From: Gabriel Mastico [redacted]
Sent: Thursday, August 27, 2026 11:17 PM
To: northinfo <northinfo@islandstrust.bc.ca>
Cc: Tobi Elliott <telliott@islandstrust.bc.ca>; Susan Yates <syates@islandstrust.bc.ca>
Subject: Draft OCP submission: enabling policy for on-site renewable energy generation and energy storage

Hello,

Please find attached my submission on the draft Official Community Plan, for the Local Trust Committee's consideration in advance of first reading.

In short, I support the draft, and I am asking the Committee to add four short enabling policies on on-site renewable energy generation and energy storage, together with an implementation action to amend Land Use Bylaw No. 177. The policies are drafted as paste-ready wording, and the submission identifies the specific bylaw provisions each one touches.

Nothing in it would permit commercial or utility-scale solar development. Every ask is limited to equipment accessory to a permitted use and sized to serve the property it sits on.

I would be glad to answer any questions trustees or staff may have, and I can provide the manufacturer's documentation and code extracts referred to in the submission if those would assist.

Thank you for the work that has gone into the draft Plan.

Best regards,

Gabriel Mastico
[redacted]

Gabriel Mastico

To: Gabriola Island Local Trust Committee, c/o Islands Trust Northern Office, northinfo@islandstrust.bc.ca
cc: Trustee Tobi Elliott; Trustee Susan Yates
Re: Draft OCP, enabling policy for on-site renewable energy generation and energy storage
Date: August 28, 2026

Submitted for the Local Trust Committee's consideration in advance of first reading.

I am writing as a Gabriola resident in support of the draft Official Community Plan, and to ask the Local Trust Committee to add a short set of enabling policies on on-site renewable energy generation and energy storage before the draft proceeds to first reading.

I should be clear about scope at the outset. I am not asking for provisions that would permit commercial or utility-scale solar development on Gabriola, and nothing below would enable it. Every ask in this submission is limited to equipment accessory to a permitted use and sized to serve the energy needs of the property it sits on, together with net metering under BC Hydro's existing program. I would support an explicit limit in the bylaw to exactly that effect.

1. Why this belongs in the Plan, and not only in the Land Use Bylaw

The changes that would remove the barriers I describe are changes to Land Use Bylaw No. 177. I raise them here for two reasons.

First, a land use bylaw must be consistent with the Official Community Plan. If the new Plan is silent on distributed generation and storage, a later application to amend LUB 177 has no policy to point to, and staff will reasonably report that it is not supported by the Plan. The OCP is the enabling layer. Without it, the bylaw work has nowhere to start.

Second, this is an OCP and Land Use Bylaw review, and Phase 2 was described as identifying the LUB modifications the new policies require. The natural home for these amendments is this project's implementation phase, not a separate application several years from now.

I would add that the Local Government Act requires an Official Community Plan to include targets for the reduction of greenhouse gas emissions, together with the policies and actions proposed to achieve them. Substantial portions of LUB 177 have not been amended since 1999, and the words solar, photovoltaic, battery and energy storage do not appear anywhere in it. A Plan that sets emission targets while leaving a 1999 bylaw to govern the equipment that meets them is doing only half of what that section contemplates.

2. Four policies I would ask you to consider

These are drafted as paste-ready wording, to sit within the draft Plan's climate change and infrastructure policies. They commit the Committee to nothing beyond the accessory scale described above.

Policy A, accessory use. Renewable energy generation and energy storage systems that primarily serve the on-site energy needs of a permitted use are supported as accessory uses in all land use designations, and should be regulated as accessory buildings and structures rather than as utility, industrial or commercial uses.

Policy B, regulatory parity. Regulations governing the siting, height and size of buildings and structures that house or support renewable energy generation and energy storage equipment should be no more restrictive than those applying to functionally equivalent accessory structures, and should furthermore accommodate the clearances and enclosure volumes required by the Canadian Electrical Code, the BC Building Code and the BC Fire Code.

Policy C, implementation action. Amend Land Use Bylaw No. 177 to establish provisions for solar photovoltaic installations, energy storage systems and associated electrical equipment, including siting within setback areas, the maximum height of enclosures housing such equipment, and exemptions for ancillary electrical apparatus.

Policy D, development permit exemption. Development permit area guidelines should exempt roof-mounted solar photovoltaic equipment, and ground-mounted generation or storage equipment sited within an already cleared or developed area, from the requirement to obtain a development permit.

Policy C is the one that matters most for what follows. Without an implementation action on the books, the bylaw amendments below will not be drafted.

3. What each policy asks of Land Use Bylaw No. 177

The table below sets out, for each policy, the provision of LUB 177 it touches and the amendment it would support. None of these amendments changes a permitted use or a density.

Policy	LUB 177	Amendment sought
A	Zone use provisions	Recognize renewable energy generation and energy storage accessory to a permitted use as a permitted accessory use in all zones.

Policy	LUB 177	Amendment sought
B	B.2.5.1(b)	Raise the maximum height of a pump/utility house sited within a setback area from 3.0 m to 4.5 m where it houses energy generation or storage equipment. The 10.0 m^2 floor area cap in B.2.5.1(a) is retained unchanged.
B	B.2.5 (heading and terms)	Broaden "pump/utility house" to "utility building," expressly including electrical, energy generation and energy storage equipment.
C	B.2.3.1	Add inverters, disconnects, meter bases, transformers, conduit and mounting hardware to the list of items that may exceed height limits, and exempt them from setback requirements.
D	Draft OCP DPA guidelines	Exempt accessory solar photovoltaic and energy storage equipment from development permit requirements, per Policy D.

4. The barrier

I want to be specific about the constraint, because it is narrower than it may sound, and because it is not the constraint most people assume.

B.2.5.1 permits a pump or utility house within a setback area, subject to a maximum floor area of 10.0 square metres and a maximum height of 3.0 metres. I am not asking for the footprint to change. Ten square metres is workable. The 3.0 metre height is not, and the reason is worth clearly describing.

Battery energy storage is not limited by how tall the equipment is. An eight-module 48 volt battery stack of the kind I am specifying stands 1.44 metres. It is limited by the volume of the room it sits in. Where an energy storage system has been evaluated to ANSI/CAN/UL 9540A, Rule 64-1100(9) of the Canadian Electrical Code permits it to be installed in accordance with the manufacturer's installation instructions, and the Appendix B note to that rule confirms that the 9540A test data may be used to set ventilation, spacing and aggregate capacity limits. Those instructions carry a minimum room volume.

An example that can be checked: Rolls Battery Engineering, a Nova Scotia manufacturer whose product appears on BC Hydro's qualified product list for battery storage, specifies in the installation guide for its S48-100LFP STACK-LV system:

"The minimum volume of installation room must be 6.50m3 (229.5ft3) per S48-(1-8)00LFP STACK-LV ESS to meet 25% LCL limitations. This is determined based on the expelled gasses during the UL 9540A test procedure."

That figure is a dilution requirement. It is the free air volume needed to keep vent gas below 25 per cent of its lower flammability limit in the event of a cell failure. The manufacturer advises that where the volume is not available, the standard's alternative is engineered deflagration venting to NFPA 68, which is a considerably more onerous and more expensive undertaking for a small residential building.

The consequence is straightforward. With the footprint fixed at 10.0 square metres, room volume can only come from height. At a 3.0 metre exterior height, once roof structure and a floor slab are subtracted, interior clear height is roughly 2.4 metres and the enclosure holds on the order of 20 cubic metres, which accommodates three such systems. At 4.5 metres the same footprint holds roughly 32 cubic metres. The additional height is not an architectural preference. With the floor area capped, it is the only remaining variable.

This produces a result the Committee may find counterintuitive. A height cap on this class of building reduces the air volume available to dilute vent gas. For energy storage, a taller enclosure is a safer one. The 3.0 metre limit is not neutral on safety. It works against it.

I recognize that the 3.0 metre limit is the condition attached to permitting a structure within the setback area at all, and that ordinary accessory buildings, which may be 7.0 or 9.0 metres under B.2.3.2, are not permitted there. I am not suggesting the two are equivalent. The narrower point is that the bylaw already accepts tall, slender electrical apparatus close to lot lines. B.2.3.1 exempts electrical service masts, lighting poles, antennas and lightning rods from height limits entirely, and those are routinely sited at or near a property line. A windowless enclosure of 10.0 square metres at 4.5 metres is a smaller presence than several of the things already exempted, and unlike them it can be screened.

Why the setback area matters at all. Many Gabriola lots are treed, and the cleared, unshaded, road-accessible part of a lot is frequently near its edge. The electrical service entrance is usually near the lot line as well. Siting generation and storage equipment near that point keeps conductor runs short, which reduces both cost and line losses, and avoids new trenching. Pushing the equipment toward the centre of a lot often means clearing mature trees to reach it, an outcome at odds with the ecosystem protection objectives elsewhere in the draft Plan.

Fire separation. I anticipate the concern that energy storage near a lot line raises fire separation questions for the neighbouring property. That concern is legitimate, and it is better answered by the instruments designed for it. Rule 64-1100 of the Canadian Electrical Code sets location, separation and capacity requirements for energy storage at residential occupancies, and is enforced by Technical Safety BC through the electrical permit and inspection. The BC Building Code and BC Fire Code set the balance. Between them, an installation is assessed against the tested behaviour of the actual equipment. A blanket 3.0 metre zoning height cap does none of that work. It pushes the installation somewhere less suitable, or prevents it altogether. I would have no objection to the amendment being conditioned on compliance with the applicable separation requirements.

Ancillary equipment. B.2.3.1 already allows height limits to be exceeded for radio and television antennas, electrical service masts, chimneys, flag poles, lighting poles, lightning rods and electrical transmission towers, among other things. An inverter, a disconnect, a meter base or a transformer belongs to the same family of small electrical apparatus as the electrical service mast already on that list. Adding them, and exempting them from setback requirements, is a housekeeping amendment that would resolve genuine ambiguity about whether a wall-mounted disconnect is a structure for setback purposes.

5. Closing

I should disclose my own interest in this change. I am designing an installation of this kind on my own property, and under the current bylaw, I may seek a development variance permit for the height of the building that will house it. That route is open to me, and I am not asking the Committee to solve my problem. I am asking that the next person should not have to apply for a variance to do something the Plan will otherwise say the island should be doing. It is also why I am able to be this specific about the constraint.

None of this asks the Committee to change the character of the island. It asks that a bylaw written before this equipment existed set the height of a small utility enclosure by what the equipment inside it actually requires, rather than by a number chosen in 1999 for a pump house.

I would be glad to answer any questions trustees or staff may have, or to provide the manufacturer's documentation that led me to prepare this submission alongside the relevant code extracts if that would assist staff.

I thank trustees and staff alike for the work that has gone into this draft; I sincerely appreciate your service to the public.

Gabriel Mastico
Gabriola Island, BC