



**Get Clean Water and Energy  
From Ocean and Sun  
No Carbon tax, No Drought  
No Power Outage,  
More local Employment**

**Adjust** ← ← ← **Check**  
↓ ↑  
**Plan** → → → **Do**

 **Green Energy Grid**

 **Building & Real Estate**

 **Green Transportation**

 **Food & Water Supply**

 **Sustainable Economy**

 **Fair & Share Charity**

 **Environment**

 **Green Education**

 **Health Service**

 **Emergency & Security**

 **Low Waste Life**

## **Phase1:** (PENDER EARTH)

- **Community Solar**  
(Community Solar in BC, SGI CESC)
- **Pender Non-profit Electric Car Ride Share Cooperative**  
(MAP, Peter Pare)(BC Ferry Capacity)
- **Community Public Building Solar Free Project**  
(PSI 2020 solar initiatives)
- **Sustainable Food Production**  
(penderfarmlandproject, Nancy Klein)

## **Phase2:** (North Pender Island Local Trustee)

- **Community Grid**
- **Natural Heating**
- **Water storage and drought**
- **NO plastic straw**
- **Ecological Footprint Club**
- **Climate Change Education**  
(School Garden using solar energy )  
(Climate Change Education Signs Project)
- **EEC Tourism**  
(Environment Economy Community Tourism)

## **Phase3:**

- **Waste & Recycle Management**
- **Fire Resilient Strategy**
- **Forest & Nature management**  
(Protect Whale No-Go Zone)(Protect RainCoast  
(biomass heating and Fertilization)  
(Pender Islands Conservancy Association)
- **Pender Island Health Care Society Telehealth**
- **Emergency and Security**
- **WIFI Connect 7/24 greenspot**

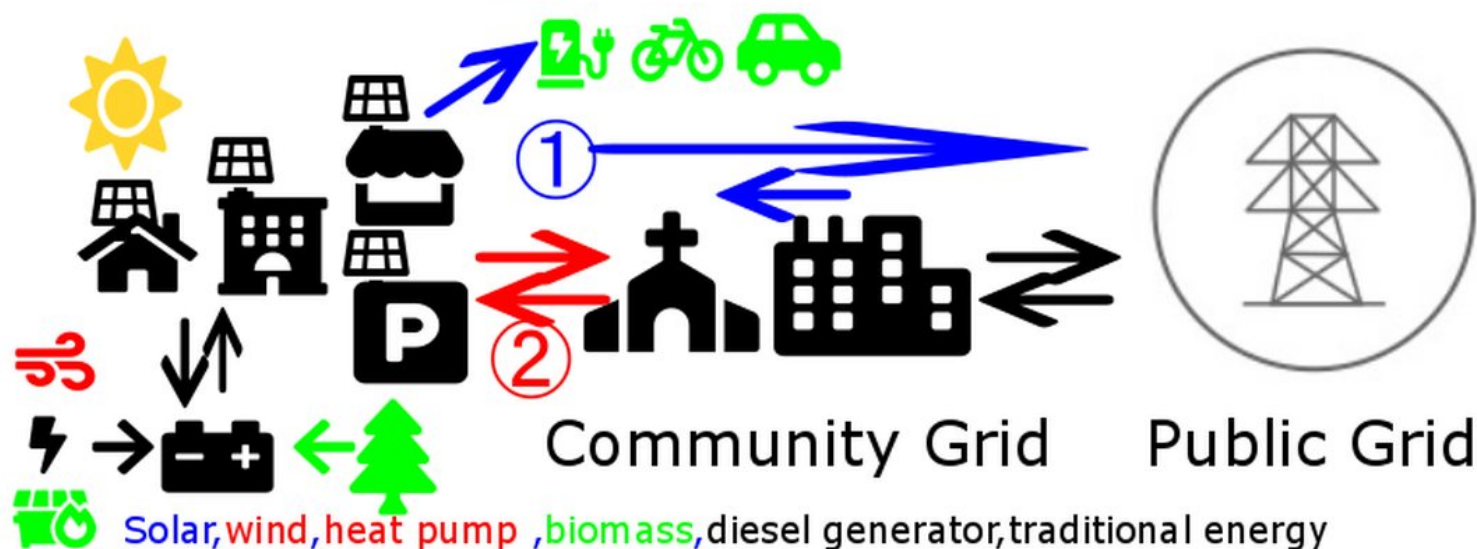
**multi-generational community  
social programs supported by community**



 **Economic**  
 **Fair**  
 **Sustainable**



Climate Resilient Community  
alternative energy ●●●



AE-Solar German Quality European Product  
**365W** panel 1956\*992  
**0.95USD/1W** (1.24CAD/1W) (Including all hardware)  
Off-grid systems, Plus 0.5USD/1wh (0.65CAD/1wh) battery type: LFP

- A small Home **4kW** on grid with 11 solar panels, requires an area of about 301 sqft (28 m<sup>2</sup>), which in B.C., generates 4,400 kWh/yr, about **C\$415/yr** worth at BC Hydro rates, Hardware cost **c\$4,960**
- Commercial **154KW** 422 solar panels, 11603 sqft (0.27 acre, 1078 m<sup>2</sup>) 169,400 kWh/yr, about **C\$23,622/yr** worth at BC Hydro rates, Hardware cost **c\$190,960**
- Commercial & Community storage 0.4USD/1wh (0.52CAD/1wh) capacity **400 kWh C\$208,000** battery type: LFP



AE SOLAR

Leading German manufacturing brand of photovoltaic modules with:

- Selection of the highest quality European bill of materials;
- Total manufacturing capacity more than **1 GW**;
- The biggest manufacturing under one roof in Europe;
- Distributorship network and presence in 72 countries.



Great Light LED LTD.

<http://greatlightled.com>



AE Solar

<https://ae-solar.com/>



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From resort hotel to farm, From rooftop to ground  
 From mountain to coast **light = energy = money**  
 Any sunshine space, roof, parking, field, farmland, pond, beach  
 75sf(7m<sup>2</sup>) space 1kW = 1100kw/yr worth C\$103.95(BC rate)



## AE Solar Community Share Solution



### AE SOLAR

☀ Nowadays people in certain regions are able to receive solar energy without installing photovoltaic modules on their own premises.

Community (shared) solar can be used for anyone who pays electricity bills. Shared Solar is an opportunity to gain credits for a certain amount of electricity from neighborhood solar farms. Community gives environmental profit to all and builds a strong electric network.

#SolarEnergy #SolarPower #Renewables  
 #RenewableEnergy #GreenEnergy  
 #SavetheWorld #SavethePlanet



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## Pender Non-profit Electric Car Ride Share Cooperative

1. E-bicycle for **60V&72V** systems which have more uphill power than standard 48V systems Pender Price: **C\$900**



1600mm



2400mm



2. EV-charging station in public solar parking and solar carport, car stop for E-bicycle (1th phase) and EV car (2th phase)



Technical Parameters  
Wind Load: 60m/s  
Snow Load: 1.5KN/m<sup>2</sup>  
Material: Q235B (Hot-dip galvanized)

**Convenient Parking:** The single-column design is optimized on the traditional H-shape, W-shape carport, without defects of easy scratch, more convenient and people-oriented.

**Applicability:** The unique design of the carport shed can make good rainproof solution at the lowest cost. Moreover, waterproof trough around the system, for your choice, can increase water guiding function and make it more beautiful on appearance.



## LSEV (Low Speed electric vehicle)

Under Motor Vehicle Safety Regulations

four-wheel vehicles powered by an electric motor, produces no emissions. have a maximum capable speed of about 25 mph (**40 km/h**).

## Motorized wheelchairs



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## Pender Non-profit Electric Car Ride Share Cooperative

3. At BC ferry terminal and other island entrance, set E-bicycle and EV lending and charging station to access to draftwood center, restaurant, resort and other place.



## Community Public Building Solar Free Project

- 100 Community family support one public solar project, **free**
- Any community member introduce 1MW project, 1 public building install solar **free**

## Public building List

NuToYou thrift shop  
Epicenter  
Royal Canadian Legion Branch 239  
Pender Island Health Care Society  
Pender Islands Museum  
Pender Island Golf & Country Club  
Pender Island Fire Rescue  
SGI Community Resource Centre

**United Community Church**

**Hope bay bible camp**

**Chapel of Saint Teresa Roman Catholic Church**

**St. Peter's Anglican Church**

**School Solar Garden**



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## Natural Heating

1. solar heating system
2. Wood pellets stove. Pellets are made from forest underbush . for cleaning forest floor and sawmill residuals.

## Water storage and drought

1. rain collection system with solar system
2. solar pump for farm and field without power.  
Need bylaw support
3. Solar seawater distillation for freshwater and natural water cycle

## NO plastic straw

Replace all plastic straw to biodegradable and environment-friendly straw



## Ecological Footprint Club

The ecological footprint measures human demand on nature, it is a measure of human impact on Earth's ecosystem and reveals the dependence of the human economy on natural capital.

Solar system measures energy footprint

waste management system measures waste footprint.

## Climate Change Education

(School Garden using solar energy )

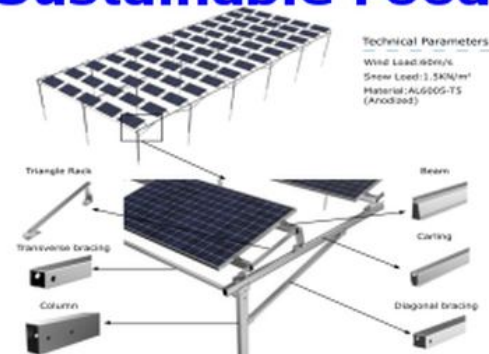
(Climate Change Education Signs Project)

## EEC Tourism

(Environment Economy Community Tourism)

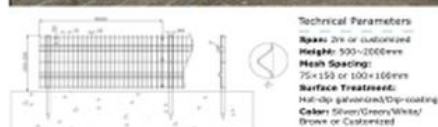
Tourism system measure visitor footprint from island entrance to every green energy spot and promote visitor for eco tour and using biodegradable material, Green sustainable transport.

## Sustainable Food Production



**Wide applicability:** It can be applied to all kinds of grounds and grow crops and plants between it, and it can also be installed with matching sheds to plant more crops.

**Economic and Practical:** It is made of aluminum alloy material which has advantages of light weight, high structural strength, good corrosion resistance and easy installation.



**Quick Installation:** The bracket is maximally pre-assembled with less mounting parts, saves the installation time, and it can be flexibly installed and adjusted with specialized tools.

**Safe and Reliable:** The surface can be dipped plastic, hot-dip galvanized or sprayed to ensure the product of beautiful appearance and excellent corrosion resistance.

**Applicability:** The mesh is welded and fabricated, installation overcomes the restriction of topography, especially for mountainous, sloping land and multi bend area.

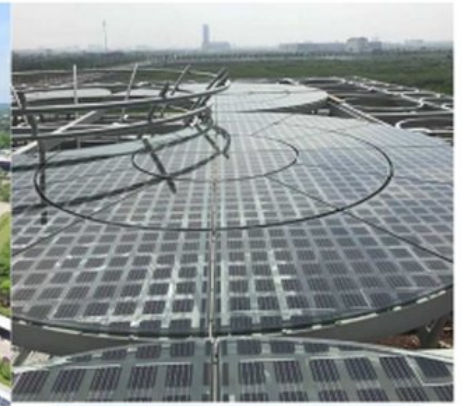


**wellbeing time with family,nature,  
community,meaningful work...**



**Economic**  
**Fair**  
**Sustainable**





**Economic**  
**Fair**  
**Sustainable**



## **Waste&Recycle Management**

The CRD Reduce per capita garbage disposal from 380 kg/person to 250 kg /person by the year 2030

Solar kitchen waste treatment system

solar compost bin, solar sewage plant

Solar recyclable plastics processing plant

## **Fire Resilient Strategy**

solar 7/24 automatic fire monitor

## **Forest & Nature management**

clean forest floor and produce wood pellet for new employment

nature monitor system to collect data for protect and research

## **Pender Island Health Care Society Telehealth**

## **Emergency and Security**

## **WIFI Connect 7/24 greenspot**

solar 7/24 automatic security monitor





# Endnotes

To find out more on discuss Climate Resilient Community



**Ben McConchie** ► Pender Island Forum (a place to talk about things that matter)

Sep 13, 2019 at 19:31

After 10 months in government as one of your Trustees for North Pender Island, I'd like to share some interesting facts about our community and things we will have to confront as a community in the near future - please feel free to correct any information I have posted.

Did you know?

1 - North Pender has a minimum size requirement for a house (100 sq. ft) but does not have a maximum size requirement to build a house.

2 - Whether or not a subdivision can take place on North Pender has very little to do with Islands Trust. Right now, the decision on whether land is subdivided on Pender ultimately rests with an

4 - Want bike lanes for Pender? Roads getting too crowded? Good news - there is already a comprehensive plan in place to develop those lanes thanks to MAP (Moving Around Pender). Bad news - they need actual real life volunteer members to join their organization to help get the work done. Several key members are retiring because they have already worked their behind off getting the bus going - it's time to step up and leave a real legacy for Pender, please consider joining MAP.

5 - Solar panels - The total cost for my friends' medium size home 8.4kw system was \$16,000 (less than the estimate) which included everything, from the hardware to them completing and submitting the application to get approved by BC Hydro.

Despite a couple big trees that shade some of their panels, their system is on track to produce about 8,000 kwh of electricity, which is about \$800 worth at BC Hydro rates, and also more

3 - The CEO of B.C. Ferries has confirmed to me and others that the ferry system is at its highest capacity in the history of B.C. Ferries - including route 5 and 5A (our routes). As a result of keeping fares lower in previous years, they cannot build more ferries for us right now. So that means no Salish class vessel for at least 3 years. But at the same time, do we want bigger ferries and more cars? In order for our community to get better, more balanced ferry service, our community's vision to the province needs to be clear. Right now it is not. But progress is being made thanks to our very active ferry advisory committee.

than we use in a year (so they'll get a cheque from BCH). If you are financially able, consider doing this to your home - check out <http://www.ssrec.org/> for more info.

6- Rain water catchment - we currently do not have a cheap and reliable technological solution for making rainwater potable and approved by the Vancouver Island Health Authority (VIHA). This needs to change as our aquifers and groundwater becomes more sensitive and scarce due to climate change.

7- We have no comprehensive tourism plan for the southern gulf islands that's being followed or implemented by an island community council. Stakeholders and business owners are currently steering the wheel.

8 - There is currently little repercussion for people to nuke their properties of trees. There are no fines for cutting trees down in a development permit area. To those folks: please





# Endnotes

property. This makes no sense and destroys our islands' ecosystems. If you like that style of island, please move to Easter Island where there are very few trees and many statues.

9- Islands Trust and its Trust Council are flawed governments that require reforms and reboots due to our climate change emergency - your local trustees (both North and South) are working extremely hard to review and make these necessary changes - including a review of the policy statement - but it can be very challenging to push a turtle up a hill.....

I could go on..... but if you've made it this far, thanks for reading, I hope you found some of this interesting and relevant. Please feel free to ask questions or offer positive solutions to keeping our islands healthy and balanced.

Have a great weekend everyone. We're so lucky to live here.



**Steve Wright** ▶ **Pender Island Forum (a place to talk about things that matter)**  
3 hours ago

I attended the Rural Islands Economic Development Forum held at Poets Cove Resort on the 7th & 8th. It was impressive in it's scope and attendance and below are my impressions.

The majority of our island communities suffer similar complaints: an aging population combined with a loss of the younger generation. The reasons for young people leaving our islands are also likely the same: a lack of opportunities, a shortage of affordable housing, and moderate or static incomes. With the loss of our traditional resource based economy in agriculture, forestry, and fishing, the lack of infrastructure, and housing constraints, we face a difficult task in expanding our local economy. We shouldn't discount the pressure from an ever increasing urban population at our fringes which can bring investment and business opportunities, but also brings a higher cost of



**Russ Francis** Thanks, Ben. A very intelligent summary of the issues we face. One additional point re solar energy. We need to move away from the vast energy transmission systems like BC Hydro's. Instead, we should be building community energy systems unconnected to the grid. Other jurisdictions are doing this now. Apart from Hydro's energy transmission losses, there's the damage that huge destructive projects like Site C do, the nature-abusive impact of the transmission lines and the vulnerability of the province-wide grid (to accidents, intentional damage, equipment failure, etc.). Large batteries continue to drop in price it's no longer just the Tesla Powerwall. Another advantage of community-based systems is that a number of residents could share their solar energy. E.g., one property may get

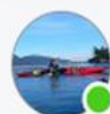
In continuing this conversation, I hope we can develop strategies that reflect the rural character of our islands, improve our resiliency throughout shifts in external economic forces, create self sufficiency and sustainability, protect the region's environment, and are inclusive to all members of First Nations and our community. These strategies will have to actively confront the challenges of climate change, so that we can ensure a healthy place for following generations.

👍👏 20

👍 20

💬 16

➦ 1



**Mark Benson** Thanks for your work on this Steve. I would very much like to have a conversation with you about ...



**Economic  
Fair  
Sustainable**



# Endnotes



**Kathy Cronk** ▶ Pender Island Forum ...  
(a place to talk about things that matter)  
2 hours ago

You want to know what climate change looks like, look up at the cedar trees do you see them dying, do you see the orca's dying; read the article to see what else is happening. Don't think it won't affect you? Your wrong, it already is. How do you feel being the frog in the pot of water that is slowly warming?



**Photographic evidence of climate change in the Northwest**



**Lucille Henshaw** ▶ Pender Island Forum (a place to talk about things that matter)  
10 hours ago

I think all this climate change publicity is waking people up to start thinking about the environment who never paid much attention to it previously. What I have seen is people supporting things that don't make environmental sense when they know it is a wrong decision but serves a political need. Many Islands Trustees have been self-serving for their own land in my opinion. What I think is correct is a large farm was made subdividable without not too much of the public knowing about it, by the time I heard about it was when I heard they forgot to leave a road allowance access to the subdividable land. Another managed to get a very large parcel subdividable into many small lots, unbelievable, now I hear for sale at a huge price. Another got involved, heard he was trying to get some land removed out of ALR, don't know if succeeded? Many mysterious things, like how did Otter Bay get four extra acres of commercial zoning and



**Paul Hutcheson**



I am shocked by the photograph of the Anderson Glacier—I hiked there in 1963 and in my memory, it is still the highlight of two weeks camping in the park. Kim Davis, tree surgeon extraordinaire, (RIP), used to say that balsam firs are the canaries of the forest. I have one balsam fir left my cedars are dying, and now the douglas fir and arbutus are showing signs of stress. Eight douglas fir had to be taken down this year, and likely another eight or ten next year. The pictures taken in and around Seattle have brought on feelings of sadness for what once was—I spent a lot of my youth in the area and know some of the locations pictured very well. We were warned starting with the early days of the industrial revolution, with small changes in the flora and fauna—what does it take to get mankind's attention?

5 hours ago · [Unlike](#) · [Reply](#)



**Joel Da Silva** [Kathy Cronk](#) so what are people on Pender doing? I see cars that run like crap spewing exhaust, oil burning 2 stroke leaf blowers, chain saws scooters, grass trimmers etc. None of the power boats have pollution equipment, who travels on ferries here? I mean the list goes on and I am just as guilty as anyone. So if we can't clean up our act here how could we expect big corporations to care?

44 minutes ago · [Like](#)



**Kathy Cronk** [Joel Da Silva](#) I agree with every single thing you are saying. Bottom line, it all starts with us, what are you doing, what am i doing to stop this run away freight train. We need system change.

40 minutes ago · [Like](#)





# Endnotes



**Steve Wright** ▶ Pender Island Forum (a place to talk about things that matter)

3 hours ago

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We will need to invest in what we have, rather than continue to import everything we require, by restoring those critical resources and mitigating further deterioration. First Nations Reconciliation offers an opportunity to understand true sustainability of the land and waters through their rich history and culture. As our history indicates, if economic activity is to be successful over the long term, it will depend upon maintaining the health of our environment and the island's resources. To accomplish this, a collaborative approach throughout the entire region of the Salish Sea will be more successful than each island community going alone. This

living, greater expectations for increased urban services and facilities, and a different mind set which may slowly deteriorate our rural character and values.

These realities mean we need to be cautious in developing strategies that may include unforeseen implications to our lifestyle, our environment, and our natural resources. Many of us attending the Forum live within the Trust Area, under Provincial legislation that directs us all to be mindful of the policies within the Trust Policy Statement and Official Community Plans. Those documents define the scale, style, and pace of development, whether residential, Industrial, or Commercial. Land Use bylaws determine where those activities are to take place. Those documents must provide the backdrop to all discussions.

If we are to expand our economy, we first have to recognize that its purpose must be to benefit the overall well being of whole community. Any economic plan must identify our existing assets and their limitations because our islands have a finite land base and limited natural resources. With the increasing challenges from climate change, we cannot continue creating economies based on continual growth, and, as any financial manager will tell you, diversity is key. We have

In continuing this conversation, I hope we can develop strategies that reflect the rural character of our islands, improve our resiliency throughout shifts in external economic forces, create self sufficiency and sustainability, protect the region's environment, and are inclusive to all members of First Nations and our community. These strategies will have to actively confront the challenges of climate change, so that we can ensure a healthy place for following generations.







# Endnotes



**Pender Islands Farmers' Institute**

3 hours ago · 🌐



**Arzeena Hamir** ▶ **Mid Island Farmer's Institute**

15 hours ago

Agricultural producers on Vancouver Island (and the Gulf Islands) and local/ provincial government staff who work closely with the sector are invited to the following focus group session to develop the Vancouver Island Agricultural Adaptation Strategies.

Please register ASAP if you are ... [See More](#)

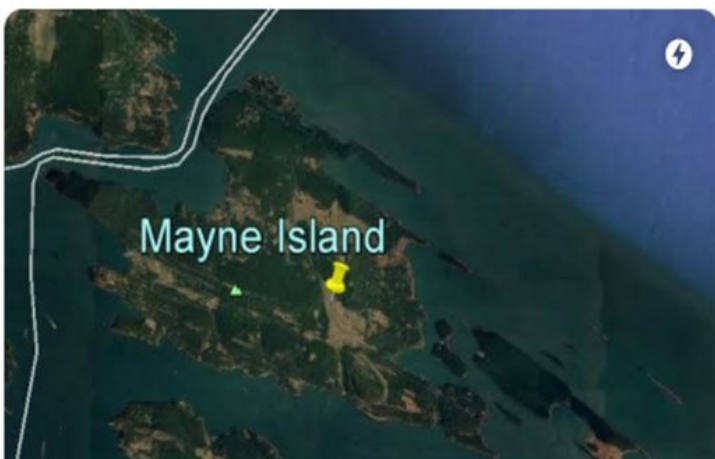
How can the agricultural sector  
**adapt to climate change?**

## Join Our Focus Group

Agricultural producers are invited to join the BC Agriculture and Food Climate Action Initiative to develop the **Vancouver & Gulf Islands Regional Adaptation Strategies**:

- obtain the latest climate change projections for the region
- discuss how climate change will affect agricultural production
- brainstorm actions to ensure agricultural resiliency

drier conditions and drought · wildfires · flooding  
weed and insect pressure · extreme weather events



**Mayne Island Garbage Services announces Jan. 1 2020 closure**



**Pender Islands Farmers' Institute**

Oct 9, 2019 at 15:06 · 🌐



<https://bcfarmersinstitutes.ca>



**Home - BC Farmers Institute**

1 To improve conditions of rural life so that settlement may be permanent and prospero...

[bcfarmersinstitutes.ca](https://bcfarmersinstitutes.ca)



**Niki Roberts** ▶ **Pender Island Forum**  
(a place to talk about things that matter)

15 hours ago



The CRD is working to reduce per capita garbage disposal from 380 kg/person to 250 kg/person by the year 2030. Attend the Open House on November 26 from 2 pm to 6 pm at the Community Hall or submit your feedback on-line. Details below.



**Pender Island Recycling Depot**

Oct 30, 2019 at 15:40 · 🌐

Did you know that the Hartland Landfill will reach capacity by the year 2100? To extend the lifespan of the landfill, the CRD aims to reduce the amount of waste generated from 380 kg/person (in 2018) to 250 kg/person by 2030.



**Economic  
Fair  
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# Endnotes



**Kathy Cronk** ► **Pender Island Forum** ..  
(a place to talk about things that matter)

2 days ago

**Pender Earth-914-A Race We Must Win**

It is time we, Pender Island took action on Climate Change. On September 14 at 1:30 -3:30 pm at the Pender Community Hall join us.

Please join a wide variety of community organizations to share thinking about how best to ensure that the Pender Islands' Community is building resilience around our changing climate (See <https://www2.gov.bc.ca/gov/content/environment/climate-change>)

and acting to reduce our own contributions to climate change. We will be gathering to share ideas about our local actions and adaptations for these issues between 1:30pm and 3:30 at the Community Hall on North Pender. The outcomes of the meeting will be small working groups to engage in particular actions for the next 3-4 months. These groups will meet a few

People travel and visit other places....it's what people do.

1 hour ago · Like · Reply 4



**Caroline Baker** Sounds like we need a better business plan that takes into account both the needs of those of us who live here year round, and those of us who make a living from the tourist industry. Let's face it ... without the tourist industry and summer visitors most of the island businesses would not be able to sustain themselves and those of us who live here would really miss the hardware store, pharmacy, grocery store, liquor stores, restaurants, farmer's market ... and many more.

38 minutes ago · Like · Reply 3

We do want to continue to try to get the CRD, Province and Federal Government to listen to common sense in the midst of this climate change crisis, and find a way to reinforce and reinstate the dam and return this ecosystem and park to its former glory as an invaluable watershed/freshwater asset.

We will be asking the community in the near future to once again make their voice heard loud and clear to the politicians, and demand this asset be restored. It will require a lot of community support to muster the necessary political will.

In the past months you have shown us amazing support as a community in this fight and ask you continue to do the same as we move from here, sending a clear message to the politicians that we will not just let such debacles slip into the shadows and be forgotten about.

Thank you everyone for your heartfelt care, love and action for our Island!!!



**Paul Hutcheson**

Perhaps this outage will spark discussion on alternatives to hydro's insistence on using 19th century technology for the generation and distribution of electricity.

3 hours ago · Like · Reply

1



**Patti Anne** Seems too early for these things!

3 hours ago · Like



**Paul Hutcheson** **Patti Anne** No, too late. The discussion should have taken place years ago. Technology moves on buy hydro is stuck in the past.

3 hours ago · Like



**Jesse James** **Paul Hutcheson** I would like to point out that Tesla had far superior alternatives in the 19th century for electricity than Edison and his Edison bulbs



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Fair  
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# Endnotes



**Driftwood Shopping Centre** updated their cover photo.

8 hours ago · 🌐

The Driftwood Centre is not just a place for shopping but also a place to relax and enjoy the stunning colours of fall.

Check our website <http://penderislandshopping.com/> for updated hours of operations and the contact information of our shops ad boutiques.

Pictures by Ewa Jaros



**Geoff de Ruiter**

22 minutes ago · 🌐

We humans really need to get our love together and start treating everyone with kindness and a deep personal respect. Anyone not doing that is a Neanderthal that should fade off evolutionarily. There is just too much at stake going into our future.



6



1



6



**Joshua Miller** A lot to ask.

1 minute ago · Like · Reply



**David Goudge** Pender Positive Vibes

49 minutes ago

Love that Sea Star is a responsible steward of our vineyards. We get to share them with so many other residents !



**Sea Star - Saturna Vineyards**

1 hour ago · 🌐

We'd like to share these photos taken by our resident Vineyard Manager Tyler. Clearly we are sharing our vineyard with other residents. Growing our grapes organically on Saturna and Pender Islands with no pesticides or herbicides has it's benefits for everyone and everything.



... *Family isn't always blood.  
It's the people in your life who  
want you in theirs; the ones who  
accept you for who you are. The ones  
who would do anything to see you smile  
and who love you no matter what.  
Share If you agree!*

