October 28, 2022

The Honourable Chrystia Freeland
Deputy Prime Minister and Minister of Finance
Department of Finance Canada
90 Elgin Street
Ottawa, Ontario K1A 0G5

Dear Minister Freeland,

I am writing to express Energy Storage Canada's support for the Government's rapid implementation of an Investment Tax Credit (ITC) for energy storage, which if realized, would help Canada's transition to a clean electricity system, while also creating jobs, providing export opportunities, reducing ratepayer costs and, critically, ensuring Canada keeps pace with the United States.

Energy storage is an essential ingredient in Canada's transition to a low-carbon economy. Storage has the unique ability to extract more value from existing zero-carbon assets, such as nuclear, solar, wind and hydro. It is also unmatched in its efficacy providing multi-service benefits, including flexible capacity, peak capacity, ancillary services, deferral of additional investments in generation, transmission and distribution, and the augmentation of the reliability of the grid. These features are especially important if electrical grids are going to take on the anticipated increase in load as our energy needs shift from fossil fuels to clean electricity sources.

In fact, our recent report *"Energy Storage – A Key Pathway to Net Zero in Canada"* concludes that for Canada to achieve its Net Zero goals by 2035, 8 to 12 GW of energy storage capacity will need to be installed.

Further, According to BloombergNEF, the recently passed US Inflation Reduction Act, which includes an ITC for energy storage technologies is expected to drive the development of an additional 30 GW/111 GWh from 2022 to 2030.[1]

We are pleased to provide the following recommendations for an Energy Storage ITC that would allow Canada to at least keep pace with the United States and position energy storage resources to support the acceleration of Canada's Energy Transition.

- **Energy Storage technology definition should provide a scope comparable to that of the IRA definition to cover all energy storage technologies. From the IRA:**

(3) DEFINITIONS. —Section 48(c) is amended by adding at the end the following new paragraphs:

[1] Inflation Reduction Act will drive development of 111 GWh of energy storage: BloombergNEF | Utility Dive

''(6) ENERGY STORAGE TECHNOLOGY.—'(A) IN GENERAL.—The term 'energy storage technology' means— ''(i) property (other than property primarily used in the transportation of goods or individuals and not for the production of electricity) which receives, stores, and delivers energy for conversion to electricity (or, in the case of hydrogen, which stores energy), and has a nameplate capacity of not less than 5 kilowatt hours, and ''(ii) thermal energy storage property.

- **ESC proposes that the ITC be "refundable" as is the case with the CCUS ITC**

A refundable tax credit would be more useful to the broader industry. A company does not need to have income taxes owing to take advantage. This makes the tax credit more useful for start-up companies and avoids the need to have complicated corporate structures to funnel tax benefits to parent investor companies. For established companies that have an existing tax appetite relative in size to the new investment, there isn't a material difference in the financial benefit associated with an ITC vs refundable tax credit. Therefore, a refundable tax credit will broaden the potential of companies that could benefit.

A refundable tax credit would provide a substantial boost to move energy storage projects forward. In general, most of the lifecycle cost related to energy storage projects are in the upfront capital investment (as opposed to ongoing operating costs), so a tax credit on the capital costs would significantly improve the economics and incent project deployment.

- **ESC proposes a 50% Long Duration ITC**

Relative to a given MW capacity, long-duration energy storage projects provide different attributes and benefits to the electricity system and are important to long-term decarbonization. However, they have a higher capital cost than short duration, even though available market revenues are similar. Without recognition of long duration benefits, it is likely that the ITC will only drive short-term duration assets. If long duration energy storage had a preferential tax credit (i.e., better than what short duration storage could get to recognize its additional value), it could help to balance the level of investment between storage projects of different durations, which will be critical for Canada meeting its decarbonization objectives.

Long duration storage is critical for net zero grid objectives—particularly in replacing traditional thermal generation. A 50% long duration ITC would help accelerate and ensure the cost-effective deployment of long duration energy storage technologies like different battery chemistries, compressed air, thermal storage, and pumped storage

- **ESC Proposes Consistency with US IRA Overall**

Canada must maintain economic parity with the United States to prevent Canadian technology companies and investors (e.g., public pension funds) from moving capital investments to the U.S.A. to take advantage of these credits. Without a comparable policy in Canada, Canadian entrepreneurs will focus their time, energy, and capital on U.S. projects, manufacturing facilities, etc., putting Canadian communities, innovation, and workforces at a disadvantage. Canadian investors will see better returns in U.S. projects and will allocate their dollars south of the border.

Consistency with the energy storage ITC in the IRA, both in terms of level of support provided and length of times available, will ensure parity in competitiveness regarding attracting investment.

- **ESC proposes a 10-year timeframe for ITC eligibility**

The US ITC is guaranteed at the same rate for all projects deployed in the next 10 years, through at least 2032. After 2032, the tax credit only declines if the US has met specific emissions reduction goals.

We recommend at least a similar timeline, if not longer (particularly for resources that have very long (multi-decade) lifespans like many forms of long duration storage).

We would be pleased to meet with your office to discuss our recommendations in more detail.

Sincerely,

Justin Rangooni
Executive Director
Energy Storage Canada