



the Greening of Industry

Notice Board

Designing the Sustainable Enterprise: Second International Conference of the Greening of Industry Network, November 14th-16th, 1993, Boston.

On November 14th-16th, 150 international leaders from academia, industry, government and non-profit organisations gathered in Cambridge, Massachusetts USA to review current research on industry and the environment and explore ideas for creating sustainable visions for corporations in a world-wide setting. The second in a ten-year conference series of the Greening of Industry Network, this year's conference explored the challenge of 'Designing the Sustainable Enterprise'.

The Greening of Industry Network is coordinated by the Tufts University Centre for Environmental Management and the Centre for Studies of Science, Technology and Society at the University of Twente in the Netherlands. The conference brought together perspectives from corporations, government, public interest groups and academia on moving corporations toward sustainability. Keynote speakers included:

- Sun Company Chief Executive Officer Robert Campbell, 'Setting the Table for the Twenty-first Century'
- Arun Kumar of Development Alternatives, 'A Strategy for Sustainable Livelihoods'
- John Elkington of SustainAbility, Ltd., 'Win-win-win Business Strategies for Sustainable Development'
- Thomas Gladwin, New York University, 'From Greening to Sustaining: The Long and Winding Road'.

Structured around an international call for papers and rigorous selection process, the 25 conference workshops explored themes such as 'Sustainable Futures for Corporations', 'Design for the Environment', 'Greening of Learning in Networks', 'Corporate Codes of Conduct and Public Credibility', and 'From Risk Communication to Collaborative Decision Making'.

To give a personal account of the conference, we have invited four participants to share their experiences - from their perspectives in four

different countries and representing different sectors as well.

Berit Aasen, Norwegian Institute for Urban and Regional Research, Oslo, Norway:

What singles out the Greening of Industry Conference and Network for me is the combination of the narrow focus on industry and environment, with the broad inclusion of people from various disciplines and topics ranging from Green profiles to industry and sustainable development. My impressions from reading the papers, and from the limited number of workshops that I could attend, four out of nineteen research workshops (which automatically gives you a biased impression as one selects the workshops of one's main curiosity), the participants came from two related but distinct groups. One group was from business strategies, auditing, etc., and the other from science and technology studies.

Having worked on and off with research on industry, technology and environment since 1987, I am at times struck by the prescriptive character of much of the work done in the area. Our desires and hope from a greening of industry seems to predominate over analytic work and critical examinations. The research workshops represented to me an exiting step forward as a meeting place for discussions of empirical research, across a broad spectrum of disciplines.

An interesting feature at the conference was that regulation and innovation debate was being taken up again in several projects. As studies from mid 1980s were non conclusive on this topic, it was interesting to see that this has surfaced again. Several factors seem to cause this reemergence, but generally it has always reflected apprehensions about the economic burden of regulations and how innovations to meet the regulations to offset the extra cost of compliance with the tightened regulations. What about the future? My main message to the organisers would be to continue the approach of this conference. Add new topics slowly and let us continue the dialogue. The changes that could take place, are in my mind more extensions of activities that are already in the beginning. The first thing is to increase the number of people

from business, having the business voice more prominent at the conferences would be a valuable thing. The second is to add to the geographical catchment area, to include more researchers and business people from Germany, France and Southern Europe. The third issue is to enlarge the thematic scope to include more of the stakeholders. This is particularly related to three groups or stakeholder actors; communities, labour organisation, and environmental groups.

Still, the most important issues in my mind are to have a broad enough agenda to encompass the debate between environmental concepts in narrow business concepts and the larger and complicating debate on sustainable development and industrial activities. If we turn out to be too narrow we will not enter into the necessary challenge of rethinking our agendas, but if we turn out to be too broad we will not include our painstaking research about where we are now, and we will leave out the troublesome work of challenging the route from where we are now to where we can be in the future.

Peter Bright, Shell International Petroleum Company, London; Chairman of International Chamber of Commerce Working Party on Sustainable Development:

I came to this conference keen to meet and learn from researchers who are observing and building a knowledge base on the greening of industry. I also hoped that I could contribute and make contacts that would be mutually beneficial for the future.

While there were some parts that were, to my business mind, rather theoretical, overall I was not disappointed. Good research, particularly that which can be disseminated in a practical manner world-wide, is worth encouraging, not least in the teaching of future business, governmental and environmental leaders.

The opening speaker, Robert Campbell, President, Chairman and CEO of Sun Company, Inc., set the tone well, highlighting the need for a proper balance between the market economy and government. Governments have an important role, but they should not overplay it. The best way of designing the sustainable enterprise is not to over design it, and to harness employee care for the environment.

This tied in well with my own experience in Shell International and in helping to lead the International Chamber of Commerce's work with the Business Charter for Sustainable Development. Within a year of its launch at

Rotterdam in April 1991, it had become the global business guide for environmental management, encouraging and stimulating initiatives by companies and industry associations around the world, from all business sectors.

The environmental challenge is, however, long term and it will take many years of constant attention and commitment to respond fully in practice to the call of the Business Charter from improved environmental performance, and to do so in an economically sound manner.

In the Panel on voluntary codes of conduct, there were pleas for enforcement of such codes and for compliance mechanisms. This partly misunderstands their role. They are not a substitute for legal regulations; they take these as their standing point. Their strength is in their 'voluntary' nature and in the ownership, drive and innovation that they can generate. As the Global Environmental Management Initiatives (GEMI) puts it, changes in corporate behaviour may most effectively be driven from inside the corporation.

With such voluntary initiatives providing one of the greatest opportunities for meeting the environmental challenge, researchers have an important role in helping to develop understanding of how they work and of how barriers may be overcome - and in spreading this knowledge widely. This was the challenge I put to the Panel and would like to put to the whole network. Equally, I hope there will continue to be strong business contacts with the network.

Rob Kerr, International Institute for Sustainable Development (IISD), Winnipeg, Manitoba, Canada:

Business must be a key player in the transition toward sustainable development. Compared with governments, individuals and NGOs, business is the best equipped to manage capital, people and technology in order to deliver the goods and services demanded by the marketplace. Among the many factors that motivate business people, short-term earnings is probably the most influential. However, society is increasingly asking business to help achieve environmental and social objectives and most business is reluctant to accept these broader responsibilities.

We want sustainable enterprises, defined by IISD as those enterprises which 'Adopt business strategies and activities that meet the needs of the enterprise and its stakeholders today while protecting, sustaining, and enhancing the human and natural resources that will be needed in the future'. The trick is how.

The Greening of Industry conference approaches sustainability primarily from an academic technical perspective. I think that you have energised some tremendous academic research talent, but what is lacking is an understanding of what will get industry moving toward sustainability. Technology development is surely required but there are other more important barriers to progress, including fiscal policies, subsidies, environmental legislation and incomplete costing of unsustainable practices. Should the Greening of Industry Network address such policy issues? If the Network is to make real progress, it will have to do this work or ally itself with others who are prepared to do it.

We must discover how to motivate business to move in the desired directions. To do this we should work with the handful of companies that are proactively tackling many of the problems and challenges expressed by Tom Gladwin in his wrap-up speech. Some of these companies are members of Businesses for Social Responsibility, headquartered in Washington. Given the academic and theoretical nature of the Network's research, it must be determined how the Network can interface with these businesses which have very practical and immediate issues to deal with.

Designing the sustainable enterprise is a complex and critical challenge in the transition to sustainable development. Success will involve the key stakeholders of enterprise-owners, managers, employees, customers, suppliers, educators, communities, interest groups, government and others. The conference should consider involving more representation from these groups. Doing so will require an up-front investment in time but will ensure that we are addressing the concerns of the stakeholders in the development of solutions.

Finally, the natural world should figure more prominently in the Network's efforts. The health of ecosystems and bio-diversity are critical issues and the source of all wealth.

In conclusion, the Network is focusing on the most important, and perhaps difficult, issue of our time - sustainable development. We have built effective communication bridges among talented participants from both North America and Europe. The Network can make a very valuable contribution to society by further broadening its approach and testing its efforts to ensure that it is making a significant difference.

Mark Joyce, Director of Environmental Information, Economics and Technology Staff, Office of Cooperative Environmental Management, United States Environmental Protection Agency:

I left the Conference feeling both apprehensive and encouraged. Apprehensive because I was reminded once again of the daunting task we face in coordinating social, economic, and political policies to bring about sustainable development on a global scale - yet encouraged because we are making progress.

We are obviously making progress in one of the areas critical to comprehensive sustainable development strategies - measurements of environmental impacts. Many of the presentations at the conference deal with some form of measurement intended to gauge environmental impacts, such as some from 'Fuller Cost' Accounting and Life Cycle Analysis. Both the public and private sectors need more sophisticated and accurate methods of measuring the environmental impacts of their actions.

The US Environmental Protection Agency is evaluating the different measures the Agency uses to determine changes in the state of the environment, and is refining the surrogate environmental indicators it uses in the internal Agency decision-making process. More accurate environmental measurement techniques are needed before market mechanisms and economic instruments - such as the trading and banking or emission credits - can be used to their fullest potential. Industry also needs more advanced accounting methodologies to weigh the environmental impacts and true economic consequences of its actions. We are clearly advancing the body of knowledge in some of these areas, but much work and research is still needed.

I believe many of the presentations at the conference graphically illustrated the linkage between economic efficiency and environmental protection. Industrial and manufacturing companies that will prosper in a global sustainable development realm will have both economic efficiency and environmental protection as primary tenets. Although seemingly logical and straightforward, many private sector companies overlook actions that can lead to both improved economic performance and greater environmental protection. The EPA 'Green Lights' programme was created to encourage companies to install energy efficient lighting when it is profitable, and is one of the best examples of Agency efforts to demonstrate the profitability of

environmental protection measures. The calculus is simple - minimum inputs and minimum waste per unit of output yields greater profits and decreased environmental impacts. This is another area where the Network can help focus work and research to develop new programmes and methodologies for pollution prevention and cleaner production.

Perhaps the most important concept that the conference reinforced is the crucial role that cooperation between the public and private sectors will play in achieving global sustainable development. Without government, industry and academia working in concert, success will be tenuous. Each sector has a distinct emphasis - government takes action to protect human health and the environment, industry produces the goods and services for economic growth, and academia educates and conducts research - and coordination is essential.

The Greening of Industry Network can continue to play an important coordinating role by bringing representatives from different sectors together to forge creative solutions that will ensure both a healthy environment and a healthy economy.

Conference Summary Report

In keeping with our usual practice, we will publish a Summary Report of the conference, an integral part of our Network activities. The report will summarise the goals, discussions and conclusions of the conference as well as the ensuing challenges and research needs.

Second Book in Series

Similarly, we will publish another edited volume based on a selection of conference papers reworked to be inclusive of conference discussions and findings. The first book in the series, *Environmental Strategies for Industry* based on research papers, discussions, and conclusions of the first Greening of Industry Network conference in 1991, was released by Island Press (Washington, D.C.) in June 1993 and is being distributed in the UK and Europe by Earthscan (London).

Bibliography on the Greening of Industry

The authors, editors and organisers of the Greening of Industry Bibliography Project met together for the first time on November 14, just prior to the start of the conference. The bibliography project will produce a distilled

volume of references and essays regarding the relationships between industry and sustainability. For more information, please contact Edith Jenkins, Bibliography Project Coordinator, Centre for Environmental Management Tufts University, Curtis Hall, 474 Boston Avenue, Medford, Massachusetts, 02155 USA, Telephone: (617) 627-3486, Facsimile: (617) 627-3084, Email: ejenkins@stud.cem.tufts.edu

1994 Conference

The Call for Papers for the third international Greening of Industry Network conference to be held in Copenhagen, November 13-15, 1994, will be distributed in December 1993. Network member Professor Ulrik Jorgensen, Technical University of Denmark, will take the lead in the planning of the 1994 conference. This conference will take up the challenges of our 1993 convening and continue pursuit of Network goals of stimulating research and debate toward developing sustainable policies and actions for industry.

We encourage Network members to contribute news items and brief editorials to this Noticeboard. If you have something you would like to contribute, please contact either of the organisers listed below. For further information on the Greening of Industry Network and conference series, contact:

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