



---

## **Public Works & Transportation Committee**

Date: Wednesday, April 21, 2010  
Place: Anderson Room  
Richmond City Hall  
Present: Councillor Linda Barnes, Chair  
Councillor Sue Halsey-Brandt, Vice-Chair  
Councillor Derek Dang  
Councillor Ken Johnston  
Councillor Harold Steves  
Mayor Malcolm Brodie (arrived at 4:50 p.m.)  
Call to Order: The Chair called the meeting to order at 4:30 p.m.

### **MINUTES**

It was moved and seconded

*That the minutes of the meeting of the Public Works & Transportation Committee held on Wednesday, March 17, 2010 be adopted as circulated.*

**CARRIED**

### **NEXT COMMITTEE MEETING DATE**

Wednesday, May 19, 2010 (tentative date) at 4:30 p.m. in the Anderson Room.

### **DELEGATIONS**

Ms. Hilda Bechler, Sustainable Community Development Services, was to delegate on Sustainable Waste Management but was not present at the meeting. The Chair directed staff to forward to Metro Vancouver a copy of Ms. Bechler's e-mail, a copy of which is attached to these minutes as Schedule 1.

## PLANNING AND DEVELOPMENT DEPARTMENT

1. **TRANSLINK 2010 CAPITAL PROGRAM COST-SHARING SUBMISSIONS - MAJOR ROAD NETWORK, BICYCLE INFRASTRUCTURE AND TRANSIT-RELATED ROAD INFRASTRUCTURE**

(File Ref. No.: 01-0154-04) (REDMS No. 2774719)

Victor Wei, Director of Transportation, in response to queries from Committee advised the following:

- an update in the Richmond Area Transit Plan (ATP), jointly developed by TransLink and the City, and approved in September 2000, is overdue. TransLink has not committed to a start date for updating this Plan;
- Richmond will be receiving 50% less annual funding allocation (from the current \$1.8 million to \$0.9 million) from TransLink starting in 2011 due to the recently approved TransLink 10-Year Plan; and
- short-term, smaller scale improvements to the intersection at Granville Avenue and Garden City Road will proceed, focusing on the safety of cyclists and pedestrians; the larger scale, long-term plans involve reconfiguring the intersection but are not anticipated within the next 5 years due to budget constraints.

Discussion ensued and Committee proposed the following changes to the staff recommendations noted in the report:

- the words “ in 2011 or sooner” be added to recommendation (3); and
- that an additional recommendation (5) be included that directs staff to send copies of the staff report and recommendations to all Richmond MLAs and MPs.

It was moved and seconded

**(1) That the submission of:**

- (a) road and traffic signal improvement projects for cost-sharing as part of the TransLink 2010 Major Road Network (MRN) Minor Capital Program;***
- (b) bicycle facility improvements for cost-sharing as part of the TransLink 2010 Bicycle Infrastructure Capital Cost-Sharing Program; and***
- (c) transit facility improvements for cost-sharing as part of the TransLink 2010 Transit-Related Road Infrastructure Program;***

*as described in the staff report dated March 26, 2010 from the Director of Transportation, entitled "Translink 2010 Capital Program Cost-Sharing Submissions - Major Road Network, Bicycle Infrastructure And Transit-Related Road Infrastructure", be endorsed.*

- (2) That should the above submissions be successful, the Chief Administrative Officer and General Manager, Planning and Development be authorized to execute the funding agreements.*
- (3) That the City send a letter to TransLink requesting that the update of the Richmond Area Transit Plan commence in 2011 or sooner to help guide the City's planning and implementation of transit-related infrastructure improvements.*
- (4) That the additional funds required to construct the Minoru Boulevard Bike Lanes project be sourced from surplus funds in Project No. 41207 (Canada Line Bridge Cycling Connections).*
- (5) That copies of the staff report and recommendations be sent to all Richmond MLAs and MPs.*

**CARRIED**

**2. ICBC/CITY OF RICHMOND ROAD IMPROVEMENT PROGRAM – PROPOSED PROJECTS FOR 2010**

(File Ref. No.: 01-0150-20-ICBC1-01) (REDMS No. 2861294)

Victor Wei introduced ICBC Road Safety Coordinator, Karon Trenaman, and thanked ICBC for their assistance in a number of road projects.

Mr. Wei remarked that the 2010 Richmond Road Safety Improvement Projects proposed in section three of the staff report will proceed regardless of whether or not ICBC provides financial assistance, as funding sources for the City's portion of the costs of these projects have been previously approved or endorsed by Council.

Discussion ensued and Committee recognized the upcoming 20th anniversary of the Road Improvements Program, and praised the program as well as the amicable working relationship between City staff and ICBC.

It was moved and seconded

***That:***

- (1) the list of proposed road safety improvement projects, as described in the staff report dated March 26, 2010 from the Director of Transportation entitled "ICBC/City Of Richmond Road Improvement Program – Proposed Projects For 2010", be endorsed for submission to the ICBC 2010 Road Improvement Program for cost sharing;*

- (2) *should the above applications be successful, the Chief Administrative Officer and General Manager, Planning and Development be authorized to negotiate and execute the cost-share agreements.; and*
- (3) *in recognition of the Road Improvement Program's upcoming 20th anniversary, the Mayor send a letter to ICBC to express the City's appreciation of past funding support and desire for the continuation of the program.*

CARRIED

3. **PROPOSED ON-STREET PARKING RESTRICTIONS IN BURKEVILLE**

(File Ref. No.: 10-6450-09-01) (REDMS No. 2872195)

Victor Wei was available to answer queries and advised the following:

- in the table on page 2 of the staff report (PWT-34), the amount for "Student Lot with E-Permit - Daily" should read \$5.50, not \$5.85;
- the City will request that BCIT assist in communicating to students the impending changes to parking regulations in Burkeville;
- formal letters will be mailed to residents regarding parking restrictions and potential roles they may have in assisting with the new parking regulations in Burkeville;
- the current parking lot at BCIT has ample room to accommodate student cars;
- there will likely be a grace period where warning tickets only will be issued;
- four major stakeholders on Sea Island - Burkeville residents, BCIT, Delta Hotel, and International Aviation Terminals (IAT) – have identified public transit service gaps. The City hopes to facilitate Translink in adjusting the current transit system in order to make it more efficient; and
- YVR sets the fees for the BCIT parking lot as a majority of the parking spaces are located on YVR property.

Discussion ensued and it was noted that perhaps the parking fees set by YVR are too high, causing students to find parking elsewhere. Further, it was noted that the City must communicate to BCIT the need for that facility to (i) contain student parking; (ii) communicate to students the impending parking restrictions; and (iii) provide education on alternative modes of transportation, such as car pooling and transit.

Committee amended the staff recommendations with the addition of recommendations (3a) and (3b) noted as follows:

It was moved and seconded

- (1) *That Option 1, as described in the staff report dated March 29, 2010, from the Director, Transportation, entitled "Proposed On-Street Parking Restrictions in Burkeville", to address traffic safety and street parking concerns in the Burkeville area be approved and staff be directed to proceed with its immediate implementation.*
- (2) *That per Option 4, as described in the staff report dated March 29, 2010, from the Director, Transportation, entitled "Proposed On-Street Parking Restrictions in Burkeville", staff be directed to work with Coast Mountain Bus Company to re-introduce bus service to Burkeville and that the use of Airport Road (southbound only) for such service be endorsed.*
- (3)
  - (a) *That staff communicate to BCIT and YVR the need for cars to be contained on BCIT premises, and that a copy of this communication be sent to the City's YVR nominee; and*
  - (b) *That staff communicate to BCIT the need to educate students on the impending parking regulations, as well as alternative transportation options.*

**CARRIED**

4. **CITY-WIDE STREET FURNITURE PROGRAM – REPORT BACK ON ADDING STREET FURNITURE ELEMENTS**  
(File Ref. No.: 10-6360-03-01) (REDMS No. 2762173)

Victor Wei was available to answer queries.

The Chair expressed frustration in the delay of moving forward with the recycling aspect of this program due to cost factors. Staff advised that this report does not preclude the possibility to expand recycling opportunities over the next couple of years.

In response to queries, Suzanne Bycraft, Manager of Fleet and Environmental Programs advised that the recycling containers used during the 2010 Winter Olympics have been deployed to City parks and other locations. Additional recycling containers are being added to areas of higher profile and where warranted by material volumes. Future expansion is dependent on resource requirements, which will be evaluated along with the effectiveness of these containers within the community. Additionally, Ms. Bycraft advised that staff is exploring potential opportunities to partner with private companies that would provide the containers at no cost, which the City would maintain.

It was moved and seconded

**That:**

- (1) *the City continue to pursue the provision of new street furniture without advertising at selected locations as part of new development requirements and special streetscape enhancement projects through to the expiry of the forthcoming 5-year contract with Pattison Outdoor for the provision of selected street furniture elements; and*

- (2) *as part of a revised street furniture strategy to be developed near the expiry of the forthcoming contract with Pattison Outdoor, staff include the option of the City purchasing street furniture without advertising as an alternative to involving the third party provision of street furniture in return for advertising rights in the public realm.*

**CARRIED**

5. **PROPOSED DEMONSTRATION WIND TURBINE REVIEW**

(File Ref. No.: 01-0370-01) (REDMS No. 2875075)

John Irving, Director of Engineering, and Mark Roozbahani, Energy Manager were available to answer queries. Staff advised the following:

- should Council agree to adopt the recommendations outlined in the staff report, further site-specific socio-environmental considerations would be conducted prior to any implementation;
- companies selling second-hand wind turbines have approached the City;
- bird mortality rates associated with wind turbines is dependent on many factors, including geographical location and bird migration habits;
- noise generated by a wind turbine is dependent upon on the turbine size and model; newer generations of wind turbines tend to be quieter; and
- the current zoning bylaw allows wind turbines to be situated in residential areas but they are subject to height restrictions.

It was moved and seconded

***That:***

- (1) *the concept of installing a wind turbine at a City owned site in Richmond be endorsed subject to external funding and further site-specific review; and*
- (2) *the Chief Administrative Officer and the General Manager, Engineering and Public Works be authorized to sign:*
- (a) *grant application(s) as required for the UBCM Innovation Fund and other applicable funds; and*
- (b) *applications and agreements as required for BC Hydro's Net Metering program;*

*for supporting the wind turbine study and implementation.*

**CARRIED**

6A. NEW BUSINESS

(i) *Traffic Calming - Seafair*

A member of Committee referred to an e-mail dated April 12, 2010 from a Seafair resident regarding drivers speeding through the neighbourhood, and the ineffectiveness of the traffic circle at Seafair Drive and Fairbrook Crescent in slowing them down. Accordingly, the following **referral** was introduced:

It was moved and seconded

*That staff investigate alternative traffic calming options for the Seafair neighbourhood.*

**CARRIED**

(ii) *Hamilton Fire Hall*

A member of Committee commented on the cement footings that remain from the old Hamilton Fire Hall, and the following **referral** was introduced:

It was moved and seconded

*That staff investigate the removal of the cement footings that remain from the demolished Hamilton Fire Hall.*

**CARRIED**

6B. MANAGER'S REPORT

(i) *Organics Collection Program*

Suzanne Bycraft provided an update on the program, stating that it was going well with approximately 50% of residents putting out green cans. Ms. Bycraft highlighted the public education measures undertaken by the department which include information on the City website, fliers and media coverage events. The City will stop collecting clear plastic bags of yard trimmings on May 1, 2010, but there will be some flexibility regarding this as residents become familiar with the program and additional direct education to residents will be provided.

In response to a query from Committee, Ms. Bycraft advised that containers have not be provided to residents as this would necessitate the transition to larger wheeled carts which would result in considerable capital cost. In addition, alternate style collection vehicles would be required and given current contract obligations, this transition is not feasible at this time. However, this possibility will be assessed in the future.

(ii) *Capital Projects Open House*

Robert Gonzalez, General Manager of Engineering and Public Works, advised that the 2010 Capital Construction Projects Open House will take place April 22, 2010 at City Hall between 3 and 7 p.m. and will showcase a number of major capital projects currently underway.

*(iii) Richmond Featured in YDIG Magazine*

Mr. Gonzalez referred to an article in YDIG, BC's magazine for trenchless construction, which highlighted the electrical work done in the O-Zone Celebration Site during the 2010 Winter Olympics by City of Richmond staff.

**ADJOURNMENT**

It was moved and seconded

*That the meeting adjourn (5:30 p.m.).*

**CARRIED**

Certified a true and correct copy of the Minutes of the meeting of the Public Works & Transportation Committee of the Council of the City of Richmond held on Wednesday, April 21, 2010.

---

Councillor Linda Barnes  
Chair

---

Susan Steeves  
Committee Clerk



**MayorandCouncillors**

---

**From:** Hilda Bechler [hilda\_bechler@yahoo.ca]  
**Sent:** April 8, 2010 6:17 PM  
**To:** MayorandCouncillors  
**Subject:** sustainable waste management  
**Categories:** UCRS CODE / FILE NUMBER: 01-0157-20-WMAN1

***Sustainable Community***

DEVELOPMENT SERVICES  
8052

New Westminster BC 604.521-

---

*People*

*Planet*

*Profits*

April 8, 2010

City of Richmond

Mayor and Council;

The two great crises of our time, peak oil and climate change, converge in the next 10 to 30 years. The GVRD Waste Management Plan, with a five-year horizon, fails to take this and related issues into account. Business as usual—incineration and landfill—will worsen these crises, both locally and globally.

We can use the billions of taxpayer dollars that we plan to spend on incinerators and ash / landfills to convert to sustainable practice instead.

Metro Vancouver's goal is a Zero Waste Economy. Two options not considered in current initiatives toward this end are Resource Recovery Parks and Local Remanufacturing of Recycled Materials.

Attached please find the discussion paper and conversion proposal I presented to the GVRD Waste Management Committee at their March 17 meeting. I will be taking this proposal to the public input meetings this month. In addition, I am also appealing directly to City Councils in order to broaden this information outreach to Councillors as well, and to the general public.

I would like to address a Standing Committee of Council on these issues, with the goal of moving this initiative to a Council agenda for your consideration. I look forward to hearing from you.

For a future,  
*Hildegard Bechler*

[Hilda\\_Bechler@yahoo.ca](mailto:Hilda_Bechler@yahoo.ca)

---

The ecological solution /s the economic solution and also the ethical.

---

Looking for the perfect gift? **Give the gift of Flickr!**

# *Sustainable Community*

DEVELOPMENT SERVICES

New Westminster BC

604. 521-8052

---

*People*

*Planet*

*Profits*

Waste Management Committee  
Board of Directors  
Greater Vancouver Regional District

***Local Remanufacturing  
Discussion Paper  
Conversion Proposal***

## *Executive Summary*

In 2008 the Regional District adopted a strategy to move toward incineration, and a zero waste economy. Part of that strategy is to scale back garbage by increasing recycling.

Also in 2008 the price of oil rose to a record high, collapsing our markets for recycled materials. The assumption today is that these markets will rebound.

Economists forecast that the price of oil will rise to another record high by the third quarter 2010, and will continue to rise as we move past peak oil—also this year.

To avoid a crisis in the near future, we can reduce our dependence on oil and stimulate a sustainable economy by remanufacturing our recycled materials locally. The billions we plan to spend on incineration can be used to begin developing these industries.

To further abate our greenhouse emissions we can convert all the Region's operations to sustainable practice and pay for this conversion with income from the remanufacture of our own recovered resources.

---

The 2008 Strategy Document proposes to "aggressively pursue a zero waste economy". In this scenario recycling grows from today's 55% to over 70% by 2015.

In 2008 the price of oil rose to \$147 per barrel, more than doubling the fuel surcharge on a container shipped to China, collapsing our markets for recycled materials.

Economist Jeff Rubin, formerly chief economist at CIBC World Markets for two decades, predicted, in 2000, the record oil price spike of 2008 and the consequent recession. He provides the numbers and incisive analysis showing that shipping costs can only go up as we move past peak oil into depletion and scarcity. World oil supplies are becoming ever more remote and expensive to access, while demand far outstrips supply.

"The transpacific bunker charge, a benchmark fuel surcharge on freight from China, rose from \$455 to over \$1,100 on a standard 40-foot container between

January 2007 and 2008. As the price of oil goes higher, China becomes a costlier and costlier place to get your stuff from."

*Why Your World Is About to Get a Whole Lot Smaller, Oil and the End of Globalization, Random House, 2009*

Rubin has predicted oil prices of over \$100 per barrel by the fourth quarter of this year, slowing the economic growth that comes with rising oil prices and risking another global recession. Both growth and recession—boom and bust—are consequences of over-reliance on oil. Prices will continue to be cyclical, but the troughs and peaks will be higher each cycle. Fast-rising oil and transport prices will be a permanent feature of world trade as "the eighteen-wheeler of globalization is thrown into reverse".

**The Regional Waste Management Plan** is based on the assumption that overseas markets for recyclables will be available indefinitely into the future. Today prices have rebounded somewhat, but not to former levels.

Income from selling recycled materials to brokers has always been far less than the cost of collection. Garbage is sometimes levied to pay the \$200 per ton it costs to collect, transfer, and sell our recovered resources. Today the Region recycles 1.9 million tons each year at a cost to taxpayers of \$ 380 million. Income from those sales is small in comparison, a few million a year. Furthermore, only mixed paper and newspaper bring revenue from brokers; freight-sensitive materials and energy-rich plastic are a giveaway.

At times of low market prices some municipalities are already forced to landfill or compost recycled materials we have all spent so much time and money to collect, also losing the public trust. When overseas markets fail entirely, our only option (if we stay with the 2008 Strategy) will be to incinerate and landfill most of our recovered resources.

**Local remanufacturing can prevent these economic, ecological, and social crises.**

Metro Vancouver supports remanufacturing, but leaves it up to the private sector.

This approach will take too long to deal with our now doubled waste crisis.

#### **Time Frame**

The Waste Management Plan has a five-year horizon, looking only as far as 2015. But we are planning an incinerator that is expected to burn for 40 years, and possibly five more incinerators far extending that time frame.

According to peak oil specialists, 2010 is the end of the five-year peak oil plateau. Today we are starting into the downside of the world oil supply bell curve into depletion. Natural gas will peak by 2014, according to ecologist David Holmgren. His calculations show that *in the next ten to thirty years* we will be into energy descent such that the net energy available per person in 2045 may be as little as 40% of today's abundance. They also indicate that globally, the energy available per capita has already peaked. His essential information provides a good framework for analyzing our waste crisis.

#### **Peak Oil and Climate Change Convergence**

Holmgren has modeled the convergence of "the two great crises of our era" and the "unprecedented challenges for human civilization" that this presents.

"Global peak oil has the potential to shake or even destroy the foundations of global industrial economy and culture. Climate change has the potential to rearrange the biosphere more radically than the last ice age. Each limits the effective options for responses to the other.

David Holmgren, *Future Scenarios: How Communities Can Adapt to Peak Oil and Climate Change*, Chelsea Green, 2009.

He has modeled four scenarios based on "whether energy available to human systems will rise or fall" over the next ten to thirty years as these crises converge. The scenarios vary with the rate of energy descent and climate change. They are already happening in various places around the globe.

- "Brown tech: (slow oil decline, fast climate change);
- Green tech: (slow oil decline, slow climate change);
- Earth steward: (fast oil decline, slow climate change);
- Lifeboats: (fast oil decline, fast climate change)."

"Brown tech" leads to eventual collapse with intermittent periods of stabilization. Oil decline will be slow if we invest ever more resources into getting oil and energy (at the expense of all other societal needs) thus speeding up climate change.

**NET ENERGY:** *Energy Return on Energy Invested (EROEI)*

Oil and all resources—metals, lumber, fish—are more remote and difficult to access, so we spend more and more energy to harvest less energy and resources in return.

"My own tracking of these issues over the last thirty years leads me to the conclusion that the next energy transition is to sources with lower energy-production rates and lower net energy yield, which in turn will drive changes in human economy and society that are without precedent since the decline and/or collapse of previous complex civilizations such as the Mayan and the Roman."

**Critical Materials Depletion**

"Accelerating economic growth and energy extraction over the last decade has greatly increased depletion of other essential nonrenewable resources, especially phosphates for food production and nonferrous metals for industry."

Metals and all resources are needed for transition to any non-fossil energy sources, including renewables.

**Water Depletion**

**Population Pressures**

**Psychosocial Limits to Affluence**

**Food Supply**

**Financial Instability**

**Species Extinction**

"The title of Richard Heinberg's latest book, *Peak Everything*, sums up the situation."

**Conventional Waste Management**

**Oil-dependent:** Landfill, incineration, and overseas shipping of recyclables, are all about fuel for transport and operations—to 'waste' 3.4 million tons each year.

We are planning "Brown tech": business as usual. We plan to spend \$470 million for the first of possibly six incinerators. Add the cost of operation, environmental upgrades,

ash transport and landfill, escalating oil prices, carbon taxes, greenhouse gases, and other externalities. Each incinerator, added "as needed", each burning 500,000 tons of 'garbage' each year (the capacity of the Cache Creek landfill) will bear these costs.

If we were forced to burn our recycled materials in the near/future, we would need another four incinerators to 'waste' the 1.9 million tons we currently recycle. We are planning to invest many billions of (endangered) taxpayer dollars in unsustainable infrastructure to harvest a lower grade of energy, using our energy-rich resources as fuel. Meanwhile, child and elder poverty, homelessness, health, education, ecological rehabilitation, infrastructure conversion to sustainability, and all societal needs, get fewer and fewer of our ever more scarce resources.

### **Negative Economic Growth**

But business only appears "as usual" because of the way we measure the economy. Making no distinction between 'goods' and 'bads', we add all money spent into the Gross Domestic Product (long pointed out by new economists such as Hazel Herderson). So oil spills are good for the economy; groundwater contamination, cancer treatment, epidemics, recession bailouts, flooding, drought, polluting waste disposal, the rising cost of oil—are all good for the economy. 'Business as usual' and 'economics as usual' looks like economic growth even as we are actually in crisis and decline.

**Net Energy:** We are planning huge fossil energy expenditure to get much less energy, and lower grade energy, for district heating—for energy-inefficient housing. An EROEI calculation for this system would no doubt show a (massive) negative net energy return. More so when taking the energy inputs in the paper, metals, plastic, etc. into account.

#### ***Critical Materials Depletion:***

**The 30% of our garbage that remains as ash is the residue of resources that could be recovered.** Six incinerators burning millions of tons of our resources every year, over many decades, would rapidly accelerate both resource depletion and climate change. (Benign climate is also a critical resource.)

#### ***Water Depletion***

Despite differences about severity, groundwater contamination by the Cache Creek landfill has been shown by testing. Common sense tells us this is unavoidable, despite efforts to mitigate or contain inevitable drainage from garbage and ash. In dry country especially, groundwater and surface water are precious to residents and economies.

#### ***Food Supply***

That same water and soil is also needed to grow our vegetables, fruit, meat—and fish—for BC's urban as well as rural populations, and for people beyond our borders.

#### ***Population Pressures***

The GVRD Plan time horizon, as mandated by provincial legislation, is just five years from now. We plan to scale back our 'waste' by 600,000 tons a year by 2015, despite projected population growth of 200,000 people—to 2.5 million. The GVRD projects 2.8 million for 2021, 3.1 million for 2031, growing to 3.4 million people by 2041.

### ***Financial Instability***

The high cost of conventional waste management is not sustainable, even in the near term. In the face of accelerating oil prices and another global recession, it may well be an impossible burden. Dependence on global incinerator corporations subject to the same economic pressures introduces further financial risk and instability.

### ***Psychosocial Limits to Affluence***

Our waste crisis reflects our increasingly dysfunctional corporate consumer culture. Using resources as fuel to produce lower quality energy reflects affluence dysfunction: addiction to energy, 'stuff', and convenience—at any cost.

### ***Species Extinction***

Contamination of air, soil, ground- and surface water by incineration and landfill contributes to the rising species extinction rate. *Homo sapiens* is not exempt.

### **GVRD Waste Management Goals**

- ***Recovery of energy and useful materials:*** Producing heat and electricity is not the 'highest and best use' for our "critical materials".

Recovering our resources instead of using them for fuel saves not only the raw resource but also the energy input they contain, which is retained and used again in remanufacturing. Burning converts that energy and raw material into far less energy of a much lower grade; and into greenhouse gases, toxic smoke, toxic ash. (Bottom ash is also toxic because we burn everything we make together.)

- ***Residuals management:*** Recovering the resources we plan to burn would go a long way toward solving the problem of landfills for ash and 'garbage'.
- ***Zero Waste Economy:*** GVRD documents show this economy as a cycle, as compared to a conventional linear economy. *Waste Disposal* is replaced with *Resource Recovery*; where incineration fits is not specified. **Remanufacturing**, necessary for a full cycle economy, is not in the diagram. It's part of this scenario, but is only listed—as "*Cost*": "*Municipalities must allow recycling or re-manufacturing operations*". This negative paradigm deprives us of one of the most powerful drivers of a win-win, sustainable economy.

### ***Growing the Zero Waste Economy***

The value in our recycled materials that makes it profitable to ship them overseas—the raw resource, the energy put into extraction, refining and manufacture—is available to our own economy at even greater profit through local remanufacture. Rubin points out that rising transport and new carbon costs act as tariffs degrading the comparative advantage of low labour and environmental protection costs in Asia.

In addition to initiatives for producer responsibility and consumer education, the Region can make great gains in waste diversion with expanded infrastructure:

- ***Resource Recovery Parks*** --to reduce, reuse and repair
- ***Remanufacturing Industries*** --to complete the resource cycle here at home.

*Remanufacturing is not without pollution, and also requires resources so reduce, reuse and repair are still priorities.*

Small-scale, decentralized, closed-loop, remanufacturing facilities can ease the strain on our economy from our region's over-reliance on oil.

***Remanufacturing costs and income***

How much remanufacturing capacity we can establish with these billions of taxpayer dollars, and how much income this will yield to pay for waste management and transition to sustainable practice, remains to be investigated. Income would be far higher than "waste-energy" incineration. Growing local demand for recyclables will improve prices and establish a price for the now unvalued, freight-sensitive resources.

***We can begin developing these facilities in this and adjacent regions today using financial resources now planned for a second incinerator and landfill.***

**Growing the Green Economy**

Energy efficiency, resource efficiency (doing more with less) and eco-efficiency (wise use of biological resources and living ecosystems) maintain our planetary life-support systems into the future. At the same time these initiatives build a sustainable economy. As Rubin (and Lovins) point out, "An efficient economy is a clean economy."

The resources and powers of our Regional District government, combined with the skills of local people developing new industries, and the resources of established industry, can actualize the necessary full-cycle infrastructures.

Additional public investment in related systems can achieve "Factor Four" and "Factor Ten" levels of energy and resource efficiency, which approach sustainability.

*(Natural Capitalism, Hawken & Lovins)*

- ❖ Energy efficiency retrofit for all local government systems
- ❖ Energy-efficient re/manufacturing industries
- ❖ On-site renewable energy: solar, wind, geothermal for new and existing facilities ('greening the grid' with diversity, distributed sources, stability)

These best practices reduce our dependence on oil and develop our local green economy while "*Profitably abating global warming*". (Amory Lovins, rmi.org) They move us toward the Green tech and Earth steward scenarios described by Holmgren as the most likely to lead to human survival.

A mix of modalities provides diversity and stability. Through our regional government taxpayers can own capital plants and assets as we do now, but in new remanufacturing facilities. The Region can provide research, financing, and contracts for new local industries. Companies already supplying waste management services can be offered contracts to provide remanufacturing instead. Such win-win practices lock no one out, and provide unlimited opportunities for new industry, business, and jobs.

A case can be made that citizens and taxpayers have a right—indeed, an obligation—to directly benefit from the recovery of our resources. We are not only stakeholders and voters; we are shareholders and owners of our regional systems,



collectively financing them to meet our needs. The inexorable rising cost with no return of conventional waste practices is not sustainable either for taxpayers or governments. We must choose the least cost, if only for the sake of our children.

The cost of public opposition is also high. Citizens who stop incinerators and landfills in their communities, as well as those who are driven to ask for them in hope of economic development, would welcome the many benefits of local, small-scale, closed-loop industries recovering our excess resources. Everyone can agree on least-cost: economic, ecological, and ethical.

### **Institutional Barriers**

Historically citizens pay the *costs* of landfill and incineration. Since the advent of recycling we also pay the cost of collection and get small returns from selling recovered resources. The *profits* that flow from our resource-efficient sustainable practice go to the remanufacturers. The idea of regional governments getting into business making money from reprocessing our excess resources raises the concern that we may get into competition with private industry—resource extraction as well as remanufacturing.

The Regional District government is already in business. We collectively own capital plants and assets, contract with for-profit global corporations to operate the garbage and recycling systems, and earn (very little) money from sales toward paying the costs. However, paying the costs to facilitate profit for others is not *good* business.

Not many corporations are remanufacturing locally, therefore the potential for new industries fed by our vast recycling stream makes competition a non-issue. We are far from meeting the needs of our own markets—in recycled paper, and other materials and goods. The GVRD could, for example, buy the Cascades paper repulping plant right now, then develop and supply local markets. These could include small-scale paper mills owned by the district, municipalities, and private industry.

We would be 'in competition' mainly with overseas remanufacturers. The escalating cost of shipping and "the rising tide of protectionism" in the world will soon eliminate that competition and we will need to supply our own markets. We can no longer rely on our 'competitors' to remanufacture our resources and provide the great variety of low-cost products they make for us—all dependent on cheap oil (and slave labour).

Any reduction in demand for raw materials despite population growth is necessary restructuring that happens all the time in a dynamic economy adapting to change.

### **Limits to Growth**

Holmgren points out that "the continuous growth in human capital and capacity is an illusion". The move from public ownership to privatization (in Australia for example) has been only "apparent economic growth" which has degraded our systems and "has come at the cost of decline in many social indicators of well-being". "Gains in productivity and efficiency in the pursuit of profits have been achieved at the cost of resilience and long-term capacity". Our children and grandchildren lose out.

Competition is not the survival imperative we have been led to believe.

"Even *The Economist* (December 24, 2005) has admitted that economists, including Herbert Spencer, an early contributor, had actually coined the phrase "survival of fittest", so often attributed to Charles Darwin. New research on Charles Darwin ([www.thedarwinproject.com](http://www.thedarwinproject.com)) sets the record straight. Darwin thought that although competition between species was important to evolution, that the human genius for bonding, cooperating and sharing was the key to our survival—including the evolution of moral sentiments and altruism."

"Over six hundred companies world-wide can now account for their success using the integrated triple bottom line: "People, Planet, and Profits".

Hazel Henderson, *Ethical Markets: Growing the Green Economy*,  
Chelsea Green, 2006.

Collectively we have the power to establish universally profitable sustainable practice with direct ethical investment by our municipal and regional governments.

"**Here's the question:** will we decide to reinvest in a global economy and an infrastructure that keeps us bound to oil consumption for every dollar or pound or yen of wealth we produce? If so, we are committing ourselves to a damaging cycle of recessions and recoveries that keeps repeating itself as the economy keeps banging its head on oil prices. If we go this route, peak oil will soon lead to peak GDP.

"Or we can change. Not only must we decouple our economy from oil but we must reengineer our lives to adapt to a world of growing energy scarcity. And that means learning to live using less energy. While much could go terribly wrong in this transition, don't be surprised if we find more than a few silver linings in the process, like a solution to carbon emissions for example. And don't be surprised if the new smaller world that emerges isn't a lot more livable and enjoyable than the one we are about to leave behind.

Either way, your world is about to get a lot smaller."

Rubin

Holmgren likewise envisions the benefits of smaller, more local economies and slower lifestyles. His work and his family's two-hectare demonstration farm in Australia focus on permaculture as the way to regenerate the earth while supporting ourselves on it.

"Let us act as if we are part of nature's striving for the next evolutionary way to respond creatively to the recurring cycles of energy ascent and descent that characterize human history and the more ancient history of Gaia, the living planet. Imagine that our descendants and our ancestors are watching us." Holmgren

---

**Proposal:** That the Waste Management Committee and the Regional District Directors reconsider the decision to move to "waste-energy" incineration; and that the GVRD:

Look at ways and means for remanufacturing our recycled materials locally, for maximum direct benefit to taxpayers;

Expand public information outreach and participation with a community cable and internet program discussing all waste management issues;

---

Begin now and seize the opportunity to buy the Cascades paper repulping plant.

---

Hildegard Bechler

[hilda\\_bechler@yahoo.ca](mailto:hilda_bechler@yahoo.ca)

March 2010