

# BC Hydro

## Planning & Operations Overview

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April 13, 2013



FOR GENERATIONS

# Overview

- Supply
- Demand
- Working together

# BC hydro

## FOR GENERATIONS



**Aug. 1, 1961**



# Our System





# VI Supply

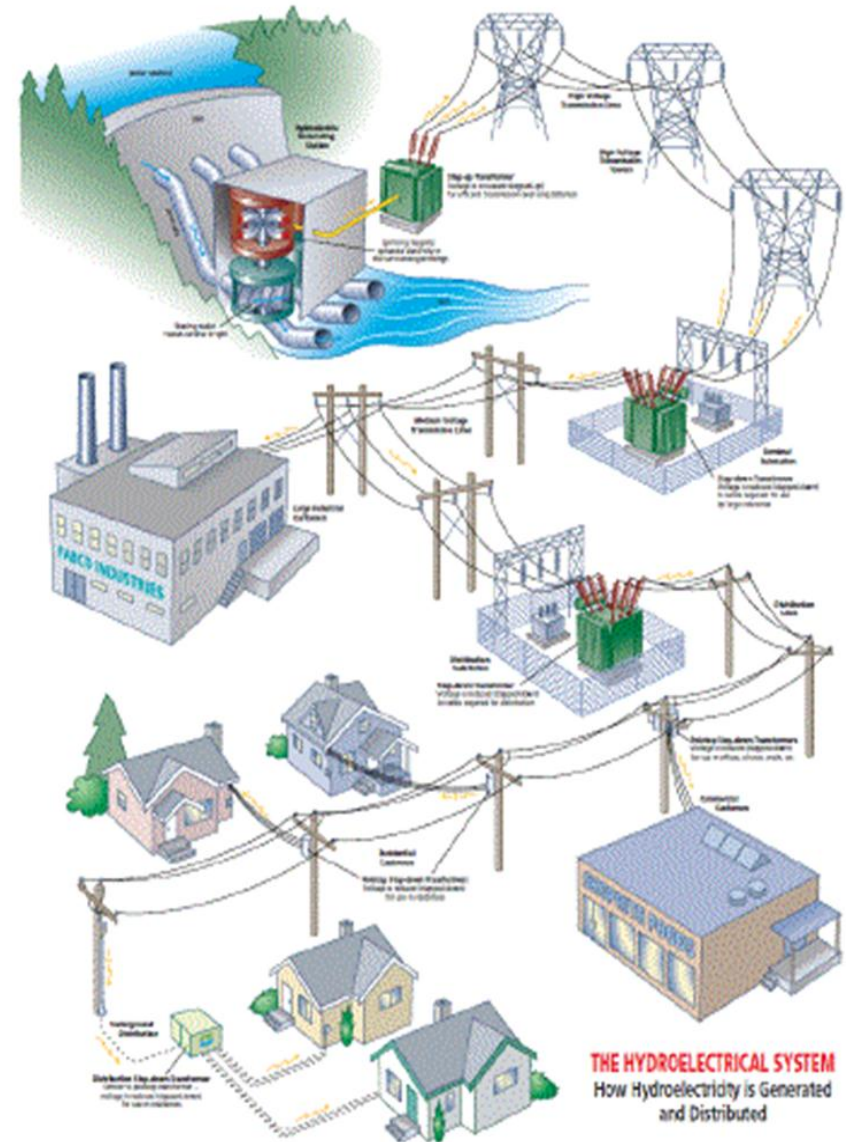
## VANCOUVER ISLAND ENERGY SUPPLY



# BC Hydro Overview

## PROVINCIAL INFRASTRUCTURE

- 31 hydroelectric facilities
- 3 thermal generating plants
- 18,500 kms of transmission lines
- 56,550 kms of distribution lines
- Approx. 900,000 poles
- Interconnect to Alberta and U.S.





# VI Vegetation Management/ Rights of Way

Safety  
Reliability

4 year  
maintenance  
cycles for  
each

8700 km of  
overhead  
distribution  
circuit

Annual  
budget \$7  
million



Brandon Gallant

## Electrical accident kills nine year old









# Suppliers

BIOGAS	5
BIOMASS	10
ENERGY RECOVERY GENERATION	3
GAS-FIRED THERMAL	2
MUNICIPAL SOLID WASTE	1
NON-STORAGE HYDRO	45
STORAGE HYDRO	10
WIND	3
TOTAL	79

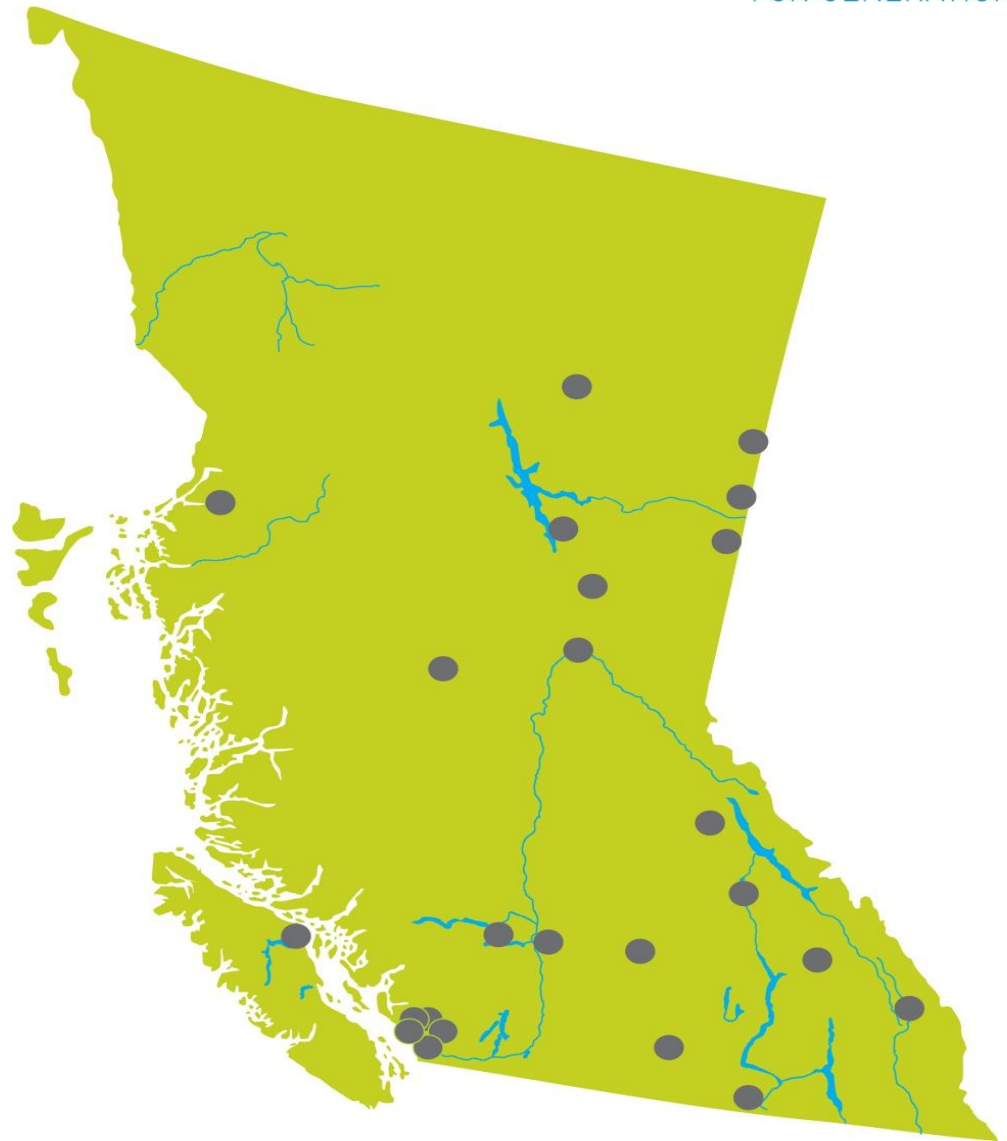


# Capital Projects - BC

Many of BC Hydro's assets were built before 1970

Spending an average of \$2.3 billion a year for the next 3 years

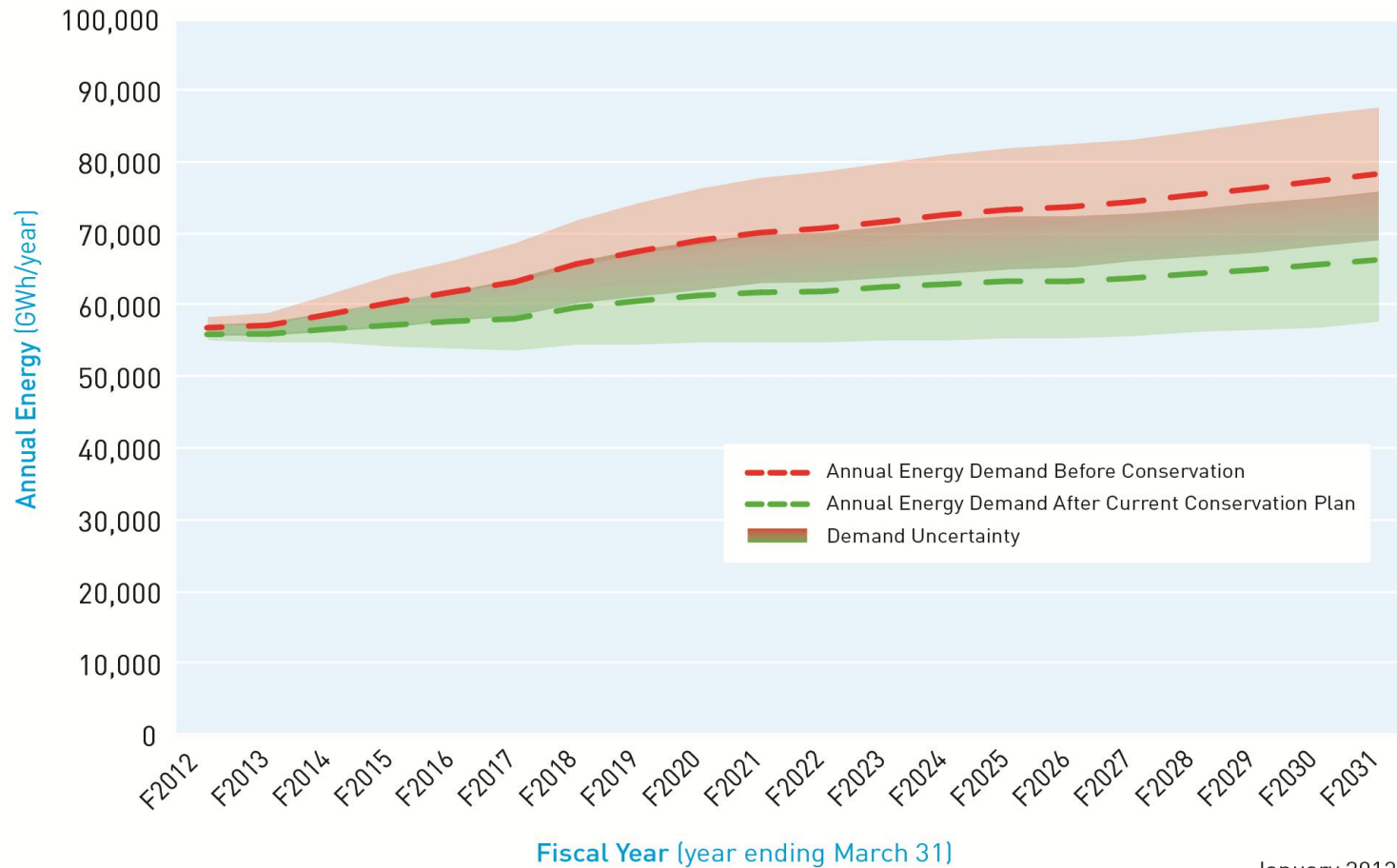
**Vancouver Island:**  
John Hart Replacement Project  
\$940 million & 400 on-site jobs





# The Growing Demand for Power

BC HYDRO'S DECEMBER 2012 LOAD FORECAST—ANNUAL ENERGY



January 2013

My bill amount for Feb 12, 2013

# \$104.72

Payment received: \$104.72

[View my balance](#)

[View my bill](#)

[Learn more about your rate.](#)

**TEAM POWER SMART**

Exclusive offers and tools. Activate a \$75 challenge or check on your challenge status.

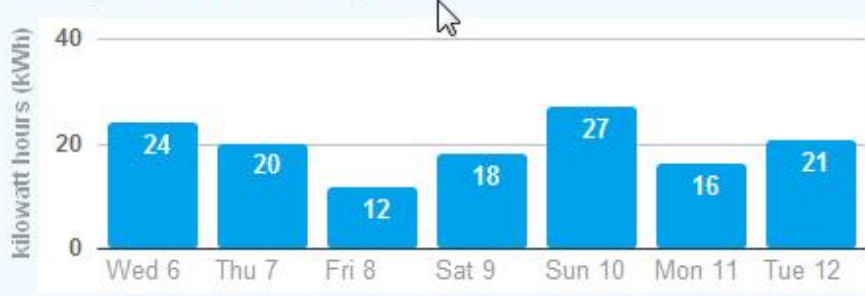


[View Members' Tool Box](#)

**ACCOUNT SERVICES** [Show all](#)

- [Move my service](#)
- [Defer a payment](#)
- [Report a payment](#)
- [Pre-authorized payments](#)
- [Equal payment plan](#)

### Consumption for the last 7 days



[View detailed consumption](#) Learn when you're using the most electricity and find ways to save.

### Current billing period

Feb 9 - Apr 10, 2013

Cost to date (32 days):

**\$47\* or 615kWh\***

Projected cost: **\$89\***

\*This is an estimate. Consumption costs don't include taxes and other fees which appear on your bill.

### Consumption alerts

Set up alerts to keep up to date on your electrical consumption.

[Set up alerts](#)

**START SAVING WITH POWER SMART**

Learn about special offers and rebates for homes & businesses

[View rebates & savings](#)



**POWER OUTAGES**



Find current power outages, report an outage & more.

[Find out more](#)

**MOVING?**

[Learn more](#)







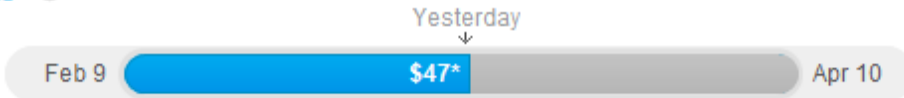
# Consumption data

Current billing period: Feb 9 to Apr 10, 2013

[+ Add an alert](#)

Cost to date [?](#)

\$47\*



Projected cost at Apr 10 [?](#)

\$89\*

Current billing period ▾



Compare

None ▾ [?](#)

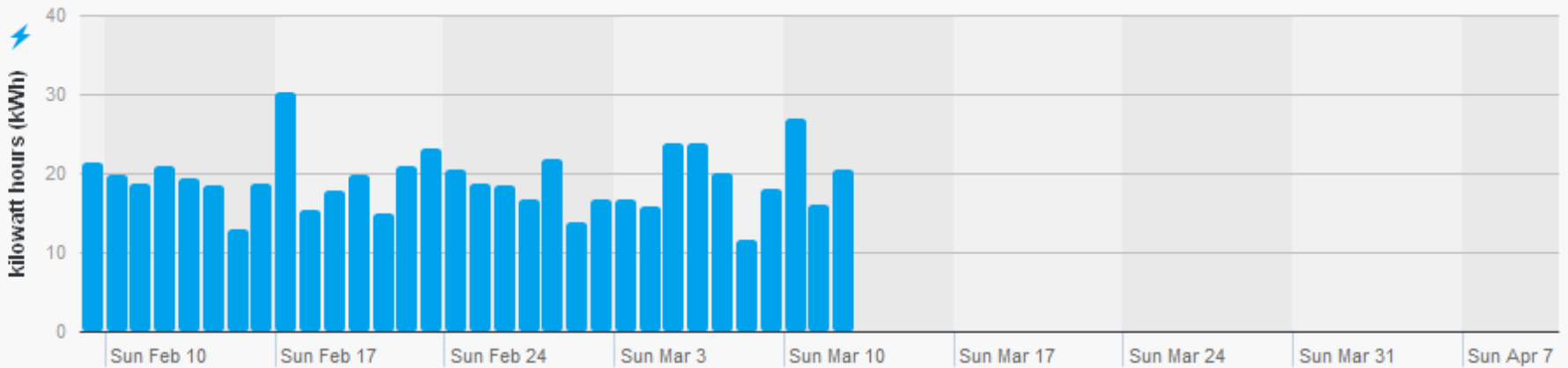
Forecast

Off

On [?](#)

Export data

## Daily consumption for Feb 9 – Apr 10, 2013



■ Consumption data

[? Help](#)



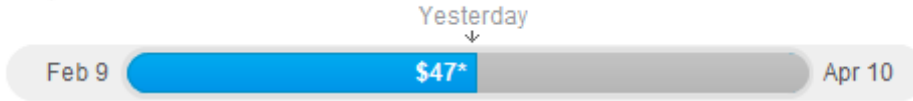
# Consumption data

Current billing period: Feb 9 to Apr 10, 2013

+ Add an alert

Cost to date ?

\$47\*



Projected cost at Apr 10 ?

\$89\*

Current billing period ▾



Compare

None ▾

Forecast

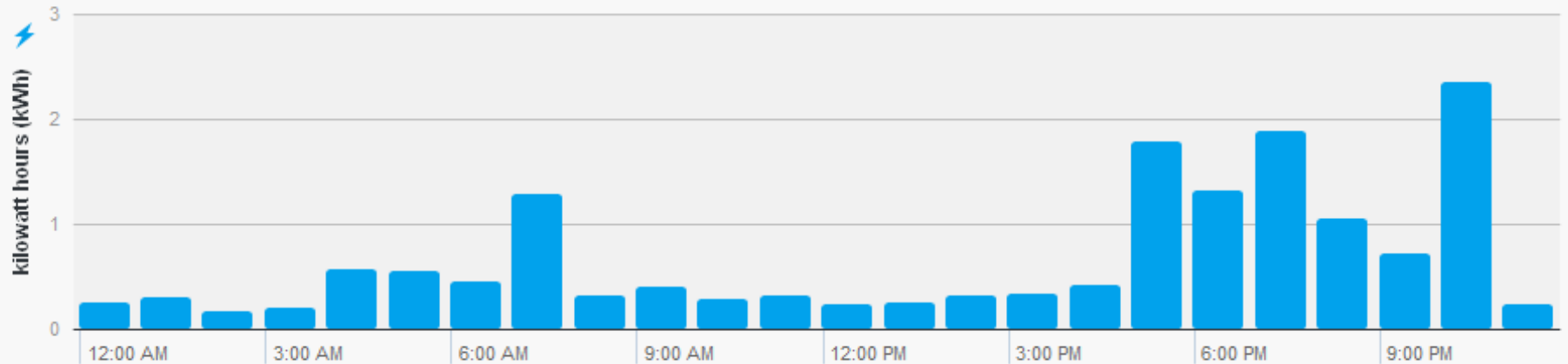
Off

On ?

Export data

Back

## Hourly consumption for Mar 11, 2013



■ Consumption data

Help

The consumption data presented here is to help you manage your consumption and find ways to save energy. It is not used for billing purposes. Learn more [here](#).

\* This is an estimate. We don't include taxes and other fees which appear on your bill.



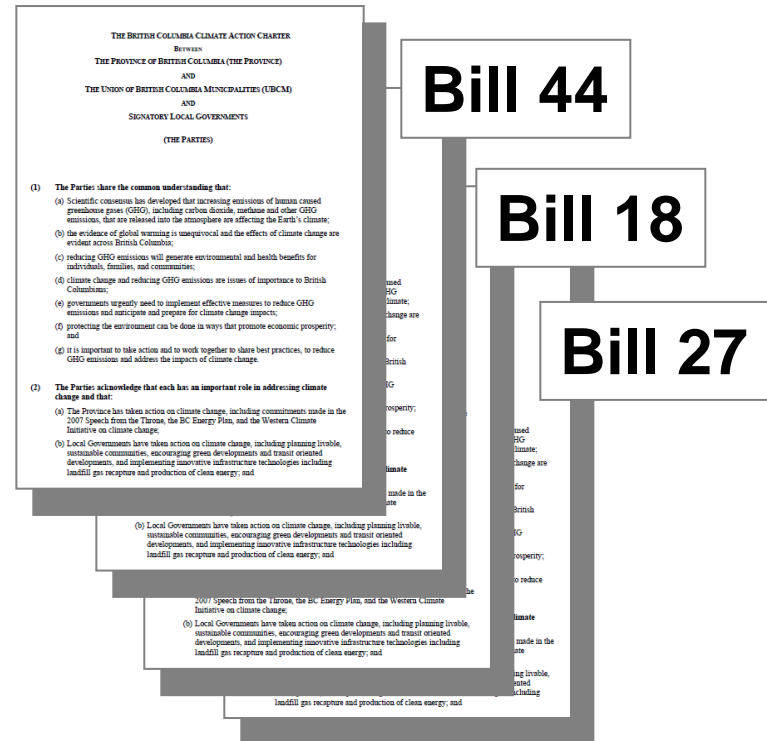
# A Power Smart opportunity arose through provincial energy and emissions policy

## Increasing Population Growth & Development



## Increasing Focus on Green House Gas Reduction

### Climate Action Charter



# New Scale for Energy Planning and Action

## Technology

Light Bulbs,  
Refrigerator buy-back



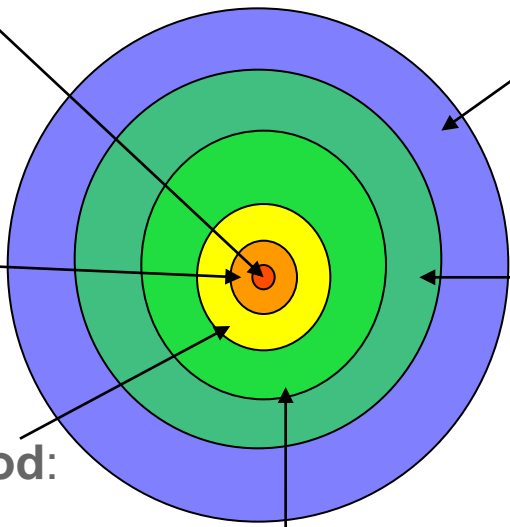
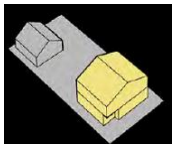
## Province:

Provincial Energy Plan



## Site and Building:

Green Buildings  
Energy retrofits



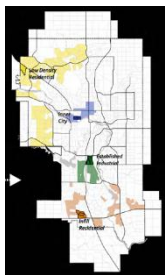
## Neighbourhood:

Local area plan  
Integrated energy master plan  
District energy plan  
Design charrettes



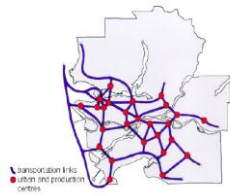
## Municipality:

GHG Action Plans  
Official community plan  
Sustainability Plan  
Community Energy Plan  
Green Building Regs



## Region (regional district):

GHG Action Plans  
Regional Sustainability Plan  
Regional Growth Strategy  
Regional Infrastructure Plans  
Intermunicipal plan



CEEPs include energy reduction targets, strategies and implementation plans

- Community leaders participate as Steering Committee members
- Council adopts CEEP containing long term energy reduction targets

Typical themes include

- Buildings theme
- Transportation theme
- Land use planning theme

Typical strategies include

- Advancing Energy Efficiency Policy at municipal level
- Promotion of existing energy efficiency programs through local government avenues
- Transportation plans encouraging trip reduction, fleet right sizing and modal shift to low carbon options



# Planning



**ROW – Right of Way**  
Obtaining ROWs

**Aging infrastructure and growth**  
Island - \$20-30 million/ year



**Call before you dig**  
Let us know when you do work

# Beautification

- BC Hydro to share 1/3 of the cost to convert overhead distribution.
- Applications must be received by October 1

**Before**



**After**





# Graffiti

Colwood

Esquimalt

Sooke

Victoria

View Royal

Cowichan Valley RD

Duncan

North Cowichan

Nanaimo

Parksville

Tofino

Comox

Courtenay

Gold River

Port McNeill

Port Hardy

**Graffiti Removal  
Agreements:  
Funding  
partnership  
agreements with  
communities**





# Community Investment

BC Hydro supports non-profit organizations through that align with our business objectives

- Mountaineer Avian Rescue Society, \$4000
- Cowichan Energy Alternatives, Sustainable Energy Workshop Series, \$3000
- Nanaimo Science and Sustainability, Science in the Park Program, \$3000
- BC Wildlife Federation Vancouver Island Region, Youth Camp, \$1500
- Habitat Acquisition Trust, Goldstream Chums Program, \$5000
- VISTA, Vancouver Island Spine Trail Development, \$10000



*Support for helipad on Cortes Is*

