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The Rt. Hon. Freundel Stuart, PC, QC, MP  
Prime Minister of Barbados

## **Regarding: Cahill Energy proposal**

Dear Prime Minister:

It seems presumptuous for a foreigner with few previous connections to Barbados to address you on a matter of domestic policy. For this I apologize in advance.

However the Cahill Energy proposal for a garbage/"biomass" incinerator is very concerning to those of us who have been involved in responding to such schemes in various parts of the world.

It makes sense that island nations concerned with waste disposal challenges, limited available land, and expensive imported hydrocarbon fuels would find such incineration proposals appealing. Their promoters make them sound like an almost-magical solution to a difficult set of problems.

The reality is quite different.

Contracts for such facilities are invariably structured to place the risks on the "host community" and deliver the rewards to investors. Many communities in the United States and elsewhere have suffered grave financial damage from their ties to incineration projects. For example, incinerators contributed importantly to the bankruptcies of Detroit (Michigan, USA) and Harrisburg (Pennsylvania, USA).

It is claimed that "gasification," etc, is fundamentally different than "incineration." This is not true, rather it is a marketing tactic in response to the bad reputation of incineration. Essentially, all combustion of solids and liquids is "gasification" in the sense that solids and liquids do not burn directly. Combustion is a process occurring in the gas phase.

Westinghouse Electric and its successors have been peddling "plasma gasification" for several decades; I recall being visited by Westinghouse salespeople in the mid-1980, promoting their "magic" solution. Actual commercial installations have remained rare because of the high costs and limited practical applications. Garbage ("mixed municipal solid waste") is not such an application.

Claims that a project would “convert” wastes into energy, heard in connection with the Cahill proposal, are always a warning sign. Chemical reactions do not “convert” waste into energy. What goes in will come out, either as ash or as air pollutants. Responsible promoters would not seek to deceive the press and public this way.

Contrary to claims often made, waste and “biomass” are not “carbon neutral” fuels and are not a desirable alternative to fossil fuels. To the contrary, they involve high emissions of both climate forcing materials and health-damaging air pollutants. Thus, they contribute to climate change and the resulting sea level rise, while damaging public health.

Investment should more rationally be directed towards recycling (“Zero Waste”) and development of solar power, wind power, and storage as required to obtain continuous supply from intermittent sources.

A full and detailed analysis of the energy and material balances for the Cahill proposal, along with process conditions, equipment lists, etc, will, I believe, support what I am saying in this note.

Likewise, a thorough due-diligence financial analysis of the proposal, with full consideration of risk and cumulative cash flows, would be revealing.

Likewise, a careful investigation of the history and “track record” of Cahill Energy is indicated. Experience elsewhere suggests that most of the promoters of such facilities have never built one. Commonly nobody else has either, anywhere. Absent some years of successful operation at a similar scale, such proposals should be regarded as experimental, and a potentially serious threat to the health and pocketbooks of citizens, and the reputations of leaders.

I understand that my colleague Professor Paul Connett ([pconnett@gmail.com](mailto:pconnett@gmail.com)) is visiting Barbados. Dr. Connett likely has a broader and deeper knowledge of this matter than anyone else. I urge you and your Cabinet to meet with him before proceeding further with the Cahill Energy scheme.

Very respectfully,

Alan Muller