

National Executive Forum on Public Property

# Improving BC Hydro's Workplace

*One workspace at a time*

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# BC Hydro's Work Environment

| Interior Space in 2004   | Interior Space in 2011  |
|--|---|
| <p><b>Low density on old floors – 55 people</b></p>  | <p><b>Increased density on new floors – 80 people</b></p>   |
| <p><b>High energy consumption:</b></p> <ul style="list-style-type: none"> <li>•Lack of natural light</li> <li>•Inefficient overhead lighting</li> <li>•Many offices had individual lamps and printers</li> </ul>   | <p><b>Energy consumption reduced:</b></p> <ul style="list-style-type: none"> <li>•Increased access to natural light</li> <li>•Individually controlled energy efficient lighting systems and energy star appliances</li> <li>•New floors show an average 30% energy savings per floor</li> </ul> |
| <p><b>Old BC Hydro culture</b></p> <ul style="list-style-type: none"> <li>•Total offices on old floors: 199</li> <li>•No Interior Space Standards in place</li> </ul>  | <p><b>New BC Hydro culture</b></p> <ul style="list-style-type: none"> <li>•Total offices on new floors: 27</li> <li>•Functionally designed Interior Space Standards in place</li> </ul>   |
| <p><b>Employee Health &amp; Safety Issues</b></p> <ul style="list-style-type: none"> <li>•Old furniture had been in use for 20 years and had deteriorated to the point where some pieces were becoming a safety hazard</li> <li>•Ergonomic issues were common place</li> </ul> | <p><b>Improved Employee Health, Safety and Comfort</b></p> <ul style="list-style-type: none"> <li>•Ergonomic furniture &amp; task chairs</li> <li>•Refitting washrooms with touch-less faucets and drying equipment to reduce spread of germs</li> </ul>  |

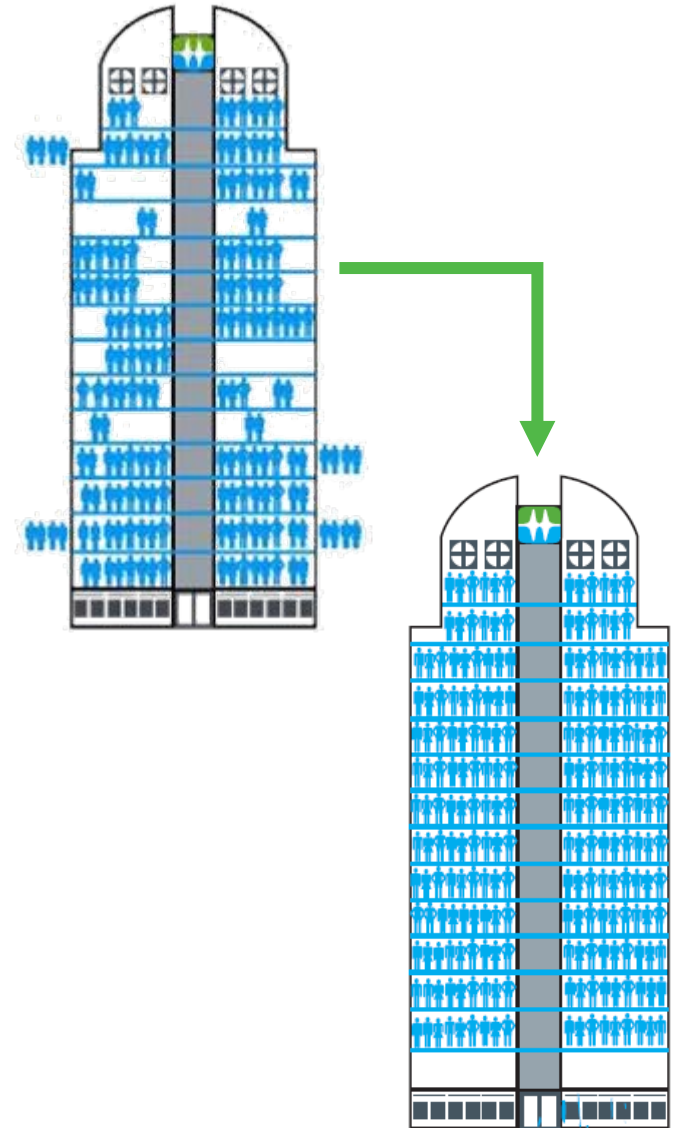
# BC Hydro Facts and Figures

- Number of employees: 6000
- Number of moves completed in 2010: 2700
- Number of owned buildings: 108
- Space owned/managed: 2.5m sq.ft
- Space leased: 400k sq.ft
- Average floor plate: 12,000 square feet



# Floor redesign goals

- Decrease costs and equalize density
- Decrease organizational churn
- Improve workforce mobility through technology



# Headquarters Improvements



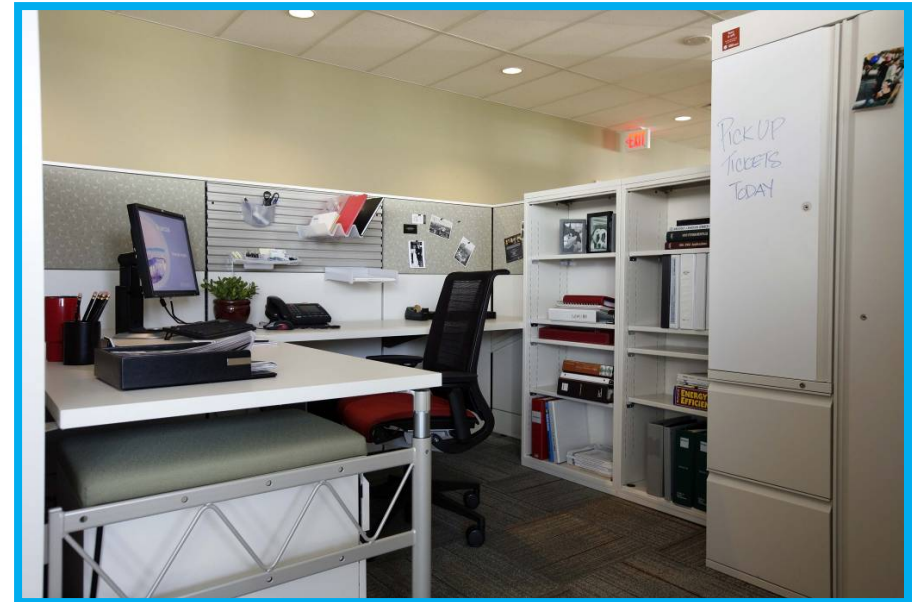
The Headquarters Improvements Project has the following objectives:

- Improve employee productivity, comfort and collaboration
- Increase access to natural light in 90% of space
- Reduce energy and water use by 30%
- Provide waste reduction/recycling opportunities
- Encourage the use of technology to collaborate (Live meeting or video-conferencing)

# Building materials

## New Workspaces are:

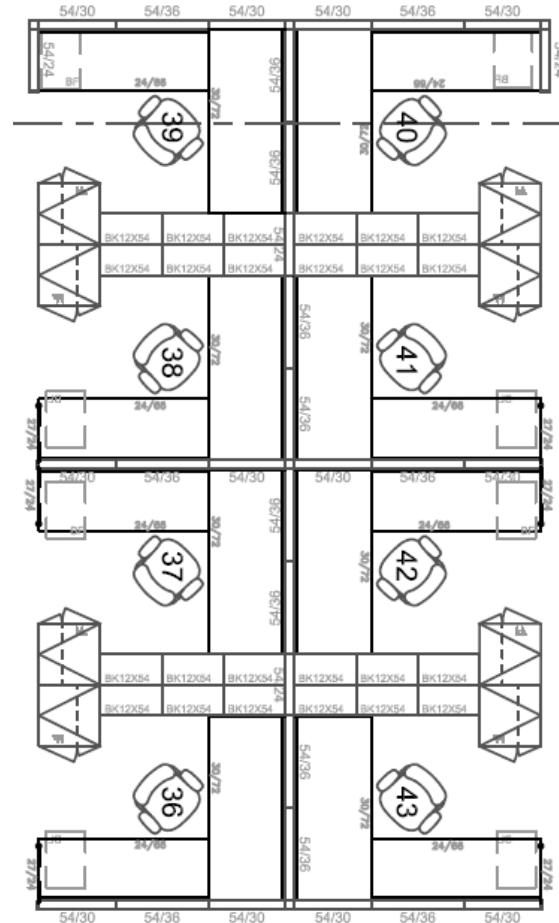
- Modular and less expensive to reconfigure
- Have low gas-emitting materials (carpet, paint)
- 90% of the wood fiber in these work surfaces comes from a recycled or reclaimed material source



# Standard Workstations

These workspaces are for office workers who are at their desks 70 per cent of the time.

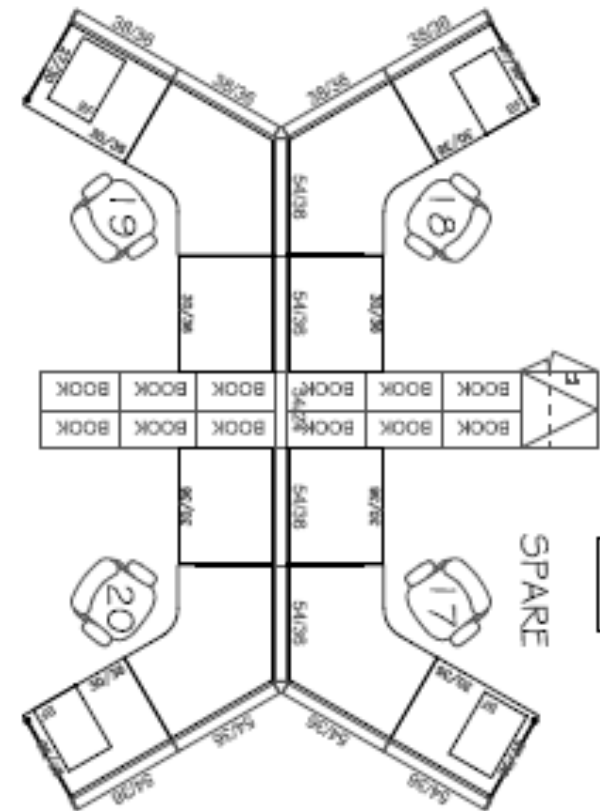
Depending on their needs the workspaces are either 60 sq.ft. or 70 sq.ft .



# Technical Workspaces

These workspaces are for technical workers who are required to layout large architectural or engineering documents on their desks.

Depending on their needs the workspaces are either 69 sq.ft. or 92 sq.ft if they need to store large documents.

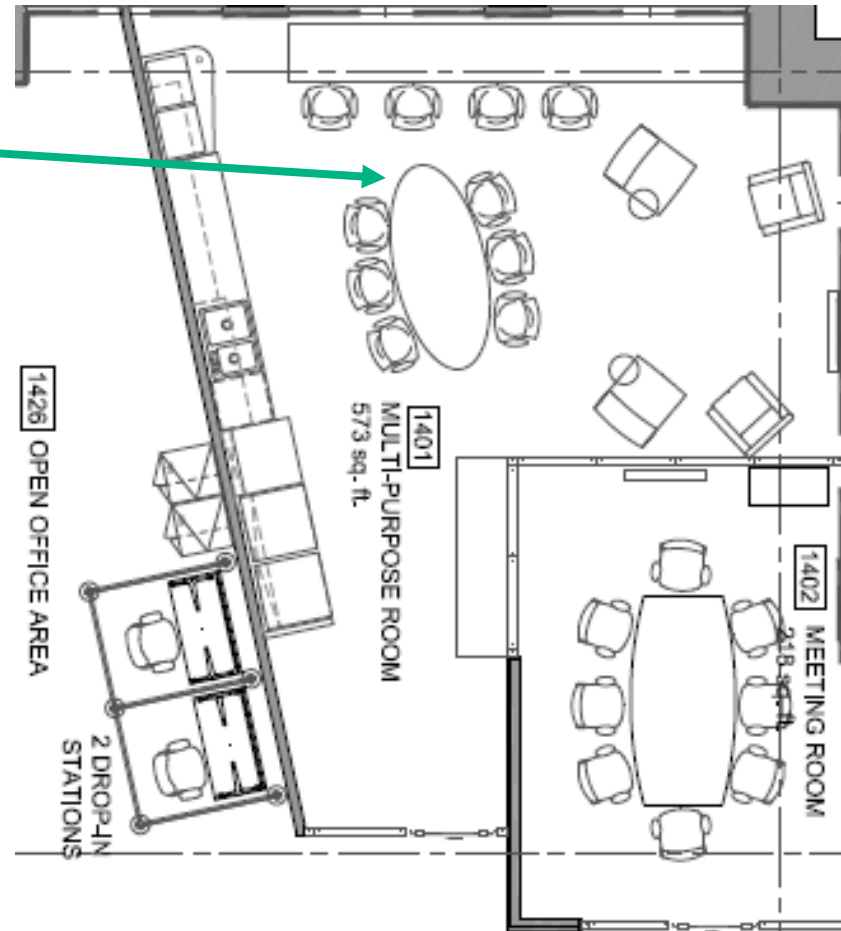






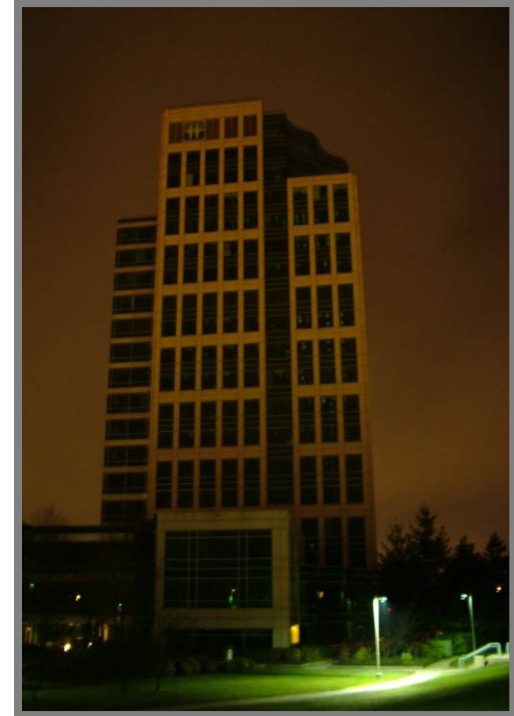
# Kitchens double as collaborative space

The kitchens have been renamed “Multipurpose Rooms” because they double as meeting rooms or collaborative space as required.



# Mechanical and electrical controls

- Adding direct digital control (DDC) will turn all mechanical equipment off once it senses all employees have left the floor
- Increases energy efficiency for overall building
- Implementing the “dark building” technology over time.



Edmonds, Earth Hour 2009

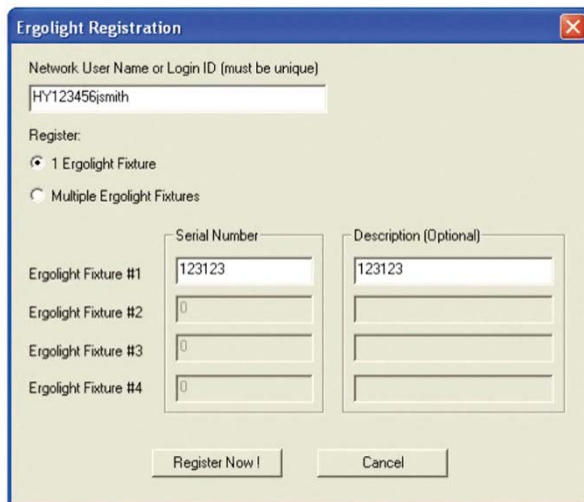
# Water efficient fixtures

- Plumbing fixtures are efficient, low-flow products
- Kitchen dishwasher and refrigerators are Energy Star

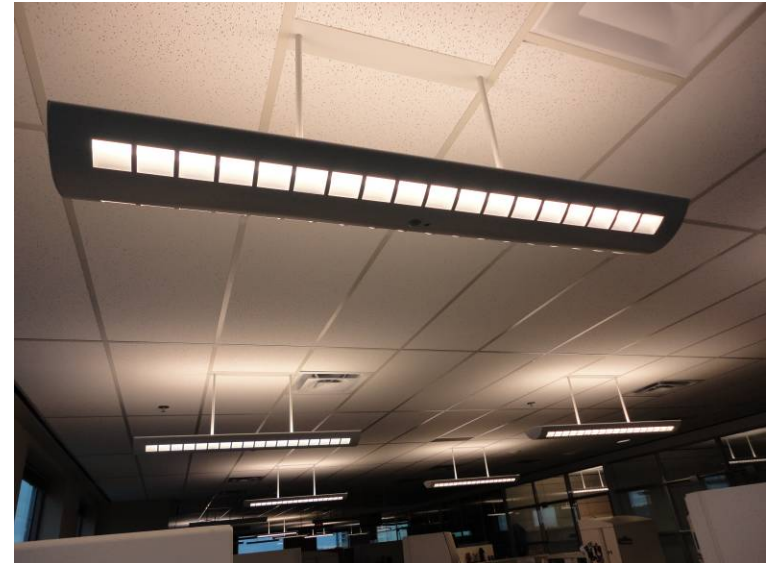


# Energy-efficient lighting

- Most workspaces have an energy saving Ergolight fixture for personal task light adjustment.



The screenshot shows a software dialog box titled "Ergolight Registration". It contains a text field for "Network User Name or Login ID (must be unique)" with the value "HY123456jsmith". Below this, there are two radio buttons under the heading "Register": "1 Ergolight Fixture" (which is selected) and "Multiple Ergolight Fixtures". Underneath, there are four rows of input fields. The first row is for "Ergolight Fixture #1" and has "123123" entered in both the "Serial Number" and "Description (Optional)" columns. The other three rows are for "Ergolight Fixture #2", "#3", and "#4", each with "0" entered in the "Serial Number" column and empty "Description" columns. At the bottom of the dialog are two buttons: "Register Now!" and "Cancel".



# Technology solutions

- Properties uses one platform for management of property records which allows us to:
  - Use one single technology to search for information
  - Share information real time across groups
  - Improve response time for queries, reduction of call volumes to help desk
  - Find efficiencies by improved data entering at the source
  - Manage BC Hydro's current and potential properties
  - Manage Property agreements with land owners and other stakeholders
  - Facilitate the maintenance of buildings owned or leased by BC Hydro

# Workstation Tune-Up Tool

**WORKSTATION TUNE-UPS TRAINING PROGRAM**

ELECTRICAL DEVICES

JOIN TEAM POWERSMART

Welcome Christian Dewinetz

### Energy Savings Calculator

| In Use   | On                               | Idle                             | Off                              |
|--|----------------------------------|----------------------------------|----------------------------------|
| <input checked="" type="checkbox"/> Computer CPU             | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            |
| <input type="checkbox"/> CRT Monitor                         | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            |
| <input checked="" type="checkbox"/> LCD Monitor              | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            |
| <input type="checkbox"/> Printer                             | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            |
| <input checked="" type="checkbox"/> Personal Scanner         | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            |
| <input checked="" type="checkbox"/> Under-Desk Heater        | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> |
| <input checked="" type="checkbox"/> Desktop Fan              | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            |
| <input checked="" type="checkbox"/> Electric Stapler         | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            |
| <input type="checkbox"/> Electric Pencil Sharpener           | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            |
| <input type="checkbox"/> Cell Phone Charger                  | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            |
| <input checked="" type="checkbox"/> Compact Fluorescent Lamp | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            |
| <input checked="" type="checkbox"/> Incandescent Lamps       | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            |

[NEXT](#) ▶

LEADING THE CHANGE

YOUR COMPUTER

LIGHTING CONTROLS

ELECTRICAL DEVICES

SHARED SAVINGS

EXTENDED ABSENCES

WASTE REDUCTION

PERSONAL ACTION

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[RESOURCES](#)

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# Maximize the energy savings

- Switch off task lights and computer monitors when not in use
- Put a power bar on desk and turn off at the end of the day
- Dress for the weather (don't use space heaters)
- Close blinds at end of the day
- Make use of workstation Tune-Up tool
- Use the revolving door in the lobby





# Creating a vision for the future of work



## Short Term

- Increased use of technology to increase workforce productivity:
  - video conferencing
  - drop in work spaces and commuter lounges
  - wireless technology
  - VOIP phones

## Long Term

- Increase utilization rate
- Ensure workspaces support the work, whether individual or collaborative by aligning HR and IT with Real Estate (three legged stool)