### **CUTTING GREEN TAPE:**

# AN ACTION PLAN FOR REMOVING REGULATORY BARRIERS TO GREEN INNOVATIONS

## **SUMMARY REPORT**



#### **TABLE OF CONTENTS**

INTRODUCTION	1
THE FUTURE IS NOW	1
WHAT IS A GREEN BUILDING/COMMUNITY?	1
WHY AREN'T ALL BUILDINGS/COMMUNITIES GREEN?	2
CUTTING GREEN TAPE: A RESPONSE TO REGULATORY BARRIERS	2
SUMMARY OF ACTION PLAN	3
PRIORITY ACTIONS	
Create smart bylaws guidebook	
Address Need for More Public Education.	
Review regional growth management Law	
Research Relations between Development Variables and automobile use, parking demand	
Establish 'Case' for DCC reform by analysing financial impacts of green developments	
Empower Green bylaws	
Implement program for building inspectors: demonstration projects, professional development	
and Innovative Practice testing	
Examine Liability issues	
Seek ways to Underwrite and Insure against Risk	8
Change permitting process	
Address Fire & Safety barriers	
Address Building Code, Plumbing Code, energy Code and Related barriers	. 11
Address Health Act barriers	
Promote Alternative Development Standards	. 12

#### INTRODUCTION

#### THE FUTURE IS NOW

Green buildings and green communities are not futuristic, utopian concepts. Today and every day, BC planning, design and construction professionals are seeking the necessary permissions to try innovative green designs. Many are successful, but regulatory barriers and costly processing delays discourage many others.

#### WHAT IS A GREEN BUILDING/COMMUNITY?

The full spectrum of green development merges several agendas of environmental, social and economic importance into a new integrated model for urban planning and construction. Some of the characteristics of green building and green community development are:

- Buildings that are used and cherished by generations because they are 'architecturally beautiful', and are graciously flexible in their uses over time (like some schools in Sweden that are built to convert to condos when enrolment drops off).
- Largely focused on adaptive reuse and or renovation of existing building stock and as a
  result capitalizing on enormous earlier investments in labour, energy and materials. In
  addition, since Canada adds to its building stock at only a very small rate each tear (in
  the nature of 1 or 2 percent), a change that makes it easier to 'green' an existing building
  could have a considerably broader impact than a comparable change for a new building.
- A compact approach to cities and communities that preserves the natural setting, protects agricultural land, and supports public transit. Providing places to live, work and shop in the same neighbourhood.
- The repair and redevelopment of 'brownfield sites' abandoned or underused properties where past activities have caused real or suspected environmental contamination.
- Design features and technologies that (1) minimize dependency on non-renewable energy sources, (2) maximize the use of renewable energy sources such as solar heating, and natural ventilation and cooling, (3) reduce energy and water consumption and waste water release, and (4) minimize solid waste from construction, operation and renovation.
- Emphasis on the use of systems, components and materials that produce the least depletion of raw materials and minimum release of wastes (especially toxic wastes) in their production, use, re-use and disposal.

Exemplary green buildings and communities in BC include the proposed East Clayton Project in Surrey, the Capers Project in Vancouver, the Oaklands Development in Burnaby, the C.K. Choi Building at the University of British Columbia, and the Vancouver Island Technology Park in Victoria.

PAGE 1 APRIL 2002 CUTTING GREEN TAPE

Green buildings and green communities are not only more ecologically responsible, they are also healthier and cheaper. A growing body of literature highlights productivity and absenteeism benefits for green buildings. Green buildings and green communities also make economic sense because they can provide considerable savings in both capital and operating costs. The Vancouver Island Technology Park — certified green building in Canada¹ — is a reclaimed hospital and did not set out to be a 'green building.' VITP developers say LEED-Gold certification was achieved not only without any extra cost, it actually made it easier to stay on budget.

#### WHY AREN'T ALL BUILDINGS/COMMUNITIES GREEN?

Although green development is much better understood now than it was only a few years ago, it is not the accepted standard of practice today. The reasons are both regulatory and non-regulatory.

The researchers and professionals who contributed to *Cutting Green Tape* have identified dozens of regulatory barriers. In general these barriers can be described as:

- Unnecessary zoning restrictions.
- Parking requirements that do not reflect actual parking needs.
- Development cost charges that do not account for savings in local services.
- Unclear or poorly supported processes for 'equivalencies' to code provisions, and fears of local officials that they will be sued if green practices fail.
- Sequential permitting processes that don't allow integrated designers to at any point 'tell the whole story'.
- Fire, building, plumbing or energy code provisions that unnecessarily prevent or discourage green building and community practices.
- Health Act provisions that unnecessarily prevent or discourage green building and community practices.
- Local government development standards that restrict innovative developments (e.g. minimum road widths, requirements to connect to municipal storm sewers, and requirements for impermeable surfaces).

#### **CUTTING GREEN TAPE:** A RESPONSE TO REGULATORY BARRIERS

In 2001, West Coast Environmental Law set out to develop an action plan for accommodating green buildings and communities within the current regulatory framework. We set out to identify green practices, regulatory barriers to green practices, and potential solutions to regulatory barriers. We reviewed a broad range of literature. We consulted with

\_

The Vancouver Island Technology Park was certified under the Leadership in Energy and Environmental Design (LEED) Program. It received a gold certification.

over 40 professionals including municipal officials, provincial and federal government officials, lawyers for municipalities, developers, architects, engineers and academics.

Our purpose is not to design regulations that require sustainable buildings or communities. Instead, we are aiming to remove barriers in order to promote more green practices without compromising other valid social policy objectives like fire, health and safety. Generally, where the regulatory system makes innovative projects more cumbersome, or where a regulation creates an economic or other barrier, we have treated them as regulatory barriers. Economic, institutional and informational barriers are only considered in *Cutting Green Tape* to the extent they affect regulatory barriers. **Key non-regulatory barriers will be identified and addressed in a separate report.** 

*Cutting Green Tape* attempts to distil this considerable volume of material into a set of practical, actionable steps for removing unnecessary regulatory barriers.

Cutting Green Tape is a living document that needs refinement. In the spirit of promoting discussion that will lead to more refined solutions, we have presented virtually all of the potential solutions provided to us in the course of the research/interviews. We are seeking your feed back as to whether the solutions identified are feasible, likely to be effective and whether they address the largest barriers to sustainability.

#### SUMMARY OF ACTION PLAN

In addition to setting out an *Action Plan* for removing key regulatory barriers, *Cutting Green Tape* provides an extensive summary of green building/community practices, associated barriers and solutions, an extensive 'annotated' list of helpful references, and detailed discussions of liability issues and development cost charges.

The *Action Plan* itself consists of detailed recommendations, analysis and next steps. For full details, please consult *Cutting Green Tape*. Here is a summary of the *Action Plan* ideas that West Coast Environmental Law rates as high or medium priority:

#### PRIORITY ACTIONS

#### CREATE SMART BYLAWS GUIDEBOOK

*The Barrier*. Many of the largest barriers to sustainable communities and sustainable buildings are the result of municipal bylaws. Zoning requirements can create both obvious barriers, such as restrictions on infill and mixed use, and less obvious barriers such as disincentives to using passive solar heating and natural ventilation. Development standards can restrict the use of narrower roads or alternative storm-water systems, and municipal approval processes often encourage status quo approaches.

**The Action Plan.** Develop a guidebook for local governments that includes: a checklist of issues for local governments to consider in greening bylaws and development processes; rationale and research supporting certain reforms; options for reform; descriptions of what leading municipalities have done; model bylaws; success stories; and links to useful resources. The audience will be local government staff, especially staff in smaller jurisdictions with limited resources. The guidebook will be designed to allow a broad-brush review of the issues,

PAGE 3 APRIL 2002 CUTTING GREEN TAPE

as well as facilitating detailed reforms of specific areas. It will be solutions oriented – recognizing the legitimate concerns that underlie many restrictive bylaws, and attempting to define solutions that facilitate sustainable practices while meeting other needs. The guidebook will be designed so that it can be updated as statutory amendments give municipalities greater flexibility, as more research becomes available, and as more success stories emerge.

**Next Steps.** West Coast Environmental Law is currently raising funds to complete the Guidebook and will be establishing a steering committee to guide the project. Provincial support — technical and/or financial — would help ensure completion of the handbook. West Coast Environmental Law is seeking to launch the project in August 2002 with completion in July 2003. Contact Chris Rolfe at 604-601-2512.

**Priority**. High. High potential for widespread impact on largest barriers to green buildings and communities. Practices such as infill have very high environmental potential and high potential adoption rates. Short-term window of opportunity for some funding sources.

#### ADDRESS NEED FOR MORE PUBLIC EDUCATION

**The Barrier**. Changing the zoning bylaws that restrict green developments is not simply a technical issue; it is also a political issue. Likely the greatest barrier to increased density and mixed use is grassroots opposition from neighbourhoods concerned with increasing traffic, noise, loss of neighbourhood ambiance, etc. Much of this opposition is based on misconceptions regarding what compact development means and a lack of understanding regarding the implications of different development patterns. A program of public education to increase public and political support for compact communities would help overcome these barriers.

The Action Plan. Develop educational material highlighting successful demonstrations of mixed use, densification, building rehabilitation. Development of educational material appropriate to different settings, e.g. highlighting smart growth developments in commercial areas (e.g. 2211 W. 4th), single family residential areas (e.g. coach house developments in Cambie & West 10th area), smaller communities and in greenfields areas. Material could also be tailored for presentations to local government officials, focussing on financial advantages to Smart Growth. Some material already exists in this regard and is in use. For instance, Smart Growth BC has developed slideshow/power point presentations for small communities and more urban areas. Smart Growth BC is also developing fact sheets on smart growth issues and flyers for community newspapers discussing smart growth issues in the lead up to civic elections. In the long run they are considering development of videos that cover similar topics that could be aired on local TV stations.

**Next Steps.** LEED BC Steering Committee<sup>2</sup> should take steps to ensure an education program is developed for BC. Smart Growth BC should continue to be active in this area on Smart Growth issues at a grass roots level, and continue to seek funding to continue its work.

-

The Steering Committee, made up of representatives of provincial, regional and local government, is working toward adoption of the leadership in Energy and Environmental Design (LEED) certification program in BC.

**Priority**. High. High potential for widespread impact on largest barriers to green buildings and communities. Practices such as infill have very high environmental potential.

#### REVIEW REGIONAL GROWTH MANAGEMENT LAW

**The Barrier**. There is widespread recognition of overall benefits to the region of avoiding sprawl and compact growth in central urban areas. However, in making local decisions, individual municipalities tend to focus on parochial concerns (e.g. not loosing tax revenue to competing municipalities, or local opposition to secondary suites). The Regional Growth Strategies provisions of the *Local Government Act* (Part 25) are aimed at dealing with this problem and ensuring a coordinated approach to growth. However, Part 25 is widely criticized as ineffective.

**The Action Plan**. Review the experience under Part 25 in order to build a stronger case for reform (if needed). Regional growth strategies could be reviewed to see whether or not they ensure that provincial, regional and municipal capital expenditures, and municipal level bylaws are consistent with the policies of regional growth strategies, future development patterns that have broad public support, and long term sustainability.

**Next Steps.** Defer review for several years. Difficult to determine effectiveness as Part 25 was only adopted in 1995, and only four regional districts have completed strategies.

**Priority**. High in the long-term. Low in the short-term.

RESEARCH RELATIONS BETWEEN DEVELOPMENT VARIABLES AND AUTOMOBILE USE, PARKING DEMAND

*The Barrier.* When working to reduce minimum parking ratios (or impose maximum ratios), or reduce DCCs for transit oriented developments, green designers face the same major impediment: municipalities rely on US-generated data that does not reflect Canadian circumstances or incorporate important variables such as proximity to transit or existence of transportation demand management programs.

**The Action Plan.** Develop a manual that provides guidance on reducing minimum parking requirements to reflect local variables and guidance on using parking management or a transportation demand management tool.

Next Steps. The Province (through the LEED BC Steering Committee) should consider commissioning a contract to develop guidance on parking requirements and road use that reflects local needs. Possible researchers include TransLink Strategic Planning staff and the Victoria Transportation Policy Institute. If partnerships are formed, support may be available from the Ministry of Community, Aboriginal and Women's Services. West Coast Environmental Law will also seek funding for research as part of its emerging Green Communities Program, with plans to incorporate research into the Handbook on Green Communities Bylaw Reform

**Priority**. Medium in short-term.

PAGE 5 APRIL 2002 CUTTING GREEN TAPE

ESTABLISH 'CASE' FOR DCC REFORM BY ANALYSING FINANCIAL IMPACTS OF GREEN DEVELOPMENTS

**The Barrier**. Most participants in our work emphasized that they thought DCCs had a significant impact on the form of development. Background research is necessary to support the reform of DCCs to account for green developments' lower impact on municipal infrastructure costs. Such research and financial analysis would support amendments to the DCC Best Practices Guide, changes to the *Local Government Act* that allow negotiated reductions in DCCs for green developments, and model DCC bylaws.

**The Action Plan.** Conduct research necessary to make financial case for Smart Growth and to support DCCs that recognize the lower servicing costs of green buildings and communities. Include research and financial analysis on relation between lot/unit size and servicing costs; green building practices and servicing costs; proximity to amenities/transit and road servicing costs; and generally applicable research on the relation between density and municipal servicing costs.

**Next Steps.** The Province (through the LEED BC Steering Committee) should assess potential for commissioning research. Possible researchers include the Urban Systems Consulting. If partnerships are formed, support may be available from the Ministry of Community, Aboriginal and Women's Services. West Coast Environmental Law will also seek funding for research as part of its emerging Green Communities Program.

**Priority**. Medium to High.

#### **EMPOWER GREEN BYLAWS**

**The Barrier**. The *Local Government Act* often places tight restrictions on what local governments can do, in many cases leaving local governments incapable of practically removing barriers to green development.

**The Action Plan.** The Province (through the LEED BC Steering Committee) seek support from UBCM and other key parties for a series of amendments to local government legislation in order to empower local governments to take actions that facilitate green buildings and green developments. Examples are:

- Allow density bonusing for Green Developments.
- Allow developer cash payments in lieu of parking space to be spent on TDM or transit.
- Allow administrative approval for minor adjustments to zoning.
- Authorize 'performance-based zoning'.

**Next Steps.** The ongoing Community Charter process offers an important opportunity to get some of these changes made quickly. West Coast Environmental Law should prepare a brief document supporting reform that enables green bylaws. LEED BC Steering Committee members should refer brief on white paper to key government agencies to informally gauge support for reforms, and seek support specific reforms.

**Priority**. High in the short-term for those action items that fall within Phase One of the Community Charter process. High in the medium term (2 to 3 years) for those items falling within Phase Two of the Community Charter process.

IMPLEMENT PROGRAM FOR BUILDING INSPECTORS: DEMONSTRATION PROJECTS, PROFESSIONAL DEVELOPMENT, AND INNOVATIVE PRACTICE TESTING

**The Barrier**. Where building codes prevent or fail to address green innovations, proponents of green innovations are left to seek approval for an 'equivalency' from local government inspectors. In many cases, particularly in smaller jurisdictions, building officials are reluctant to consider or approve equivalencies because they are unfamiliar with the solution and don't have access to information on its efficacy. Lack of information, awareness and familiarity with green building practices are not only regulatory barriers but also institutional and economic barriers. We are all strongly persuaded and inspired by examples. This is particularly true in the design professions and building industry.

**The Action Plan**. Increase building inspectors' awareness and access to information on green buildings. Combine with efforts to increase awareness, information access and familiarity within the rest of the development community (recognizing different informational needs). Create new mechanisms to enhance the testing and demonstration of new technologies. To accomplish this, *Cutting Green Tape* recommends the Province (through the LEED BC Steering Committee) implement a program that would consist of:

- Professional Development for Building Professionals. General topics could include
  green building certification, equivalencies and the anticipated national 'objective-based
  code', and the concerns and realities associated with liability. Some sessions could be on
  specific green practices (e.g. alternative materials and computer-aided design tools for
  natural ventilation and cooling). Organize tours for building officials of leading-edge
  green buildings in BC.
- Demonstrate Performance, Safety, and Economics of Innovative Practices. Design
  communications and media plans to expose and celebrate BC's existing successful green
  building/community projects. Seek out new opportunities to demonstrate green
  building and community practices (e.g. the Province's 'sustainable' Whistler bid).
  Investigate changes to municipal infrastructure funding mechanisms to cover costs of
  demonstration projects that reduce demand on municipal infrastructure.
- Provide More Opportunities to Share and Conduct Innovative Practice Testing. Establish a web-based 'Clearinghouse for Green Buildings Technology and Materials Test Results' upon which qualified organisations, local governments and independent testing facilities can post test results of new technologies and materials and save others the costs/delays of doing so. Establish formal or informal networks among local governments to share testing and other 'green practice' experiences. Help find funding for 'interactive research buildings' like the proposed Centre for Interactive Research on Sustainability (CIRS) at the University of British Columbia. Investigate partnerships with existing testing and demonstration programs for innovative practices and materials with environmental benefits.

PAGE 7 APRIL 2002 CUTTING GREEN TAPE

**Next Steps.** LEED BC Steering Committee engage the Local Government Management Association of BC, CMHC, NRCan, FCM, NRC the Royal Architecture Institute of Canada, and the 'City Program' at Simon Fraser University in discussions about sponsoring/implementing a Professional Development Program for regulatory officials on Green Practices. Other programs aimed at information sharing and development should be considered.

**Priority**. High (but potential for provincial or local government action may be limited by resources)

#### **EXAMINE LIABILITY ISSUES**

**The Barrier**. Regardless of the actual risk of a system failing, green innovations tend to be perceived as risky because innovation, by its very nature, involves risks. Local governments may be reluctant to approve innovative green designs because of the perceived risk that they will be sued if the system fails. Municipal governments are particularly fearful of liability because of their 'deep pockets' and the fact that under the law of negligence, they may be ultimately responsible for 100% of damages even though only 5 percent at fault. Reforms to liability provisions in the local government legislation or under the *Negligence Act*, could help reduce these barriers.

**The Action Plan.** Investigate liability issues further. Protecting municipalities from risk effectively transfers risk onto homeowners and third parties who suffer the consequences of failed innovations. And protection from liability could lead to a lower standard of care by inspection officials. Views of all stakeholders need to be considered before undertaking liability reform. Options include expanding protection of liability in the *Local Government Act* or eliminating joint and several liability for municipal approvals under the *Negligence Act*.

**Next Steps.** The Province (through the LEED BC Steering Committee) should engage UBCM, Ministry of Attorney General and the Ministry of Community, Aboriginal and Women's Services regarding liability reform. West Coast Environmental Law to review upcoming paper on liability reform and report to the LEED BC Steering Committee.

**Priority**. High in short-term due to window of opportunity created by Provincial review of liability principles. However, careful public consideration needed before any amendments.

#### SEEK WAYS TO UNDERWRITE AND INSURE AGAINST RISK

*The Barrier*. In circumstances where codes prevent or fail to address green innovations, proponents are left to seek approval for an 'equivalency' from local government inspectors. With limited experience with green practices, building officials respond to perceived risks by either denying approval or by requiring extensive 'back-up' or 'redundant' systems to protect public safety in the event the green practice fails.

**The Action Plan.** In addition to addressing code limitations themselves, *Cutting Green Tape* recommends the Province investigate ways to underwrite the risk of failure of demonstration projects which are in the public interest, or require others to do so. Options include government insuring the risk of specific green demonstration projects or provincial requirements for payment into a guarantee system.

**Next Steps.** LEED BC Steering Committee engage the Province, Municipal Financing Authority, the federal government, local governments, developers and the green building/community design community in a discussion about the merits of the Province or the federal government underwriting the risk of green practice failure in carefully chosen, green building demonstration projects, and/or requiring builders/developers to pay into a guarantee system. Engage, in particular, local governments and developers who participated in the process to reform the Waste Management Act Municipal Sewage Regulation.

**Priority**. Medium to Low (limited political potential).

#### CHANGE PERMITTING PROCESS

**The Barrier**. BC planners, designers and construction professionals that fail to secure necessary approvals to try something green and innovative identify the following two regulatory reasons as part of the problem:

- Sequential permitting processes that don't allow integrated design teams to 'tell the whole story'.
- Time and money associated with persuading regulators to approve 'equivalencies' for projects.

#### The Action Plan. Local governments should:

- Implement 'integrated permitting processes' that can respond to 'integrated building
  design' processes that are becoming more and more common. In these processes, a
  designer can show regulators what she wants to achieve, and regulators can make
  judgement about the entire project, subject to details being ironed out.
- Establish 'front of the line' processes for building applications that meet specified 'green building/community' criteria such as commitment to green building certification.
   Consider as potential models, the City of Vancouver's 'fast track' for heritage and social housing projects, and its 'Certified Professional Process' which allows proponents to hire outside consultants to review plans for compliance.
- Investigate the timing of demolition permit, building permit, and development permit
  processes to ensure building deconstruction and re-use of materials is not unnecessarily
  restricted.
- Eliminate bylaws that charge builders if they put recycling bins on city streets.

The Province (through the LEED BC Steering Committee) should:

Investigate the merits of creating a 'competitive' building approval process similar to
processes created in Australia. In Australia, the result is reported to be more innovation
and shorter approval times as private sector companies emerge to 'specialize' in the
knowledge and approval of innovative designs and technologies. In order to attract
private sector interest, the states have had to implement ten-year liability caps, and
proportional liability. Many citizens of BC are likely to be opposed to the idea because of

PAGE 9 APRIL 2002 CUTTING GREEN TAPE

a real or perceived reduction in public trust and accountability for inspections and approvals vital to the public interest.

• Investigate the merits of 'innovative option permits' — allowing the trial use of innovative materials at the applicants risk. To address concerns about the risk of future owners, the Province should also investigate requiring the applicant to register a note on his or her title.

**Next Steps.** The Province, through the LEED BC Steering Committee, should bring designers, developers and local government officials together to investigate the merits of:

- Establishing 'integrated permitting,' 'front of the line,' and 'innovative option permit' processes.
- Creating 'competitive' building approval processes similar to processes created in Australia.

Local governments should:

- Invite local building demolition and materials salvage companies to meet and discuss regulatory barriers, if any, associated with the timing of demolition permit, building permit, and development permit processes.
- Investigate the impact of bylaws that charge builders for recycling or waste bins.

West Coast Environmental Law should include ideas from this section in 'green handbook' above.

**Priority.** High, but careful analysis and public debate of competitive approval idea is needed.

#### **ADDRESS FIRE & SAFETY BARRIERS**

**The Barrier**. Fire and safety requirements are clearly in place to serve two serious public policy objectives — fire prevention and safety. But green building/community design professionals encounter situations where code requirements prevent, or fail to consider, green building practices that could vastly improve environmental performance without compromising fire and safety objectives. One example is the emergency access standards requiring specified widths, turning radius of largest emergency vehicles, and surfaces permitted for emergency vehicles. These requirements no longer reflect today's emergency vehicle technology and limit the environmental benefits associated with increased density and smaller road surfaces.

Action Plan. This Action Plan recommends the Province investigate safe alternatives to fire and safety provisions that would serve green building/community objectives. Specific recommendations are to review emergency access requirements to identify safe alternatives, shift to smaller emergency vehicles, investigate banning lane parking, review 'compliance alternatives' that would accommodate the rehabilitation of older buildings, and demonstrating equivalent performance to Code requirements using natural ventilation design analyses.

**Next Steps.** The Province, through the LEED BC Steering Committee, should bring designers, developers, local governments and fire officials together to review emergency access.

**Priority**. Medium. It will likely be easier to start with access requirements and 'alternative compliance' models.

ADDRESS BUILDING CODE, PLUMBING CODE, ENERGY CODE AND RELATED BARRIERS

*The Barrier*. A considerable number of green building/community practices are prohibited or discouraged by building, plumbing, and energy codes. Although there are limited references to energy in the Building Code, and the City of Vancouver has an energy code for commercial buildings, otherwise energy codes are generally voluntary in BC. Designers and builders, however, must comply with them in order to qualify for important financial incentives.

*The Action Plan.* Cutting Green Tape recommends investigating specific changes to the codes that would accommodate green building/community practices — while still maintaining important public safety protections.

As general recommendations, *Cutting Green Tape* suggests the Province (through the LEED BC Steering Committee):

- Rapidly adopt the National 'Objective-based' Code for BC (expected 2004).
- In advance of 2004, examine its process for adopting the national codes with a view to
  finding greater speed, efficiencies, and quality. Some interviewees have suggested
  automatic adoption. Others have suggested the Province and local governments should
  establish a provincial version of the Canadian Commission on Building and Fire Codes
  (CCBFC) the volunteer organization that prepares and maintains the model national
  fire, plumbing, and building codes.
- Persuade the CCBFC to, as the 'next stage' of the national code evolution beyond
  'objective-based' code, review the fire, building, and plumbing codes from the
  perspective of creating buildings with a long lifecycle. Some interviewees have suggested
  the current versions focus on short-term precautions at the expense of promoting
  buildings that will have a longer life span.
- Research the potential for a 'Rehabilitation Code' to specifically address building
  restoration. Several US states have rehabilitation codes that balance the heritage and
  environmental benefits of building restoration against safety concerns for seismic, fire,
  handicapped access.
- Consider amendments to either the code or the *Local Government Act* (as appropriate) to allow municipalities to consider performance guarantees, warranties and security offered by the private sector when determining equivalencies.
- Amend the federal Weights and Measures Act and/or the federal Electricity and Gas
   Inspection Act regulations to allow landlords and strata councils to use 'unofficial' metering equipment to allocate energy costs among strata members or tenants.

PAGE 11 APRIL 2002 CUTTING GREEN TAPE

Cutting Green Tape also discusses several specific recommendations for building, plumbing and energy code revisions. Because of the technical nature of these ideas, Cutting Green Tape is not able to confirm the necessity of specific changes, but instead offers the service of reporting ideas generated by researchers and interviewees in the interest of encouraging further discussion.

**Next Steps.** The Province, through the LEED BC Steering Committee, should bring together green building/community professionals, local governments, and provincial building and plumbing code administrators to examine each of the recommendations above.

Priority. High.

#### ADDRESS HEALTH ACT BARRIERS

**The Barrier**. Regulations under the *Health Act* fail to differentiate grey water (water-carried wastes from drinking, culinary purposes and cleaning) from black water (human excretion). In addition, the regulation could potentially be interpreted as not allowing grey water re-use. The lack of differentiation presents a barrier to onsite water treatment for grey water.

**The Action Plan**. Amend the Sewage Disposal Regulation to give separate definitions of grey and black water; set differing standards for grey and black water; and investigate and share performance experiences with alternative treatment systems among building officials and the development industry.

**Next Steps.** LEED BC Steering Committee to contact the Ministry of Health to ensure that these issues are considered during the current amendment process.

*Priority*. Medium, due to short-term window of opportunity. Otherwise low.

#### PROMOTE ALTERNATIVE DEVELOPMENT STANDARDS

**The Barrier**. While greenfield development is generally seen as less favourable than infill, or brownfield development, it can be done in such a way to minimize its ecological footprint. These standards would allow traditional grid development patterns similar to those found in the Kitsilano neighbourhood of Vancouver, while further protecting streams through natural stormwater absorption, detention and treatment. Unfortunately, some provincial and local government development standards such as minimum road widths standards, requirements to connect to municipal storm sewers, and requirements for impermeable surfaces, restrict such innovative developments.

**The Action Plan.** LEED BC Steering Committee should support the significant work already underway on defining ADS such as reduced road widths, reduction in impermeable surfaces, and environmentally sensitive storm water alternatives. Work on standards should continue, with an eye to adopting them to a BC context, and increasing specificity and preciseness. A mechanism for sharing knowledge, standards and sample ADS bylaws should be developed.

**Next Steps.** LEED BC Steering Committee should meet with the James Taylor Chair (University of British Columbia) and Michael von Hausen to seek out opportunities to further the work of The ADS Project, and support work on Green Communities Zoning Reform

handbook to help eliminate barriers to ADS, such as zoning restrictions, or density restrictions.

*Priority*. High. Significant energy has gone into the ADS project, potential impacts are profound for new developments, and the project has high recognition.

PAGE 13 APRIL 2002 CUTTING GREEN TAPE