



Power Smart

***High
Performance
Buildings
for
British
Columbia***

Outline



Why energy conservation is important to BC Hydro

How we design programs to influence sustainable buildings

Power Smart Solutions to address market barriers

Overview of the Power Smart High Performance Building Program

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Why Power Smart



- Plays a critical role to help BC Hydro meet its future energy obligations
- Power Smart accounts for a third of BC Hydro's new energy supply requirement to meet new load growth to 2012
- Power Smart is the lowest cost resource available to meet our future energy needs.

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Program Design Principles



- Programs are designed to identify and address key market barriers to create lasting change
- Work with existing market channels and players to influence and change practices, technology and behaviors to adopt energy efficiency solutions
 - > Power Smart Alliance and Trade Allies

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Address Market Barriers



Lacking Awareness and Understanding

- Developers unaware of the business case for green buildings
- Occupants and building owners unaware of the non-energy benefits of green buildings

Power Smart Solutions

- Invest in study to demonstrate “green asset value” and promote the findings to all stakeholders
- Implement awareness campaigns & recognition programs

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High Performance Buildings



Buildings that cost less to operate and maintain, are healthier more comfortable places in which to live, work and play. That are more profitable. That have less impact on the environment.

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Green Value Study Findings*



- be quicker to secure tenants
- command higher rents or prices
- enjoy lower tenant turnover
- cost less to operate & maintain
- improve business productivity for occupants affecting churn, renewals, inducements, fitting out costs
- increase asset value

**Full study available on the Royal Institute of Chartered Surveyors web site.*

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Address Market Barriers



Industry Constraints and Accessibility

- Training and experience needed in energy simulation modeling and integrated design process to create high performance buildings

Power Smart Solutions

- Sponsor energy simulation training workshops
- Support development of Integrated Design Process (IDP) framework (underway) and offer training
- Sponsor a sustainable design competition for emerging green builders (Canada Green Building Council, Cascadia Chapter)

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Strategic Importance

- Developers unaware of the competitive advantage
- Design teams coming aware that having green building design & construction expertise & experience is crucial to maintain market competitiveness

Power Smart Solution

- Promote growing awareness of and demand for green buildings (over 200 LEED registered projects in Canada in less than 15 months - don't be left behind Provide opportunity for design teams to increase green building experience by participating in High Performance Building Program
- Recognize developers & design teams who participate in HPB program

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Power Smart High Performance Building Program



We will help you promote & celebrate your project's success

- > Leverage the Power Smart logo to market the project
- > listing on BC Hydro HPB web-page
- > marketing tool kit with sample messaging
- > creation of a success story for your project
- > a plaque for the completed building

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Address Market Barriers



Return and Affordability

- Perception that added cost to design and build green buildings - unacceptable ROI

Power Smart Solution – High Performance Building Program Offer

- Provide funding for teams to study the design alternatives and create a business case for the investment
- Incentives to offset incremental capital cost, if any, to build the new more energy efficient design

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Power Smart High Performance Building Program Overview



Provides incentives & tools to help developers and owners of new large buildings and their design teams create better, more energy efficient buildings.

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High Performance Building Program Offer



Financial incentives & tools for qualified projects*

- Identify energy savings strategies early in the building design process
- Evaluate alternative design options and make a business case for the high performance design
- Offset the incremental costs, if any, of the energy efficient measures in the high performance design.

** Over 50,000 square feet and “energy intense” facilities*

Financial Incentives



Design Assistance

- Fund 50% of the cost to conduct an energy study or energy simulation modeling

Capital Incentives

- Funding to reduce the incremental capital cost associated with the energy efficient measures for the high performance design.
- Calculated based on the total electrical savings over 10 years.

Thank You



BC Hydro and the Power Technology Alliance

Working together, planning for B.C.'s future with the development of energy – efficient, sustainable buildings

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