## The Oslo Declaration on Sustainable Consumption

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On 10–12 February 2005, an international group of approximately four dozen researchers met in Oslo for

the final workshop of a 3-yr project on the development and utilization of indicators for sustainable consumption. This initiative was sponsored by the Japanese Ministry of Economy, Trade, and Industry (METI) and led by the Society for Non-Traditional Technology (SNTT) and the Research Center for Life Cycle Assessment at the Institute for Advanced Industrial Science and Technology.<sup>1</sup> The project built on prior work in sustainable consumption and enabled researchers involved in this area to engage in an extended period of structured exchange (Hertwich et al. 2005).<sup>2</sup>

A frequent point of discussion during the event in Norway was the growing divergence between official statements made during the World Summit on Sustainable Development (WSSD) in Johannesburg in 2002 regarding the need

to foster more sustainable consumption and the paucity of actual achievements meeting this ob-

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jective. Few national governments, or their constituent research councils, have evinced visible

willingness to support work to facilitate more environmentally benign and socially equitable modes of consumption. Two interlocking issues seem to be responsible for this growing implementation gap. On one hand, the assertion that prevailing modes of production and consumption must become more resource- and energyefficient has become in recent vears a virtual cliché (Factor 10 Club 1997). On the other hand, there are important indications-particularly in developed countries-that the growth of personal incomes (and concomitant materials use) over the past four decades has not contributed appreciably to overall improvements in quality of life, wellbeing, or happiness (see, e.g., Lane 2000). Our contemporary economic system apparently fulfils consumer needs in a highly inefficient way and there is little rationale to believe

that an unalloyed emphasis on efficiency will be sufficient to ensure sustainability in the future.

In light of these circumstances, participants in the Norway workshop took the initiative to formulate the Oslo Declaration on Sustainable Consumption (and to circulate it within the scientific community). The Declaration consists

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of two constituent parts—a statement of intent and an outline of principal research questions. Individuals who support its aims can add themselves as signatories at <http://www.oslodeclara tion.org>. As this issue of the *JIE* goes to press, more than 100 scientists have endorsed the Declaration.

### The Declaration

#### **Statement of Intent**

#### The Challenge

The future course of the world depends on humanity's ability to provide a high quality of life for a prospective nine billion people without exhausting the Earth's resources or irreparably damaging its natural systems. It was on the basis of this recognition that the Johannesburg Plan of Implementation (Chapter III) called upon the international community to work toward improving global living conditions and to "encourage and promote the development of a ten-year framework of programmes in support of regional and national initiatives to accelerate the shift towards sustainable consumption and production."<sup>3</sup>

In this context, sustainable consumption focuses on formulating strategies that foster the highest quality of life, the efficient use of natural resources, and the effective satisfaction of human needs while simultaneously promoting equitable social development, economic competitiveness, and technologicalinnovation.

#### Bridging the Implementation Gap

While there have been commendable proclamations over the past three years, actual initiatives to cultivate more sustainable modes of consumption have not materialized and there are indications that an implementation gap is becoming manifest. Environmental policy making in the world's high-consumption countries continues to rely on remedial regulatory frameworks, cleaner production technologies, and (in some regions) product-oriented policies. Efforts to develop consumption systems that are markedly more efficient and effective are still largely unknown and to date there have been few practical steps toward their implementation.

The immediate challenge is to launch a comprehensive research effort on sustainable consumption that can be joined with the ten-year framework of programs on SCP [sustainable consumption and production] being developed by the United Nations Environment Program (UNEP) and to assist in the formulation of prompt policy implementation.

#### The Contribution of Research

In accordance with the commitment expressed in Agenda 21 to develop a better understanding of the role of consumption and to delineate ways to bring about more sustainable patterns of meeting human needs, research has already begun to generate knowledge about how to move toward a more sustainable global future. However, the emphasis to date has primarily been on questions of sustainable *production*. There has been considerably less effort devoted to charting the transitions that will be necessary to facilitate sustainable consumption, and this heretofore neglected dimension still requires comprehensive investigation. Research must begin to systemically integrate initiatives to promote improvements in quality of life, to distinguish long-term structural consumption trends, and to identify the social mechanisms and cultural aspects of consumer behavior and household decision making. Consideration of consumption in sustainability policies is also essential to prevent undermining potential improvements in production efficiency. An upgraded commitment to research on sustainable consumption can enhance understanding of how to analyze, realize, and govern the institutions and organizations that can facilitate sustainable consumption.

#### A Call for Action from the Oslo Meeting Participants

The Declaration calls upon policy makersresponsible for the design of future research initiatives to develop action programs on sustainable consumption. Specific projects should include:

- The establishment (preferably within the next 2 years) of a collaborative research program in each geographical region of the world focused on sustainable consumption
- The implementation of pilot projects designed to test research findings and to foster experiments predicated upon novel sustainable consumption systems
- The creation of adequate monitoring and evaluation practices to assess the effectiveness of sustainable consumption policies in each geographic region of the world that will enable continuous learning and ensure that initiatives are regularly updated
- Provision of a platform within the WSSD 10-year framework of programs on SCP for all regional research efforts to identify opportunities for translating knowledge into concrete policy initiatives
- The creation of a collaborative program representing regional research institutions and international organizations working on sustainable consumption

To foster the objectives of this Declaration, the participants of the Oslo meeting have proposed to create a knowledge network for sustainable consumption to advance the following research agenda.

## Annex to The Declaration

# Outline of a Research Program on Sustainable Consumption and Production

#### Preamble

The following research agenda is a nonexhaustive list of unresolved questions in the field of sustainable consumption. Because of the broad nature of the topic, this compilation includes points for disciplinary investigation, as well as issues that can more appropriately be explored by interdisciplinary and transdisciplinary teams. Although this research agenda is designed to serve as a comprehensive plan of action, its constituent elements will likely be adopted by different sponsors as a basis for framing new initiatives.

#### **Consumer Behavior and Practices**

Numerous academic fields work on consumer behavior and consumption practices including research pertaining to the following:

- The activities that individuals engage in and the commodities and services that they use
- The social and behavioral factors that shape everyday life
- The influence of values, attitudes, social expectations, and cultural norms on decision making
- The choice sets that are available to consumers and how they are created by different market actors, such as retailers and advertisers
- The role of technology, design, infrastructure, and organization in influencing consumer behavior

Some of this work investigates individual choices—such as the purchase of organic or ecolabeled products—whereas related research focuses on wider lifestyle patterns. Behavioral researchers provide both policy-relevant insights into ongoing adjustments in consumption and scientific understanding pertaining to how consumers act and choose. Future efforts in this area should, however, put more emphasis on the contextual and causal influences of consumer behavior. Research on intended and unintended changes (rebound effects) should highlight factors that limit the behavioral options of individuals such as cost, time, space, information, and skill.

Other issues—for example, social cohesion and family traditions—may also be instructive in this regard. Consumer research would also benefit from a better understanding of the environmental relevance and sustainability impacts of specific activities and choices, and this knowledge would likely be useful in designing and implementing initiatives to foster sustainable consumption. Researchers working in this area have to date shown, for instance, that simply providing information to consumers does not lead to marked changes in behavior. The normative intent of reducing environmental impacts generates important research questions. Efforts to address them will likely represent an effective use of resources.

#### **Consumption-Environment Connections**

Policy makers require a better understanding of how environmental impacts are related to specific consumption activities and consumer choices. Based on studies currently available, we know that shelter, transportation, and nutrition are responsible for the largest material flows, energy expenditures, and carbon dioxide ( $CO_2$ ) emissions in industrialized countries. These assessments take into account both direct release from households and indirect sources connected to the production and delivery of the goods and services that households consume. We have some insights into how socioeconomic and geographical factors influence household energy use and  $CO_2$  emissions, but substantial gaps in our knowledge remain regarding the following topics:

- The environmental impacts of consumption in developed countries upon trading partners in developing nations
- The linkages between specific consumption practices and broad activity classifications such as nutrition and leisure
- The relationship between luxury consumption and more ordinary use of less expensive, mass-market products
- The environmental consequences of actually changing consumption patterns rather than attributing average impacts to specific activities
- The mechanisms and opportunities available for reducing the environmental impacts that are obscured by current state-of-the-art assessment methods
- The structures and relationships on which we can develop scenarios and model policies for a sustainable future

#### **Consumption–Sustainability Connections**

More work is needed on the nonenvironmental impacts of consumption on sustainability. In particular, current research tends to be limited to the social and economic impacts of consumption, the effects of prevailing practices on communities and the wider society, and the tensions and synergies between the different dimensions of sustainability. It is necessary to extend research to consider the effects of consumption on poverty, human and labor rights, security, welfare, and governance. To inform policy making, it will be necessary to make transparent the trade-offs between the different sustainability dimensions and to facilitate debate about how these choices might be made in practice. Prior work on sustainability indicators could serve as a starting point for research on sustainability measures that are relevant to consumption.

#### Consumption–Quality of Life Connections

In developed countries, there is a conspicuous tendency to equate material consumption with quality of life despite the fact that empirical research provides little support for this linkage (and even in some instances shows an opposite tendency). Broad social scientific agreement has been attained that quality of life is more closely tied to less tangible considerations such as freedom, security, social embeddedness, environmental quality, health, and ability to live in accordance with one's values and ideals. Interest in sustainable consumption over the past decade has provided important insights on the role of consumption, numerous proposals for alternative views, and many moral arguments for a focus on different, more accurate descriptions of quality of life. Empirical and experimental work on what people construe as quality of life, though, is limited. We know from public health research, for example, that some forms of consumption can become addictive—such as compulsive shopping or eating disorders—and can lead to reductions in quality of life. But how lifestyle choices, activity patterns, social factors, infrastructures, and policies affect the quality of life of different subpopulations is insufficiently understood.

#### **Envisioning Sustainable Futures**

Researchers working on sustainable consumption need to develop more robust linkages to futures research and to formulate long-term scenarios that provide inspiring visions of the future. In pursuing this path it will likely be necessary to de-link long-term planning from shorter-term forecasting and to anticipate how developed countries might achieve improvements in quality of life while simultaneously respecting the limited resources and assimilative capacity of natural systems. Strategies will also have to be worked out for how developing countries can provide sustainable livelihoods that combine traditional ways of life with advanced technology. This task presupposes that it will be possible to reframe current discourses about how developing countries might bypass contemporary Western technologies and to pose the challenge as one in which so-called leapfrogging can be a basis for sustainable living.

#### Impact of Sustainable Consumption Policies

Sustainable consumption is relevant to numerous policy spheres including trade and economic affairs, land-use planning, and transportation. Relevant policy instruments to reduce the environmental impacts of consumption include taxes and subsidies, regulation, education, public procurement, and local empowerment. At present, though, how these policies affect consumption practices and their environmental impacts or quality of life is poorly understood. Because past policy making has been overwhelmingly geared toward increasing absolute levels of consumption, there is little accumulated experience about how to shift practices in more sustainable directions. Although we have ex ante (and occasionally ex post) analyses of single policies, such evaluations rarely consider entire policy packages and often fail to look beyond impacts on gross domestic product (GDP) and the prime policy issue at stake. Moreover, truly transformational changes toward sustainable consumption will require long-term changes in complex production– consumption systems. Issues pertaining to how we should influence and govern for these purposes have not been addressed, and further study is needed at the system level.

#### Implementation and Dissemination Studies and Experiments

Research on sustainable consumption will likely continue to rely on field studies and collaborations with consumers, communities, and policy makers. The intent of these investigations is often to promote policy changes and to support certain normative societal developments. In addition, stakeholder involvement in the policy-making process has become increasingly common. The field of sustainable consumption has an opportunity to further both of these objectives simultaneously. It is, however, unclear at present how we should study processes that are largely invisible to individuals and how it might be possible to escape potential complexity traps when involving large numbers of stakeholders. In the face of ever-changing systems of provision, studies that reveal how to empower self-interested people to pursue more sustainable livelihoods will allow future policies to be enacted with a crucial element of balance. Practical experiments with small-scale systems that foster sustainable consumption (strategic niche management) in priority fields such as food, shelter, and mobility would likely have considerable value.

#### Acknowledgments

This is a slightly language-edited version of the original Oslo Declaration as published on <www.oslodeclaration.org>. We extend our sincere appreciation to all of our colleagues in the Oslo workshop who contributed to the formulation of this declaration. A complete list of signatories appears at the website; additional signatures are welcome.

#### Notes

- Further details regarding the Research Center for Life Cycle Assessment are available at <http://unit.aist.go.jp/lca-center/english/ sustainable/e-sustatinable.top.html>. The proceedings of the Oslo workshop were published as Hertwich and colleagues (2005).
- Editor's Note: See the special issue of this journal on consumption and industrial ecology edited by Hertwich, which contains research that emerged in part from this project (Hertwich 2005).
- 3. The full text of the Johannesburg Plan of Implementation is available at <http://www.johannesburgsummit.org/html/documents/summit\_docs/2309-planfinal.htm>.

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