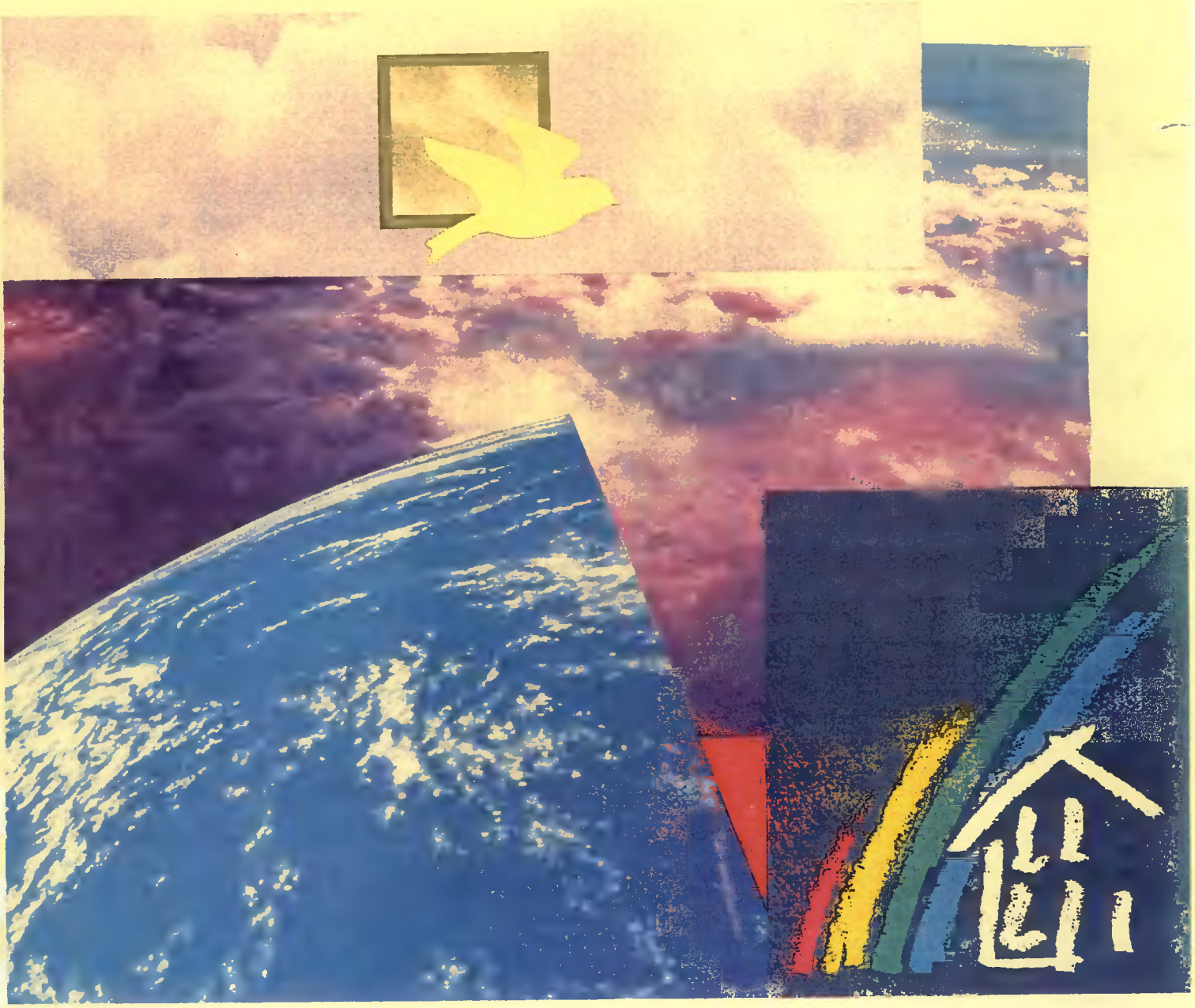
HEALTHY COMMUNITIES PROJECT.

HOUSING, HEALTH & ENVIRONMENT



HEALTHY COMMUNITIES PROJECT.

HOUSING, HEALTH & ENVIRONMENT

- final report -
Prepared on behalf of
CANADA MORTGAGE AND HOUSING CORPORATION. (CMHC)

Acknowledgements:

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PEI ASSOCIATION OF CO-OPERATIVE HOUSING.	(PEACH)
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Special thanks go to the members of the Advisory Board:

Linda Burke, Evelyn Feldstein, Mary Jennings, John Keefe, Jill Lightwood, Debbie Lutz, and Dan Murray.

The project also could not have succeeded without the efforts and initiative of the team of presenters:

Deb Conners, Sharon Labchuk, Irené Novaczek and Sue Stephenson.

Most important of all, we thank all those residents of social housing projects who took time to promote, and/or to participate in, a session.

Thanks are extended to the staff of the Charlottetown Branch of CMHC for their patience and assistance, and to Sue-Ann Rothwell of CMHC's Research Division for her backing and guidance.

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- ENVIRONMENT CANADA
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- CANADA MORTGAGE AND HOUSING CORPORATION.

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1. PREFACE:

The project sponsors sought to empower residents to make environmentally sound choices in their daily lives, by informing residents of the health impacts of housing choices, and by sharing solutions with them. The sponsors also sought to encourage residents to make a cogent case for public housing dollars to be spent in ways that promote both personal and planetary health in a cost-effective manner.

However, working with social housing projects reveals a mass of conflicting priorities:

- The requirements of the National Building Code mandate a quality of construction and maintenance that are usually above the norm.
- Community concerns prompt attention to environmental matters.
- "Modesty" criteria mitigate against the use of "top of the line" materials.
- Management personnel must be skilled and thrifty, but they receive no financial reward as directors of non-profit housing groups.
- Money is scrupulously limited to essentials.
- Residents range from vastly creative to disinterested.

Much of the funding for social housing projects is administered via CMHC, who promote "best practices" in the corporation's publications but are constrained by the day to day financial limitations of the corporation's Portfolio Management operations.

Some federally funded housing projects consist of renovated older structures, while many others were constructed specifically to provide affordable housing for low and moderate income residents.

The common factor in all of the projects is a commitment to modest standards of finish and to tried, true and cost-saving methods of construction. Both construction and maintenance are usually based on a tender process that gives the work to the lowest bidder.

By contrast, CMHC's Research Division produces a constant stream of innovative and adventurous ideas and practices that can cost more up front, but are beneficial in terms of durability, energy efficiency, environmental friendliness or other desirable qualities.

This community education project represents an attempt to create some links between Innovation and Modesty within CMHC's social housing portfolio.

2. EXECUTIVE SUMMARY:

This project is an example of the kind of partnership that grows out of networking and results in action. The original idea was developed "around the kitchen table"...almost. Various proponents of community development happened to have experience with social housing, both professionally and as residents. Informal chats led to the idea of taking some of the existing body of work on Healthy Housing and sharing it with the residents of 30 social housing projects in structured sessions.

Consultation with half a dozen groups verified that a need existed, and that many quality publications and research papers were gathering dust on shelves. Further, almost all the groups contacted expressed an interest in helping out in some way, whether by sharing resources or donating time and expertise.

With its excellent office set-up, prodigious amounts of housing research and extensive experience with housing groups, CMHC was the clear choice as the nucleus of the proposal. An application to Environment Canada's Eco-Action Program was drafted, and various letters of support and encouragement were sent to CMHC by interested groups. The application was approved, and CMHC's internal ratification process began. Time was of the essence, but only tentative progress could be made until all approvals from all levels were in place.

Fortunately, networking both electronically and by word of mouth resulted in the continual discovery of pieces of completed work that helped to keep the project moving forward. We were also fortunate in the availability of Advisory Board members all of whom had experience with environment and health issues, and most of whom had backgrounds in social housing and community development work. As well, we were lucky to be able to call on the expertise of presenters with plenty of grounding in environment and health issues.

At a Healthy Communities Conference in the Fall of 1994, leaders in the field of social housing had the opportunity to learn more about Healthy Housing and the Healthy Communities Project. An invitation to assist with the project led to the involvement of a number of volunteers who agreed to liaise with the residents of their housing communities.

Research on resources and strategies led to piloting of prototype materials in the period prior to Christmas 1994. The onset of the new year saw intensive work begin on the training modules and the survey, while the preliminary scheduling for presentations got under way.

With the training modules completed, three trainers tested them with different housing groups and made modifications before tackling the bulk of the 27 remaining presentations.

The presentations began on February 22, 1995 and the final one was completed on April 12, 1995. All sessions were supposed to have been completed by March 31, 1995, but postponements and cancellations necessitated the rescheduling of 7 sessions into the first two weeks of April. At the conclusion of the project, 26 workshops had been held. In total, 287 people participated in the workshops. This represents an average attendance of 57% of the occupied units.

Notable lessons from the project include:

- Scheduling is a major undertaking, especially with Family housing.

- Seniors are the most easily reached group; they also tend to be well informed about environmental issues.

- People appreciate the opportunity to learn more about personal and planetary health.

- The greatest "hunger" for education on links between health, housing and the environment was found among employees of governments and institutions.

- Residents are best reached when a presentation is adapted to their regular schedule of meetings or events, usually by providing for a relatively short session.

- Professionals like to attend in-service training sessions that focus on "real life" issues and open up opportunities for interdisciplinary considerations.

- Even with literate groups, reading and writing act as barriers to involvement. Seeing, hearing and participating are the keys to success.

The project was successful in terms of reaching grassroots residential communities and increasing their awareness of links between housing and health. However, it would be preferable to run such a project over a significantly longer time period, with presentations scheduled to coincide with events that already bring people together. The amount of time devoted to scheduling and logistics mitigated against the most effective use of the available window of opportunity.

FINANCIAL BENEFITS:

Small grants and contributions are not usually seen as a significant economic development tool, but it would be remiss not to point out the broad benefits of this project from that standpoint. Some eleven individuals and thirty-nine businesses and non-profit groups received payment for goods and services during the completion of the Healthy Communities Project, ensuring that the economic wellbeing of the local community was not ignored when implementing the theme.

2. RÉSUMÉ

Ce projet illustre le type de partenariat qui naît de l'établissement de réseaux et qui favorise la prise de mesures. L'idée première a été élaborée «autour de la table» ou presque. Par hasard, divers proposants du développement communautaire avaient de l'expérience dans le logement social, soit à titre de professionnels, soit à titre de résidents. De conversations informelles a jailli l'idée de regrouper certains documents existants sur les habitations saines et de les présenter aux occupants de 30 ensembles de logements sociaux à l'occasion de séances structurées.

La consultation d'une demi-douzaine de groupes a confirmé qu'il y avait effectivement un besoin et que de nombreux rapports de recherche et publications de qualité avaient été mis aux oubliettes. De plus, presque tous les groupes joints ont manifesté le désir d'aider d'une façon ou d'une autre, soit en partageant leurs ressources, soit en offrant leur temps et leurs connaissances.

Grâce à ses excellentes installations, à ses quantités prodigieuses de rapports de recherche et à sa vaste expérience avec les groupes s'occupant du logement, la SCHL a fait l'unanimité comme élément central de la proposition. On a ensuite rédigé une demande aux responsables du Programme Éco-Action d'Environnement Canada et la SCHL a reçu diverses lettres d'appui et d'encouragement provenant de groupes concernés. La demande a été approuvée et le processus de ratification interne de la SCHL s'est mis en branle. Le temps était un facteur important, mais on ne pouvait entreprendre que des démarches provisoires en attendant d'avoir reçu l'approbation de tous les niveaux.

Heureusement, les réseaux électroniques et le bouche à oreille ont permis la découverte continue de documents complets favorisant l'évolution du projet. Nous avons également bénéficié de la disponibilité des membres du comité consultatif qui connaissaient tous les questions d'environnement et de santé et dont la majorité avait travaillé dans le domaine du logement social et du développement communautaire. Nous avons également eu la chance de pouvoir compter sur l'expertise de conférenciers ayant de solides connaissances sur les questions d'environnement et de santé.

À la conférence Villes et villages en santé, tenue à l'automne 1994, des leaders du logement social ont eu l'occasion d'en apprendre davantage au sujet des habitations saines et du projet des communautés en santé. Une invitation à collaborer au projet a permis d'obtenir la participation d'un certain nombre de bénévoles ayant accepté d'établir les contacts avec les résidents de leurs communautés responsables du logement.

La recherche sur les ressources et les stratégies a mené à l'essai de documents modèles juste avant Noël 1994. Au début de la nouvelle année, un travail intensif a été entrepris sur les modules de formation et le sondage. Les présentations ont débuté selon le calendrier préliminaire.

Une fois les modules terminés, trois formateurs les ont mis à l'essai auprès de différents groupes concernés par le logement et les ont ensuite modifiés avant d'entamer la série des 27 autres exposés.

Les présentations ont commencé le 22 février 1995 et la dernière a eu lieu le 12 avril 1995. Les séances devaient prendre fin le 31 mars 1995, mais sept séances ont dû être déplacées aux deux premières semaines d'avril en raison de reports et d'annulations. À la fin du projet, 26 ateliers avaient eu lieu, auxquels 287 personnes au total ont participé. Cela représente une participation moyenne de 57 % des logements occupés.

Voici certaines conclusions notables tirées du projet :

- l'établissement d'un calendrier est une entreprise d'envergure, particulièrement pour le logement des familles;

- les aînés constituent le groupe le plus facile à joindre; ils sont habituellement bien informés sur les questions d'environnement;

- les gens apprécient de pouvoir en apprendre davantage sur leur propre santé et sur celle de la planète;

- les employés du gouvernement et des établissements scolaires sont les participants ayant manifesté l'intérêt le plus marqué relativement à l'éducation sur les liens entre la santé, le logement et l'environnement;

- il est plus facile de joindre les résidents lorsque les exposés, présentés d'ordinaire sous forme de séances relativement courtes, coïncident avec leur horaire régulier de réunions ou d'activités;

- les spécialistes aiment participer à des séances de formation sur le terrain qui portent sur les questions de la «vraie vie» et favorisent les recoupements interdisciplinaires;

- même avec les groupes alphabètes, la lecture et l'écriture font obstacle à la participation. Le succès passe par la constatation, l'écoute et la participation.

Le projet a été couronné de succès pour ce qui est d'atteindre les collectivités résidentielles populaires et d'accroître leur sensibilisation aux liens entre le logement et la santé. Par contre, il serait préférable de faire fonctionner un projet semblable pendant une période beaucoup plus longue et de faire coïncider les exposés avec des activités qui réunissent déjà les gens. Le temps consacré à l'établissement d'un calendrier et aux préparatifs a nui à l'optimisation des possibilités offertes.

AVANTAGES FINANCIERS :

Les petites subventions et contributions ne sont habituellement pas perçues comme un outil de développement économique important, mais ce serait faire preuve de négligence que de ne pas souligner sur ce plan les avantages importants de ce projet. Environ onze personnes et trente-neuf entreprises et groupes sans but lucratif ont été rétribués pour des biens et services pendant la réalisation du projet sur les communautés en santé, de sorte que le bien-être économique des collectivités locales n'a pas été négligé pendant la mise en oeuvre du thème.

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3. PROJECT DEVELOPMENT.

An informal series of luncheon meetings between several Community Development proponents led to discussion of a possible adult education project that would target social housing residents and would use many of the existing resources that were "sitting on the shelves" of various agencies and organisations.

CMHC's Portfolio Management department was considering a theme for a conference that would bring together a core group of social housing leaders on Prince Edward Island. David Daughton, of CMHC, gained approval to sound out Environment Canada's Eco-Action Program on the topic of contributing some funding towards a "Healthy Communities Conference". In discussing the idea with representatives of PEI's Health and Community Services Agency (HCSA), environmental groups and other interested parties, the idea for a conference grew into a more ambitious scheme for a province-wide community education initiative.

A number of "sponsors" expressed support for the project as being harmonious with their goals, and a draft proposal with two phases was prepared and passed on to Environment Canada for comment and criticism. Instead of critiquing the draft, Environment Canada endorsed both phases and offered to fund the project in the full amount requested, subject to CMHC's signing of a suitably worded agreement. This prompt response necessitated a series of consultations between CMHC's local, regional and national offices that eventually gave rise to a commitment to allocate further funds that would supplement the resources available at the branch office level.

4. PROCESS.

Although project funds were to be administered by CMHC, and the project co-ordination carried out by a CMHC employee, an Advisory Committee consisting of sponsor representatives agreed to assist with program decisions. Other groups with shared objectives were invited to participate, so sponsors were not limited only to the groups listed on the original application.

LANGUAGE:

The working language of the project was English, and written materials were mostly in English. However, training sessions were offered in both official languages, and most resource materials were available in both official languages.

METHODS:

Through a program of adult education and team building, we attempted to address the following objectives in Social Housing projects across P.E.I.:

* Reduced Energy Consumption.
* Improved Indoor Air Quality.
* Household Waste Reduction.
* Environmentally Responsible Construction/Maintenance Practices.
* Reduced Ozone Depletion.
* Decreased Usage of Persistent Toxins.
* Increased Understanding of the Environment/Human Health Link.

Groups were informed of changes in technology, policy and the regulatory and legislative environment, as well as being assisted in working together to identify solutions and to clarify values.

THE TARGET POPULATION:

Social Housing projects provide a convenient entry point for innovative actions within Prince Edward Island. There are one hundred and sixty-seven projects that are located from one end of the Island to the other and that house a predominantly adult population, from young adults to seniors. Although primarily composed of lower and middle-income Canadians, social housing residents come from diverse backgrounds in terms of ethnic heritage, mother tongue, education and family composition. As well, certain projects are specifically targeted to groups such as women, indigenous peoples, victims of violence and people with disabilities.

Social Housing residents reflect Canada's diversity, yet all housing projects operate within a homogeneous and well organized administrative system. The hardware, software, bureaucracy and data required for communication, evaluation and administration already exist, and are adaptable to the implementation of new programs and actions, as well as to the maintenance of the status quo.

This project was envisaged as a means of putting the mass of existing resources to use, in such a way as to result in widespread environmental action and behavioural change. CMHC, alone, publishes volumes of pertinent scientific research each year, and each of the sponsor groups and agencies offered a wealth of expertise and information rooted in good science. Our aim was to translate information into action.

PARTICIPATION:

Strategies for change should include the willing and informed partnership of the people affected. Opportunities and tools for involving Social Housing leaders already existed and could be built upon. The nature of Social Housing on Prince Edward Island allows for a structured pattern of activity and involvement in which changes can be measured and tracked. Our group included people with a proven record of achievement in environmental change, community action and adult education both within and outside the housing sector.

PHASE 1:
GOALS AND ROLES.

October 24th., 1994 to December 30th., 1994.

ACTIONS:

- **Healthy Communities Conference.**
- **Social Housing Leadership Training.**
- **Module Development.**
- **Pilot Presentations.**

Summary:

CONFERENCE:

A two day participatory conference held on October 28th. and 29th., 1994 brought together leaders in Social Housing from across P.E.I. Approximately 70 people attended over the course of the Friday and Saturday. Social Housing residents, board members, managers, researchers and other professionals attended, with most participants drawn from the co-op and non-profit housing sectors.

The conference addessed a broad range of topics from deferred maintenance to board recruitment, with sustainability as a common theme. Response to the healthy communities visioning session and to the workshop on environmental considerations for directors was especially positive.

The conference workshops allowed participants to work with experts in Environment, Health, Housing and Community Development in order to identify the key target areas for the pilot phase.

Members identified at the conference agreed to assist the sponsor team in training to introduce the "Healthy Communities" program to their Social Housing projects.

LEADERSHIP TRAINING:

Unfortunately, this component of the project was weakened by the length of deliberations over the project. The necessary approvals and administrative mechanisms took longer to establish than we had anticipated, and the March 31, 1995 deadline for completion allowed no leeway in postponing this component to a later time. The more condensed nature of this phase was a contributory factor to the difficulties experienced with scheduling the presentations, as there was less time to build a network of supporters within individual housin projects. The intensive presentation phase was predicated on the existence of a well-prepared cadre of on-site volunteers from across the Island. In fact, we did not have sufficient trained volunteers in place to promote and assist with the presentations, which led to a much more labour intensive process during Phase Two of the project. Anyone attempting to repeat this project should ensure that time, funds and human resources are sufficient to train enough allies during the pre-presentation phase.

MODULE DEVELOPMENT:

The module development process was initiated by the co-ordinator, David Daughton in consultation with Deb Conners. After agreement was reached on a draft format, the Advisory Board made suggestions and gave their concurrence. Deb Conners then proceeded with the detailed development of the modules, checking in with the co-ordinator and the Advisory Board as the work progressed, and incorporating changes as necessary.
Once the creative process was completed, the preparation of various props and materials to support the paper component was addressed. The Health Wheel and other aids were laminated and equipped with "velcro" for use with felt boards.

PILOT PRESENTATIONS:

The modules were tested on a group that included the trainers, and changes were made based on the feedback received. Particular attention was paid to the points raised by the Advisory Board in their review of the final draft of the modules.

We had been able to benefit from the work done by the Co-operative Housing Federation of Canada in piloting their own environmental education materials, and this allowed us to shorten up our own piloting phase considerably.

PHASE 2:
BUILDING HEALTHY CHOICE.

January 2nd., 1995 to March 31st., 1995.

ACTIONS:

- **Survey of Behaviours and Awareness.**
- **Module Presentation (30 Projects).**
- **Evaluation of Changes.**
- **Facilitator Development.**

Summary:

A poll of Social Housing residents was conducted to determine the current levels of awareness of environment and health links, and to establish the extent to which healthy choices and actions are incorporated into daily activity.

The Training Modules developed during Phase One were presented at 26 different housing projects that represent a cross section of Social Housing communities on Prince Edward Island.

Following the completion of the training sessions, respondents to the original poll were to be contacted to assess the impact of the program on their behaviours and awareness.

Throughout this period, trainers sought to identify potential facilitators within individual Social Housing projects. The people identified will be invited to attend networking sessions at which the formation of a "Healthy Communities" facilitation team will be discussed and the results of Phases One and Two will be reviewed.

5. RESOURCES:

FUNDING:

The financial assistance that made the project possible came from two sources.

1. ENVIRONMENT CANADA's Environmental Citizenship Initiative provided $22,000 through their ECO-ACTION Program.
   This funding was accessed through a competitive public process in which project proposals are reviewed on the basis of program criteria.

2. CANADA MORTGAGE AND HOUSING CORPORATION provided $9,000 through their PART IX Initiative.
   This funding was accessed through an internal application and review process which saw the proposal initially screened at the Regional level prior to being recommended for review by the National Office. The funding approval was linked to CMHC's commitment to the promotion of Healthy Housing alternatives.

VOLUNTEERS:

Although some eleven individuals and thirty-nine non-profit groups and businesses received payment for goods and services as a result of this project, the driving force behind the project came from the voluntary sector.

It was volunteers spending their own time and money on meeting to discuss community needs that first gave rise to the idea. The letters of support came primarily from groups largely operated and governed by volunteers. The project proposal was developed outside of paid working hours and was reviewed by volunteers on their own time. Many hours of work were committed to developing the project before any funds were committed. Once funding was offered, it was still primarily volunteers who gave up their weekend time to attend the Conference, and much of the review of the module development was done by volunteers, including the piloting sessions. The trainers gave up time to attend preliminary sessions for no other recompense than food and thanks. Even paid pieces of work sometimes metamorphosed into more than was originally bargained for, requiring flexibility, initiative and free labour from the parties involved.

The Advisory Board gave essential time, energy and impetus to the project:

HEALTHY COMMUNITIES PROJECT.

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FACILITIES:

The project was co-ordinated from CMHC's Charlottetown office. The co-ordinator was given the use of a 386 computer linked to an AS400 based LAN which gave access to CMHC's national electronic mail network. A direct line with receptionist service was also supplied. The office had two photocopiers, two fax machines and a good supply of general office equipment, including networked printers. The CMHC boardroom was also used for all Advisory Board meetings and for the training of the trainers.

Electronic mail (other than CMHC items) was accessed via a NIRV "web" account paid for by the P.E.I. Environmental Network, using a computer and modem supplied by the P.E.I. Environmental Network.

Various volunteers performed project tasks on home computers, and the office facilities of the sponsoring groups were all used on project business at one time or another during the project.

All but one of the presentations were conducted in donated premises, primarily the common rooms of the social housing projects involved. Two presentations were given in spaces supplied by the provincial government, and one session took place in a rented church hall.

IN KIND CONTRIBUTIONS:

Some members of the Advisory Board took part in meetings during their working hours, with their employers donating the time.

The sponsors all donated significant amounts of planning and monitoring time during the project.

Much of the transportation, delivery of materials etc., was accomplished using private vehicles for which no charge was made. The same individuals made no claims for the long distance calls that they were called upon to make from home.

The spouses of the project personnel facilitated the work by taking on extra family responsibilities to allow for evening and weekend sessions.

Many of the sponsors provided incidental photocopying, long distance calls, fax service, supplies etc.

CMHC provided significant assistance by absorbing costs for much of the:

- **photocopying**
- **telephone calls**
- **faxing of documents**
- **mailing**
- **routine office supplies**
- **workshop materials**
- **translation**

6. PROGRAM MATERIAL:

PROCESS:

The learning modules were developed following the principles of adult education. Learners were treated as a resource upon which to draw, with the sessions following an elicitive more than a directive model. Nevertheless, the modules did contain at least one section designed to put the instructor in a lecturer rather than a facilitator role.

In general, the sessions were designed so as to draw out the participants' knowledge and experience within a group setting so that each module of approximately one hour duration culminated in a written statement of learning that would lead to an action. The three modules focussed on:

1. The resident as an individual.
   (YOUR UNIT, YOUR HOME)

2. The resident within the housing community.
   (YOUR BUILDING, YOUR HOME)

3. The resident as citizen and human being.
   (YOUR EARTH, YOUR HOME)

The trainers were encouraged to be respectful and flexible in working with different groups, and to vary the format when warranted. However, all sessions were rooted in the material in APPENDIX "A".

7. PRESENTATIONS:

TRAINING THE TRAINERS:

The main session for trainers took place on February 17th. The module development team presented the entire workshop to the trainers, pausing periodically for feedback on the structure and content. The trainers were given the opportunity to practise presenting and to receive feedback from their peers.
Although all of the trainers had experience with public presentations, one undertook to co-facilitate at one of the three trial sessions so as to increase her comfort level. This arrangement worked well.
After the initial three sessions, the trainers shared their experiences on the strengths and weaknesses of each session and various modifications and suggestions were made.
Approximately three weeks into the presentation schedule, it became apparent that another trainer was required because of shifting dates and prior commitments among the initial trainers. A meeting was held to evaluate progress and to share helpful hints based on the first round of presentations. The new trainer agreed to co-facilitate a session with an experienced trainer under the scrutiny of both the co-ordinator and the survey interviewer. This session took place on March 21st., after which time we operated with 4 trainers and 2 back-up trainers.

SCHEDULING AND LOGISTICS:

The task of scheduling the workshops consumed a great deal of time and energy. This had major implications in terms of the resources of the project. Although 26 number of workshops were successfully completed, the logistics of organizing them took a considerable amount of time.

Many projects underestimate the amount of time taken up with planning events. We want to learn from this experience and also analyze the problem, to the extent that we can, so that others may benefit from our experience.

Even though not every workshop we planned went ahead, we were generally pleased to have reached so many people and such a diversity of people. Even when a workshop was cancelled, we believe that the personal contact and written information shared will contribute to raising the level of awareness about environmental issues.

THE RESULTS:

At the conclusion of the project 26 workshops had been held between February 22 and April 12, 1995. Following is the list of workshops that were successfully completed. By successfully completed, we mean that they were scheduled, confirmed, and that people showed up. In total, approximately 287 people participated in the workshops. This represents an average attendance of 57% of the occupied units. Many more were exposed to the written introductory sheet or were part of discussions about the workshops.

1.	Feb 22,	East Royalty Seniors Co-op
2.	Feb.23,	Pownal Square Co-op
3.	Feb.24,	Kensington Legion Seniors Co-op
4.	March 4,	La Coopérative d'habitation Gabriel Ltée,
5.	March 6	Kings Square Co-op
6.	March 8	Gateway Co-op
7.	March 9,	O'Leary Legion Development Corporation
8.	March 9,	Summerside Lions Housing Project
9.	March 13	PEI Housing: East Prince
10.	March 14	Queens Region Seniors Housing
11.	March 14	St Eleanors Lions Club Seniors
12.	March 16	PEI Housing: Montague
13.	March 17	PEI Housing: East Prince
14.	March 21	PEI Housing: Charlottetown
15.	March 23	Hensley Green Co-op
16.	March 24	Lennox Island Band Council
17.	March 28	Southport Community Seniors
18.	March 30	Notre Dame Place
19.	March 30	Windsor Green
20.	April 05	Health and Community Services Agency
21.	April 05	Kay Reynolds Centre
22.	April 06	Notre Dame Place
23.	April 10	SAS House
24.	April 11	The Elms
25.	April 12	Dalton Centre Seniors
26.	April 12	Gateway & Renate Place Co-ops

THE LOGISTICS OF SCHEDULING

The task of organizing these workshops was complex and depended to a large extent on our ability to forge a personal relationship with key people in each housing project. Workshop scheduling fell into several categories:

a) Workshops scheduled that were successfully completed

There were 26 workshops completed, reaching approximately 287 people. This is close to the original goal of completing 30 workshops during the course of the project. In some cases, groups combined for sessions, and more than some locations were used for more than one session.

b) Workshops scheduled and confirmed but not completed

The most common reason for workshops being scheduled, confirmed but not carried out was that nobody showed up. As the workshops were designed to be interactive and use a small group and brainstorming approach, if the numbers fell below 2 or 3 people the workshop could not be effective. Sometimes these workshops were scheduled and re-scheduled several times. There were 8 workshops in this category:

c) Workshops scheduled that were subsequently cancelled

Some workshops were scheduled, confirmed and then cancelled. Again, these represent considerable efforts on the part of the coordination team. In some cases, two sessions had been originally arranged, but it became desirable to only conduct only one, either because of the direct feedback from the participants or because of scheduling difficulties.
There were 8 workshops in this category

d) Workshops scheduled that were subsequently postponed

Some workshops required many discussions before a final date was settled on. Often this was because the contact person had to discuss with a Board or with membership before a final date could be negotiated.
There were 9 workshops in this category.

e) Workshops that were discussed at length, but were never confirmed and subsequently cancelled.

Several workshops were discussed at length, but the housing project eventually decided that they would not go ahead, usually because of lack of interest or lack of time. There were 9 workshops in this category.

f) Workshops that were scheduled and completed but the site was not a housing project

As it became clear that the original idea of workshops on site in housing projects might not come to fruition in all instances, the workshops were offered at a few other sites. The only workshop completed that did not focus primarily on residents of federally subsidised housing was the one held at the Health and Community Services Agency

THE PROCESS:

The first approach began with telephone contact with someone who was a key participant in the project, usually a board member, provincial employee or an on site coordinator. If there was any interest we followed up with written information about the workshops (attached) and some suggested dates. After this, contact would continue by phone, fax and mail. It was common for the contact person to need to go to a board meeting, membership or committee meeting to discuss further.
Once there was confirmation from the Housing project, then there were usually several calls to confirm the details, such as the exact location of the event, the numbers expected, communication with the presenters etc.

THE ANALYSIS:

It is easy to assume that if people cancel a workshop or simply do not turn up, it is because they are not interested in the subject matter. Although this is a factor, we believe other factors contributed such as:

a) People are too busy

Many people live busy lives these days, often with work, family and volunteer responsibilities. We heard in some instances that the housing project had gone through a time of many meetings.

b) Communication

At the earlier stages of the project, we often assumed that contact with one person meant that the details had been communicated to others on the project. We found that this was not always the case and put more energy into ensuring that posters were up, flyers were provided to all residents if possible etc. We also needed to streamline our internal communications, so that one person became the coordination point for last minute confirmations of all details, such as location, presenter, refreshments etc.

c) Promotion

The greatest success came when someone within the project on site took it upon themselves to promote the workshops personally. This included people going door to door, giving it time on an agenda for discussion, phoning people to remind them it was happening etc.

d) Timing

In some cases the lack of follow through had more to do with poor timing. For example, if a housing project had just had a series of special meetings, people did not want to go to any more meetings. Also the timing of the March break and Easter holidays probably created additional limitations for times when people were prepared to meet. Where timing allowed us to build on activities already scheduled, for example a membership meting or a regular event, we had more success.
Sometimes the timing of the workshops was not as convenient as it first appeared. With March break and Easter falling close together, families may have had other commitments and key people may have been away.

e) Feelings of Powerlessness

It is hard to know whether people do not turn out to workshops on the environment because they feel powerless . They may perceive environmental problems as global in nature and not within reach of the ordinary citizen to do anything about. This is speculation and needs some follow up.

RECOMMENDATIONS:

We recommend that anyone scheduling similar workshops should plan for a considerable amount of time and energy to be spent in the logistics of scheduling.

We recommend that whenever possible workshops should build on natural events within the projects

We recommend that key contacts be made within the projects who will ensure the internal promotion and follow through

TARGET GROUPS:

The workshops reached the following target groups:

- Members of Housing Co-ops;
- Residents of Provincial Social Housing Programs;
- Seniors;
- Victims of Family Violence;
- Survivors of Sexual Abuse;
- People with both physical and mental disabilities;
- First Nations people;
- Aboriginal youth;
- Service providers;
- Health care workers;
- Federal and Provincial Government employees.

VARIATIONS:

The trainers were encouraged to vary their presentations according to the needs of the participants. Attendance at workshops varied from a high of 100% of occupied units to a low of 6%, making for widely varying group sizes. Group dynamics were also affected by the factors of age, gender, literacy, disability and cultural differences, so the trainers had to adapt the sessions to a variety of circumstances and audiences.

The modules allowed for a maximum half day session, but most groups opted for an abbreviated presentation of around two hours duration. Interest was higher for modules Two and Three than for module One which focuses mainly on practices specific to the home. This preference was in keeping with the Co-operative Housing Federation's findings during the piloting of their "Greening Your Co-op" material, in that people seem to be more interested in the "big picture" now that advice and information on greening the household is widely available.

After the initial few presentations, it became clear that seniors groups require particular emphasis on the introductory component. The reasons for being at the workshop must be made crystal clear, and the trainer must take pains to place themself within the context of PEI society. This includes a brief genealogical history for Island born trainers, and an account of their origins and whatever led them to PEI by trainers "from away". Whether for reasons of literacy or dexterity, seniors groups proved to be highly resistant to writing things down. It was necessary to secure the services of a volunteer scribe from within the group.

FEEDBACK:

The feedback forms were very gratifying. Almost without exception, the participants expressed a high degree of satisfaction with the sessions and only one of the comments in the "I didn't like..." section expressed any dissatisfaction. The comment in question was an uncomfortable reaction to the development of secondary sexual characteristics and early onset of puberty in children exposed to water-borne hormone mimickers. Most comments on the feedback forms simply expressed appreciation, such as:

- I liked all the information and the issues. Very interesting.
- Very interesting talk. Enjoyed it all.

The most positive feedback resulted from the Water talk. Participants were particularly appreciative of the opportunity to engage in some in depth discussion of the risks to PEI's aquifers.

WHAT WE LEARNED:

1. Scheduling sessions with housing groups is very time consuming.

2. Survey fatigue is epidemic on PEI. Even with an interviewer, people were reluctant to take the time to respond.

3. The competitive marketplace applies to training as much as to trade. Successful training must be as interesting and entertaining as Bingo and TV to draw a crowd.

4. "Grassroots" approaches work well in a professional forum.

5. Writing is a barrier to participation, especially for seniors.

6. Both co-ordinator workload and cost can be drastically reduced by the reduction of paper use in the sessions.

7. Seniors are remarkably well informed about many environmental issues.

8. Interest in both local and global environmental and health issues is pervasive and strong.

9. Once material is prepared and presenters are trained, it is probably most cost-effective to combine presentations with already scheduled events over a longer period of time.

8. SURVEY:

METHODOLOGY:

Interviews were conducted with 25 randomly selected residents from target housing communities prior to the delivery of the presentations.

As the presentations were completed, another 25 randomly selected residents were interviewed using the same set of questions.

The results were compiled in the attached report.

LIMITATIONS:

The study lacks a control group, so the comparisons that can be made lack a clear baseline.

It was not possible to do before and after interviews with the same group of people, but the two samples did have a small degree of overlap as a result of the random selection process.

PARTICIPANTS:

Interviewees were drawn from Queens and Prince County, with all respondents being over 25 years of age. More women than men were represented, and all were fluent anglophones.

The survey data is set out in APPENDIX "B".

9. CONCLUSIONS:

PARTNERSHIP:

One of the most successful elements of this project was the pioneering co-operation between federal and provincial government, Environmental Non-Government Organisations, Non-Government Organisations, the health sector and a Crown Corporation. In spite of very diverse corporate cultures and different ways of doing business, all partners managed to adapt to each other sufficiently to get the work done on time and within the necessary budgetary & other parameters.

INNOVATION:

As well as forming new partnerships, the project marked a new willingness to use publications produced by other organisations to promote the goals of one's own organisation. In an era when every organisation and department seems to be intent on having its own set of publications, newsletters etc., it was taken as a positive development to see any kind of sharing of print resources.

AT RISK POPULATIONS:

It was clear that the participants at the sessions do experience health problems that are linked to indoor air quality and to other housing issues. It was also clear that the majority of participants would not have been exposed to the CMHC, Environment Canada and Environmental Coalition materials that were distributed without them being brought on site. Many of the groups visited lack both the mobility and the will to seek such information in the broader community. However, it was also clear that the building standards of recently constructed social housing projects represented a vast improvement over the previous living situations of many of the residents. This leads us to believe that there is a large group of people in low cost private housing who could benefit from this information.

DUPLICATION:

Based on our experience, we do not recommend that other offices or agencies attempt to duplicate this project exactly. The modules are an excellent basis for an educational project, but we feel that they are best used outside of an intensive and strictly time-limited situation. Anyone wishing to build upon elements of our work is advised to simply publicise the sessions as an activity available to both the public (for information and education) and to professional and industrial groups for professional development, occupational health issues and the like. The principles of Healthy Housing are easily transferred to Healthy Institutions and Healthy Offices which are key components of Healthy Communities. The facilitative and elicitive nature of the modules are well suited to the initiation of discussion around Health and Environment issues whether in residences, workplaces or a community forum. People are eager to share their concerns and their successes, and the benefits ripple out farther and faster when people working at various community hubs become involved in the process.

APPENDIX "A"

WORKSHOP MODULE MATERIALS:

HEALTHY COMMUNITIES PROJECT.

INTRODUCTION

GOAL: Help participants to feel comfortable in the session.

Objectives: * clarify the purpose of the workshop
* clarify roles of facilitator and participants
* increase feelings of safety in the group

AGENDA.

- Welcome and Opening Statement.....5 min.
- Group Guidelines/Agreements.....5 min.
- Test Pattern (colour brainstorm).....2 min.
- Questions.....5 min.
- Participation and feedback.....3 min.

Welcome and Opening Statement:
points to include:
* welcome everyone - wear your name tag
* introduce yourself and your job at the workshop
* distribute name tags and markers
* encourage everyone to relax and to put their worries aside
* explain a little about the project and its purpose
* review the agenda
* check for questions and concerns
* circulate attendance list

Group Guidelines and Agreements:
points to include:
* have each person say their name and wear their name tag
* emphasise that this is information sharing not a test
* it's o.k. to make mistakes, make jokes ask questions
* facilitator needs to know if anyone is uncomfortable/upset
* washroom locations, smoke breaks, refreshments etc.

Test Pattern:
points to include:
* explain brainstorming technique (no right/wrong, no discussion)
* this is a practice brainstorm using colours
* everyone to say a different colour and facilitator flipcharts them
* facilitator points out that all colours are "right" and part of the picture

Questions:
* invite questions now and at any time

Participation and Feedback:
* emphasise that we want to understand their concerns and needs
* evaluation forms will be used at the end
* what we learn will be used to improve future sessions, so please help

HEALTHY HOUSING

Module Outline and Facilitators Notes

MODULE 1: Health of the Resident

0:00

Presentation of Health and Housing

We are here today to talk about health and specifically the ways that our housing can support our health.

Who here believes that your housing affects your health?[1]

Lets **make a list** of the ways that is does:

• hot/cold	• natural light	• EMR
• drafty	• Mould	• ozone depletion
• water quality	• mildew	• acid rain
• bugs	• easy to clean	• land use

Brainstorm list on **flipchart**
Ensure inclusion of one from each of the areas.

Some of the things on this list are **supportive and some are not supportive.**

Point out the supportive ones, Circle the non-supportive ones

What happens to your health if you live in a place that is ...(read circled items on list)

Verbally list & point to the non-supportive characteristics

[1] If some say no, acknowledge them, note that workshop is based on assumption that housing does affect health, and let them know that they will have the opportunity to voice their beliefs - in fact that they will be helpful to us, because they will "keep us honest".

Even if you have good food, supportive friends, a job you love, and generally lots of good things in your life, **your health is stressed if your housing has many of these conditions.**

Show health wheel

And if you somehow lose your job, your partner leaves you, and your best friend moves to Halifax, then you are more likely to get sick because there are just not enough of the building blocks of health present in your life.

Looking at health this way, we can see that health is not something that you just have or don't have. **We can, in fact, choose to create an environment around us that supports our health.** It is no surprise that the same components that support us to maintain our physical health are also the things that we need to have if we get physically ill. So when you choose to make sure that you are supported in your health to the best that you can be, you are also making sure that if you do get sick, you have what you need around you in order to heal!

All of that is a long way to say that **we have a lot of control over our health.**

Let's **go back to our list** of the ways that housing affects our health.

	Develop the Structure of the Workshop Looking at this list you can see that • **there are some things that are totally within your control** - the type of cleansers you use for example. • **Other things are decisions made about the whole building,** such as when to put in new energy efficient windows. • And then **there are things are affected by and affect everyone in the community** or the world - ozone depletion for example. **We are going to focus on each of these areas in turn throughout the next 3 hours.** Our first hour will focus on the opportunities that you have to increase the your health within your home environment, the second hour will focus on your building and the third hour on the global community.	Point out examples on the flip chart.
0:15	*Run Through Small Group Task* What I'd like to do now is to **choose several items that you as a resident have control over,** and talk about what your choices are in working with each of these things. For instance, whether or not your home is warm enough has a great and immediate impact on your health. **What options do you have when you are at home and feeling cold?** • turn up the thermostat • bake something in the oven • put on a sweater • anything else that you can think of?	Give examples if necessary
	What about use of cleaners? Some people get sick if they are around powerful cleaners, and the chemicals in them are not good for any of us. What are your options?	Have the group develop the list.

	• clean less • use them anyway • buy environmentally friendly cleaners • use homemade versions that are not toxic • etc.	
	Small Groups	
0:20	You can see that we have many choices about how we live in our housing that directly affect our health. Right now I'd like to invite you to **move into small groups** and continue what we began here with a list that I am going to hand around after you are in your groups. This list is broken down into four areas: air, water, energy and materials. Each group will work on one area. I'd like you to **"number off" from 1 to 4** starting here to my left and going aroud to the room. The 1's go over in that corner, the 2s over there, the 3s over here, and the 4s in this corner.	If there are less than 12 participants, create only 3 groups.
	Have a look at the sheet that your group is working on. You will see that there are a number of issues such as the two we have already discussed. I would like you to **think of all the options for action** that you have for each issue. You can **brainstorm as a group, and each keep track of the options on your own sheet.** You have about 15 minutes.	Hand out **issues sheets** and **information sheets.** Move around the room helping each group with their list - after 13 minutes let them know that they have 2 more minutes.
	Large Group, Reflection and Personal Commitment	
0:40	**Come back to the larger group** now please ... And take a few minutes on your own to **find the actions that you think are the top 3** in importance to creating a healthy home for yourself. Number them one to three, with one being the most important and three being the least important.	

	Out of that list of 3, **star the one thing that you would be willing to commit to doing.** It might not be the number one action on your priority list - that's O.K. Doing any one thing of the things that you feel are among the top 3 is pretty good!	Give them several minutes to do this.
	Report to Large Group	
0:45	Now I'd like to suggest that we go around the room, and have each person tell in just a few words what *you* think is • the **most important action** that your group came up with, and • the **one which you feel that you could commit to** doing to make your unit a healthier place. And remember that each group was working on a different area, so as you are listening to other people, you might get some ideas of other things that you could do	Encourage people to use just a few words for each of these. If you have a particularly large group, just invite a few people to speak, or every 2nd, as you have time available.
	Closure of Module	
0:55	I am going to hand out a Learning Sheet now, that is divided into three sections. At this point, I would like you to **fill out the first part.** It gives you a place to **list one thing you learned** during this hour about how you can make your home a healthier place to live, and a place to **fill in the one thing you are willing to do.**	Hand out **learning sheet.**
1:00		

MODULE 2: Health of the Building

Presentation of Health of the Building

1:05 So now we are ready to move into the second part of our workshop, and look at the health of the building. Just as people's health builds up out of a number of different parts, so does that of your unit and building. Things do not happen in isolation - but instead lots of different things all affect each other and the health of the building.

I'm sure you have all noticed the effect that the other residents have on your life: whether it is noise, cleanliness, smoking, or use of the community facilities, we all affect other people with the choices we make about how we want to live, and we are impacted by other people's choices.

As well as the current choices made be people in the building, we are also affected by the choices made during construction:

- materials that contain alot of glues can emit gases for years,
- the absence or inclusion of an adequate ventilation system
- and the maintenance of the furnace and duct work all affect the health of the building

Looking back at our list of health issues, we can see that a number of issues relate to the building you live in.

Bring the **flip chart page with list of health issues** to the front of the room.

Run Through Small Group Task

1:10	I would like to think with you about what can be done about these things. Let's begin with one of these issues. What are the options in your building to deal with bugs. We are just brainstorming here - there is no right or wrong. • exterminators • cleanliness • education of tenants • non-toxic alternatives to chemical poisons *Small Groups*	
1:15	All right, as we did when we were talking about your personal health, I would like you to break up into small groups, and list possible solutions to the issues about the health of your building. And let's switch the groups around. Each group move clockwise to the next corner of the room. Look over your issues sheet. You will see a list of issues that affect the health of a building, with space to fill in possible solutions. And also you will notice that there is a space for you to add an issue that feels important to your group. Work on these together, and I will be moving around to help each group with their list.	**Hand out issues sheets** Move around the room helping each group - after 13 minutes let them know that they have 2 more minutes to finish up.

	Most of these issues require action by the residents working together with the building manager. So, rather than setting your priorities independently as you did with the issues regarding your personal health, this time I would like you to decide as a group on the top three actions that you think would make your building more healthy, and rank them from one to three. Once you have done that choose, as a group, one that you would be most interested in seeing happen. Take six or seven minutes to do that now.	Again, move about the room facilitating this process. Check in about when each group is ready to finish.
	There are flip chart sheets and markers at the front of the room. Please **have one person write out the three actions you chose, and put a star beside the one thing that you would be most willing to do.** And then **choose one person in your group to tell your decision to the larger group.**	**Put flip chart sheets up on wall**
	Report to Large Group	
1:35	O.K., come back to the large group now. Let's hear from each group about their choices.	Hear from each group, encouraging them to include the reasons for their choices.
	When we think about making the actions listed on these sheets happen, we are looking at involving the whole building. Whether it is as part of the decision-making team, or is as an occupant of a building where new windows are being put in, everyone will be affected. This also means that one person cannot create these changes working alone, as you can with your personal health.	

	Ideas for Action	
1:45	What ways do you, as a resident in your building, have to make any of these things happen? • tenant's committee • talk to building manager • petition • get commitment of residents and fund raise • do it without official involvement	Listen to answers to discover level of empowerment - do they think of tenant's committee, or do they say that there is no way? Gear discussion to the level of responses. Educate about options where appropriate.
	Closure of Module 2	
1:55	Now, I would like you to **pull out the Learning Sheet** we began at the end of the first hour. **Fill out the second part.** List one thing you learned during this hour about how you can make your building a healthier place to live, fill in the one thing you want to see done, and who you could work with to make this happen.	
2:00		

MODULE 3: Health of the Environment

Presentation of Health of the Environment

2:10 The environment surrounding your building has an effect on the health of your building and is affected by the health of your building.

We have a habit of thinking that when we discard something, it goes "away". The truth is that there is no "away". Everything that we dispose of has to go somewhere - either to a landfill site, a sewage treatment plant, or some other place. Wherever it goes, it still affects our air, our water, our land, and our future energy resources.

Water Presentation

Water is an important is on PEI these days. I would like to take about 15 minutes now to give you some information about water. Water is an essential resource for life. Canadians have the second highest use of water per person of any country in the world! And a Canadian family uses almost nine times as much water each day as a family in Europe. After we have used our water we often return it to the environment without cleaning it. While you are listening, think about the ways that Canadians could change their water use.

Insert Water Presentation

Develop Priorities

2:25	What do you think that Canadians could do to reduce our water use, and improve the quality of our water?	Brainstorm. Make list on **flip chart.**
	Which one of these feels the most important to you right now?	Help group choose one action.
	Action Plan	
2:35	Let's develop an action plan. When developing this kind of plan, there are always some basic things to think about. Do we want to change policy? Or do something that directly creates change? Perhaps our goal is public education? Or research? For ...(the issue chosen above)... think about what kind of action would you like to see happen.	
	There are many tools available to us to create change. Each of these boards lists one of these tools. I'd like you to look over these names which are available to us for our action plan. Take one of the packets of 5 sticky dots and place one ofeach of the five tools that you would like to use. We will put the tools with the most dots in our action plan.	Bring out the **action plan tools.** Bring out **coloured sticky "dots"**
2:50	Next we have to think about when we would use each of these activities. Does one of these seem to be the first thing to do? (Etc.)	Help group develop an order to the list.
	Now we have the basic plan You can see that you could use this process with any issue that you wanted to work on and in any group to develop a basic outline of what the group feels is important.	

	Closure of Module
2:55	Now, I would like you to pull out your Learning Sheet. Fill out the third part. List one thing you learned during this hour about how you can make your world a healthier place to live. Fill in the one thing you want to see done, and who you could work with to make this happen.
3:00	
	Evaluation and Close
3:20	

HOUSING/HEALTH BRAINSTORM.

1. Volatile Organic Compounds:

- Plywood, chipboard etc.
- Carpets, vinyl flooring etc.
- Paints, thinners, strippers.
- Household cleaners.
- Curtains, upholstery, fabric.
- Inks, dyes etc.
- Glues, caulking, etc.
- Polishes, sealants etc.
- Treated wood/preservatives.

2. Automotive Products:

- Gasoline.
- Oil.
- Fluids (Brake, Steering etc.)
- De-icers.
- Fuel and oil additives.
- Car cleaners and finishes.

3. Plants, Animals, Soil:

- Moulds.
- Dusts.
- Pollen.
- Animal dander.
- Insect pests.
- Urine, feces.
- Radon

4. Building materials:

- Resins (pine, cedar etc.)
- Plaster dust, sawdust etc.
- Paint chips.
- Fiberglass/Asbestos fibres.
- Formaldehyde, plastics etc.

5. Combustion By-Products:

- Tobacco smoke.
- Wood/Coal smoke.
- Propane/Natural gas fumes.
- Furnace oil fumes.

6. Moisture:

- Mildew and moulds.

7. Electromagnetic Radiation:

- Electricity.
- Lighting.
- Microwaves, communications.
- White noise.

WATER.

Canada is a water-rich nation, with 20 percent of the world's fresh water resources. Yet water is a resource under pressure:

- Only 9% of our fresh water reserves are usable.
- 60% of river discharge runs North to the Arctic, BUT
- 90% of the population lives within 200 miles of the southern border.
- Demand for potable water has increased seven-fold in the past 90 years.
- 75% of that increase has taken place in the past twenty years.

Canadians are the second largest users of water in the world, with each Canadian using an average of 77 gallons per day.

Until recently, the availability of pure drinking water was taken for granted in most parts of Canada.

Municipal water supply costs tax dollars. Water treatment also costs tax dollars. So, when water is used unnecessarily, tax dollars are also wasted.

Experience has shown that residential water use can be cut by between 30 and 50 percent with no effect on lifestyle. Most of the savings are simply the result of some changes to water using hardware:

- Low flow shower heads use half as much water;
- Faucet aerators cut flow in half;
- Water saving appliances can clean dishes or clothing using a fraction of the water consumed by standard washers and dishwashers.
- Lawns can be planted with hardier native grasses that thrive on rainfall alone. (This also reduces pesticide and herbicide use).
- Trees, shrubs and paved walkways can further reduce the need for watering. (Trees and shrubs also reduce heating and cooling costs).

Growing awareness of industrial pollution, agricultural pollution and contamination by bacteria, chemicals and metals has prompted concern about water quality.

As well as concern about outside sources of contamination, there is concern about the health effects of water treatment additives such as chlorine and fluoride, and about the leaching of heavy metals, such as lead, from water distribution pipes.

ALL DRINKING WATER ON PEI COMES FROM GROUNDWATER WHICH IS EASY TO POLLUTE AND TO USE UP.

COMMON POISONS THAT THREATEN GROUND WATER:

- Car batteries
- Fuel oil
- Automotive oils and fluids (brake, steering, transmission etc.)
- Gasoline
- Paints and solvents
- Household cleaners such toilet cleaners, oven cleaner, bleach
- Smokestack emissions
- Incinerator ash
- Radioactive and medical wastes
- Industrial effluent
- Herbicides and pesticides
- Leachate from dumps

MAN-MADE CHEMICALS FOUND IN GROUND WATER TO 1991 = 2100
(TESTING IS COSTLY, SO MANY CHEMICALS ARE NOT
EVEN CHECKED FOR)

NUMBER OF CHEMICALS IN USE IN 1991 = 30,000

NUMBER OF CHEMICALS CURRENTLY IN USE = 40,000

OF THE CHEMICALS TESTED, OVER 1000 ARE KNOWN TO CAUSE
CANCER, MANY HAVE STILL NOT BEEN TESTED

NEW CHEMICALS COMING ONTO THE MARKET EACH YEAR = 1000

Chronic exposure to persistent toxins can lead to:

- Birth Defects
- Lowered intelligence in children
- Mental confusion or Memory Loss
- Increased rates of Leukemia, Cancer, Liver Disease, Kidney Disease and other degenerative illnesses
- Lowered resistance to common infections

TINY QUANTITIES OF TOXIC SUBSTANCES ACCUMULATE INTO LARGER QUANTITIES
AS YOU GO UP THE FOOD CHAIN. HUMAN BEINGS ARE AT THE TOP OF
THE FOOD CHAIN, SO WE OFTEN CONSUME FOODS THAT HAVE ALREADY
CONCENTRATED TOXINS DURING THEIR OWN GROWTH.

LEADING POLLUTION SOURCES - PEI

1. LEAKING FUEL TANKS.

SOLUTIONS:

- Monitor carefully.
- Replace regularly.
- Inspection access.
- Containment systems.
- Alternative fuels.
- Energy conservation.
- District heating.
- Public transportation.

2. ROAD SALT.

SOLUTIONS:

- Use sand.
- Driver education.
- Public transportation.
- Work at home.

3. PESTICIDES AND HERBICIDES.

SOLUTIONS:

- Control spraying.
- User and public education.
- Limit availability.
- Soil health research.
- Promote sustainable alternatives.
- Use resistant plant strains.
- Use biological controls.

ONE LITRE OF GASOLINE CAN CONTAMINATE TWO MILLION LITRES OF DRINKING WATER.

(bioaccumulation diagram)

HEALTHY HOUSING LEARNING SHEET

MODULE 1: Health of the Resident

One thing I learned during this module about how I can make my home a better place to live is: _____

_____

One thing I am willing to do to make my home a better place to live is:

_____

_____

MODULE 2: Health of the Building

One thing I learned during this module about how I can make my building a better place to live is: _____

_____

One thing I am willing to do to make my building a better place to live is:

_____

_____

MODULE 3: Health of the Environment

One thing I learned during this module about how I can make my world a better place to live is: _____

_____

One thing I am willing to do to make my world a better place to live is:

_____

_____

Name:_____

Date: _____

Energy Issues for the Resident

Hot Water

1. _____
2. _____
3. _____
4. _____

Heating

1. _____
2. _____
3. _____
4. _____

Lighting

1. _____
2. _____
3. _____
4. _____

Transportation

1. _____
2. _____
3. _____
4. _____

Electricity

1. _____
2. _____
3. _____
4. _____

_____

1. _____
2. _____
3. _____
4. _____

Materials Issues for the Resident

Furniture

1. _____
2. _____
3. _____
4. _____

Composting

1. _____
2. _____
3. _____
4. _____

Recycling

1. _____
2. _____
3. _____
4. _____

Reduction and Reuse

1. _____
2. _____
3. _____
4. _____

Cleaners

1. _____
2. _____
3. _____
4. _____

_____

1. _____
2. _____
3. _____
4. _____

Air Issues for the Resident

Smells

1. _____
2. _____
3. _____
4. _____

Noise

1. _____
2. _____
3. _____
4. _____

Headaches

1. _____
2. _____
3. _____
4. _____

Hobbies

1. _____
2. _____
3. _____
4. _____

Breathing Problems

1. _____
2. _____
3. _____
4. _____

_____

1. _____
2. _____
3. _____
4. _____

Water Issues for the Resident

Amount of Use

1. _____
2. _____
3. _____
4. _____

Pollution

1. _____
2. _____
3. _____
4. _____

Mould and Mildew

1. _____
2. _____
3. _____
4. _____

Outdoor Use

1. _____
2. _____
3. _____
4. _____

Chemicals, Taste, Colour

1. _____
2. _____
3. _____
4. _____

_____

1. _____
2. _____
3. _____
4. _____

Air Issues for the Building

Smells

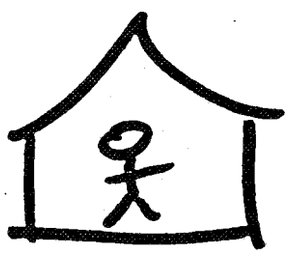
1. _____
2. _____
3. _____
4. _____

Construction Material Emissions

1. _____
2. _____
3. _____
4. _____

Ventilation

1. _____
2. _____
3. _____
4. _____



Moulds

1. _____
2. _____
3. _____
4. _____

External Pollutants

1. _____
2. _____
3. _____
4. _____

1. _____
2. _____
3. _____
4. _____

Energy Issues for the Building

Hot Water

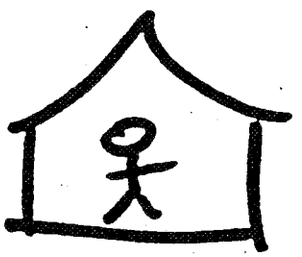
1. _____
2. _____
3. _____
4. _____

Electricity

1. _____
2. _____
3. _____
4. _____

LIghting

1. _____
2. _____
3. _____
4. _____



Solar Energy

1. _____
2. _____
3. _____
4. _____

Heat Loss

1. _____
2. _____
3. _____
4. _____

_____

1. _____
2. _____
3. _____
4. _____

WATER ISSUES FOR THE BUILDING

Amount of Use

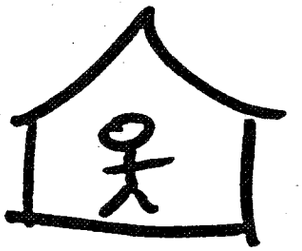
1. _____
2. _____
3. _____
4. _____

Pollution

1. _____
2. _____
3. _____
4. _____

Mould and Mildew

1. _____
2. _____
3. _____
4. _____



Water saving Technology

1. _____
2. _____
3. _____
4. _____

Outdoor Use

1. _____
2. _____
3. _____
4. _____

_____

1. _____
2. _____
3. _____
4. _____

Materials Issues for the Building

Construction Material Choices

1. _____
2. _____
3. _____
4. _____

Useable Community Open Space

1. _____
2. _____
3. _____
4. _____

Hazardous Materials

1. _____
2. _____
3. _____
4. _____

Privacy for Residents

1. _____
2. _____
3. _____
4. _____

Recycle and Compost

1. _____
2. _____
3. _____
4. _____

1. _____
2. _____
3. _____
4. _____

Air Issues for the Global Community

Pollution

1. _____
2. _____
3. _____
4. _____

Greenhouse Effect

1. _____
2. _____
3. _____
4. _____

Depletion of Ozone Layer

1. _____
2. _____
3. _____
4. _____

Deforestation

1. _____
2. _____
3. _____
4. _____

Acid Rain

1. _____
2. _____
3. _____
4. _____

_____

1. _____
2. _____
3. _____
4. _____

Energy Issues for the Global Community

Depletion of Sources

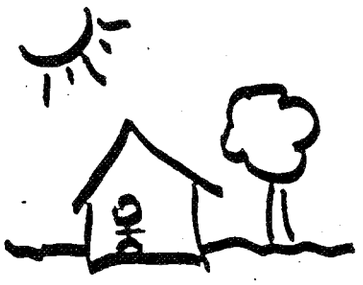
1. _____
2. _____
3. _____
4. _____

Pollution

1. _____
2. _____
3. _____
4. _____

Transportation

1. _____
2. _____
3. _____
4. _____



Global Warming

1. _____
2. _____
3. _____
4. _____

Electromagnetic Radiation

1. _____
2. _____
3. _____
4. _____

_____

1. _____
2. _____
3. _____
4. _____

MATERIALS ISSUES FOR THE GLOBAL COMMUNITY

Depletion of Resources

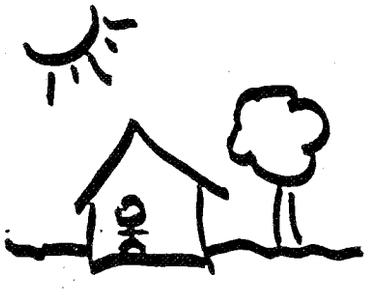
1. _____
2. _____
3. _____
4. _____

Waste Disposal

1. _____
2. _____
3. _____
4. _____

Hazardous Materials

1. _____
2. _____
3. _____
4. _____



Wise Land Use

1. _____
2. _____
3. _____
4. _____

Recycle and Compost

1. _____
2. _____
3. _____
4. _____

_____

1. _____
2. _____
3. _____
4. _____

WATER ISSUES FOR THE GLOBAL COMMUNITY

Amount of Use

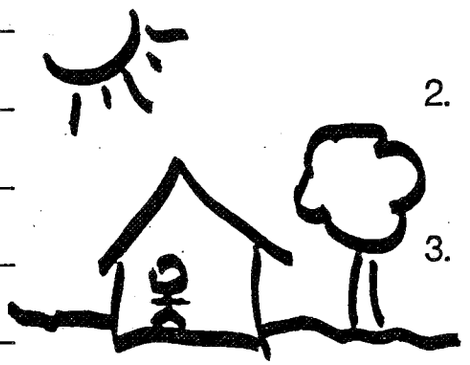
1. _____
2. _____
3. _____
4. _____

Sewage Pollution

1. _____
2. _____
3. _____
4. _____

Safe Drinking Water

1. _____
2. _____
3. _____
4. _____



Acid Rain

1. _____
2. _____
3. _____
4. _____

Chemical Pollution

1. _____
2. _____
3. _____
4. _____

_____

1. _____
2. _____
3. _____
4. _____

AIR INFORMATION SHEET

The indoor environment is also affected by agents and conditions originating outside — for example, the quality of the outdoor air (pollution levels, temperature, and humidity) and radon and other soil gases which enter through leaks and cracks in the foundation.

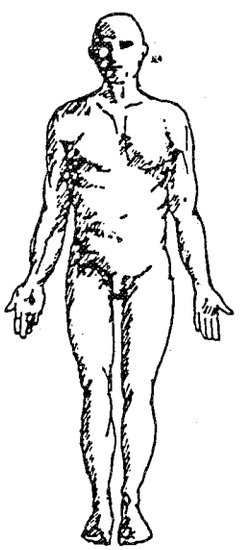
All of these agents and conditions affect the quality of the indoor environment, and pose potential dangers to your health. Regardless of your health needs, clean indoor air can provide the basis for a nurturing environment. It can improve the quality of your health and your sense of well-being.

Health Effects and Indoor Air Quality

Many chemicals, such as formaldehyde, toluene, and other volatile organic compounds (VOCs) found as contaminants in homes and offices, are known to have adverse effects on human health. Molds, besides causing allergic reactions and acute infections, can cause chronic illnesses in humans (Significance of Fungi in Indoor Air: Report of a Working Group, Health and Welfare Canada, 1987).

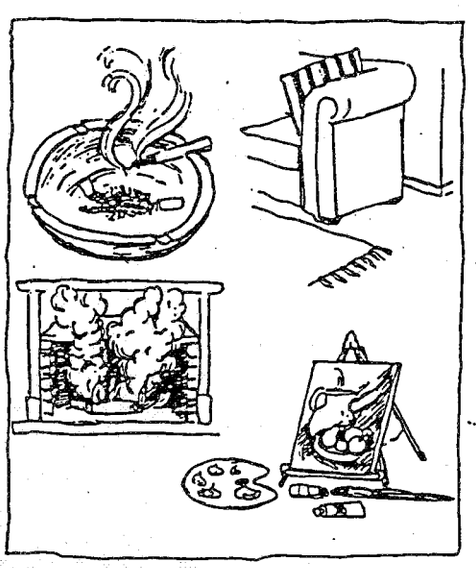
The health care community is still in the process of determining the extent and range of housing-related health effects. The list that follows names just some of the ailments that may be related to poor indoor air quality.

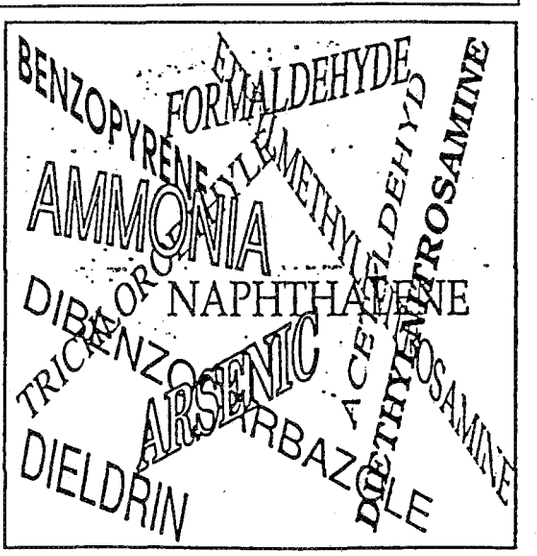
allergic rhinitis
anemia
asthma
asbestosis
cancer
cardiovascular stress
coughing
digestive problems
dizziness
dry, chapped or irritated skin
emphysema
eye, nose and throat irritation
fatigue
headaches



impaired lung function / shortness of breath
impaired vision
impaired coordination
influenza
learning impairment
liver and kidney damage
loss of bone calcium
nervous system depression
nose bleeds
pneumonia
rashes
respiratory distress
respiratory infection
sinus congestion

Exposure to contaminants can also have a number of indirect health effects, including increased susceptibility to disease from other causes, aggravation of existing disease, and sensitization to the same and other environmental agents.





Over 60 000 commercial chemicals in use today were unknown 40 years ago.

Almost everyone is concerned about outdoor air pollution. Few people, however, realize that the air they breathe inside their homes may actually be more hazardous to their health than outside air.

The link between human shelter and the healthfulness of the indoor environment is not new — even caves had indoor air quality problems. But as houses have become more complex, especially with the increased use of synthetic, chemical-based products, so too have the risks to human health. Today, depending on your level of sensitivity, you may be negatively affected by anything from furniture to fuel oil and from wax to wallpaper.

Another major source of trouble, especially for allergy sufferers, is molds. Molds grow wherever it is damp. They can be found outside the house, in the structure of the house, and throughout the house; in obvious places, like the kitchen and bathroom; and in not so obvious places like carpets and walls.

How Contaminants Enter Our Bodies

Contaminants can enter our bodies in three ways: through the water and food we consume (ingestion); through the materials and furnishings we come in contact with (touch); and through the air we breathe (inhalation). This guide is primarily concerned with airborne contaminants and the improvement of air quality as the major step in creating a clean house. Airborne contaminants are generally divided into two different groups: biologicals and chemicals.

*1. **Biological contaminants** can originate from outdoors or within the home. They include molds, dust mites, pollen, animal dander, and bacteria. Molds are underrated contaminants in the home; they produce particulates (spores and residual matter) and gases (volatile compounds characterized as moldy or musty odours). High moisture levels inside the home support the growth of molds and dust mites.*

*2. **Chemical contaminants** include both gases and particulates. Gases can originate from numerous sources, including:*

- *gases released by occupant activity (body odour, carbon dioxide [CO_2], cigarette smoke);*
- *combustion gases generated by the burning of fossil fuels in gas furnaces, fireplaces, hot water heaters, woodstoves and oil furnaces;*
- *gases released by building materials, furniture, fabrics, floor coverings, carpets, paints, and caulking, as they age, dry, or cure;*
- *other gases, such as ammonia from cleaning products, chlorine from bleach, pesticides, vapours from personal care products, and ozone produced by some electrical equipment;*
- *cooking and hobby activities; and*
- *gases from the soil and rocks, such as radon (see also note on page 15).*

Chemical particulates may originate from a variety of sources, including dust and soils, combustion processes, and cigarette smoke, as well as building materials and furnishings such as concrete, lead paint, insulation, carpets and draperies.

Sources of Contaminants

Contaminants are found indoors in a variety of forms. They can be gases:

- carbon dioxide from breathing
- products of combustion such as carbon dioxide, carbon monoxide and oxides of nitrogen
- radon from the soil
- water vapour (humidity can create problems when there is too much or too little in the air)
- a wide variety of hydrocarbon-based chemical gases, and
- odours.

They can be liquids in the form of tiny droplets, called aerosols:

- water droplets that carry bacteria and viruses
- liquid chemicals from "spray" aerosols, and
- solvent fumes.

They can be solids:

- dust from both inside and outside the home
- soot from combustion processes
- asbestos fibres
- lead from automobile emissions, and
- spores and other products of fungal growth.

MATERIALS INFORMATION SHEET

Hazardous products which can pollute your home:

- paint
- paint thinner
- paint remover
- bleach
- oven cleaner
- antifreeze
- drain cleaners
- fire extinguishers
- fertilizer
- pesticides
- rust proofer
- spot remover
- toilet cleaner
- cigarettes
- fireplaces
- dry cleaning fluid
- household cleaners
- mothballs
- perfumed soaps
- furntiure polish
- air fresheners
- toxis glues
- air conditioners

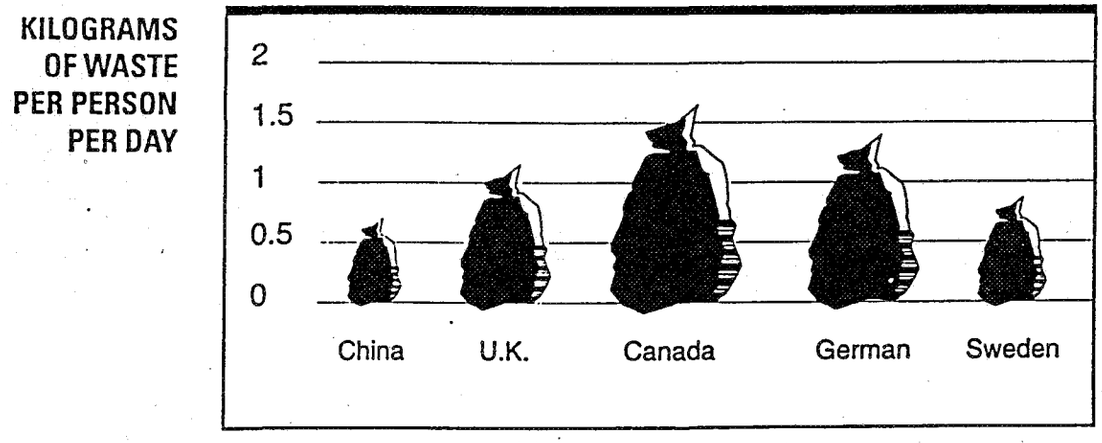
THE 4 R's:
Reduce
Re-Use
Recycle
Recover

As towns grow, they ususally take over agricultural land.
Single family detached housing requires:

- 3 to 4 times more land to house the same number of people as a walk up apartment.
- 4 times more infrastructure per unit than a duplex (And 4 times more distance to travel for snow removal, shcool bus routes, and garbage collection).

Waste management

Canada churns out more garbage from its homes, offices and factories per capita than almost any other country on earth. All this garbage puts stress on our environment, clogging landfill sites, polluting the soil and contaminating water supplies. Despite our vast geography, we are running out of places to dump our garbage.



New landfill sites are hard to find because not many Canadians want a dump in their backyard. So elected officials at all levels are promoting and enforcing reduction in the amount of materials going to landfill. They are also enacting requirements for better, but more expensive disposal techniques.

RESOURCE EFFICIENCY

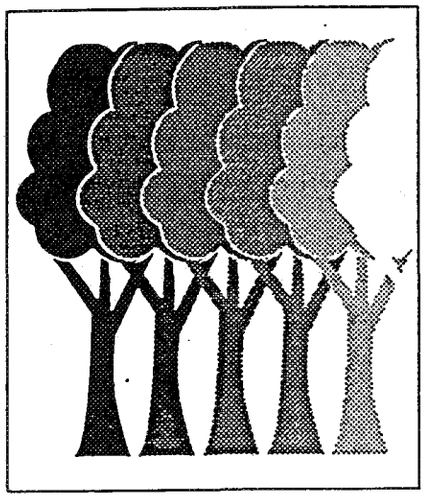
Housing is a major consumer of Canada's natural resources. The construction and operation of our homes and communities places a heavy burden on our forests, water, petroleum, and land resources.

At virtually every stage of the design and construction process, inefficiencies in the use of materials can be identified. In many cases these inefficiencies are justified by a perception of Canada's seemingly plentiful natural resources. Yet every time resources are extracted, processed, and manufactured, a burden is placed on the environment, and our resource base is diminished.

A more efficient use of resources offers the potential to improve affordability of our housing, to decrease energy consumption associated with extraction and processing, and to minimize the environmental impact of resource use.

More efficient designs will also allow for environmental effects to be amortized over a longer period of time. Alternative designs can minimize the need to extract forest-based, petroleum-based, or water-related raw materials. More efficient construction processes can also reduce wastage on the site.

Minimizing the environmental impact of housing may require new approaches to community planning, housing design, materials selection, construction techniques, and the regulatory approval process.



1 PERSON uses:

23 tons of wood
18 tons of paper
16 tons of metals
32 tons of organic chemicals
540 tons of construction materials . . .

Management of Construction Waste

As much as 2.5 tonnes of wastes are produced in the construction of typical new housing in Canada. Combined with an even higher rate of waste generation incurred in the demolition and renovation of homes, such waste is in fact a waste of resources and energy, not to mention a burden on landfill capacity.

Waste management on the construction site is based on four Rs:

- *review* of conventional procedures;
- *reduction* in the wastes being generated;
- *reuse* of materials; and
- *recycling* of what has conventionally been seen as waste.

Construction practices can be altered to minimize wastes and optimize resource use through central cutting areas to allow for easier access to off-cuts, improved site storage procedures designed to minimize water damage, and improved inventorying procedures.

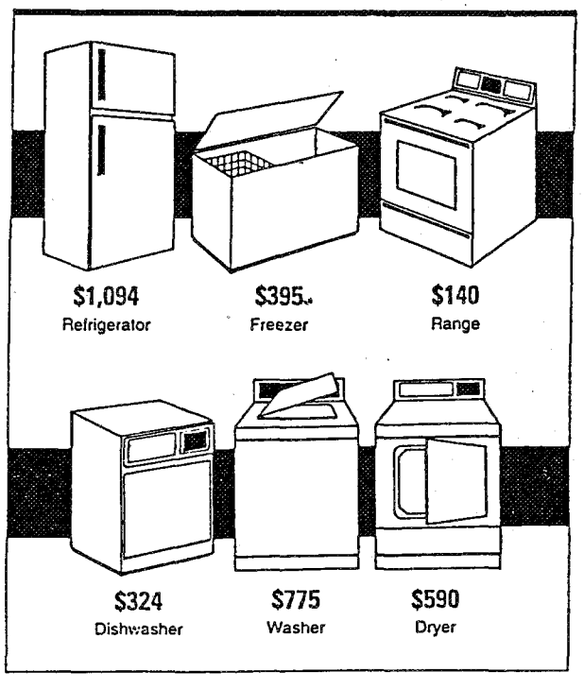
Many materials commonly thrown into disposal bins can be re-used on site. Off-cuts can be employed for blocking and bridging, insulation can be placed into the attic, drywall off-cuts can serve as additional thermal mass. Finally, when optimum use of materials has been accommodated, leftover materials can be recycled.

The design of healthy housing must take into account wastage produced during construction, as well as the ultimate disposal of construction materials as they approach the end of their useful lifetime.

Energy Information Sheet

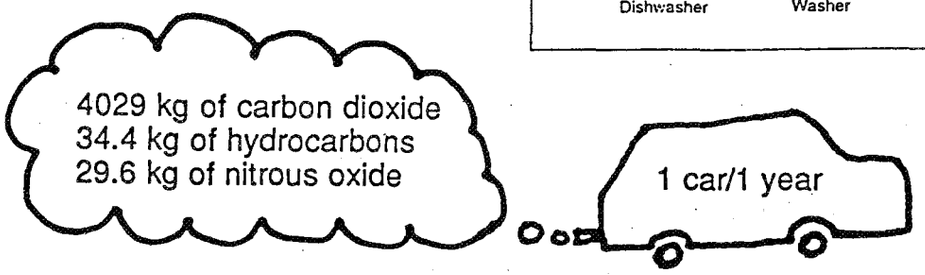
Skylights add natural light and are especially useful in multiunit housing. Recent improvements make skylights energy efficient and leak proof.

Applicances can account for 14% of the energy used in a home. The potential value of energy saved during the lifetime operation of various appliances using more energy efficient appliances is shown below:

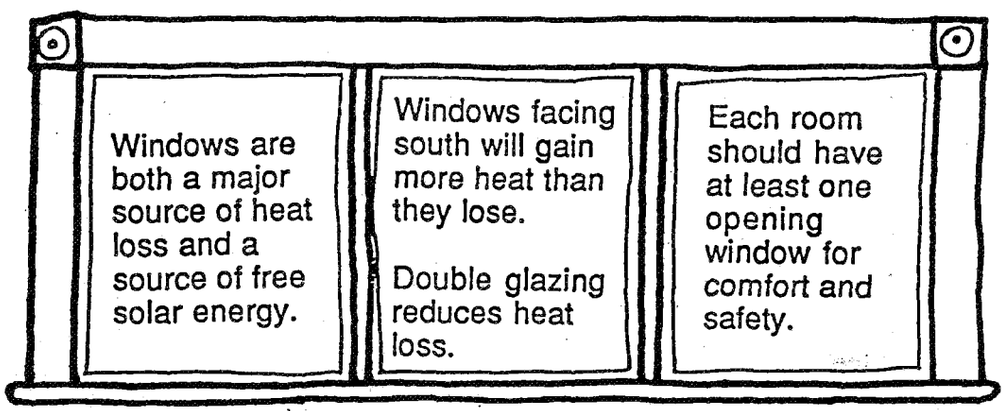


Detached houses can consume from 15 to 67% more energy than other low rise housing options, mostly due to high exposed surface to volume ratio.

Fluourescent lighting is 3 to 6 times more efficient than regular incandescent bulbs.



77% of Canadian households own one or more cars.



Embodied Energy

The energy embodied in house construction materials - *the amount of energy required to manufacture, transport and install materials used in house construction* - represents as much as 30 years' worth of operating energy consumption. Choices can be made that reduce the amount of energy used.

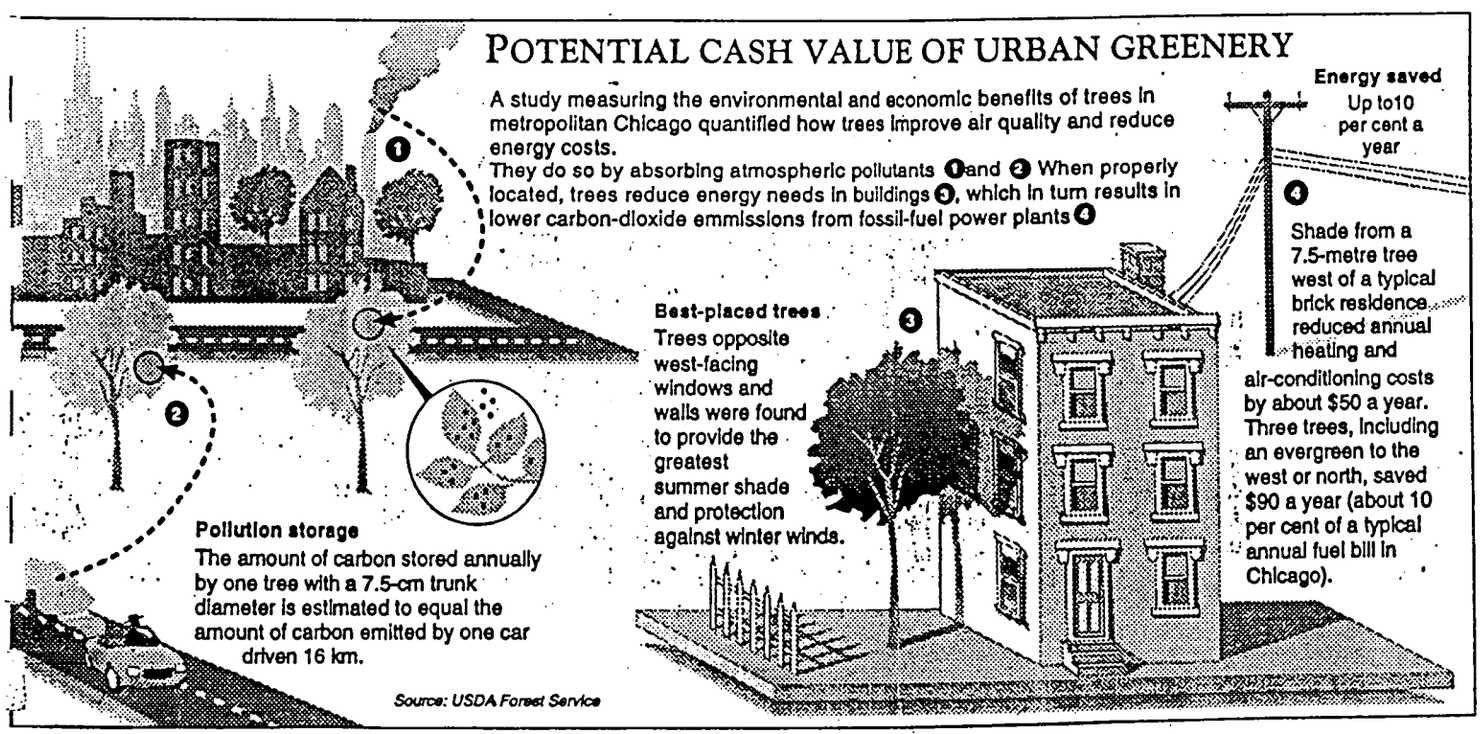
These choices are important for each of the following:

- **Manufacturing.** A considerable amount of energy is used in making the materials used in a typical house. Major energy savings can be result through the wise choice of building materials. For example, a typical wood-frame home has one third the embodied energy of the same house built of steel and concrete.

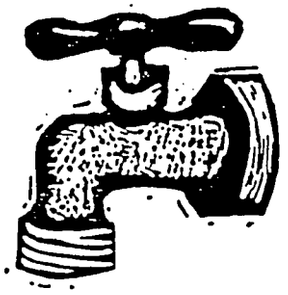
- **Transportation.** Transportation of goods is especially energy intensive because of the huge distances between major urban centres in Canada. Local products require less energy in transportation.

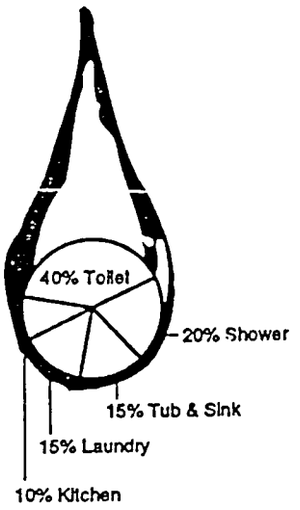
- **Recycled and Reused Materials.** Because of the energy used in processing of materials, the more recycled and reused materials used in construction, the better.

- **Maintenance, Demolition and Replacement.** Energy is required not only to manufacture and install materials, but also to maintain, demolish and replace materials. Sometimes this means trade offs have to be made. For example, wood siding may required less energy to manufacture, and may be available locally, but needs to be painted. Brick cost much more to make and transport but last a long time without maintenance.

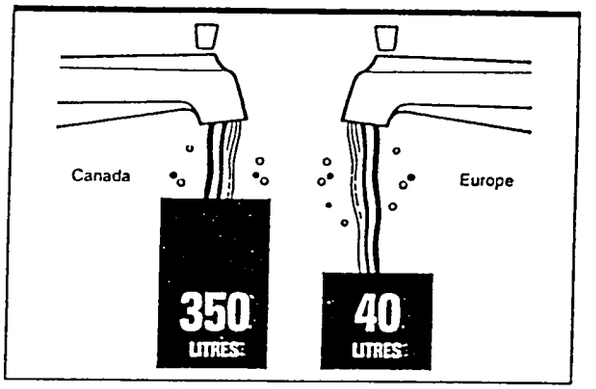


WATER INFORMATION SHEET





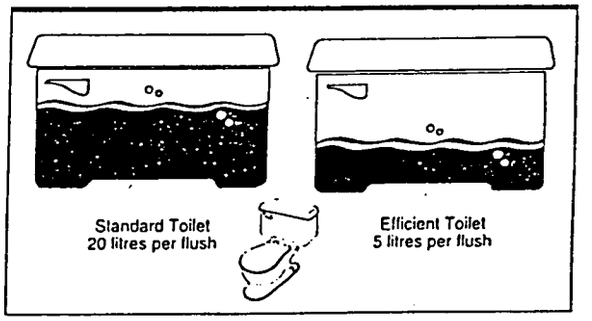
75% of household water use is in bathroom.



Canadian families use 350 litres of water per day compared to 40 litres for a European family. **Two litres of water per day is all a person requires for survival.**

Toilet water use comparisons:

They are the biggest water wasters in the house. A typical flush uses 20 litres of water.



Water-efficient toilets, which are readily available for about the same price, use five litres per flush with the same results. That's a water saving of 75 per cent for every flush!

Showerheads:

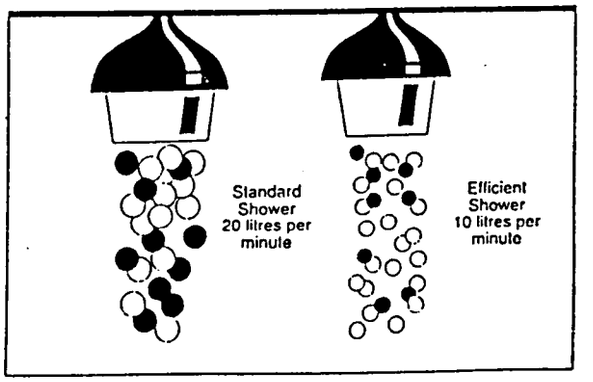
Low flow showerhead with shut-off button

Shut-off button (convenient for shutting off water temporarily while soaping or shampooing)

Environment Canada

Showerhead water use comparisons:

Showers are the second heaviest water users in the home, averaging a flow rate of 20 litres a minute.



Symptoms of mould and mildew:

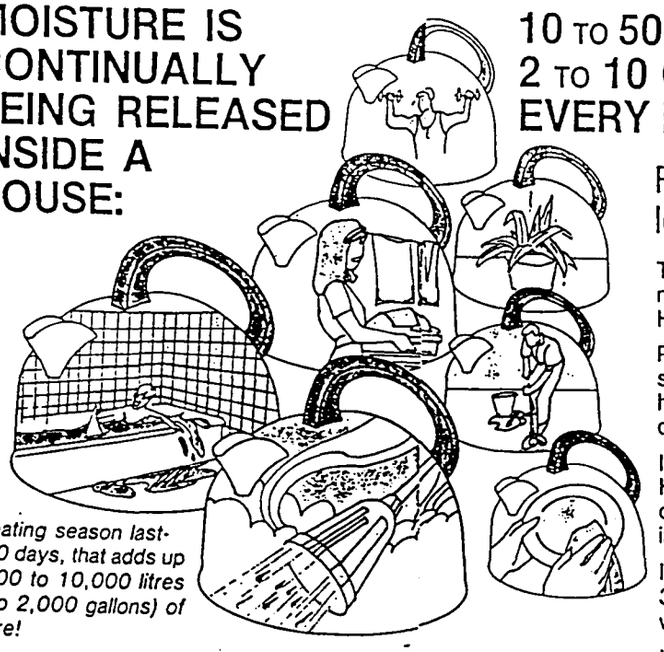
- musty smells
- green or black marks on inside surface of outer walls or ceiling
- stains in wet areas of carpet
- mildew on drapes and back of furniture

Only 30% of water used in irrigation returns to its source.

Water use in the home can be cut by 50% using water efficient devices and appliances, without lifestyle changes.

MOISTURE IS CONTINUALLY BEING RELEASED INSIDE A HOUSE:

10 TO 50 LITRES OR 2 TO 10 GALLONS EVERY DAY *



* *In a heating season lasting 200 days, that adds up to 2,000 to 10,000 litres (400 to 2,000 gallons) of moisture!*

A WET OR DAMP BASEMENT ESPECIALLY IF HEATED, MAY GENERATE MUCH MORE MOISTURE THAN ALL OTHER FAMILY ACTIVITIES COMBINED

Find the moisture level in your house

The amount of moisture in the air is normally measured as its Relative Humidity (RH).

Purchase a Relative Humidity sensor (hygrometer) at your local hardware store or building supply dealer.

Inside your house, the Relative Humidity should be brought down to approximately 45% during the winter heating season.

In very cold weather, a level of 30% may be needed to prevent window condensation.

Upgraded windows can support a higher level of Relative Humidity without condensation occuring.

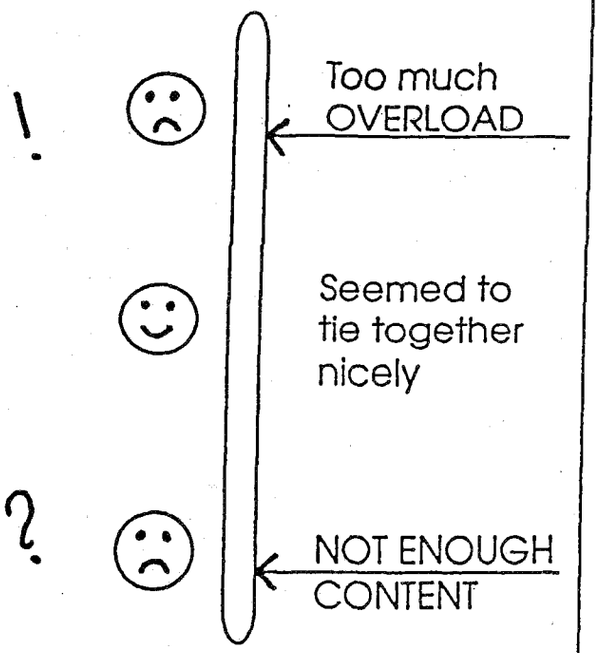
FACILITATOR KIT.

THIS BOX CONTAINS:

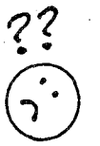
- MODULE NOTES (2)
  * Introduction
  * Module 1
  * Module 2
  * Module 3
  * Brainstorm Prompt Sheet
  * Water Presentation
- RESIDENT ISSUE SHEETS (X 7)
  * Air * Energy * Water * Materials
- BUILDING ISSUE SHEETS (X 5)
  * Air * Energy * Water * Materials
- GLOBAL ISSUE SHEETS (X 5)
  * Air * Energy * Water * Materials
- INFORMATION SHEETS (X 30)
  * Air * Energy * Water * Materials
- LEARNING SHEETS (X 30)
- EVALUATION FORMS (X 30)
- BIOACCUMULATION DIAGRAM (X 1)
- HEALTH WHEEL SEGMENTS (X 8)
- HEALTH WHEEL TITLE (X 1)
- STRATEGY WORDS (X 23)
- SELF-STICK DOTS (> 100)
- SELF-STICK NAME TAGS (X 30)
- MASKING TAPE (X 1)
- CHISEL POINT MARKERS (X 2)
  * for name tags and flipcharts
- DRY ERASE MARKERS (X 2)
  * for "Static Image" sheets
- "STATIC IMAGE" SHEETS (> 10)
- PAPER & PENS/PENCILS (1 & 30)
- ASSORTED BOOKS (Numbers vary)

Feedback Form

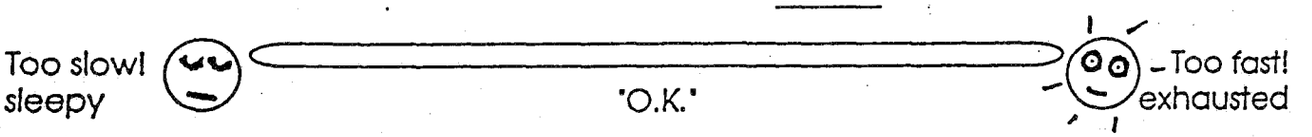
Information:
(please mark on scale)



I am Confused about ...
(or want more info on or would change .....)



(Please mark "X" on scale.) PACE WAS ...



Today I learned ...

I liked...

I didn't like...

APPENDIX "B"

SURVEY RESULTS:

RESULTS

The purpose of this survey was to examine the knowledge of environmental issues primarily related to the home and living habits. Residents of several housing projects(public, non-profit, private non-profit and cooperatives) were surveyed concerning their knowledge and practices on a wide variety of topics. Residents were invited to participate in 1/2 day workshops regarding Healthy Vs Less Healthy Environments.

The workshops were designed to provide new information and to exchange and encourage discussion on topics such as:

-indoor air quality
-packaging
-resource use
-hazardous products
-health and environment
-renovations
-waste management

Although there was a pre-seminar survey group and a post-seminar group there was no effort made to do a pre/post assessment using the same individuals. Conclusions can only be drawn on a macro scale as there was no control group.

Both groups surveyed, based on the responses to the survey question, were quite aware of many of the concerns and issues about our environment. There was little difference overall in the demonstrated knowledge level of the "pre" and "post" seminar groups. On specific issues there was a noted improvement in knowledge levels. (packaging, and saving water resources to name a couple)

There was a great deal of information presented and as organizers and facilitators noted, there are areas that need additional attention. As an example it was discovered that the surveyed residents use a large number of hazardous products, however a low percentage of the respondents make use of hazardous waste disposal sites or special disposal arrangements.

Many of the items covered in the survey and the seminars will help in raising the general awareness of the social housing residents to environmental issues.

Healthy Communities Project

Pre-Workshop Questionnaire Responses

SECTION # 1

In **Section 1,** which dealt with "Your Unit/Your Home", the first series of questions solicited feelings on the impact of shopping choices. Of the 25 respondents, 84% (21) indicated that our shopping choices are the best way of keeping environmentally hazardous products out of the household. Similarly 88% of those polled believe that shopping choices can influence manufacturers to make better products and merchants to carry more environmentally friendly products.

Although most respondents (84%) put a moderate to extreme importance on seeking out products with little packaging, a smaller percentage (72%) placed the same importance on buying items in bulk. Bulk food and household items are usually stored in reused containers. Similarly a high percentage (84%) of respondents consistently use cloth or recycled plastic shopping bags.

Those surveyed do not exert much effort in educating themselves or others about packaging (33% placed no or little importance on this). Similarly the bulk of the respondents (68 %) exert little or no effort in advising store managers of over packaged products.

Fifty six percent of those surveyed felt that they throw out .5 kg of packaging day, 40 % percent of respondents felt this to be untrue, whereas 4 % didn't know.

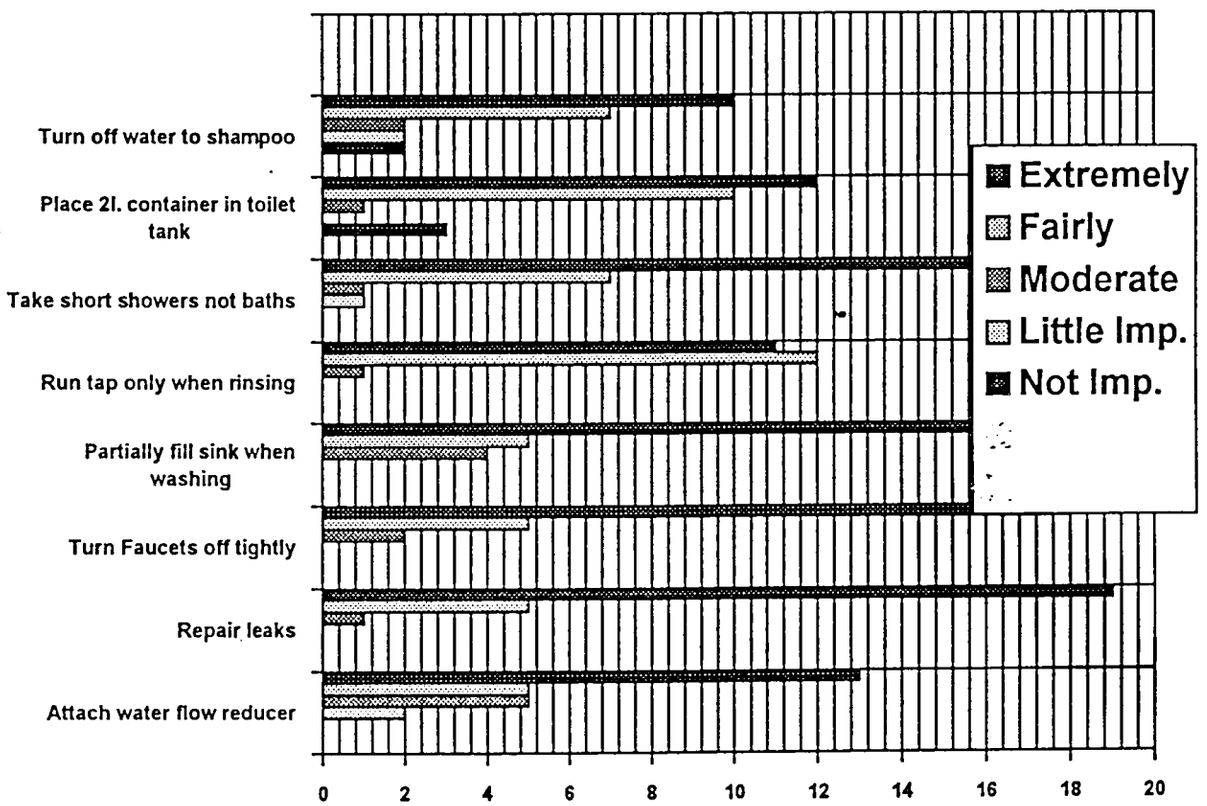
Sixty four percent of the responses felt that often packaging is the only real difference between products. The survey also revealed that 56 % felt that packaging made up 40% of the weight of the items in any shopping cart.

In the subsection on resource use, 64% (16) of the respondents agreed with the statement that Canadians use 350 litres of water per day, 24% thought this figure to be false and another 12% did not know. Only 12% of the population surveyed thought it false that efficient energy use will bring economic as well as environmental savings.

As chart A illustrates most respondents are aware of the importance of saving water resources through the methods outlined in the questionnaire.

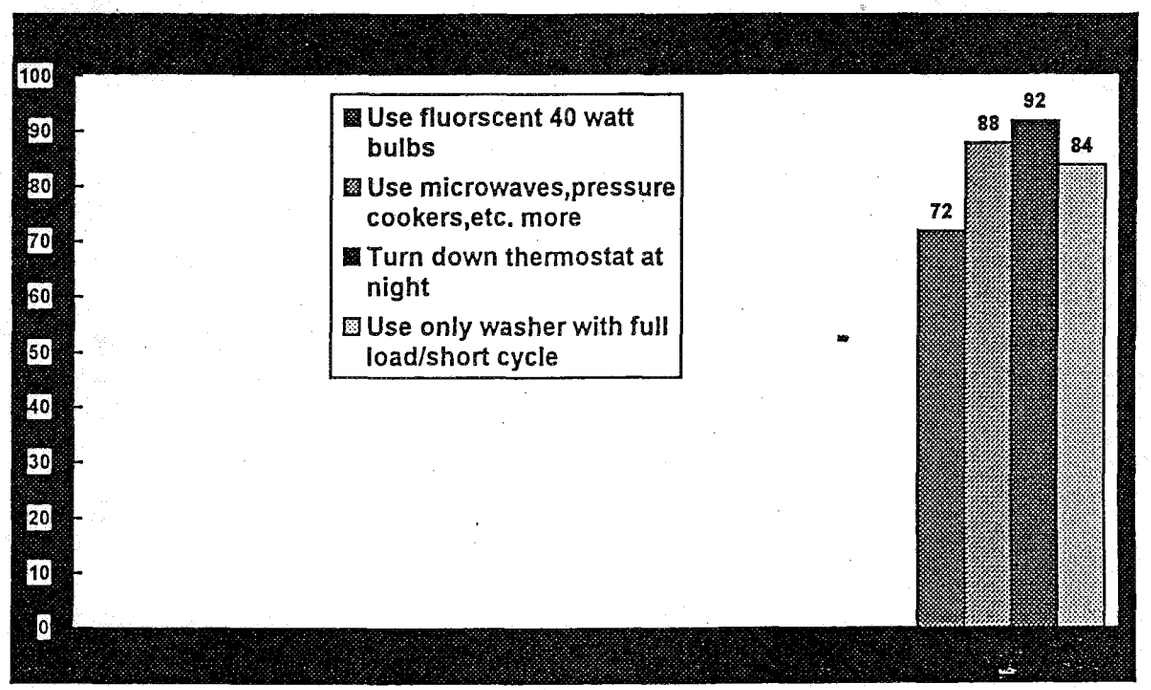
CHART A

Respondents awareness of the importance of saving water resources



Very few of those surveyed disagreed that significant savings could result from the energy conservation methods proposed. As illustrated in Chart B the agreement with the conservation actions ranged between 72 - 96 % .

CHART B



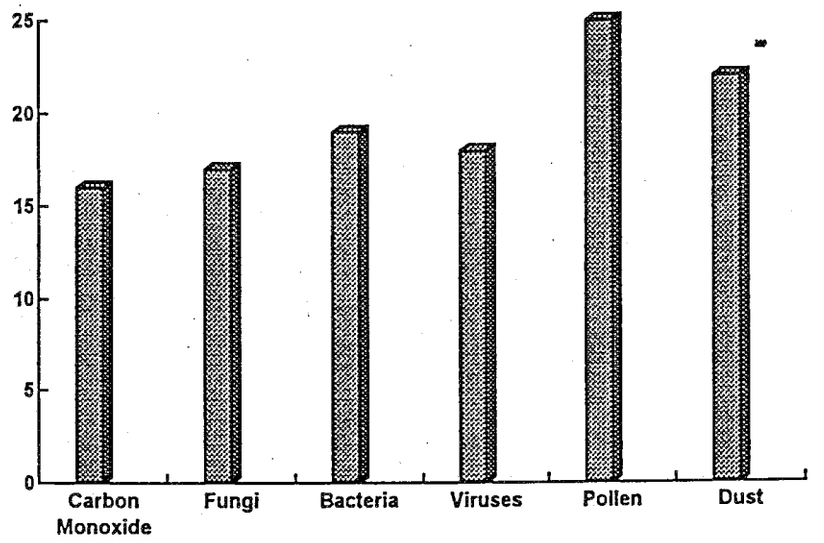
Indoor Air Quality

Of the 25 respondents 18 or 72% felt that a tightly sealed home leads to trapping hazardous elements indoors. Four respondents (16%) felt that hobbies requiring use of toxic products required a room vented outside, whereas three people (12 %) thought that periodically opening of a window was sufficient but the vast majority, 72 % (18) felt that both were required.

Ninety two percent (23/25) agreed that mixing chlorine bleach with ammonia created a highly poisonous gas. The remaining two respondents did not know. Similarly 84% of respondents agreed that certain household items can contain hazardous materials.

Chart C illustrates how many of each of the substances listed respondents felt were in their homes. Notably only 28 % felt that their homes contained formaldehyde, whereas 100 % felt their homes contained dust.

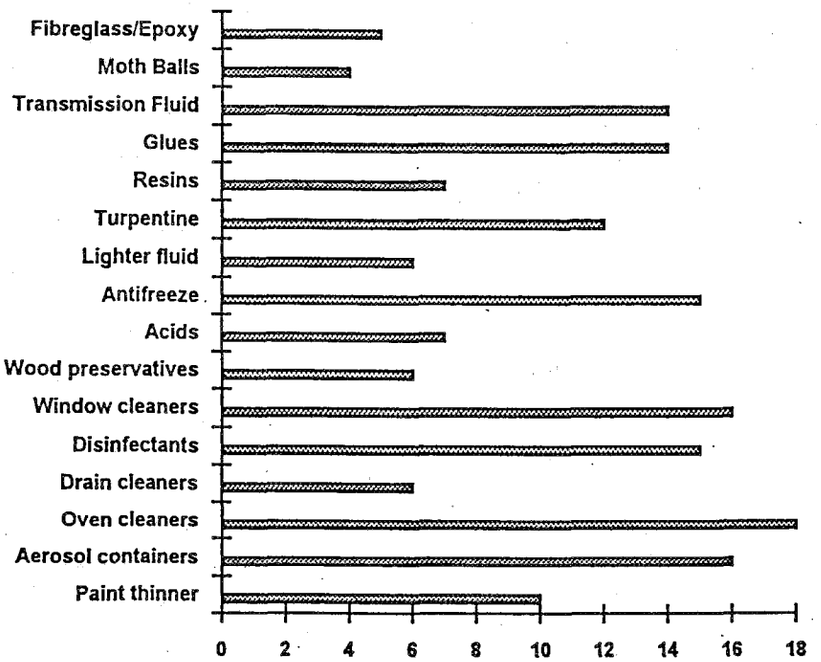
CHART C



Hazardous Products

Each of the hazardous materials listed were used by at least several of the respondents. The hazardous materials used most commonly were paints, varnishes and stains, aerosol containers, oven cleaners, disinfectants , window cleaners and antifreezes. Chart D illustrates the complete response.
Only 40 % of the 20 people who responded indicated that they took advantage of facilities for proper disposal of hazardous products.

CHART D



SECTION # 2

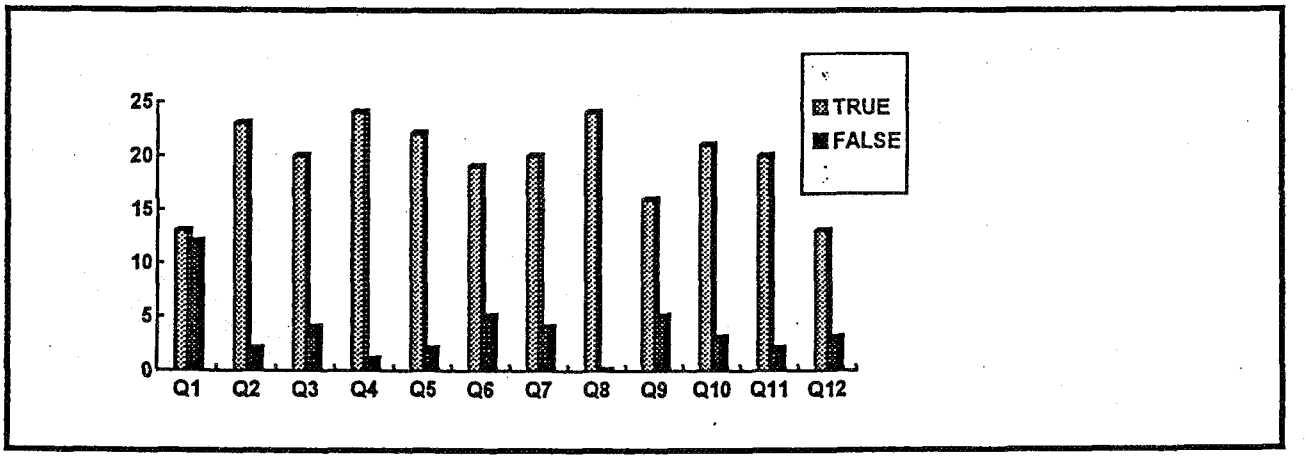
Health and The Environment

The questions in this section looked at the general awareness of those being surveyed concerning the relationship between the environment and human health. In the first subsection a series of statements were to be identified as true or false. The results are contained in Chart E.

CHART E

LEGEND

Q 1- Products used in my apartment may give my neighbor a headache
Q 2- Ozone depletion can lead to immune system damage
Q 3- Skin cancer rates are affected by types of indoor lighting
Q 4- Skin cancer rates are affected by exposure to sunlight
Q 5- Human beings eat foods high on the food chain
Q 6- Unbleached paper is safer than bleached paper
Q 7- Chemicals on food we ate 15 years ago may still be stored in our bodies
Q 8- Trees and shrubs can lower the heating bill
Q 9- Mortgage and insurance rates can be affected by building pollution
Q10- A healthy building has lower vacancy rates
Q11- Some chemicals act as hormone "mimickers" that affect reproductive health
Q12- There was a 400% increase in ectopic pregnancies in the US. between 1970 and 1987



Hazardous Product Storage

When quizzed concerning the necessity of storing hazardous products in the original container, 100 % of those surveyed agreed that all three reasons provided were valid.

When confronted with a list of products and requested to identify those to be disposed of as hazardous materials, each product was identified by at least 52 % of the respondents. Of the 13 products, 8 products were identified by over 80 % of the respondents as being a product requiring disposal as a hazardous material.
All respondents indicated that it is moderately to extremely important (with 80 % stating that it was extremely important) not to dispose of hazardous material down the toilet. Eighty four percent of those surveyed indicated that it was extremely important not to burn hazardous material in fireplaces or in the backyard. The remaining 16% indicated it was moderately to fairly important not to dispose of hazardous material in this manner. Similarly 80 % of the respondents indicated it was extremely important not to crush or puncture aerosol cans. Only one respondent placed little importance on puncturing or crushing aerosol cans. Only one respondent (4 %) felt it was of little importance to not use hazardous product containers for other purposes.

Outdoor Activities

The first series of questions asks participants to indicate whether the statements are True, False or Don't Know. The responses are detailed in Chart E, however to summarize, most respondents felt that a push mower works as well as a power mower for small areas, that taller grass holds moisture in the soil better than shorter grass, that appropriate plant selection can decrease watering requirements, that chemical /pesticide resistant insects are on the increase , that non-hazardous products that work are available and that well fitting storm windows assist in heating and cooling of the home.

The next series explored attitudes concerning chemical pesticides. Seventy-two percent (18/25) of those surveyed agreed or strongly agreed that chemical pesticides should never be used when rain is forecast. Only 8 % disagreed with this statement. Eighty percent of the respondents either strongly agreed (68%) or agreed (12%) that it was important to follow the instructions on chemical pesticides to the letter. Keeping chemical pesticides contained tightly in the original container was agreed with by 80% of respondents (76% strongly agreed and 4% agreed). Avoiding application of chemical

pesticides to bare or eroded ground was strongly agreed to by 68 % of the respondents while 80 % strongly agreed with avoiding use of chemical pesticides around ponds, streams, marshes and wells.
Twenty three of the twenty five survey participants agreed with all statements regarding composting. Ninety two percent felt that composting reduces garbage collected, provided a chemical free fertilizer and can be done successfully in urban areas. Two respondents didn't know whether composting could be successfully done in urban areas.

The next group of questions looked at renovation practices. Slightly over 65% (15 of 23 replied - 2 did not reply) felt that anything you fix up or tear down can be harmful to you and the environment. Only 6 % of the respondents felt it unnecessary to wear a respirator when removing paint in homes over 10 years old. A full 96 % felt that scraped lead based paint must be disposed of as a hazardous waste.

Eighty percent buy only the amount of paint, stain, cleaners, etc. needed for a specific job. Only 64 % indicated they dispose of completely empty and sealed hazardous waste containers in appropriate sites. Unwanted or unused paints are donated to others by only 15 of 25 (60 %), however 18 of 25 (72 %) indicate they only donate when the original container and instructions are available.

SECTION # 3

Your Earth / Your Home

Sixty four percent (16 of 25) did not know if the statement that 17 million Canadians have access to recycling was true or not. Only 20 % (5 of 25) felt it to be true whereas 15 % (3 people) felt it to be untrue. Eleven of twenty four respondents felt that one litre of oil can contaminate 2 million litres of water whereas 13 of 24 (54 %) did not known if it was true or false.

Waste Management

The first series of questions in this section asks respondents to what degree they agree or disagree with the importance of certain actions related to oil tanks. Checking for leaks and monitoring oil use patterns to detect losses were deemed important by 84 % of the respondents. Only 52 % strongly agreed with placing a plastic sheet under the tank to see and contain any leaks, another 20 % agreed whereas only 12 % disagreed or strongly disagreed with this idea.

The next group of questions relates to landfill sites. Only 32 % of the respondents felt that landfill sites can safely contain our garbage, whereas 52 % felt they could not safely contain our garbage, 16 % did not know. Sixty-four percent agreed that newspapers in readable condition could be found in landfill sites after 30 years, 32 % did not know. Although 68 % felt that decomposing garbage creates greenhouse gases, only 28 % agreed that 40% of Canada's methane comes from landfill sites. Only 28 % agreed with the statement that methane is 20 times more potent than carbon dioxide. In the three questions related to landfill and methane gases, those not agreeing indicated that they did not know.

In questions relating to support for companies who conduct themselves in a certain manner. Strong support for companies who promote and use recycled material was indicated by 96 % of the respondents. Similar strong support (92 % of respondents) was recorded for companies who recover energy.
All respondents indicated it very to extremely important to support companies who produce good quality durable products. Not as many people (72 %) felt it important to make product environmental information available.

Eighty eight percent of respondents felt it true that Canadians throw away 2000 lbs. of garbage a year. Only 56 % felt that Canada had it's own Eco logo, however only 12 % (3 of 25) felt it false, whereas 8 people did not know or failed to respond. Ninety two

percent of those surveyed felt that the breakdown of the contents of our garbage presented was true, the remaining 8 % did not answer. Similarly 92 % of those surveyed agreed with the definition of environmentally friendly and only 4 % or one person disagreed. When questioned about the mobius loop only 72 % agreed that it was the international symbol indicating their content of recycled materials. The remaining 28 % of people surveyed did not reply or wrote in that they did not know. Seventy six percent of the respondents agreed that one family's yearly supply of newspaper could be recycled into almost enough insulation for a house.

When purchasing a car 80 % of the respondents felt pollution controls were fairly (28 %) or extremely (52 %) important. Energy efficiency was rated as extremely important by 96 % and fairly important by the remaining 4 %. Tire pressure was rated of little importance by 2 people (8 %), of moderate importance by 1 person, as fairly important by 3 people and extremely important by 19 (76 %). Air conditioning was of no importance to 40 % of those surveyed, of little importance to 8 %, fairly important to 24 %, and extremely important to 28 %. All respondents thought proper maintenance of engines and filters was fairly (12%) to extremely (88 %) important

Only 8% of those surveyed thought that Canada had an endless supply of water. Ninety six percent (24/ 25) felt that water is our most essential resource. Only 72% felt that Canadians are among the world's worst water wasters

Planting lots of trees to slow the greenhouse effect was a useful activity according to 96 % of the respondents but only 76 % felt housing the bird community to reduce the bug population was helpful. Using sand instead of salt to deal with ice and snow on sidewalks was supported by 100 % of the respondents.

Healthy Communities Project

Post-Workshop Questionnaire Responses

SECTION # 1

In **Section 1** which dealt with "Your Unit/Your Home", the first series of questions solicited feelings on the impact of shopping choices. Of the 25 respondents, 80% (20) indicated that our shopping choices are the best way of keeping environmentally hazardous products out of the household. Only 72% of those polled believe that shopping choices can influence manufacturers to make better products but 88% believe merchants can be prompted to carry more environmentally friendly products based on our choices.

Most respondents (84%) put a moderate to extreme importance on seeking out products with little packaging, a similar percentage (76%) placed the same importance on buying items in bulk. Two people did not reply Bulk food and household items are usually stored in reused containers. Similarly a high percentage (84%) of respondents consistently use cloth or recycled plastic shopping bags.

Of those surveyed only 60% (15 /25) currently think it fairly (20%) or extremely (40%) important to educate themselves, friends and family about packaging. Only 16% felt it was not at all important. Of the respondents (44%) exert little or no effort in advising store managers of over packaged products, whereas 40% felt it fairly to extremely important to do so, while 12% felt it moderately important. One person did not reply.

Almost two thirds (16/25) of those surveyed felt that they throw out .5 kg of packaging day, 20% percent of respondents felt this to be untrue, whereas 12% didn't know, again one person did not reply.

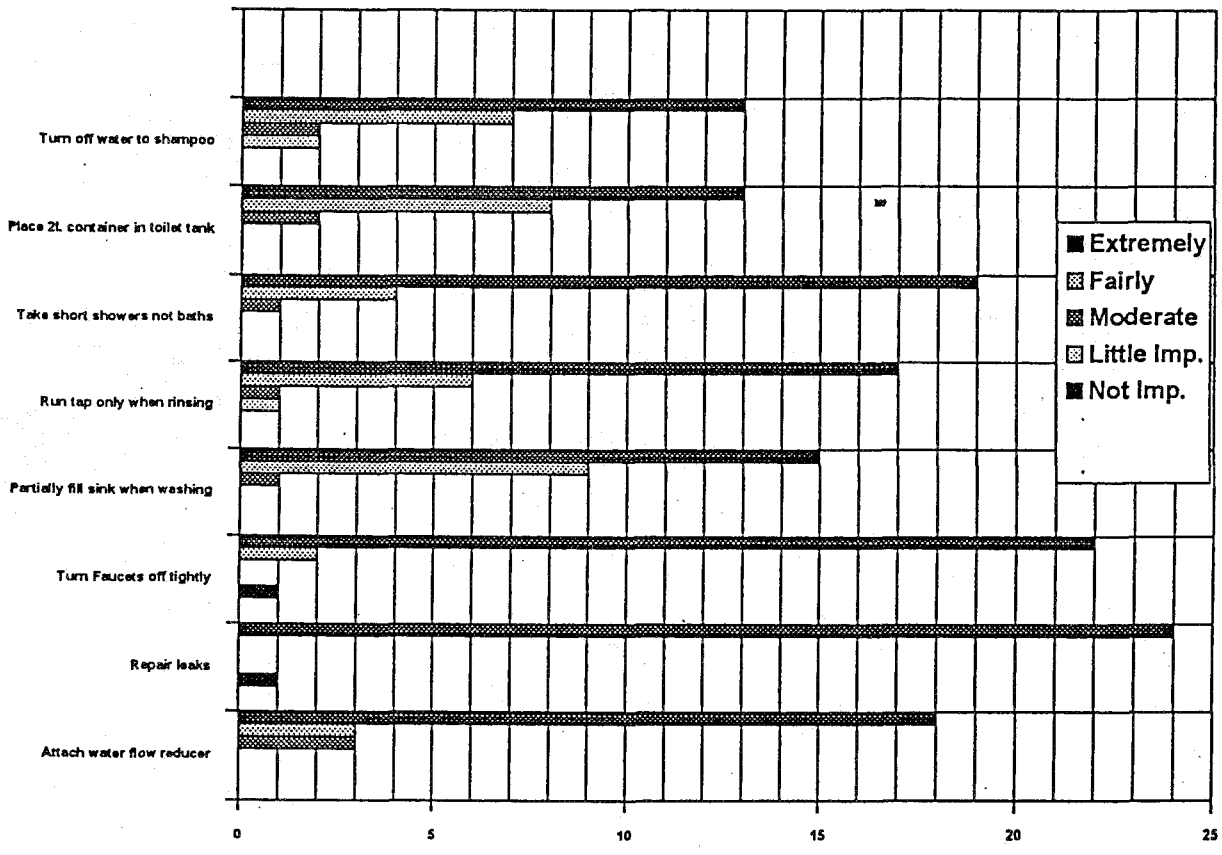
Sixty eight percent of the responses felt that often packaging is the only real difference between products. The survey also revealed that 60% felt that packaging made up 40% of the weight of the items in any shopping cart.

In the subsection on resource use, 72% (18) of the respondents agreed with the statement that Canadians use 350 litres of water per day, 20% thought this figure to be false and another 8% did not know. Only 4 0f 24 of the people replying thought it false that efficient energy use will bring economic as well as environmental savings. One person did not know and one failed to respond.

As Chart A illustrates most respondents are aware of the importance of saving water resources through the methods outlined in the questionnaire.

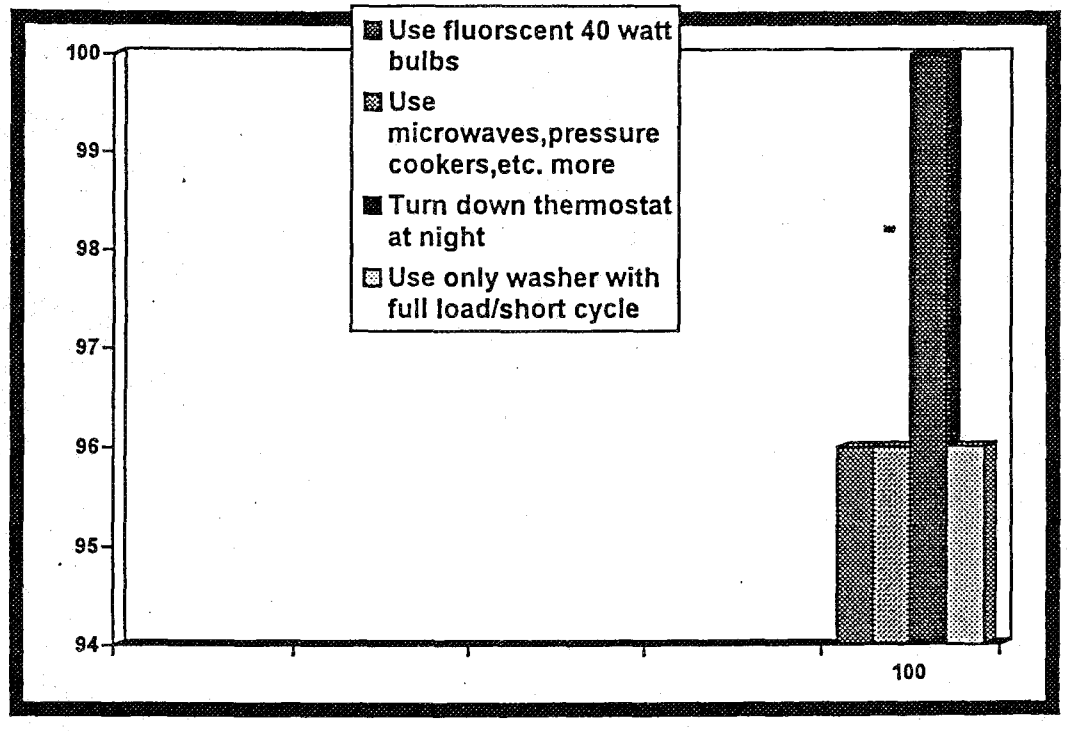
CHART A

Respondents awareness of the importance of saving water resources



Very few of those surveyed disagreed that significant savings could result from the energy conservation methods proposed. As illustrated in Chart B the agreement with the conservation actions ranged between 92 - 100 % .

CHART B



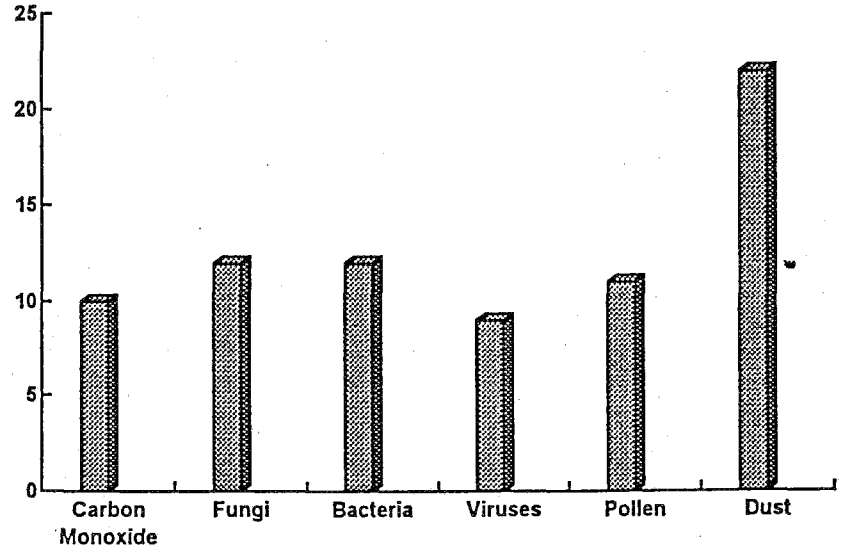
Indoor Air Quality

Of the 25 respondents 19 or 76% felt that a tightly sealed home lead to trapping hazardous elements indoors. Five respondents (20%) felt that hobbies requiring use of toxic products required a room vented outside, but the vast majority, 80 % (20) felt that both were required.

Ninety six percent (24/25) agreed that mixing chlorine bleach with ammonia created a highly poisonous gas. The remaining respondent did not know. Similarly 96% of respondents agreed that certain household items can contain hazardous materials.

Chart C illustrates how many of each of the substances listed respondents felt were in their homes. Notably only 12% felt that their homes contained formaldehyde, whereas 88% felt their homes contained dust.

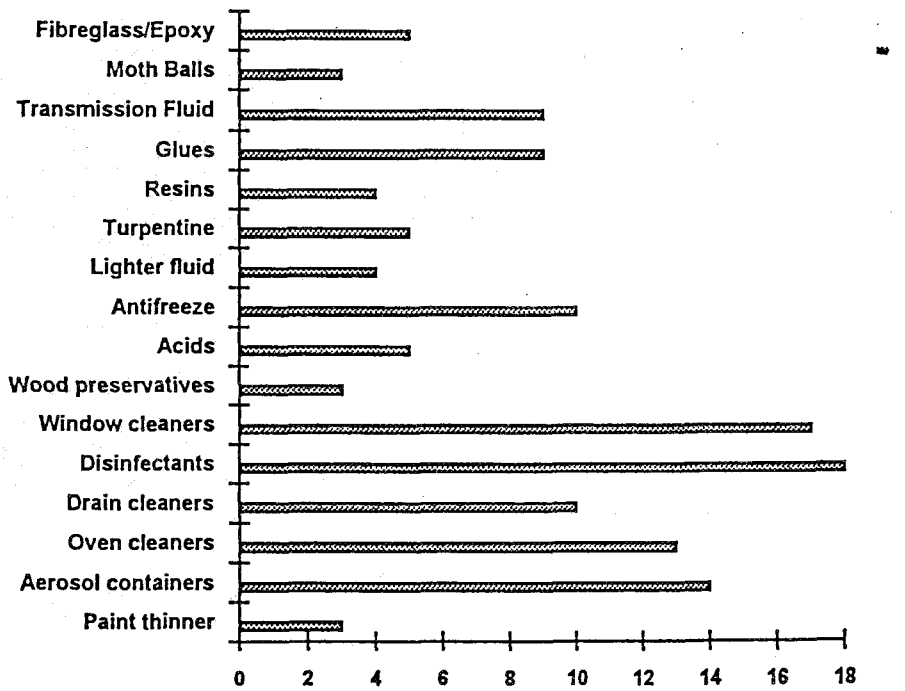
CHART C



Hazardous Products

Each of the hazardous materials listed were used by at least several of the respondents. The hazardous materials used most commonly were disinfectants (72%), window cleaners (68%), aerosol containers (56%), oven cleaners (52%), and antifreezes (40%). Chart D illustrates the complete response.

CHART D



Of the 22 people who responded 50% indicated that they took advantage of facilities for proper disposal of hazardous products.

SECTION # 2

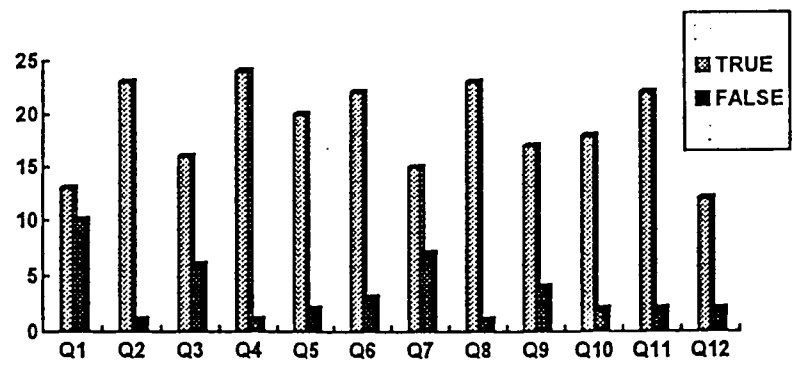
Health and The Environment

The questions in this section looked at the general awareness of those being surveyed concerning the relationship between the environment and human health. In the first subsection a series of statements were to be identified as true or false. The results are contained in Chart E.

CHART E

LEGEND

Q 1- Products used in my apartment may give my neighbor a headache
Q 2- Ozone depletion can lead to immune system damage
Q 3- Skin cancer rates are affected by types of indoor lighting
Q 4- Skin cancer rates are affected by exposure to sunlight
Q 5- Human beings eat foods high on the food chain
Q 6- Unbleached paper is safer than bleached paper
Q 7- Chemicals on food we ate 15 years ago may still be stored in our bodies
Q 8- Trees and shrubs can lower the heating bill
Q 9- Mortgage and insurance rates can be affected by building pollution
Q10- A healthy building has lower vacancy rates
Q11- Some chemicals act as hormone "mimickers" that affect reproductive health
Q12- There was a 400% increase in ectopic pregnancies in the U.S. between 1970 and 1987



Hazardous Product Storage

When quizzed concerning the necessity of storing hazardous products in the original container, 68% of those surveyed agreed that all three reasons provided were valid. Six people (24%) identified retention of handling and disposal instructions as the reason why the original container is necessary. One person felt that making sure of the contents was why the original container was essential. One person failed to answer.

When confronted with a list of products and requested to identify those to be disposed of as hazardous materials, each product was identified by at least 40 % of the respondents. Of the 13 products, 3 products were identified by over 80 % of the respondents as being a products requiring disposal as a hazardous material.

All respondents indicated that it is moderately to extremely important (with 88 % stating that it was extremely important) not to dispose of hazardous material down the toilet. Eighty four percent of those surveyed indicated that it was extremely important not to burn hazardous material in fireplaces or in the backyard. The remaining 16% indicated it was moderately to fairly important not to dispose of hazardous material in this manner. Similarly 80% of the respondents indicated it was extremely important not to crush or puncture aerosol cans. Only two respondents placed little importance on puncturing or crushing aerosol cans. Only three respondents (12%) felt it was of little importance to not use hazardous product containers for other purposes whereas 80% felt it was extremely important not to use these containers for any other purpose.

Outdoor Activities

The first series of questions asks participants to indicate whether the statements are True, False or Don't Know. The response are detailed in Chart F (following page), however to summarize, most respondents felt that a push mower works as well as a power mower for small areas, that taller grass holds moisture in the soil better than shorter grass, that appropriate plant selection can decrease watering requirements, that chemical /pesticide resistant insects are on the increase, that non-hazardous products that work are available and that well fitting storm windows assist in heating and cooling of the home.

CHART F

LEGEND

Q1- For a small lawn, a push mower works just as well as a power or gas one

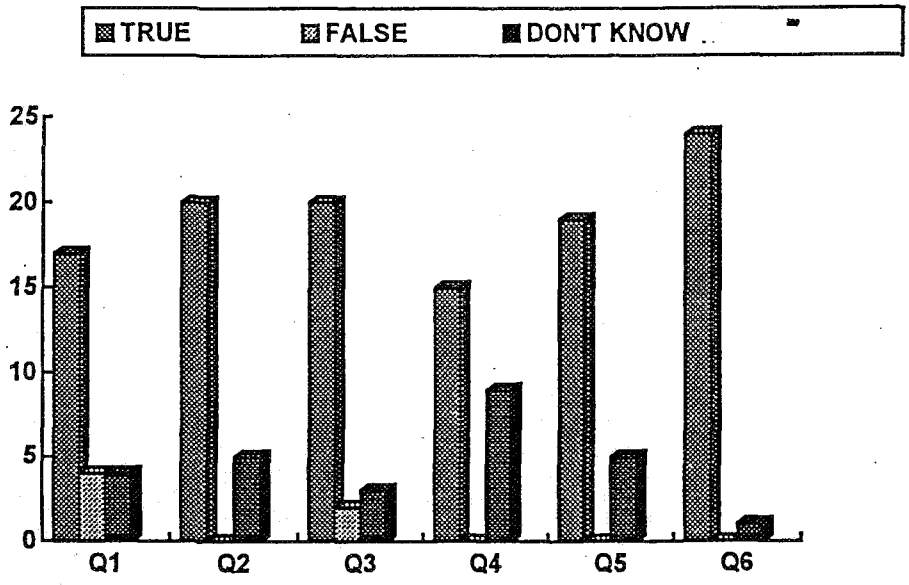
Q2 Taller grass (6.5 cm. or 2 1/2 inches) holds water in the soil better than constantly mowed, short grass does

Q3- Informed choices when selecting plants, trees, or shrubs, can lower the need for watering

Q4- Since the 1950's, the number of insects/mites resistant to chemical pesticides/herbicides has gone from 10 to 450

Q5- Non hazardous products that work are readily available

Q6- Well fitting storm windows and doors lower heat loss in winter and prevent cooling in summer



The next series explored attitudes concerning chemical pesticides. Only 22 of 25 of those surveyed replied. Eighty percent (16/25) of those surveyed strongly agreed that chemical pesticides should never be used when rain is forecast; another 16% agreed with the statement Only one person disagreed with this statement. Eighty percent of the respondents (20/25) either strongly agreed (72%) or agreed (8%) that it was important to follow the instructions on chemical pesticides to the letter. Keeping chemical pesticides contained tightly in the original container was agreed with by 80% (68%) strongly agreed and 12% agreed). Avoiding application of chemical pesticides to bare or eroded ground was agreed to by 80%,(76% strongly and 4% who simply agreed) of those surveyed Identical percentages agreed with avoiding use of chemical pesticides around ponds, streams, marshes and wells.

Twenty two of the twenty five survey participants agreed with all statements regarding composting. Eighty eight percent felt that composting reduces garbage collected, provided a chemical free fertilizer and can be done successfully in urban areas. One respondents felt that composting could not be successfully done in urban areas.

The next group of questions looked at renovation practices. Sixty percent of the survey group (15 of 22 replied - 3 did not reply) felt that anything you fix up or tear down can be harmful to you and the environment. All of the respondents who replied (24 replied) felt it necessary to wear a respirator when removing paint in homes over 10 years old. A full 100% of those who replied (22/22) felt that scraped lead based paint must be disposed of as a hazardous waste.

Sixty eight percent of the survey group buy only the amount of paint, stain, cleaners, etc. needed for a specific job. A healthy 88% indicated they dispose of completely empty and sealed hazardous waste containers in appropriate sites. Unwanted or unused paints are donated to others by only 16 of 24 , however 21 of 23 who replied indicated they only donate when the original container and instructions are available.

SECTION # 3

Our Earth/Our Home

Only slightly over half of the survey participants responded to this question Of these 13 of 16 did not know if the statement that 17 million Canadians have access to recycling was true or not.
Nineteen of twenty five respondents felt that one litre of oil can contaminate 2 million litres of water and one person felt this was false whereas 5 of 25 (20%) did not known if it was true or false.

Waste Management

The first series of questions in this section asks respondents to what degree they agree or disagree with the importance of certain actions related to oil tanks. Checking for leaks was deemed important by 96% of the respondents and monitoring oil use patterns to detect losses was also deemed important by 92%. Only one person of 23 who replied strongly disagreed with placing a plastic sheet under the tank to see and contain any leaks whereas the remaining 22 either agreed or strongly agreed with this action

The next group of questions relates to landfill sites. Only 16% of the respondents felt that landfill sites can safely contain our garbage, whereas 72% felt they could not safely contain our garbage, 4 % did not know and 8% did not answer. Sixty-four percent agreed that newspapers in readable condition could be found in landfill sites after 30 years; 16% disagreed and 20% did not know. Sixty eight percent felt that decomposing garbage creates greenhouse gases, similarly 64% agreed that 40% of Canada's methane comes from landfill sites. Only 56% agreed with the statement that methane is 20 times more potent than carbon dioxide. In the three questions related to landfill and methane gases, those not agreeing usually indicated that they did not know.

In questions relating to support for companies who conduct themselves in a certain manner, fairly strong support for companies who promote and use recycled material was indicated by 88% of the respondents. Similar strong support (88% of respondents) was recorded for companies who recover energy. Almost all respondents 21 of 23 indicated it was important to support companies who produce good quality durable products. Ninety percent, 19 of the 21 people replying to this question felt it important to make product environmental information available.

Eighty eight percent of the survey group felt it true that Canadians throw away 2000 lbs. of garbage a year, only one person disagreed and 2 did not reply. Seventy two percent agreed that Canada had it's own Eco Logo, one person (4%) disagreed and 2 did not reply. All twenty five respondents felt that breakdown of the contents of our garbage presented was true. Similarly 92% of those surveyed agreed with the definition of environmentally friendly and the other 8% had no opinion as they did not reply. When questioned about the mobius loop only 72% agreed that it was the international symbol indicating the content of recycled materials. The remaining 28% of people surveyed did not reply. Eighty percent of those surveyed agreed that one family's yearly supply of newspaper could be recycled into almost enough insulation for a house.

When purchasing a car 80% of the respondents felt pollution controls were fairly (12%) or extremely (68%) important. Energy efficiency was rated as extremely important by 76 % and fairly important by 20 % whereas one individual rated it of little importance. Tire pressure was rated of little importance by 1 person (4 %), as fairly important by 2 people (8%) and extremely important by 20 (80 %). Air conditioning was of no importance to 32% of those surveyed, of little importance to 8%, moderately important to 16% fairly important to 8%, and extremely important to 28%, 8% did not respond All but one respondent thought proper maintenance of engines and filters was extremely (88%) important. Two people did not reply.

Only 16% of those surveyed thought that Canada had an endless supply of water. Ninety six percent (24/25) felt that water is our most essential resource. Only 84% felt that Canadians are among the world's worst water wasters

Planting lots of trees to slow the greenhouse effect was a useful activity according to 88% of the respondents but only 72% felt housing the bird community to reduce the bug population was helpful. Using sand instead of salt to deal with ice and snow on sidewalks was supported by 100% of the respondents.

Healthy Communities Project

Questionnaire Responses
Data Compilation

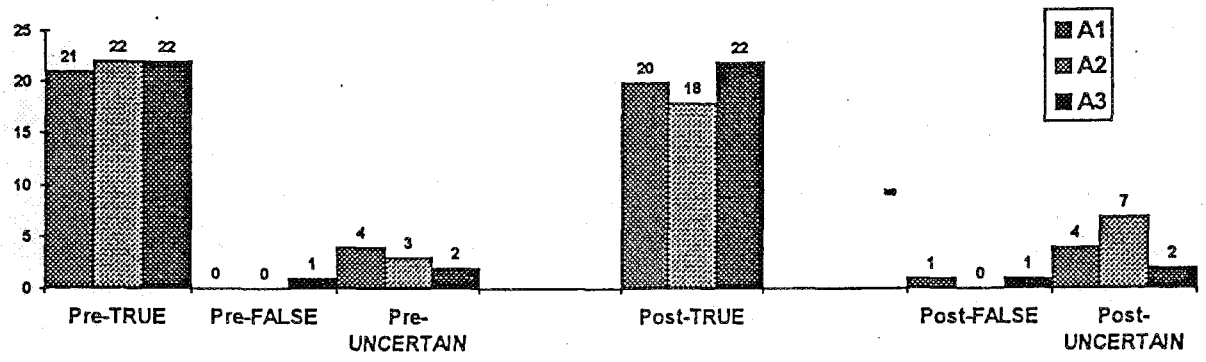
Participants responded as follows ;

Shopping Choices:

A1. are our best way of keeping environmentally hazardous products out of our homes?

A2. can persuade manufacturers to make better products

A3. can prompt merchants to carry more environmentally safe products through our selection and choices?Using the following scale, participants responded as indicated :



PACKAGING

Participants responded using the following scale
1 - not at all 2 - a little 3 - moderately 4 - fairly 5 - extremely

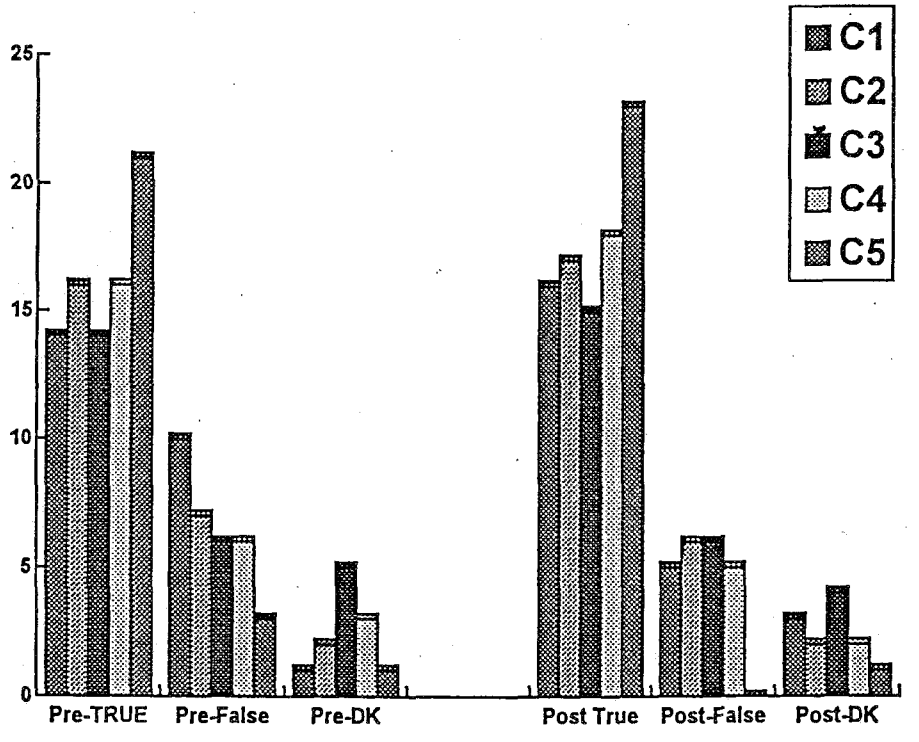
When shopping **how important** is it to you to..

B1-Try to find products that have little or no packaging
B2-Purchase bulk foods and household items
B3-Store the bulk items in containers that are being reused
B4-Reuse plastic shopping bags, or use cloth bags
B5-Educate yourself, friends, and family about packaging
B6-Tell Store Management about over packaged products

	Pre-Seminar						Post-Seminar				
Scale	1	2	3	4	5		1	2	3	4	5
B1	2	2	4	7	10		0	3	4	6	11
B2	3	4	6	8	4		3	3	1	10	8
B3	2	1	3	9	10		0	1	1	6	15
B4	4	0	3	5	13		4	0	6	5	10
B5	3	6	6	6	4		4	0	6	5	10
B6	13	4	2	3	2		8	3	3	1	9

RESOURCE USE

C1-You throw away an average of 1/2 kilogram (over 1 lb.) of packaging a day
C2-Package presentation is often the only real difference between two products.
C3-40% (by weight) of all packaging used, is made up of what you find in a shopping cart.
C4-Each Canadian uses about 350 litres (aprox. 78 gals)of water a day.
C5-This is 2 1/2 times the usage of the average European.
C6-Using energy efficiently will bring environmental "savings",as well as economic rewards.



Respondents awareness of the importance of saving water resources

	PRE-SEMINAR						POST-SEMINAR.....				
SCALE --->	1	2	3	4	5		1	2	3	4	5
Attach a water flow reducer	0	2	5	5	13		0	0	3	3	18
Repair leaks in faucets	0	0	1	5	19		1	0	0	0	24
Turn taps off tightly	0	0	2	5	18		1	0	0	2	22
Partially fill sink when cleaning	0	0	4	5	16		0	0	1	9	15
Run tap only when rinsing while shaving etc	0	1	1	12	11		0	1	1	6	17
Take-short showers instead of baths	0	0	1	7	16		0	0	1	4	19
Fill 2L plastic bottles and place in toilet tank	2	0	1	10	12		0	0	2	8	13
Turn off water when to shampoo	03	2	2	7	10		0	2	2	7	13

Respondents were asked to rate each of the above noted water saving actions using the 5 point scale.
(1-not important 2- a little 3-moderately 4-fairly 5-extremely important)

SIGNIFICANT SAVINGS FROM SPECIFIC ACTIONS

Respondents were asked to state whether the following statements were TRUE, FALSE, or DON'T KNOW (DK);

E1-Turn off lights, TV, radio, and stereo when not at home
E2- Use 48" twin tube, 40 watt fluorscent light bulbs
E3- They give 4 times more light and last 10 times longer than 100 watt incandescent bulbs
E4-Use microwaves, pressure cookers, toaster ovens more
E5- Turn down the thermostat at night and when not at home
E6- Use washers (dish and clothes) only with full load and on short cycle

	PRE_SEMINAR			POST-SEMINAR		
STATEMENT	TRUE	FALSE	DK	TRUE	FALSE	DK
E1	24	0	1	24	0	0
E2	18	1	6	23	1	0
E3	22	2	8	22	1	1
E4	23	1	2	23	1	0
E5	23	1	1	24	0	0
E6	21	8	2	23	0	1

INDOOR AIR QUALITY

Can a tightly weather sealed home, lead to hazardous elements being trapped inside? **YES-Pre- 18 Post 19**
NO -Pre- 0 Post 1
DON'T KNOW-Pre- 7 Post 5

Respondents were asked to answer the following;
Hobbies requiring use of toxic products should be done in:
PRE- 4 **POST** 5 a room vented to the outside
PRE- 3 **POST** 0 a room in which the window is opened periodically
PRE-18 **POST** 20... or both.

Chlorine bleach combined with ammonia will create a highly poisonous gas.
Yes **PRE-**23 **POST-**24
No **PRE-** 0 **POST-** 0
Don't Know **PRE** 2 **POST** 1

Curtains, carpets, furniture, and household items can contain hazardous chemicals/materials that are emitted into the air.
True **PRE-** 21 **POST** 24
False **PRE-** 0 **POST** 0
Don't Know **PRE-** 4 **POST** 1

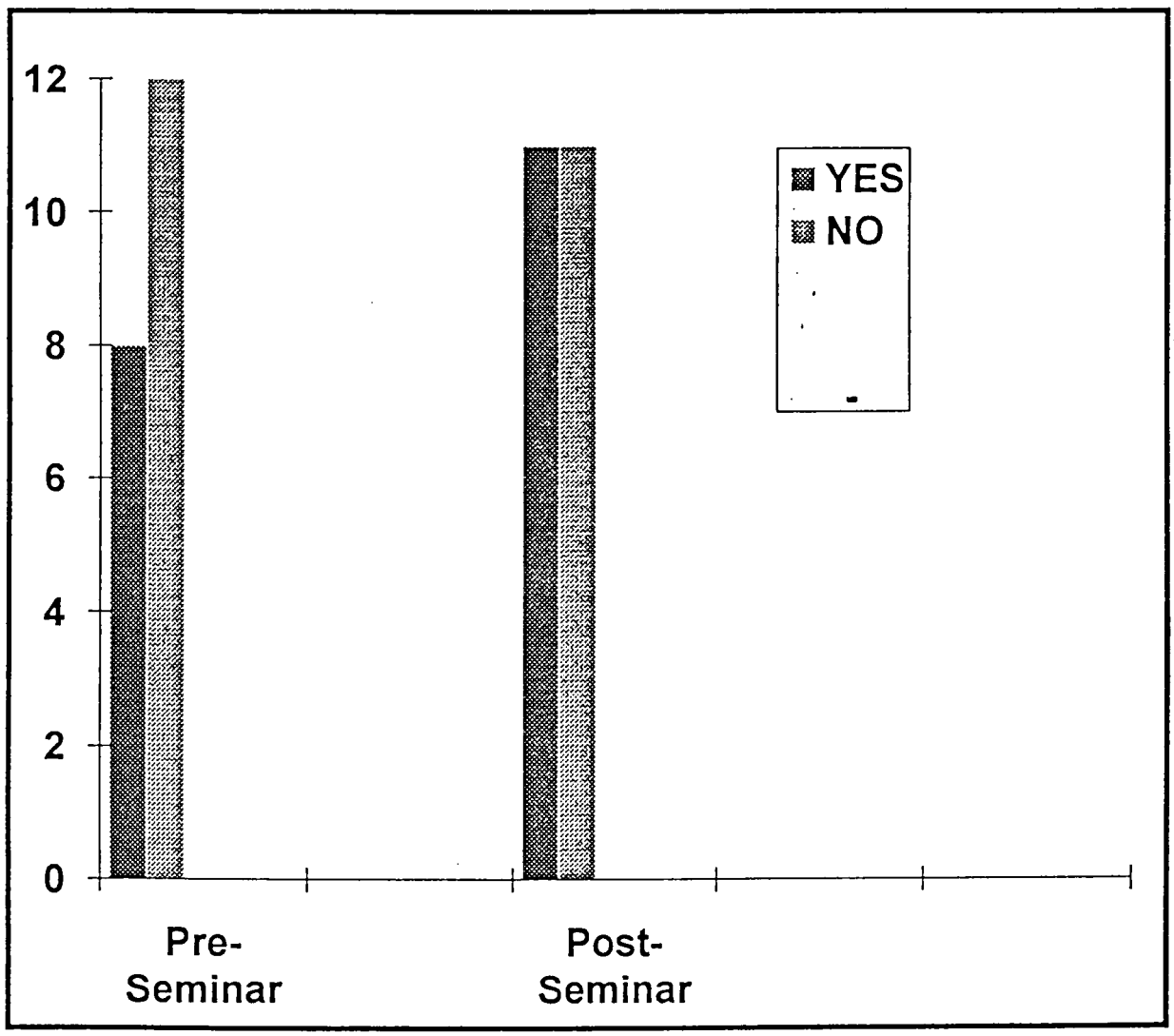
Which of the following may be found in your home:

Formaldehyde	**PRE-** 7	**POST -** 3
Carbon monoxide	**PRE-**16	**POST-** 10
Fungi	**PRE-**17	**POST-** 12
Bacteria	**PRE-**19	**POST-** 12
Viruses	**PRE-**18	**POST -** 9
Pollen	**PRE-**18	**POST-** 11
Dust	**PRE-**22	**POST-** 25

USE OF HAZARDOUS PRODUCTS

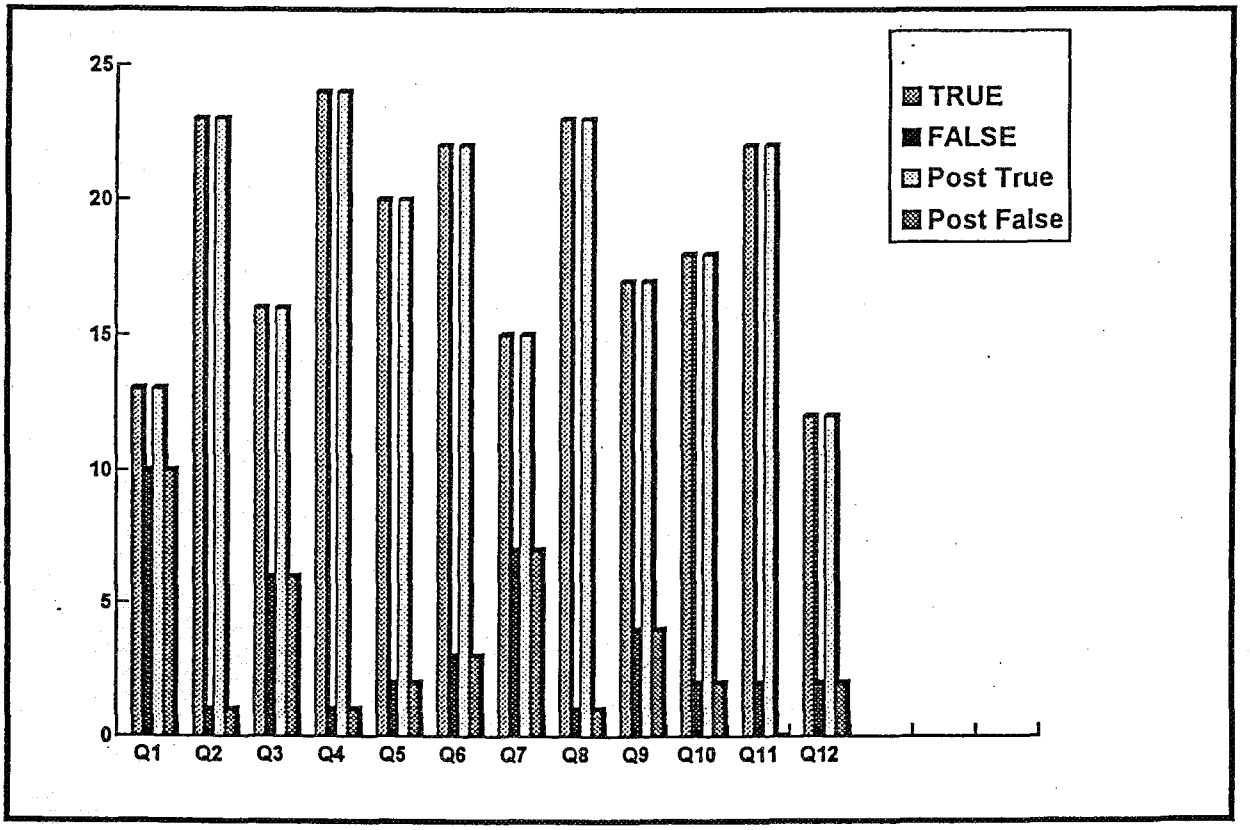
ITEM	PRE-SEMINAR	POST-SEMINAR
Paint,varnish,stain	16	7
Paint Thinner	10	3
Aerosol containers	16	14
Oven Cleaner	18	13
Drain cleaner	6	10
Disinfectant	15	18
Window cleaners	16	17
Wood Preservatives	6	3
Acids	7	5
Antifreezes	15	10
Lighter fluid	6	4
Turpentine	5	5
Glues	9	9
Transmission fluid	9	9
Moth balls	3	3
Fibregass/epoxy	5	5
Resins	7	4

RESPONDENTS USE OF HAZARDOUS WASTE DEPOTS



LEGEND

Q 1- Products used in my apartment may give my neighbor a headache
Q 2- Ozone depletion can lead to immune system damage
Q 3- Skin cancer rates are affected by types of indoor lighting
Q 4- Skin cancer rates are affected by exposure to sunlight
Q 5- Human beings eat foods high on the food chain
Q 6- Unbleached paper is safer than bleached paper
Q 7- Chemicals on food we ate 15 years ago may still be stored in our bodies
Q 8- Trees and shrubs can lower the heating bill
Q 9- Mortgage and insurance rates can be affected by building pollution
Q10- A healthy building has lower vacancy rates
Q11- Some chemicals act as hormone "mimickers" that affect reproductive health
Q12- There was a 400% increase in ectopic pregnancies in the U.S. between 1970 and 1987



HAZARDOUS PRODUCT STORAGE

Storage of hazardous products in the original container is necessary because:

1. the package includes handling and disposal instructions
   PRE- 0 POST-6

2. the number of tainted containers is not unnecessarily increased
   PRE- 0 POST-0

3. there is no chance of being misled about the contents.
   PRE- 0 POST-1

4. all of the above. PRE- 25 POST-17

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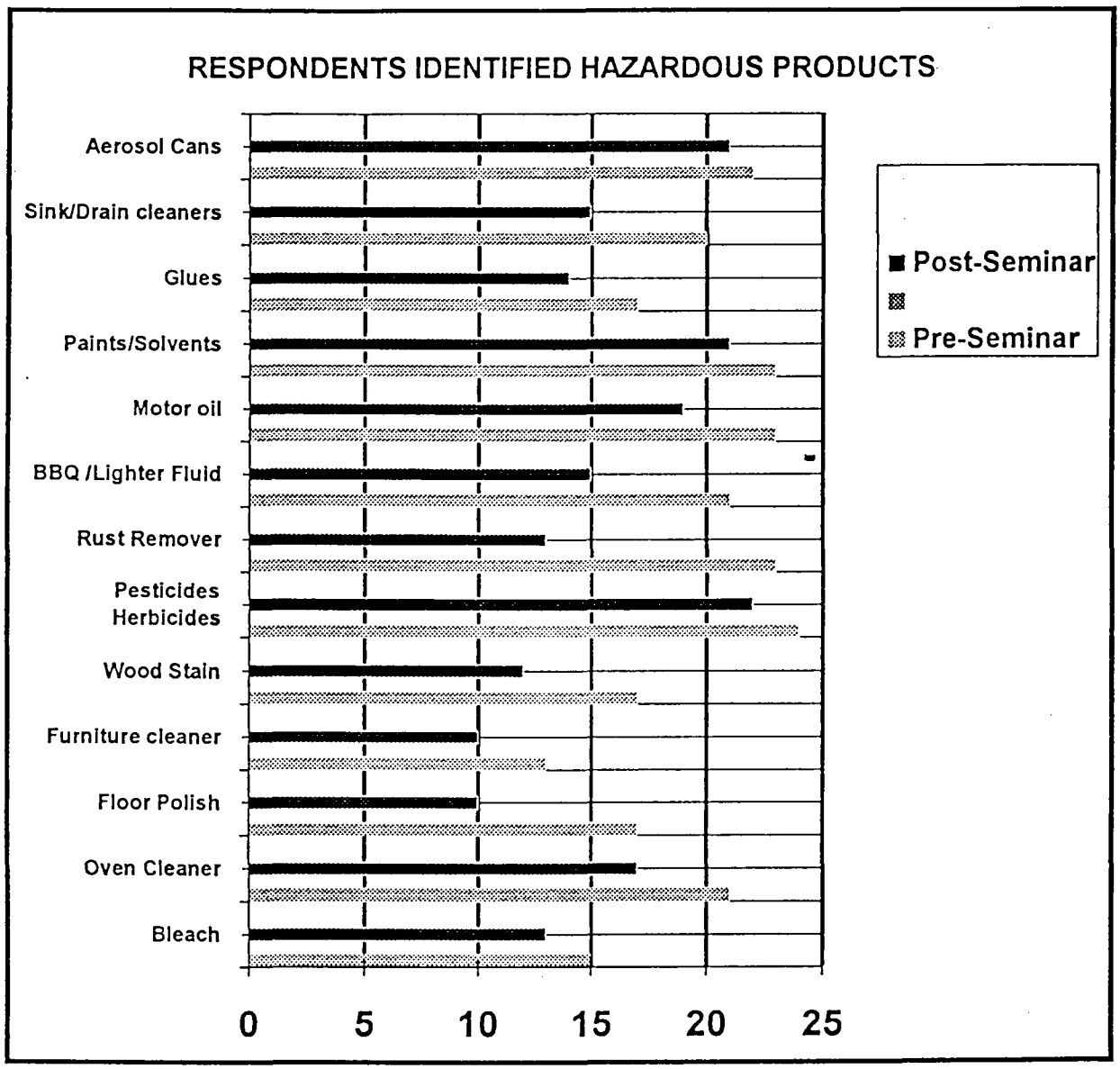
Respondents were asked to identify which products they used.



DISPOSAL OF HAZARDOUS HOUSEHOLD/BUILDING MATERIALS

Respondents were asked to indicate how important it was to NOT engage in the following practices. The respondents were to use the following scale to rate importance;1 - not important 2 - a little 3 - moderately 4 - fairly 5 - extremely important

F1-Pour hazardous household products down the toilet
F2-Burn hazardous household products in the fireplace or backyard
F3-Crush or puncture aerosol containers
F4-Use hazardous product containers for any other

	PRE- SEMINAR						POST-SEMINAR				
	1	2	3	4	5		1	2	3	4	5
F1	0	0	1	4	20		0	0	0	3	22
F2	0	0	1	3	21		0	0	1	2	21
F3	0	1	1	1	20		2	0	0	3	20
F4	0	1	0	3	21		3	0	0	2	20

OUTDOOR ACTIVITY

Respondents were to rate each of the following as being TRUE, FALSE or DON'T KNOW.

LEGEND

Q1- For a small lawn, a push mower works just as well as a power or gas one

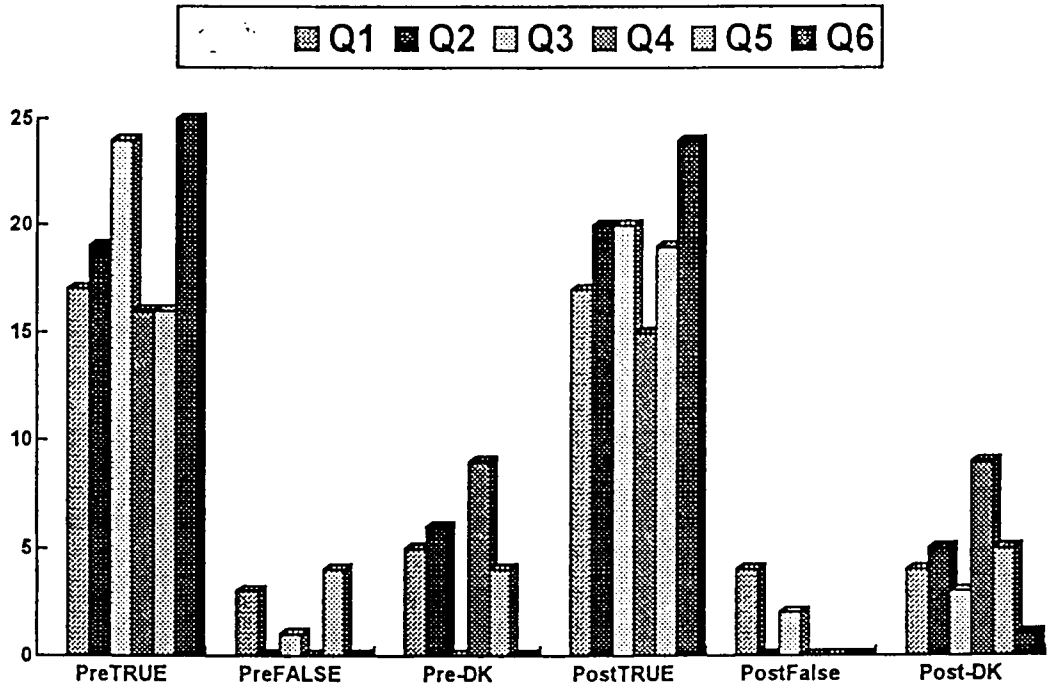
Q2 Taller grass (6.5 cm. or 2 1/2 inches) holds water in the soil better than constantly mowed, short grass does

Q3- Informed choices when selecting plants, trees, or shrubs, can lower the need for watering

Q4- Since the 1950's, the number of insects/mites resistant to chemical pesticides/herbicides has gone from 10 to 450

Q5- Non hazardous products that work are readily available

Q6- Well fitting storm windows and doors lower heat loss in winter and prevent cooling in summer



Respondents were asked to indicate how much they agreed or disagreed with certain actions related to chemical pesticide use, using the following scale;
1 - Strongly agree 2 - Agree 3 - Neutral 4 - Disagree 5 - Strongly Disagree

If you do use chemical pesticides it is important to:

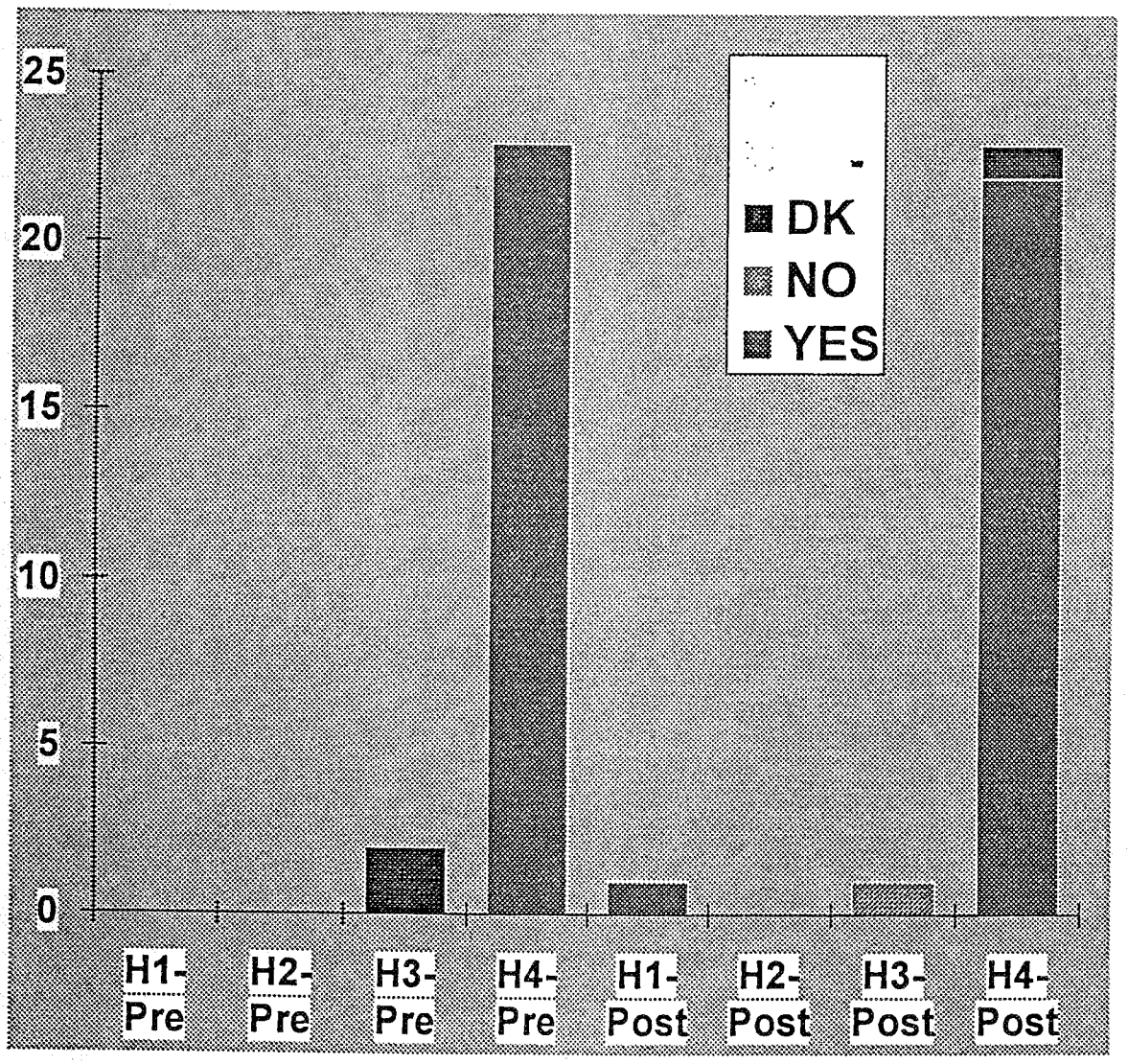
G1-never use the product on days when rain is forecasted
G2-follow the instructions to the letter
G3-*keep contained tightly in the original container*
G4-avoid application to eroded or bare ground
G5-avoid use around ponds, streams, marshes, or wells

	Pre-Seminar						Post-Seminar				
Scale	1	2	3	4	5		1	2	3	4	5
G1	16	2	4	1	1		16	4	0	1	0
G2	17	3	1	1	1		18	2	1	1	0
G3	19	1	1	1	1		17	3	1	1	0
G4	17	1	3	2	0		19	1	1	0	1
G5	20	0	0	1	2		19	1	1	0	1

Composting

Respondents were to indicate **YES, NO,** or **DON'T KNOW** to the following;

H1-Can reduce the amount of garbage put out for collection by 1/3
H2-Can provide a chemical free source of fertilizer
H3-Can be done successfully in urban areas
H4-All of the above.



Renovations

Respondents were asked to answer **YES** or **NO** to the next series of questions.

Is it true or false, that almost everything you tear down or fix up, can be harmful to you, and your environment? **PRE -YES-** 15 **PRE- NO-**8
POST-YES-15 **POST-NO-**7

In your view, is it necessary to wear a respirator when removing paint in homes over 10 years old? **PRE-YES** -21 **PRE-NO** - 4
POST-YES-24 **POST-NO-** 0

Should old scraped paint be disposed of as hazardous waste, if it is lead based.
PRE-YES- 24 **PRE- NO-** 0
POST-YES-22 **POST-NO-** 0

Do You?...

Buy only the amount of paint, cleaners, wood stain etc. that you will need for a specific job? **PRE-YES** 20 **PRE-NO-** 5
POST-YES-17 **POST -NO-**5

Dispose of completely empty and sealed hazardous containers in appropriate waste sites? **PRE-YES-** 16 **PRE-NO** 9
POST-YES-22 **POST-NO-** 1

Donate unused or unwanted paints, cleaners,etc. to a friend or community group for use? **PRE-YES-** 15 **PRE-NO-** 10
POST-YES-16 **POST-NO-** 8

Donate materials ONLY if they are in the original container, accompanied by the instructions? **PRE- YES-** 18 **PRE-NO-** 7
POST-YES-21**POST-NO** -2

SECTION # 3

Your earth/ Your home

Respondents were asked to indicate by picking YES, NO **or** DON'T KNOW.

17 million Canadians (nearly 2/3 of the population), have access to recycling.
Pre-Yes 5 **Pre-No** 3 **Pre-Don't Know** 16
Post-Yes 13 **Post-No** 1 **Post-Don"t Know** 11
ONE litre of oil can contaminate up to TWO MILLION LITRES of water?
Pre-Yes 11 **Pre-No** 0 **Pre-Don't Know** 13
Post-Yes 19 **Post-No** 1 **Post-Don't Know** 5

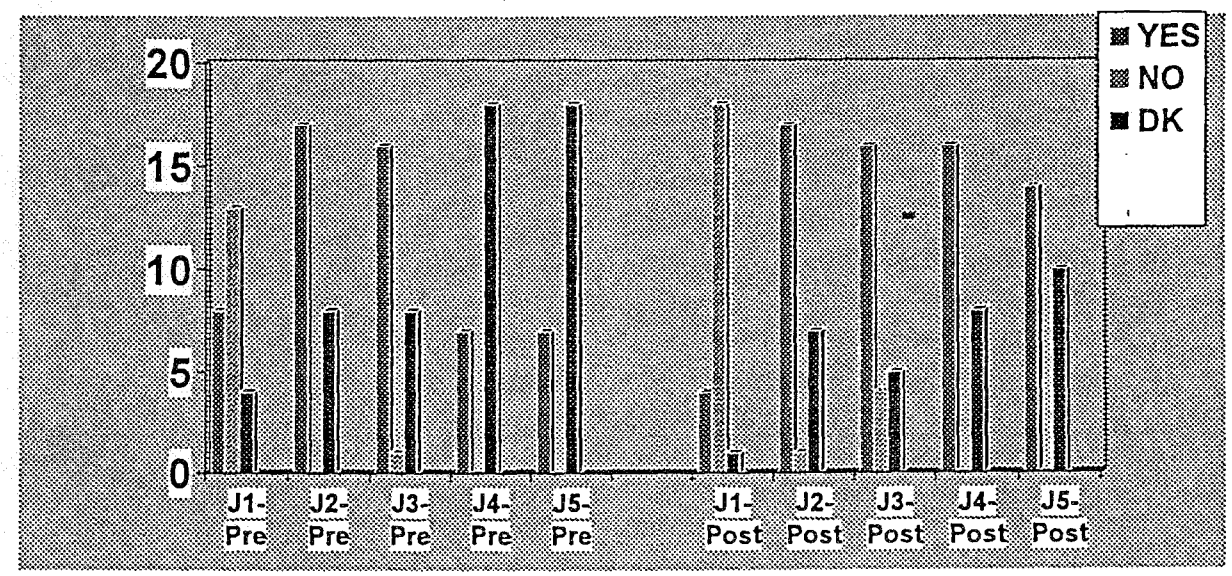
Respondents were asked to indicate if they; 1 - Strongly agree 2 - Agree 3 - Neutral 4 - Disagree 5 - Strongly Disagree

Whether you have an individual tank, or share a communal oil tank, how important do you think it is to:
K1-Regularly check the tank for visible leaks
K2-Monitor the oil use patterns to detect unusual losses
K3-Place a plastic sheet under the tank to see and contain any possible leaks.

	Pre-Seminar						Post-Seminar				
Scale	1	2	3	4	5		1	2	3	4	5
K1	19	2	0	1	2		22	2	0	0	1
K2	19	2	1	0	2		20	3	0	0	1
K3	13	5	2	1	2		18	4	0	0	1

Respondents were asked if they agreed or disagreed with the following statements by indicating YES, NO, or DON"T KNOW

J1-Landfills can safely contain our garbage
J2-Decomposing garbage creates greenhouse gasses
J3-Newspapers can be found in readable condition
after 30 years in a landfill.
J4-Almost 40% of Canada's total methane emission comes from landfill sites
J5-Methane is 20 times more potent as a greenhouse gas than carbon dioxide



Respondents were to use the gradient scale, with *1 as the least important and 5 representing extreme importance*, to give an *answer* that represents how important it was to support companies that...

L1•promote and use recycled and recyclable products recover energy from waste
L2•recover energy from use
L3•produce good quality durable products that will last
L4•make relevant product environmental information readily available to you as a customer

	PRE-SEMINAR						POST_SEMINAR				
Scale	1	2	3	4	5		1	2	3	4	5
L1	0	0	1	7	17		2	0	1	4	18
L2	0	0	2	3	20		2	0	1	3	19
L3	0	0	0	2	23		1	0	0	1	20
L4	0	1	5	0	18		0	0	2	3	16

Respondents were asked to indicate if the following statements were. True or False....

M1-In the 1990's, each Canadian will throw away one ton, or 2000 lbs of garbage a year

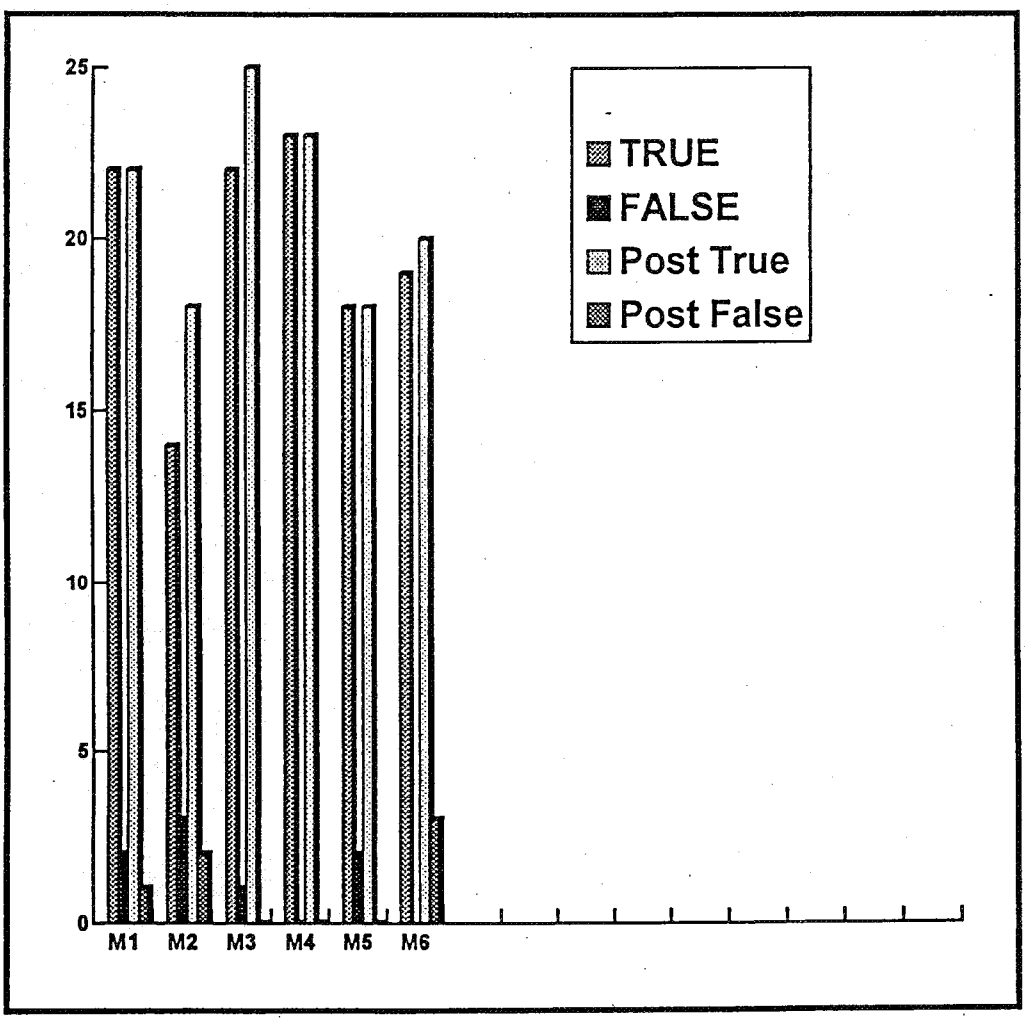
M2-Canada has it's own Eco Logo

M3-1/3 of our waste consists of paper and paper board materials;1/3 is made up of glass, metal, plastic, textiles, wood, and other materials; and the remaining 1/3 is waste from our kitchens and yards.

M4-Products are identified as environmentally "friendly" if they are made, transported, used, and disposed of in ways that cause more reduction in harm to our environment, than other products in the same category.

M5-A mobius loop, is the international symbol found on many products, indicating their content of recycled materials.

M6-One family's yearly supply of newspaper can be recycled into almost enough insulation for a house.



Respondents rated the following items in terms of importance as it relates to buying,and owning a car. The scale used was;
1-not important,2-a little, 3-moderately, 4 fairly, 5-extremely important

N1-Pollution control factor
N2-Energy efficiency (gas guzzler)
N3-Proper tire prssure
N4-Air conditionning
N5-Maintenance of filters and engine tuning

	PRE- SEMINAR						POST-SEMINAR				
	1	2	3	4	5		1	2	3	4	5
N1	2	1	2	7	13		1	1	1	3	17
N2	0	0	0	4	21		0	1	0	5	19
N3	0	2	1	3	19		1	0	0	2	20
N4	10	2	0	6	7		8	2	4	2	7
N5	0	0	0	3	22		1	0	0	0	22

Respondents were asked which of the following were true.

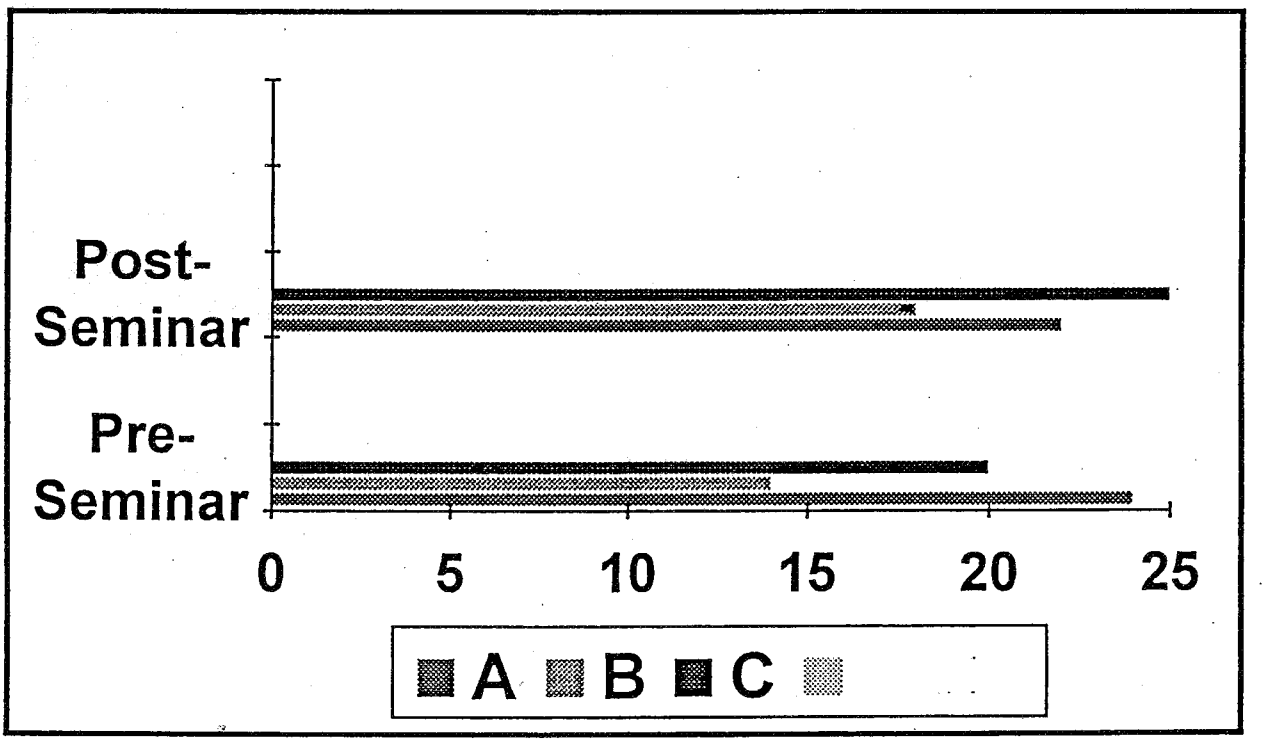
Canada has an endless supply of water. **PRE-** 2
POST 4

Water is our most essential resource **PRE** 24
POST...24

Canadians are amongst the world"s worst water wasters
PRE 18
POST 21

Respondents were asked which of the following actions by their communities could help their environment.

A. Planting and looking after lots of trees to slow down the greenhouse effect
B. Feed and house the bird community in order to reduce the bug population
C. Use sand instead of salt to deal with side walk ice and snow.



APPENDIX "C"

SURVEY QUESTIONNAIRE AND ANSWER SHEET:

ENVIRONMENTAL SURVEY

The following survey will assist in the development of a healthier environment for you, your family, friends, and neighbors. It will provide an indication of the overall environmental awareness level, and specific areas of concern, among residents of federally assisted housing projects on P.E.I.

Please complete as many questions as possible.
Your contribution is very important to us.

Thank You, in advance, for your participation.

SECTION # 1 ⇨ YOUR UNIT/YOUR HOME

Please ✓mark the box that responds best with your feelings

Our Shopping Choices:	YES	NO	UNCERTAIN
1. are our best way of keeping environmentally hazardous products out of our homes?	☐	☐	☐
2. can persuade manufacturers to make better products	☐	☐	☐
3. can prompt merchants to carry more environmentally safe products through our selection and choices?	☐	☐	☐

Please ✓mark the box that bests represents your current actions,
1 - not at all 2 - a little 3 - moderately 4 - fairly 5 - extremely

When shopping **how important** is it to you to...

	1	*2*	*3*	*4*	*5*
Try to find products that have little or no packaging	☐	☐	☐	☐	☐
Purchase bulk foods and household items	☐	☐	☐	☐	☐
Store the bulk items in containers that are being reused	☐	☐	☐	☐	☐
Reuse plastic shopping bags, or use cloth bags	☐	☐	☐	☐	☐
Educate yourself, friends, and family about packaging	☐	☐	☐	☐	☐
Tell store management about over packaged products	☐	☐	☐	☐	☐

PACKAGING

Please answer either T/true, F/false, or DK/don't know to the following:

	T	*F*	*DK*
You throw away an average of 1/2 kilogram (over 1 lb.) of packaging a day	☐	☐	☐
Package presentation is often the only real difference between two products.	☐	☐	☐
40% (by weight) of all packaging used, is made up of what you find in a shopping cart.	☐	☐	☐

RESOURCE USE

	T	*F*	*DK*
Each Canadian uses about 350 litres (approx. 78 gals) of water a day. This is 2 1/2 times the usage of the average European.	☐	☐	☐
Using energy efficiently will bring environmental "savings", as well as economic rewards.	☐	☐	☐

Rate the following as to their importance in saving water:
(1 - not important 2 - a little 3 - moderately 4 - fairly 5 - extremely important)

	1	*2*	*3*	*4*	*5*
Attach a water flow reducer to sink faucets/showers	☐	☐	☐	☐	☐
Repair leaks in faucets and taps	☐	☐	☐	☐	☐
Turn taps off tightly	☐	☐	☐	☐	☐
Partially fill sink for cleaning dishes, food, clothing	☐	☐	☐	☐	☐
Run tap while shaving/brushing teeth only when rinsing	☐	☐	☐	☐	☐
Take short showers instead of baths	☐	☐	☐	☐	☐
Fill 2/two ltr. (aprox. 1 gal.) plastic bottles with water, and place in toilet tank	☐	☐	☐	☐	☐
Turn off water to soap and shampoo when showering	☐	☐	☐	☐	☐

Please ✓mark one answer either T/true, F/false or DK don't know, to the following:
Significant savings can be seen if we:

	T	*F*	*DK*
Turn off lights, TV, radio, and stereo when not at home	☐	☐	☐
Use 48" twin tube, 40 watt flourescent light bulbs	☐	☐	☐
They give 4 times more light and last 10 times longer than one 100 watt incandescent	☐	☐	☐
Use microwaves, pressure cookers, and toaster ovens more	☐	☐	☐
Turn down the thermostat at night, and when not at home	☐	☐	☐
Use washers (dish & clothes) only with full load and on short cycle	☐	☐	☐

INDOOR AIR QUALITY

Can a tightly weather sealed home, lead to hazardous elements being trapped inside?
Please ✓mark one: **YES____ NO____ DON'T KNOW____**

Hobbies requiring use of toxic products should be done in: **(*✓one*)**
___ a room vented to the outside
___ a room in which the window is opened periodically or both.

Chlorine bleach combined with ammonia will create a highly poisonous gas. **(*✓one*)**
Yes ___
No ___
Don't Know ___

Curtains, carpets, furniture, and household items can contain hazardous chemicals/materials that are emitted into the air. **(*✓one*)**
True ___
False ___
Don't Know ___

Which of the following may be found in your home: **(✓ one or more)**
Formaldehyde ___ carbon monoxide ___
fungi ____ bacteria ___
viruses ___pollen____ dust ____ (heaven forbid!!)

HAZARDOUS PRODUCTS:

Please ✓ Check off which of the following products you use:

paint, varnish, stain ___ paint thinner ___ aerosol containers ___ oven cleaner ___ drain cleaner ___ disinfectant ___ window cleaners ___ wood preservative ___ acids ___ antifreeze ___ lighter fluid ___ turpentine ___ glues ___ transmission fluid ___ moth balls ___ fiberglass/epoxy ___ resins ___

Please ✓one.
Insects found on houseplants require:
insecticidal soap or ____
chemical sprays ____
both ____

Thank you for completing section #1

SECTION # 2
YOUR BUILDING/YOUR HOME

Do you, use hazardous waste depots, or take advantage of special collection days for hazardous products? Yes ___ No ___

HEALTH AND THE ENVIRONMENT

Please ✓ mark either T/true, or F/false, to the following:

	True	*False*
Products used in my apartment may give my neighbor a headache	☐	☐
Ozone depletion can lead to immune system damage	☐	☐
Skin cancer rates are affected by types of indoor lighting	☐	☐
Skin cancer rates are affected by exposure to sunlight	☐	☐
Human beings eat foods high on the food chain	☐	☐
Unbleached paper is safer than bleached paper	☐	☐
Chemicals on food we ate 15 years ago may still be stored in our bodies	☐	☐
Trees and shrubs can lower the heating bill	☐	☐
Mortgage and insurance rates can be affected by building pollution	☐	☐
A healthy building has lower vacancy rates	☐	☐
Some chemicals act as hormone "mimickers" that affect reproductive health	☐	☐
There was a 400% increase in ectopic pregnancies in the U.S. between 1970 and 1987	☐	☐

HAZARDOUS PRODUCT STORAGE

Storage of hazardous products in the original container is necessary because: (✓ mark one)

___ the package includes handling and disposal instructions
___ the number of tainted containers is not unnecessarily increased
___ there is no chance of being misled about the contents.
___ all of the above.

DISPOSAL OF HAZARDOUS HOUSEHOLD/BUILDING MATERIALS

Which of the following should be disposed of as hazardous waste?
(✓ *mark one or more*)

Bleach ____ Oven Cleaner ____ Floor polish ____ Furniture cleaner ____
wood stain ___ pesticides/herbicides ____ rust remover ____ BBQ/lighter fluid____
motor oil ___ paints/solvents ____ glues ____ sink/drain cleaner ____
aerosol cans____

DISPOSAL OF HAZARDOUS HOUSEHOLD/BUILDING MATERIALS (continued)

Please indicate how important it is for you not to: (✓ mark one)
1 - not important 2 - a little 3 - moderately 4 - fairly 5 - extremely important

	1	*2*	*3*	*4*	*5*
Pour hazardous household products down the toilet	☐	☐	☐	☐	☐
Burn hazardous household products in the fireplace or backyard	☐	☐	☐	☐	☐
Crush or puncture aerosol containers	☐	☐	☐	☐	☐
Put batteries in the regular garbage	☐	☐	☐	☐	☐
Use hazardous product containers for any other purpose	☐	☐	☐	☐	☐

OUTDOOR ACTIVITY -

In your view, are the following statements T/True, F/False or DK/don't know:

	T	*F*	*DK*
For a small lawn, a push mower works just as well as a power or gas one	☐	☐	☐
Taller grass (6.5 cm. or 2 1/2inches) holds water in the soil better than constantly mowed, short grass does	☐	☐	☐
Informed choices when selecting plants, trees, or shrubs, can lower the need for watering	☐	☐	☐
Since the 1950's, the number of insects/mites resistant to chemical pesticides/herbicides has gone from 10 to 450	☐	☐	☐
Non hazardous products that work are readily available	☐	☐	☐
Well fitting storm windows and doors lower heat loss in winter and assist cooling in summer	☐	☐	☐

If you do use chemical pesticides,
Please indicate how important it is for you to (✓ mark one)
1 - Strongly agree 2 - Agree 3 - Neutral 4 - Disagree 5 - Strongly Disagree

	1	*2*	*3*	*4*	*5*
never use the product on days when rain is forecasted	☐	☐	☐	☐	☐
follow the instructions to the letter	☐	☐	☐	☐	☐
keep contained tightly in the original container	☐	☐	☐	☐	☐
avoid application to eroded or bare ground	☐	☐	☐	☐	☐
avoid use around ponds, streams, marshes, or wells	☐	☐	☐	☐	☐

Please ✓ mark one Yes, No, or Don't Know, to the following...

COMPOSTING;	YES	NO	DON'T KNOW
Can reduce the amount of garbage put out for collection by 1/3	☐	☐	☐
Can provide a chemical free source of fertilizer	☐	☐	☐
Can be done successfully in urban areas	☐	☐	☐
All of the above.	☐	☐	☐

RENOVATIONS

Is it true or false, that almost everything you tear down or fix up, can be harmful to you, and your environment? _____

In your view, is it necessary to wear a respirator when removing paint in homes over 10 years old? Yes ____ No ____ Don't Know ____

Should old scraped paint be disposed of as hazardous waste, if it is lead based.
Yes ____ No ____ Don't Know _____

Please ✓ mark one - Yes or No

Do You?...

Buy only the amount of paint, cleaners, wood stain etc. that you will need for a specific job?
☐ yes ☐ no ☐ don't know

Dispose of completely empty and sealed hazardous containers in appropriate waste sites?
☐ yes ☐ no ☐ don't know

Donate unused or unwanted paints, cleaners,etc. to a friend or community group for use?
☐ yes ☐ no ☐ don't know

Donate materials ONLY if they are in the original container, accompanied by the instructions?
☐ yes ☐no ☐ don't know

Thank you for completing section #2

SECTION # 3
YOUR EARTH/YOUR HOME

Please indicate by ✓ marking one
17 million Canadians (nearly 2/3 of the population), have access to recycling.
Yes ____ No____ Don't Know ____

ONE litre (2/3 qt.) of oil can contaminate up to TWO MILLION LITRES (approx. 441,000 gals.) of water?
Yes ____ No ____ Don't Know____

WASTE MANAGEMENT

Please indicate by ✓ marking one as:
1 - Strongly agree 2 - Agree 3 - Neutral 4 - Disagree 5 - Strongly Disagree

Whether you have an individual tank, or share a communal oil tank, how important do you think it is to:	*1*	*2*	*3*	*4*	*5*
Regularly check the tank for visible leaks	☐	☐	☐	☐	☐
Monitor the oil use patterns to detect unusual losses	☐	☐	☐	☐	☐
Place a plastic sheet under the tank to see and contain any possible leaks.	☐	☐	☐	☐	☐

Do you agree or disagree with the following statements.
Please indicate by ✓ yes, no or don't know

	YES	NO	DON"T KNOW
Landfills can safely contain our garbage	☐	☐	☐
Decomposing garbage creates greenhouse gasses	☐	☐	☐
Newspapers can be found in readable condition after 30 years in a landfill.	☐	☐	☐
Almost 40% of Canada's total methane emission comes from landfill sites	☐	☐	☐
Methane is 20 times more potent as a greenhouse gas than carbon dioxide	☐	☐	☐

Using the gradient scale, with *1 as the least important and 5 representing extreme importance, circle the appropriate answer* that represents how important you feel it is to support companies that...

• promote and use recycled and recyclable products	1	2	3	4	5
• recover energy from waste	1	2	3	4	5
• produce good quality durable products that will last	1	2	3	4	5
• make relevant product environmental information readily available to you, as a customer	1	2	3	4	5

Are the following statements T/true or F/false....
Please indicate by ✓ marking one

	T	F
In the 1990's, each Canadian will throw away one ton, or 2000 lbs of garbage a year.	☐	☐
Canada has it's own Eco logo	☐	☐
1/3 of our waste consists of paper and paper board materials;	☐	☐
1/3 is made up of glass, metal, plastic, textiles, wood, and other materials; and the remaining 1/3 is waste from our kitchens and yards.	☐	☐
Products are identified as environmentally "friendly" if they are made, transported, used, and disposed of in ways that cause less harm to our environment, than other products in the same category.	☐	☐
A mobius loop, is the international symbol found on many products, indicating their content of recycled materials.	☐	☐
One family's yearly supply of newspaper can be recycled into almost enough insulation for a house.	☐	☐

When buying, and owning a new or used car, how important is it to look for the following:.....
(1 - not important 2 - a little 3 - moderately 4 - fairly 5 - extremely important)

	1	*2*	*3*	*4*	*5*
pollution control factors	☐	☐	☐	☐	☐
energy efficiency (is it a gas guzzler?)	☐	☐	☐	☐	☐
proper tire pressure	☐	☐	☐	☐	☐
an air conditioner	☐	☐	☐	☐	☐
properly maintained filters and engine tuning	☐	☐	☐	☐	☐

Which of the following are true; (Respond with an ✓)

Canada has an endless supply of water _____
Water is our most essential resource _____
Canadians are among the worlds worst H20 (water) wasters _____

Apartment buildings, communities, and groups can help their environment by which of the following? (Respond with an ✓)

A. Planting and looking after lots of trees to slow down the greenhouse effect. ____
B. Feed and house the bird community in order to reduce the bug population. ____
C. Use sand instead of salt to deal with sidewalk ice and snow ____

Thank-you for completing Section #3

SURVEY RESPONSES
SECTION # 1
YOUR UNIT/YOUR HOME

OUR SHOPPING CHOICES: Yes to all of these three affirmative actions.

When shopping, how important is it to you to: If your current actions do not include these activities, PLEASE consider making them part of your life. They will all make a difference.

page #2..

PACKAGING: All three are TRUE.

RESOURCE USE: Again, these three are TRUE.

Rate the following as to their importance in saving water: All of these efforts will contribute toward minimizing our excessive water use.

Significant savings can be seen if we: Any, and all of these activities will reduce your power bill.

page #3..

INDOOR AIR QUALITY:
Healthy indoor air quality requires proper ventilation and circulation.

Use of toxic hobby products should always be done in a room with both outside venting, and a window open periodically.

YES, chlorine bleach combined with ammonia will create a highly poisonous gas.

These items can, and often do, contain hazardous chemicals/materials that emit into the air.

All of these can be found in our homes, to varying degrees. It is important we learn how to best identify and minimize their potential effects.

HAZARDOUS PRODUCTS:
Use one of the many "natural" or non toxic alternatives to these products. If this is not possible, PLEASE use and dispose of these products only by following the label instructions to the letter.

Use insecticidal soaps in place of dangerous chemical sprays when dealing with insects on houseplants.

SECTION # 2
YOUR BUILDING/YOUR HOME
page #4..

HEALTH AND THE ENVIRONMENT: All of these statements are true.
HAZARDOUS PRODUCT STORAGE: All are excellent reasons to use only the original container for storage.
DISPOSAL OF HAZARDOUS HOUSEHOLD/BUILDING MATERIALS
All of these products are toxic and require proper waste management.

page #5..

Batteries **should** be held in sealed containers for proper disposal, but **please.. never** do any of the other activities!!!

OUTDOOR ACTIVITY: All of the statements are actually TRUE.

If you do use chemical pesticides we hope you will **Strongly Agree**, and follow all of these recommendations.

page #6..

COMPOSTING: Yes to all three.

RENOVATIONS: Paints, asbestos, paint removers, stains, waxes, glues, adhesives, pressure treated wood, and saw dust can each pose potential problems. Do your home work before embarking on a Renovation project. Call CMHC for RENOVATION "how to" publications.

Many old paints were lead based and therefore require a respirator and, cautious and specific handling for disposal.

Do you?..If you don't, you should.

SECTION # 3,
YOUR EARTH/YOUR HOME
page #7...

17 million Canadians have access to recycling.

ONE litre of oil <u>can</u> contaminate up to TWO MILLION LITRES of water.

WASTE MANAGEMENT:
Oil tank management...All are important in order to avoid a leak or spill.

Landfills can not safely contain our garbage. The following four statements indicate some of the reasons why.

Companies now realize established environmental practices, policies, and readily available consumer product information, is simply good business. Look for products from companies that REDUCE, REUSE, RECYCLE, and RECOVER.
All of these statements are TRUE.

With any new or used car, it is important to our environment to look for, and maintain all of these, but the air conditioner. (AC's increase fuel consumption while using Freon, a harmful CFC, as a coolant.)

That we possess an endless supply of water..is False. The others are true.
We all gain from these environmentally friendly efforts.

APPENDIX "D"

SAMPLE DOCUMENTATION:

WORKSHOP

Healthy Communities Project

Canada Mortgage and Housing Corporation (CMHC), Environment Canada, Health and Community Services Agency (HCSA), along with other community partners, are providing a series of workshops for people in Social Housing groups regarding **Healthy vs. Less Healthy Environments** and the effect that environment can have on people and their community.

The workshops are designed to be fun and educational, with participants taking an active part in all aspects of the program. The workshops are sponsored by the above mentioned organizations and there is no charge to the participants. A meeting hall or board room will be required. However, if the housing community does not have a facility, an effort will be made to assist in providing one.

The workshop is designed in one hour blocks, allowing for a 1/2 day session (approximately 4 hours) if desired. Shorter sessions can be made available. The length of the workshop can be made to meet your needs. For example, weekends, evenings and daytimes are all available.

The workshops cover:

- **your home,**
- **indoor air quality,**
- **packaging,**
- **resource use,**
- **hazardous products,**
- **health and the environment,**
- **renovations,**
- **waste management,**
- **and more!**

Workshops will be held through to mid April.

A presenter will come to your community to facilitate the **Healthy Communities** sessions.

If you have particular environmental concerns that you wish to have addressed, the workshops can be tailored to meet your needs.

These workshops are designed to increase the level of awareness among residents of federally subsidised housing and to enhance their ability to take action on environmental concerns.

For further information, please call:

Linda Burke.....894-9814
David Daughton.....566-7395

HEALTHY COMMUNITIES PROJECT.

Tel: 566-7395/894-9814

MEMO

TO: Mr Ron MacMillan
Renate Place Housing Co-op

From: David Daughton

Date: March 24, 1995

Re: Healthy Communities Project

.....

The accompanying brief description of the project will give you a better idea of the kind of workshops that are being offered. I have enclosed several copies of this for your members.

We have set aside the following dates in the hope that they will prove suitable:

Monday, April 03, 7 - 9 p.m. or

Thursday, April 06, 7 - 9 p.m. or

Saturday, April 08, 1 - 3 p.m.

Other dates can be set aside for your group if you prefer.

Early confirmation would be appreciated so that all the necessary arrangements can be made in good time.

Thank you for your interest in the Healthy Communities Project. We look forward to presenting a workshop in your housing community.

Please do not hesitate to call either Linda Burke (894 9814) or myself (566 7395) if you need any more information or have any questions.

Yours sincerely,

David Daughton
Healthy Communities Project

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WORKSHOP

Healthy Communities Project

Canada Mortgage and Housing Corporation (CMHC), Environment Canada, Health and Community Services Agency (HCSA), along with other community partners, are providing a series of workshops for people in Social Housing groups regarding Healthy vs. Less Healthy Environments and the effect that environment can have on people and their community.

The workshops are designed to be fun and educational, with participants taking an active part in all aspects of the program. The workshops are sponsored by the above mentioned organizations and there is no charge to the participants. A meeting hall or board room will be required. However, if the housing community does not have a facility, an effort will be made to assist in providing one.

The workshop is scheduled to take place:

THURSDAY, MARCH 16, 1995.....1 p.m. to 4 p.m.

AT

S.KINGS REGIONAL SERVICES CENTRE,
WOOD ISLANDS HILL, MONTAGUE

The workshops cover:
- your home,
- indoor air quality,
- packaging,
- resource use,
- hazardous products,
- health and the environment,
- renovations,
- waste management,
- and more!

A presenter will come to your community to facilitate the Healthy Communities sessions.

If you have particular environmental concerns that you wish to have addressed, the workshops can be tailored to meet your needs.

These workshops are designed to increase the level of awareness among residents of federally subsidised housing and to enhance their ability to take action on environmental concerns.

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Linda Burke.....894-9814
David Daughton.....566-7395

WORKSHOPS

NAME OF HOUSING PROJECT

.....

CONTACT NAME

.....

ADDRESS

.....

POSTAL CODE .....

PHONE AND FAX

.....

PRESENTER

.....

DAY, DATE AND TIME

.....

LOCATION

.....

SPECIAL NEEDS

.....

CONFIRMED ..... TENTATIVE.....

OTHER INFORMATION

.....

.....

.....

FOR IMMEDIATE RELEASE.

PARTNERS PROMOTE HEALTHY HOUSING.

The connection between improved indoor air quality and a stronger immune system is not just a concern of Island schoolchildren and teachers. A new project to increase awareness of environment and health issues in housing has shown that partnerships can translate into action.

In a joint effort by Canada Mortgage and Housing Corporation (CMHC), Environment Canada, the Health and Community Services Agency (HCSA), and the PEI Environmental Network, presentations on the health effects of indoor environments are being offered to housing communities throughout PEI.

Although targeted mainly to federally subsidised housing projects, the workshops are available to any interested individuals and groups.

"Our aim with the Healthy Communities Project is to give people the knowledge and skills that they need to gain control over air pollution, water pollution and toxic substances within their home, and to reinforce the connection between these issues and the big issues such as ozone depletion and global warming," says Albert Aucoin of CMHC.

"The changes will have to involve everyday living habits, as well as industrial practices, if Canada is to meet its targets for reduced emissions," says Aucoin.

Funding from Environment Canada's Environmental Citizenship Program and CMHC, combined with the volunteer efforts of many groups and individuals have given islanders the chance to get up-to-date information on Healthy Housing in their own homes.

The workshops are designed to be fun and educational, with participants taking an active part in all aspects of the program.

If you want to know more about the project, it is being co-ordinated through CMHC's Charlottetown office.

For further information, please call:

Linda Burke.....894-9814 David Daughton.....566-7395

APPENDIX "E"

BIBLIOGRAPHY:

BIBLIOGRAPHY:

Emerging Impacts of Climate Change?...(Greenpeace)

Home and Family Guide...(The Harmony Foundation of Canada)

Native Shrubs of PEI...(MacPhail Woods Ecological Forestry Project)

The Clean Air Guide...(CMHC NHA 6695/aussi disponible en français)

Healthy Housing - Practical Tips...(CMHC/LNH 6736)

Moisture and Air - Householders Guide...(CMHC NHA 5968)

Healthy Housing - Plan On It,,,(CMHC NHA 6725)

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Building Consensus for a Sustainable Future...(NRTEE)

National Round Table Review, Fall 1994...(NRTEE)

Utne Reader, Nos. 59 & 63...(LENS Publishing Co.)

Stewardship and Sustainability...(PEI Dept of Environmental Resources)

Achieving a Healthy Environment...(O'Brien Publishing, Ottawa)

Draft Health Goals for PE Islanders...(Health Policy Council)

Eco City Report, No. 5...(EcoCity Society, Edmonton)

New York Times Service

Environment Network News, Nos. 35 & 36...(Alberta Env. Network)

Public Awareness of PEI Water Resources...(Criterion Research)

Environmental Site Assessments...(CMHC)

Giants of Garbage...(James Lorimer and Co.)

Toward Sustainable Communities...(NRTEE)

Cancer and the Unresolved Health Issues in the Biological Effects of Electromagnetic Fields and Radiation...(Tesla Book Co.)

Your Co-op - Make It Green...(CHFC)

Keeping the Heat In...(Energy, Mines and Resources Canada)