

Eco-Efficiency at the Renaissance, Leading the Way

CEAA Annual Conference
2004



RENAISSANCE VANCOUVER HOTEL HARBOURSIDE

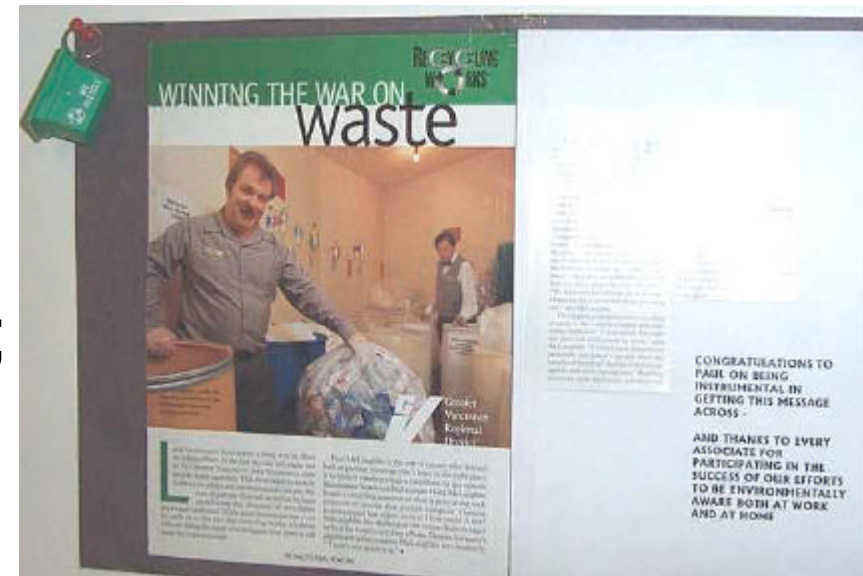
OVERVIEW

- 18 storey downtown waterfront location, 438 deluxe guestrooms, 11 suites, 2 concierge floors, Marriott family member
- 18, 000 sq. ft. meeting space, 13 flexible meeting rooms, 7,920 sq. ft. ballroom.
- 2, 300 sq. ft. Health and Fitness Club, Indoor Pool, Whirlpool and Sauna
- Vistas Revolving Restaurant & Bar for dinner, Patina Restaurant for Breakfast and Lunch, Coal Harbour Bar
- Between 175 to 300 staff



RENAISSANCE HOTEL

- Solid waste and recycling;
- Water use;
- Liquid waste;
- Air emissions;
- Energy efficiency;
- Sustainable purchasing;
- Hazardous waste.



RENAISSANCE HOTEL

SOLID WASTE AND RECYCLING

- Program started in 1999
- Initiative of Purchaser/Receiver
- Now culture at hotel
- Programs include:
 - Recycling room (glass, plastic, metal, etc.)
 - Composting of organic waste
 - Packaging reduction/reuse programs
 - Metal hanger exchange
 - Mattress exchange
 - Charitable donations (soap/shampoo)



RENAISSANCE HOTEL

WATER USE & LIQUID WASTE

- Large and significant aspect of operations
- Water use tracked since 1998
- Water use vs. liquid waste
- Initiatives include:
 - Bed linen/towel reuse programs
 - Sensors on public toilets
 - Xeriscape management
 - Housekeeping leak reporting



RENAISSANCE HOTEL

AIR EMISSIONS

- Not large or significant operational aspect
- Issues include staff/guest transportation, mechanical equipment, emergency generators,
- Initiatives include:
 - No-idling policy for delivery trucks
 - TransLink Employer Pass Program
 - Guests encouraged to share taxis or use the Airporter service to the airport



RENAISSANCE HOTEL

ENERGY EFFICIENCY

- Large and significant operational aspect
- Energy use tracked since 1998
- Issues include heating/cooling equipment, general lighting, exterior lighting, kitchen/office equipment and plug loads
- Initiatives include:
 - Relamping corridor lighting from incandescent (60W) to 13W compact fluorescents
 - Back of house lights equipped with occupancy sensors
 - Conversion from T12 fluorescents to T8 with electronic ballasts
 - Radiant bathroom floor heating turned off in summer



RENAISSANCE HOTEL

SUSTAINABLE PURCHASING

- Renaissance tied to Marriott AVENDRA catalogue
- List of preferred vendors
- Policy to buy local whenever possible (90% within BC)
- Initiatives include:
 - Bulk purchasing of some food products (e.g. wild salmon)
 - Organic products used and promoted
 - Local BC VQA wines
 - Just-in-time purchasing policy
 - Reusable/recyclable packaging



RENAISSANCE HOTEL

HAZARDOUS WASTE

- Determined to be an insignificant issue
- Minimal hazardous waste products produced

RENAISSANCE HOTEL

CONCLUSIONS AND RECOMMENDATIONS

- Solid waste/recycling initiatives extremely well managed
- Sustainable purchasing well established
- Recommendations include:
 - Implement a formal tracking program for solid waste
 - Conduct solid waste audits (provides baseline from which to set waste reduction goals)
 - Develop formal sustainable purchasing program
 - Use life-cycle approach and supply chain management systems



RENAISSANCE HOTEL

SmartSteps RECOMMENDATIONS – continued

- Recommendations include:
 - Retrofit or replace all guest toilets with ultra-low flow models
 - Develop and implement a formal energy management plan
 - Conduct regular energy audits



RENAISSANCE HOTEL

QUESTIONS

RENAISSANCE HOTEL



SMARTSTEPs ASSESSMENT

- Assessment conducted January 2004
- 3 assessment team members
- 1-day on-site (information request prior)

PROGRAM LEVELS

- Level 1 Tactical Eco-Efficiency
- Level 2 Strategic
- Level 3 Sustainable
- Level 4 Structural

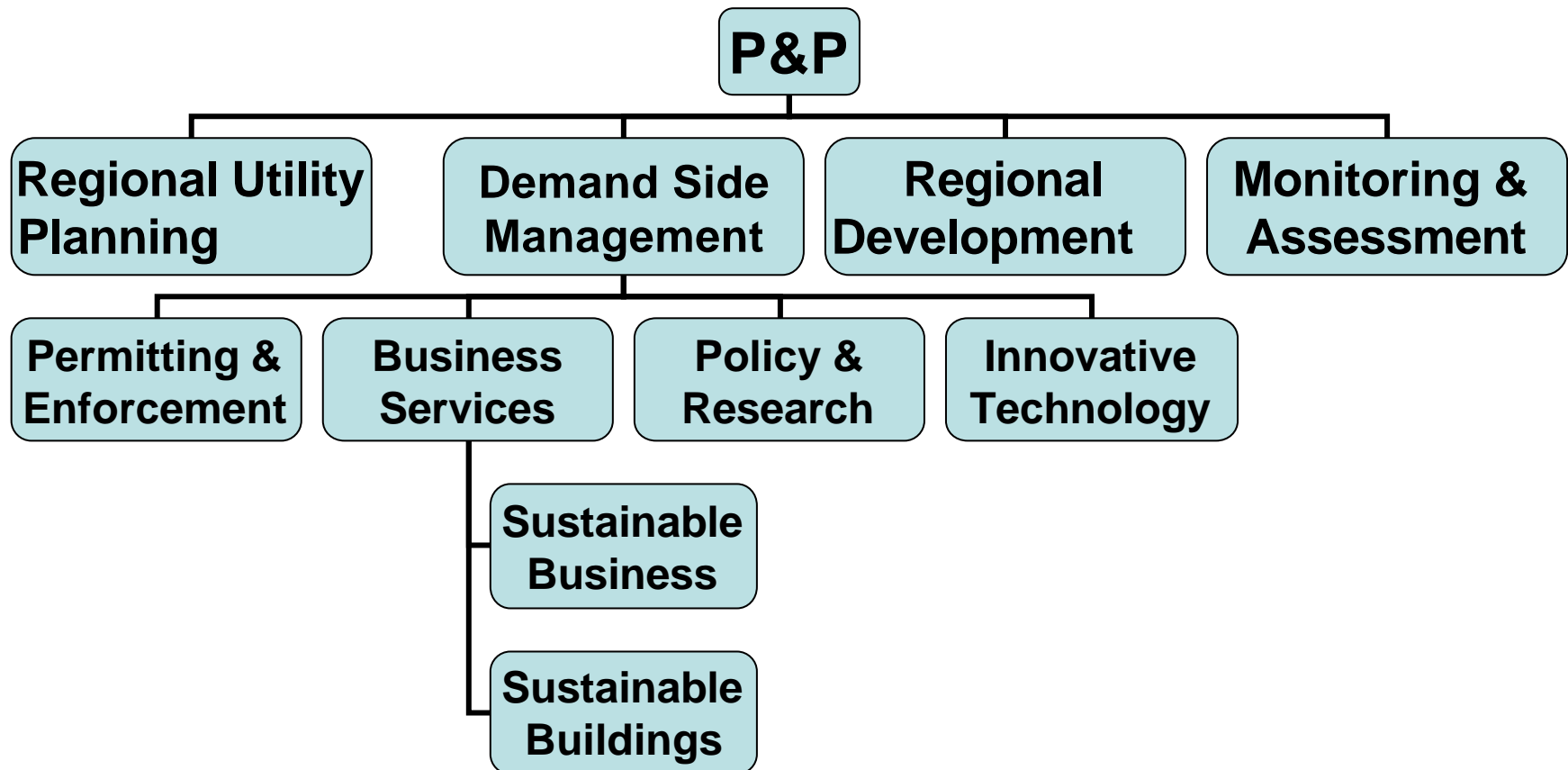


Overview

- GVRD Policy & Planning
- SmartSteps GVRD's Sustainable Business Program
- Technical Resources (web and print)
- SmartSteps Assessment Protocol
 - Jacques Whitford – Myra Pagé, Environmental Scientist



Organizational Chart



Sustainable Business Program

- What is a Sustainable Business?
- Why Eco-efficiency?
 - World Business Council for Sustainable Development:
“... creating more goods and services with ever less use of resources, waste and pollution”

Benefits of Eco-Efficiency

- Economic...uses less resources per unit of production
- Environmental... having to manage less waste...reduces costs
- Social...improves employee and public perception of company

SmartSteps

- Modeled on former Recycling Works program
- Audience research
- GVRD Business Friendliness Report
- Strategic Marketing Plan conducted Dec. 2001
- Branded SmartSteps



Impacts/Opportunities

IC&I Sector:

Generates:

- 3/4 of municipal solid waste (*including DLC*)
- 1/2 of GHG emissions
- 1/3 of smog-forming contaminants
- 1/3 of the BOD loading to WWTP's

Uses:

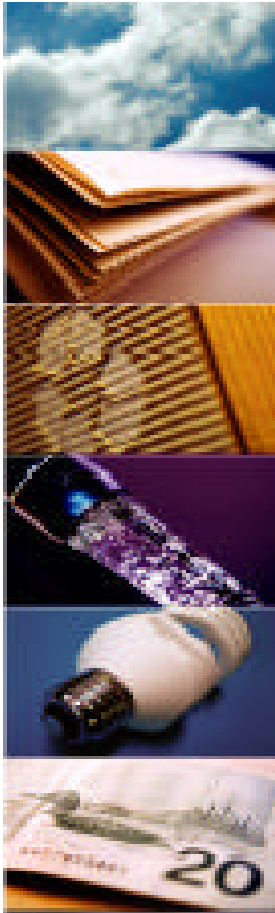
- 1/3 of potable water supply
- 1/3 of energy and resources

Priority Sectors



- Hotel and Motels
- Restaurants
- Retail
- Transportation
- Commercial Offices
- Wholesale/Warehousing
- Manufacturing
- Schools

Program Areas

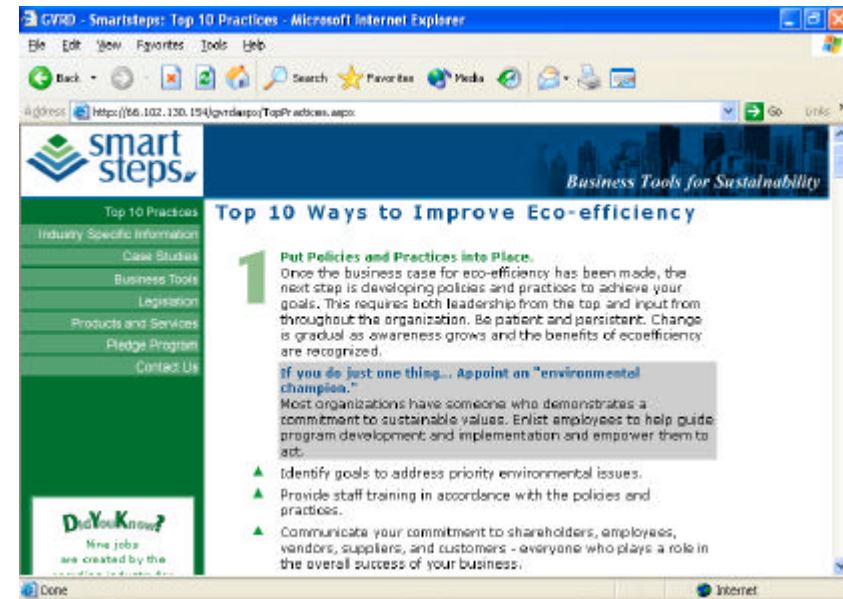


- Clean Air
- Waste Reduction
- Recycling
- Water Conservation
- Energy Efficiency
- Sustainable Purchasing

Business Tools

Internet business gateway recommended...
answering the questions:

- What do you have to do?...
- What can you do? ...
- What have others done?...
- Why would you want to do it?...
- Who to contact for more information?



Technical Resources

- SmartSteps Top 10 actions to improve eco-efficiency
- Sector based guidelines
- Case studies
- Tools
 - Business Case TCA
 - Products & Services Directory
 - Sustainable Purchasing Guidelines
- Guide to environmental legislation and regulations



Technical Resources cont'd

smart steps
Business Tools for Sustainability

Top 10 Ways to Improve Eco-efficiency

1. **Comply with Environmental Legislation and Regulations.**

LINKS AND RESOURCES
SmartSteps Guide to Environmental Legislation
www.smartsteps.ca

2. Retail

How eco-efficiency can help you protect your store's profits.

Protecting your profits as an owner or a manager of a retail operation is the Greater Vancouver Regional District (GVRD) has developed a

Case Study

Campus Sustainability Office (CSO)

UBC's Sustainability Office (CSO) adopted a progressive sustainability policy. CSO's sustainability policy addresses the various requirements and standards for the campus. A Campus Sustainability Office (CSO) was created to implement the policy, to promote, coordinate, and implement sustainability practices. The office focuses on the CSO's role in campus sustainability projects, CSO Sustainability Committee, campus sustainability and business development, change by encouraging students, staff, and faculty about the impacts of their activities, and sustainability in business, change.

Water Reduction and Recycling

UBC's CSO has implemented a water reduction program. The program is based on the goal of reducing water use by 10% by 2010. The program is based on the goal of reducing water use by 10% by 2010. The program is based on the goal of reducing water use by 10% by 2010.

Food Waste

UBC's CSO has implemented a food waste reduction program. The program is based on the goal of reducing food waste by 10% by 2010. The program is based on the goal of reducing food waste by 10% by 2010. The program is based on the goal of reducing food waste by 10% by 2010.

Office Paper

UBC's CSO has implemented an office paper reduction program. The program is based on the goal of reducing office paper use by 10% by 2010. The program is based on the goal of reducing office paper use by 10% by 2010. The program is based on the goal of reducing office paper use by 10% by 2010.

Paper Recycling

UBC's CSO has implemented a paper recycling program. The program is based on the goal of recycling 100% of office paper by 2010. The program is based on the goal of recycling 100% of office paper by 2010. The program is based on the goal of recycling 100% of office paper by 2010.

Disposable Cups

UBC's CSO has implemented a disposable cups reduction program. The program is based on the goal of reducing disposable cups by 10% by 2010. The program is based on the goal of reducing disposable cups by 10% by 2010. The program is based on the goal of reducing disposable cups by 10% by 2010.

GWID - SmartSteps: Top 10 Practices - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media

Address: http://66.100.130.154/gwids/TopPractices.aspx

smart steps
Business Tools for Sustainability

Top 10 Ways to Improve Eco-efficiency

1. **Put Policies and Practices into Place.**

Once the business case for eco-efficiency has been made, the next step is developing policies and practices to achieve your goals. This requires both leadership from the top and input from throughout the organization. Be consistent and persistent. Change.

Business Case TCA

Home Login Register Help

Selected Case: GVRD Lighting Retrofit

Business Cases

This is a Sample Plan. Changes will not be saved.

Business Cases

Business Case Name: Sample Nitric Acid Elimination

Options Title: Nitric Acid Elimination stainless steel v. plastic racks

Inventory

Investment Costs

Operating Costs

Analysis

To help determine what taxes and incentives might apply, please respond to the following:

Active Business Income

Less than \$200,000
Between \$200,000 and \$500,000
More than \$500,000

Taxable Capital \$ 1200000

Manufacturing & Processing Income \$ 20000

Proportion of Income from Manufacturing and Processing 90 %

Please indicate what discount rate should be used in the analysis:

Discount Rate 15 %

Now Copy Cancel Save Reset

Total Cost Assessment

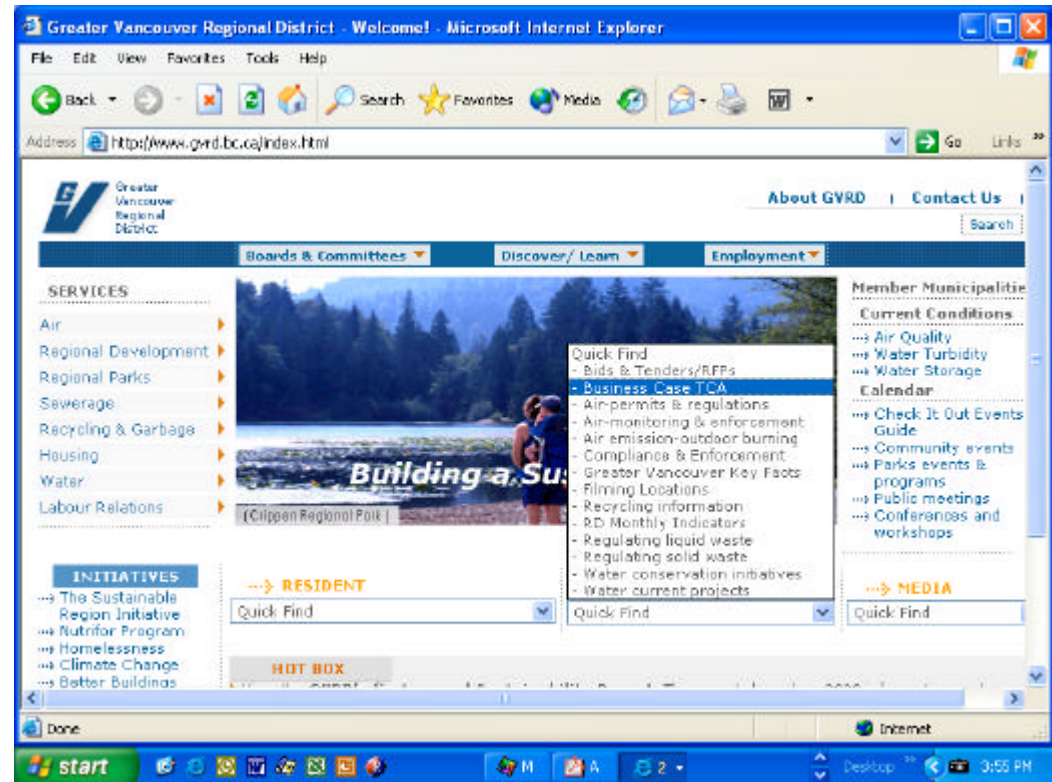
TCA considers:

- True costs and profitability of options
- Identifies overlooked or hidden costs
- Considers time value of money
- Uses discounted cash flow
- Extends time horizon
- Enhances decision making

The screenshot shows a web browser window titled "BusinessCase - Microsoft Internet Explorer". The address bar displays "http://www.gird.bc.ca/BusinessCase.aspx?page=Business%20Cases". The page content is titled "Business Cases" and features a sidebar with navigation buttons: "Business Cases", "Options", "Inventory", "Investment Costs", "Operating Costs", and "Analysis". The main content area shows a form for a "Selected Case" named "Sample Nitric Acid Elimination". A red warning message states: "This is a Sample Plan. Changes will not be saved." The form fields include: "Name" (Sample Nitric Acid Elimination), "Title" (Nitric Acid Elimination: stainless steel v. plastic rocks), "Active Business Income" (radio buttons for "Less than \$200,000", "Between \$200,000 and \$300,000" (selected), and "More than \$300,000"), "Taxable Capital" (\$1200000), and "Manufacturing & Processing Income" (\$200000). A footer note reads "Prescribed by BC Government".

Business Case TCA

- Web-based application
- Available on: www.gvrd.bc.ca
- Provides on-line guidance/ resources
- Considers BC and Federal taxes



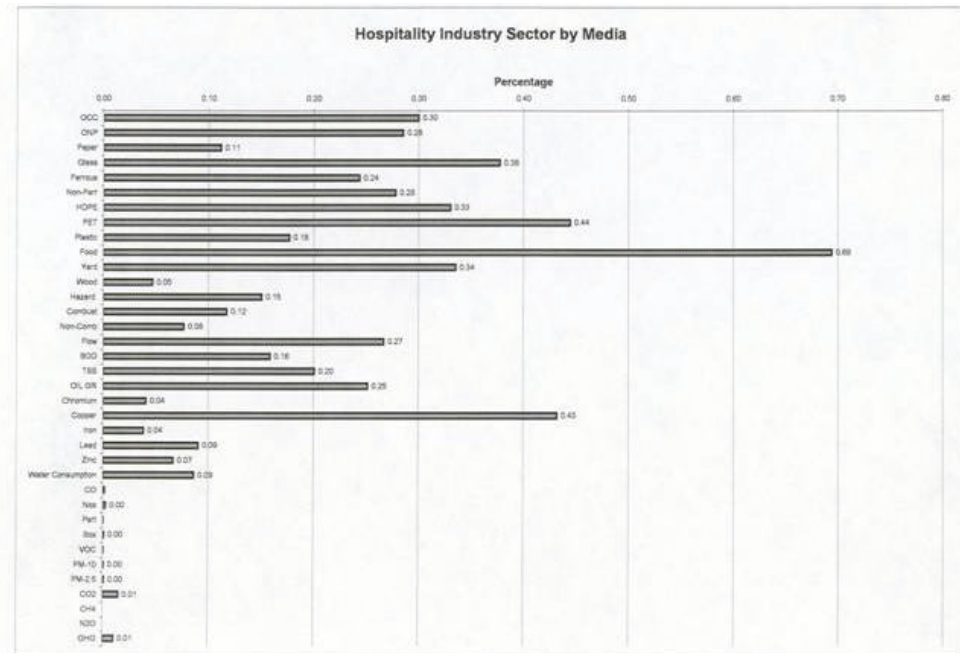
GVRD Assessment Protocol

- Pilot program to develop and test assessment protocol
- Assess/characterize eco-efficient practices/opportunities
- One assessment conducted in each of 8 SmartSteps priority sectors
- Hotel sector
 - Renaissance Vancouver Hotel Harbourside

Hotel/Motel Sector

Impacts – Opportunities

- Energy conservation
- Solid waste reduction, recycling
- Water conservation
- Sustainable purchasing



JACQUES WHITFORD ENVIRONMENT LIMITED

One of Canada's largest environmental, geotechnical and risk management consulting firms

- Established in 1972
- 36 offices
- Corporate Office is located in Dartmouth, NS
- Over 1,200 employees
- Burnaby, BC (604) 436-3014
- Business partnerships in the following countries: Argentina, Brunei, China, Costa Rica, Indonesia, Russia, Trinidad, United Arab Emirates



Contact Information

GVRD Business Services

Tel: 604.451.6575

Fax: 604.436.6970

Email: business_services@gvrd.bc.ca

Website (coming soon): www.smartsteps.ca

A group of people, including a woman with blonde hair and a man in a suit, are gathered around a table, looking at a laptop screen. The image is semi-transparent and serves as a background for the title.

CONTACT INFORMATION

JACQUES WHITFORD

Tel: 604.436.3014

Fax: 604.436-3752

Email: mpage@jacqueswhitford.com

Website: www.jacqueswhitford.com





Questions

?