



Protecting the Environment:

Entrepreneurs Working
Toward a Sustainable Future



An Entrepreneur's Guide to Benefits, Opportunities and Best Practices



Atlantic Canada
Opportunities
Agency

Agence de
promotion économique
du Canada atlantique

Canada

Working With Young Entrepreneurs



Protecting the Environment:

Entrepreneurs Working Toward a Sustainable Future

An Entrepreneur's Guide to Benefits, Opportunities and Best Practices

A Commitment to Sustainable Development

At the Atlantic Canada Opportunities Agency (ACOA), we believe that a healthy environment is essential to the development of a strong, growing and sustainable economy. We are committed to protecting the environment of this region by promoting sustainable businesses and communities in Atlantic Canada and by setting an example in the environmental management of ACOA's own operations.

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Carla MacQuarrie – Future Aqua Farms Ltd., NS
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Chad Holloway – Newfoundland Firewood, NL
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Tanya Doucet – ACOA Co-op Student
Christine Bertin – ACOA Co-op Student
Monique Bourgeois – ACOA Co-op Student

Important Information about Web site Links

Within this resource, Web site links have been identified to provide information related to the development and implementation of environmentally friendly business strategies.

Abbreviations identified in parentheses have been used throughout this guide to identify English (*E*), French (*F*) and Bilingual (*E/F*) Web sites.

This publication is also available electronically at www.acoa-apeca.gc.ca

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Table of Contents

Introduction

Section 1 – Building Awareness

- 1.1 Environmental Responsibility
- 1.2 Developing an Environmental Mindset
- 1.3 Environmental Leadership
- 1.4 Eco-Efficiency - A Framework for Environmental Action
- 1.5 Eco-Efficiency and Sustainable Development
- 1.6 Benefits of Eco-Efficiency

Section 2 – Environmental Leadership and Eco-Efficiency in Action

- 2.1 Building a Culture of Environmental Leadership
- 2.2 Thinking About Eco-Efficiency in Your Business
- 2.3 Developing an Eco-Efficiency Strategy for Your Business
- 2.4 How Businesses are Achieving Eco-Efficiency Gains

Section 3 – Online Resource Links

- 3.1 General Information on Sustainability and Eco-Efficiency
- 3.2 Eco-Efficiency Assessment Tools
- 3.3 Sustainability and Eco-Efficiency Strategies
- 3.4 Environmental Standards and Certification
- 3.5 Sustainability and Eco-Efficiency Solutions

References

“The environment, whether local, regional, or global, is a major concern for many young Canadians. They see current practices that show a lack of respect for ecosystems and a misuse of resources. They see problems in our society’s systems, as well as a lack of awareness at an individual level. Many youth are concerned that most people are not aware of the impact they have on the environment and the delicate balance that exists between people and the environment. The challenge for many young people and their organizations is to make these issues real for others.”



Introduction

“The environment, whether local, regional, or global, is a major concern for many young Canadians. They see current practices that show a lack of respect for ecosystems and a misuse of resources. They see problems in our society’s systems, as well as a lack of awareness at an individual level. Many youth are concerned that most people are not aware of the impact they have on the environment and the delicate balance that exists between people and the environment. The challenge for many young people and their organizations is to make these issues real for others.”

Source: Canadian Youth Perspectives on Sustainable Development

Before young Atlantic Canadians are able to acknowledge and promote entrepreneurship as an activity that supports sustainable development, it is important that they understand how entrepreneurs are able to meet environmental challenges and appreciate the positive impact that this can have on society. In doing so, it is anticipated that they will also discover how entrepreneurs benefit from sustainable business practices and the increasing importance of environmental leadership within small and medium-sized enterprises.

As the federal government department responsible for economic development in the Atlantic region, the Atlantic Canada Opportunities Agency (ACOA) continues to support efforts to increase the number of environmentally aware and active entrepreneurs. ACOA recognizes that economic progress and environmental sustainability must move forward within an interdependent framework and believes that knowledge, hard work and innovation will play a key role in achieving this goal.

ACOA is pleased to provide this publication for the benefit of existing, new and aspiring entrepreneurs. Ultimately it will be of value to all entrepreneurs who have an interest in improving the way they do business while minimizing their impact on the environment, but it should be of special interest to youth who have yet to explore the benefits and opportunities associated with becoming an environmental leader within Atlantic Canada’s business community.

It is anticipated that this resource will help you:

- increase your awareness of the needs and benefits associated with environmental leadership and sustainable business practices;
- promote the development and improvement of environmentally friendly business practices; and
- build upon the environmental ideas and achievements of successful entrepreneurs in Atlantic Canada.

Section 1 – Building awareness

This section will develop an understanding of what it means to become an environmentally conscious entrepreneur. By profiling the value, opportunities and direct benefits associated with environmental leadership and eco-efficiency this section provides a starting point for entrepreneurs who want to increase the level of sustainability in their business.

1.1 Environmental Responsibility

“A business does not have to harm the environment to be profitable. The most important thing to realize is that by becoming environmentally sustainable, a business can operate more efficiently and make a positive contribution to society.”

*Chad Holloway, Newfoundland Firewood
Port Blandford, Newfoundland & Labrador*

Efforts to ensure a sustainable future will require that all individuals, organizations and levels of government work together to achieve this goal. Given this reality, the economic contributions that entrepreneurs make to society must be balanced by a demonstrated commitment toward the environment.

Of additional significance for entrepreneurs is the reality that environmentally friendly business practices result in direct benefits to a business operation, thereby encouraging a natural and mutually beneficial relationship between entrepreneurship and environmental leadership.

1.2 Developing an Environmental Mindset

“My motto for entrepreneurs who want to make their business more environmentally sustainable is... Do it for your own satisfaction first, people will follow.”

*Philippe Levesque, Macrophylla
Dundee, New Brunswick*

As you begin to explore the idea of increasing the level of environmental action within your business, consider the following:

- by using renewable resources and energy you are not only protecting the environment but improving opportunities for future generations;
- conservation practices save money and can be incorporated into your business with relative ease;
- encouraging new ideas and embracing innovation will enable you, your employees and your customers to take advantage of new and sustainable technologies;

- buying and developing environmentally friendly products and services helps protect the environment and can create new market opportunities; and
- understanding the potential impact your business operation can have on the environment is important to the local community and your liability exposure.

1.3 Environmental Leadership

“Some environmental practices will be easy to embrace and yield big dividends, while others will take more perseverance and may have a smaller impact in the short term. Creating a priority list and setting some definitive goals are important first steps as an entrepreneur.”

*Kevin Jeffrey, Avalon House
Belfast, Prince Edward Island*

“My motto for entrepreneurs who want to make their business more environmentally sustainable is... Do it for your own satisfaction first, people will follow.”

Simply stated, environmental leadership is about individuals doing their part to ensure a healthy environment for future generations. The notion of environmental leadership in business does not mean that entrepreneurs need to compromise the profitability of their business operation. It does, however, require that entrepreneurs recognize environmental leadership as an opportunity to work with greater efficiency and to capitalize on new product or service opportunities that will have a positive impact on the environment and their business.

According to the Center for Small Business and the Environment¹, entrepreneurs of small and medium-sized enterprises are well suited to promote a culture of environmental leadership because:

- they represent a huge talent pool filled with the kind of opportunity, drive, creativity, skills and experiences needed to address a wide range of environmental challenges;
- they are rooted locally and have a greater likelihood of understanding environmental issues as they may affect their communities, workers and families; and

¹ Center for Small Business and the Environment (E) - <http://www.geocities.com/aboutcsbe/>



- they have traditionally led the way when it comes to efficiency and innovation.

1.4 Eco-Efficiency – A Framework for Environmental Action

“One of the greatest and most rewarding achievements as an entrepreneur has been the development of a highly effective infrastructure for the ecological operation of my business.”

*Geordie Ouchterlony, Home Grown Organic Foods
Halifax, Nova Scotia*

As a framework for environmental action, the concept of eco-efficiency:

- provides a practical and systematic approach to setting and achieving environmental performance objectives in business;
- promotes a management philosophy which encourages businesses to become more competitive, more innovative and more environmentally responsible;
- encourages entrepreneurs to “do more with less” by creating quality products and services while reducing resource use, waste and pollution along the entire value chain; and
- is about more than just meeting environmental regulations or managing waste and pollution after a business is created, it is about developing businesses that prevent and minimize waste in the first place.

Source: Sustainable Development, ACOA Web site

To discover what you already know about eco-efficiency, or areas that you may wish to explore further, take a few moments to complete Industry Canada’s online Eco-Efficiency Questionnaire (E/F) at:

http://strategis.ic.gc.ca/sc_innov/productivity/engdoc/eco-questions.html

1.5 Eco-Efficiency and Sustainable Development

“The innovative production processes provided by our business have had a positive impact on the aquaculture industry, especially in light of increasingly stringent environmental standards, the need for sustainability and an ethical responsibility to preserve natural ecosystems.”

*Carla MacQuarrie, Future Aqua Farms Ltd.
Chezzetcook, Nova Scotia*

It is important to clarify that process efficiency and product enhancement are both important ideas that define the role of eco-efficiency.

- **Process efficiency** - involves minimizing materials, energy and toxins throughout the entire business operation.
- **Product enhancement** - involves improving products to extend their durability and increase their service intensity.

The majority of eco-efficient businesses traditionally place a significant emphasis on process efficiency by minimizing materials, energy and toxins within their business operation. As a result entrepreneurs may inadvertently forget to consider and develop opportunities related to product enhancement.

Increased levels of sustainable development will be realized through product enhancement because it addresses the need for technological change and innovation by stressing product durability and service intensity.

1.6 Benefits of Eco-Efficiency

“As a result of our effort to incorporate environmentally friendly business practices, we have increased our efficiency, customer satisfaction and profitability.”

*Pierre Pelletier, La Savonnerie Olivier Soapery
Ste-Anne-de-Kent, New Brunswick*

The benefits that eco-efficient practices provide for business will often serve as the incentive required to energize entrepreneurs and employees of small and medium-sized enterprises into action.

Through eco-efficiency, entrepreneurs increase their ability to:

- reduce inefficiencies and waste;
- lower operating costs;
- improve quality;
- continuously improve processes and practices;
- enhance business image;
- increase employee motivation;
- improve workplace safety and employee health;
- maintain or increase market share;
- stimulate innovation;
- develop a competitive advantage;
- increase profitability and access to capital;
- minimize their impact on the environment;
- reduce environmental liabilities; and
- meet government regulations.

Sources: Eco-Efficiency - What Small and Medium-Sized Companies Should Know, ACOA;

Good Business Sense, Industry Canada.

Section 2 – Environmental Leadership and Eco-Efficiency in Action

Understanding the dynamics of environmental leadership is an important step in increasing the sustainability of small and medium-sized enterprises. Equally important is that entrepreneurs are ready to promote the type of environmental leadership that will enable their businesses to fully capitalize on the benefits eco-efficiency has to offer.

This section will offer ideas and strategies to help entrepreneurs promote a culture of environmental leadership and increase the level of eco-efficiency within their business operation. Environmental experiences of Atlantic Canadian entrepreneurs will also be utilized in an effort to demonstrate the relevance and impact of these ideas.

2.1 Building a Culture of Environmental Leadership

The concept of environmental leadership in business means that “the environment needs to be part of all decision-making to ensure the best social, economic and environmental outcomes for all.”

*Don Henry, Executive Director
Australian Conservation Foundation*

One of the most obvious indications that a culture of entrepreneurial leadership exists can be found by observing and talking to the people who work within a business. According to Jennifer Corson of Renovators Resource, taking pride in the environmental aspects of their work provides entrepreneurs and employees with increased levels of motivation and commitment. In the case of Corson and her team, the protection of the environment has become the focus of what her business is about.

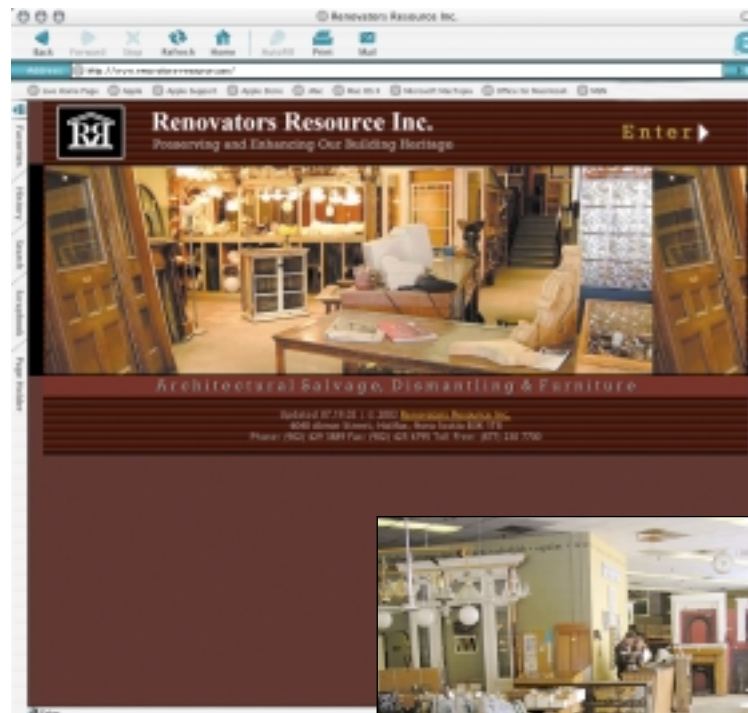
Renovators Resource

Halifax, NS

“Our industry might not produce many millionaires, but we have a group of people who enjoy and take pride in the environmentally friendly nature of their work.”

*Jennifer Corson, President
Renovators Resource Inc.*

Renovators Resource Inc. is an architectural salvage company that employs a dismantling crew to salvage building materials destined for landfill. The business has a retail location where these salvaged materials are sold and also produces a line of furniture called 'ReFurnishings' that is made from salvaged material stock.



Employees at Renovators Resource use every opportunity to reduce, reuse and recycle. Garbage is rarely taken to the landfill and the business has developed a network of companies that reuse what it does not. “Often times”, says owner Jennifer Corson, “our line of furniture makes use of the pieces that we can’t sell. It’s what the company represents, and we strive to continue our focus of recycling. We also promote the use of more ecologically friendly methods of sanding, painting and refinishing to homeowners, renovators and builders.”

Renovators Resource provides Corson the opportunity to enjoy what she does while making a positive contribution to the environment. The business offers a work environment in which employees enjoy themselves and are proud of the environmentally friendly aspects of their work. The challenge for her as an environmentally sustainable entrepreneur is to find and research the viability of new opportunities that fit within the philosophy of her business.

To learn more about Renovators Resource visit
www.renovators-resource.com (E)



When a strong culture of environmental leadership exists within a business, it often evolves through the hard work of entrepreneurs and their employees. By involving employees in the development and implementation of a strategy promoting eco-efficiency, entrepreneurs are essentially acknowledging the benefits of sharing responsibility and the value of collaboration within a business.

Creativity, initiative and the benefits of networking with a variety of stakeholders has helped New Brunswick entrepreneur Philippe Levesque nurture a culture of environmental leadership whereby social, economic and environmental priorities have become part of a well balanced approach at Macrophylla.

Macrophylla

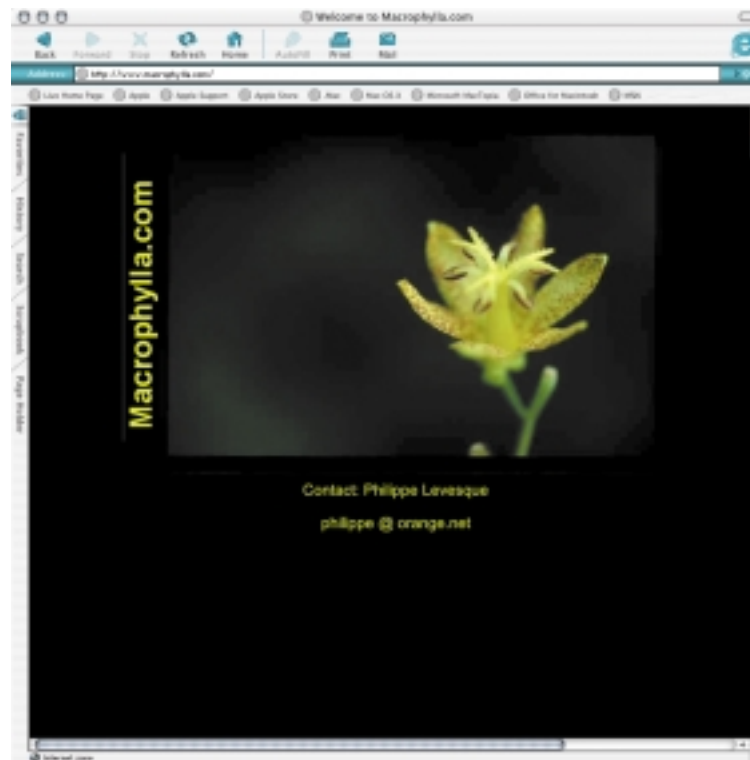
Dundee, NB

“Environmentally friendly business practices are fully integrated into the operation of Macrophylla. Our employees are fully aware of these practices and are happy to work in a way that is good for the planet.”

*Philippe Levesque, Owner
Macrophylla*

Macrophylla is an environmentally sustainable nursery that produces a variety of ornamental plants. According to owner Philippe Levesque, the business uses no plastic or non-biodegradable products. In keeping with its strong environmental philosophy, Macrophylla uses biodegradable fiber pots, reusable wooden identification tags and craft paper and raffia as wrapping materials in place of plastic bags. In addition, there are absolutely no chemical fertilizers used. Instead Levesque has opted to make his own dry and liquid fertilizers using various combinations of seaweed, horsetail and comfrey teas. The soil used for growing ornamental plants at Macrophylla is prepared by hand using mushroom compost from a local factory and shredded leaves from a neighbouring city. In place of commercial weed killers, Levesque also prefers to use his own newspaper and cedar-based mulch.

To develop his environmental strategies for organic gardening, Levesque relied on what he refers to as “a reasonable knowledge of organic gardening” and adapted it on a larger scale. Exhibiting a true entrepreneurial spirit, Levesque has learned by networking and sharing ideas with others, and through trial and error. He also promotes the benefits of researching ideas and using local products and services whenever possible.



For entrepreneurs who are interested in becoming environmentally sustainable Levesque offers the following advice, “speak with suppliers about alternatives, ask customers what they think and visit businesses in a similar field of activity that already operate using environmentally friendly practices”.

To reach Macrophylla: **philippe@orange.net**

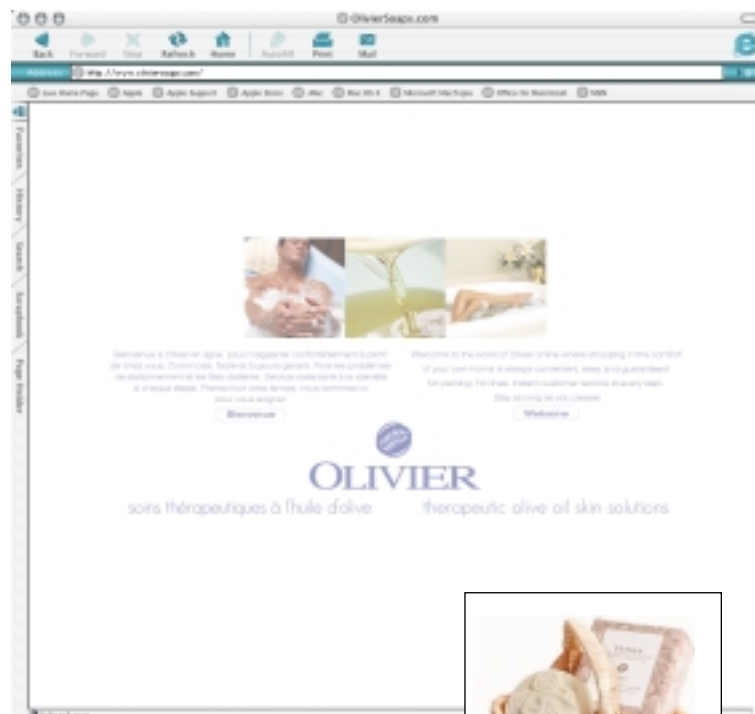
In order to achieve a successful level of eco-efficiency entrepreneurs often have to address challenges associated with time, implementation and education. Overcoming some of these challenges is a priority that has resulted in big dividends for La Savonnerie Olivier Soapery, a family owned New Brunswick business operated by Pierre Pelletier and Isabel Gagné.

La Savonnerie Olivier Soapery

Ste-Anne-de-Kent, NB

“To encourage a culture of environmental stewardship among entrepreneurs it is important to recognize outstanding environmental efforts and increase support for environmental education.”

*Pierre Pelletier, Vice-President
La Savonnerie Olivier Soapery*



La Savonnerie Olivier Soapery is a family owned and operated eco-manufacturer of natural skin care products that are exported internationally. In addition to manufacturing environmentally friendly products, owners Pierre Pelletier and Isabel Gagné also work hard to ensure that their business operates within an eco-efficient framework.

To help the business achieve a high level of eco-efficiency, La Savonnerie Olivier Soapery is a member of the Eco-Vision Certification Program. This Program provides environmental standards for things such as lighting, recycling, re-using, reducing energy use, alternative packaging materials, and green marketing activities.

Pelletier and Gagné’s eco-efficiency efforts include simple things like re-using paper and more complex issues such as product packaging. At La Savonnerie Olivier Soapery packaging is made with recycled paper, un-waxed cardboard and food coloring. Products are also available without packaging to reduce commercial waste.

While the benefits of operating a highly efficient and sustainable business are worthwhile, Pelletier and Gagné acknowledge that there are significant challenges involved. For technical support the owners utilize information from the Irving Eco-Centre: La Dune de Bouctouche. This community resource offers up-to-date knowledge and practical suggestions that can be directly applied to their business.

Pelletier and Gagné have built their business on the premise that economic development must not be detrimental to the sustainability of the environment, and in doing so have promoted environmental stewardship to their suppliers and customers.

To learn more about La Savonnerie Olivier Soapery visit www.oliviersoaps.com (E/F)

To learn more about the 'Living in Balance' Eco-Vision Certification Program visit

<http://www.ecotourismnb.com/op-cert.htm> (E)

<http://www.ecotourismnb.com/fr/ap-cert.htm> (F)

As demonstrated by the efforts of La Savonnerie Olivier Soapery, Macrophylla and Renovators Resource Inc., some of the more important elements in a business environment that embrace environmental leadership include:

- **Vision** - An entrepreneur’s vision for his or her business will ultimately include values that will support and/or encourage sustainable business practices. These values may eventually emerge in the form of environmental standards, objectives and/or goals that form the foundation of an environmental strategy.
- **Standards** - Standards provide a basis to manage, guide and assess the performance of environmental efforts. These standards can be simple objectives, be part of a certification program or result in a formal environmental management plan.

“To encourage a culture of environmental stewardship among entrepreneurs it is important to recognize outstanding environmental efforts and increase support for environmental education.”



- **Commitment** - Long-term dedication toward environmentally sustainable ideas and solutions is important as substantive benefits are not always derived in the short term, nor are they always achieved without risk.
- **Support** - Clear communication of environmental issues, needs and goals complemented by training, research and other support mechanisms encourages effective environmental business practices.
- **Collaboration** - The goal of sustainability in business will not be realized without the help of others. Establishing effective teams and information networks for the exchange of ideas, problem solving and research will help build the foundation required to meet environmental challenges.
- **Creativity** - Creative ideas, solutions and innovative products, processes and services are needed to address environmental issues.
- **Passion & Knowledge** - Environmental leadership requires a desire for knowledge and an interest in improving existing environmental practices.

2.2 Thinking About Eco-Efficiency in Your Business

Entrepreneurs who want to improve eco-efficiency levels within their business can think about the potential in terms of a progressive framework that challenges them and their employees to Redesign, Rethink and Reshape.

- **Redesign processes** to reduce the consumption of resources, reduce pollution and avoid risks, while at the same time reducing costs.
- **Redesign products** so that they will have less impact on the environment, while still providing functionality to consumers.
- **Rethink your markets** as you find innovative ways to meet customer needs.
- **Reshape supply and demand** through improved product and service delivery by demonstrating the value-added benefits your business offers.

Source: Sustainable Business Online Resources

Halifax-based entrepreneur, Geordie Ouchterlony is a prime example of someone who has thought about the value of sustainable business practices. He is committed to using environmentally friendly processes in his business and shares his knowledge of organic food production in an effort to help customers meet their health, wellness and environmental needs.

Home Grown Organic Foods

Halifax, NS

"Businesses will try to provide consumers with whatever they ask for. By making consumers aware of the benefits associated with buying sustainable products entrepreneurs will promote environmental stewardship."

*Geordie Ouchterlony, Owner
Home Grown Organic Foods*



Home Grown Organic Foods (HGOF) is dedicated toward satisfying the growing demand for healthy, locally grown, affordable and ecologically sustainable organic food. According to owner Geordie Ouchterlony, Home Grown Organic Foods differs from most agrifood businesses in that every decision is weighted heavily by environmental and social implications.

Ouchterlony believes he has a greater impact educating his consumers and promoting sustainability as an entrepreneur, than as a consumer. For example, the packaging used at HGOF to deliver food is reusable and the business also composts and recycles on a regular basis. As an entrepreneur Ouchterlony has the opportunity to educate potential customers on the benefits of eating organically grown foods which, among other benefits, indirectly promotes the value of sustainable farming practices.

Future environmental initiatives for Home Grown Organic Foods include cooking classes. As a chef this will provide Ouchterlony with the opportunity to encourage others

to use organic food as well as to demonstrate how an environmentally conscious person operates a household.

Ouchterlony believes that environmentally conscious entrepreneurs who are trying to make their business more eco-efficient should research, talk with experts, keep it simple and have fun!

To learn more about Home Grown Organic Foods visit www.hgof.ns.ca (E)

2.3 Developing an Eco-Efficiency Strategy for Your Business

Eco-efficient practices tend to develop and evolve over time and it should be emphasized that any effort made to incorporate aspects of eco-efficiency in a business is a move in the right direction and will ultimately have a positive impact on the environment. Sometimes simple approaches might be overlooked, but if recognized can turn into opportunities for increasing public awareness and helping minimize our impact on the environment. The efforts of Newfoundland Firewood's owner Chad Holloway exemplify the point that any entrepreneur can have a positive impact on the environment and their business if they have the desire.

Newfoundland Firewood

Port Blandford, NL

"Entrepreneurs and all levels of government need to work together as leaders in promoting and supporting environmentally friendly products, services and business practices."

*Chad Holloway, Owner
Newfoundland Firewood*

Newfoundland Firewood processes and bags firewood and kindling for recreational fires. The company primarily supplies product to service stations, private and government-owned parks where it is then resold to consumers. During the processing phase, waste from preparing and packaging the wood consists of short ends of birch, birch bark, and sawdust. Owner Chad Holloway works hard to ensure that his business is as eco-efficient as possible by selling all the short end pieces locally at a reduced price for firewood and bagging the birch bark which is then sold as tinder for lighting fires instead of newspapers.

"Entrepreneurs and all levels of government need to work together as leaders in promoting and supporting environmentally friendly products, services and business practices."

Newfoundland Firewood processes birch as firewood because in Newfoundland this is essentially a by-product of the forestry industry. Due to the twists and bends most birch is not able to be used for logging material and since birch is a hardwood it cannot be used to make pulp for paper.

Although there are no major uses for small birch by logging companies, they still have to cut and remove the birch when using clear cutting practices. Holloway saw an opportunity to create a market for this product.

According to Holloway, "some people say that Newfoundland Firewood is not helping the environment because we are selling a product that emits smoke into the air. The thing is, at least in the foreseeable future, there will likely be campfires and fireplaces. By using our product consumers are burning waste woods instead of destroying additional habitat used by wildlife."

The variety and level of eco-efficiency demonstrated by businesses are important to recognize in the sense that they all bring value to the environment and society. Newfoundland Firewood's effort to provide firewood and kindling from industry waste is a good example of the re-valorization of by-products. In contrast to this, Avalon House in Prince Edward Island promotes eco-efficiency through eco-innovation with a focus on developing markets for sustainable products and services.

To reach Newfoundland Firewood: nfldwood@yahoo.com

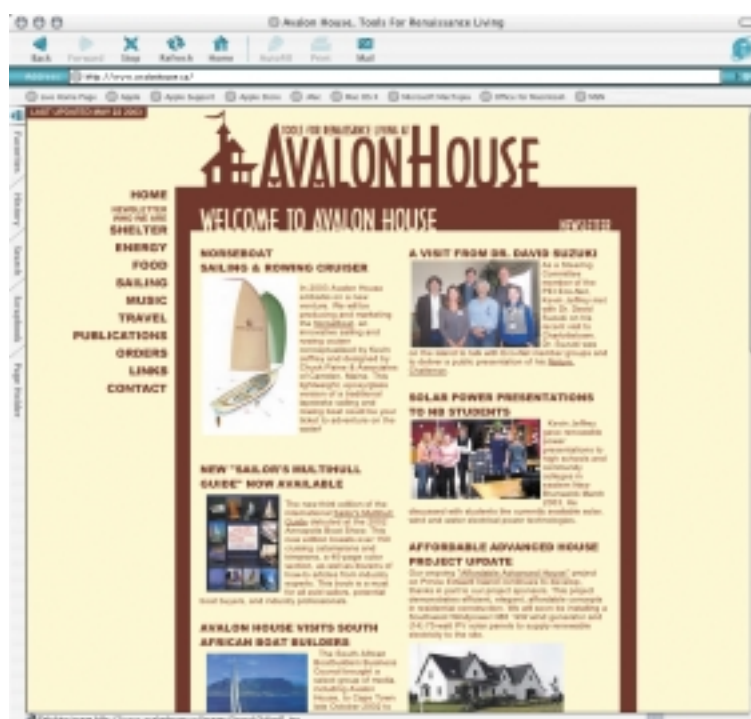


Avalon House

Belfast, PE

"The positive impact of Avalon House is that our products and services help people do more with less, to live well with a small environmental footprint. The more businesses who adopt these practices, the more sustainable our environment and communities become."

Kevin Jeffrey, President
Avalon House



Avalon House supplies tools For 'Renaissance Living', which according to President Kevin Jeffrey is defined as "living in a sustainable manner with an emphasis on quality of life". The main areas of expertise at Avalon House include consulting/design services and the sale of products to help people create sustainable homes, energy and food production systems. Avalon House also promotes recreational pursuits that emphasize environmental sustainability and involve a low level of consumerism.

Environmental standards serve as important benchmarks for many of the services and products provided through Avalon House. For example, the R2000 program is one benchmark for residential construction. Likewise, the national organic food standards adopted by Canada provide important benchmarks in the area of food production at Avalon House.

In addition to providing environmentally sustainable products and services, Avalon House is located in a highly efficient passive solar structure, and its business equipment is all

geared to be highly energy efficient. The co-owners are currently developing a renewable power demonstration site on the property where the business is located. Once completed, this site will be open on a limited basis to the public, and will offer courses on renewable power.

To learn more about Avalon House visit
www.avalonhouse.ca (E)

Regardless of the approach taken to increase levels of eco-efficiency within a business, entrepreneurs can improve their effectiveness if they begin the process by using a strategy that will enable them to:

- **develop an awareness** of environmental issues and practices as they relate to operating a business;
- **recognize opportunities** that exist to increase and benefit from environmental products and services;
- **assess, identify and prioritize** environmental needs and opportunities within a business; and
- **implement, monitor and improve** environmentally friendly business practices.

An extremely effective and simple-to-use tool called Three Steps to Eco-Efficiency has been developed by Industry Canada to assist entrepreneurs in creating an eco-efficiency program tailored to meet their needs. The process involves a self-assessment, strategic planning and a benefit-cost analysis section and can be accessed online at:

<http://strategis.ic.gc.ca/epic/internet/inee-ee.nsf/vwGeneratedInterE/ef00012e.html> (E)

<http://strategis.ic.gc.ca/epic/internet/inee-ee.nsf/vwGeneratedInterF/ef00012f.html> (F)

2.4 How Businesses are Achieving Eco-Efficiency Gains

Businesses are benefiting through eco-efficiency by:

- **optimizing processes** that enable entrepreneurs to prevent pollution in the first place;
- **creating zero waste** by using the waste and by-products of one industry as raw materials and resources for another;
- **embracing the value of knowledge and networking** to help entrepreneurs share resources and increase the effective use of their physical assets;

- **promoting eco-innovation** in a way that uses new knowledge to help entrepreneurs make old products more resource efficient to produce and use;
- **developing new services** that encourage consumers to consider the full life cycle impact of products (i.e. product durability and recycling); and
- **encouraging business-led innovation** to develop new and more sustainable products to replace traditional product markets.

Adapted from: Measuring Eco-efficiency - A Guide to Reporting Company Performance, WBCSD

Optimizing processes can be achieved relatively easily if entrepreneurs take the time to research and implement these strategies. As demonstrated by Norton's Cove Studio and owner Janet Davis, the advantages of process efficiency can result in cost savings, the protection of natural eco-systems and improved health and safety.

Norton's Cove Studio Inc.

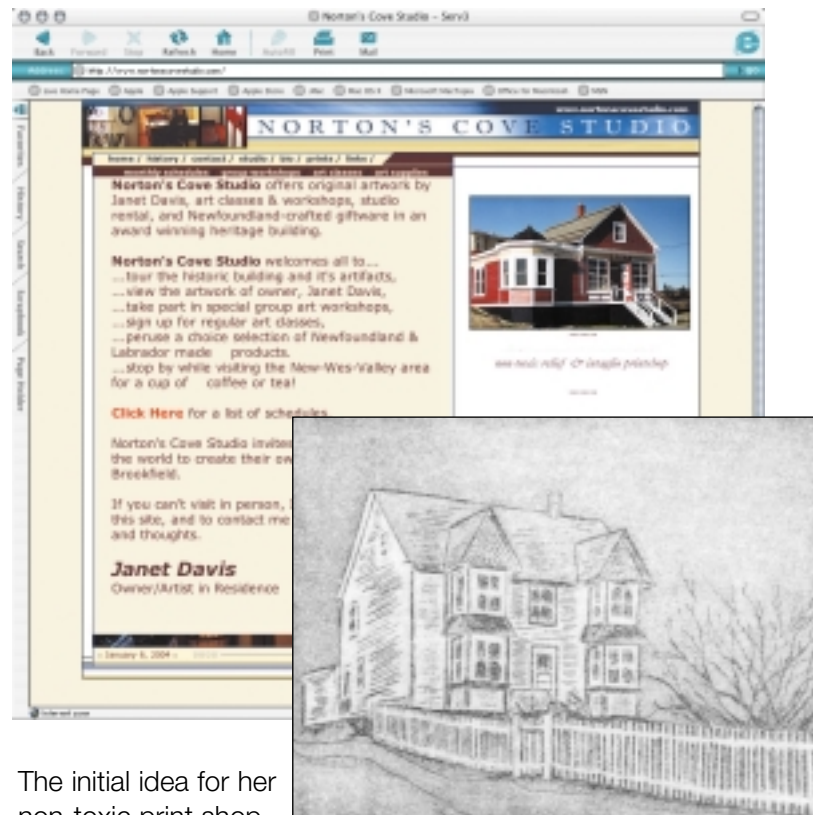
Wesleyville, NL

"As entrepreneurs and responsible citizens we need to ask the question - Why pollute our planet and bodies when it is so unnecessary?"

*Janet Davis, Owner
Norton's Cove Studio*

Norton's Cove Studio Inc. is an art studio that has a fully operational non-toxic intaglio and relief print shop. To the best of owner Janet Davis' knowledge it is the only completely non-toxic print shop in the province of Newfoundland and Labrador.

The non-toxic techniques used by Davis utilize regular household supplies in lieu of harmful chemicals and toxins to create the same effects. According to research, "there are 112 toxic and noxious substances commonly used by practitioners of traditional printmaking media. A non-toxic print shop is suitable for use by all ages, whereas age restrictions are put on a traditional print shop because of harmful environmental effects".



The initial idea for her non-toxic print shop came from a workshop during Davis' studies at the Nova Scotia College of Art and Design. Aside from the environmental and health benefits associated with environmentally sustainable business practices, Davis also enjoys the fact that there is no need for extraction systems, respirators and disposing of toxic chemicals. She believes that many artists, aspiring artists and customers are concerned about health and the environment and, as a result, the concept of a non-toxic print shop has been very well received by those who have visited her studio.

To learn more about Norton's Cove Studio visit
www.nortonscovestudio.com (E)

To learn more about Non-Toxic Intaglio Printmaking visit
http://www.mtsu.edu/~art/printmaking/non_toxic.html (E)

Businesses that optimize processes are not always able to prevent or utilize by-products or waste. Atlantic Innovative Enterprises is an example of entrepreneurs working to support the concept of zero-waste. In the case of this Montague, Prince Edward Island business, this is achieved by using the waste or by-products from other businesses to manufacture their products.

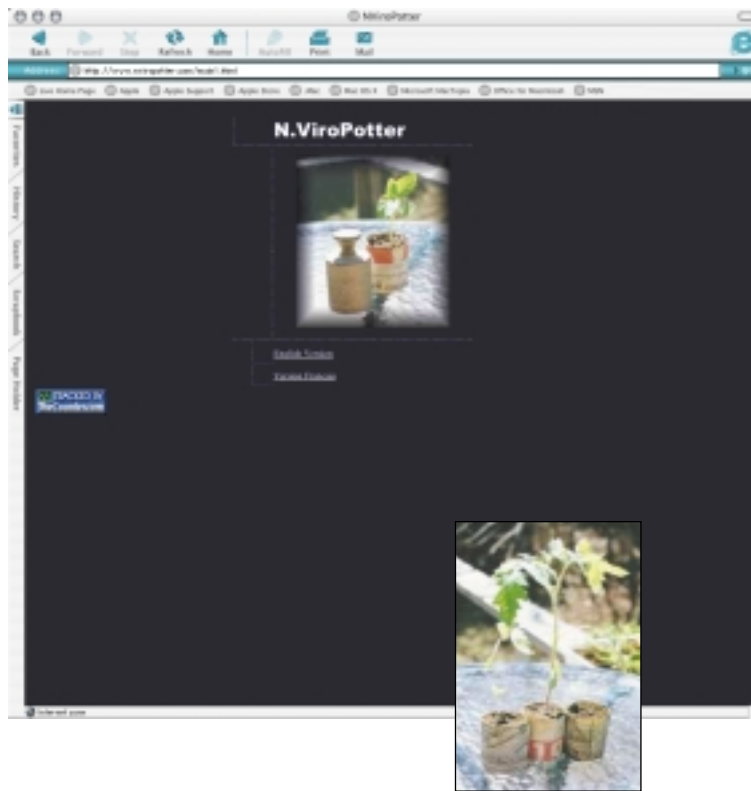


Atlantic Innovative Enterprises

Montague, PE

"The products manufactured at Atlantic Innovative Enterprises are part of a trend toward more responsible environmental practices."

Tom Haan, Co-Owner
Atlantic Innovative Enterprises



"The products manufactured at Atlantic Innovative Enterprises are part of a trend toward more responsible environmental practices."

Atlantic Innovative Enterprises (AIE) is a small manufacturing company that is focused on developing new environmentally friendly products. Currently AIE produces wooden rollers (Nviro Potter) for making environmentally friendly seedling pots using newspaper.

The environmental benefits of this product are numerous. In addition to the fact that the newspaper seedling pot is biodegradable and enables the roots of seedlings to grow through easily, the roller itself is manufactured from lumber

too small for most other purposes. This enables AIE to reduce its operating costs and recycle what would otherwise become waste lumber.

As an evolving manufacturer, everyone involved in AIE is familiar with the environmental aspects of the business. This awareness is promoted through mentoring and group discussions. The owners of AIE also believe that an entrepreneur's vision should incorporate environmental values and that this vision is an integral part of how you do business.

An ongoing challenge that the partners of AIE work to overcome is the sourcing of markets for waste or by-products. AIE partner Tom Haan believes that "people are starting to value products that are environmentally sustainable and are willing to pay for them. People like to know that you want to make a difference by promoting environmental stewardship within your business".

To learn more about Atlantic Innovative Enterprises visit www.nviropotter.com (E/F)

As expressed by Nycki Temple (Ecowise Products Inc.) and Marc Landry (Touche Organik Touch), developing eco-efficient processes and working toward a policy of zero-waste is more likely to be achieved once entrepreneurs realize the potential value of networking and education.

Ecowise Products Inc.

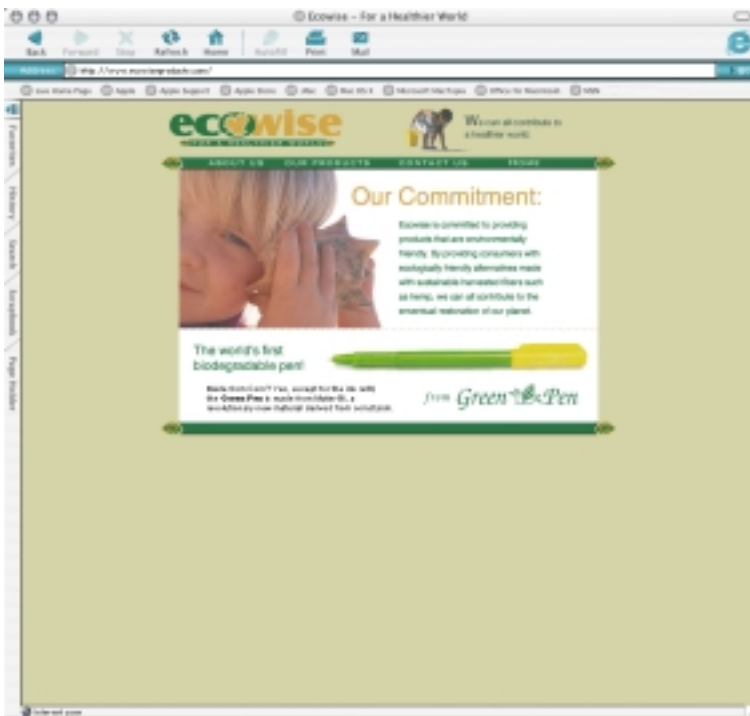
St. John's, NL

"We educate buyers on the environmental benefits of our products and they in turn educate their customers."

Nycki Temple, Co-Owner
Ecowise Products Inc.

Ecowise Products Inc. manufactures a wide range of environmentally friendly products utilizing materials such as hemp, organic cotton and recycled plastic for fleece. In addition to buying supplies and products from eco-friendly suppliers, the owners also strive to encourage environmental stewardship within the operation of their business by recycling, reducing and reusing materials that might normally be discarded.

Co-owner Nycki Temple believes that promoting environmental leadership within the business community does not have to be complicated and can be made as simple as incorporating locally offered eco-services within the operation of a business. For example, a restaurant owner might use locally grown organic foods, or other entrepreneurs can support recycling depots or promote



and participate in community-based environmental projects. It all helps nurture an environmental consciousness among entrepreneurs and establish an eco-efficient network within the business community.

To learn more about Ecowise Products Inc. visit www.ecowiseproducts.com (E)

The idea of sharing the benefits stemming from the operation of an eco-efficient enterprise, with clients, suppliers, other entrepreneurs and the public in general, is an important element in instilling a culture of environmental leadership in Atlantic Canada.

Touche Organik Touch

Beresford, NB

"Finding environmentally conscious suppliers and increasing the level of consumer awareness are important factors for environmentally friendly entrepreneurs."

Marc Landry, Owner
Touche Organik Touch

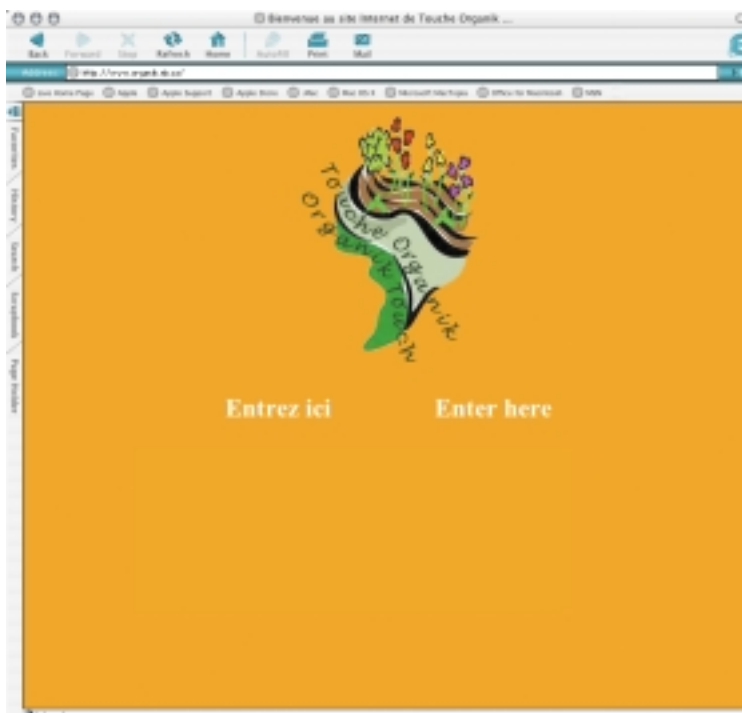
Touche Organik Touch specializes in environmentally friendly gardening and lawn care by offering organic fertilizers, consultation and project management services. As an entrepreneur, Marc Landry applied his background as an environmental technician by identifying a market that he could develop and creating Touche Organik Touch. As a project consultant and educator Landry helps people develop and

"We educate buyers on the environmental benefits of our products and they in turn educate their customers."

apply sustainable lawn and gardening practices that are beneficial to the environment and the people he serves.

Touche Organik Touch also promotes sustainable lawn care and gardening through the sale of environmentally friendly products that have traditionally been developed by larger companies using harmful chemicals.

Landry acquired the knowledge he needed to develop and operate his business through networking, personal experiences and a post secondary education. He advocates taking the time to ensure that all aspects of the business are environmentally friendly because it will help develop customer loyalty while having a positive impact on the environment.



Some of the challenges that Landry deals with as an environmental entrepreneur involve awareness education and product availability. It is Landry's belief that employees and consumers must be educated, and he attempts to meet this need using workshops and advertising. In the future Landry hopes to find and/or develop new environmental products for the consumer market.

To learn more about Touche Organik Touch visit www.organik.nb.ca (E/F)



“There is a growing demand for environmentally friendly products. Many consumers are willing to spend a little more to buy products that will benefit the environment rather than those that contribute to its destruction.”

The creativity and passion entrepreneurs possess has led Hillary Oram, owner of Newfoundland Essentials, toward the production of eco-efficient body products. As an example of eco-innovation, Oram’s products clearly demonstrate the value of promoting the consumption of sustainable products that are used on a daily basis.

Newfoundland Essentials

Glovertown, NL

“There is a growing demand for environmentally friendly products. Many consumers are willing to spend a little more to buy products that will benefit the environment rather than those that contribute to its destruction.”

*Hillary Oram, Owner
Newfoundland Essentials*

Each day thousands of products are used that have harmful effects on both the body and the environment. Newfoundland Essentials was born out of a need for environmentally friendly products that are made without using destructive environmental practices.

Owner Hilary Oram especially likes the challenge of developing and creating new ideas while knowing that they are environmentally sustainable. Her all-natural bath and beauty products are handcrafted without the use of harmful chemicals, preservatives or colorants. The packaging for her products is biodegradable, reusable or recyclable.

Oram says that environmentally responsible products have always been important to her and that she has learned to incorporate sustainable strategies into the daily operation of her business. She has accomplished this primarily through researching and sharing ideas.

The major challenge that exists for Newfoundland Essentials is that not all consumers are concerned about purchasing

environmentally friendly products. For example, some people are color-oriented and will not purchase a natural product that does not contain colorants. Oram believes that these challenges will eventually be overcome through a combination of increased consumer awareness and a continued focus on product innovation.

To learn more about Newfoundland Essentials visit www.nfessentials.com (E)



The success of Future Aqua Farms Ltd. in Chezzetcook, Nova Scotia illustrates the value of business-led innovation and its importance in achieving required levels of sustainability to meet the needs of future generations.

Future Aqua Farms Ltd.

Chezzetcook, NS

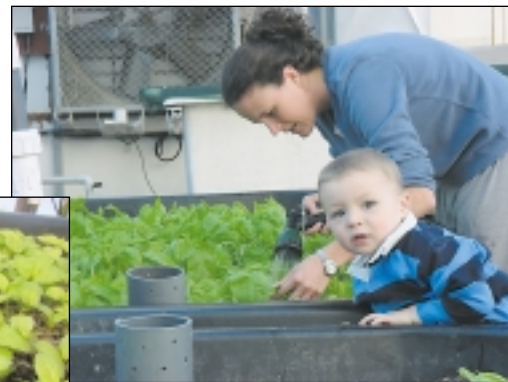
“Research is the key to incorporating environmentally friendly practices within a business. While the payback may not always be immediately evident, it will become obvious in the long-term.”

*Carla MacQuarrie, Co-Owner
Future Aqua Farms Ltd.*

Future Aqua Farms Ltd. is an environmentally efficient food production system. Through the integration of aquaculture and hydroponics, waste products and the utilization of water are



“Research is the key to incorporating environmentally friendly practices within a business. While the payback may not always be immediately evident, it will become obvious in the long-term.”



dramatically reduced. The concept behind Future Aqua Farms Ltd. is to produce fish in harmony with plants. To achieve this, aquaculture effluent from the fish farming process is used to nourish plants and is cleaned naturally in the process. Once the water has been filtered by the plants it is returned to the fish culture tanks as fresh water. In a traditional aquaculture system the effluent would be dumped and replaced by fresh water from another source, thus creating pollution and requiring the ongoing consumption of water resources.

The management team of Future Aqua Farms Ltd. has a wide range of training and experience. According to Carla MacQuarrie, one of Aqua Farms founding partners, the skills and experience utilized to make the business a success include a strong knowledge of aquaculture production, environmental science, biological systems, engineering, marketing and business operations. Training for all employees is provided to ensure that they understand the environmental significance of the business' operational practices. The management team also provides environmental consulting services for existing aquaculture facilities that wish to incorporate a hydroponics nutrient removal component in order to increase the environmental efficiency of their operation.

To learn more about Future Aqua Farms Ltd. visit www.futureaquafarms.com (E)



Section 3 – Online Resource Links

3.1 General Information on Sustainability and Eco-Efficiency

Atlantic Canada Opportunities Agency - Sustainable Development (E/F)
<http://www.acoa.ca/e/library/reports/eco.shtml>

Business and Environment Publications (E)
<http://business.wri.org/publications.cfm>

Business and Sustainable Development (E)
<http://www.bsdglobal.com/>

Canada Department of Foreign Affairs and International Trade (DFAIT) - Sustainable Development Web site (E/F)
<http://www.dfait-maeci.gc.ca/sustain/menu-en.asp>

Eco-Efficiency (E/F)
<http://strategis.ic.gc.ca/e2>

Environmental Affairs - Canadian Industry and Government (E/F)
<http://strategis.ic.gc.ca/epic/internet/inea-ae.nsf/vwGeneratedInterE/Home> (E)

<http://strategis.ic.gc.ca/epic/internet/inea-ae.nsf/vwGeneratedInterF/Home> (F)

GreenBiz - Small Business Resources (E)
http://www.greenbiz.com/resources/smallbiz/tools_more.cfm

Industry Canada's Sustainable Development Homepage (E/F)
http://strategis.ic.gc.ca/sc_mrksv/sustain/index.html

National Round Table on the Environment and the Economy (E/F)
<http://www.nrtee-trnee.ca>

Responsible Entrepreneurship Measures for SMEs (E)
http://europa.eu.int/comm/enterprise/entrepreneurship/support_measures/responsible_entrepreneurship/

Sustainable Online Business Resources (E/F)
<http://www.communityfutures.ca/provincial/>

[SustainableBusiness/English/Main_Pages/home_e.htm](http://www.sustainablebusiness.ca/English/Main_Pages/home_e.htm)

The Centre for Small Business and the Environment (E)
<http://www.aboutcsbe.org>

3.2 Eco-Efficiency Assessment Tools

Concise Self-Assessment Guide to Environmentally Sustainable Commerce (E)
<http://www.sustainable-busforum.org/guide.html>

Eco-Efficiency Questionnaire (E/F)
http://strategis.ic.gc.ca/sc_innov/productivity/engdoc/eco-questions.html

GreenBiz - Small Business Resources (E)
http://www.greenbiz.com/resources/smallbiz/tools_more.cfm

Three Steps to Eco-Efficiency (E/F)
<http://strategis.ic.gc.ca/epic/internet/ineeee.nsf/vwGeneratedInterE/ef00012e.html> (E)

<http://strategis.ic.gc.ca/epic/internet/ineeee.nsf/vwGeneratedInterF/ef00012f.html> (F)

3.3 Sustainability and Eco-Efficiency Strategies

Building Sustainable Enterprises - Workshop Materials (E/F)
<http://strategis.ic.gc.ca/epic/internet/inbse-ced.nsf/vwGeneratedInterE/Home>

Business and Sustainable Development (E)
<http://www.bsdglobal.com/>

Buy Green (E)
<http://www.buygreen.com/>

Concise Self-Assessment Guide to Environmentally Sustainable Commerce (E)
<http://www.sustainable-busforum.org/guide.html>

Eco-Efficiency Centre (E)
<http://www.mgmt.dal.ca/sres/eco-burnside/homepage.html>

EMAS Toolkit for Small and Medium-Sized Enterprises - Eco-Mapping (E/F)
http://www.inem.org/htdocs/inem_tools.html

Energy Efficiency in Canada (E/F)
<http://oe.nrcan.gc.ca/>

Environment Canada - Ecocycle: Product Life Cycle Management (E/F)
<http://www.ec.gc.ca/ecocycle/>

GreenBiz - Small Business Resources (E)
http://www.greenbiz.com/resources/smallbiz/tools_more.cfm

Global Environmental Management Initiatives (E)
<http://www.gemi.org/>

Guide to Green Government (E/F)
<http://www.sinfo.gc.ca/reports/en/ggg/Default.cfm>

Living in Balance - EcoVision Certification Program (E/F)
<http://www.ecotourismnb.com/op-cert.htm> (E)

<http://www.ecotourismnb.com/fr/ap-cert.htm> (F)

Sustainable Online Business Resources (E/F)
http://www.communityfutures.ca/provincial/SustainableBusiness/English/Main_Pages/home_e.htm

3.4 Environmental Standards and Certification

A Primer for Industry - Your Window on the Canadian Environmental Assessment Act (E/F)
http://www.ceaa-acee.gc.ca/012/001/1-0_e.htm

Buy Green (E)
<http://www.buygreen.com/>

Energy Efficiency in Canada (E/F)
<http://oe.nrcan.gc.ca/>

Environmental Choice Program (E/F)
<http://www.environmentalchoice.com/>

GreenBiz - Small Business Resources (E)
http://www.greenbiz.com/resources/smallbiz/tools_more.cfm

International Organization for Standardization (E/F)
<http://www.iso.ch/iso/en/iso9000-14000/iso14000/iso14000index.html>

Living in Balance - EcoVision Certification Program (E/F)
<http://www.ecotourismnb.com/op-cert.htm> (E)
<http://www.ecotourismnb.com/fr/ap-cert.htm> (F)

3.5 Sustainability and Eco-Efficiency Solutions

Buy Green (E)
<http://www.buygreen.com/>

Canadian Centre for Pollution Prevention (E/F)
<http://www.c2p2online.com/>

Canadian Environmental Solutions (E/F)
http://prods.businesscanada.ic.gc.ca/Ces_Web/

Canadian Government Energy Efficiency Programs (E/F)
<http://oe.nrcan.gc.ca/english/business.cfm?Text=N>

Dollars to \$ense Workshop (E/F)
<http://oe.nrcan.gc.ca/english/workshops.cfm>

Eco-Efficiency Centre - The Eco-Checklist (E)
<http://www.mgmt.dal.ca/sres/eco-burnside/homepage.html>

Eco-Efficiency Centre - Fact Sheets (E)
<http://www.mgmt.dal.ca/sres/eco-burnside/homepage.html>

Eco-Efficiency Indicators Workbook (E/F)
http://www.nrtee-trnee.ca/Publications/Eco-efficiency_Workbook/index.html

Energy Efficiency in Canada (E/F)
<http://oe.nrcan.gc.ca/>

Environmental Choice Program (E/F)
<http://www.environmentalchoice.com/>

Global Environmental Management Initiatives (E)
<http://www.gemi.org/>

Government of Canada Cross-Cutting Measures for Industry:
Program Description and Contact Information (E/F)
http://www.climatechange.gc.ca/english/action_plan/na_b11.shtml

GreenBiz - Small Business Resources (E)
http://www.greenbiz.com/resources/smallbiz/tools_more.cfm

Greening Your Business: A Primer for Smaller Companies (E)
<http://www.greenbiz.com/toolbox/printer.cfm?LinkAdvID=15205>

Sustainable Online Business Resources (E/F)
http://www.communityfutures.ca/provincial/SustainableBusiness/English/Main_Pages/home_e.htm



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<http://www.sdinfo.gc.ca/reports/en/monograph5/splash.cfm> (E/F)
3. Day, R., (1998), Beyond Eco-Efficiency: Sustainability as a Driver for Innovation, Sustainable Enterprise Perspectives
<http://www.wri.org/wri/meb/sei/beyond.html> (E)
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<http://www.ifsm.ch/PDF-files/ref-sustainable-man2.pdf> (E)
5. Eco-Efficiency - What Small and Medium-Sized Companies Should Know, Atlantic Canada Opportunities Agency
<http://www.acoa-apeca.gc.ca/e/library/reports/eco.pdf> (E/F)
6. Eco-efficiency Indicators Workbook - National Round Table on the Environment and the Economy
http://www.nrtee-trnee.ca/Publications/Eco-efficiency_Workbook/en/need.htm (E/F)
7. Good Business Sense, Industry Canada
8. Center for Small Business and the Environment
<http://www.geocities.com/aboutcsbe/> (E)
9. Sustainable Business Online Resources
<http://www.communityfutures.ca/provincial/SustainableBusiness/> (E/F)
10. Sustainable Development - Atlantic Canada Opportunities Agency
<http://www.acoa.ca/e/library/reports/eco.shtml> (E/F)
11. World Business Council for Sustainable Development, The Business Case for Sustainable Development, Johannesburg Summit, 2002
http://basd.free.fr/docs/releases/20020828_water.html (E)
12. World Business Council for Sustainable Development: Business Leadership after Kyoto
<http://www.iisd.ca/linkages/journal/wbcds.html> (E)