

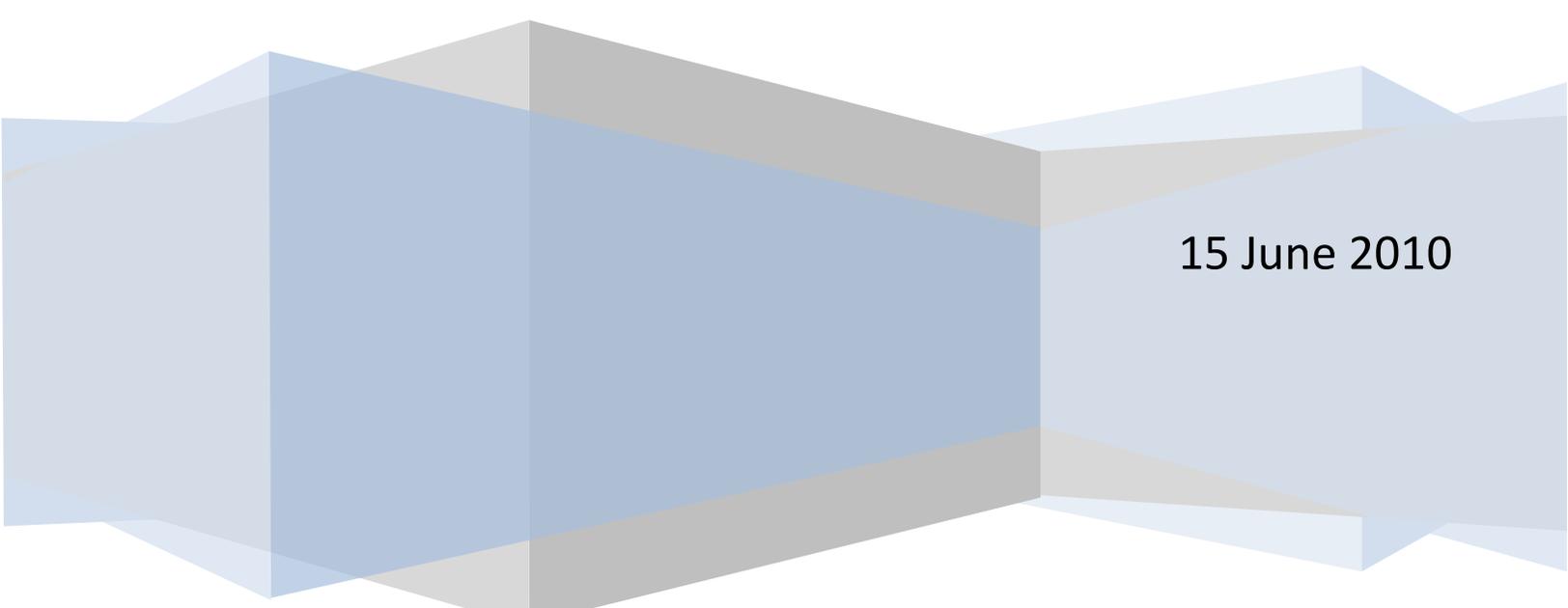
SUCCESS

Sunshine Coastal Environmental Sustainability Society

**Market-based Zero-Waste Strategic Plan**  
**(Where the economy works with the environment)**

**Discussion Paper 01**

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## **Market-based Zero-Waste Strategic Plan: ( Where the economy works with the environment)**

*This document is a summation of basic concepts and ideas set forth in the May 29<sup>th</sup> and 30<sup>th</sup> Public Sustainability Workshops held in Gibsons and Pender Harbour, and the Strategic Plan Meeting held by SuCESS directors on May 31.*

### **A. Preamble**

The fundamental cornerstone of Zero Waste plans is the professional market assessment of recyclable, re-usable or recoverable resources as an economic function of community size and capacity.

Data gathered in this market assessment determine all subsequent planning, such as facility siting, structural design of the facility, local employment planning and transportation efficiency planning.

The market assessment is simply a logical extension of the core belief, that no waste is “garbage.” All waste has value as a “recovered resource,” and therefore must have a market destination. Determining the market potential of local “waste” resources is crucial to determining the potential for local employment in this industry

Environmentally, this has two important implications.

First, “waste” is no longer “garbage” to be disposed of in a traditional landfill or incinerated. Instead, as a “resource” waste enters the closed market loop, thereby minimizing natural resource demands and impacts.

Second, by intercepting resources at source, and reducing transportation, Zero Waste also minimizes the greenhouse gas footprint.

## ***B. The Zero Waste Challenge***

Zero Waste challenges some fundamental assumptions about “waste management” that Canadians take for granted. Throughout the twentieth century Canadians have grown accustomed to seeing their garbage taken away by government, or government-contracted companies, to be dumped in landfills. Landfills throughout the world are reaching capacity and are contaminating many public water supplies.

There is a growing awareness of the need to make recycling more efficient and minimize landfill use, to extend the lifespan of existing landfills for many generations to come. This means that “resource recovery” needs to be developed as a viable industry.

Whereas “waste disposal” was a government responsibility, “resource recovery” is an entrepreneurial challenge for which government structures are not suited. Governments do not run businesses, but merely regulate them, as indicated in the *BC Recycling Regulation* which stipulates that responsibility for: “*end of life product management (lies) on the producer and consumers of a product, and not the general taxpayer or local government.*”

Government must therefore provide access to recycling, and some regulatory oversight. It is not supposed to interfere in or constrain, entrepreneurial creativity. Government cannot be a contractor, as in traditional “waste disposal,” as this would involve the use of taxpayer funds to subsidize and assume risks inherent in venture capitalism. Furthermore, this would distort market competition which depends on all parties having equal access to a level playing field. It would inhibit private sector investment and entrepreneurial innovation which are keys to any successful industry.

Zero Waste is therefore firmly market-oriented and poses a challenge to the vested interests of local governments as landfill operators, and to the average Canadian’s passive expectation of “garbage disposal facilities and services.”

Zero Waste challenges twenty-first century Canadians to “step up to the plate” and reconsider how they can shape the economy, and address climate change and resource limitations, by developing “The New Economy” from the bottom up.

### **C. The Market-based Zero Waste Strategy**

Zero Waste plans and facilities are currently being successfully developed around the world, both in developed and developing nations. In all cases, their success has largely been made possible by a basic strategy developed at ZWIA (Zero Waste International Alliance) drawing on the 40 year experience of Richard V. Anthony, and his associates in progressive “waste management” practices.

The strategy follows 14 basic sequential steps which need to be followed carefully to assure success. It is important to stress that developing Zero Waste is a building process in which one needs to follow basic foundational steps. One should not expect to achieve desired targets if one omits key foundational steps. Thus, one should not expect to develop a successful Zero Waste facility if one merely constructs or designs a facility, without having first carried out a full market assessment to understand and meet the community’s needs and expectations.

#### **1. Adopt the Zero Waste definition**

To begin to engage the public in the transformational process of how to deal with discards, one has to establish common goals and expectations which everybody can understand. The ZWIA definition of Zero Waste is an ethical summation of basic environmental principles that sets common goals that meet normal human expectations of health and security. It has proven easily acceptable to communities around the world, and is therefore recommended as the starting point to achieve consensus:

*“Zero Waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them. Implementing Zero Waste will eliminate all discharges to land, water or air that are a threat to planetary, human, animal or plant health.”*

#### **2. Establish benchmarks and a timeline.**

Change does not come overnight. The kind of social transformation which requires moving beyond the assumptions to which Canadians have grown accustomed, requires social planning.

It is therefore very important to establish targets that can be attained and to understand how to manage the evolution towards Zero Waste. To begin with, it is crucial to assess how much waste is currently being diverted from the landfill and how much is currently being recovered. That enables one to understand how much ground needs to be covered to implement feasible targets

From these benchmarks it should be relatively easy to determine a timeline of what steps can be taken to reach a 60% recovery rate. That should be the initial rough target, as it is now commonly set by government agencies such as the European Common Market.

The figure of 60% is not arbitrary. In most pollution abatement curves, or recovery models, the first 60% are relatively easy to deal with. The next 20% (80% of total) recovery is more difficult, and the last 20% are especially costly and difficult.

(Planning a market – oriented strategy based on this concept will help calculate the means and the costs required to address these challenges, and should provide a means to address the larger problems posed by the last 60-100%)

### **3. Engage the whole community.**

Successful planning is measured by successful implementation. Zero Waste, because it requires a social transformation, depends on having broad community support. It is therefore important to engage the whole community “bottom-up.”

The development of plans delivered top-down by government appointees is socially divisive. No matter how good formal plans or social intentions may be, without broad community support implementation will meet with resistance.

It is therefore essential to begin by engaging the public in a dialogue of the many who represent as much of the whole community as possible, rather than in a dialogue of a chosen – if well intentioned- few who may represent only limited sectorial interests.

#### **4. Demand that decision makers manage resources not waste.**

As discussed in section B above (*The Zero Waste Challenge*) Zero Waste poses a direct challenge to institutional assumptions associated with “garbage disposal.” Government employees and civic leaders are accustomed to view waste as a nuisance by-product to be eliminated, rather than as a resource which presents economic opportunities.

Zero Waste is part of a paradigm shift for which traditional government structures are ill-equipped. It is important to engage the discussion with civic officials around the question of the urgency to make this paradigm shift for both economic and environmental reasons.

Governments are accountable at the voting booth, and respond in consequence to public pressures. Public demand for the development of economic opportunities inherent in resources, rather than for continued public waste and water and air quality fouling associated with traditional disposal and incineration practices, can change the assumptions of decision-makers.

#### **5. Educate and train Resource Managers, develop programs, create green jobs and enforce environmental rules.**

Zero Waste is a programme within the resource recovery industry. It requires a sophisticated and specialized understanding of three specific areas of concern for the industry: market value and process, transportation economics and environmental impacts.

The resource recovery and recycling industry is in a position similar to that in which the septic and sewerage industry in British Columbia found itself prior to 2005. It now faces similar needs to train a professional force, and move away from direct government control to arms length regulatory oversight.

As with the septic industry the resource recovery and recycling industry is poised for major structural and organizational changes. The septic industry has moved from a

disorganized ad hoc trade which was largely uncomfortably and poorly managed by Environmental Health officers on a prescriptive model until the advent to the *Sewerage System Regulation (31 May 2005)*. Through the efforts of its professional body, BCOSSA (BC On-Site Septic Association), it has become the current highly professionalized industry based on site specific engineering and environmental standards which now provides environmental management leadership throughout North America. Recycling is similarly currently being transformed by Zero Waste and ZWIA to a new level and cadre of professional knowledge and excellence.

Recycling can no longer be approached as simple sideline to “garbage collection” which has burdened taxpayers and their descendants environmentally. Resource recovery requires a detailed understanding of market economics and environmental regulations. Educational programmes and certification are currently being developed and given by ZWIA to make the industry more efficient and lay the groundwork for potential green jobs.

## **6. Educate residents, businesses and visitors.**

Resource recovery facilities are currently increasingly supported by industry, such as Wall-Mart or London Drugs, which are moving rapidly to implement EPR's, and minimize their transportation costs.

Businesses are leading environmentally, because they understand that it makes smart business sense to minimize impacts. While these trends are driven by the demands of a minority of customers, they also affect the consumer patterns of a greater number of customers who have come to expect more sustainable and responsible business practices

## **7. Perform Zero Waste Assessments.**

As the social demand for Zero Waste grows, the key and central requirement is that a Zero Waste Assessment be carried out. This is a sophisticated comprehensive market assessment of both the current consumer community resource production and

separation, and of potential local markets available for the resources produced by the community.

## **8. Build Residual Separation and Research Facilities.**

Based on data from the market-based zero waste assessment for the size and demographics of the community, economically viable facilities for resource recovery are sited and designed to accommodate a Resource Recovery Park.

It is important to note that, unlike a landfill, or a simple recycling facility, which is essentially a generic social space, a Resource Recovery Park is a “site specific” and “community specific” facility. It is to be designed for both the capacity of the community concerned and for the markets available and accessible to that community, with its transportation opportunities and limitations in mind.

Furthermore, unlike a generic facility designed to receive and store resources, an RRP is a facility designed to capture and re-process recovered resources, and therefore to attract local entrepreneurship. It is a green industrial park, designed to create environmentally sustainable jobs for the new economy.

## **9. Develop New Rules and Incentives to move towards Zero Waste.**

In keeping with point 8 above, an RRP is a facility designed to transition away from “waste disposal” to “resource recovery.” Building the structure is not an end in itself. Local government must also take its cue from entrepreneurs to enact regulations to encourage the public and local businesses to shift paradigms.

## **10. Enact Extended Producer Responsibility (EPR) Rules.**

EPR regulations are being rapidly enacted and expanded in British Columbia. Zero Waste merely facilitates their implementation. Therefore when facilities are developed, EPR regulations can be more easily implemented and expanded.

EPR's are a crucial means of addressing the last 20% of costly resources that are to be kept out of landfills. EPR's are a market force to make producers modify products that

are costly to recycle or present intractable recycling hazards. They force the producer to assume the cost of re-processing, and therefore of lowering that cost by producing easier-to-recycle alternatives.

### **11. Remove government subsidies for wasting.**

Inasmuch as resources have a market value the cheap cost of land filling mixed or contaminated products is a subsidy that does not reflect the true cost of sorted products. These subsidies must therefore be eliminated to reflect the real environmental costs of waste to the public. Zero Waste programmes will then be able to assume their real competitive status in an open market.

### **12. Support Zero Waste Procurement.**

The development of the resource recovery industry as a healthy sector of the new economy depends largely on continued support by the public and government of Zero Waste certified products. A market campaign must therefore be developed to encourage both the public and government to procure Zero Waste certified products, in order to further support resource recovery facilities and the local industries associated with them.

### **13. Expand Zero Waste Infrastructure.**

Zero Waste requires a specialized infrastructure. While Zero Waste facilities compete with the market at large, they are, as noted above specialized and adapted to their communities. Larger facilities for recovery may therefore specialize in niche markets that are unavailable to smaller local facilities. To overcome these limitations and increase the ability to recover resources it is important to build a network capable of expanding the ability to deal with specialized items.

### **14. Challenge Businesses to lead the way to Zero Waste.**

As noted above (Item 6), large businesses have been quick to assume a leadership role in resource recovery and EPR's. While the will is there, smaller local businesses, given the current subsidy regime to the "waste and disposal" interest, small businesses

frequently find it cheaper to rely on wasteful practices. Small regulatory changes removing subsidies that artificially distort the resource recovery market, would make it easy to motivate many small businesses to become leaders in Zero Waste.

#### ***D. Where Are We At On The Sunshine Coast?***

Having gone over the 14 point strategy, it is important to assess where we are at today on the Sunshine Coast.

During the Pender session, a member of the public, Jim Hall proposed and was seconded by Area A director, Eric Graham, that a Zero Waste resolution be drafted and submitted to the Sunshine Coast Regional District Board of Directors (See [Appendix A](#) below.) The resolution proposes that the Sunshine Coast achieve Zero Waste by 2020, or sooner.

This resolution sets us at item 4 in the sequence. However, SuCESS achieved an attendance of about 90 people in the two workshops. In this sense we have established a foundation from which to engage the whole community, as per item 3. The workshops carried out by Richard V. Anthony included several presentations which are part of ZWIA's educational programme. We have therefore worked towards initiating steps 5 and 6 in the sequence.

From where the Sunshine Coast stands now, we are poised to complete that transition to Step 7 which requires retaining the services of a Zero Waste consultant to carry out a comprehensive professional market assessment which is critical to developing an RRP design.

It is therefore to be hoped that upon adoption of the Resolution ([Appendix A](#)), the Board of Directors at SCRCD will understand that in order to complete its commitment to the resolution, a Zero Waste consultant must be contracted to make this assessment, before proceeding with the structural design of a facility in Pender Harbour.

**APPENDIX A Zero Waste Resolution (Adopted by SuCESS May 30 2010)**

Whereas, **the Sunshine Coast Regional District has committed to the principles of Zero Waste as:**

"Producer responsibility at the front end of the problem: industrial production and design, Community responsibility at the back end of the problem: consumption, discard use and disposal and Political responsibility to bring both community and industrial responsibility together in a harmonious whole."

**and the Zero Waste Alliance's definition of Zero Waste as:**

"a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles, where all discarded materials are designed to become resources for others to use. Zero Waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them. Implementing Zero Waste will eliminate all discharges to land, water or air that are a threat to planetary, human, animal or plant health."

We, the Sunshine Coast community, urge our regional district board of directors adopt the following:

**The Sunshine Coast Regional District will set a goal to achieve a Zero Waste goal of 90% diversion of waste from landfills or incineration by the year 2020 or sooner. The Regional District will follow the ZWIA (Zero Waste International Alliance) Principles of producer responsibility, consumer responsibility and political responsibility and the 14 Practical Steps towards a market-based Zero Waste strategy which includes establishing benchmarks, setting a timeline for action and engaging the community.**

**The 14 Practical Steps to a market-based Zero Waste strategy are:**

- 1. Adopt the Zero Waste definition.**
- 2. Establish benchmarks and a timeline.**

3. Engage the whole community.
4. Demand decision makers manage resources not waste.
5. Educate and train Resource Managers, Develop programs, Create green jobs and Enforce environmental rules.
6. Educate residents, businesses and visitors.
7. Perform Zero Waste Assessments.
8. Build Residual Separation and Research Facilities.
9. Develop New Rules and Incentives to move towards Zero Waste.
10. Enact Extended Producer Responsibility (EPR) Rules.
11. Remove government subsidies for wasting.
12. Support Zero Waste Procurement.
13. Expand Zero Waste Infrastructure.
14. Challenge Businesses to lead the way to Zero Waste.

*The motion was presented to Eric Graham Eric Graham, SCRD Director for Pender Harbour/Egmont (Area A) to submit to the SCR D Board of Directors.*