facility in Kamloops BC has been mothballed and approximately 36 workers were affected.
- The primary reason was reduced demand in Alberta's oil and gas sector (the major market serviced by the Kamloops plant). It's possible this facility will begin operations again if the oil and gas market picks up.