North American Workshop on Sustainable Consumption and Production (SCP) and Green Building

31 January – 1 February 2011, Ottawa, Canada

WORKSHOP REPORT

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Executive summary

Context

- The Ottawa workshop was co-hosted by the Government of Canada, and organized in cooperation with the Government of the United States and the United Nations Environment Programme (UNEP), and supported by the One Earth Initiative Society. It was the second North American regional meeting on sustainable consumption and production organized by the Canadian and U.S. governments and UNEP, building on the first workshop held in Washington, DC, U.S.A, November 6 and 7, 2008.

- The goal of the workshop was to convene a multi-stakeholder dialogue promoting bi-national collaboration on green building as an important application of international sustainable consumption and production efforts.

- A number of studies show that three consumption clusters – housing, food and drink, and mobility/transportation – drive 70 to 80% of the ecological impacts in developed economies, and promoting green building is a high-leverage option to help transform production and consumption patterns for sustainability.

- The meeting provided a useful platform through which to engage the green building community in both Canada and the U.S. on how buildings are designed, built and used, and to identify opportunities and barriers for the sector, while keeping the broader questions posed by sustainable consumption and production in mind.

Concrete green building outcomes

- The importance of communicating the need to develop, maintain, and integrate life cycle assessment databases at high levels in Canada and the U.S. was expressed.

- There was an agreement for collaboration between Equilibrium Housing (Canada) and Zero Energy Housing (U.S.).

- Participants expressed support for competitions to raise awareness and help stakeholders develop and learn from best practices.

- There was agreement to convene a meeting between the U.S. General Services Administration and municipalities regarding PULSE (a system to coordinate monitoring and tracking of energy).

- Participants advanced the idea of a “Road to Rio” program for cities to showcase their initiatives and prepare for Rio+20.

- Participants suggested engaging in potential partnerships with the Federation of Canadian Municipalities’ emerging showcase program.

- Support was given to develop the business case for green building retrofits and communicate these to industry groups and politicians.

- Some participants agreed to further explore the opportunities for transforming building codes and standards.
Key outcomes as inputs to the international dialogue on sustainable consumption and production

- **Sustainable consumption and production (SCP) as a fundamental global environmental and social issue** – SCP is an issue around which Canada and the U.S.A (North American region) can play a leadership role on the international stage.

- **Further articulation of a North American approach to sustainable consumption and production (SCP)** – The SCP approach is fundamentally multi-sectoral, including initiatives from industry, private sector, government and civil society, and multi-jurisdictional as it involves SCP initiatives at the federal, state/provincial, and municipal levels. It can draw on the expertise of practitioners in key sectors (building, mobility, food, tourism) to shape collaborations and other activities aimed at supporting existing initiatives across North America, bringing their efforts to scale, and identifying and filling gaps for continuous improvement towards sustainability.

- **The workshop as a model of multi-stakeholder dialogue on SCP** – The workshop can serve as model for a regional programme of dialogues under the 10-Year Framework of Programmes on SCP to be determined at the United Nations Commission on Sustainable Development (UN CSD 19) in May of 2011, and such regional dialogues on SCP can advance regional collaborative partnerships. Key economic sectors, SCP categories as well as types of approaches that have a high impact in shifting consumption and production patterns can serve as focal themes for future workshops. Examples of sectors and thematic entry points include food, transportation, waste, and cities. Specific SCP categories include production, investment, marketing and distribution, and consumption. Finally, process-related approaches to SCP include skills gaps, governance and life cycle databases. The model is a two-way dialogue in which practitioners inform approaches to advance SCP, while SCP experts provide a systemic lens for assessing progress in particular sectors, categories and initiatives. The workshop includes representatives from different sectors (different levels of government, industry and business, finance, civil society), and explores existing and new opportunities for partnership to advance SCP.

- **Further opportunities for discussion** – Workshop participants discussed that there will be several opportunities for continuing this dialogue at the international level, including at the U.N. Commission on Sustainable Development in May 2011 and at the United Nations Conference on Sustainable Development in Rio de Janeiro in June 2012.

Inputs for consideration at the United Nations Commission on Sustainable Development’s 19th session focused on sustainable production & consumption, and building on the Marrakech Process

- A 10-Year Framework of Programmes (10YFP) could support regional and national initiatives such as the creation of a SCP map of actors and a survey of SCP activities (who-is-doing-what-where in North America). Other potential Programmes could include supporting research on SCP, reviewing progress in North America on SCP since the Rio Earth Summit (1992), financing SCP initiatives, creating a database or archive of good practices and successes around SCP, and building capacity to engage mass media and to measure progress on sustainability.

- A 10YFP could help catalyze public-private partnerships in North America around SCP.
• The topic of green building could be an interesting and high-leverage entry point for a regional framework on SCP.

• The value of using SCP as a lens is that it helps inform who is brought together to engage in deep discussion around a particular practice (i.e. green building), and how these people are brought together. Innovative ways of convening that include dynamic, interactive, adaptive and engaging workshops are necessary to tap into the collective intelligence of participants that can stimulate breakthrough solutions and provide concrete inputs to current research efforts, thus realizing the overall 10YFP goal of shifting to sustainable patterns of consumption and production.

• The efficient use of resources is a central goal of the 10YFP, but participants cited the ‘rebound effect’ numerous times as a concern to be taken into consideration when developing policy for SCP.
1. Context

1.1 Goal of the North American Sustainable Consumption & Production Workshop on Green Building

The Government of Canada (led by Environment Canada), the United States Government and the United Nations Environment Programme (UNEP) hosted the North American Sustainable Consumption and Production Workshop on Green Building at the Minto Suite Hotel in Ottawa, Canada (January 31 – February 1, 2011). This was the second North American regional meeting on sustainable consumption and production, building on the first workshop held in Washington, DC, U.S.A, November 6 and 7, 2008.

The goal of the Ottawa workshop was to convene a multi-stakeholder dialogue promoting bi-national collaboration on green building as an important application of international sustainable consumption and production (SCP) efforts, particularly towards the development of a 10-Year Framework of Programmes (10YFP) in support of regional and national initiatives for sustainable consumption and production. Further details on the 10YFP are provided in the United Nations Environment Programme background paper that was developed for the meeting.

The specific aims of this workshop were to:

- Build on U.S.-Canada collaborative efforts in green building and identify possible additional areas of collaboration, for example, in the areas of 1) financial structures; 2) building products / life cycle approach; and 3) building performance, including aligning first cost and operations / maintenance budgets; and

This present report is an integrated analysis based on background research, interviews with workshop participants and other experts, and the multi-stakeholder dialogue that took place January 31 and February 1, 2011. It explores specific solutions and target priorities related to SCP, and the green building sector in particular.

1.2 Sustainable consumption & production and green building

Sustainable consumption and production (SCP) is a key global environmental and social issue around which Canada and the U.S.A (North American region) can play a leadership role on the international stage. A number of studies show that three consumption clusters – housing, food and drink, and mobility/transportation – drive 70 - 80% of the ecological impacts in developed economies, and promoting green building is a high-leverage option to help transform production and consumption patterns for sustainability. In addition, because a number of collaborations around green building already exist between the U.S. and Canada, and because the building sector generally plays a key role in both countries’ economy, the Governments of Canada and the United States agreed that it would be valuable and useful to focus on green building as a practical way to consider sustainable consumption and production in North America.
The concept of sustainable consumption and production can be understood as a whole-systems approach through which to consider the practical means of aligning economic systems to meet the needs of current and future generations within the ecological carrying capacity of the Earth. In that sense, the production and consumption system is the aggregate of all economic activity that guides the provision of goods and services that move through our lives and that sustain us. It emerges from our needs and values, which determine what we produce and consume, and how much.

Many observers feel that this system is currently unsustainable on both social and ecological fronts, as the way we currently extract resources, transform matter and energy into products and services, and create waste is undermining lives and livelihoods and our economies. An SCP approach examines societal needs and values, and applies a life-cycle and value-chain perspective to the production and consumption of goods and services, and includes categories such as the building sector, food systems, households, transportation, consumer items, large infrastructure (e.g. waste operations), etc. Shaping and transforming the production and consumption system requires the participation and collaboration of all key actors in society, notably government, business and industry as well as communities, civil society and NGOs, who need to work together to establish the structures through which sustainable patterns of production and consumption arise. A more in-depth look at sustainable consumption and production is available in Background Paper #1.

1.3 The green building sector as a practical and action-oriented thematic sector to talk about sustainable consumption & production

The North American Workshop on SCP and Green Building provided a useful platform through which to engage the green building community – planners, developers, policy makers, architects, etc. – in both Canada and the U.S., on how buildings are designed, built and used, and to identify opportunities and barriers for the sector. The event provided a space for this community to keep in mind the broader questions posed by applying a sustainable consumption and production lens, such as taking into consideration the behaviour of owners and tenants when examining building performance, recognizing the role of land-use planning in supporting broader system shifts, applying whole-neighbourhood perspectives and approaches (i.e. district energy systems), and ensuring that efficiency gains do not translate into greater rates of resource use.

The meeting allowed the green building participants to familiarize themselves with Canadian and U.S. involvement in the UN Commission on Sustainable Development (CSD) and international processes around sustainable consumption and production, and it informed the international dialogue in terms of insight from practitioners in the green building sector. It was an opportunity for the Canadian and U.S. Governments to present existing initiatives and collaborative efforts around green building as well as to explore opportunities for additional collaboration. The event also provided UNEP with a platform to present its Sustainable Buildings and Climate Initiative (UNEP-SBCI), in which several stakeholders participating in the meeting are involved, as well as inform the participants on the process leading into the UN’s 19th CSD in May 2011.
2. Canada – U.S. Green Building collaboration outcomes

2.1 Opportunities for the green building sector – specific outcomes

- The importance of communicating the need to develop, maintain, and integrate life cycle assessment databases at high levels in Canada and the U.S. was expressed.
- There was an agreement for collaboration between Equilibrium Housing (Canada) and Zero Energy Housing (U.S.).
- Participants expressed support for competitions to raise awareness and help stakeholders develop and learn from best practices.
- There was agreement to convene a meeting between the U.S. General Services Administration and municipalities regarding PULSE (a system to coordinate monitoring and tracking of energy).
- Participants advanced the idea of a “Road to Rio” program for cities to showcase their initiatives and prepare for Rio+20.
- Participants suggested engaging in potential partnerships with the Federation of Canadian Municipalities’ emerging showcase program.
- Support was given to develop the business case for green building retrofits and communicate these to industry groups and politicians.
- Some participants agreed to further explore the opportunities for transforming building codes and standards.

2.2 Opportunities for the green building sector – common themes

Throughout the event, participants repeated the following themes as being critical focuses for future U.S.-Canada collaboration:

- The need to look beyond individual buildings to consider broader neighbourhoods, communities and cities. (Sadhu Johnston, City of Vancouver; Arab Hoballah, UNEP; and repeated throughout thematic discussions). A number of emerging concepts could enable a whole-neighbourhood approach including district energy, community energy planning, liveable communities, and low-carbon cities.
- Applying green building concepts to existing buildings, not just new buildings. As noted by one participant: in 20 years the large majority of the building stock will be made up of the buildings that exist today. The green building sector can make its biggest gains by focusing on existing buildings including retrofits, operations, and post-occupancy performance. (Roger Platt, U.S. Green Building Council; Guy R. Newsham, National Research Council; Mikkel Stenbæk Hansen, European Topic Centre on Sustainable Consumption and Production; Dennis Wilde, Gerding Edlen)
- Measuring success by improvements in well-being and the number of added years of life for occupants. Participants noted the critical need to focus on people’s welfare and that green design and building can have tremendous impacts on the lives of occupants. (Guy R. Newsham, National Research Council; reiterated during discussion).
• **Focusing on the wealth of benefits that green building can provide.** (Mikkel Stenbæk Hansen, European Topic Centre on Sustainable Consumption and Production; Dennis Wilde, Gerding Edlen; Helen Goodland, Light House Sustainable Building Centre). The sector must think far-reaching and focus on aspects beyond energy including water, persistent chemicals, waste, emissions, material use, aesthetics and occupant wellbeing. As noted by Roger Platt, U.S. Green Building Council: we are looking for the day when every building provides a net positive benefit to the environment, provides clean water, and outputs more energy than it uses.

• **Having governments lead by example.** (Arab Hoballah, UNEP; Sadhu Johnston, City of Vancouver; Jan Dyer, Sustainability Directorate, Environment Canada).

• **Banging the tambourine and communicating loudly.** Arab Hoballah, UNEP, put forward the need to use sticks, carrots, and the tambourine (which makes noise and sets the pace for joint work – used here as a metaphor to designate communication). Participants alluded to the tambourine throughout the workshop and the need for strong public engagement and communications. Participants put forward that competitions – for occupants, cities, and/or the public – could be used to raise awareness and help stakeholders develop and learn from best practices.

• **The critical need to address behaviour and individual lifestyle.** Mikkel Stenbæk Hansen, European Topic Centre on Sustainable Consumption and Production, and William E. Rees, Professor, University of British Columbia, highlighted that despite significant gains in energy efficiency in recent decades, bigger house sizes and lower occupancy have meant that total energy use and our Ecological Footprints have risen. Dennis Wilde, Gerding Edlen, noted that a building’s design can be state of the art, but the use of a space heater under a desk undoes it all. He referred to the need to communicate this to the occupants of buildings. One participant noted the issue of behaviour as the ‘elephant in the room’.

• **Engaging the whole spectrum and diversity of society.** There was a recognition that there is a critical need to bring everyone to the table to share best practices and advance the issues (within and among jurisdictions). This includes real estate agents, consumers, researchers, property owners, and tenants; not just builders. (Mikkel Stenbæk Hansen, European Topic Centre on Sustainable Consumption and Production).

• **Collaborating on common and appropriate metrics.** The sector needs to work together to develop consistent metrics that measure real performance for both new and retrofitted buildings. (Donna M. McIntire, LEED® AP, U.S. Department of State; Thomas Mueller, Canada Green Building Council; Guy R. Newsham, National Research Council). It would also be a great benefit to look at standardizing accounting and appraisal practices. As noted by Kevin Kampschroer, perhaps we need to move from LEED to LEEP (Design to Performance) to ensure that we are measuring real impacts.

• **The municipal role and the importance of cities was put forward as a major area for potential gain** (Sadhu Johnston, City of Vancouver, and raised frequently in discussion groups). In small groups participants discussed how to accelerate green building in cities. The group agreed to the need for a neighbourhood approach: eco districts and district energy and linking transportation to land use. Key messages can include that this issue goes beyond energy and that it extends to communities and neighbourhoods. Sadhu Johnston, City of Vancouver, agreed to convene a meeting between the GSA and municipalities regarding
PULSE (a system to coordinate monitoring and tracking of energy). The U.S. Green Building Council will continue to explore the development of a program called “Road to Rio” for cities to showcase their initiatives and prepare for Rio+20. Members of the group will also: follow up with the potential of the FCM’s emerging showcase program; explore how they might collaborate with the U.S. Conference of Mayors; and further contemplate the idea of a peer-to-peer charette.

- **Breaking through financing barriers.** Until there is a strong price and value attached to green building, action and uptake will be slow. There is a need to understand the existing structure of the real estate industry and to provide education to this industry as well as to appraisers. Perhaps builders need to re-examine their expectations for their rates of return. Emphasis needs to be put on the value of human health and productivity gains. (Dennis Wilde, Gerding Edlen; Chris Choi, U.S. EPA). In small group discussion participants noted the value of building on existing initiatives such as the financial tool PACE (Property Assessed Clean Energy), public private partnerships, tax programs, and the CMHC mortgage insurance capacities. Other measures may include: attaching financing to title rather than owner; linking utility planning to financial incentives; and helping financiers recognize the value of green buildings. This will require education and creating, analysing and sharing data. Programs need to think long-term (at least 25-30 years) because of the timeframe of building projects.

- **Sharing risks and benefits among those involved.** A key theme raised throughout the workshop was the need to find mechanisms to balance stakeholders’ risks and rewards (among those who make the investments and those who use the buildings, those who build versus own, those who own versus those who rent and use). (Mikkel Stenbaek Hansen, European Topic Centre on Sustainable Consumption and Production; also noted throughout breakout group discussions).

- **Communicating the major benefits to green buildings.** Green buildings need to be positioned as low-cost climate change solutions and key instruments to address water and other impacts. The sector also needs to be recognized for providing major trade opportunities. In small group discussion participants focused on how best practices can be widely communicated, disseminated and implemented. Green building retrofits could be connected to issues such as climate change, obesity, water scarcity, health and wellbeing. The group noted some key next steps: develop the business case; communicate the benefits to industry groups and politicians. An online platform would be useful to share common ideas and best practices.

- **Building a trained work force** that includes not just entry-level capacity, but where green building capacity is integrated into the building trade. (Phil Jago, Natural Resources Canada, and raised frequently in discussion groups).

- **Establishing and maintaining Life Cycle Assessment databases.** Wayne Trusty, President, Athena Materials Institute, which deals with Life Cycle Assessment, introduced the critical need for a repository of reliable data relating to the performance of products throughout their lifecycle. Throughout the remainder of the workshop, participants referred to the need for government-supported life cycle databases. In small group discussion, participants noted the need to bring together and synergize existing databases. Canada needs to find a federal home for such a database and link it to those in the U.S. as well as those in Europe. Potential next steps include: catalyzing a tri-lateral meeting on sustainable materials and products;
having these discussions at all levels including U.S.-Canada and at the NAFTA level; positioning the issue as a market access issue (products that lack data can be stopped at the border); and going to senior levels of government in Canada and the U.S. to make clear the implication of not acting.

- **Transforming building codes and standards.** Green buildings are breaking new territory and green builders constantly come up against red tape and new barriers. Best practices need to be shared and processes need to be streamlined. (Dennis Wilde, Gerding Edlen; Chris Choi, U.S. EPA). Dennis Wilde put forward the need to move towards outcome-based code systems, rather than ones that are simply prescriptive. In small group discussion participants suggested that aggressive and far-reaching “concept code” could be developed that cities and other jurisdictions could champion and work to implement. Twinning towns across the U.S.-Canada border could test out ideas and work through harmonization. A mechanism, perhaps a database, could be used to share “accepted exceptions” to codes. A broad range of stakeholders need to be engaged including: code writing organizations; municipal associations; the construction community; owners; operators; developers; service/utility providers; green building associations; the Federal Government in Canada; and the states in the U.S. Canada-U.S. rating standards need to be compared; a performance measurement framework needs to be developed, and highly rated green buildings need to be assessed and shared.

- **Building upon and linking Zero Energy Housing (U.S.) and Equilibrium Housing (Canada) initiatives.** Participants discussed this theme in a small breakout group. Collaboration between these initiatives could help support product and services development; broaden the initiatives and bring them from clusters to communities to cities to the national levels; move beyond housing to commercial levels; and create mixed use and adaptable buildings. It would be valuable to develop action groups with key players including DOE, EPA, CMHC, NRCan, IISBE and others; create an advanced building consortium to develop criteria for demonstrations of new building types; and using energy savings to reinvest in a revolving fund for reinvestment. For the existing two programs it would also be valuable to assess the possibility for requiring local content for heavy materials.

### 3. Inputs for consideration at the United Nations Commission on Sustainable Development’s 19th session focused on sustainable production & consumption, and building on the Marrakech Process

Participants who joined the breakout group on international processes around sustainable consumption and production on the second day of the meeting discussed and investigated the following question: What inputs are useful in informing the UN CSD (particularly pertaining to the 10-Year Framework of Programmes) and beyond? The group clustered answers into two categories: (1) What can the 10-Year Framework of Programmes do to support the (North American) region? And (2) What can North America contribute to the 10-Year Framework of Programmes? The bullets presented below synthesize and cluster some of the most prominent ideas that emerged during the meeting, as well as some major points taken from background research and interviews conducted prior to the workshop.
3.1 What can the 10-Year Framework of Programmes (10YFP) do to support the (North American) region?

- There was recognition that a 10YFP could support the myriad of existing SCP-related activities and initiatives taking place in North America, which are often not referred to using the term “SCP”. There are many groups/networks/collaborations working on green building, clean energy, etc., across the region that are contributing to sustainable patterns of consumption and production, although these groups tend to use the language developed within their own “tribe”. Engaging and learning from these communities is critical for shaping international approaches.

- It was observed that many of these national and regional initiatives that are contributing to SCP are fragmented (this was also noted in other regions), and a Programme under the 10YFP could be to map and survey SCP activities (who-is-doing-what-where in North America). Such a Programme would create a useful tool for the North American region to help foster cohesion, develop synergies, and advance existing collaborations within and between sectors.

- Other potential programmes that would “support regional and national initiatives” for SCP could include supporting research on SCP, reviewing progress in North America on SCP since the Rio Earth Summit (1992), financing SCP initiatives, creating a database or archive of good practices and successes around SCP, and building capacity to engage mass media and to measure progress on sustainability.

- The 10YFP is seen as an opportunity to strengthen the visibility of, and understanding around, SCP, and help legitimize this concept as an overarching and cross-cutting (holistic) approach to greening the North American economy. One idea that emerged was promoting a regional multi-stakeholder dialogue on SCP, which could itself be a North American Programme developed under the 10YFP.

- The value of public-private partnerships was mentioned numerous times throughout the workshop, and a 10YFP could help catalyze such partnerships in North America. One specific example was cited where an initial investment made by a government (i.e. government seed funding) triggered a cascading effect and led to the creation of many successful public-private partnerships which helped to promote sustainable patterns of consumption and production. Such partnerships are valuable in the realm of sustainable consumption and production.

- Federal governments cannot advance SCP on their own. In many ways, industry and business are taking the lead in SCP in North America and are essential partners in implementing and advancing SCP, as are civil society organizations and networks. The federal government efforts to advancing SCP through regulatory and other policy instruments are complemented by initiatives by other sectors and by other levels of government such as at the state/provincial and municipal levels. The North American approach to SCP is fundamentally a multi-jurisdictional and multi-sectoral approach, and partnerships are key.

3.2 What can North America contribute to the 10YFP?

- The practical nature of using a specific theme or sector to discuss production and consumption was emphasized, and it was suggested that this Ottawa workshop on SCP and Green Building serve as a model for other high-impact regional dialogues and the creation of
partnerships. These other discussions could link sustainable consumption and production with, for example, thematic entry points such as food, transportation, waste, cities, etc., or around specific SCP categories such as production, investment, marketing and distribution, consumption, etc, or even process-related approaches to SCP, such as skills gaps, governance and life cycle databases. The application of the ‘iceberg model’ (see p. 12 of Background Paper #1) can be useful for framing and guiding multi-stakeholder discussions, particularly around leverage points for change.

- At the 2008 North American Stakeholder Workshop on Sustainable Consumption and Production, progress towards developing a draft North American SCP vision and framework was discussed, and the topic of green building could be an interesting and high-leverage entry point for such a regional framework. This would be a useful contribution to the 10YFP as Programmes are implemented after the UN’s 19th CSD. Although the idea of creating a regional framework on SCP and developing it at a subsequent meeting was a recommendation put forward by participants in 2008, the issue was not raised as a key point in the 2011 workshop on green building.

- The value of using SCP as a lens is that it helps inform who is brought together to engage in deep discussion around a particular practice (i.e. green building), and how these people are brought together. Innovative ways of convening that include dynamic, interactive, adaptive and engaging sessions and activities like a “world/collaboration café” tap into the collective intelligence of participants, build collaborations, stimulate breakthrough solutions, and provide concrete inputs to current research efforts. These help to realize the overall 10YFP goal of shifting to sustainable patterns of consumption and production.

- The North American region can contribute a review of progress on SCP and sustainability generally in North America. It can celebrate its successes, and share its good practices within the region and with the international community. Furthermore, governments in the U.S. and Canada can lead by example and apply concepts to their own operations or scale up existing efforts in order to make sustainability mainstream.

- The region can also help frame the sustainable consumption and production dialogue with, *inter alia*, media, for broader uptake and understanding of the consequences and societal benefits of adopting sustainable patterns of consumption and production. The idea of putting a “big name” behind the need to transform current consumption and production patterns (like a greener life show with Oprah Winfrey) could help educate people and elevate the issue.

- The question of framing was considered very important: SCP needs to be framed in a positive light, particularly the benefits that it would bring to the economy, jobs and overall livelihoods. Perhaps one way to give life to the term SCP is to focus on wellbeing, and explore other issues starting from that particular entry point. It was agreed that the sector of green building offers a positive story to share with a wider public, considering the numerous benefits that derive from this industry, including indoor air quality, which leads to improved health and greater worker productivity, the stimulation of new markets, and the more efficient use of natural resources. Overall, good communication was considered essential, and the metaphor of the tambourine (an important addition to ‘carrots’ and ‘sticks’ as ways to have society adopt sustainable patterns of consumption and production) was used to convey this idea.
3.3 Additional thoughts and considerations around the 10YFP and sustainable consumption & production generally

- Moving toward sustainability is a collective challenge, and thus requires the participation of all stakeholders. Government, as well as business, civil society, and academia all have a critical role to play, and are already innovating for SCP. However, our national and regional responses to the challenge posed by SCP could be better coordinated and made more coherent, as numerous existing related initiatives on SCP are not always linked.

- There is also a need for improved coordination and coherence within governments around SCP, and to align scarce resources with priorities. SCP is not well integrated in the work of economics and line ministries; rather, it is often entered through the environmental perspective, which limits its scope and effectiveness as an approach to connect issues and ideas together, and keep the greater picture in mind. These challenges might be overcome if SCP is championed at the highest political level, and supported by a cross-departmental coordinated federal effort and by clear budget lines.

- Partnerships are a useful way to advance SCP, and partnerships between researchers, regulators and businesses can be emphasized for the creation and delivery of Programmes under the 10YFP. Indeed, collaborations and partnerships are something that North America does well and which can inspire the world.

- Several participants stressed that sustainability is not a technical capacity issue, but a human behavioural one. It was emphasized, for example, that relying on technology and the prospects of efficiency to reduce material and energy consumption without simultaneously addressing the consumptive behaviour of individuals and institutions has counter-intuitively undermined sustainability by fostering higher rates of consumption as a result of the ‘rebound effect’, an unintended consequence which emerges when the savings realized from efficiency gains are spent on other forms of consumption (larger homes; more km driven; a vacation in an exotic location…), thus eliminating any net benefit that would have otherwise been achieved.

- With regards to the “10-Year Framework of Programmes”, it was noted that a distinction needed to be made between “Framework” and “Programmes”, and that neither was currently defined explicitly. It was suggested that at CSD 19 in May 2011, the Framework, which can take many forms, will be negotiated, while the Programmes themselves will be developed over the next 10 years.

- Sustainable consumption and production will play a big part in the UN Conference on Sustainable Development (Rio+20), in addition to its main themes: the green economy in the context of sustainable development and poverty eradication, and institutional framework for sustainable development. In Canada, there will be a series of workshops starting in the spring to engage provinces and territories, and civil society (as defined by the UN) to weigh into questions such as how Canada should contribute to the Rio+20 conference; how sustainable development can be achieved; how we can advance a green economy and institutional framework; and what regulatory tools we should implement. Canadian civil society has also self-organized and launched the “WE CANada” initiative to promote the UNCSD 2012 to ordinary citizens, and sustainable consumption and production will be one of the topics addressed and made tangible to a broader public.
• Some participants remarked that the potential of relevant UN agencies to lead on sustainable consumption and production is not fully realized, and could be explored in the context of the Rio+20 themes.

• Workshop participants also discussed that there will be several opportunities for continuing this dialogue at the international level, including at the U.N. Commission on Sustainable Development in May 2011 and at the United Nations Conference on Sustainable Development in Rio de Janeiro in June 2012.

3.4 Opportunities for North America’s unique contribution

As stated by Jan Dyer, Sustainability Directorate, Environment Canada, North America has a real history of collaboration between government, civil society, researchers, and businesses. North America can bring such collaborations forward to the UN and share them with the world. John Matuszak, U.S. Department of State, noted that North Americans like to focus on practical actions and programs that improve people’s lives and protect the environment. Best practices and experiences, hopefully many from this workshop, can be shared at the international stage and in negotiation of the 10-Year Framework of Programmes (10YFP).

4. Follow-up events for further conversations on green building and SCP

A few key dates relating to green building and SCP have been mentioned:

• Greenbuild: International Conference and Expo, October 4-7, 2011, Toronto, Canada
• Ecobuild: UK exhibit and trade fair, March 1-3, 2011, London, UK
• UN Commission on Sustainable Development 19, May 2-13, 2011, New York, United States
• Asia-Pacific Economic Cooperation (APEC), November 2011, Honolulu, Hawaii, United States
• Rio+20 UN Conference on Sustainable Development, June 4-6 2012, Rio, Brazil

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ANNEX 1: Testimonials

I found the workshop extremely encouraging, and thought the gathering of diverse organizations and individuals from both the policy and practice sides provided lively discussion. The challenge will be to develop the ideas and strategies that came out of the workshop into a plan that can speed the adoption of green building practices in both Canada and the U.S.

Chris Choi, Community Planner, U.S. Environmental Protection Agency, U.S.A

Thank you for the opportunity to participate in the Workshop on International Sustainable Construction Collaboration. I thought it was a fruitful dialogue. We had lively discussions in the small groups format that followed the presentations. I thought there was general agreement around the importance of the built environment as an integral piece in reaching broad agreement around equitable production and consumption. I think it is very important for the UN to promote sustainable practices in this important arena. It is not enough to lament the disproportionate consumption patterns in the developed world. We need practical steps that will lead to more equitable consumption of limited resources. The UN can help to break down cross border barriers with respect to codes, development patterns and human behavior.

Dennis Wilde, Developer, Gerdling Edlen, U.S.A

The Department of State Bureau of Overseas Buildings Operations greatly appreciated the opportunity to participate in this international discussion on the potential of green buildings in leading and demonstrating sustainable consumption and production. We are committed to raising global awareness of the role of buildings in climate change and other environmental impacts. We intend to carry this message through our embassy and consulate leaders as they join the League of Green Embassies and convene Greening Forums on this topic in their host countries. National missions overseas offer perfect platforms for eco-diplomacy – demonstrating best practice and technological advances in sustainable development.

Donna McIntire, Architect, LEED® Accredited Professional, U.S. Department of State, U.S.A

The workshop provided a great forum for discussion of how green building can be advanced in a way that is grounded in sustainable consumption and production practices. The event did an impressive job of bringing together leading thinkers in these areas to share creative and innovative ideas and generate next steps and areas of collaboration where parties can make a real difference. Thanks to the organizers for the opportunity!

Carolyn Webb, Programmes Manager and Chief Administrative Officer, Canadian Institute for Environmental Law and Policy, Canada

The papers and presentations were very useful. The workshop also offered some excellent networking opportunities - reflecting the backgrounds/work of the participants. The choice of participants was obviously critical.

Nonita Yap, Professor, Rural Planning and Development, University of Guelph, Canada
The second North American workshop on Sustainable Consumption and Production marked a major and multi-level contribution to an essential, if fledgling, global dialogue about the causes of and solutions to our growing sustainability and equity challenges. By continuing the dialogue through the lens of "sustainable consumption and production" and focusing on the built environment, Canada and the United States advanced conceptually vis a vis each other and vis a vis the rest of the world, critically examining a sector in transformation, and implicitly acknowledging that our own development model has complex global implications.

Stefanie Bowles, Senior Policy Researcher, Policy Research Initiative Canada, Canada

Hearty congratulations on a great job! We had some wonderful conversations and connections. I look forward to this type of workshop with the other areas of interest (i.e. food and transportation).

Linda Varangu, Director, My Sustainable Canada, Canada

I was glad to attend this second workshop and witness the increasing interest of Canada and U.S.A in SCP matters, policies and thematic issues. Despite the fact that NA started very late compared to other countries in organizing such roundtables, it was obvious that there is already a great level of awareness on the opportunities and challenges of SCP in the region and their relation with the other regions and global concerns; there is also an incredible amount of good practices at national, city and individual levels that need to be better know, replicated and scaled up in the NA as well as adapted in other regions of the world. If the building sector has clearly demonstrated this, it also showed that other similar actions are undertaken in many other sectors because of the multi-stakeholders’ nature of buildings and interactions with so many other sectors. Comprehensive sets of laws and regulations together with tools and market instruments do exist but application at larger scale is urgently needed. Therefore in addition to these sticks and carrots, there is great need for improved and pro-active communication, or [the metaphor of] tambourines, if a sustained transformative change is to take place towards sustainable consumption and production.

Arab Hoballah, Chief, Sustainable Consumption & Production Branch, UNEP

When I first received the invitation to the event, I was interested, because my own policy research has led me to believe that there is much interest and progress in the efficiency-side of things, but little progress and a lot of reluctance to even address the question of excessive consumption, in terms of too many buildings that are too large and too well-equipped. Nevertheless, I was a bit sceptical that the event would prove useful for me. I was happily proven incorrect, and I made a number of ideas and contacts that will be quite useful, including one for a cross-border NGO to develop and monitor a number of very high-performance buildings. That isn’t bad for a two-day time investment.

Nils Larsson, Executive Director, International Initiative for a Sustainable Built Environment, Canada

As a first time participant in a workshop of this calibre, I was pleasantly surprised by the interactive nature of the two-day North American Workshop on Sustainable Consumption and Production. I found myself engaging with federal officials from both the United States and Canada, while learning about UNEP programs and possible future collaborations. While opinions
varied on how we may tackle the challenge of reducing the environmental impacts of buildings, the discussion remained on course. At the end of the second day, I was confident the collective voice of participants was duly recorded, organized and shared by the One Earth facilitators. I am pleased to have been able to partake in workshop; the facilitation team of One Earth played a tremendous role in how smoothly the workshop was run and congratulate the team on a job well done.

Meirav Even-Har, Building Owners and Managers Association of Canada (BOMA), Canada

The economics of resource efficiency are no longer in doubt. Now the challenge is to link policy with emerging economics to scale up impact and benefit. The North American Sustainable Consumption and Production Workshop tackled this issue in ways that will hopefully inspire greater action and collaboration at both the bilateral and multilateral level in the run-up to the Rio+20 UN Conference on Sustainable Development in Brazil in June 2012.

Linda Coady, Distinguished Fellow, UBC Liu Institute for Global Issues, Canada

I was very pleased to hear the group generate so much positive and constructive discussion about the role of municipalities in supporting the expansion of green buildings in North America and promoting innovative practices. I found the discussions on how to ‘Formalize and Support Information Sharing at the Municipal Scale’ informative, and was pleasantly surprised to see that the Federation of Canadian Municipalities is already filling many of the needs identified in that group north of the 49th parallel. I especially enjoyed Sadhu Johnston’s presentation on innovative approaches and initiatives in Vancouver and Chicago. I hope that this will continue to inspire the workshop participants to consider and work with municipalities as they develop tools and strategies to expand the uptake of green buildings in Canada and the United States. Thank you again for the opportunity to participate.

Jeca Glor-Bell, Program Officer, Federation of Canadian Municipalities, Canada
ANNEX 2: Agenda

Workshop website: http://scpgreenbuild.wordpress.com/

DAY ONE – Monday January 31, 2011
Venue: Minto Suite Hotel (Salons Lisgar & Massey)
8:00 Registration
8:30 Coffee
9:00 Welcome and Identifying Workshop Goals
Welcome & Introduction of One Earth: Brenda Metropolit, Director, Sustainability Initiatives, Environment Canada
Lead Facilitator: Nicole Anne Boyer, One Earth
Opening Remarks: Introductions: Brenda Metropolit, Director, Sustainability Initiatives, Environment Canada
• Jan Dyer, Director General, Sustainability Directorate, Environment Canada
• John Matuszak, Division Chief for Sustainable Development and Multilateral Affairs, Department of State, U.S. Government
• Amy Fraenkel, Regional Director, UN Environment Programme – Regional Office for North America
Goals of the Meeting – Vanessa Timmer, Executive Director, One Earth Initiative Society
9:30 SESSION 1 – PANEL: A Review of Existing Canada / U.S. Collaborative Efforts Related to Green Building (with Question and Answer Session)
Introductions: Derry Allen, Counselor, Office of Strategic Environmental Management Office of Policy, U.S. Environmental Protection Agency
• Michael Calvert, Global Practice Lead, Green Building, Global Business Opportunities Bureau, Canadian Department of Foreign Affairs and International Trade (10 min) (Download his presentation as a PDF- 136kb)
• Chris Choi, Environmental Protection Agency, U.S. Government (10 min) (Download his presentation as a PDF- 383kb)
Brief review of initiatives outlined in Background Paper #3: Existing Canada – U.S. Collaboration in Green Building (5 minutes each)
• Wayne Trusty, President, Athena Institute on Life Cycle Assessment
• Evan Lloyd, Executive Director, NAFTA Commission on Environmental Cooperation
• Guy R. Newsham, Senior Research Officer, Institute for Research in Construction, M24, National Research Council
• Roger Platt, Senior Vice President of Global Policy and Law, U.S. Green Building Council
• Donna M. McIntire, Architect, LEED® AP; U.S. Department of State
• Kelsey Scheich, APEC Affairs Coordinator, U.S. Department of Commerce
• Kevin Kampschroer, Director of the Office of Federal High-Performance Green Buildings at the U.S. General Services Administration

10:30 Break
10:45 SESSION 2 – PANEL: Green Building and Sustainable Consumption and Production: International and Multi-jurisdictional Opportunities and Current Issues and Efforts (with Question and Answer Session)
Issues covered include financial structures, building construction products / life cycle, and building performance, including aligning first cost and operations / maintenance budgets, energy performance and disclosure, and indoor air quality.

- **Arab Hoballah**, Chief, Sustainable Consumption & Production Branch, United Nations Environment Programme – Paris Office—international green building processes and green building as an application of international sustainable consumption and production activities (Download his presentation as a **PDF** - 731kb)
- **Mikkel Stenbæk Hansen**, European Topic Centre on Sustainable Consumption and Production – European best practice in bi-national and multinational green building efforts and the application of an SCP lens to the green building sector
- **Sadhu Johnston**, Deputy Manager, City of Vancouver, past Chief Environmental Officer of Chicago and Deputy Chief of Staff to Mayor, City of Chicago – city activities in green building and opportunities for multi-jurisdictional support and efforts (Download his presentation as a **PDF**- 2.3MB)
- **Dennis Wilde**, Developer, Gerding Edlen – green building practitioners experience and current issues in the green building sector (Download his presentation as a **PDF** – 1.3 MB)
- **Helen Goodland**, Executive Director, Lighthouse Sustainable Building Centre – current issues in the green building sector and opportunities for concrete action and solutions (Download her presentation as a **PDF**- 560 kb)

12:30 Lunch

1:15 BREAKOUT SESSION

Guiding Question: What actions can we take within the existing areas of collaboration, and what are additional areas for Canada-U.S. and international collaboration given our review of current issues and multi-jurisdictional and international opportunities? (Collaboration Café – Salons Lisgar & Massey – facilitated by the One Earth team)

3:00 Break

3:15 Report back on common themes and insights; Dialogue

4:15 KEYNOTE: The Big Picture: What will it take to address our environmental and social challenges, strengthen our economy and reduce our greenhouse gases? What do better futures look like?

*William E. Rees*, Professor, Community and Regional Planning, University of British Columbia and founder of the Ecological Footprint concept (Download his presentation as a **PDF**- 840 kb)

5:00 Adjourn / Canal Ritz Dinner

**DAY TWO – Tuesday February 1, 2011**

Venue: Minto Suite Hotel (Salons Lisgar & Massey)

8:30 Coffee

9:00 Opening Remarks

- **Philip B. Jago**, Director, Buildings Division, Office of Energy Efficiency, Natural Resources Canada (Download his presentation as a **PDF**- 311 KB)

SESSION 3: OPTIONS FOR THE PATH FORWARD

PANEL: The Future of the Green Building Sector and Reflections on Canada and U.S. Collaboration (with Questions and Answer session)

- **Thomas Mueller**, President, Canada Green Building Council (Download his presentation as a **PDF**- 1.8 MB)
- **Roger Platt**, Senior Vice President of Global Policy and Law, U.S. Green Building Council (Download his presentation as a **PDF**- 1 MB)
• Diana Osler-Zortea, President, Building Owners and Managers Association (BOMA) Canada
  (Download her presentation as a PDF- 167 KB)

10:00 Break

10:15 BREAKOUT SESSION in breakout rooms on options for a path forward (Salon Lisgar; Salon Massey; Leger A; Leger B – facilitated by the One Earth team and other participants). The objective of this session is to identify actions and opportunities based on the areas of Canada / U.S. and international collaboration identified on Day 1, and, where appropriate, who can take these actions and opportunities forward.

12:00 Lunch

12:45 Report back and discussion: How do we communicate the key messages to our communities? What is it that we need to work on together as we go forward?

2:00 Break

2:15 SESSION 4: INTERNATIONAL LINKS: United Nations Commission on Sustainable Development (CSD), 10 Year Framework of Programmes on Sustainable Consumption and Production (10YFP)

PANEL:

• John Matuszak, Division Chief for Sustainable Development and Multilateral Affairs, Department of State, U.S. Government

• Arab Hoballah, Chief, Sustainable Consumption & Production Branch, United Nations Environment Programme – Paris Office (Download his presentation as a PDF- 153 kb)

Respondents include:

• Pamela Hay, Deputy Director, Foreign Affairs and International Trade Canada

• Derry Allen, Counselor, Office of Strategic Environmental Management Office of Policy, U.S. Environmental Protection Agency


The objective of this session is to contribute inputs for the UN Commission on Sustainable Development discussions on Sustainable Consumption and Production in 2011 and other related efforts. Green building is an important component of sustainable consumption and production. Can this workshop design serve as a model for a regional programme within the 10 Year Framework of Programmes on SCP in which a sustainable consumption and production lens is applied to other sectors beyond green building? What inputs are useful in informing preparations for UN CSD and beyond?

3:45 CLOSING

• Brenda Metropolit, Director, Sustainability Initiatives, Environment Canada

• Jan Dyer, Director General, Sustainability Directorate, Environment Canada

4:00 Meeting Adjourns
### ANNEX 3: Participant list

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
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<tbody>
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<td>Regional Director, UNEP, Regional Office for North America</td>
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