



SUSTAINABILITY AND THE PLASTICS INDUSTRY

REPRESENTATION OF STAKEHOLDER AND SUSTAINABLE DEVELOPMENT INTERESTS

THE NATURAL STEP

The Natural Step is an international NGO dedicated to Sustainable Development. The work we do is based upon a scientific approach and began with scientists and businesses in Sweden over ten years ago. Our framework uses science and systems thinking to help others get to grips with the complexities of sustainability.

We now have offices in US, Australia, Japan, New Zealand, Canada, South Africa, Israel, Sweden , UK and Brazil. There is interest in expanding TNS to new countries in almost every global region. We are at a stage of our development when our potential to influence global affairs is coming to the fore.

Our work covers three broad areas:-

Advisory – working with major business organisations to get Sustainable Development at the heart of their strategies and decision- making. This activity covers a wide range of interventions, based upon long term relationships. Our partners past and present include:-

BP

Ikea

Carillion

Interface

Co-operative Bank
Matsushita

Crest Nicholson
McDonalds

Du Pont

Nike

EVC

Norsk Hydro

FTSE for Good
Sainsburys

H P Bulmer
Tarmac

Home Depot

Outreach – our task is to disseminate awareness about both the realities and opportunities of sustainable development. The pedagogy we use, based upon learning techniques, lends itself to a better understanding of why sustainable development is so important. We are working with various Universities and educationalists around the world to develop the learning potential of TNS. The framework has also proved successful in adding value to community building projects in diverse settings.

R&D – our Science Programme lies at the heart of our development. In Sweden and US there is an extensive range of research projects underway based upon the TNS Framework, from materials design to transport. In the UK we have published our *2020 Vision* series of research projects on the following topics:-

- Thermal Treatment of Waste
- Sustainable Drainage Systems (SuDs)
- Putting SuDs into Practice
- Bulking Printing
- Biosolids
- Towards the Sustainable Use of Material Resources
- Renewable Energy
- PVC
- GMO's

Materials Development

In the UK we undertake specific examinations of materials and processes from the SD perspective including construction design, and quarrying. We have become heavily engaged in work with the construction sector with an emphasis on materials specification and procurement. The Swindon Hospital scheme, for which we were sustainable development advisors, is widely regarded as the outstanding example of sustainable construction in the UK. We have worked on the relationship between ISO 14001 and sustainable development with the British Standards Institute, and carried out similar work with regard to Life Cycle Analysis.

Whether it is PVC or pesticides, we have developed expertise in **Stakeholder Mapping** from the SD perspective. This enables a systems approach to be applied to selection and design from the outset.

Similar extensive work is going on in Sweden on materials design as well as explaining how the many different tools available to decision makers fit together with the TNS approach.

We have a major international research proposal under development concerning the application of the TNS framework to design across all sectors of industry.

Policy Development

The combination of work with business, R&D, and our learning expertise, is bringing us more and more into the area of influencing policy, both at the national and the EU level. Our International Chairman, Karl-Henrick Robèrt has recently been appointed to the EU President's Sustainability Roundtable. In the UK our Chairman, Jonathon Porritt, is also Chair of the Government's Sustainable Development Commission.

Our reputation and our contribution

TNS now has a respected position around the world for its impartial expertise. We have won awards for our work in Japan and the US, and were recently singled out as the leading NGO commentator on Corporate Sustainability Reports in the UNEP/SustainAbility commentary "Trust Us".

TNS is not an easy option. We enable those we work with to see the realities of sustainability within a rigorous framework. That framework illuminates the whole systems impact of their activities. But that hard reality is always welcomed as it helps decision makers understand how they must proceed. Then they can get to grips with real solutions to the problems we all face. Our contribution is to give others the confidence they need in their decisions and choices, from the long term sustainability perspective. Thus they are better able to justify their immediate actions.

More recently we have incorporated a systems view of the social dimension of sustainability, into our framework. Any view of materials and processes must also take into account the social impacts of their manufacture and use.

The Natural Step framework has proved to be rigorous and independent enough to address such complex questions as the place of plastics in a sustainable world. There is no doubt that those from the industry who already involved will need an external view if their recommendations are to have both technical credibility and a wider stakeholder perspective.

Is there a place for plastics in a sustainable world?

We have undertaken extensive work with some parts of the PVC industry, including the British Plastics Federation, examining the place of PVC in a sustainable society. Does it have a sustainable future? A number of conclusions arise which may also be applicable to plastics more generally:

- This is a ubiquitous material that affects all our lives.
- It is associated with convenience and a modern lifestyle,

but

- also with over-the-top consumerism, waste, and the throw-away society.
- Whilst these materials are actually important in meeting many of our every-day needs, they are also mistrusted, even condemned in some quarters, as being polluting and harmful, either to nature or to human health.
- The challenges to be overcome are substantial from the environmental, economic and social perspective. The issues involved include carbon emissions, additives, bio-accumulation, and waste treatment practices, as well as complex social impacts.

Dealing with complexity.

These are complex matters and cannot be dealt with in a simplistic manner. To ban a material in a knee-jerk reaction to perceived pressure does not make sense.

The mix of interests in these materials is very diverse. The allocation of responsibilities and impacts needs to be better understood. The Stakeholder Mapping work we have done for PVC demonstrates the difficulty of apportioning responsibility. We need to make new efforts to increase participation in decision-making about big issues, to raise awareness of the challenges we face from the sustainability perspective, to move away from blame culture, and begin to look for solutions and new opportunities together.

In our view a systems approach, based upon scientific understanding, is essential to make progress.

David Cook

Chief Executive
The Natural Step International