ANNUAL REPORT 1990

Environment Canada | Environnement Canada

Canada

CONTENTS

Over 50% recycled paper
including 5% post-consumer
fibre

ENVIRONMENTAL CHOICE

The Environmental Choice Program was created by the Government of Canada to help consumers find products which ease the burden on the environment.

Goods and services which meet the Program's product-specific criteria are identified by the EcoLogo, the Program's symbol of certification.

The EcoLogo, an image consisting of three stylized doves intertwined to form the shape of a maple leaf, symbolizes government, industry and consumers working together.

MESSAGE FROM THE CHAIR

Pat Delbridge, Chair
Environmental Choice Board

The last ten years have been an eventful time for the increasing number of people concerned with environmental issues.

After several centuries of enjoying the benefits of industrial development, the Western world has only recently begun to face up to some of the environmental costs. The causes go to the roots of how our society is organized and the lifestyles to which we have become accustomed.

Finding solutions to these complex challenges requires not only the active participation of every person, company, institution and government no matter where they are located, but also a requirement to find new solutions that go beyond the regulate/enforce methods of the past.

One approach, where Canada is proud to be playing a leading role, involves using eco-labelling to help consumers use their purchasing dollar to build environmentally better products. This program seeks to help consumers distinguish among products first by setting sound science-based criteria which must be met in

order for products to be considered as less harmful to the environment, and then by labelling those products which measure up. Of course the most effective way of decreasing the environmental harm resulting from the manufacture, use and disposal of consumer products remains the reduction of the consumption of such products. As is the case with other approaches, eco-labelling can only offer partial solutions to the environmental problems of the world, yet fills a particular niche in a way that no other effort can. The eco-labelling niche is defined by the need to do what we can now, immediately, to reduce the harm arising from our daily consumption of goods and services.

It is now two years since Canada began to develop its own eco-labelling program. At the time it was known as the Environmentally Friendly Products Program. I was asked, along with fifteen others, to form the Program's advisory and management board. Now, with two years' experience under our belt, we would like to report what we have accomplished in that time.

One of the first questions we raised as a Board was whether there is such a thing as an "environmentally friendly" product. We knew that a search for a truly "environmentally friendly" product would probably be a fruitless search, given our present state of knowledge and ability to produce a perfectly benign product. We knew, however, that there are ways in which the burden placed on the environment through the manufacture, use and disposal of products can be significantly reduced. We agreed that if we could

identify those ways, and certify products which employ them, we would be helping consumers make environmentally sensible choices, thereby harnessing the power of the market to stimulate the supply of products that are less environmentally harmful.

So this is what we set out to do. In that first year we changed the name of the Program to Environmental Choice, developed a rigorous, open, science-based process that would lead to the setting of product-specific certification criteria, tested and refined that process through the development of criteria for three types of products, established the EcoLogo as the Program's symbol of certification, and created a secretariat within Environment Canada to take on the day-to-day operation of the Program.

With the organizational foundation laid, it was now possible, as we moved into the Program's second year, to become more operational. By the spring of 1990 we had set certification criteria for a total of ten types of products and actually issued our first EcoLogo certifications to qualifying product brands. Now, at the end of our second year, the EcoLogo can be found on diapers, motor oils, paints, paper, insulation, fencing and more, in a growing list of product categories. These are the tangible results of what we have done to date.

Of equal importance to what we have done, however, is *how* we have done it. It is our process, the means by which we determine which products constitute a good environmental choice, that gives the EcoLogo its value as a credible guide to consumers, as a mar-

keting tool capable of drawing attention to products which meet the program's criteria and, ultimately, as one of a variety of means by which we can scale down the harm caused to the environment through our daily consumption of goods and services, not just this year, but for years to come.

In order to identify the ways in which any particular type of product can be rendered less harmful to the environment, we must first understand the nature of the harm caused by that product. Our process, therefore, begins with the study of a product's life-cycle, from the extraction of a resource through to the manufacture, use and disposal of the product. Only through such an approach can we see where in a product's life-cycle the environmental problems occur, and where there are opportunities to diminish them.

In practical terms this means that if we are looking at paints, for example, we find that most solvent-based paints contain high levels of volatile organic compounds (VOCs). These solvents are derived from petroleum, so their use contributes to the depletion of a non-renewable resource. VOCs keep paint in a liquid form as long as it's in the can. But when the paint is applied to a surface, the evaporation of the VOCs, which is what causes the paint to dry, contributes to the production of ozone and "photochemical smog" in the lower atmosphere. Substances used as pigments and preservatives, including formaldehyde, aromatic hydrocarbons and heavy metals such as mercury, lead, cadmium and chromium, can be toxic and even carcinogenic to

humans. Our study revealed that it is not only possible to replace many of these substances with less harmful ingredients which perform the same function, but that the VOC content can be greatly reduced as well.

In taking this approach we recognize that in many areas and many product categories there are still huge gaps in our knowledge of environmental impacts, environmental risks, and cause and effect. Often the assumptions made by the general public do not stand up to scientific scrutiny. For example, there is the explicit assumption made by a large sector of the public that anything that is "natural" is safe, and "chemically based" unsafe, which is far from being true. The scientific evidence that weighs the overall importance of one environmental issue such as low level ozone against another such as global warming still doesn't exist, and this becomes extremely important when one is trying to suggest which alternate fuel is more environmentally sound over another.

The greatest value of the life-cycle approach is that it enables us to keep track of whether proposed changes to any stage of a product's life do, in fact, contribute to a net reduction in the burden that product places on the environment. We encountered several cases where the environmental benefits resulting from specific changes would have been negated or even outweighed by the environmental costs resulting from those same changes. There have also been instances when we decided not to develop certification criteria for a particular type of product because

of the existence of a more environmentally sensible alternative. For example, we are not certifying window cleaners containing petroleum-based solvents, in view of the effectiveness of vinegar and water.

In addition to the life-cycle studies, the Board has the benefit of input and assistance from the Canadian Standards Association (CSA), contracted to assess products against the Environmental Choice criteria and issue the EcoLogo to those which measure up. Another contributing group is a volunteer committee composed of technical experts in a range of fields including various environmental sciences, medicine and relevant manufacturing sectors. The activities of this committee, including the initial drafting of certification criteria, is coordinated by the CSA. The CSA is also responsible for the public review process. This is a 60-day period early in the life of every set of draft criteria during which time we welcome suggestions as to how to improve the guideline's content. As well, we rely on the very knowledgeable people in the Industrial Programs Branch of Environment Canada, whose expert advice is sought on every guideline we develop.

Of course, the certification criteria we establish at any particular point are only as good as the information available to us at that time. Things change. Technologies evolve. New products appear in the marketplace as old ones disappear. So, too, will our criteria change, becoming increasingly stringent as new opportunities emerge to reduce environmentally harmful practices even further.

These less tangible results of our activities to date, those that relate more to process than to product, are what will define the shape of the tangible results of the Environmental Choice Program in the future. Over the coming year we will put this process to work in the development of guidelines covering another twenty-five types of products. Among the challenges looming over that horizon will be the development of criteria for the complex categories of household cleaners and packaging. We will be looking at ways of recognizing environmentally improved offices and automobiles. In our third year, as the number of product certifications grows, we will roll out a major campaign designed to generate awareness and understanding of the EcoLogo among consumers from coast to coast. Internationally, we will be sharing experiences and information with other countries also in the early stages of developing eco-labelling programs.

I know, through consultations with people involved with eco-labelling elsewhere in the world, that the Canadian approach is widely recognized as being of an exceptionally high standard. My colleagues on the Board and I are very proud of this accomplishment and know that it has only been possible, during these times of severe fiscal restraint, as a result of the exceptional efforts of some very capable and dedicated people on the secretariat staff, at the CSA and on the technical committee.

I would like to express my personal appreciation for the support, hard work and very thoughtful

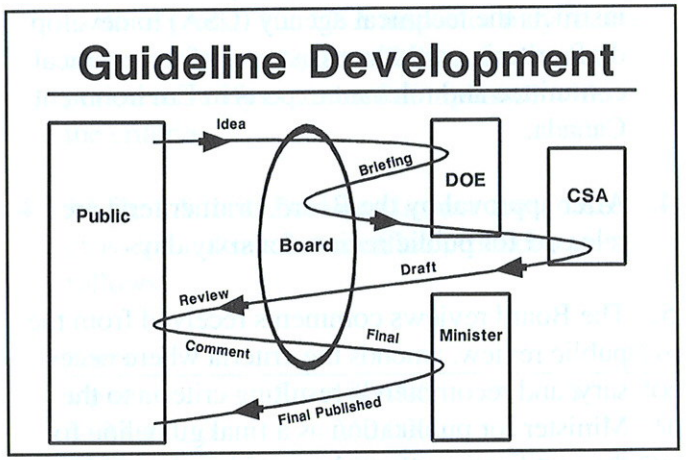
contributions provided by all of the members of the Environmental Choice Board. Three members, Dian Cohen, Geraldine Kenney-Wallace and Richard Plain, will unfortunately not be continuing with us on the Board as we move into our third year, so I would like to take this opportunity to thank them for their efforts during the Program's critical start-up period.

What follows is a more detailed account of how Environmental Choice works and what it has accomplished over the past year. I hope you will agree that we have used this time well in establishing a trajectory for Environmental Choice that will serve Canadians well in their efforts to reduce the costs to the environment for many years to come.

Pat Delbridge, Chair
Environmental Choice Board

PROCESS

Environmental Choice policy and product-specific certification criteria are set by a sixteen member voluntary Board. The Board is served and the Program is managed on a daily basis by a secretariat within Environment Canada. The secretariat has contracted the Canadian Standards Association (CSA) to assist in the development of criteria and the processing of applications for the EcoLogo.



SETTING THE CRITERIA

There are five stages in the development of Environmental Choice certification criteria:

1. The Board decides on the type of product, chosen from the pool of suggestions received from the public, for which criteria will be developed.

2. The Secretariat engages a consultant to develop a briefing paper, reviewed by relevant experts in Environment Canada, on the product type including an environmental assessment spanning the product's life-cycle, a profile of the industry and an assessment of the consumer market for the relevant product type.

3. After reviewing the briefing paper, the Board instructs the technical agency (CSA) to develop draft criteria, with the assistance of its technical committee and relevant experts in Environment Canada.

4. After approval by the Board, draft criteria are released for public review for sixty days.

5. The Board reviews comments received from the public review, amends the criteria where necessary, and recommends resulting criteria to the Minister for publication as a final guideline for the certification of products within that category.

LICENSING PRODUCTS

1. *APPLICATION:* Manufacturers of products apply for the EcoLogo through the Canadian Standards Association (CSA). The application fee ranges upwards from $800, depending upon the complexity of the manufacturing processes and the number of plant sites requiring inspection.

2. *VERIFICATION:* A CSA representative visits plant sites to assess products and processes against the Environmental Choice criteria.

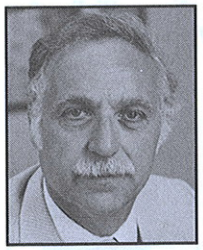
3. *LICENCE:* A licensing agreement is established by the CSA granting permission for the use of the EcoLogo on products found to meet the Environmental Choice criteria for periods up to three years. The CSA inspector may return unannounced at any time during the licence period to verify continued compliance with the criteria.

4. *FEES:* Annual EcoLogo licence fees, based on gross annual sales of certified products, are as follows:

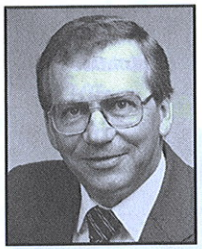
Sales		Fees
Up to	$ 100,000	$ 300
$100,001 to	250,000	750
$250,001 to	500,000	1,500
$500,001 to	1,000,000	2,500
Greater than	$ 1,000,000	5,000

RESOURCES

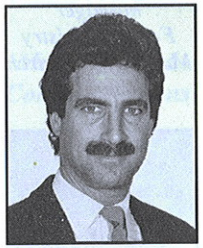
ENVIRONMENTAL CHOICE BOARD



Gordon Atherley
Partner
Atherley, O'Connel & Associates



Jack Brooks
Vice-President
3M Canada



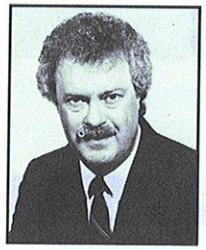
David Cohen
Law Professor
Universtity of British Columbia

Dian Cohen*
President
Dian Cohen Productions Ltd.

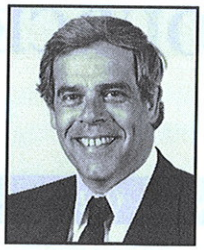
Pat Delbridge
President
Pat Delbridge Associates Inc.

Janice Harvey
President
Conservation Council of New Brunswick

*** Retired from the Board***

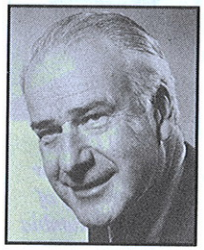


Joe H. Hilliard, PhD
Manager
Food Chemistry
Manitoba Research Council

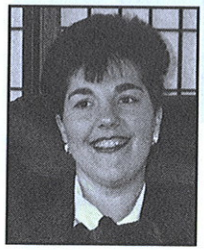


Peter Jacobs
Professor
Université de Montréal

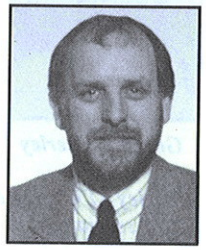
Geraldine Kenny-Wallace*
Former Chairperson
Science Council of Canada



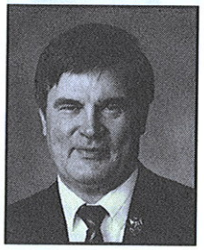
Alasdair McKichan
President
Retail Council of Canada



France Mercier
Consumer Representative

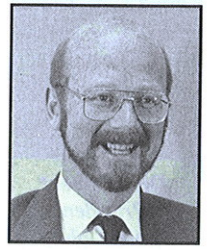


James Patry
Vice-President
T.E.S. Limited



Richard Plain*
Professor
University of Alberta

Guylaine Saucier, M.C., F.C.A.
Corporate Administrator



Derek Stephenson
President
Resource Integration Systems Ltd.

SECRETARIAT

Director
Graham Hardman

Senior Technical Advisor
Valerie M. Douglas

Senior Policy Advisor
Christine Rollo

Senior Marketing and Communications Advisor
Charles Dickson

Technical Officer
Bruce Switzer

Administrative Officer
Micheline Hawkins

Marketing and Communications Officer
Alexandra Halkett Oberle

Technical Officer
Bernadette Duffy

CANADIAN STANDARDS ASSOCIATION ENVIRONMENTAL CHOICE DIVISION

Director
John Wolfe

Guideline Development Manager
Ahmad Husseini

Licensing Manager
Jack Poon

Administrator
Heather Hattin

Coordinator
Linda Lyle

Administrator
Brad Brooks

Engineering Technologist
Dave Moase

COORDINATING TECHNICAL COMMITTEE

Chair
John Wolfe

Voting members

Perry Anderson
Jack Brooks
Fred Edgecombe
Bernice Goldsmith
Joe Hilliard
Julia Keenliside
Peter Miasek
Ruth Pelly
Derek Stephenson
Vito Ariganello
Valerie Douglas
Hal Ebert
Steve Hart
Dan Hoornweg
Gerald McLaughlin
James Patry
Marie-Claude Savoie
Jeffrey Whitehead

Non-voting members

Jack Donald
Jack Poon
Anthony Redpath
Ahmad Husseini
Janet Randall

TASK FORCES

Over the past year, 245 people representing industry, environmental groups, consumers, trade associations, researchers and government have served on the following task forces:

Paint
Fine paper from recycled paper
Sanitary paper from recycled paper
Packaging from recycled paper
Batteries
Compost
Water conserving products
Lamps
Alternative fuels
Detergents
Diaper services
Unbleached paper
Long life tires
Drycleaning
Hair care products

RESULTS

ENVIRONMENTAL CHOICE HAS ESTABLISHED PRODUCT SPECIFIC CERTIFICATION CRITERIA FOR 14 TYPES OF PRODUCTS:

Re-refined Lubricating Oil

This category includes all types of lubricating oils, except synthetics. Oils qualifying for the EcoLogo must contain over 50% by volume re-refined oil and less than five parts per million (ppm) of chlorinated-compounds. Their metal content must be less than 25 ppm, with no single metal exceeding 5 ppm.

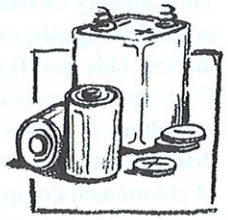
Insulation From Recycled Wood-based Cellulose Fibre

The fibre content of products in this category must be 100% post-consumer. They must contain no ingredients which would require labelling as poisonous, corrosive, flammable or explosive under the Consumer Chemical and Container Regulations of the Hazardous Products Act.

Products Made From Recycled Plastic

This category includes construction materials, horticultural supplies, produce containers, non-food containers, office supplies, and recreational equipment. In general, all products in this category must contain over 90% by weight post-consumer plastic, with the exception of construction materials which must contain over 60% by weight post-consumer plastic.

Zinc-air Batteries

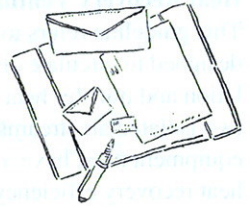


In the category of Batteries, the first sub-category is zinc-air batteries, primarily used in hearing aids. Products in this category must contain no more than 40 mg per Ampere/hour of mercury.

Reduced Pollution Water-based Paints

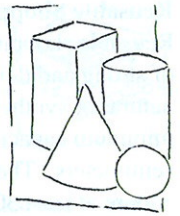
Water-based paints must not be manufactured with formaldehyde, halogenated solvents, aromatic hydrocarbons, mercury or mercury compounds. They must not be tinted with pigments of lead, cadmium, chrome VI or their oxides. They must have a flash point of 61.0°C or greater and must not contain volatile organic compounds (VOCs) in excess of 250 g/L, excluding water.

Fine Paper From Recycled Paper



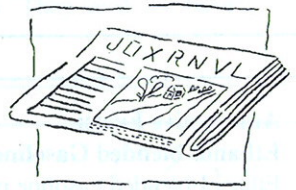
This category includes printing, business and exercise papers, envelopes, cover stock and bristols, which must contain over 50%, by weight, of recycled paper which includes a minimum of 5% post-consumer fibre.

Miscellaneous Products From Recycled Paper



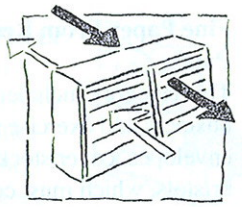
This category includes hobby and craft forms, which must contain 100% by weight recycled paper, including a minimum of 5% post-consumer fibre.

Newsprint From Recycled Paper



This guideline refers to newsprint consisting of at least 25% recycled old newspapers by weight, contributing to an overall recycled paper content of at least 40%. Newspapers must contain 35% by weight of newsprint meeting these specifications, using a weighted average over a three month period. Miscellaneous published material from newsprint must contain 100% by weight of qualifying newsprint.

Heat Recovery Ventilators

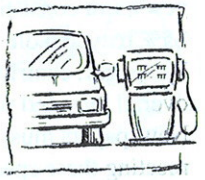


This guideline refers to equipment designed to circulate air for ventilation and transfer heat between two isolated air streams. Such equipment must have a sensible heat recovery efficiency of 75% at O°C and an exhaust air transfer ratio of 5% or less.

Reusable Shopping Bags

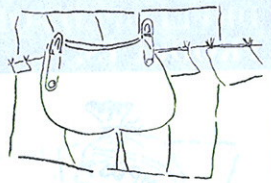
Reusable shopping bags must be made of strong and durable material, either natural or synthetic, and have a minimum capacity of 15,000 cubic centimeters. They must be able to endure at least 300 uses carrying 10 kilograms under wet conditions and must be made of material that will not release hazardous or toxic substances. They must be home washable.

Automotive Fuels:
Ethanol-blended Gasoline



Ethanol-blended gasoline must contain a minimum of 5% by volume of ethanol with the remaining part of the mixture being gasoline. The ethanol must be totally derived from biomass products. The ethanol-blended gasoline must meet Canadian General Standards Board standard CAN/CGSB-3.511-M, Oxygenated Unleaded Automotive Gasoline Containing Ethanol.

Reusable Cloth Diapers



All 100% reusable diapers that can be used at least 75 times and can be washed at home will be eligible for the EcoLogo. Also, the diapers must be able to endure at least 75 uses.

Composting Systems for Residential Waste

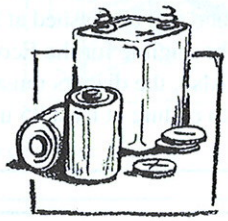
Composting systems must be made for residential use and be designed to provide sufficient air circulation to keep the composting material in an aerobic state. They must be accompanied by a user manual listing waste products that must not be put into the composter, uses for the compost produced, conditions under which the composting process will not work, and ways to avoid potential problems with wild animals, rodents and pathogens. They must also have a five-year guarantee.

Reduced Pollution Solvent-based Paint

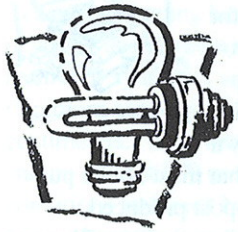
Solvent-based paint must not be formulated or manufactured with formaldehyde, mercury or mercury compounds or be tinted with pigments of lead, cadmium, chromimum VI or their oxides. It must not contain volatile organic compounds in excess of 380 g/L excluding water and must have a flash point of at least 37.8°C.

DRAFT CRITERIA HAVE BEEN DEVELOPED FOR SEVEN TYPES OF PRODUCTS:

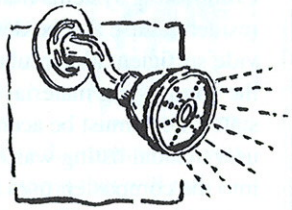
Compost



Non-Rechargeable Batteries

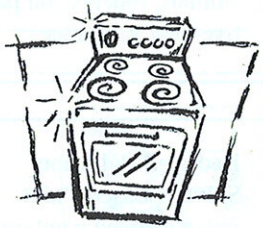


Energy-Efficient Lamps

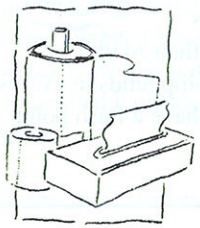


Water-Conserving Products

Diaper Services



Energy-Efficient Major Applianes



Sanitary Paper

Criteria for numerous other product types, ranging from household detergents to long-life tires are currently under development.

PRODUCTS CERTIFIED WITH THE ECOLOGO

Cloth Diapers
Baby Bliss (Altrim)
Babykins (Babykins Products Canada Ltd.)
Cushies (Cushies Diapers)
Hapi-Napi (Hapi-Napi Diapers)
Indisposables (Indisposables Cotton Diaper Co.)
Puritys (Puritys Diaper Ltd.)
Rapps (Morgan Diaper Services)

Re-Refined Motor Oil
Canada's Choice (BresLube)
Canadian Pride (Mohawk Oil Co. Ltd.)
Chevron Re-Refined Motor Oil (Chevron Canada Ltd.)
Eco (Canadian Tire)
Entech (Esso Petroleum Canada)
Flo-rite Super Duty (Turbo Resources Ltd.)
National (BresLube)
Premium 1 (BresLube)
President's Choice (Loblaw International Merchants)

Products from Recycled Plastic
Vexar plastic fencing (Du Pont Canada Inc.)

Water-Based Paints
Numerous brands from Benjamin Moore Co. Ltd., Canadian Tire Corp., Color Your World, ICI Paints, International Paints (Canada) Ltd., Para Paints Canada Inc., Selectone Paints Ltd., and St. Clair Paint and Wallpaper

Cellulose Insulation
Weathershield Insulation (Can-cell Industries Inc.)
Fibrex R2000 (Prosumex Inc.)

Fine Paper from Recycled Paper
Numerous products from DRG Stationery Co., Domtar Inc., Moore Business Forms, Noranda Forest Recycled Paper, Resolve (Island Paper Mills Co.), Rolland Inc. and Tenex Data Corp.

Zinc-Air Batteries
Rayovac Canada Inc.

ECP PUBLICATIONS

- EcoLogo (newsletter)
- FactSheets (available for each of the product categories for which criteria have been set)
- EcoLogo Graphic Standards Guide

For more information contact:

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