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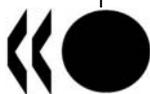
### **Working Group on Waste Prevention and Recycling**

**INVENTORY OF INTERNATIONAL INITIATIVES RELATED TO SUSTAINABLE MATERIALS  
MANAGEMENT**

For more information, please contact Henrik Harjula: Tel: +33(0)1 45 24 98 18  
Fax: +33(0)1 44 30 61 79; Email: [henrik.harjula@oecd.org](mailto:henrik.harjula@oecd.org)

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## FOREWORD

This Inventory of International Initiatives related to Sustainable Materials Management (SMM) was financed by the Flemish Public Waste Agency (OVAM) and prepared by Sander de Bruyn (CE), Ester van der Voet (CML), Laurant van Oers (CML), Maartje Sevenster (CE), Gerdien van de Vreede (CE) and Marissa Korteland (CE). Comments from the OECD Working Group on Waste Prevention and Recycling have further improved the content of the document.

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## INVENTORY OF INTERNATIONAL INITIATIVES RELATED TO SUSTAINABLE MATERIALS MANAGEMENT

### EXECUTIVE SUMMARY

The OECD Working Group on Waste Prevention and Recycling (GWPR) launched a new work area on Sustainable Materials Management in 2005. Sustainable Materials Management (SMM) is a relatively new approach in waste management strategies. The GWPR has agreed to the following working definition for the SMM [ENV/EPOC/WGWPR/RD(2005)5/FINAL]:

*“Sustainable Materials Management is an approach to promote sustainable materials use, integrating actions targeted at reducing negative environmental impacts and preserving natural capital throughout the life-cycle of materials, taking into account economic efficiency and social equity”*

Compared to traditional waste management, Sustainable Materials Management introduces sustainability and life-cycle perspectives.

#### Introduction

Life-cycle thinking applied to materials is not new. From the perspective of products and materials many initiatives have been developed which add life-cycle elements to existing policy areas and other activities. These include sustainable production and consumption, eco-design, integrated product policy, eco-efficiency or sustainable natural resource use. Although these initiatives start from different perspectives, they boil down to similar approaches by taking the life cycle perspective on the transformation of materials into products and services and, finally, waste.

#### Scope and Objectives of the Study

This study provides a summary of international initiatives that are relevant for Sustainable Materials Management. Initiatives have been defined here broadly as comprising various elements, such as information gathering, development of methods, networking, exchange of experience, and generation of ideas and policy measures, including the development of policy tools, programmes and strategies. Such initiatives have been investigated at the level of:

1. Global International Organisations (e.g. UN and UN-related organisations);
2. Regional International Organisations (e.g. G8, EU and OECD);
3. International Business and Industry Associations, International Standard Associations and environmental NGOs (only selected initiatives); and
4. Research organisations (only selected initiatives).

In order to limit the scope of the present study some rigor has been applied to the criteria whether an initiative would be relevant for SMM or not. Initiatives had to take a life-cycle perspective into account, focus on reducing

environmental impacts throughout the life-cycle of materials, and bear a relationship with waste and material policies in general. Using these criteria a total of 68 initiatives have been identified at the international level.

### Results of the study

The 68 initiatives are presented as datasheets in the Annex of the document. The datasheets give a concise description of the initiatives oriented on aims, goals and results and more specific information related to documents, websites, contact persons, types of materials, products and environmental impacts that are considered, etc. In addition, the usefulness of these initiatives for SMM is discussed briefly.

In the report the initiatives are introduced in two levels:

- i) Categorized by the organisations that have launched the initiatives; and
- ii) Categorized by content where the initiatives have been headed under the various themes they originate from (such as eco-design, or sustainable production and consumption).

### Main Findings

This inventory shows that there are many on-going activities related to Sustainable Materials Management. However, the starting point from end-of-life materials, as elaborated by the WGWPR, is relatively new. Most of the initiatives are meant to improve information, network building or to learn from other experiences. Based on the inventory findings, rather few international initiatives are developed for policy making or policy formulations and only a few initiatives have led to concrete new policy measures. From the perspective of international programmes, it seems that there is still a gap, both in knowledge and experience, how life-cycle thinking can be incorporated in existing international environmental policies. This finding, however, cannot necessarily be assumed for national policies as this inventory did not undertake an evaluation of national programmes relevant to Sustainable Materials Management. While national and sub-national initiatives were not covered in this inventory, the WGWPR has also examined SMM policies at the national level through a survey of national SMM policy initiatives (ENV/EPOC/WGWPR(2008)3/FINAL), and any gaps in initiatives addressing policy making or policy formulation is appropriately addressed within the context of that survey. This inventory does consider a few national initiatives that have grown into an international network (e.g. Japanese 3R; Chinese Circular Economy) and may lend some insight into which national policies relevant to SMM have garnered sufficient momentum to become expanded to receive international attention.

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For more information about the **Sustainable Materials Management**, contact: **Henrik Harjula, National Policies Division**, Environment Directorate, Email: [henrik.harjula@oecd.org](mailto:henrik.harjula@oecd.org); Fax : +33 1 44 30 61 79.

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**GLOSSARY OF ACRONYMS**

3R	Reduce – Reuse – Recycle
ANPED	Northern Alliance for Sustainability
APRSCP	Asia Pacific Roundtable for Sustainable Consumption and Production
BIGAS	Bayer crop science Integrated environmental Gains Along the supply chain for Sustainable agriculture
CDM	Clean Development Mechanism
CEC	The North American Commission for Environmental Cooperation
CEO	Chief Executive Officer
CER	Certified Emission Reductions
CIRAIG	Interuniversity Research Centre for the Life Cycle of Products, Processes and Services
CO <sub>2</sub>	Carbon dioxide
COICOP	Classification of Individual Consumption by Purpose
CSI	Cement Sustainability Initiative
CSCP	Centre on Sustainable Consumption and Production
CSR	Corporate Social Responsibility
D4S	Design for Sustainability
DITC	Division on International Trade and Commodities
DTIE	Division of Technology, Industry and Economics
EC	European Commission
EEA	European Environmental Agency
EEEI	European Eco-Efficiency Initiative
EIONET	European Information and Observation Network
ELV	End-of-life Vehicles
EMA	Environmental Management Accounting
EPI	Environmental Performance Indicator
EPLCA	European Platform on Life Cycle Assessment
ETAP	Environmental Technologies Action Plan
EUP	Energy using Products
FAO	Food and Agriculture Organization
G8	Group of Eight
GEN	Global Eco-labelling Network
GIN	Greening of Industry
GPPP	Green Public Procurement Policies
GRI	Global Reporting Initiative
GRIP	Norwegian foundation for Sustainable Consumption and Production
IBEP	International Bio-energy Platform
ICCA	International Council of Chemical Associations
ICMM	International Council on Mining and Metals
ICSPAC	International Coalition for Sustainable Production and Consumption
IEA	International Energy Agency

IEC	International Electrotechnical Commission
IFCS	Intergovernmental Forum on Chemical Safety
IISD	International Institute for Sustainable Development
IPP	Integrated Product Policy
IPPC	Integrated Pollution Prevention and Control
ISEE	International Society for Ecological Economists
ISF	Integrated Strategies Forum
ISIC	International Standard Industrial Classification (of all economic activities)
ISIE	International Society of Industrial Ecology
ISO	International Organization for Standardization
JRC	Joint Research Centre
LCA	Life-Cycle Assessment
LCI	Life-Cycle Inventory
LCIA	Life-Cycle Impact Assessment
LCM	Life-Cycle Management
MFA	Material Flow Analysis
MMSD	Mining, Minerals and Sustainable Development
NAGPI	North American Green Purchasing Initiative
NASCP	North America Sustainable Consumption and Production
NATO	North Atlantic Treaty Organization
NCPC	National Cleaner Production Centre
NESPEMS	New European Phased Environmental Management System
NGO	Non-Governmental Organisation
PSS	Product Service Systems
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
R&D	Research and Development
SAICM	Strategic Approach to International Chemicals Management
SBCI	Sustainable Building and Construction Initiative
SCP	Sustainable Consumption and Production
SDF	Sustainable Development Framework
SETAC	Society of Environmental Toxicology and Chemistry
SFA	Substance Flow Analysis
SMM	Sustainable Materials Management
SPAC	Sustainable Production and Consumption
SPC	Sustainable Product Criteria
SPP	Sustainable Public Procurement
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UN DESA DSD	United Nations Department of Social Affairs – Division for Sustainable Development
UNEP	United Nations Environmental Programme
UNIDO	United Nations Industrial Development Organisation
US	United States
WBCSD	World Business Council for Sustainable Development
WEEE	Waste Electrical and Electronic Equipment
WGEIO	Working Group on Environmental Information and Outlooks
WGWPR	Working Group on Waste Prevention and Recycling
WPNEP	Working Party on National Environmental Policies
WTO	World Trade Organisation

## 1. BACKGROUND

### 1.1 Introduction

For the last 20 years the OECD Working Group on Waste Prevention and Recycling (WGWPR) has been developing and promulgating international waste policies aiming at preventing and reducing waste generation and managing the residues in an environmentally sound manner. However, looking only at wastes, i.e. end-of-life materials resulting from human activities, is no longer sufficient. To date, waste minimisation policies have not kept pace with the increasing waste generation that is associated with economic growth and increasing materials consumption. This concern has given rise to a need for more creative and far-sighted solutions that employ *life-cycle thinking* to reducing in a cost-effective manner the negative environmental impacts (or externalities) associated with the increasing use of materials.

Environmental problems are generated along the entire life-cycle of products – extending from the extraction of raw materials needed for products, to the manufacture of intermediate and final goods, to their packaging and consumption, and finally, to their reuse, recycling and disposal.

Natural resources are a foundation of economic activity and human welfare. They provide raw materials, energy, as well as environmental and social services. Governments and international organisations are increasingly confronted with their management and efficient use which is the key to economic growth and sustainable development. This topic is of emerging importance to most of the OECD member countries, since many of them are trying to move away from a heavily waste-oriented view and develop materials-based approaches.

It is important that public policies target those points of materials life-cycle at which the potential environmental and economic benefits are likely to be the largest. The life-cycle approach helps to identify these points. OECD work in the area of Sustainable Materials Management (SMM), begun in 2005, focuses on this opportunity.

This SMM work was started in 2005 with a workshop to: i) set the scene for this work area; ii) explore the present understanding and status of activities towards sustainable materials management in member countries and international organisations; iii) define the needed terms; and iv) determine the most pressing areas for future work.

The WGWPR also decided to take forward three SMM projects in 2006 -- one of them being “an inventory of international initiatives related to Sustainable Materials Management”. It was further decided that this work would be undertaken by Belgium, in close co-operation with the OECD Secretariat and the OECD Steering Group on SMM.

### 1.2 Objectives of the Inventory

The WGWPR considered useful to undertake an inventory of SMM-related activities within international organisations for the following reasons:

- Due to the limits of waste prevention and minimisation policies and the continuous overall increase of consumption, the use of materials in a sustainable manner has become an emerging challenge of the new century which most countries have now to face. By combining and sharing their knowledge and experience through international organisations involved in economics and environment, countries have a better chance of developing synergies that will allow to tackle the issue of SMM successfully;
- Due to globalisation, production processes, transport, management, rules and regulations concerning materials in one country may lead to negative environmental impacts in others. Since the use of materials has an international dimension, cooperation between countries is needed. The best forum for this cooperation are international organisations; and
- Finally, in order to prevent duplication of work, but rather benefit from possible existing knowledge and experience on SMM, and to identify possibilities for co-operation in the field of SMM, the WGWPR recommended in December 2005 that the OECD carefully look for activities of relevance for SMM which are already in progress or under development in other international organisations.

Consequently, it would be crucial to know which other international organisations/bodies are working on SMM or developing such policy approaches. To this end, UN bodies, such as United Nations Environmental Programme (UNEP), United Nations Conference on Trade and Development (UNCTAD), United Nations Industrial Development Organisation (UNIDO), Food and Agriculture Organisation (FAO), the World Business Council for Sustainable Development (WBCSD), the Group of Eight, G8 (Reduce-Reuse-Recycle, 3R), the World Bank, the European Commission (EC) and its institutions or agencies will be explored.

This report aims to give a summary of international initiatives that are relevant for sustainable materials management, and to:

- Categorize the initiatives in clusters, both with respect to content and organisational levels;
- Discuss which initiatives are relevant for the OECD WGWPR SMM-activities; and
- Organise the initiatives in a database which can be used for further activities in this field.

### **1.3 Study methodology**

In order to execute the study several definitional choices had to be made. These relate to questions like:

- i) What is an initiative?
- ii) How is SMM understood for the purposes of this inventory, so that it would be possible to determine which initiatives should be taken into consideration?
- iii) Which organisations will be considered in the inventory?

These considerations are elaborated below.

#### ***1.3.1 Understanding of an Initiative***

An initiative is here understood a public act, action or statement by an organisation, or group of organisations aiming to solve a problem or organise action related to sustainable materials management. It is not limited to the development and implementation of policy measures, tools, programmes and

strategies or establishment of “process”-type approaches, and includes related information gathering, development of methodologies, networking and information sharing.

### ***1.3.2 Understanding of Sustainable Materials Management for this Inventory***

There is obviously a broad understanding of what sustainable materials management is, however, a more detailed understanding is needed for this inventory, to draw a line between what SMM is and what it is not. After all, just about all the processes of production and consumption are bound up in one way or another with the use of materials. Any policy that intervenes in production or consumption will therefore also intervene, directly or indirectly, in material supply chains underlying those processes.

Thus the understanding relates to two aspects:

- i) What is SMM?
- ii) What are materials?

The WGWPR agreed in December 2005 on the following working definition for SMM. The working definition is intended as a guide for focusing the OECD work on SMM and can be revised or improved as appropriate as the work evolves:

*“Sustainable Materials Management is an approach to promote sustainable materials use, integrating actions targeted at reducing negative environmental impacts and preserving natural capital throughout the life-cycle of materials, taking into account economic efficiency and social equity.”*

The WGWPR also agreed to the following explanatory notes to the working definition:

*“Materials” include all those extracted or derived from natural resources, which may be either inorganic or organic substances, at all points throughout their life-cycles.*

*“Life-cycle of materials” includes all activities related to materials such as extraction, transportation, production, consumption, material/product reuse, recovery and disposal.*

*An economically efficient outcome is achieved when net benefits to society as a whole are maximised.*

*A variety of policy tools can support SMM, such as economic, regulatory and information instruments and partnerships.*

*SMM may take place at different levels, including firm/sector and different government levels.*

*SMM may cover different geographical areas and time horizons.”*

For the purposes of this study the OECD working definition of SMM is understood as follows:

- i) SMM adopts a life-cycle approach as its basic premise;
- ii) The aim of SMM is to reduce the negative environmental impacts of materials use and preserve natural capital, taking into account economic efficiency and social equity;
- iii) SMM actions aim to promote reducing environmental impacts throughout the lifecycle directly; we are not concerned here with measures having an indirect effect, such as CO<sub>2</sub> emissions trading;

- iv) It is characteristic of SMM that it seeks integration of actions: environmental policies cannot be built in isolation from other policy fields; and

**The first element** gives a clear demarcation: an initiative has to take a life-cycle perspective, otherwise it is not SMM.

**The second element** puts forward the necessity that the initiative aims to reduce the environmental impacts of materials use. Initiatives solely devoted to social aspects in a life-cycle perspective (child labour!) are therefore not considered as SMM. Further, initiatives which are not directly relevant to materials use, are not covered by this definition either (*i.e.* fisheries policy, biodiversity policy).

According to **the third element**, the initiative must directly target one or more components of the life-cycle. Initiatives having an indirect effect on the life-cycle (such as CO<sub>2</sub>-emission trading) are not considered as part of SMM.

**The fourth element** concerns integration of actions. Many non-environmental considerations affect the environmental impacts from materials over the life cycle. Hence, SMM policies best seek to integrate with such considerations in order to create synergies and minimise potential negative impacts.

This is a difficult criterion to use in the inventory as the integrative aspect is not always clear. It is taken here as a criterion that policy measures aiming to reduce a specific material in a specific product are mostly not SMM but part of other policies, for example, policies aiming to reduce toxicity<sup>1</sup>. However, it is noted that in such risk management efforts, SMM can support and assist in ensuring the most effective and efficient risk management choices are made.

Using these four elements, insight has been gained of what is SMM for the purposes of this study. In practice there is no universally valid definition that will serve equally well across the board in establishing what constitutes SMM. The demarcation lines adopted here can nonetheless provide a useful handle.

Finally, we have **to understand what a “material” is**. A material is the useful part of natural resource which is extracted from it for further processing and use. However, in the context of SMM it should be noted that a material is something that sooner or later would end up as waste, or a recoverable material. In this way it is determined that water and air included in materials are counted in, but water and air as such are rather considered resources than materials. However, in the case of water this understanding could be challenged.

### ***1.3.3 Organisations included in this Inventory***

The main orientation in this investigation is on international initiatives. For clarity and ease of reference in the list of policy initiatives, the following categorisation of organisations is used:

1. Global Intergovernmental Organisations like UN and UN-related organisations;

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<sup>1</sup> This is a mere practical step needed to limit the number of initiatives. By considering only the first 3 elements, for example, there is a risk that hundreds of policy initiatives from various (inter)national organisations be captured unnecessarily in the datasheets. Consider all the various product regulations in force, for example, with separate measures banning use of cadmium in batteries, toys, beer crates and so on. These all have the specific aim of reducing environmental pollution and are based (in part) on a life-cycle approach. However, these measures are very specific and may not be interesting for the broader scope of initiatives relevant for SMM (Definition of natural resource: A substance or condition which exists in nature that can be exploited for economic benefit).

2. Regional Intergovernmental Organisations, like G8, EU and OECD and initiatives financed through these organisations;
3. International Business and Industry Associations, International Standards Associations and NGOs (*not exclusive*); and
4. Research organisations (only the largest initiatives).

The inventory of SMM activities under business and research organisations is less thorough than that of intergovernmental organisations. This is due to the fact that providing the full range of initiatives in this area would extend the scope and timeline of the present study.

National and sub-national initiatives were not covered in this inventory. The OECD has separately surveyed national SMM initiatives in 2007. This study, however, includes some national initiatives that have had an international impact (*see* Section 2.5).

#### 1.4 Sustainable Materials Management in wider Perspective

(EU addition here; 2 sentences from page 21) In recent years a wide range of initiatives have been taken in numerous settings with the goal of reducing the environmental impacts of production and consumption throughout product life cycles, “from cradle to grave” or even “from cradle to cradle”. These initiatives have been prompted largely by a realisation that although current environmental policy is certainly making great strides, at some stage of the supply chain there will still be environmental impacts - often beyond national borders - that continue to accelerate the overall degradation of the planet’s ecosystems. One of the strategies to overcome this is to close the cycles of our industrial metabolism (Ayres, 1989)<sup>2</sup>.

From the perspective of waste, in particular, many such initiatives have been put forward. It is evident that it is not very cost-effective to focus policy solely on waste, the final link in the product chain. It is often simply more effective as well as cheaper to improve matters by taking action further upstream (Von Weizsäcker, *et al.* 1997). The automotive industry, for example, has had good experience with design modifications enabling materials to be better recycled in the end-of-life stage.

Such initiatives share the common feature that the aim is to reduce the environmental impacts throughout the life-cycle of product, materials, or activities. They have been labelled differently in the literature, depending on the focus of the initiatives in the life-cycle:

- “Sustainable production and consumption” is a term for initiatives that aim to integrate chain analysis in decisions relating to production and consumption;
- “Integrated product policy” seeks to minimise environmental degradation by looking at all phases of a product’s life-cycle (and taking action where it is most effective);
- “Sustainable natural resource use” investigates minimising environmental impacts from the use of natural resources throughout the life-cycle;
- “Sustainable materials management” aims to minimise environmental impacts from the use of materials throughout the life-cycle. The focus of SMM, as defined by the OECD, is on all stages of the life-cycle from material extraction from natural resources to end-of-life management; and
- Eco-efficiency, finally, is a management strategy ‘doing more with less’—In practice, eco-efficiency is achieved through the pursuit of three core objectives: i) Increasing product or

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<sup>2</sup> Such issues have been labelled differently as societal metabolism (Fischer-Kowalski 1997).

service value; ii) Optimising the use of resources; and iii) Reducing environmental impacts throughout the life-cycle.

In addition there are initiatives like *Corporate Social Responsibility*, or *Eco-design* that share many of the views of the initiatives mentioned above.

As all these initiatives take a life-cycle perspective, they are more or less similar. After all, the life cycle implies that natural resources feed into materials which feed into products that are consumed and recovered or disposed of. The similar characteristics of these initiatives can be summarised as follows:

- They take a life-cycle perspective;
- They often point at the greater effectiveness of environmental policies when taking a life-cycle perspective;
- They often point at the lower costs (greater efficiency) that can be achieved when taking a life-cycle perspective;
- They may take into account and seek to minimise environmental damages experienced by the South;
- They may suggest the need for an integrated approach to environmental problems in creating a greater coherence between existing environmental policies (the so-called umbrella function of these initiatives).

In other words, initiatives need not to be labelled SMM in order to be considered as contributing to SMM. Also many initiatives that do not make reference to the term SMM are in fact dealing with issues that are important for SMM.

## **1.5 Structure of the Report**

The description of initiatives is given in the Annex which contains 68 initiatives relevant for SMM. These 68 initiatives together provide an overview of the field, but do not cover the whole range of possible initiatives, as outlined in Section 1.3.3. Nevertheless they do give a reasonable overview of what is going on in the field internationally.

The initiatives can be headed to organisational types (i.e. global and regional international organisations, business, national organisations, etc.), or by substance (i.e. sustainable production, eco-design, waste management, etc.). Both classifications are elaborated in this study. This is due to the fact that the selected search approach has been oriented in these two ways, and both with respect to the organisations as to the subjects covered, only the most relevant initiatives are included. Hence, in Chapter 2 initiatives are introduced from the perspective of organisations, and in Chapter 3 from a substantive perspective. Chapter 4 will then provide the conclusions. The initiatives themselves are presented on datasheets in the Annex.

When referring in the text to a particular initiative, this is done by “#” and a number, i.e. #43, which makes it easy to locate the initiative in the Annex.

## **1.6 Accountability**

As this report is principally an inventory of initiatives, information regarding the specific nature, development, outcomes, players, etc. of the SMM-related initiatives should not be considered complete or comprehensive. Readers are invited to use the various Internet and other references provided in the text and the data sheets to learn more about the specific details associated with the listed initiatives.

## 2. THE INITIATIVES BY ORGANISATIONS

### 2.1 Introduction

Many organisations have introduced initiatives that are relevant for SMM according to the definition outlined in paragraph 1.3. In this chapter an overview is presented of the initiatives of the main organisations relevant for SMM.

### 2.2 Global Intergovernmental Organisations

There are several global organisations like the UN, FAO and World Bank that have programmes concerned with the sustainable use of resources and materials taking a lifecycle perspective. As these organisations have only limited power and means, their programmes are generally restricted to agenda-setting, training, public education, harmonisation and facilitation. Such initiatives can nevertheless have a substantial influence on the thinking and policy of individual countries and international organisations, and lead to major regulations. This is reflected in the Kyoto and Montreal protocols, for example, both of which were secured under UN leadership.

#### 2.2.1 *United Nations*

Since its creation in 1972 the United Nations Environmental Programme, **UNEP**, has pursued the goal of a more environmentally benign and, since 1987 a more sustainable development of global society. Most UNEP initiatives relate to the use of natural resources like water, land, timber and fish. Over the past 10 years there has also been a growing focus on issues relating to the economy. Cleaner production, life cycle economy and environmentally sound management are recurrent terms in UNEP documents. The Malmö Declaration of 2000 appeals countries to develop initiatives for “cleaner and more efficient technologies for a life cycle economy” (#3). This has led to the establishment of the Life-Cycle Initiative (LCIn, #17) in collaboration with the Society of Environmental Toxicology and Chemistry (SETAC), home of the LCA scientific community. In the Life-Cycle Initiative activities are being developed under the headings of Life-Cycle Thinking, Life-Cycle Management and Life-Cycle Assessment (LCA). Though focused primarily on products and services, this LCI initiative also has implications for materials and resource use.

In 2002, following the World Summit on Sustainable Development, the Life-Cycle Initiative was transferred to the Ten Year Framework of Programmes on Sustainable Consumption and Production, also known as the Marrakesh process (#22). This Framework, of grand design, has a number of Task Forces, each chaired by an individual (European) country. Several of these, such as the Sustainable Building and Construction Task Force (#14), have resources or materials as their main focus and are therefore included in the datasheets.

One recent development is the establishment of the International Panel for Sustainable Resource Management (Resource Panel, #20). Established by UNEP, with the support of a wide range of governments, the European Commission and representatives from civil society, the new scientific panel

is part of an international partnership on resource management. It will look at the impacts on resources and materials used in all phases of their life cycle.

In this area of sustainable production and consumption, originating from the Ten Year Framework, the UN has many initiatives. Taken up in the database are the following (*see also Table 1*):

- *General*: Life-Cycle Initiative, the newly established Centre of Sustainable Consumption and Production and the International Panel on Sustainable Resource Management launched in November 2007, Asian-Pacific Roundtable on Sustainable Production and Consumption, Nordic Roundtable on Sustainable Production and Consumption (#4; #28);
- *On production*: Sustainable Building & Construction, Design for Sustainability, Product Service Systems (#14);
- *On consumption*: Sustainable Lifestyles, Sustainable Products; Sustainable Product Criteria Database (Table 1);
- *On waste*: Integrated Resource Management pilot projects in developing countries; and
- *On trade*: Sustainable Public Procurement, Biotrade, and the GRIP initiative on North-South business relations (#13).

**Table 1. UN related Activities relevant to SMM**

Sheet Number*	Organisation	Title of the initiative
13	UN DESA/UNEP partnership	Sustainable Public Procurement (Switzerland) - 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns: The Marrakech Process
22	UN DESA/UNEP partnership	SPC initiatives database - 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns: The Marrakech Process
14	UN DESA/UNEP partnership	Sustainable Building & Construction (Finland) - 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns: The Marrakech Process
15	UN DESA/UNEP partnership	Sustainable Products (United Kingdom) - 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns: The Marrakech Process
16	UN DESA/UNEP partnership	Sustainable Lifestyles (Sweden) - 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns: The Marrakech Process
20	UNEP	International Panel on Sustainable Resource Management
17	UNEP/SETAC partnership	UNEP/SETAC Life-Cycle Initiative
28	UNEP/Wuppertal Institute partnership	Collaborating Centre on Sustainable Consumption and Production (CSCP) UNEP/WI
12	UNEP	UNEP's Product Service Systems and Sustainability
5	UNEP	UNEP's Sustainable Building & Construction Initiative (SBCI)
4	UNEP	Asia Pacific Roundtable for Sustainable Consumption and Production (APRSCP)
3	UNEP	International Declaration on Cleaner Production
2	UNEP	National Cleaner Production Centres
18	UNEP	UNEP's Design for Sustainability (D4S) Activities
21	UNEP	UNEP/IAPSO Product Criteria Database

\*The sheet number gives the number where these initiatives can be found in the datasheets (Annex).

Since the starting point in the Ten Year Framework of Life-Cycle Thinking, all these initiatives are, directly or indirectly, relevant to Sustainable Materials Management. These initiatives generally aim at knowledge build-up and dissemination, networking, exchange of ideas and experiences, setting up pilot projects and advising governments. The Roundtables are regional structures for conferencing.

A separate branch of UN activities is connected with the concept of Cleaner Production:

- The National Centres for Cleaner Production (#2); and
- The Declaration on Cleaner Production (#3).

The Declaration on Cleaner Production has the decoupling of economy and environment as its core principle, to be reached by minimising environmental impacts of production by technical means. The National Centres deal with more specific issues, for example for specific sectors or services. These, too, can be relevant to Sustainable Materials Management, especially when targeted at products and services.

### 2.2.2 Other UN-related Organisations

One of the developments that may have major consequences for future use of resources and materials is the growing interest of policy-makers in biomass as a source of energy and materials and the widespread interest that has immediately been displayed by the biotechnology sector. There is already a plethora of policy initiatives in this area, many of them with ambitious targets. International organisations, too, are developing activities in this field. The Biofuel Initiative, launched by UNCTAD in 2005, seeks to help developing countries make optimum use of their renewable energy potential, particularly when it comes to biofuels. At the initiative of the FAO the International Bio-energy Platform (IBEP) was recently set up to advice government and industry on formulating policies in this area. Another objective is to establish bio-energy R&D programmes. In this area, the following initiatives are included in the database:

- FAO IBEP (#8);
- UNCTAD BioTrade initiative (#10) and Biofuel initiative (#23);
- SAICM (#56)
- IFCS related initiatives (#57 and #58).

The FAO is concerned mainly with the big issues of the future with respect to agriculture: how the world's population is to be fed, and the associated question of how water, land, timber and fish resources are to be managed. The FAO's vision on these matters is set out in its "Strategies for a Sustainable Agricultural and Rural Development". Another important task of the FAO is to collect and disseminate statistics on land and water use, agricultural output, pesticide and fertiliser use, and production, consumption and international trade of fish and timber. Together, this represents an extremely extensive and useful data set providing key insights into all kinds of trends in these areas.

**Table 2. Other UN related Organisations' Activities relevant to SMM**

Sheet Number	Organisation	Title of the initiative
19	Food and Agriculture Organization (FAO)	FAO sustainable Development (activities)
8	Food and Agriculture Organization (FAO)	International Bio Energy Platform (IBEP)
10	UNCTAD	BioTrade initiative
23	UNCTAD	Biofuels initiative
56	UNEP	Strategic Approach to International Chemicals Management (SAICM)
57	Intergovernmental forum on chemical safety (IFCS)	North American Sustainable Consumption and Production Database
58	Intergovernmental forum on chemical safety (IFCS)	INFOCAP

The Strategic Approach to International Chemicals Management (SAICM), adopted by the International Conference on Chemicals Management (ICCM) on 6 February 2006 in Dubai, United Arab Emirates, is an international policy framework to foster the sound management of chemicals. SAICM

(#56) was developed by a multi-stakeholder and multi-sectoral Preparatory Committee and supports the achievement of the goal agreed at the 2002 Johannesburg World Summit on Sustainable Development of ensuring that, by the year 2020, chemicals are produced and used in ways that minimise significant adverse impacts of chemicals on the environment and human health.

The **Intergovernmental forum on chemical safety (IFCS)** is a UN affiliated body and has launched two initiatives which serve as a database on chemical management plans (INFOCAP, #58) and Sustainable Production and Consumption (#57). In paragraph 4.3 these databases are described in some more detail from the perspective of alternative sources of information on initiatives worldwide.

### 2.3 International Business and Industry Associations, International Standards Organisations and NGOs

There is an increasing realisation that business and industry hold many of the keys to changing production and consumption patterns. Life-Cycle Assessment has a long strand in business areas and programmes devoted to reducing environmental impacts over the lifecycle have been introduced since the 1980s. Such initiatives have been labelled as cleaner production, eco-efficiency, zero-emission initiatives, and design for environment (DfE) or industrial ecology. Recently, such initiatives have often been headed under Corporate Social Responsibility (CSR) – a concept that states that organisations have a duty of care to all of their stakeholders in all aspects of their operations, which goes beyond their statutory obligation to comply with legislation.

The number of business initiatives focussing on networking and information exchange is virtually unlimited as almost every sector has deployed initiatives in fields close to SMM. It is, however, difficult to assess which initiatives go beyond mere intentional declarations and organising a few workshops.

One of the organisations that clearly goes further than just elaborating concepts related to SMM is the **World Business Council for Sustainable Development (WBCSD)**, which is probably also the best known and influential organisation in this respect. The WBCSD is a network organisation which brings in “some 180 international companies in a shared commitment to sustainable development through economic growth, ecological balance and social progress”. It launched an eco-efficiency programme (#56) which has now been followed up by various sectoral activities (#53). Many activities deal with energy, but materials are, for example, a specific focus in the Cement Sustainability Initiative (#54).

The **Greening of Industry** network (<http://www.greeningofindustry.org/>) is in this case important as a bridge between business, government and researchers. It is also one of the oldest networks around in this area.

From a sectoral perspective, the initiatives that have been undertaken at the **International Council on Mining and Metals (ICMM)** are relevant for SMM as lifecycle thinking has gained a prominent role in the environmental activities from this organisation. They have introduced a work programme based on the concept of Materials Stewardship (#52) The programme aims to ensure the responsible provision of materials and supervision of material flows towards the creation of maximum societal value and minimum impact on man and the environment. ICMM has published guidance on materials stewardship. It's commitment to materials stewardship is demonstrated through Principle 8 of the ICMM Sustainable Development Framework. A similar initiative has been established by the chemical industry oriented on product stewardship (#60). The International Council of Chemical Associations Long Term Global Product Strategy is broad based and includes for example guidance on sharing good practice along the value chain, a management system for implementation of product stewardship and a process for systematic risk assessment of chemicals.

**Table 3. Overview of Business Organisations and NGOs with Initiatives relevant to SMM**

Sheet Number	Organisation	Title of the initiative
48	Ceres	Global Reporting Initiative (GRI)
47	Greening of Industry (GIN)	Greening of Industry (GIN)
49	International Council on Mining and Metals (ICMM)	Declaration by the Metals Industry on Recycling Principles
51	International Council on Mining and Metals (ICMM)	Materials Stewardship
50	International Council on Mining and Metals (ICMM)	Sustainable Development Framework (SDF)
53	World Business Council for Sustainable Development (WBCSD)	Cement Sustainability Initiative
52	World Business Council for Sustainable Development (WBCSD)	Mining, Minerals and Sustainable Development (MMSD)
55	World Business Council for Sustainable Development (WBCSD)	Eco-efficiency programme
54	Global Eco-labelling Network (GEN)	The Global Eco-labelling Network (GEN)
59	ICSPAC	SPAC Watch
46	ICSPAC	ICSPAC
45	Northern Alliance for Sustainability (ANPED)	Sustainable Production and Consumption Working Group
60	ICCA	Global Product Strategy
61	International Organization for Standardization (ISO)	ISO 14000 Family
62	International Electrotechnical Commission (IEC)	IEC Technical Committee 111

The overview of business organisations is not exhaustive. Especially in the field of CSR many activities have been undertaken at the global, regional or national levels. Organisations like **Business for Social Responsibility (BSR)** (<http://www.bsr.org/>) aim to help companies achieve success in ways that demonstrate respect for ethical values, people, communities and the environment. Such initiatives (similar ones have been employed by the UNICE and a dozen of other organisations) have not been included in the database, however, as Life-Cycle Assessment only plays minor roles in such initiatives.

The important **Global Reporting Initiative (#48)**, a large multi-stakeholder network of thousands of experts oriented on CSR, co operate with UNEP/SETAC lifecycle initiative (#17) when it comes to life cycle activities.

Standards are a type of instrument that can ensure desirable characteristics of products and services such as quality, environmental friendliness, safety, reliability, efficiency and interchangeability. When products, systems, machinery and devices work well and safely, it is often because they meet standards. In the case of environmental standards, their use or implementation is intended to be environmentally beneficial or to reduce negative environmental impacts of activities. The **ISO 14000 family (#61)** addresses "environmental management". This result in activities/initiatives the organization undertakes to minimize harmful effects on the environment caused by its activities and to achieve continual improvement of its environmental performance. For its part, the work under **IEC Technical Committee 111 (#62)** is intended to prepare the necessary guidelines, basic and horizontal standards, including technical reports, in the environmental area on electrical and electronic equipment.

The overall purpose of the **GEDnet** network (<http://www.gednet.org/>) is to foster co-operation and encourage information exchange among its members and other parties operating or developing Type III Environmental Product Declaration programmes and to discuss key issues in developing such programs. A type III environmental declaration provides information regarding the environmental aspects of products and services based on information from life cycle assessment studies according to the ISO 14040-series of standards.

Environmental and other NGOs have fostered many initiatives relevant for SMM. Many of these activities have a local character and are therefore not included in this overview. Some activities related to sustainable production and consumption. The **International Coalition for Sustainable Production and Consumption (ICSPAC) (#46)** offers an agenda, research reports and various tools that can be useful in the field of sustainable production and consumption and the lifecycle thinking. The **Global Eco-labelling Network GEN (#55)** aims to improve, promote, and develop the "eco-labelling" of products and services. These NGO initiatives very much cooperate with business and can be considered as joint effort between business and the NGO community.

## 2.4 Regional Intergovernmental Organisations

### 2.4.1 European Union (EU)

The EU is of immediate relevance for the present review because there are a series of directives and proposals at EU level that include many elements of the concept of SMM<sup>3</sup>.

In the 6<sup>th</sup> Environmental Action Programme of the EC (EC, 2001) concepts like life-cycle assessment, resource efficiency and waste prevention were introduced as important concepts of future environmental policies in the EU. In subsequent years, the actions announced in the 6<sup>th</sup> EAP have been

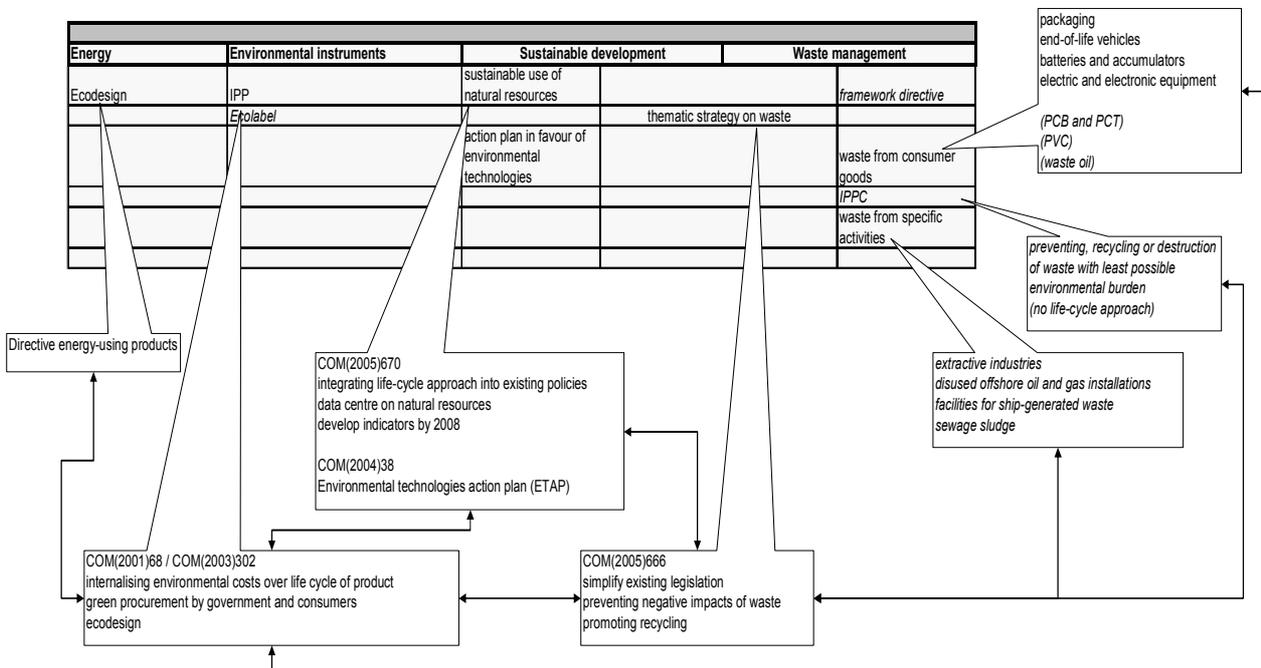
<sup>3</sup> In addition, many OECD countries are members of the EU as well.

translated into communications and other policy plans. In the environmental policies of the European Union the life cycle approach is featuring now more prominently than a decade ago. At the moment the three main policy cornerstones are the EU’s communications in the fields of:

- Product policy (Integrated Product Policy (IPP) Green Book, COM(2001)68 and COM(2003)302) to be extended by a Sustainable Consumption and Production (SCP) Action Plan in 2008 (#39);
- Natural resources (Strategy, COM(2005)670) (#31); and
- Waste prevention and recycling (Strategy, COM(2005)666) (#44).

Although these three policy tracks have their origin in various themes of EU policy (*see* Figure 1), they are very much intertwined. The Thematic Strategy on Waste Prevention and Recycling (#31) is explicitly positioned under the headings of both sustainable development and waste management and to a certain extent reflects an evolution in thinking as discussed in Section 1.4. Thus, the focus of EU waste policy is shifting increasingly from the end of the product life-cycle to the cycle as a whole, and the implementation of concrete targets or standards in legislation is advancing. It is no coincidence that this Strategy is entitled “Making work of sustainable use of natural resources”. It is closely allied to the Thematic Strategy on Sustainable Use of Natural Resources, but is at the same time also geared to simplifying and modernising older waste policy tracks by integrating the provisions of the waste oil directive (75/439/EEC) and the hazardous waste directive (91/689/EEC) into the revised and updated framework directive on waste (2006/12/EC). Moreover, the implementation of the Strategy will be closely linked to the clarification and modification of the scope of the Integrated Pollution Prevention and Control (IPPC) Directive and to additional waste management activities.

**Figure 1. EU Policy Tracks relevant to SMM and Waste (legislation in italics is not covered in this study)**



The Thematic Strategy on natural resources complements IPP. Both tracks are based on life cycle thinking, but while IPP takes the product as its point of departure, the Resource Strategy is more all-embracing, in a sense intervening earlier in the chain. Several encompassing implementation measures will be proposed in the forthcoming Sustainable Consumption and Production (SCP) Action Plan.

The notions of IPP and waste prevention find concrete expression in a range of legislation, including several directives relating to waste policy and in particular the end-of-life phase of specific consumer goods, including:

- End-of-life vehicles (2000/53/EC), (#40);
- Packaging and packaging waste (1994/62/EC, revised by 2004/12/EC), (#41);
- Electrical and electronic equipment (2002/95&96/EC), (#42); and
- Batteries and accumulators (2006/66/EC), (#43).

As it stands at the moment, the packaging directive contains a limited set of life-cycle-oriented measures, including targets for recycling and incineration with energy recovery, a heavy metal ban, and a set of essential requirements specific to the manufacturing and composition of packaging (limited volume and weight, design for re-use, recycling and recovery, elimination of hazardous substances, etc). The life-cycle-oriented goals are also cited as an underlying motive for drawing up the present directive with a possibility for their future elaboration in more detail.

The end-of-life vehicles directive is primarily concerned with issues like limiting the use of dangerous substances or making allowance in vehicle design and manufacture for later dismantling, reuse and recycling. Although such measures have life cycle thinking in mind, at the time of drafting the directive, they were rather based on the end-of-life impacts rather than on the optimisation of economic-environmental considerations over the life-cycle. A full assessment of the life-cycle impacts of vehicles (transport) is ongoing under the Sustainable Consumption and Production agenda.

Article 5 of the new directive on (waste) batteries and accumulators (2006/66/EC) explicitly elaborates the notion of optimising the life-cycle environmental performance of batteries and accumulators, and highlights that the marketing of batteries with less polluting substances should be encouraged. The article cites dangerous substances and heavy metals, but the scope for optimisation does not end there, reuse, recycling and recovery obviously also have a major part to play. The directive on waste electrical and electronic equipment, or WEEE directive, sets explicit targets for the recovery and recycling of this type of equipment (and component parts). Product design that facilitates dismantling and recycling is explicitly cited as a key issue, but life cycle policy in the sense of e.g. materials selection is lacking.

The IPP philosophy is also reflected in the “Eco-design” directive on energy-using products (2005/32/EC), which strictly speaking comes under the heading of energy policy (Figure 11). In this directive eco-design is defined as:

*“The integration of environmental aspects into product design with the aim of improving the environmental performance of the energy-using product throughout its life-cycle”.*

With energy-consuming appliances the use phase is generally the dominant factor in life cycle environmental impact. One of the key aims of this directive is therefore to improve energy efficiency through better product design and construction. In the context of sustainable materials usage the use phase is difficult to integrate, because it is not necessarily the case that less material is always better in terms of life-cycle environmental impact. In the case of heavy duty electrical equipment, for example, a

minimum diameter of copper wire can be recommended as the reduction in electrical resistance and its associated losses of power may be more significant than savings on materials.

The establishment of the European “Eco-label” (several EC decisions in 2000) also ties in with life-cycle thinking. Following from the IPP strategy, one of the ideas being considered in this context is to introduce differentiated charges based on the Eco-label or some other form of environmental label. However, these tracks are still fairly ‘soft’ and do not yet focus on the life-cycle. Therefore, they were not included in this study.

Although most EU legislation relevant for SMM is based on product or waste policies, a couple of other initiatives are interesting for SMM also. First there has been the introduction of the Thematic Strategy on the Sustainable Use of Natural Resources in 2005. This Strategy sets out a programme in order to reduce environmental impacts from resource use over the next 25 years. Lifecycle thinking has been explicitly rooted in this initiative. Secondly, the EU also has running programmes on cleaner technology (# 35), corporate social responsibility (#36) and the EU financed a network for sustainable production and consumption (#34) and also a handbook on green procurement (EC, 2004, not included, *see* also Section 3.5.1). Finally, Eurostat (not included here) and the EEA also provide statistics and studies relevant to SMM. Within EEA there is a Topic Centre on Resource and Waste Management (#37), the source of several studies that focus on sustainable materials management. One of the aims of this Topic Centre is to collect information on material flows and their associated environmental impacts.

Another example of SMM is Regulation (EC) No 761/2001 of the European Parliament and of the Council of 19 March 2001 allowing voluntary participation by organisations in a Community eco-management and audit scheme (EMAS) (not included here). The Eco-Management and Audit Scheme (EMAS), EU voluntary instrument which acknowledges organisations that improve their environmental performance on a continuous basis. EMAS registered organisations are legally compliant to run an environment management system and report on their environmental performance through the publication of an independently verified environmental statement. They are recognised by the EMAS logo, which guarantees the reliability of the information provided.

Other areas of the EU touch upon the issue of sustainable materials management. In its plans for project funding for development aid (“external action”), for example, the EU has also established directives relating to sustainable management of natural resources (COM(2006)20), “External Action: Thematic Programme For Environment and Sustainable Management of Natural Resources including Energy”). However, this mainly relates to criteria for funding and falls short of being included in this review on the ground that the policy initiatives must bear a relation with waste.

In summary, although many of the aims laid down in current EU legislation still relate to traditional waste management (recovery, recycling, incineration with energy recuperation), there is now a definite trend towards taking a life cycle approach. The two thematic strategies cited are clear examples in this respect and a number of statements and articles in the packaging, end-of-life vehicles and battery directives reflect the same spirit. In addition, the principle of eco-design (including “design for recycling”) has also been incorporated in various directives. Table 4 gives an overview of the various activities within the EU in fields that are interesting for SMM.

**Table 4. Initiatives relevant for SMM from the EU or EU funded Organisations**

34	European Commission	Network Sustainable Consumption Research Exchange
36	European Commission	EU Corporate Social Responsibility
31	European Commission	Thematic Strategy on the Sustainable Use of Natural Resources
39	European Commission	Integrated Product Policy (IPP)
44	European Commission	Thematic Strategy on the Prevention and Recycling of Waste
41	European Commission	Directive 94/62/EC of the European Parliament and of the Council of 20 December 1994 on Packaging and Packaging Waste
40	European Commission	Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on End-of life Vehicles
42	European Commission	Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on Waste Electrical and Electronic Equipment (WEEE)
43	European Commission	Directive 2006/66/EC of the European Parliament and of the Council on Batteries and Accumulators and Waste Batteries and Accumulators
35	European Commission	Environmental Technologies Action Plan
38	European Commission	Directive 2005/32/EC of the European Parliament and of the Council Establishing a Framework for the Setting of Eco-design Requirements for Energy-using Products
11	European Commission	European Platform on Life Cycle Assessment
67	European Commission	Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
37	EEA	EEA Topic Centre on Resource and Waste Management

Research on life-cycle aspects in the EU has been included in the EC Joint Research Centre (JRC-IES and JRC-IPTS). The JRC-IES play an important role in developing and disseminating LCA methodology and data and the JRC-IPTS in working on prognostic techno-economic models and on identifying products with the highest environmental impact and improvement potential.

#### ***2.4.2 Organisation for Economic Co-operation and Development (OECD)***

In addition to the WGWPR activities, the OECD is engaged with issues relevant to sustainable materials management aspects in three other trajectories. Several links of cooperation between them have been established:

1. The OECD work programme on material flows (MF) and resource productivity (RP), steered by the Working Group on Environmental Information and Outlooks (WGEIO), supports the implementation of the OECD Council recommendation on MF and RP adopted in April 2004. The aim is to improve knowledge about the flows of materials within and among countries, so as to better understand the physical resource base of countries' economies and to inform related policies and management approaches. This is done by providing guidance on how to measure

material flows and resource productivity, paying attention to: i) How material flow accounts and indicators can be constructed in a coherent framework that countries can easily implement and further adapt to their own needs; and ii) How material flow indicators can be selected to suit policy needs and how they can be interpreted and used. The work has benefited from a sequence of workshops hosted by member countries (Helsinki, June 2004; Berlin, May 2005; Rome, May 2006; Tokyo, September 2007). Main outputs include a series of guidance documents that have been drafted in a joint effort by a group of experts from OECD countries led by the OECD Secretariat, and a pilot database building on existing national and international data sources;

2. The OECD has also been engaged actively in Green Public Procurement resulting in a “Council Recommendation in 2002 on Improving the Environmental Performance of Public Procurement (#33). A report to the OECD Council assessing the implementation of the Recommendation was published in early 2007, [http://www.oalis.oecd.org/oalis/2006doc.nsf/linkto/env-epoc-wpnep\(2006\)6-final](http://www.oalis.oecd.org/oalis/2006doc.nsf/linkto/env-epoc-wpnep(2006)6-final); and
3. Finally, the OECD was launching in 2007 Horizontal Work on Sustainable Production which is meant as an analysis of measures to arrive at sustainable manufacturing production. As this is not yet operational, it is not included in the overview presented in this study.

The OECD-linked International Energy Agency (IEA) has established a collaborative framework encompassing a great many countries which aims to research, develop and promote bio-energy technologies (#9).

#### ***2.4.3 North Atlantic Treaty Organization (NATO)***

In 1999, NATO, the North Atlantic Treaty Organization, implemented a project on Sustainable Building for Military Infrastructure (#63). The goal was to network and gather information on ways to reduce the environmental implications of military activities through a life-cycle approach, from the planning, the construction, to their operation and the demolition of building. Fully appreciating the project’s success as forums for the exchange of knowledge, the participants expressed keen interest in follow-up seminars. Participants meet every two years.

#### ***2.4.4 North American Commission for Environmental Cooperation (CEC)***

The North American Commission for Environmental Cooperation (CEC), a regional intergovernmental organization created by Canada, Mexico and the United States, under the North American Agreement on Environmental Cooperation, addresses regional environmental concerns, helps prevent potential trade and environmental conflicts, and promotes the effective enforcement of environmental law. The Agreement complements the environmental provisions of the North American Free Trade Agreement. For example, the CEC has established the North American Green Purchasing Initiative (NAGPI, #64) in order to promote green procurement practices and policies in North America ([http://www.cec.org/pubs\\_docs/documents/index.cfm?varlan=english&ID=12411](http://www.cec.org/pubs_docs/documents/index.cfm?varlan=english&ID=12411)). NAGPI includes SMM characteristics such as the focus on evaluating the environmental impacts of the products and services an organization will purchase, rather than the waste it will produce.

**Encouraging Green Purchasing** (independent project). The purpose of this project is to help increase the proportion of “green products and services” in the procurement decisions of institutions including governments at all levels, universities, hospitals, and private companies, and thus reduce their impact on the environment and human health. The project aims to promote the improvement of regional and national coordination and greater policy coherence concerning the purchase of green office supplies,

energy from renewable resources, and green cleaning supplies. In practical terms, it supports the development of information, tools and practical approaches for use by institutions. The project in its entirety addresses the sustainable development and the environmental conservation and protection objectives of the NAAEC and NAFTA.

**Clean Electronics Pollution Prevention Partnership (CEP3)** (<http://www.cec.org>). This component builds on previous experiences in North America in exploring a trilateral cooperation mechanism to facilitate the transition of the electronics industry to meet new global environmental requirements. It aims to help improve competitiveness, access to global markets and environmental performance while advancing pollution prevention strategies in North America.

The project is designed to provide resources, technical assistance, and promote voluntary efforts to eliminate or significantly reduce the uses of electronic products manufactured or imported in the North American market that contain a variety of hazardous and toxic constituents. The project could include harmonization of current efforts in North America, such as the EPEAT tool in the United States and TerraChoice in Canada, implementation of best management practices, promotion of compliance assistance tools for pollution prevention programmes, and cleaner production technologies.

The CEP3 will promote a coordinated effort to align the goals of the partnership, recognizing the need for programme flexibility and effective communication, to provide participants with the ability to leverage available resources to help promote improved environmental performance throughout North America.

The CEP3 will be guided by the designated Parties' representatives and the existing North American Pollution Prevention Partnership (NAP3). The NAP3 invites representation from the Parties and companies and/or associations within the electronics industry. Industry associations such as The Electronics Industries Alliance (EIA), The National Electrical Manufacturers Association (NEMA), The IPC – the Association Connecting Electronic Industries (IPC), Canieti (*Cámara Nacional de la Industria de Informática, Electrónicas y Telecomunicaciones*) and Electronics Product Stewardship (ESP) Canada, are expected to participate in the project. A CEP3 steering committee will coordinate the activities proposed under this component. It will have representation from industry, government, academia, and nongovernmental organizations from all three countries, including one representative from each of the NAP3 pollution prevention roundtables. The CEC will support the programme activities of the steering committee, and ensure timely reporting on activities and results to the NAP3 and the public.

## **2.5 National initiatives**

Although national initiatives are not considered in this study, some initiatives which originate from national policy plans have been included as they clearly have an international orientation where more parties than just national parties are involved. In addition, this section shortly elaborates concepts like green procurement and eco-labelling frequently encountered in national initiatives. As such initiatives often are related to lifecycle thinking, they may be of interest for OECD in their future research activities.

### ***2.5.1 National initiatives with international orientation***

Some national initiatives that have been developing into international initiatives are included in this review. Table 5 gives an overview of three such initiatives which, although they primarily have been taken by an individual country, have resulted in a wider audience and networking.

It should be noted that the focus of this inventory is on multinational initiatives. Many, if not most, OECD member countries have undertaken activities that would fit within this study's definition of SMM

and that have an international reach, component or impact. It is not within the mandate of this project nor practically feasible within this one report to include and explore a representative sample of them all.

**Table 5. Overview of National Initiatives with wider Audience**

6	G8 (Group of Eight)	3-R initiative (Japan, G8)
30	National Development and Reform Commission - China	Circular Economy (China)
1	GRIP - Nordic Ad-Hoc group on SCP consortium	Nordic Roundtable on Business Relations and Sustainable Consumption and Production in a North/South perspective

### 2.5.2 Other types of national initiatives

At the national level many other initiatives take place which may be important for SMM as they focus on life cycle thinking. Here we consider two types of them relevant for SMM that do have resulted in concrete actions: eco-labelling and green procurement.

**Eco-labelling.** Since 1977, when the ‘Blue Angel’ scheme was initiated by the German government, several national labelling systems have been set up (Melser and Robertson, 2005). These include ‘Environmental Choice Programme’ (Canada), ‘Green Seal’ (USA), ‘Eco-mark’ (Japan) and many more. ‘Nordic Swan’ and ‘Euro-flower’ are examples of multi-country initiatives. The labels apply their criteria on a broad variety of non-food product categories; electronics, clothing, office supplies, cleaning products etc. Some incorporated services such as tourism as well. Increasingly eco-labelling is endorsed from the private business sector. To date, no eco-label exclusively focuses on waste reduction and management but most do take a lifecycle perspective, including end-of-life management.

**Green procurement.** In recent years, green procurement initiatives have received increased attention. Several private businesses and government agencies at regional, national and local levels tried to include environmental and social considerations into their buying decisions. Green procurement means the purchase of products and services that have less environmental impacts than available alternatives. The direct aim is to support sustainable consumption and production patterns.

Many countries have introduced greener public purchasing policies. Examples are Canada, United States, Austria, United Kingdom, Netherlands, France and Denmark (OECD, 2003).

## 2.6 Research organisations

A number of national Life-Cycle Assessment database activities are ongoing globally. Presently Australia, Brazil, China, Denmark, Germany, Japan, Malaysia, Switzerland, Thailand, and the US are having formal national activities. As illustrative example, the US project may be detailed: The National Renewable Energy Laboratory (NREL) and its partners created the U.S. Life-Cycle Inventory (LCI) database to help life-cycle assessment experts answer their questions about environmental impacts. This database provides a cradle-to-grave accounting of the energy and material flows into and out of the environment that are associated with producing a material, component, or assembly. It is online accessible storeroom of data collected on commonly used materials, products, and processes. The data were critically reviewed following the project data review protocol. Information about the protocol and the database is contained in the U.S. LCI Database Project Development Guidelines and the User's Guide for Life-Cycle Inventory Database, <http://www.nrel.gov/lci>.

On an international level, the EC Joint Research Centre's IES also plays an important role in developing, harmonising, and disseminating recommended LCA methodology and reference LCI data, as well as recommended LCIA impact methods and factors (*see* initiative #11). The Joint Research Centre's IPTS works on prognostive techno-economic studies and on identifying the products with the highest environmental impact and improvement potential (#7).

The Sustainable Business and Construction Initiative (SBCI), co-ordinated by UNEP, aims to encourage decision makers in the construction industry and its stakeholders, including government, to develop and implement policies, strategies and practices that are cleaner, safer and make efficient use of natural resources. It recognises that there is considerable potential for improving the long-term performance of buildings by taking into account long-term benefits and costs, and using life cycle approaches to identify sustainable construction opportunities. The SBCI will operate as a reference source for the numerous voluntary activities and guidelines which are currently enacted at a national or regional level. Doing this will enable the initiative to provide a common platform for stakeholders, to establish performance baselines and to develop tools and strategies.

Chain analysis, the research activity relevant for SMM, is supported and developed at various international scientific gremia. Methodology development around Life Cycle Assessment and its economic counter-part, Life Cycle Costing, is concentrated in the Society of Environmental Toxicology and Chemistry (SETAC), the principal International organisation for LCA scientists. The link with Life-Cycle Management is established, among others, in the bi-annual LCM conferences organized by academia and business. The UNEP-SETAC Life Cycle Initiative (#17), another important body for methodology development, aims at establishing common practices and consensus on difficult methodological issues. Standardisation of the LCA methodology takes place in the ISO framework. ISO 14040 contains directions for LCA studies, especially targeted at the methodological framework and terminology. The EC Joint Research Centres (JRC-IES and JRC-IPTS) also play an important role in developing, disseminating and standardizing LCA methodology and data (*see* initiatives #07 and #11). In Canada, notably in Quebec, the Interuniversity Research Centre for the Life-Cycle of Products, Processes and Services (CIRAIG, # 65) is another example of research organisation that generates, integrates, and interprets relevant knowledge in the fields of life cycle assessment and products, processes, and services management in order to support industries and governments in their transition towards sustainable development.

Material flow accounting and Substance Flow Analysis has its, originally European but now global, focus in ConAccount (#29). This platform for MFA researchers and users started out as a Concerted Action of the EU 5th Framework Programme, but still is alive even after the EU grant has since long been terminated. MFA standardisation further is taken up by Eurostat, who have issued a methodological guide in 2002. Eurostat, in harmony with the OECD, recommends EU member states to keep track of the material base of their economy by drafting economy-wide MFA accounts.

There are many more methods in the field of environmental and sustainability analysis, such as Risk Assessment, Environmental Impact Analysis, Integrated Analysis, the more economic oriented environmental Cost Benefit Analysis, Input Output Analysis with environmental extensions, and various forms Eco-Efficiency Analysis, and the more technology oriented Design for the Environment, Design for Sustainability, and Design for Recycling, each with their own platforms of methodology development. All these may or may not include aspects of chain analysis, design and management. LCA and MFA however can be considered core methods in the field of chain analysis, since these two have cradle-to-grave chains as their research object.

MFA, SFA and other supporting methods for chain analysis are also the core business of the International Society of Industrial Ecology (ISIE, #27). The ISIE, established in 2001, organises

biannual conferences and co-organises an annual LCA case study symposium with SETAC. The ISIE issues a scientific journal, the Journal of Industrial Ecology. Together with the International Journal on LCA and the one on Ecological Economics, this is the most important place where methodology development and case study results related to chain analysis is published and discussed. Many research institutes, academic and others, contribute to the development of the Industrial Ecology research, of which chain analysis in its various shapes is an important part. The International Society for Ecological Economics (ISEE, #26) also serves as a platform for such methods, but on a smaller scale. Methods such as LCA and MFA fall into the category of analysis of the physical economy, one of the many topics of interest of the ISEE.

In many countries University institutes, Consultant and Research Centres are working on Life Cycle Assessment, generating, integrating, and interpreting relevant knowledge in the fields of life-cycle assessment and products, processes, and services management, in order to support industries and governments in their transition towards sustainable development.

Methodologies of chain analysis typically can be used to support policies of chain management. In international fora, such policies are gaining momentum. The EU Waste Strategy, Integrated Product Policy and Resource Strategy are examples of chain oriented policies. While LCA has long been the method of choice for IPP, a broader “life-cycle thinking” is increasingly finding its way into end-of-life policy.

The Yale University (USA) Stocks and Flows Project (#66) is evaluating current and historical global flows of important metals, determining the stocks available in different types of reservoirs and the flows among the reservoirs, developing scenarios of possible futures of metal use, and assessing the environmental and policy implications of the results. As of fall 2007, the group has completed work on copper, zinc, chromium, lead, iron, nickel, and silver, comprising complete cycle characterizations for all countries using significant amounts of these materials (more than 50), nine world regions including Europe, North America, and Asia, and the planet as a whole. Targeted studies of a few states and cities have also been accomplished. The group is now in the process of similar research on stainless steel. Specialized studies on tin, tungsten, and aluminium have been done as well. These comprehensive cycles, and their interpretation and implications, will be published in the scholarly literature as they are completed.

### 3. THE INITIATIVES BY CONCEPTS AND TYPES OF ENVIRONMENTAL POLICY

#### 3.1 Introduction

In addition to the classification presented in Chapter 2, this chapter will categorize the initiatives according to content. Although all the initiatives included in this overview have life cycle thinking as an important element, they originate from different perspectives and emphasize different elements important for SMM. These perspectives will be given here in this chapter.

First, in Section 3.2, initiatives oriented on sustainable production and consumption will be presented. In Section 3.3., initiatives from the perspective of production (i.e. eco-design, cleaner production, etc.) will be presented. Section 3.4 will investigate initiatives that have been started from a specific point of departure in the life-cycle. Section 3.5 will then list initiatives that have been formulated for specific types of environmental policy.

#### 3.2 Sustainable Production and Consumption

"Changing consumption patterns" is the subject of Chapter 4 of Agenda 21. At its third session, in 1995, the Commission on Sustainable Development adopted an International Work Programme on Changing Consumption and Production Patterns, from which the concept of "sustainable production and consumption" has emerged.

The concept of sustainable production and consumption is explicitly based on a life cycle perspective, as can be seen from this adopted definition<sup>4</sup>:

*"Sustainable production and consumption is the use of goods and services that respond to basic needs and bring a better quality of life, while minimizing the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardize the needs of future generations."*

*Symposium: Sustainable Consumption. Oslo, Norway; 19-20 January 1994.*

Within the inventory we have included the most important international initiatives on sustainable production and consumption, which includes various initiatives by the UNEP/UN DESA consortium (initiatives #13-16; #22), the CSCP centre (#28) at Wuppertal by the UN/Wuppertal Institute, the UN Newsletter on SCP (#28), the EC's European Platform on LCA (#11), Norway (#1) and NGOs (ICSPAC, #46; #59 and ANPED #45). They tend to be oriented to networking and information gathering.

#### 3.3 Initiatives based on Production and Products

The application of life cycle thinking started to take off in industry as early as the 1980s. Within industry various instruments have been introduced which have been named differently as: pollution prevention, cleaner technology, cleaner production, eco-design, loop closing, and environmental

<sup>4</sup> Many other definitions exist, though, see <http://www.iisd.org/susprod/principles.htm>.

management systems. Starting from an industry perspective, the scope has been broadened over the years to take a life cycle perspective at industrial processes and intermediate inputs in the production processes. Recently social-economic aspects have come to the foreground, which has been labelled as corporate social responsibility (CSR). CSR originates in the three pillars of sustainability as defined especially in business (PPP, Planet, People, and Profit).

A related strand of initiatives is oriented on products. Integrated product policies (IPP) and Cleaner Products are ways to minimize the environmental impacts over the life cycle. In a way, the influential UN Life Cycle initiative (#17) also originated in this field but is nowadays applicable to a wider range of aspects, including natural resource management.

### ***3.3.1 Corporate Social Responsibility (CSR)***

Corporate Social Responsibility (CSR) is an evolving concept that does not have a universally accepted definition. Generally, CSR is understood to be the way firms integrate social, environmental and economic concerns into their values, culture, decision making, strategy and operations in a transparent and accountable manner and thereby establish better practices within the firm, create wealth and improve society.

CSR is perceived as an important step towards sustainable development in a rapidly globalizing world. There are numerous initiatives on the area of CSR and all initiatives meant for business (i.e. #47-56) are one way or the other linked to CSR. In addition to these business initiatives, our datasheets include one initiative from the EU that has published a Communication on Corporate Social Responsibility (#36). This Communication sets out guidelines and plans for future work in this area which is basically oriented on promotion of CSR as a concept and the promotion of voluntary environmental instruments, such as environmental management systems and the Eco-label scheme.

### ***3.3.2 Eco-design and Integrated Product Policies***

Eco-design is an approach to design of a product with special consideration for the environmental impacts of the product during its whole lifecycle. The idea to address environmental questions at the design stage derives from the observation that at least 70% of the decisions concerning pollution in the subsequent manufacturing, use and disposal stages are made during the design of a product (Sheng, 1995). Life-cycle engineering, green design and manufacturing, and design for the environment are some other terms associated with eco-design.

In the datasheets, there are several initiatives included with respect to eco-design, which includes the EU Directives establishing a framework for the setting of eco-design requirements for energy-using products (#38) and vehicles (#40), and the UN activities related to eco-design (#18). Many other initiatives mention eco-design as a mean towards lowering environmental impacts.

Integrated Product Policy (IPP) seeks to minimise environmental impacts by looking at all phases of a products' life-cycle and taking action where it is most effective. The concept has increasingly gained interest, especially in Europe, over the last fifteen years. The US has also taken a life-cycle approach in many of programmes and uses a variety of tools which assess and attempt to reduce life-cycle impacts of products, including product design and design for environment (DfE) tools, environmentally preferable purchasing programmes and voluntary partnerships to encourage the reduction of priority chemicals. Many initiatives on IPP exist at the level of national states. From the organisations considered in this inventory, included are initiatives from the UN (#12; #16; #18), the EC European Platform on LCA (#11), and the EC Communication on IPP (#39). The Communication considers eco-design as a key to ensure that products on the market become more environmentally benign.

Although important as a policy tool, eco-design and IPP initiative lack any quantifiable targets. The IPP-communication (#39) suggests, for example, that targets may be derived from targets to be set within the framework of the Thematic Strategy on Sustainable Use of Natural Resources.

### **3.3.3 *Cleaner Production and Eco-efficiency***

Cleaner Production is a strategy for increasing the efficiency of natural resource use and minimising wastes. Pollution and risks to human health and safety are reduced at the source, rather than the end of the production process, i.e. the "end-of-pipe" stage. The adoption of Cleaner Production typically involves improving maintenance practices, upgrading or introducing new technology, or changing production processes. It results in meeting consumers' needs with more environmentally compatible, quality products and services. As well as reducing pollution, this strategy also generates tangible economic savings for a business enterprise by improving the overall efficiency of production.

Within the present inventory the international declaration on cleaner production and the establishment of cleaner production centres is taken into account (#2; #3). Also the EU Environmental Technologies Action Plan (ETAP, #35) is worthwhile mentioning in this respect.

## **3.4 Specific Materials or Phases in the Chain**

Many initiatives have their origins in a certain stage in the life-cycle chain of products and materials. Originally starting from consideration of the eco-efficiency of the production of materials or manufactured products such initiatives enlarged their scope taking life-cycle elements into account.

### **3.4.1 *Bio-energy***

One of the areas where recently life cycle perspectives have been applied is the field of bio-energy and biomaterials. The reasons are clear: biofuels can be applied as a substitute for fossil fuels, however, during the production of biofuels negative side-effects occur over the life cycle. The question is how much these side-effects are off-set by the reduction in CO<sub>2</sub>-emissions.

Bio-energy is relevant for this inventory as it can be produced from biomass waste flows. In addition, the discussion on bio-energy contains many elements that are of interest to SMM as the principles that guide the discussion (i.e. the life cycle impacts) conform to SMM.

A comprehensive overview of the many initiatives in this field has been given by van Dam *et al.*, (2006). We have included here in the database the most relevant initiatives at the level of the UN (#10, #23), IEA (#9) and FAO (#8).

### **3.4.2 *Chemicals***

Implementation of Chapter 19 of Agenda 21 has shifted from being a primary undertaking of the Inter-Governmental Forum on Chemical Safety to that of the recently negotiated Strategic Approach to International Chemicals Management (SAICM, #56). SAICM is a policy framework for international action on chemicals that was adopted in 2006 following development by a multi-stakeholder and multi-sectoral process. Successful implementation of SAICM would contribute significantly to meeting the expectations contained in the UNCED Agenda 21 report and to achieving the goal agreed at the 2002 Johannesburg World Summit on Sustainable Development of ensuring that, by the year 2020, chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health. SAICM comprises the following three core components:

- The Dubai Declaration, a political statement, which expresses the commitment to SAICM by Ministers, heads of delegation and representatives of civil society and the private sector;
- The Overarching Policy Strategy, which sets out: the scope of SAICM; the needs it addresses; objectives for risk reduction, knowledge and information, governance, capacity-building and technical cooperation and illegal international traffic; underlying principles; and financial and institutional arrangements; and
- A Global Plan of Action, which sets out proposed “work areas and activities”, is a working tool and guidance document that may be used by all stakeholder groups. It will be further developed during the implementation of SAICM.

SAICM has many proposed actions to address the full life cycle of chemicals and it identifies numerous pertinent scientific, technical and administrative needs for developing countries and countries with economies in transition.

Chemicals are also covered by the Intergovernmental Forum on Chemical Safety (IFCS, #57; #58) which has, amongst others, a database on sustainable production and consumption practices. Also the International Council of Chemical Associations (ICCA) has deployed activities in the sphere of life-cycle assessment (#60). Within the EU REACH (#67) has also entailed a number of studies and proposals which have partly been based on life-cycle assessment. Cement is explicitly considered in the initiative by the WBCSD (#53).

### **3.4.3 Metals**

The Yale University (USA) Stocks and Flows Project (#66) is focused on the global flows of important metals. The importance of metals in the world economy makes it important to understand their stocks and flows. More specifically, three issues are worthy of attention:

- The historical reservoir for the materials used by our technological society has been virgin stocks (ore bodies, mineral deposits, and the like). For a variety of reasons, those stocks may become inadequate or unavailable at some times or places in the future. Other reservoirs exist, however, a principal one being materials or products in use, stored, or discarded over the years by corporations and individuals. These reservoirs might become very important in the next few decades of rapid population growth and resource and energy use;
- A second consideration is that society's use of energy in the extraction and processing of materials is part of the general evaluation of energy limits and energy provisioning; and
- A third issue is that the loss of resources by dissipation or landfilling can sometimes be problematic from an environmental standpoint.

These issues can be addressed by developing cycles for the stocks and flows of materials of interest, particularly if the cycles are temporally and spatially resolved. These comprehensive cycles, and their interpretation and implications, will be published in the scholarly literature as they are completed.

### **3.4.4 Natural Resources**

Several initiatives have been employed that take the mining and metals sector as a starting point, by the WBCSD (#57, now finished) and the ICMM (#51 and #52). ICMM has developed a Sustainable Development Framework with 10 key principles which its Members are committed to implementing. To

facilitate effective reporting of the industry performance the ICMM cooperated with the Global Reporting Initiative to develop a Mining and Metals Supplement to the GRI Guidelines.

Life-cycle initiatives have gained interest by the mining and metals sector as a way of minimizing environmental impacts along the value chain of materials. By maximizing the economic value gained from the resources, impacts per unit of service (or product) may decline. ICMM has developed guidelines on materials stewardship to promote the practical implementation of maximising value in the minerals and metals life cycle.

Two initiatives in the field of sustainable resource management (SRM) bear mentioning in this inventory of SMM initiatives given the potential linkages and synergies between the two fields. The EU Thematic Strategy on the sustainable use of natural resources (#31) defines a range of actions for the next 25 years to decouple the environmental impacts of the use of natural resources from economic growth. The Thematic Strategy Resources is supported with life cycle methods and data by the EC's European Platform on LCA (#11). Such issues have also been identified by the UN/SETAC Life-Cycle Initiative as being important (#17).

The EU Thematic Strategy on the Sustainable Use of Natural Resources proposes to establish a panel (#20) in 2007. As such, UNEP launched the International Panel for Sustainable Resource Management. Its main tasks will be to provide scientific assessment on the sustainable use of natural resources. The Panel will identify knowledge and capacity gaps in developing and transition countries and suggest initiatives to overcome obstacles, by means of capacity building, training, education, demonstration projects and formation exchange.

#### ***3.4.5 End-of-life Management***

Both at the level of EU and other organisations initiatives have been undertaken to enlarge issues about waste management with life cycle considerations. One example is the Japanese 3R-initiative dealing with waste prevention from a life-cycle perspective (#6). Within the EU several initiatives (i.e. #40-43), originating from a waste management perspective, have included life cycle elements in their operations. The EU Thematic Strategy on the Prevention and Recycling of Waste (#44) might become especially interesting in the future as policy objectives outlined here are closely linked to the OECD-SMM objectives.

### **3.5 Specific Policy Instruments**

Finally, initiatives can be headed according to the policy instruments that they aim to establish. We can distinguish here initiatives on green procurement and initiatives on eco-labelling. In addition to these two areas which have been included into the database, we briefly touch upon extended producer responsibility and economic instruments as two other areas which we find important in this field as several initiatives might consider these instruments in the future.

#### ***3.5.1 Green Procurement***

Green procurement is important for SMM as sustainable procurement may imply the reduction of resource consumption and thereby the reduction of waste generation (Government of Canada, 2006).

Much of the focus on green procurement has been on the public sector, which is an important market force. It accounts for a significant fraction of demand (Marron, 2003). Besides, governments

might encourage businesses and households to follow similar purchasing policies<sup>5</sup>. Green public procurement procedures and initiatives have been applied by the OECD (#33), and the UN (#13; #16) which aim to set out guidelines for green public procurement and aim to stimulate such initiatives. Many more initiatives exist at the national and local level.

### **3.5.2 *Eco-labelling***

Over the years, the number of eco-labelling programmes has grown significantly. They cover lots of product categories, ranging from household cleaning goods to natural resource based products. Eco-labelling means that products which meet specific environmental standards are certified and labelled with a special symbol. The aim is to change consumer behaviour by providing information on the environmental impact of a product. Simultaneously, eco-labels would offer a market incentive for producers to improve environmental management. It is therefore no coincidence that eco-labels are stimulated, especially from NGOs (the Global Eco-labelling Network, #54).

There are different types of eco-labelling programmes. They vary, among others, in origin, degree of voluntariness, product and process coverage, certification procedures and scope of influence.<sup>6</sup> To date, no eco-label exclusively focuses on waste reduction and management. However, labelling schemes that assess products' life-cycles are relevant for actors involved in this sector. Their 'cradle to grave' approach includes the environmental impact of products' reuse and disposal. Many eco-labels take such a life-cycle perspective, particularly those covering industrial-based products, but not all. Some solely focus on the production stage, for instant labels on wood (FSC) and fish (MSC). In addition to life-cycle approaches, eco-labels concerning tourism facilities are worth noticing. They also include criteria on waste reduction, i.e. material use, and waste separation.

### **3.5.3 *Extended Producer Responsibility (EPR)***

Some initiatives on cleaner products stem from the concept of extended producer responsibility. EPR is a policy approach in which producers of consumer products are required to accept significant responsibility for the management/disposal of those products after their use (OECD, 2001).

EPR is based on the idea that if manufacturers are more directly made to pay for the waste created by their products, they will design them differently to reduce that waste (and reduce costs). A wide range of programmes (both mandatory and voluntary) fall under the Extended Producer Responsibility umbrella, including "take back" programmes and deposit/refund systems.

EPR programmes are now well-established internationally and many initiatives exist in many countries. The OECD WGWPR has been actively involved in the EPR-programmes. It is however, still very unclear to which extent EPR programmes result in waste prevention, e.g. through changes in product design. Most EPR programmes do, however, show a clear improvement in recycling rates (OECD, 2005).

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<sup>5</sup> Several ways of positive and negative interaction between public and private initiatives are explored in Marron (2003).

<sup>6</sup> In response, the International Organisation for Standardization (ISO) defined three generally accepted types of eco-labels. Type I labels are based on voluntary, life-cycle assessment of products' environmental performance through independent third party certification. They are awarded to environmentally preferable products. Type II labels involve environmental claims made by manufacturers, importers or retailers themselves. Type III labels are neutral. They list product information but contain no judgment (IISD/UNEP, 2005). The design of most eco-labels comes closest to ISO type I, even if they assess only part of product's life-cycles.

EPR programmes are often specified to specific products and have therefore not been included in this inventory - over 25 countries have systems for packaging recovery and recycling (e.g., European Union Packaging and Packaging Waste Directive; Ontario, Canada's CSR system; bottle deposit legislation in U.S. states). There are also programmes to promote recovery and recycling of batteries, paints, automobiles, tires and electronic equipment. While most are in Europe and North America, they are being expanded to Eastern European countries that join the EU, as well as in Asia and Latin America. The revenues from such programmes are often earmarked for waste management, especially recycling projects.

#### ***3.5.4 Taxation of Materials***

Governments may tax materials, or specific materials in products, in order to reduce their use. To date, there is only one product group that is clearly taxed as an input in products or production processes: ozone depleting substances. The US issued an excise tax that applied to bulk imports of class I ozone depleting substances (e.g. CFCs, halons, carbon tetrachloride, methyl chloroform), and products containing and manufactured with those substances. Countries like Australia focus on inputs. They charge the import of ozone depleting chemicals and use revenues to finance awareness programmes.

Taxes on packaging provide another example of taxation aimed to reduce the use of certain materials or even abandon certain types of packaging. In Iceland, Hungary, Denmark and Belgium there exists a tax on (beverage) packages made of glass, plastic, paper and/or cardboard. Norway taxes non-refillable beverage containers and Sweden poses a fee on imported aluminium cans. Denmark, Italy and Ireland have placed a tax on plastic carrier bags in order to reduce their use.

#### 4. CONCLUSIONS

When the individuals working on this inventory began their task, none had a full appreciation for the number and diversity of projects that would be included. They simply wanted to be able to take advantage of the work that others are doing and not repeat it. Indeed, the number of projects described in this document is a testament to the importance that many people around the world place on the issue we are calling sustainable materials management. The initiatives listed in this inventory are diverse with respect to scope, number of activities and organisational strength. Many initiatives have only started during the last two years. It is difficult to assess which initiatives will be most influential. Based on the level of ambition and current activities, some arguments can be made that the initiatives from UNEP on Sustainable Production and Consumption form a coherent framework and might become important for SMM in the future. Also the EU triangle with Thematic Strategies on waste prevention and natural resources and the communication on Integrated Product Policy might become an important cornerstone for further activities relevant to SMM. Furthermore, the 3R initiative by G8 and Japan might become an important analytical framework in the near future.

This listing and the projects it describes will be useful to the OECD as it plans future work in the area of sustainable materials management. It will also be useful to the individual member countries and to non-OECD member countries as well. Finally, it should be useful to the people working on the projects themselves, so they can know what others are doing, plan their work accordingly and join forces where that appears to be a good idea.

## REFERENCES<sup>7</sup>

### Cited References

- Dam van J., M. Junginger, A. Faaij, I. Jürgens, G. Best and U. Fritsche (2006), Overview of recent developments in sustainable biomass certification, Paper written within the frame of IEA Bioenergy Task 40 (preliminary version)..
- EC (2001), Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions On the sixth environment action programme of the European Community, Environment 2010: Our future, Our choice - The Sixth Environment Action Programme, COM/2001/0031, Brussels.
- EC (2004), Buying green: A handbook on environmental public procurement, European Commission, Luxembourg.
- Government of Canada (2006), Greening Government – Procurement, [www.greeninggovernment.gc.ca](http://www.greeninggovernment.gc.ca).
- IISD/UNEP (International Institute for Sustainable Development/United Nations Environment Programme) (2005), *Environment and Trade. A handbook*. 2<sup>nd</sup> edition, Geneva : UNEP Division of Technology, Industry and Economics, Environment and Trade branch, Winnipeg.
- Koopmans, G. and P. de Krom (2005), *Motie duurzame bedrijfsvoering overhead*, Den Haag: Kamerstukken II, vergaderjaar 2004–2005, 29800-XI, Nr. 130.
- Korteland, M. H. (2006), Eco-labelling: to be or not to be? Desirability of eco-labels from an environmental and poverty perspective, Report for the Dutch Ministry of Foreign affairs, Amsterdam, Vrije Universiteit, Institute for Environmental Studies.
- Marron, D. (2003), “Green Public Purchasing as an Environmental Policy Instrument” in OECD, *The Environmental Performance of Public Procurement - Issues of Policy Coherence*, OECD, Paris.
- Melser, D. and P. E. Robertson (2005), “Eco-labelling and the Trade-Environment Debate”, *The World Economy* 28: 49-62.
- Milieudefensie (2006), Resultaten onderzoek: Fout hout in bouwprojecten overhead, Amsterdam.
- OECD (2001), *Extended Producer Responsibility: A Guidance Manual for Governments*, OECD, Paris.
- OECD (2003), *The Environmental Performance of Public Procurement - Issues of Policy Coherence*, OECD, Paris.

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<sup>7</sup> References to documents and links in the Annex are not included here.

ENV/EPOC/WGWPR(2007)4/FINAL

OECD (2005), *EPR Policies and Product Design: Economic Theory and Selected Case Studies*, ENV/EPOC/WGWPR(2005)9/FINAL, <http://www.oecd.org/env/waste/>.

Sheng, P. S., D. Dornfeld and P. Worhach (1995), "Integration Issues in Green Design and Manufacturing", *Manufacturing Review*, June 1995.

UNEP (2005), *The Trade and Environmental Effects of Eco-labels: Assessment and Response*, DTI/0756/GE,

UNEP Division of Technology, Industry and Economics, Economics and Trade Branch, Geneva.

Von Weizsäcker E, Lovins A. B., Lovins L. H. (1997), *Factor Four. Doubling Wealth, Halving Resource Use*. The New report to the Club of Rome, Earthscan, London.

### **Additional Information Sources**

As stated in the introductory chapter, this inventory is not exhaustive. Many more initiatives which take into account life-cycle aspects exist. Especially at the national and local level initiatives exist which have not been included in this overview. There are several convenient databases on Internet which can be searched through looking for particular initiatives. They are listed below.

#### **1. UN/World Bank Sustainable Procurement**

<http://www.uneptie.org/pc/sustain/policies/green.asp>

*What it is:* Database to show what criteria are used by organisations to apply sustainability to their procurement practices

*Contains:* About 100+ initiatives on Green Procurement from supranational, national, local or business authorities. Search terms: organisations

#### **2. OECD/EEA database on instruments used for environmental policy and natural resources management**

<http://www2.oecd.org/ecoinst/queries/index.htm>

*What it is:* an overview of economic instruments (environmentally related taxes, fees and charges, tradable permit systems, deposit refund systems, environmentally motivated subsidies) and voluntary approaches in OECD countries for the environment and natural resources used in environmental policy in OECD Member countries, EEA member countries and countries otherwise co-operating with EEA, not being members of OECD.

*Contains:* Over 1,000 economic instruments (taxes, subsidies, tradable emission permits) Search terms: Country, ISIC-code, COICOP-codes, Environmental Domain (Water Pollution; Air Pollution; Climate Change; Land Contamination; Waste Management; Natural Resource Management; Noise; Ozone Layer Protection; Energy Efficiency; Transport; Land Management).

Remarks: There seem no economic instruments for specific lifecycle aspects.

#### **3. UN Sustainable Consumption and Production (SCP) initiatives**

<http://webapps01.un.org/dsd/scp/public/Welcome.do?gotoScp=Go+to+the+SCP+database>

*What it is:* The Sustainable Consumption and Production (SCP) database provides a basis for reviewing international cooperation mechanisms on SCP.

It can also serve as a source of information on such mechanisms and activities for the use of national and regional initiatives seeking international cooperation. It identifies the organizations active in each area and the nature of their activities, and indicates sources of further information.

*Contains:* over 100 initiatives covering the scope of "sustainable production and consumption". Search terms: Geographic scope (regions or individual countries); Areas of work (e.g. fields of interest, about 40 items can be selected); Activity types and Target groups.

#### **4. UN Best Practices Database**

<http://www.bestpractices.org/>

*What it is:* Searchable database that contains over 2,650 proven solutions from more than 140 countries to the common social, economic and environmental problems of an urbanizing world. It demonstrates the practical ways in which public, private and civil society sectors are working together to improve governance, eradicate poverty, provide access to shelter, land and basic services, protect the environment and support economic development.

*Contains:* Over 2600 initiatives, often at local community level Search terms: Free text search. Lifecycle returned 0 hits; Waste returned 121 hits.

**5. EU Sustainable Production and consumption website**

<http://forum.europa.eu.int/Public/irc/env/wssd/home>

*What it is:* This website provides selected examples on sustainable production and consumption policies and initiatives in a number of EU Member States. It is not a comprehensive list of all existing policies and initiatives from the contributing Member States. It was launched at The European Stakeholder Meeting on Sustainable Consumption and Production in Ostend 24-26 November 2004.

*Contains:* Unknown number of initiatives. Search terms: Free text search. Lifecycle returned 2 hits; Waste returned 23 hits. Remarks: Database is not updated. Most information reflects from 2003-2005.

**6. EEA's Wastebase**

<http://waste.eionet.europa.eu/wastebase>

*What it is:* WasteBase is an electronic database with information on waste and waste management in Europe. This includes waste quantities, policies, plans, strategies, and instruments.

*Contains:* About 200 waste management plans and success stories on waste prevention. Search terms: Free text search. Life cycle returned 3 hits in the section "Waste management plans". There is also a part devoted to "success stories in waste management" which can search in topics like ecodesign, efficient consumption, etc.

**7. INFOCAP**

<http://www.who.int/ifcs/infocap/>

*What it is:* Infocap contains examples related to chemicals management.

*Contains:* About 600 entries, mostly on projects related to chemicals management, a few policy plans and training and guidance documents.

**8. Database on sustainable consumption and production on North America**

<http://nasca.icspac.net/db/>

*What it is:* The NASCP Database aims at facilitating cooperation among organizations in Canada, United States and Mexico that are interested in promoting sustainable consumption and production.

*Contains:* About 200 initiatives related to SCP in North America. Search terms include sector, focus area, country, organisations and tools. Life cycle returned 45 initiatives from merely governmental and academic initiatives.

**9. EC JRC's Directory of life-cycle databases, software tools, and service providers**

<http://lca.jrc.ec.europa.eu>

*What it is:* This online directory provides independent, well structured, and detailed information on service, software and data resources in the area of life cycle thinking in support of business and public authorities.

*Contains:* Descriptive and multiple classifying information and contact data on presently 100 service providers, 40 databases, and 26 software tools

## ANNEX

## A. List of the Initiatives

Nr.	Initiative title	Organisation
1	Nordic Roundtable on Business Relations and Sustainable Consumption and Production in a North/South perspective	GRIP
2	National Cleaner Production Centres	UNEP
3	International Declaration on Cleaner Production	UNEP
4	Asia Pacific Roundtable for Sustainable Consumption and Production (APRSCP)	UNEP
5	UNEP's Sustainable Building & Construction Initiative (SBCI)	UNEP
6	3-R initiative (Japan, G8)	G8
7	Sustainable Production and Consumption (SUSPROC) activities of JRC-IPTS	JRC-IPTS
8	International Bio Energy Platform (IBEP)	FAO
9	Bio energy technology	IEA
10	BioTrade initiative	UNCTAD
11	European Platform on Life-Cycle Assessment JRC-IES	RC-IPTS
12	UNEP's Product Service Systems and Sustainability	UNEP
13	Sustainable Public Procurement (Switzerland) - 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns: The Marrakech Process	UN DESA/UNEP consortium
14	Sustainable Building & Construction (Finland) - 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns: The Marrakech Process	UN DESA/UNEP consortium
15	Sustainable Products (United Kingdom) - 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns: The Marrakech Process	UN DESA/UNEP consortium
16	Sustainable Lifestyles (Sweden) - 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns: The Marrakech Process	UN DESA/UNEP consortium
17	UNEP/SETAC Life Cycle Initiative	UNEP/SETAC consortium
18	UNEP's Design for Sustainability (D4S) Activities	UNEP
19	FAO sustainable Development (activities)	FAO
20	International Panel on the Sustainable Use of Natural Resources	UNEP/EC
21	UNEP/IAPSO Product Criteria Database	UNEP
22	SPC initiatives database - 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns: The Marrakech Process	UN DESA/UNEP consortium
23	Biofuels initiative	UNCTAD
24	SETAC Professional Interest Group on Life Cycle Assessment	EMPA
25	Life Cycle Management International Conference	Swiss Federal Institute of Technology (ETH)
26	International Society for Ecological Economists, Research Agenda	International Society for Ecological Economists
27	International Society of Industrial Ecology, Research Agenda	International Society for Industrial Ecology
28	Collaborating Centre on Sustainable Consumption and Production (CSCP) UNEP/WI	UNEP/Wuppertal Institute consortium

29	ConAccount: Coordination of Regional and National Material Flow Accounting for Environmental Sustainability	ConAccount
30	Circular Economy (China)	National Development and Reform Commission - China
31	Thematic Strategy on the sustainable use of natural resources	European Commission
32	Recommendation of the Council on Material Flow Accounting	OECD
33	Recommendation of the Council on Improving the Environmental Performance of Government	OECD
34	Network Sustainable Consumption Research Exchange	European Commission
35	Environmental Technologies Action Plan	European Commission
36	EU Corporate Social Responsibility	European Commission
37	EEA Topic Centre on Resource and Waste Management	EEA
38	Directive 2005/32/EC of European Parliament and Council establishing a framework for the setting of ecodesign requirements for energy-using products	European Commission
39	Integrated Product Policy (IPP)	European Commission
40	Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of life vehicles	European Commission
41	European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste	European Commission
42a	Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE)	European Commission
42b	Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)	European Commission
43	Directive 2006/66/EC of European Parliament and Council on batteries and accumulators and waste batteries and accumulators	European Commission
44	Thematic Strategy on the prevention and recycling of waste	European Commission
45	Sustainable Production and Consumption Working Group	Northern Alliance for Sustainability (ANPED)
46	ICSPAC	ICSPAC
47	Greening of Industry (GIN)	Greening of Industry (GIN)
48	Ceres	Ceres
49	Declaration by the Metals Industry on Recycling Principles	International Council in Mining and Metals (ICMM)
50	Sustainable Development Framework (SDF)	International Council in Mining and Metals (ICMM)
51	Integrated Materials Management (IMM)	International Council in Mining and Metals (ICMM)
52	Mining, Minerals and Sustainable Development (MMSD)	World Business Council for Sustainable Development
53	Cement Sustainability Initiative	World Business Council for Sustainable Development
54	The Global Eco-labelling Network (GEN)	Global Eco-labelling Network (GEN)
55	Eco-efficiency	World Business Council for Sustainable Development
56	Strategic Approach to International Chemicals Management (SAICM)	UNEP
57	North American Sustainable Consumption and Production Database	Intergovernmental Forum on Chemical Safety (IFCS)
58	INFOCAP	Intergovernmental Forum on Chemical Safety (IFCS)
59	SPAC Watch	ICSPAC
60	Global Product Strategy	ICCA
61	ISO 14 000 Family	ISO
62	IEC	International Electrotechnical Commission (IEC)

63	NATO	NATO
64	NAGPI	CEC
65	CIRAIG	Interuniversity Research Centre
66	Yale University Stocks and Flows Project	Yale University
67	Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)	European Commission

**B. Description of the Initiatives**

<b>Nordic Roundtable on Business Relations and Sustainable Consumption and Production in a North/South Perspective</b>				<b>01</b>
<b>Organisation</b> GRIP - Nordic Ad-Hoc group on SCP consortium. GRIP is the Norwegian foundation for Sustainable Consumption and Production.		<b>Description</b> GRIP was established by the Norwegian Ministry of the Environment. GRIP promotes and supports sustainable production and consumption patterns		
<b>Description</b> The Nordic Roundtable contributes to formulation of UN and EU policies on sustainable production and consumption. Experts from business, governments, academia and NGOs exchanged experiences from initiatives that have been taken to promote SCP.				
<b>Overall objective</b> Find out how business relations in a North/South perspective can contribute to more sustainable production and consumption patterns and what governments and business should do to promote necessary changes				
<b>Specific goals</b> Give concrete examples of what has been done by business. Identify the driving forces and barriers and identify options to strengthen the driving forces and lower the barriers				
<b>Results</b>	The results from the roundtable have been published as a report, which is being used to promote international cooperation in this area			
<b>Website Reports</b>	<a href="http://www.grip.no/nordicroundtable2005/">http://www.grip.no/nordicroundtable2005/</a>			
<b>Initiative type Instruments</b>	North/South business relations and Sustainable Consumption and Production: A driving force for sustainable development? (Norden, 2005) <a href="http://www.grip.no/nordicroundtable2005/2005-04-08%20report-final.pdf">http://www.grip.no/nordicroundtable2005/2005-04-08%20report-final.pdf</a> Networking			
<b>Starting year</b>	2005	<b>Ending year</b>	2005	
<i>Scope of the initiative</i>				
<b>Sector</b>	Not specific, focus on business sector.	<b>Product</b>	Not specific	
<b>Material</b>	Not specific	<b>Waste</b>	Not specific	
<b>Env. impacts</b>	All	<b>Socio-econ. impacts</b>	Taken into account. Initiative aims to minimize environmental impact under present technological and economic limits.	
<b>Geographical focus</b>	Target: Nordic countries impact assessment: Location independent / World	<b>Indicators</b>	Various, not explicitly mentioned.	
<i>Assessment</i>				
<b>Usefulness for SMM</b> Networking of results and good examples from activities on Sustainable Production and Consumption in businesses				
<b>Relation to other initiatives</b> 10-year framework of programmes on Sustainable Consumption and Production, SCP				
<b>Contact</b> Mr. M. Standley: <a href="mailto:martin.standley@grip.no">martin.standley@grip.no</a>				

<b>National Cleaner Production Centres</b>		<b>02</b>	
<b>Organisation</b> United Nations Industrial Development Organisation (UNIDO); United Nations Environment Programme, Division of Technology, Industry, and Economics (UNEP-DTIE), Production and Consumption Branch		<b>Description</b> UNEP is the designated authority of the United Nations in environmental issues at the global and regional level	
<b>Description</b> The UNIDO/UNEP Programme for National Cleaner Production Centres (NCPCs) is a unique programme of capacity building to help development of the Cleaner Production concept at the national level in developing countries and countries in transition			
<b>Overall objective</b> The purpose of an NCPC is to build local capacity to implement Cleaner Production in developing countries and economies in transition. NCPC's target primarily is to transfer know-how and not to transfer only technology			
<b>Specific goals</b> Raise awareness of Cleaner Production through (i) Demonstrate effectiveness; (ii) Train local experts; (iii) Help to obtain financing for investments; (iv) Disseminate technical information; (v) Provide policy advice			
<b>Results</b>	There are 24 centres established since 1994		
<b>Website</b>	<a href="http://www.uneptie.org/pc/cp/ncpc/activites.htm">http://www.uneptie.org/pc/cp/ncpc/activites.htm</a>		
<b>Reports</b>	<a href="http://www.uneptie.org/pc/cp/reportspdf/NCPCbkgnd.pdf">http://www.uneptie.org/pc/cp/reportspdf/NCPCbkgnd.pdf</a>		
<b>Initiative type</b>	Networking		
<b>Instruments</b>			
<b>Starting year</b>	1994	<b>Ending year</b>	Ongoing
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific (in developing countries)	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	All	<b>Socio-econ. impacts</b>	Taken into account as the initiative aims to minimize environmental impact under present technological and economic limits
<b>Geographical focus</b>	Target: Global (developing countries) impact assessment: Location independent/World	<b>Indicators</b>	Various, not explicitly men- tioned.
<b>Assessment</b>			
<b>Usefulness for SMM</b> A network for promotion of cleaner production, if applied to process chains (i.e. products and services), is useful for SMM			
<b>Relation to other initiatives</b> International Declaration on Cleaner Production			
<b>Contact</b> Programme Officer G. Clark <a href="mailto:garrette.clark@unep.fr">garrette.clark@unep.fr</a>			

<b>International Declaration on Cleaner Production</b>		<b>03</b>	
<b>Organisation</b> United Nations Environment Programme, Division of Technology, Industry, and Economics (UNEP-DTIE), Production and Consumption Branch		<b>Description</b> UNEP is the designated authority of the United Nations in environmental issues at the global and regional level	
<b>Description</b> The International Declaration is a voluntary but public commitment to the strategy and practice of Cleaner Production			
<b>Overall objective</b> To achieve economic, environmental and health/safety benefits by promotion of Cleaner Production i.e. the minimum environmental impact under present technological and economic limits			
<b>Specific goals</b> Consensus on a Cleaner Production 'vision': (i) catalyse implementation of strategies, tools, technologies, institutes; (ii) Support the growing network of organisations; (iii) training and education; (iv) demonstration projects and technical assistance			
<b>Results</b>	The signatory list provides an overview of the signatory organisations, organised by signatory category. <i>see</i> at: <a href="http://www.uneptie.org/pc/cp/declaration/sig_list.htm">http://www.uneptie.org/pc/cp/declaration/sig_list.htm</a> Signatory feature shows what signatories have done in the Implementation, <i>see</i> at: <a href="http://www.uneptie.org/pc/cp/declaration/feature.htm">http://www.uneptie.org/pc/cp/declaration/feature.htm</a> <a href="http://www.uneptie.org/pc/cp/declaration/home.htm">http://www.uneptie.org/pc/cp/declaration/home.htm</a>		
<b>Website</b>			
<b>Reports</b>	Networking		
<b>Initiative type</b>	Networking		
<b>Instruments</b>			
<b>Starting year</b>	1998	<b>Ending year</b>	Ongoing
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	All	<b>Socio-econ. impacts</b>	Taken into account as the initiative aims to minimize environmental impact under present technological and economic limits.
<b>Geographical focus</b>	Location independent/World	<b>Indicators</b>	Various, most likely MFA or LCA indicators, Economic indicators (investments, proceeds, value added, etc.)
<b>Assessment</b>			
<b>Usefulness for SMM</b> A network for promotion of cleaner production, if applied to process chains (i.e. products and services), is useful for SMM			
<b>Relation to other initiatives</b>			
<b>Contact</b> Programme Officer G. Clark: <a href="mailto:garrette.clark@unep.fr">garrette.clark@unep.fr</a>			

<b>Asia Pacific Roundtable for Sustainable Consumption and Production (APRSCP)</b>		<b>04</b>	
<b>Organisation</b> United Nations Environment Programme, Division of Technology, Industry, and Economics (UNEP DTIE), Production and Consumption Branch		<b>Description</b> UNEP is the designated authority of the United Nations in environmental issues at the global and regional level	
<b>Description</b> To foster dialog among industry, government, academia, and non-government organizations in the region to address pollution problems and solutions			
<b>Overall objective</b> Provide support that will enhance information flow and human resources development, and will strengthen public/private partnerships to stimulate the promotion and implementation of cleaner production strategies and technologies in the region			
<b>Specific goals</b> (i) To promote technology and information exchange; (ii) develop a network ; (iii) foster regional cooperation; (iv) encourage active participation from interested stakeholders; (v) to serve as a source of analysis and review			
<b>Results</b>	Various notes, handbooks, training material and papers on indicators, methods and tools, <i>see</i> <a href="http://www.aprscp.org/default.htm">http://www.aprscp.org/default.htm</a> . Project on sustainable agriculture named BIGAS (Bayer Crop Science Integrated Environmental Gains Along the Supply Chain for Sustainable Agriculture) addresses environmental, economic and social issues using three recent tools: the Environmental Performance Indicator System (EPI or ISO14031), Environmental Management Accounting (EMA) and Phased EMS (BS8555)		
<b>Website Reports</b>	<a href="http://www.aprscp.org/default.htm">http://www.aprscp.org/default.htm</a>		
<b>Initiative type</b>	Networking		
<b>Instruments</b>			
<b>Starting year</b>	1997	<b>Ending year</b>	Ongoing
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific, concretely there is a sustainable agricultural project	<b>Product</b>	Not specific
<b>Material Env. impacts</b>	Not specific All	<b>Waste Socio-econ. impacts</b>	Not specific Taking into account using the Triple Bottom Line approach
<b>Geographical focus</b>	Target initiative: Regional (Asia and the Pacific) Impact assessment: Location independent/World	<b>Indicators</b>	Various, most likely MFA indicators and LCA indicators, investments, proceeds, value added etc.
<b>Assessment</b>			
<b>Usefulness for SMM</b> A network focussed on sustainability aspects in the Asian pacific region based on a life cycle approach			
<b>Relation to other initiatives</b> World Summit on Sustainable Development, Task force of the 10-year Framework of Programmes on Sustainable Consumption and Production. In addition, various forms of cooperation between APRCP and European Commission			
<b>Contact</b> <a href="mailto:mail@aprscp.org">mail@aprscp.org</a>			

<b>UNEP's Sustainable Building &amp; Construction Initiative (SBCI)</b>		<b>05</b>	
<b>Organisation</b> United Nations Environment Programme, Division of Technology, Industry, and Economics (UNEP DTIE), Production and Consumption Branch		<b>Description</b> UNEP is the designated authority of the United Nations in environmental issues at the global and regional level	
<b>Description</b> In partnership with international leading companies, UNEP initiates the Sustainable Building and Construction Initiative (SBCI) to promote and support sustainable solutions in the building and construction sector			
<b>Overall objective</b> To address (environmental) sustainability in the building and construction sector			
<b>Specific goals</b> (i) Establish global baseline scenarios; (ii) develop tools and strategies; (iii) implement pilot projects; (iv) promoting and support of sustainable building and construction			
<b>Results</b>	Sustainable Building & Construction Initiative Information note, 2006 <a href="http://www.uneptie.org/pc/pc/SBCI/SBCI_2006_InformationNote.pdf">http://www.uneptie.org/pc/pc/SBCI/SBCI_2006_InformationNote.pdf</a>		
<b>Website</b>	<a href="http://www.uneptie.org/pc/home.htm">http://www.uneptie.org/pc/home.htm</a>		
<b>Reports</b>	<a href="http://www.uneptie.org/pc/pc/SBCI/SBCI_2006_InformationNote.pdf">http://www.uneptie.org/pc/pc/SBCI/SBCI_2006_InformationNote.pdf</a>		
<b>Initiative type</b>	Networking		
<b>Instruments</b>			
<b>Starting year</b>	2006	<b>Ending year</b>	
<b>Scope of the initiative</b>			
<b>Sector</b>	Building and construction sector	<b>Product</b>	The entire life span of buildings, energy
<b>Material</b>	Construction materials, fuels	<b>Waste</b>	Building and construction waste; waste of manufacturers
<b>Env. impacts</b>	Focus on CO <sub>2</sub> emissions, energy efficiency and depletion of resources and waste generation. Other areas will be defined later.	<b>Socio-econ. impacts</b>	Benefits of construction sector for society will be part of the global baseline scenarios
<b>Geographical focus</b>	Location independent/World	<b>Indicators</b>	At first CO <sub>2</sub> emissions and energy efficiency
<b>Assessment</b>			
<b>Usefulness for SMM</b> Initiative deals with environmental impacts of building and construction materials, based on a lifecycle approach			
<b>Relation to other initiatives</b> Cooperation with Task Force Sustainable Building & Construction (Fin) - The Marrakech Process			
<b>Contact</b> SBCI secretariat sbci@unep.fr			

3-R initiative (Japan, G8)		06	
<b>Organisation</b> G8 (Group of Eight)		<b>Description</b> The G8 Group is an unofficial forum of the heads of the leading industrialized democracies (Russia, U.S., Britain, France, Japan, Germany, Canada and Italy)	
<b>Description</b> The 3R Initiative is a platform for governments and international organisations			
<b>Overall objective</b> to promote the “3Rs” (reduce, reuse and recycle) globally so as to build a sound-material-cycle society through the effective use of resources and materials and minimization of environmental impacts			
<b>Specific goals</b> 1 Inventory of National Policies and 3Rs 2 Reduction of Barriers to the International Flow of waste 3 Cooperation between Developed and Developing Countries 4 Cooperation among Stakeholders 5 Promotion of Science and Technology Suitable for the 3Rs			
<b>Results</b>	3R Portfolios (country inventories of best practices of 3rs) issues and background papers of meetings from ministers and senior officials on visions and strategies, many examples from Japan on building a Sound Material Cycle Society		
<b>Website</b>	<a href="http://www.env.go.jp/recycle/3r/en/index.html">http://www.env.go.jp/recycle/3r/en/index.html</a>		
<b>Reports</b>	<a href="http://www.env.go.jp/recycle/3r/en/outline/issues_paper.pdf">http://www.env.go.jp/recycle/3r/en/outline/issues_paper.pdf</a>		
<b>Initiative type</b>	All		
<b>Instruments</b>			
<b>Starting year</b>	2005	<b>Ending year</b>	
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific	<b>Product Waste</b>	Not specific
<b>Material</b>	Not specific	<b>Socio-econ. impacts</b>	Not specific
<b>Env. impacts</b>	All, focus is on waste flows, however also a Life Cycle Impact approach is mentioned		Environmental improvements if economic feasible
<b>Geographical focus</b>	Location independent/World	<b>Indicators</b>	Most likely various: e.g. focus on material/waste flow indicators, LCIA indicators (e.g. global warming), recycling rates, eco-efficiency, cost-effectiveness
<b>Assessment</b>			
<b>Usefulness for SMM</b> The network will provide examples on the implementation of activities towards a material-cycle society and its environmental and economic impacts. The reduction of waste by respectively consumption reduction, reuse and recycling is the core issue of the initiative. The network will provide many examples.			
<b>Relation to other initiatives</b> 3Rs is promoted as part of the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns. the Circular Economy concept of China is brought into 3Rs as one of China’s strategies for chain management			
<b>Contact</b> 3R@env.go.jp			

<b>Sustainable Production and Consumption (SUSPROC) activities of JRC-IPTS</b>		<b>07</b>	
<b>Organisation</b> Joint Research Centre - Institute for Prospective Technological Studies (JRC-IPTS) Unit: Competitiveness & Sustainability (C&S)		<b>Description</b> The mission of the IPTS is to provide customer-driven support to the EU policy-making process by researching science-based responses to policy challenges that have both a socio-economic and a scientific or technological dimension.	
<b>Description</b> SUSPROC supports the implementation and further development of the EU strategy for sustainable development, the EU Environmental Action Plan and the integration of environmental concerns in other European policy areas through prospective socio- and techno-economic research and method development.			
<b>Overall objective</b> To support the policy-making process related to specific priority issues identified in the European Union's SDS (Sustainable Development Strategy) and EAP (Environmental Action Plan): the sustainable use of resources and environment and health.			
<b>Specific goals</b> <ul style="list-style-type: none"> <li>– Identification, characterisation and assessment of technological options for sustainable production and consumption.</li> <li>– Development of Environmentally Extended Input-Output tools for policy analysis Assessment of the environmental improvement potential of products and of related policy measures.</li> <li>– Methodology development and techno-economic analysis related to the development and implementation of waste policies.</li> <li>– Prospective analysis on the interactions between innovation, competitiveness and employment.</li> <li>– Cost-effectiveness and cost-benefit analysis to support impact assessment of policies, measures and technologies.</li> </ul>			
<b>Results</b>	Publications on clean technologies, environmental improvement potential of products, , regulation & innovation & competitiveness, waste, environment policy analysis		
<b>Website Reports</b>	<a href="http://www.jrc.es/activities/sustainable_development/susproc.cfm">http://www.jrc.es/activities/sustainable_development/susproc.cfm</a>		
<b>Initiative type</b>	method development, information gathering		
<b>Instruments</b>			
<b>Starting year</b>	1994	<b>Ending year</b>	ongoing
<b>Scope of the initiative</b>			
<b>Sector</b>	All	<b>Product</b>	all
<b>Material</b>	All	<b>Waste</b>	all
<b>Env. impacts</b>	All types of environmental impacts (not specified)	<b>Socio-econ. impacts</b>	yes
<b>Geographical focus</b>	EU	<b>Indicators</b>	Several environmental, social and economic indicators
<b>Assessment</b>			
<b>Usefulness for SMM</b> Method development and scenario analysis on integrated environmental, economic and social assessment of production and consumption patterns.			
<b>Relation to other initiatives</b> The activities of the action related to the sustainable use of resources are concentrated around the Action Plans on Sustainable Production and Consumption and on Sustainable Industrial Policy, the Thematic Strategy on the Sustainable Use of Natural Resources, the Integrated Product Policy and the Thematic Strategy on the Prevention and Recycling of Waste.			
<b>Contact</b> Louis Delgado (action leader)			

<b>International Bio Energy Platform (IBEP)</b>		<b>08</b>	
<b>Organisation</b> Food and Agriculture Organization (FAO), Sustainable Development Department, Research and Technology Division (RTD) - Environment		<b>Description</b> The FAO has the challenge to satisfy people's rights to food security and, at the same time, ensure that the natural resource base remains productive for the future. The FAO's Sustainable Development Department - RTD - Environment advises governments on integrated policy, planning, and management of natural resources	
<b>Description</b> An international platform for organizing and facilitating a multidisciplinary and global approach on Bio energy.			
<b>Overall objective</b> Ensure the delivery of sustainable, equitable and accessible bio energy sources and services.			
<b>Specific goals</b> Provide information for policy and decision making: (i) design bio energy production and utilization systems; (ii) Build institutional capacity; (iii) Enhance access to energy services from bio energy systems; (iv) Facilitate exchange, collaboration and integration			
<b>Results</b>	Expected outcomes: (i) tools/guidelines for decision-makers; (ii) capacity building and training; (iii) strategies institutionalized; (iv) best-management practices facilitated; (v) synergies with other renewable resource usages; (iv) a framework for implementation		
<b>Website</b>	<a href="http://www.fao.org/sd/dim_en2/en2_060501_en.htm">http://www.fao.org/sd/dim_en2/en2_060501_en.htm</a>		
<b>Reports</b>	<a href="ftp://ftp.fao.org/docrep/fao/009/A0469E/A0469E00.pdf">ftp://ftp.fao.org/docrep/fao/009/A0469E/A0469E00.pdf</a>		
<b>Initiative type</b>	information gathering/method development/networking		
<b>Instruments</b>			
<b>Starting year</b>	2006	<b>Ending year</b>	2012
<b>Scope of the initiative</b>			
<b>Sector</b>	(Bio) energy	<b>Product</b>	(Bio) energy
<b>Material</b>	Bio fuels	<b>Waste</b>	Biomass residues and wastes from agriculture, municipal waste and industrial waste
<b>Env. impacts</b>	All, but mainly depletion of fossil fuels and climate change	<b>Socio-econ. impacts</b>	Sustainability criteria are included
<b>Geographical focus</b>	Location independent/World	<b>Indicators</b>	Depletion of resources, emission of global warming gases
<b>Assessment</b>			
<b>Usefulness for SMM</b> A network focussed on sustainability aspects of bio energy taking into account the value chain from biomass resources to bio fuel end products, including cost-effective use of organic residues and wastes as a resource for bio energy			
<b>Relation to other initiatives</b> Bio fuels initiative also from UN, i.e. UNCTAD			
<b>Contact</b> sd-dimensions@fao.org			

<b>IEA Bioenergy Technology</b>		<b>09</b>	
<b>Organisation</b> International Energy Agency (IEA)		<b>Description</b> The International Energy Agency (IEA) is an autonomous body within the OECD to advise 26 Member countries in their effort to ensure reliable, affordable and clean energy for their citizens.	
<b>Description</b> IEA Bio energy is an organisation set up in 1978 by the International Energy Agency (IEA) with the aim of improving cooperation and information exchange between countries that have national programmes in bio energy research, development and deployment			
<b>Overall objective</b> IEA Bio energy aims to accelerate the use of environmentally sound and cost-competitive bio energy on a sustainable basis, and thereby achieve a substantial contribution to future energy demands.			
<b>Specific goals</b> To improve cooperation and information exchange between countries that have national programmes in bio energy research, development and deployment. For details on tasks, <i>see</i> at <a href="http://www.ieabioenergy.com/OurWork.aspx">http://www.ieabioenergy.com/OurWork.aspx</a> For details on Task library, <i>see</i> at <a href="http://www.ieabioenergy.com/LibLinks.aspx">http://www.ieabioenergy.com/LibLinks.aspx</a> For details on IEA Bio energy library, <i>see</i> at <a href="http://www.ieabioenergy.com/Library.aspx">http://www.ieabioenergy.com/Library.aspx</a>			
<b>Results</b>	The work of IEA Bio energy is carried out through a series of Tasks, each having a defined work programme.		
<b>Website</b>	<a href="http://www.ieabioenergy.com/">http://www.ieabioenergy.com/</a>		
<b>Reports</b>	<a href="http://www.ieabioenergy.com/Index.aspx">http://www.ieabioenergy.com/Index.aspx</a>		
<b>Initiative type</b>	Networking/information gathering		
<b>Instruments</b>			
<b>Starting year</b>	1978	<b>Ending year</b>	Ongoing
<b>Scope of the initiative</b>			
<b>Sector</b>	(Bio) energy	<b>Product</b>	(Bio) energy
<b>Material</b>	Bio fuels	<b>Waste</b>	Biomass residues and wastes from agriculture, municipal waste and industrial waste
<b>Env. impacts</b>	All, but mainly depletion of fossil fuels and climate change	<b>Socio-econ. impacts</b>	Economic sustainability is taken into account
<b>Geographical focus</b>	Location independent/World	<b>Indicators</b>	Depletion of resources, emission of global warming gases, cost-effectiveness
<b>Assessment</b>			
<b>Usefulness for SMM</b> A network focussed on sustainability aspects of bio energy taking into account the value chain from biomass resources to bio fuel end products, including cost-effective use of organic residues and wastes as a resource for bio energy. The International Energy Agency was founded in 1974 as an autonomous body within the OECD. Membership consists of 25 of the 29 OECD member countries			
<b>Relation to other initiatives</b>			
<b>Contact</b> <a href="http://www.ieabioenergy.com/ContactUs.aspx">http://www.ieabioenergy.com/ContactUs.aspx</a>			

<b>Bio Trade Initiative</b>		<b>10</b>	
<b>Organisation</b> United Nations Conference on Trade and Development (UNCTAD)		<b>Description</b> United Nations Conference on Trade and Development (UNCTAD) promotes the development-friendly integration of Division on International Trade and Commodities (DITC)	
<b>Description</b> Bio Trade refers to those activities of collection, production, transformation, and commercialisation of goods and services derived from native biodiversity under the criteria of environmental, social and economic sustainability			
<b>Overall objective</b> UNCTAD Bio Trade Initiative promotes sustainable Bio Trade in support of the objectives of the Convention on Biological Diversity			
<b>Specific goals</b> To set up programmes that enhance the capability of developing countries to produce value-added products and services derived from biodiversity (e.g. forestry), for both domestic and international markets			
<b>Results</b>	At a regional and national level Bio Trade assists developing countries in the formulation and implementation of National Bio Trade Programmes. Criteria are developed to certify sustainable Bio Trade projects		
<b>Website</b>	<a href="http://www.biotrade.org/index.htm">http://www.biotrade.org/index.htm</a>		
<b>Reports</b>	<a href="http://www.biotrade.org/BTFP/BTFP-docs/Concept_Notes/UNCTAD_MEA_Workshop_C">http://www.biotrade.org/BTFP/BTFP-docs/Concept_Notes/UNCTAD_MEA_Workshop_C</a>		
<b>Initiative type</b>	Networking		
<b>Instruments</b>			
<b>Starting year</b>	1996	<b>Ending year</b>	?
<b>Scope of the initiative</b>			
<b>Sector</b>	Mainly agricultural, forestry and fishery sector in developing countries	<b>Product</b>	(Natural) biological resources
<b>Material</b>	Biomass, (natural) biological resources	<b>Waste</b>	
<b>Env. impacts</b>	Mainly biodiversity and depletion of natural biological resources and genetic material.	<b>Socio-econ. impacts</b>	Social and economic sustainability criteria are included
<b>Geographical focus</b>	Focus on countries which are rich in biodiversity and have a clear interest in developing a national capacity to promote biotrade	<b>Indicators</b>	Criteria to protect biodiversity, however indicators are not explicitly mentioned
<b>Assessment</b>			
<b>Usefulness for SMM</b> Sustainable upchain processes of (exotic) biological resources			
<b>Relation to other initiatives</b> Convention on Biological Diversity (CBD); UNCTAD's Plan of Action (Bangkok, 2002, and São Paulo, 2004) Convention on Biological Diversity (CBD); UN Commission on Sustainable Development (CSD); United Nations Millennium Development Goals (MDG); World Summit on Sustainable Development (WSSD)			
<b>Contact</b> <a href="http://www.biotrade.org/Intro/Contacts/bti-contacts.htm">http://www.biotrade.org/Intro/Contacts/bti-contacts.htm</a>			

<b>European Platform on Life Cycle Assessment at JRC-IES</b>		<b>11</b>	
<b>Organisation</b> European Commission, Joint Research Centre - Institute for Environment and Sustainability (JRC-IES) in cooperation with DG Environment, Directorate for Sustainable Development and Integration		<b>Description</b> The mission of the IES is to provide scientific and technical support to EU policies for the protection of the environment contributing to sustainable development in Europe	
<b>Description</b> The project provides scientific and technical support for the development and especially implementation of life-cycle-related policies in the EU dealing with natural resources, products, consumption, and waste. At the same time it supports private business in applying life cycle methods and improves the access to and quality of data.			
<b>Overall objective</b> To improve credibility, acceptance and practice of Life Cycle Assessment (LCA) in business and public authorities, by providing reference life cycle inventory data and recommended methods and life cycle impact assessment factors for LCA work and applications.			
<b>Specific goals</b> Main deliverables are: - European Reference Life Cycle Data System (ELCD) with inventory data and impact assessment factors; - Handbook of technical guidance documents for LCA; - LCA information hub to ease the access to data and methods as well as information resources (third-party data, software tools, and service providers) and to facilitate knowledge exchange.			
<b>Results</b>	News, presentations and minutes at <a href="http://lca.jrc.ec.europa.eu/EPLCA/news.htm">http://lca.jrc.ec.europa.eu/EPLCA/news.htm</a>		
<b>Website</b>	<a href="http://lca.jrc.ec.europa.eu/">http://lca.jrc.ec.europa.eu/</a>		
<b>Reports</b>	<a href="http://lca.jrc.ec.europa.eu/EPLCA/deliverables.htm">http://lca.jrc.ec.europa.eu/EPLCA/deliverables.htm</a>		
<b>Initiative type</b>	Method development, data compilation, networking, information gathering,		
<b>Instruments</b>	Information giving, cooperation.		
<b>Starting year</b>	2005	<b>Ending year</b>	2008
<b>Scope of the initiative</b>			
<b>Sector</b>	all	<b>Product</b>	all
<b>Material</b>	all	<b>Waste</b>	all
<b>Env. impacts</b>	All types of environmental impacts	<b>Socio-econ. impacts</b>	not covered
<b>Geographical focus</b>	location independent, world, EU	<b>Indicators</b>	Life-cycle impact assessment indicators
<b>Assessment</b>			
<b>Usefulness for SMM</b> Supporting business and public authorities in Europe with reference data and recommended methods on Life Cycle Assessment (LCA)			
<b>Relation to other initiatives</b> To support the implementation of the Thematic Strategies on the Prevention and Recycling of Waste and on the Sustainable Use of Natural Resources, the Integrated Product Policy (IPP) Communication and the preparation of the upcoming Sustainable Consumption and Production (SCP) Action Plan.			
<b>Contact</b> European Platform on Life Cycle Assessment <a href="http://lca.jrc.ec.europa.eu">http://lca.jrc.ec.europa.eu</a> <a href="mailto:lca@jrc.it">lca@jrc.it</a>			

UNEP's Product Service Systems and Sustainability		12	
<b>Organisation</b> United Nations Environment Programme, Division of Technology, Industry, and Economics (UNEP DTIE), Production and Consumption Branch		<b>Description</b> UNEP is the designated authority of the United Nations in environmental issues at the global and regional level	
<b>Description</b> Product Service Systems (PSS) invites business to shift its focus from selling products to selling the utility. A mix of products and services can thereby fulfil the same client demands with less environmental and social impacts			
<b>Overall objective</b> To raise awareness of Product Service Systems (PSS) as a new concept for business to improve their sustainability performance			
<b>Specific goals</b>			
<b>Results</b>	UNEP's publication on Product-Service Systems and Sustainability: Opportunities for sustainable solutions (UNEP, 2002) UNEP's brochure on The Role of Product Service Systems in a Sustainable Society <a href="http://www.uneptie.org/pc/sustain/reports/pss/pss-brochure-final.pdf">http://www.uneptie.org/pc/sustain/reports/pss/pss-brochure-final.pdf</a> Meeting Report: Meeting of the Retail Industry on Sustainable Development (UNEP DTIE, 2002) <a href="http://www.uneptie.org/pc/sustain/reports/Retail/Nov4Mtg2002/MtgReport_RetailSustDevp_Nov4.pdf">http://www.uneptie.org/pc/sustain/reports/Retail/Nov4Mtg2002/MtgReport_RetailSustDevp_Nov4.pdf</a> Sustainable Solutions, Developing Products and Services for the Future (Martin Charter and Ursula Tischner (eds.), 2001), Greenleaf Publishing, Sheffield, UK <a href="http://www.uneptie.org/pc/sustain/design/pss.htm">http://www.uneptie.org/pc/sustain/design/pss.htm</a> <a href="http://www.uneptie.org/pc/sustain/reports/pss/pss-imp-7.pdf">http://www.uneptie.org/pc/sustain/reports/pss/pss-imp-7.pdf</a>		
<b>Website Reports Initiative type Instruments</b>	Networking		
<b>Starting year</b>	2002	<b>Ending year</b>	Ongoing
<b>Scope of the initiative</b>			
<b>Sector</b>	Services (all sectors)	<b>Product Waste</b>	Not specific
<b>Material</b>	Not specific	<b>Socio-econ. impacts</b>	Not specific
<b>Env. impacts</b>	All	<b>Indicators</b>	Not explicitly mentioned
<b>Geographical focus</b>	Location independent/World		Life Cycle Assessment indicators
<b>Assessment</b>			
<b>Usefulness for SMM</b> PSS aims at reducing material consumption, waste generation and environmental impacts by equal deliverance of functions by shifting from products to services			
<b>Relation to other initiatives</b>			
<b>Contact</b> sc@unep.fr			

<b>International Task Force Sustainable Public Procurement (Switzerland) - 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns: The Marrakech Process</b>			
<b>Organisation</b> United Nations Department of Social Affairs, Division for Sustainable Development (UN DESA DSD) and United Nations Environment programme (UNEP).		<b>Description</b> UN DESA is the UN department concerned with standards of living, full employment, and conditions of economic and social progress and development. UNEP is the designated authority of the United Nations in environmental issues	
<b>Description</b> A voluntary initiative lead by a country to promote and support the implementation of Sustainable Public Procurement, by developing tools and supporting capacity building in both developed and developing countries			
<b>Overall objective</b> To promote and support the implementation of Sustainable Public Procurement (SPP), by developing tools and supporting capacity building in both developed and developing countries			
<b>Specific goals</b> Development of a toolkit to implement SPP, research and dissemination, implementation of pilot projects, networking with stakeholders in different countries			
<b>Results</b>	Not publicly accessible yet		
<b>Website</b>	<a href="http://www.uneptie.org/pc/sustain/10year/taskforce.htm">http://www.uneptie.org/pc/sustain/10year/taskforce.htm</a>		
<b>Reports</b>	<a href="http://www.uneptie.org/pc/sustain/resources/MTF/Fact_sheet_MTF_procurement.pdf">http://www.uneptie.org/pc/sustain/resources/MTF/Fact_sheet_MTF_procurement.pdf</a>		
<b>Initiative type</b>	Networking		
<b>Instruments</b>			
<b>Starting year</b>	2006	<b>Ending year</b>	?
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	All	<b>Socio-econ. impacts</b>	Including economic and social aspects (costs, benefits)
<b>Geographical focus</b>	Location independent/World	<b>Indicators</b>	Not explicitly mentioned
<b>Assessment</b>			
<b>Usefulness for SMM</b> A network to support the implementation of SPP in pilot countries. Research on environmental, social, economic and legal aspects of SPP (i.e. chain analysis of up chain processes of materials). Stimulation of cooperation of stakeholders and countries			
<b>Relation to other initiatives</b> World Summit on Sustainable Development, Task force of the 10-year Framework of Programmes on Sustainable Consumption and Production (Marrakech process) cooperation with The Marrakech Task Force - Sustainable Products (United Kingdom)			
<b>Contact</b> Mr P Kristensen <a href="mailto:philip.kristensen@buwal.admin.ch">philip.kristensen@buwal.admin.ch</a>			

<b>International Task Force Sustainable Building &amp; Construction (Finland) - 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns: The Marrakech Process</b>			
<b>Organisation</b> United Nations Department of Social Affairs, Division for Sustainable Development (UN DESA DSD) and United Nations Environment programme (UNEP).		<b>Description</b> UN DESA is the UN department concerned with standards of living, full employment, and conditions of economic and social progress and development. UNEP is the designated authority of the United Nations in environmental issues	
<b>Description</b> A voluntary initiative lead by a country to develop local and national policies and legislation to secure the sustainability of construction, use and maintenance of the built environment.			
<b>Overall objective</b> The development of local and national policies and legislation to secure the sustainability of construction, use and maintenance of the built environment. Main focus on energy (efficiency, savings, renewables)			
<b>Specific goals</b> Activities: background data: mapping out the baseline condition (document research) internal exchange of best and worst practices (workshop, web) research projects on jointly determined issues dissemination of successful policies			
<b>Results</b>	not publicly accessible yet		
<b>Website</b>	<a href="http://www.uneptie.org/pc/sustain/10year/taskforce.htm">http://www.uneptie.org/pc/sustain/10year/taskforce.htm</a>		
<b>Reports</b>	<a href="http://www.uneptie.org/pc/sustain/resources/MTF/SBC_TF_mini_ToR_14Feb06.pdf">http://www.uneptie.org/pc/sustain/resources/MTF/SBC_TF_mini_ToR_14Feb06.pdf</a>		
<b>Initiative type</b>	Networking		
<b>Instruments</b>			
<b>Starting year</b>	2006	<b>Ending year</b>	?
<b>Scope of the initiative</b>			
<b>Sector</b>	Building and construction, transport, energy	<b>Product</b>	Buildings, (renewable) energy
<b>Material</b>	Construction materials (renewable) energy	<b>Waste</b>	Construction waste
<b>Env. impacts</b>	Mainly depletion of fossil fuels and climate change, but also health and fire hazards caused by traditional fuels.	<b>Socio-econ. impacts</b>	Not explicitly mentioned
<b>Geographical focus</b>	Location independent/World	<b>Indicators</b>	Mainly energy efficiency and carbon dioxide emissions
<b>Assessment</b>			
<b>Usefulness for SMM</b> A network to support the implementation of concrete projects that lead to energy efficiency and sustainability of the built environment globally, considering the impacts of the built environment from resource extraction to demolition.			
<b>Relation to other initiatives</b> World Summit on Sustainable Development, Task force of the 10-year Framework of Programmes on Sustainable Consumption and Production (Marrakech process) cooperation with UNEP's Sustainable Building and Construction Initiative (UNEP SBCI)			
<b>Contact</b> Ms K Taipale taipale@hse.fi			

<b>International Task Force Sustainable Products (United Kingdom) - 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns: The Marrakech Process</b>				<b>15</b>
<b>Organisation</b> United Nations Department of Social Affairs, Division for Sustainable Development (UN DESA DSD) and United Nations Environment programme (UNEP).		<b>Description</b> UN DESA is the UN department concerned with standards of living, full employment, and conditions of economic and social progress and development. UNEP is the designated authority of the United Nations in environmental issues		
<b>Description</b> A voluntary initiative lead by a country to raise awareness of product policy as a means of achieving international product development and environmental objectives and to encourage cooperation and innovation on product eco-design				
<b>Overall objective</b> To raise awareness of product policy as a means of achieving international product development and environmental objectives and to encourage cooperation and innovation on product eco-design				
<b>Specific goals</b> Raise awareness of product policy: <ul style="list-style-type: none"> <li>• Support practical product eco-design</li> <li>• encourage national policy to improve the environmental performance of products</li> <li>• Construct and establish practical co-operative projects</li> <li>• Monitor and report progress</li> </ul>				
<b>Results</b>	Not publicly accessible yet			
<b>Website</b>	<a href="http://www.uneptie.org/pc/sustain/10year/taskforce.htm">http://www.uneptie.org/pc/sustain/10year/taskforce.htm</a>			
<b>Reports</b>	<a href="http://www.uneptie.org/pc/sustain/resources/MTF/UK%20TF%20Sustainable%20produ">http://www.uneptie.org/pc/sustain/resources/MTF/UK%20TF%20Sustainable%20produ</a>			
<b>Initiative type</b>	Networking			
<b>Instruments</b>				
<b>Starting year</b>	2005	<b>Ending year</b>	?	
<b>Scope of the initiative</b>				
<b>Sector</b>	Not specific, product manufactures	<b>Product</b>	Not specific	
<b>Material</b>	Not specific	<b>Waste</b>	Not specific	
<b>Env. impacts</b>	All, whole life environmental impacts	<b>Socio-econ. impacts</b>	Not explicitly mentioned	
<b>Geographical focus</b>	Location independent/World	<b>Indicators</b>	Not explicitly mentioned	
<b>Assessment</b>				
<b>Usefulness for SMM</b> a network for development of databases and methods for chain analysis and management				
<b>Relation to other initiatives</b> World Summit on Sustainable Development, Task force of the 10-year Framework of Programmes on Sustainable Consumption and Production (Marrakech process) a response to a number of international gatherings: <ul style="list-style-type: none"> <li>• 3Rs (Reduce, Reuse, Recycle) Conference, Japan</li> <li>• Right Lights 6, Shanghai</li> <li>• G8 Summit, Gleneagles</li> <li>• UN commission on Sustainable Development</li> <li>• UN Marrakech Process</li> </ul>				
<b>Contact</b> Chris.Baker@defra.gsi.gov.uk				

<b>International Task Force Sustainable Lifestyles (Sweden) - 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns: The Marrakech Process</b>				<b>16</b>
<b>Organisation</b> United Nations Department of Social Affairs, Division for Sustainable Development (UN DESA DSD) and United Nations Environment programme (UNEP)		<b>Description</b> UN DESA is the UN department concerned with standards of living, full employment, and conditions of economic and social progress and development. UNEP is the designated authority of the United Nations in environmental issues		
<b>Description</b> A voluntary initiative lead by a country to support implementation of projects on sustainable lifestyles; develop tools and capacity building on education and communication for sustainability; and assembling results and inspiring examples on sustainable lifestyles				
<b>Overall objective</b> Main goal is to develop and support the implementation of sustainable policies and projects that enable the adoption of sustainable lifestyles				
<b>Specific goals</b> Planned outcomes: Communication on Sustainable Consumption such as website, manuals guidelines training courses Implementation of demonstration projects support National policies and action plans on sustainable consumption				
<b>Results</b>	Not publicly accessible yet			
<b>Website</b>	<a href="http://www.unep.org/pc/sustain/10year/taskforce.htm">http://www.unep.org/pc/sustain/10year/taskforce.htm</a>			
<b>Reports</b>				
<b>Initiative type</b>	Networking			
<b>Instruments</b>				
<b>Starting year</b>	2005	<b>Ending year</b>	?	
<b>Scope of the initiative</b>				
<b>Sector</b>	Consumers, lifestyle	<b>Product</b>	Not specific	
<b>Material</b>	Not specific	<b>Waste</b>	Not specific	
<b>Env. impacts</b>	All	<b>Socio-econ. impacts</b>	Economic and social aspects of consumption will be taken into account by the task force as well	
<b>Geographical focus</b>	Location independent/world	<b>Indicators</b>	Based on LCIA methodology	
<b>Assessment</b>				
<b>Usefulness for SMM</b> Networking of results and good examples from ongoing work on sustainable consumption, using life cycle analysis of lifestyles. Support for the implementation of projects at the regional and/or sub regional and national level				
<b>Relation to other initiatives</b> World Summit on Sustainable Development, Task force of the 10-year Framework of Programmes on Sustainable Consumption and Production (Marrakech process)				
<b>Contact</b> Ms G Blomquist <a href="mailto:gunilla.blomquist@sustainable.ministry.se">gunilla.blomquist@sustainable.ministry.se</a>				

UNEP/SETAC Life Cycle Initiative		17	
<b>Organisation</b> United Nations Environment Programme (UNEP) Society of Environmental Toxicology and Chemistry (SETAC)		<b>Description</b> UNEP is the designated authority of the United Nations in environmental issues. SETAC is a non-profit, worldwide professional society engaged in research, development and education of environmental problems and natural resources	
<b>Description</b> International Life Cycle Partnership to enable users around the world to put life cycle thinking into effective practice			
<b>Overall objective</b> To develop and disseminate practical tools for evaluating the opportunities, risks, and trade-offs associated with products and services over their entire life cycle to achieve sustainable development			
<b>Specific goals</b> Collect and disseminate information on data and methods, relation to other tools, successful applications; support LC management; provide a basis for capacity building; facilitate the use of LC based information and methods			
<b>Results</b>	<ul style="list-style-type: none"> <li>- UNEP/SETAC Life Cycle Initiative Publications, <i>see</i> at: <a href="http://lcinitiative.unep.fr/default.asp?site=lcinit&amp;page_id=F14E0563-6C63-4372-B82F-6F6B5786CCE3">http://lcinitiative.unep.fr/default.asp?site=lcinit&amp;page_id=F14E0563-6C63-4372-B82F-6F6B5786CCE3</a></li> <li>- Life Cycle Management (LCM): - Definition study</li> <li>- Life Cycle Inventory (LCI): - Definition study; overview globally available LCI databases</li> <li>- Life Cycle Impact Assessment (LCIA): - Summary of LCIA methods</li> </ul>		
<b>Website</b>	<a href="http://lcinitiative.unep.fr/">http://lcinitiative.unep.fr/</a> <a href="http://www.uneptie.org/pc/sustain/lcinitiative/">http://www.uneptie.org/pc/sustain/lcinitiative/</a>		
<b>Reports</b>	Associated Journal: The international Journal of Life Cycle Assessment		
<b>Initiative type</b>	Networking		
<b>Instruments</b>	Giving information		
<b>Starting year</b>	2002	<b>Ending year</b>	2010
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	All	<b>Socio-econ. impacts</b>	In development
<b>Geographical focus</b>	Location independent/World	<b>Indicators</b>	Environmental impacts, details depend on LCIA methodology used
<b>Assessment</b>			
<b>Usefulness for SMM</b> A network for development of databases and methods for chain analysis and management			
<b>Relation to other initiatives</b> Malmö Declaration Ten years Framework of Programmes on Sustainable Consumption and Production			
<b>Contact</b> <a href="http://lcinitiative.unep.fr/">http://lcinitiative.unep.fr/</a>			

UNEP's Design for Sustainability (D4S) activities		18	
<b>Organisation</b> United Nations Environment Programme, Division of Technology, Industry, and Economics (UNEP DTIE), Production and Consumption Branch		<b>Description</b> UNEP is the designated authority of the United Nations in environmental issues at the global and regional level	
<b>Description</b> Activities related to Eco-design to raise awareness, build capacities and demonstrate practical applications within businesses in developing economies			
<b>Overall objective</b> Activities on Design for Sustainability are to raise awareness, build capacities and demonstrate practical applications within businesses in developing economies			
<b>Specific goals</b> Activities on Design for Sustainability are to raise awareness, build capacities and demonstrate practical applications within businesses in developing economies			
<b>Results</b>	1 Design for Sustainability: A global guide. (in prep) 2 Design for Sustainability: A Practical Approach for Developing Economies (in prep) More publications can be found at: <a href="http://rosinant.antenna.nl/scenet/fimpro?-db=scnetres_.fp3&amp;-format=resources.html&amp;-view">http://rosinant.antenna.nl/scenet/fimpro?-db=scnetres_.fp3&amp;-format=resources.html&amp;-view</a> <a href="http://www.uneptie.org/pc/sustain/design/design-subpage.htm">http://www.uneptie.org/pc/sustain/design/design-subpage.htm</a>		
<b>Website Reports Initiative type Instruments</b>	Networking		
<b>Starting year</b>	2002	<b>Ending year</b>	Ongoing
<b>Scope of the initiative</b>			
<b>Sector</b>	Designers, manufacturers in developing countries	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	All	<b>Socio-econ. impacts</b>	Not explicitly mentioned
<b>Geographical focus</b>	Target group: developing countries Impacts: Location independent/World	<b>Indicators</b>	Most likely Life Cycle Impact Assessment indicators
<b>Assessment</b>			
<b>Usefulness for SMM</b> D4S is an approach which companies can use to improve efficiencies, product quality and market opportunities, while at the same time improving environmental performance. The target group is on developing economies. Eco-design may take into account design issues that are relevant for reuse and/or recycling. The target group is developing economies. D4S is one approach that enables 'leap-frogging' over the resource intensive and pollution generating development patterns that have been followed by developed economies			
<b>Relation to other initiatives</b>			
<b>Contact</b> sc@unep.fr			

FAO sustainable Development (activities)		19	
<b>Organisation</b> Food and Agriculture Organization (FAO) Sustainable Development Department, Research and Technology Division – Environment		<b>Description</b> Food and Agriculture Organization of the United Nations has the challenge to satisfy people’s rights to food security and, at the same time, ensure that the natural resource base remains productive for the future. The FAO’s Sustainable Development Department - Research Technology Division - Environment advises governments on integrated policy, planning, and management of natural resources.	
<b>Description</b> FAO has various research and policy projects related to sustainable agricultural production of food and energy, taking into account environmental, social and economic impacts			
<b>Overall objective</b> An environmental, economical and social sustainable security of food (and energy) globally			
<b>Specific goals</b>			
<b>Results</b>  <b>Website</b> <b>Reports</b> <b>Initiative type</b> <b>Instruments</b>	numerous projects and databases on agriculture and food and energy production, land use, biodiversity, climate change, desertification, erosion etc. <a href="http://www.fao.org/sd/">http://www.fao.org/sd/</a> <a href="http://www.fao.org/sd/">http://www.fao.org/sd/</a> Information gathering		
<b>Starting year</b>		<b>Ending year</b>	
<b>Scope of the initiative</b>			
<b>Sector</b> <b>Material</b>  <b>Env. impacts</b>  <b>Geographical focus</b>	Agriculture biomass, (natural) biological resources All, related to agricultural activities World, but much focus on developing countries	<b>Product</b> <b>Waste</b>  <b>Socio-econ. impacts</b>  <b>Indicators</b>	Food, energy Biomass residues and wastes from agriculture Social and economic research of agricultural sector included remote sensing of e.g. biodiversity, climate change, natural resources, desertification, soil erosion etc. time-series records from over 210 countries and territories covering statistics on prices, production and consumption of materials in on agriculture, fisheries, forestry, nutrition, food aid, land use and population
<b>Assessment</b>			
<b>Usefulness for SMM</b> There are many activities related to Geo information, monitoring and assessment of resources etc. But the activities are not really chain management/analysis			
<b>Relation to other initiatives</b>			
<b>Contact</b> sd-dimensions@fao.org			

<b>International Panel for Sustainable Resource Management</b>			<b>20</b>
<b>Organisation</b> United Nations Environment Programme, Division of Technology, Industry, and Economics (UNEP DTIE), Sustainable Consumption and Production Branch		<b>Description</b> Established by UNEP, with the support of a wide range of governments, the European Commission and representatives from civil society, the new scientific panel is part of an international partnership on resource management.	
<b>Description</b> International scientific panel that will look at the impacts on resources and materials used in all phases of their life cycle.			
<b>Overall objective</b> To contribute to increasing resource-efficient economic growth in all regions in the world, and to assist in decreasing the environmental impacts associated with economic growth (de-coupling) in a life-cycle perspective			
<b>Specific goals</b> Scientific assessment on the use of resources, advice on gathering of information on the use of resources and environmental impacts in a life cycle perspective, advice on capacity building and international knowledge exchange on the use of resources			
<b>Results</b>	Panel launched on 9 November 2007		
<b>Website</b>	<a href="http://www.unep.org/pc/sustain/initiatives/resourcepanel/index.htm">http://www.unep.org/pc/sustain/initiatives/resourcepanel/index.htm</a>		
<b>Reports</b>	information gathering, scientific assessments.		
<b>Initiative type</b>			
<b>Instruments</b>			
<b>Starting year</b>	2007	<b>Ending year</b>	?
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific	<b>Product</b>	Not specific, as final product of natural resources
<b>Material</b>	Not specific, as intermediate material of natural resources	<b>Waste</b>	Not specific
<b>Env. impacts</b>	All, during the full life-cycle of a resource	<b>Socio-econ. impacts</b>	Also social and economic impacts are taken into account.
<b>Geographical focus</b>	Location independent/World	<b>Indicators</b>	Eco-efficiency, environmental impacts (most likely MFA and LCA indicators), economic and social impacts
<b>Assessment</b>			
<b>Usefulness for SMM</b> An international scientific panel to assess the environmental and partly the economic and social aspects for sustainable resource management at the global level.			
<b>Relation to other initiatives</b> Input/output to other programmes, like the 10-year framework on sustainable consumption and production, the G8 3R (reduce, reuse and recycle) Initiative led by Japan, the Chinese circular economy approach, the EU thematic strategy on the sustainable use of natural resources and the UN Millennium Ecosystem Assessment.			
<b>Contact</b> sc@unep.fr			

UNEP/IAPSO Product Criteria Database		21	
<b>Organisation</b> United Nations Environment Programme, Division of Technology, Industry, and Economics (UNEP DTIE), Production and Consumption Branch		<b>Description</b> UNEP is the designated authority of the United Nations in environmental issues at the global and regional level	
<b>Description</b> The database intends to offer a series of procedural and methodological approaches to environmentally sustainable purchasing. It contains listings of environmentally sustainable purchasing initiatives, with a focus on product specific criteria			
<b>Overall objective</b> The primary objective of the database is to function as an international directory on environmentally sustainable procurement			
<b>Specific goals</b> This database intends to offer a series of procedural and methodological approaches to environmentally sustainable purchasing			
<b>Results</b>	Database containing procedural and methodological approaches to environmentally sustainable purchasing		
<b>Website</b>	<a href="http://www.uneptie.org/pc/sustain/policies/green_find.asp">http://www.uneptie.org/pc/sustain/policies/green_find.asp</a>		
<b>Reports</b>	<a href="http://www.uneptie.org/pc/sustain/policies/green_find.asp">http://www.uneptie.org/pc/sustain/policies/green_find.asp</a>		
<b>Initiative type</b>	Information gathering		
<b>Instruments</b>			
<b>Starting year</b>	2001	<b>Ending year</b>	Ongoing
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	All	<b>Socio-econ. impacts</b>	not explicitly mentioned
<b>Geographical focus</b>	Location independent/World	<b>Indicators</b>	Most likely LCA indicators
<b>Assessment</b>			
<b>Usefulness for SMM</b> The database contains examples of SMM, i.e. green purchasing initiatives, and the used procedural and methodological approaches			
<b>Relation to other initiatives</b> Related to Marrakech Task Force - Sustainable Public Procurement			
<b>Contact</b> sc@unep.fr			

<b>Sustainable Consumption and Production initiatives (SCPI) database - 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns: The Marrakech Process</b>				<b>22</b>
<b>Organisation</b> United Nations Department of Social Affairs -Division for Sustainable Development (UN DESA DSD) United Nations Environment programme (UNEP)		<b>Description</b> UN DESA is the UN department concerned with standards of living, full employment, and conditions of economic and social progress and development. UNEP is the designated authority of the United Nations in environmental issues		
<b>Description</b> Database containing initiatives on Sustainable Consumption and Production. Serves as a source for information and possible cooperation				
<b>Overall objective</b> Information exchange on Sustainable Consumption and Production Initiatives all over the world				
<b>Specific goals</b> Review international cooperation Identification of mechanisms, activities and organisations involved in SCPI				
<b>Results</b>	SCP initiatives database is operational			
<b>Website</b>	<a href="http://webapps01.un.org/dsd/scp/public/Welcome.do">http://webapps01.un.org/dsd/scp/public/Welcome.do</a>			
<b>Reports</b>	<a href="http://webapps01.un.org/dsd/scp/public/Welcome.do">http://webapps01.un.org/dsd/scp/public/Welcome.do</a>			
<b>Initiative type</b>	Information gathering			
<b>Instruments</b>				
<b>Starting year</b>	Unknown		<b>Ending year</b>	Unknown
<b>Scope of the initiative</b>				
<b>Sector</b>	Not specific		<b>Product</b>	Not specific
<b>Material</b>	Not specific		<b>Waste</b>	Not specific
<b>Env. impacts</b>	All		<b>Socio-econ. impacts</b>	Included in some of the listed initiatives
<b>Geographical focus</b>	Various geographical scales, depends on initiative, but mainly global		<b>Indicators</b>	Initiative dependent
<b>Assessment</b>				
<b>Usefulness for SMM</b> The database contains initiatives related to consumption and production chain analysis and management				
<b>Relation to other initiatives</b> World Summit on Sustainable Development, Task force of the 10-year Framework of Programmes on Sustainable Consumption and Production (Marrakech process)				
<b>Contact</b> <a href="http://www.un.org/esa/sustdev/contact.htm">http://www.un.org/esa/sustdev/contact.htm</a>				

<b>Biofuels initiative</b>		<b>23</b>	
<b>Organisation</b> United Nations Conference on Trade and Development (UNCTAD)		<b>Description</b> UNCTAD promotes the development-friendly integration of Division on International Trade and Commodities (DITC)	
<b>Description</b> An international expert group to help developing countries increase the production, use, and trade of bio-fuels resources and technology			
<b>Overall objective</b> The aim of the initiative is to help developing countries make the most of their renewable energy potential			
<b>Specific goals</b> Main goals are economic and social development by developing Biofuel activities in developing countries. Land-use and environmental problems will be taken into account			
<b>Results</b>	Sectoral feasibility studies available for a small group of countries. Including an assessment of Projects on Clean Development Mechanism (CDM)		
<b>Website</b>	<a href="http://www.unctad.org/Templates/Page.asp?intItemID=4004&amp;lang=1">http://www.unctad.org/Templates/Page.asp?intItemID=4004&amp;lang=1</a>		
<b>Reports</b>	<a href="http://www.unctad.org/templates/Webflyer.asp?docID=5991&amp;intItemID=1634&amp;lang=1">http://www.unctad.org/templates/Webflyer.asp?docID=5991&amp;intItemID=1634&amp;lang=1</a>		
<b>Initiative type</b>	Networking		
<b>Instruments</b>			
<b>Starting year</b>	2005	<b>Ending year</b>	?
<b>Scope of the initiative</b>			
<b>Sector</b>	Bio energy sector in developing countries	<b>Product</b>	Energy
<b>Material</b>	Bio fuels	<b>Waste</b>	Certified emission reductions (CERs)
<b>Env. impacts</b>	Depletion of fossil fuels, climate change certified emission reductions (CERs)	<b>Socio-econ. impacts</b>	Primary focussed on economic and social issues in developing countries
<b>Geographical focus</b>	Developing countries	<b>Indicators</b>	primary: economic, social, secondary: environmental (land use, climate change) certified emission reductions (CERs)
<b>Assessment</b>			
<b>Usefulness for SMM</b> Mainly relevant for the assessment of different options of treatment of agricultural products and waste for energy production			
<b>Relation to other initiatives</b> The Expert Meeting on the New and Dynamic Sectors of World Trade International Bio Energy Platform from FAO UNCTAD/Earth Council Institute - Carbon Market Programme Clean Development Mechanism, <i>see</i> : <a href="http://unfccc.int/kyoto_protocol/mechanisms/clean_development_mechanism/items/2718.php">http://unfccc.int/kyoto_protocol/mechanisms/clean_development_mechanism/items/2718.php</a>			
<b>Contact</b> <a href="mailto:info@unctad.org">info@unctad.org</a>			

<b>SETAC Professional Interest Group on Life Cycle Assessment</b>		<b>24</b>	
<b>Organisation</b> SETAC (Society of Environmental Toxicology and Chemistry)		<b>Description</b> SETAC is a non-profit, worldwide professional society engaged in research, development and education of environmental problems and natural resources	
<b>Description</b> An international infrastructure to support the mission of the SETAC and SETAC Europe Life-Cycle Assessment (LCA) groups in advancing the science, practice, and application of LCA and related approaches worldwide			
<b>Overall objective</b> To advance the science, practice, and application of LCA to reduce the resource consumption and environmental burdens associated with products, packaging, processes, or activities			
<b>Specific goals</b> Core tasks include planning and organizing LCA sessions and conferences, coordination of topical working groups, preparation and global integration of SETAC LCA publications, and promotion of the UNEP/SETAC Life-Cycle Initiative			
<b>Results</b>	SETAC books on LCA methodology Journal: Integrated Environmental Assessment and Management- Journal: Environmental Toxicology and Chemistry- SETAC meetings, incl. LCA		
<b>Website</b>	<a href="http://www.setac.org/htdocs/who_intgrp_lca.html">http://www.setac.org/htdocs/who_intgrp_lca.html</a>		
<b>Reports</b>	Method development		
<b>Initiative type</b>			
<b>Instruments</b>			
<b>Starting year</b>		<b>Ending year</b>	
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	environmental aspects and potential environmental impacts (e.g. resource use and environmental consequences of releases) throughout a product's life cycle	<b>Socio-econ. impacts</b>	According to the SETAC LCA definition LCA does not address economic considerations or social effects
<b>Geographical focus</b>	Various, depends on method	<b>Indicators</b>	Various, depends on method
<b>Assessment</b>			
<b>Usefulness for SMM</b> Methodology development supporting SMM studies and policies			
<b>Relation to other initiatives</b> Promotion of the UNEP/SETAC Life Cycle Initiative			
<b>Contact</b> SETAC Europe <a href="mailto:setac@setaceu.org">setac@setaceu.org</a>			

<b>Life Cycle Management International Conference 2007</b>		<b>25</b>	
<b>Organisation</b> Swiss Federal Institute of Technology (ETH) Zurich		<b>Description</b> ETH Zurich is a science and technology university in the engineering sciences and architecture, system-oriented sciences, mathematics and natural sciences areas	
<b>Description</b> Bi-annual international conference on Life Cycle Management			
<b>Overall objective</b> Facilitate exchange of knowledge between researchers, academics, and professionals from industrial enterprises and public institutions working on the application and implementation of life cycle approaches, methods and tools for sustainability			
<b>Specific goals</b>			
<b>Results</b>	Articles on various topics are published in the previous LCM 2005 Proceeding Book- LCM2007 has published a preliminary list of sessions in LCM2007		
<b>Website</b>	<a href="http://www.lcm2007.org/">http://www.lcm2007.org/</a>		
<b>Reports</b>	<a href="http://www.etseq.urv.es/aga/lcm2005/index.jsp">http://www.etseq.urv.es/aga/lcm2005/index.jsp</a>		
<b>Initiative type</b>	Method development		
<b>Instruments</b>			
<b>Starting year</b>	2003	<b>Ending year</b>	Ongoing
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific, including waste management and recycling	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	Various, depends on method	<b>Socio-econ. impacts</b>	Economic and sometimes social aspects might be part of the methodology
<b>Geographical focus</b>	Various, depends on method	<b>Indicators</b>	Various, depends on method
<b>Assessment</b>			
<b>Usefulness for SMM</b> Methodology development supporting SMM studies and policies			
<b>Relation to other initiatives</b> LCM2005			
<b>Contact</b> ETH <a href="mailto:info@lcm2007.org">info@lcm2007.org</a> <a href="http://www.lcm2007.org/contact.html">http://www.lcm2007.org/contact.html</a>			

<b>International Society for Ecological Economists, Research Agenda</b>			<b>26</b>
<b>Organisation</b> International Society for Ecological Economists (ISEE)		<b>Description</b> ISEE is a not-for-profit, member-governed, organization dedicated to advancing understanding of the relationships among ecological, social, and economic systems for nature	
<b>Description</b> The International Society for Ecological Economists (ISEE) facilitates understanding between economists and ecologists and the integration of their thinking into a trans-discipline aimed at developing a sustainable world			
<b>Overall objective</b> ISEE is a not-for-profit, member-governed, organization dedicated to advancing understanding of the relationships among ecological, social, and economic systems for the mutual well-being of nature and people			
<b>Specific goals</b> The Society assists its members and ecological economists generally, regional societies of ecological economics, related societies, and other organizations in such matters of common concern as can be dealt with more effectively by united action			
<b>Results</b>	ISEE newsletter- Journal Ecological Economics- listing of EE meetings & conferences- listing of EE research programmes- listing of EE education		
<b>Website</b>	<a href="http://www.ecoeco.org">http://www.ecoeco.org</a>		
<b>Reports</b>	Method development		
<b>Initiative type</b>	Method development		
<b>Instruments</b>	Method development		
<b>Starting year</b>	2001	<b>Ending year</b>	Ongoing
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	Various, depends on method	<b>Socio-econ. impacts</b>	Relationships among ecological, social, and economic systems
<b>Geographical focus</b>	Various, depends on method	<b>Indicators</b>	Various, depends on method
<b>Assessment</b>			
<b>Usefulness for SMM</b> Methodology development supporting SMM studies and policies			
<b>Relation to other initiatives</b>			
<b>Contact</b> International Society for Ecological Economics <a href="http://www.ecoeco.org/about/contact.htm">http://www.ecoeco.org/about/contact.htm</a>			

<b>International Society of Industrial Ecology, Research Agenda</b>			<b>27</b>
<b>Organisation</b> International Society for Industrial Ecology (ISIE)		<b>Description</b> The ISIE promotes industrial ecology as a way of finding innovative solutions to complicated environmental problems, and facilitates communication among scientists, engineers, policymakers and managers	
<b>Description</b> A platform for scientists to promote industrial ecology, i.e. integrate environmental concerns and economic activities			
<b>Overall objective</b> The mission of the ISIE is to promote the use of industrial ecology in research, education, policy, community development, and industrial practices			
<b>Specific goals</b> The mission of the ISIE is to promote the use of industrial ecology in research, education, policy, community development, and industrial practices			
<b>Results</b>	ISIE newsletter- Journal of Industrial Ecology- listing of IE conferences- listing of IE Academic programmes- listing of IE dissertations		
<b>Website</b>	http://www.is4ie.org		
<b>Reports</b>	Networking		
<b>Initiative type</b>	Networking		
<b>Instruments</b>	Networking		
<b>Starting year</b>	2001	<b>Ending year</b>	Ongoing
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific	<b>Product Waste</b>	Not specific
<b>Material</b>	Not specific	<b>Socio-econ. impacts</b>	Various, depends on method
<b>Env. impacts</b>	All	<b>Indicators</b>	Various, depends on method
<b>Geographical focus</b>	Various, depends on method		
<b>Assessment</b>			
<b>Usefulness for SMM</b> Academic discourse, methodology development and case studies supporting SMM studies and policies			
<b>Relation to other initiatives</b>			
<b>Contact</b> Secretary ISIE, is4ie@yale.edu http://www.is4ie.org			

<b>Collaborating Centre on Sustainable Consumption and Production (CSCP) UNEP/Wuppertal Institute</b>		<b>28</b>	
<b>Organisation</b> United Nations Environment Programme (UNEP) Wuppertal Institute (WI)		<b>Description</b> UNEP is the designated authority of the United Nations in environmental issues at the global and regional level. The Wuppertal Institute is a knowledge centre on sustainability with focus on ecology, economy and society	
<b>Description</b> The CSCP is a not-for-profit think-tank and “do-tank” from the collaboration between two institutions: the UNEP and the Wuppertal Institute.			
<b>Overall objective</b> Centre to provide scientific support to activities undertaken by UNEP and other organisations in the field of SCP			
<b>Specific goals</b> Report trends in SCP: ⇒ Contribute to the implementation of policies and measures aimed at SCP patterns ⇒ Support private sectors/consumers in understanding their role in achieving SCP patterns ⇒ Achieve cooperation and leverage with partners			
<b>Results</b>	A newly established organisation that will generate and evaluate initiatives on Sustainable Consumption and Production		
<b>Website</b>	<a href="http://www.scp-centre.org/">http://www.scp-centre.org/</a>		
<b>Reports</b>	<a href="http://www.uneptie.org/pc/sustain/resources/CSCP_Brochure.pdf">http://www.uneptie.org/pc/sustain/resources/CSCP_Brochure.pdf</a>		
<b>Initiative type</b>	Networking		
<b>Instruments</b>			
<b>Starting year</b>	2005	<b>Ending year</b>	Ongoing
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	All	<b>Socio-econ. impacts</b>	Also economic and social aspects will be part of research
<b>Geographical focus</b>	Location independent/World	<b>Indicators</b>	Various, most likely MFA indicators and LCA indicators
<b>Assessment</b>			
<b>Usefulness for SMM</b> CSCP is a research institute focussed on SMM in the areas of both scientific research and project implementation			
<b>Relation to other initiatives</b> 10-year Framework of Programmes on Sustainable Consumption and Production (Marrakech process)			
<b>Contact</b> <a href="http://www.scp-centre.org/DIRECTORY.829.0.html">http://www.scp-centre.org/DIRECTORY.829.0.html</a>			

<b>ConAccount</b> Coordination of Regional and National Material Flow Accounting for Environmental Sustainability		<b>29</b>	
<b>Organisation</b> ConAccount		<b>Description</b> Research platform informally managed by a steering committee of Wuppertal Institute, IFF, CML and Statistics Sweden	
<b>Description</b>			
<b>Overall objective</b> Establishing a platform for research in the area of Material Flow Accounting and Substance Flow Analysis			
<b>Specific goals</b> To support the information exchange between the scientists developing MFA and the users of the results, to provide the basis for the development of a coherent framework of MFA methodology, to promote the use of MFA for statistics and policy			
<b>Results</b>	www.conaccount.net		
<b>Website</b>			
<b>Reports</b>	Method development, networking		
<b>Initiative type</b>			
<b>Instruments</b>			
<b>Starting year</b>	1996	<b>Ending year</b>	Ongoing
<b>Scope of the initiative</b>			
<b>Sector</b>	All sectors	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	All/none	<b>Socio-econ. impacts</b>	none
<b>Geographical focus</b>	All scale levels	<b>Indicators</b>	Related to societal metabolism of mass, materials, substances
<b>Assessment</b>			
<b>Usefulness for SMM</b> Methodology development supporting SMM studies and policies			
<b>Relation to other initiatives</b> No formal relationship			
<b>Contact</b> www.conaccount.net, Stefan_Bringezu: stefan.bringezu@wupperinst.org			

<b>Circular Economy (China)</b>		<b>30</b>	
<b>Organisation</b> China Council for International Cooperation on Environment and Development, Task force on Circular Economy		<b>Description</b> As a high-level advisory body of the Chinese Government, CCICED is mandated to exchange and disseminate international experience and expertise in the field of environment and development, to carry out in-depth research on key issues related to China's environment and development, to provide policy recommendations to the Chinese Government, and to conduct policy demonstrations as necessary, with a view to integrating environment and development and ensuring the sustainability of economic development in China	
<b>Description</b> The CCICED Task Forces organise meetings and conferences and advises the Chinese government on issues of (international) environment and development. The Task Force Circular Economy started from the observation that the current growth in materials use can only be sustainable in case of a circular economy, where materials are for a large part recycled.			
<b>Overall objective</b> The object of the Task Force on Circular Economy is to identify priority areas and provide policy system to develop circular economy in China based on the review of both domestic and foreign experience, incentive theory as well as current and long run development targets, to provide policy simulations and analysis based on suitable quantitative models, and to make contributions to promote the development of circular economy in China.			
<b>Specific goals</b> Development based on the circular economy becomes essential for China to reach an overall well-off (shao kong) society by sustaining fast-paced economic growth while mitigating negative ecological impact and creating more job opportunities. This society is defined as quadrupling the country's GDP from 2002 to 2020, while enhancing social equality and environmental protection as well.			
<b>Results</b>			
<b>Website</b>	<a href="http://eng.cciced.org/cn/company/Tmxxb143/fl143.asp?siteid=1&amp;lmid=5236">http://eng.cciced.org/cn/company/Tmxxb143/fl143.asp?siteid=1&amp;lmid=5236</a>		
<b>Reports</b>			
<b>Initiative type</b>	networking		
<b>Instruments</b>			
<b>Starting year</b>	1992 (CCICED), 2002 (CE)	<b>Ending year</b>	Ongoing
<b>Scope of the initiative</b>			
<b>Sector</b>	All sectors	<b>Product</b>	Not specific
<b>Material</b>	All materials	<b>Waste</b>	Not specific
<b>Env. impacts</b>	All/none	<b>Socio-econ. impacts</b>	none
<b>Geographical focus</b>	China	<b>Indicators</b>	None mentioned
<b>Assessment</b>			
<b>Usefulness for SMM</b> Legislation will be developed to implement a circular economy.			
<b>Relation to other initiatives</b> No formal relationship			
<b>Contact</b> secretariat@cciced.org			

<b>Thematic Strategy on the Sustainable Use of Natural Resources</b>		<b>31</b>	
<b>Organisation</b> European Union European Commission DG Environment		<b>Description</b> The European Union is a union of 27 European countries The European Commission is the executive body of the EU The Directorate General for the Environment develops and enforces environmental legislation in EU	
<b>Description</b> Overarching policy plan to reduce the impacts on the environment from our use of natural resources. The approach set out will be applied through existing and emerging environmental policies at the level of the EU member states.			
<b>Overall objective</b> To reduce the negative environmental impacts generated by the use of natural resources in a growing economy – a concept referred to as de-coupling. For renewable resources this means also staying below the threshold of overexploitation.			
<b>Specific goals</b> (i) Data Centre to enhance and improve knowledge on resource use and environmental impacts; (ii) develop indicators; (iii) High-Level Forum which discusses national measures; (iv) an International Panel on the sustainable use of natural resources.			
<b>Results</b>	The Commission will review the progress made in achieving the strategy's objective in 2010 and then every five years. This review will feed into the final evaluation of the Sixth EAP		
<b>Website</b>	<a href="http://ec.europa.eu/environment/natres/">http://ec.europa.eu/environment/natres/</a>		
<b>Reports</b>	<a href="http://ec.europa.eu/environment/natres/pdf/com_natres_en.pdf">http://ec.europa.eu/environment/natres/pdf/com_natres_en.pdf</a>		
<b>Initiative type</b>	policy measures, information gathering		
<b>Instruments</b>	To be developed, the EC thinks primarily at economic instruments (tax differentiation.).		
<b>Starting year</b>	2006	<b>Ending year</b>	2030
<i>Scope of the initiative</i>			
<b>Sector</b>	All sectors	<b>Product</b>	Not specific
<b>Material</b>	Natural resources	<b>Waste</b>	Not specific
<b>Env. impacts</b>	All	<b>Socio-econ. impacts</b>	To be taken into account but not main orientation
<b>Geographical focus</b>	EU and it's worldwide impacts	<b>Indicators</b>	To be developed in 2008 in cooperation with Data centres (Eurostat)
<i>Assessment</i>			
<b>Usefulness for SMM</b> The development in the Thematic Strategy will be relevant for OECD-SMM as many of the challenges (i.e. defining indicators, defining policy instruments) are similar to that of SMM			
<b>Relation to other initiatives</b> Formal relation to the thematic Strategy on Waste and the IPP Directive. Relation to UN initiatives especially in the field of the International Panel (#20)			
<b>Contact</b>			

<b>Recommendation of the Council on Material Flow Accounting</b>		<b>32</b>	
<b>Organisation</b> Organisation for Economic Cooperation and Development (OECD), Working Group on Environmental Information and Outlooks (WGEIO)		<b>Description</b> The OECD provides governments with the analytical basis to develop environmental policies that are effective and economically efficient, amongst others through performance reviews, data collection, policy analysis, and projections. WGEIO advises on methodologies for environmental indicators and accounting systems; it issues recommendations that help countries improve their environmental information systems and produce reliable data	
<b>Description</b> Initiative that urges OECD member countries and the OECD to define and implement a framework for material flow accounts			
<b>Overall objective</b> Take steps to improve information on material flows, including its quality and relevance for environmental management			
<b>Specific goals</b> Develop methodologies to enhance knowledge of material flows within and among countries; consolidate and improve data collection; develop tools to measure resource productivity and material flows including estimation methods, accounts and indicators			
<b>Results</b>	In 2007 there will be a report to the Council on progress achieved by Member countries in implementing this Recommendation and auxiliary materials, like a Guidance Manual, will be written		
<b>Website</b>	<a href="http://www.oecd.org/dataoecd/3/63/31571298.pdf">http://www.oecd.org/dataoecd/3/63/31571298.pdf</a>		
<b>Reports</b>	Method development		
<b>Initiative type</b>			
<b>Instruments</b>			
<b>Starting year</b>	2004	<b>Ending year</b>	
<i>Scope of the initiative</i>			
<b>Sector</b>	Not specific	<b>Product</b>	Not specific
<b>Material</b>	Weight of throughput of materials in the economy	<b>Waste</b>	
<b>Env. impacts</b>		<b>Socio-econ. impacts</b>	No attention
<b>Geographical focus</b>	OECD	<b>Indicators</b>	MFA type of indicators
<i>Assessment</i>			
<b>Usefulness for SMM</b> Material flow accounts can, if detailed enough, be a tool to analyse economy-wide trends in material consumption. Some of the indicators in the MFA framework may provide a rough estimation of future trends in waste disposal			
<b>Relation to other initiatives</b> To the OECD WGWPR SMM initiative			
<b>Contact</b> Dr. Yuichi Moriguchi, <a href="mailto:moriguti@nies.go.jp">moriguti@nies.go.jp</a>			

<b>Recommendation of the Council on Improving the Environmental Performance of Government</b>				<b>33</b>
<b>Organisation</b> Organisation for Economic Co-operation and Development (OECD), Working Party on National Environmental Policies (WPNEP)		<b>Description</b> The OECD provides governments with the analytical basis to develop environmental policies that are environmentally effective and economically efficient, amongst others through performance reviews, data collection, policy analysis, and projections		
<b>Description</b> Initiative recommends OECD member states to take measures to introduce and stimulate Green Public Procurement Policies (GPP). The initiative gives an overview of GPP in member countries and investigates barriers, implementation and measurement issues				
<b>Overall objective</b> The OECD recommends that Member countries take greater account of environmental considerations in public procurement of products and services in order to improve the environmental performance of public procurement				
<b>Specific goals</b> Member countries should develop greener public purchasing policies amongst others by providing policy incentives, development of indicators, evaluations schemes				
<b>Results</b>		Conferences have been held, publication of the Recommendation. Recently special interest was put on issues of chemical safety in green procurement		
<b>Website Reports</b>		<a href="http://webdomino1.oecd.org/horizontal/oecdacts.nsf/linkto/C(96)39">http://webdomino1.oecd.org/horizontal/oecdacts.nsf/linkto/C(96)39</a>		
<b>Initiative type</b>		Method development		
<b>Instruments</b>				
<b>Starting year</b>		1996	<b>Ending year</b>	
			NA	
<b>Scope of the initiative</b>				
<b>Sector</b>		Government	<b>Product</b>	
<b>Material</b>		Not specific	Not specific	
<b>Env. impacts</b>		All	<b>Waste</b>	
<b>Geographical focus</b>		OECD with worldwide consequences	<b>Socio-econ. impacts</b>	
			No	
			<b>Indicators</b>	
			Indicators need to be developed	
<b>Assessment</b>				
<b>Usefulness for SMM</b> Green procurement can be seen as a way to minimize environmental impacts over the lifecycle and is hence related to prevention				
<b>Relation to other initiatives</b>				
<b>Contact</b>				

<b>Network Sustainable Consumption Research Exchange (SCORE)</b>		<b>34</b>	
<b>Organisation</b> The Network project SCORE		<b>Description</b> SCORE acts as one of the EU's central support structures for the UN's 10 Year Framework of Programmes for Sustainable Consumption and Production (SCP)	
<b>Description</b> An initiative funded by the EU to establish a network on Sustainable Consumption and Production			
<b>Overall objective</b> In a series of workshops and conferences they analyse the state of the art in SCP research, and promote cases of (radical) sustainable consumption for mobility, agro-food and energy use.			
<b>Specific goals</b> To gain understanding in the concept of SCP and how a 'radical' change to SCP may be governed and realised; in workshops, cases will be analysed on 'implementability', and policy 'prescriptions' will be worked out that can support implementation			
<b>Results</b>	Two workshops have been held.		
<b>Website</b>	<a href="http://www.score-network.org/score/score_module/index.php">http://www.score-network.org/score/score_module/index.php</a>		
<b>Reports</b>			
<b>Initiative type</b>	Networking		
<b>Instruments</b>			
<b>Starting year</b>	2005	<b>Ending year</b>	2008
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	
<b>Env. impacts</b>	All	<b>Socio-econ. impacts</b>	Yes
<b>Geographical focus</b>	World	<b>Indicators</b>	No indicators
<b>Assessment</b>			
<b>Usefulness for SMM</b> Can be a network which is relevant for SMM especially when it comes to implementing policies taking a life-cycle perspective and introduction of cases relevant to SMM			
<b>Relation to other initiatives</b> UN's SCP-initiative			
<b>Contact</b> Arnold Tukker: <a href="mailto:arnold.tukker@tno.nl">arnold.tukker@tno.nl</a>			

<b>Environmental Technologies Action Plan</b>		<b>35</b>	
<b>Organisation</b> European Union European Commission DG Environment		<b>Description</b> The European Union is a union of 27 European countries The European Commission is the executive body of the EU The Directorate General for the Environment develops and enforces environmental legislation in EU	
<b>Description</b> Concrete steps and a framework for enhancing the development and dissemination of environmental technologies, emphasising synergies between the three dimensions of sustainable development taking into account environmental impacts outside EU			
<b>Overall objective</b> Aims to harness the full potential of technology to reduce pressures on our natural resources, improve the quality of life of European citizens and stimulate economic growth			
<b>Specific goals</b> The actions proposed fall into three main categories: getting from research to markets; improving market conditions; and acting globally			
<b>Results</b>	Technology platforms have been established in technological areas relevant for eco-innovation. Networks of testing centres are being established and should prepare the ground for a possible EU-w		
<b>Website</b>	<a href="http://ec.europa.eu/environment/etap/index_en.htm">http://ec.europa.eu/environment/etap/index_en.htm</a>		
<b>Reports</b>	<a href="http://eur-lex.europa.eu/LexUriServ/site/en/com/2004/com2004_0038en01.pdf">http://eur-lex.europa.eu/LexUriServ/site/en/com/2004/com2004_0038en01.pdf</a>		
<b>Initiative type</b>	R&D		
<b>Instruments</b>			
<b>Starting year</b>	2004	<b>Ending year</b>	NA
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	
<b>Env. impacts</b>	All types of impacts	<b>Socio-econ. impacts</b>	Yes
<b>Geographical focus</b>	EU with worldwide consequences	<b>Indicators</b>	No indicators
<b>Assessment</b>			
<b>Usefulness for SMM</b> The ETAP is not limited to end-of-pipe technologies but explicitly aims to reduce negative environmental impacts throughout the life-cycle. Life cycle costing promotion is part of ETAP. ETAP can be perceived as a means towards prevention			
<b>Relation to other initiatives</b> EU Sustainable Development Strategy			
<b>Contact</b>			

<b>EU Corporate Social Responsibility</b>		<b>36</b>	
<b>Organisation</b> European Union European Commission DG Environment		<b>Description</b> The European Union is a union of 27 European countries The European Commission is the executive body of the EU The Directorate General for the Environment develops and enforces environmental legislation in EU	
<b>Description</b> An EU Strategy to promote CSR (Corporate Social Responsibility). The Communication on CSR was based on a series of consultation rounds with member states and the business sector after the publication of a Green Paper on CSR in 2001			
<b>Overall objective</b> To promote CSR in the EU			
<b>Specific goals</b> Raising awareness and improving knowledge on CSR and reporting on its achievements; Helping to mainstream and develop open coalitions of cooperation; Ensuring an enabling environment for CSR			
<b>Results</b>	Various conferences, working groups and documents have been prepared. A new Communication on CSR has been established in 2006.		
<b>Website</b>	<a href="http://ec.europa.eu/employment_social/soc-dial/csr/index.htm">http://ec.europa.eu/employment_social/soc-dial/csr/index.htm</a>		
<b>Reports</b>	Communication on CSR(COM(2006/136 final) of 22.03.2006)		
<b>Initiative type</b>	All		
<b>Instruments</b>			
<b>Starting year</b>	2001	<b>Ending year</b>	NA
<b>Scope of the initiative</b>			
<b>Sector</b>	Business sector	<b>Product</b>	Not specified
<b>Material</b>	Not specified	<b>Waste</b>	
<b>Env. impacts</b>	All types of environmental impact	<b>Socio-econ. impacts</b>	Yes through promotion of core labour standards in bilateral agreements
<b>Geographical focus</b>	EU with worldwide consequences	<b>Indicators</b>	No indicators have been developed
<b>Assessment</b>			
<b>Usefulness for SMM</b> CSR can be an important vehicle for SMM			
<b>Relation to other initiatives</b> The EU Communication COM(2002)82 "towards a global partnership for sustainable development" (13.2.2002)			
<b>Contact</b>			

<b>EEA Topic Centre on Resource and Waste Management</b>		<b>37</b>	
<b>Organisation</b> EEA		<b>Description</b> The EEA is an agency of the European Union (EU) and one of the decentralised Community bodies. The EEA aims to support sustainable development through the provision of targeted, relevant and reliable information to policy-making agents	
<b>Description</b> <i>See above</i>			
<b>Overall objective</b> The mission of the Topic Centre is to provide reliable and comparable data and information on resource and waste for each country in Europe to decision-makers and the public			
<b>Specific goals</b> (i) Management and analysis of data on waste and material flows, incl. development and update of indicators and fact sheets; (ii) Assessment of policy instruments; (iii) Estimating environmental impacts of waste and resources			
<b>Results</b>	Establishment of Wastebase: an electronic database with selected information on waste and waste management in Europe		
<b>Website</b>	<a href="http://waste.eionet.europa.eu/">http://waste.eionet.europa.eu/</a>		
<b>Reports</b>	Many reports to be downloaded from their website.		
<b>Initiative type</b>	Information gathering		
<b>Instruments</b>			
<b>Starting year</b>	1997	<b>Ending year</b>	NA
<b>Scope of the initiative</b>			
<b>Sector</b>	not specific, special orientation on waste	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	All environmental impacts, but special orientation on waste	<b>Socio-econ. impacts</b>	
<b>Geographical focus</b>	EEA	<b>Indicators</b>	Strong focus on MFA related indicators combined with research into lifecycle impacts
<b>Assessment</b>			
<b>Usefulness for SMM</b> Useful as source of information on wastes and material flows. Wastebase can be used to investigate initiatives in EEA countries			
<b>Relation to other initiatives</b> The Topic Centre is part of the European Information and Observation Network (Eionet), set up to help the EEA to retrieve information, identify issues and produce information on Europe's environment			
<b>Contact</b> (Mr.) Pawel KAZMIERCZYK: Pawel.Kazmierczyk@eea.eu.int			

<b>Directive 2005/32/EC of European Parliament and Council establishing a Framework for the setting of Ecodesign Requirements for Energy-using Products</b>		<b>38</b>	
<b>Organisation</b> European Union European Commission DG ENV		<b>Description</b> The European Union is a union of 27 European countries The European Commission is the executive body of the EU The Directorate General for the Environment develops and enforces environmental legislation in EU	
<b>Description</b> This framework directive defines the principles, conditions and criteria for setting environmental requirements for energy-using appliances (eco-design)			
<b>Overall objective</b> Establishing a framework for eco-design for energy-using products to ensure free movement in internal market. Setting of requirements which the energy-using products must fulfil in order for them to be placed on the market and/or put into service			
<b>Specific goals</b> No concrete targets or goals are set in the directive. Some priority product groups are identified for application of the Directive			
<b>Results</b>	The effectiveness of the directive and its implementations will be reviewed no later than 2010		
<b>Website</b>	<a href="http://ec.europa.eu/enterprise/eco_design/index_en.htm">http://ec.europa.eu/enterprise/eco_design/index_en.htm</a>		
<b>Reports</b>	<a href="http://ec.europa.eu/enterprise/eco_design/index_en.htm">http://ec.europa.eu/enterprise/eco_design/index_en.htm</a>		
<b>Initiative type</b>	Policy measures		
<b>Instruments</b>	Eco-design		
<b>Starting year</b>	2005	<b>Ending year</b>	
<b>Scope of the initiative</b>			
<b>Sector</b>	Energy using products	<b>Product</b>	Energy using products
<b>Material</b>	Various	<b>Waste</b>	Energy using products
<b>Env. impacts</b>	Focus on energy / climate change, but in principle others as well	<b>Socio-econ. impacts</b>	None
<b>Geographical focus</b>	EU	<b>Indicators</b>	Eco-label meant to benchmark products
<b>Assessment</b>			
<b>Usefulness for SMM</b> An example of life cycle policy that explicitly includes raw material consumption next to a focus on energy efficiency. Raw material selection and use is one of the parameters of eco-design for EuP's. Materials consumption and waste generation as well as possibilities for recovery of materials have to be assessed for each phase of the life cycle.			
<b>Relation to other initiatives</b> IPP and WEEE. Directives 92/42/EEC, 96/57/EC and 2000/55/EC are considered official implementations of the Eco-design directive, even though predating it			
<b>Contact</b>			

<b>Integrated Product Policy (IPP)</b>		<b>39</b>	
<b>Organisation</b> European Union European Commission DG ENV		<b>Description</b> The European Union is a union of 27 European countries The European Commission is the executive body of the EU The Directorate General for the Environment develops and enforces environmental legislation in EU	
<b>Description</b> IPP calls for involvement of all parties at all possible levels of action and throughout the life cycle of products. EU acts on IPP are the 2001 Green Paper and a 2003 Communication that focuses on conditions to improve the life cycle profile of products			
<b>Overall objective</b> Stimulating (environmental) life cycle thinking in product chains and improving life cycle environmental performance of products			
<b>Specific goals</b> Currently no regulation and no quantifiable targets are part of IPP			
<b>Results</b>	Directives for specific products/sectors have built on the ideas in the Green Paper and Communication		
<b>Website</b>	<a href="http://ec.europa.eu/environment/ipp/home.htm">http://ec.europa.eu/environment/ipp/home.htm</a>		
<b>Reports</b>	<a href="http://europa.eu/scadplus/leg/en/lvb/l28011.htm">http://europa.eu/scadplus/leg/en/lvb/l28011.htm</a>		
<b>Initiative type</b>	All		
<b>Instruments</b>	Pricing, labelling, green procurement		
<b>Starting year</b>	2001	<b>Ending year</b>	
<i>Scope of the initiative</i>			
<b>Sector</b>	Not specific	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	All integrated	<b>Socio-econ. impacts</b>	To be taken into account; IPP is ultimately about sustainable development
<b>Geographical focus</b>	EU	<b>Indicators</b>	Life cycle information established in separate working groups
<i>Assessment</i>			
<b>Usefulness for SMM</b> Product life-cycle management is a starting point for SMM for economic actors, as the product is core business. The IPP pilot assessment by Nokia is an illustration. However, because of the diversity, it is hard to set targets or monitor changes			
<b>Relation to other initiatives</b> Directives based on IPP: WEEE, ELV, EUP, Batteries and Packaging. Also strong link with the natural resource strategy			
<b>Contact</b>			

<b>Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on End-of life Vehicles</b>		<b>40</b>	
<b>Organisation</b> European Union European Commission DG ENV		<b>Description</b> The European Union is a union of 27 European countries The European Commission is the executive body of the EU The Directorate General for the Environment develops and enforces environmental legislation in EU	
<b>Description</b> EU directive to prevent waste from vehicles and reduce waste by reuse, recycling and recovery			
<b>Overall objective</b> Prevention of waste from vehicles and reuse, recycling and recovery of end-of life vehicles (components) to reduce the disposal of waste. Improvement of environmental performance of all economic operators in the life cycle			
<b>Specific goals</b> Cease the use of mercury, hexavalent chromium, cadmium or lead in new vehicles. Increase recovery and recycling rates to 95% and 85% respectively by 2015			
<b>Results</b>	According to the 2006 study, environmental benefits may be attributed to the directive, although full potential has not been realised. Additional benefits of the 2015 targets will be small as economic incentive for recycling is strong		
<b>Website</b>	<a href="http://europa.eu/scadplus/leg/en/lvb/l21225.htm">http://europa.eu/scadplus/leg/en/lvb/l21225.htm</a>		
<b>Reports</b>	<a href="http://europa.eu/scadplus/leg/en/lvb/l21225.htm">http://europa.eu/scadplus/leg/en/lvb/l21225.htm</a>		
<b>Initiative type</b>	policy measures		
<b>Instruments</b>	Standards		
<b>Starting year</b>	2000	<b>Ending year</b>	
<i>Scope of the initiative</i>			
<b>Sector</b>	Vehicles	<b>Product</b>	Vehicles
<b>Material</b>	Various (heavy metals, waste oil, battery acid, tyres, glass etc)	<b>Waste</b>	Waste vehicles (components)
<b>Env. impacts</b>	Various, final waste	<b>Socio-econ. impacts</b>	Not specific
<b>Geographical focus</b>	EU	<b>Indicators</b>	Recovery and recycling rates by weight
<b>Assessment</b>			
<b>Usefulness for SMM</b> Reducing impacts along life cycle is one of the main purposes of the Directive. Product design for recycling is the primary tool for this; however, Member States are only held to make sure that product design does not prevent recycling and recovery			
<b>Relation to other initiatives</b> Amended by decisions 2002/525/EC, 2005/438/EC, 2005/673/EC			
<b>Contact</b>			

<b>European Parliament and Council Directive 94/62/EC of 20 December 1994 on Packaging and Packaging Waste</b>				<b>41</b>
<b>Organisation</b> European Union European Commission DG ENV		<b>Description</b> The European Union is a union of 27 European countries The European Commission is the executive body of the EU The Directorate General for the Environment develops and enforces environmental legislation in EU		
<b>Description</b> Provides that the Member States shall take measures to prevent the formation of packaging waste, which may include national programmes and may encourage the reuse of packaging. Amended by Directives 2004/12/EC and 2005/20/EC				
<b>Overall objective</b> Increase the prevention and reuse of packaging waste, reduce the environmental impact of packaging and packaging waste				
<b>Specific goals</b> Targets for recovery and recycling for 2001 and 2008 (as amended by 2004/12/EC). Targets for the period 2009-2014 to be set in 2007 at the latest				
<b>Results</b>	National monitoring of packaging waste and recovery/recycling rates			
<b>Website</b>	<a href="http://ec.europa.eu/environment/waste/packaging_index.htm">http://ec.europa.eu/environment/waste/packaging_index.htm</a>			
<b>Reports</b>	<a href="http://europa.eu/scadplus/leg/en/lvb/l21207.htm">http://europa.eu/scadplus/leg/en/lvb/l21207.htm</a>			
<b>Initiative type</b>	Policy measures			
<b>Instruments</b>	Standards			
<b>Starting year</b>	1994	<b>Ending year</b>	none	
<b>Scope of the initiative</b>				
<b>Sector</b>	Not specific	<b>Product Waste</b>	Not specific packaging	
<b>Material</b>	Packaging (glass, plastics, wood, paper & board, aluminium, steel)	<b>Socio-econ. impacts</b>	Food safety, hygiene	
<b>Env. impacts</b>	All	<b>Indicators</b>	Waste volume, recovery and recycling rates by weight per material	
<b>Geographical focus</b>	EU			
<b>Assessment</b>				
<b>Usefulness for SMM</b> The 'soft' section (essential requirements) deals with life cycle issues, such as design to minimize environmental impact at the waste stage. In practice, the added environmental effect of the Directive turns out to be limited				
<b>Relation to other initiatives</b> Amended by Directives 2004/12/EC and 2005/20/EC				
<b>Contact</b>				

<b>Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on Waste Electrical and Electronic Equipment (WEEE)</b>		<b>42a</b>	
<b>Organisation</b> European Union European Commission DG ENV		<b>Description</b> The European Union is a union of 27 European countries The European Commission is the executive body of the EU The Directorate General for the Environment develops and enforces environmental legislation in EU	
<b>Description</b> EU directive to reduce the disposal of waste (components of) electrical and electronic equipment			
<b>Overall objective</b> Prevention of waste electrical and electronic equipment (WEEE), and reuse, recycling and other forms of recovery to reduce the disposal of waste. Improve the environmental performance of all operators involved in the life cycle			
<b>Specific goals</b> Free return of waste equipment by final holder. Rate of separate collection of at least 4 kg on average per inhabitant from private households by 31/12/2006. Also rates of recovery by an average weight per appliance by 31/12/2006 (varies per type)			
<b>Results</b>	First round of implementation reports due in 2007 (covering 2004-2006) and review of the directive in 2008		
<b>Website</b>	<a href="http://europa.eu/scadplus/leg/en/lvb/l21210.htm">http://europa.eu/scadplus/leg/en/lvb/l21210.htm</a>		
<b>Reports</b>	<a href="http://europa.eu/scadplus/leg/en/lvb/l21210.htm">http://europa.eu/scadplus/leg/en/lvb/l21210.htm</a>		
<b>Initiative type</b>	Policy measures		
<b>Instruments</b>	Standards		
<b>Starting year</b>	2003	<b>Ending year</b>	NA
<b>Scope of the initiative</b>			
<b>Sector</b>	Electrical and electronic equipment	<b>Product</b>	Electrical and electronic equipment
<b>Material</b>	Materials used in electrical and electronic equipment, hazardous substances	<b>Waste</b>	Waste electrical and electronic equipment (WEEE)
<b>Env. impacts</b>	All	<b>Socio-econ. impacts</b>	None
<b>Geographical focus</b>	EU	<b>Indicators</b>	Collection rate in kg per inhabitant, recovery and recycling rate per appliance type
<b>Assessment</b>			
<b>Usefulness for SMM</b> In its current implementation, the life cycle aspect and generic materials management are not very strong in the directive			
<b>Relation to other initiatives</b> Amended by directive 2003/108/EC. A parallel directive 2002/95/EC deals with the restriction of use of hazardous substances in electrical and electronic equipment. Related to IPP, 'Ecodesign' directive			
<b>Contact</b>			

<b>Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) 42b</b>			
<b>Organisation</b> European Union European Commission DG ENV		<b>Description</b> The European Union is a union of 27 European countries The European Commission is the executive body of the EU The Directorate General for the Environment develops and enforces environmental legislation in EU	
<b>Description</b> EU directive to restrict the use of certain hazardous substances in electrical and electronic equipment.			
<b>Overall objective</b> To restrict the use of hazardous substances in electrical and electronic equipment and to contribute to the protection of human health and the environmentally sound recovery and disposal of waste electrical and electronic equipment.			
<b>Specific goals</b> From 1 July 2006 lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE) may not be used in new electrical and electronic equipment put on the Community market. However, a maximum concentration value of 0,1 % by weight in homogeneous materials for lead, mercury, hexavalent chromium, PBB and PBDE, and of 0,01 % by weight in homogeneous materials for cadmium shall be tolerated. In addition, certain uses specified in the Annex to the Directive are tolerated.			
<b>Results</b>		The substance ban for electric and electronic equipment entered into force on 1 July 2006. European Commission assessed/is assessing requests for further exemptions from the substance ban. Directive is scheduled for review in 2008	
<b>Reporting Website</b>		N/A	
<b>Initiative type</b>		Policy measures	
<b>Instruments</b>		Ban of substances	
<b>Starting year</b>		2003	
<b>Ending year</b>		N/A	
<b>Scope of the initiative</b>			
<b>Sector</b>	Electrical and electronic equipment	<b>Product</b>	Electrical and electronic equipment
<b>Material</b>	Materials used in electrical and electronic equipment, hazardous substances	<b>Waste</b>	Reduced environmental impacts from waste management
<b>Env. impacts</b>	Reduced toxicity of products,	<b>Socio-econ. impacts</b>	Under investigation
<b>Geographical focus</b>	EU	<b>Indicators</b>	Not needed; the scope of the ban is clear
<b>Assessment</b>			
<b>Usefulness for SMM</b>			
Waste prevention by reducing presence of hazardous substances in waste Facilitation of recycling			
<b>Relation to other initiatives</b> Amended by Commission Decisions 2005/618/EC, 2005/717/EC, 2005/747/EC, 2006/310/EC, 2006/690/EC, 2006/691/EC, 2006/692/EC. A parallel Directive - 2002/96/EC - deals with waste electrical and electronic equipment. Related to Directive 2005/32/EC on eco-design : "EuP") and chemicals (in particular REACH).			
<b>Contact</b> <a href="mailto:Madalina.CAPRUSU@ec.europa.eu">Madalina.CAPRUSU@ec.europa.eu</a> <a href="mailto:Michail-Georgios.PAPADOYANNAKIS@ec.europa.eu">Michail-Georgios.PAPADOYANNAKIS@ec.europa.eu</a> (Review of RoHS)			

<b>Directive 2006/66/EC of European Parliament and Council on Batteries and Accumulators and Waste Batteries and Accumulators</b>				<b>43</b>
<b>Organisation</b> European Union European Commission DG ENV		<b>Description</b> The European Union is a union of 27 European countries The European Commission is the executive body of the EU The Directorate General for the Environment develops and enforces environmental legislation in EU		
<b>Description</b> EU directive establishing rules for batteries to be placed on the market and for the collection, treatment and recycling of waste batteries and accumulators				
<b>Overall objective</b> Improve environmental performance of batteries and accumulators over the life cycle, by prohibiting hazardous substances and improving collection, treatment, recycling				
<b>Specific goals</b> Targets for collection. Battery recycling processes have to meet recycling efficiencies.				
<b>Results</b>	Not available yet			
<b>Website</b>	<a href="http://ec.europa.eu/environment/waste/batteries/index.htm">http://ec.europa.eu/environment/waste/batteries/index.htm</a>			
<b>Reports</b>	<a href="http://europa.eu/scadplus/leg/en/lvb/l21202.htm">http://europa.eu/scadplus/leg/en/lvb/l21202.htm</a>			
<b>Initiative type</b>	Policy measures			
<b>Instruments</b>	Standards for content of hazardous substances			
<b>Starting year</b>	2006	<b>Ending year</b>	NA	
<i>Scope of the initiative</i>				
<b>Sector</b>	Batteries and accumulators	<b>Product</b>	Batteries and accumulators	
<b>Material</b>	Various, hazardous sub-stances	<b>Waste</b>	Batteries and accumulators	
<b>Env. impacts</b>	Various, but most important (implicit) toxicity	<b>Socio-econ. impacts</b>	None	
<b>Geographical focus</b>	EU	<b>Indicators</b>	Collection rate, recycling efficiencies	
<i>Assessment</i>				
<b>Usefulness for SMM</b> Example of a policy instrument with explicit life-cycle perspective. Also resulted in a ban on substances that shouldn't end up in landfill				
<b>Relation to other initiatives</b> IPP; Repealing 91/157/EEC				
<b>Contact</b>				

<b>Thematic Strategy on the Prevention and Recycling of Waste</b>				<b>44</b>
<b>Organisation</b> European Union European Commission DG ENV		<b>Description</b> The European Union is a union of 27 European countries The European Commission is the executive body of the EU The Directorate General for the Environment develops and enforces environmental legislation in EU		
<b>Description</b> This communication sets out a framework for European waste policy in the coming years, and lays the basis, inter alia, for a revision of the framework Directive on waste				
<b>Overall objective</b> In current context important aim of the initiative is introducing life-cycle thinking in EU waste policy. An explicit aim of linking the resource stage and waste stage of life cycles also in policy making is stated				
<b>Specific goals</b> Implementation in a new framework directive on waste				
<b>Results</b>	Implementation in a new framework directive on waste by 2010			
<b>Website</b>	<a href="http://ec.europa.eu/environment/waste/strategy.htm">http://ec.europa.eu/environment/waste/strategy.htm</a>			
<b>Reports</b>	<a href="http://europa.eu/scadplus/leg/en/lvb/l21197.htm">http://europa.eu/scadplus/leg/en/lvb/l21197.htm</a>			
<b>Initiative type</b>	All			
<b>Instruments</b>	Legislation (review and update)			
<b>Starting year</b>	2005	<b>Ending year</b>	2010	
<b>Scope of the initiative</b>				
<b>Sector</b>	Not specific	<b>Product Waste</b>	Not specific	
<b>Material</b>	Not specific	<b>Socio-econ. impacts</b>	Not specific	
<b>Env. impacts</b>	In theory all impacts over the life cycle		Life-cycle thinking explicitly also in terms of economic efficiency	
<b>Geographical focus</b>	EU	<b>Indicators</b>	To be decided	
<b>Assessment</b>				
<b>Usefulness for SMM</b> Introduction of life-cycle thinking in the waste framework directive will provide a direct link to SMM. A strong link exists with the Thematic strategy on Resources COM(2005)670				
<b>Relation to other initiatives</b> Framework directive on waste 2006/12/EC, thematic strategy on resources COM(2005)670				
<b>Contact</b>				

<b>Sustainable Production and Consumption Working Group</b>		<b>45</b>	
<b>Organisation</b> Northern Alliance for Sustainability (ANPED)		<b>Description</b> ANPED works to empower Northern civil society in creating and protecting sustainable communities and societies world-wide. ANPED now has over one hundred member organisations, all working towards a better quality of life for everyone within the Earth's carrying capacity (Agenda 21).	
<b>Description</b> This programme, one of seven undertaken by ANPED, promotes and monitors progress towards sustainable production and consumption on the national and international level. Key elements of the work are ecological fiscal reform; clean and eco-effective production; education, information and public participation for sustainable consumption and production; corporate responsibility and accountability.			
<b>Overall objective</b> To provide a vehicle for ANPED members to increase their knowledge, capacity and effectiveness in promoting sustainable production and consumption policy and practice			
<b>Specific goals</b> ANPED works on several thematic issues through its working groups. Each working group works to change unsustainable production and consumption patterns from its own angle, <i>see</i> : <a href="http://www.anped.org/index.php?part=116&amp;section=home&amp;reference=0">http://www.anped.org/index.php?part=116&amp;section=home&amp;reference=0</a>			
<b>Results</b>	The Working Group organized a number of meetings, workshops, skillshares and papers. Developed a SPAC campaign toolkit for NGOs		
<b>Website</b>	<a href="http://www.spac.anped.org/">http://www.spac.anped.org/</a>		
<b>Reports</b>	<a href="http://www.spac.anped.org/publications.aspx">http://www.spac.anped.org/publications.aspx</a>		
<b>Initiative type</b>	Networking		
<b>Instruments</b>			
<b>Starting year</b>	2003	<b>Ending year</b>	
<i>Scope of the initiative</i>			
<b>Sector</b>	Not specific/not specified	<b>Product</b>	Not specific/not specified
<b>Material</b>	Not specific/not specified	<b>Waste</b>	Not specific/not specified
<b>Env. impacts</b>	All/not specified	<b>Socio-econ. impacts</b>	All/not specified
<b>Geographical focus</b>	Worldwide, but strong focus on Europe	<b>Indicators</b>	
<i>Assessment</i>			
<b>Usefulness for SMM</b> Initiative addresses both the production and the consumption of goods. Life cycle initiatives are recognized as a tool to promote cleaner production and extended producer responsibility			
<b>Relation to other initiatives</b> ICSPAC (#46)			
<b>Contact</b> erol.hofmans@anped.org			

ICSPAC, various initiatives		46	
<b>Organisation</b> ICSPAC		<b>Description</b> International Coalition for Sustainable Production and Consumption	
<b>Description</b> NGO initiative on sustainable production and consumption. Is embedded in a broader network of 13 NGO partners			
<b>Overall objective</b> To provide an effective information exchange and networking vehicle for NGOs and citizen organizations promoting sustainable production and consumption (SPAC) policies and practices			
<b>Specific goals</b> (i) Commitment to developing National Policy Frameworks to promote sustainable production and consumption (including implementation of the revised UN Guidelines on Consumer Protection); (ii) Reforming perverse subsidies and public investment promoting unsustainable production and consumption; (iii) Promoting citizen access to meaningful information, while challenging irresponsible information sources, such as promotion of unsustainable consumption values and habits to children; (iv) Encouraging producer responsibility and corporate accountability			
<b>Results</b>	Initiated the SPAC Watch initiative, monitors the Marrakech process, provides a long list of links to relevant/related websites and reports		
<b>Website</b>	www.icspac.net		
<b>Reports</b>	http://www.icspac.net/pubs/		
<b>Initiative type</b>	Information gathering		
<b>Instruments</b>			
<b>Starting year</b>	1999	<b>Ending year</b>	
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific (specifically water, energy, human products settlements, food, advertising & general)	<b>Product</b>	Not specific consumption
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	All	<b>Socio-econ. impacts</b>	
<b>Geographical focus</b>	Worldwide	<b>Indicators</b>	
<b>Assessment</b>			
<b>Usefulness for SMM</b> Initiative focuses on both the production and the consumption of goods. Life cycle analyses is one of the topics addressed in the production phase			
<b>Relation to other initiatives</b> SPAC Watch, related to Integrative Strategies Forum (ISF)			
<b>Contact</b> info@icspac.net			

<b>Greening of Industry Network (GIN)</b>		47	
<b>Organisation</b> Greening of Industry Network (GIN)		<b>Description</b> The Greening of Industry Network is an international association of researchers, business leaders, activists, and policy makers dedicated to building a sustainable future	
<b>Description</b> <i>See above</i>			
<b>Overall objective</b> The Greening of Industry Network develops knowledge and transforms practice to accelerate progress toward a sustainable society			
<b>Specific goals</b>			
<b>Results</b>	Organized several workshops and conferences, published reports and books		
<b>Website</b>	<a href="http://www.greeningofindustry.org/">http://www.greeningofindustry.org/</a>		
<b>Reports</b>	<a href="http://www.greeningofindustry.org/publications.html">http://www.greeningofindustry.org/publications.html</a>		
<b>Initiative type</b>	Networking		
<b>Instruments</b>			
<b>Starting year</b>	1991	<b>Ending year</b>	
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	All/not specific	<b>Socio-econ. impacts</b>	Increasing the quality of life of all people of current and future generations
<b>Geographical focus</b>	Worldwide	<b>Indicators</b>	
<b>Assessment</b>			
<b>Usefulness for SMM</b> Basically a knowledge network which might serve as information source for SMM practices in business.			
<b>Relation to other initiatives</b>			
<b>Contact</b>			

<b>Ceres Sustainability Reporting and other activities</b>		<b>48</b>	
<b>Organisation</b> Ceres		<b>Description</b> Ceres is the largest coalition of investors, environmental and public interest organizations in North America	
<b>Description</b> A national network (US) of investors, environmental organizations and other public interest groups working with companies and investors to address sustainability challenges such as global climate change			
<b>Overall objective</b> Integrating sustainability into capital markets for the health of the planet and its people. Ceres launched the Global Reporting Initiative (GRI), now the de-facto international standard (used by over 850 companies) for corporate reporting on environmental, social and economic performance			
<b>Specific goals</b>			
<b>Results</b>	36 companies have published reports on sustainability issues according to the guidelines of GRI and Ceres.		
<b>Website</b>	www.ceres.org		
<b>Reports</b>	http://www.ceres.org/pub/		
<b>Initiative type</b>			
<b>Instruments</b>			
<b>Starting year</b>	1989	<b>Ending year</b>	
<i>Scope of the initiative</i>			
<b>Sector</b>	Not specific	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	Mainly climate change	<b>Socio-econ. impacts</b>	
<b>Geographical focus</b>	US/Worldwide	<b>Indicators</b>	Not specified
<i>Assessment</i>			
<b>Usefulness for SMM</b> Although particularly focussed on climate change impacts, life cycle analysis play a minor role in some of the studies and principles Ceres endorses			
<b>Relation to other initiatives</b> Ceres launched the Global Reporting Initiative (GRI)			
<b>Contact</b> http://www.ceres.org/ceres/contact.php			

<b>Declaration by the Metals Industry on Recycling Principles</b>		<b>49</b>	
<b>Organisation</b> International Council on Mining and Metals (ICMM)		<b>Description</b> ICMM's vision is a viable mining, minerals and metals industry that is widely recognised as essential for modern living and a key contributor to sustainable development	
<b>Description</b> 2 page declaration paper on which approach should be used for assessing the benefits of recycling: the recycled content approach or the end-of-life recycling approach. Paper endorsed by 17 companies and institutes from the metal industry			
<b>Overall objective</b> Environmental models and policy discussions that concern product recycling should characterize material recycling in a manner that is appropriate and that promotes the objectives of sustainable development			
<b>Specific goals</b>			
<b>Results</b>		Conclusion: for purposes of environmental modelling, decision-making, and policy discussions involving recycling of metals, the metals industry strongly supports the end-of-life recycling approach over the recycled content approach.	
<b>Website</b>		<a href="http://www.icmm.com/publications/1468Declaration_on_Recycling_Principles_lca2006.11.pdf">http://www.icmm.com/publications/1468Declaration_on_Recycling_Principles_lca2006.11.pdf</a>	
<b>Reports</b>		<a href="http://www.icmm.com/publications/1468Declaration_on_Recycling_Principles_lca2006.11.pdf">http://www.icmm.com/publications/1468Declaration_on_Recycling_Principles_lca2006.11.pdf</a>	
<b>Initiative type</b>		Method development	
<b>Instruments</b>			
<b>Starting year</b>		2006	<b>Ending year</b>
			2006
<b>Scope of the initiative</b>			
<b>Sector</b>	Metal	<b>Product</b>	Not specific metal products
<b>Material</b>	Metal	<b>Waste</b>	
<b>Env. impacts</b>	Not specified	<b>Socio-econ. impacts</b>	
<b>Geographical focus</b>	Not specified	<b>Indicators</b>	
<b>Assessment</b>			
<b>Usefulness for SMM</b> It advocates the use of life cycle analysis in decision making			
<b>Relation to other initiatives</b>			
<b>Contact</b> info@icmm.com			

<b>Sustainable Development Framework (SDF)</b>		<b>50</b>	
<b>Organisation</b> International Council on Mining & Metals (ICMM)		<b>Description</b> ICMM's vision is a viable mining, minerals and metals industry that is widely recognised as essential for modern living and a key contributor to sustainable development	
<b>Description</b> An initiative to help the ICMM members to meet their sustainable development commitments. The Framework comprises three elements – a set of 10 Principles, public reporting and independent assurance			
<b>Overall objective</b> All member companies are required to implement the ICMM Sustainable Development Framework and comply with policy commitments made by the ICMM Council			
<b>Specific goals</b> Underpinning the Framework is a commitment to sharing good practice across the industry. This is done through the publication of good practice guidance documents and tools which are developed in close co-operation with members			
<b>Results</b>	The ICMM Council, made up of member CEOs, has committed corporate members to implement the ICMM Sustainable Development Framework. A 'good practice' website was launched. Toolkits are being developed, for example on community development (with the World Bank), resource endowments (with UNCTAD and the World Bank) and on implementing materials stewardship in the minerals and metals value chain (with ICMM members).		
<b>Website</b>	<a href="http://www.icmm.com/sd_framework.php">http://www.icmm.com/sd_framework.php</a>		
<b>Reports</b>	<a href="http://www.icmm.com/publications/1459SDF_English.pdf">http://www.icmm.com/publications/1459SDF_English.pdf</a>		
<b>Initiative type</b>			
<b>Instruments</b>			
<b>Starting year</b>	2001	<b>Ending year</b>	
<b>Scope of the initiative</b>			
<b>Sector</b>	Mining	<b>Product</b>	Not specific mining products
<b>Material</b>	Not specific materials related to mining	<b>Waste</b>	not specified
<b>Env. impacts</b>	All	<b>Socio-econ. impacts</b>	Various
<b>Geographical focus</b>	Worldwide	<b>Indicators</b>	
<b>Assessment</b>			
<b>Usefulness for SMM</b> One of the 10 principles is to facilitate and encourage responsible product design, use, re-use, recycling and disposal of products			
<b>Relation to other initiatives</b> A good-practice website was launched in 2004 in partnership with UNCTAD, UNEP and the UK Department for International Development (DFID) - <a href="http://www.goodpracticemining.org">www.goodpracticemining.org</a> . This initiative is a follow-up of the MMSD (#53) initiative			
<b>Contact</b> <a href="mailto:info@icmm.com">info@icmm.com</a>			

<b>Integrated Materials Management (IMM)</b>		<b>51</b>	
<b>Organisation</b> International council on Mining & Metals (ICMM)		<b>Description</b> ICMM's vision is a viable mining, minerals and metals industry that is widely recognised as essential for modern living and a key contributor to sustainable development	
<b>Description</b> An initiative from the mining sector to help its members meet their sustainable development commitments, and drive performance improvement across the industry as a whole, oriented on material stewardship and encouraging regulation based on sound science			
<b>Overall objective</b> To ensure that the level and patterns of use of mineral commodities are aligned with sustainable development. To promote responsible design, use, re-use, recycling and disposal of the materials the mining industry produces			
<b>Specific goals</b> ⇒ Promoting and facilitating materials stewardship: Materials stewardship is built on the premise that all participants have a shared responsibility for the performance of the whole materials cycle of which we are part, well beyond our direct operations. ⇒ Encouraging regulation that is based on sound science.			
<b>results</b>	ICMM published a guidance document on materials stewardship and ICMM members have developed several projects related to IMM		
<b>Website</b>	<a href="http://www.icmm.com/integ_materials.php">http://www.icmm.com/integ_materials.php</a>		
<b>Reports</b>	<a href="http://www.icmm.com/library_pub_detail.php?rcd=199">www.icmm.com/library_pub_detail.php?rcd=199</a>		
<b>Initiative type</b>	All		
<b>Instruments</b>			
<b>Starting year</b>		<b>Ending year</b>	
<b>Scope of the initiative</b>			
<b>Sector</b>	Mining	<b>Product</b>	Not specific mining products
<b>Material</b>	Not specific materials related to mining	<b>Waste</b>	Not specific (not specified)
<b>Env. impacts</b>	ALL	<b>Socio-econ. impacts</b>	Not addressed
<b>Geographical focus</b>	Worldwide	<b>Indicators</b>	Published a guidance document on materials stewardship
<b>Assessment</b>			
<b>Usefulness for SMM</b> The IMM programme takes a life cycle approach to the production and use of minerals. Life cycle analysis serves as a tool for material stewardship			
<b>Relation to other initiatives</b> Mining, Minerals and Sustainable Development (MMSD)			
<b>Contact:</b> <a href="mailto:info@icmm.com">info@icmm.com</a>			

<b>Mining, Minerals and Sustainable Development (MMSD)</b>		<b>52</b>	
<b>Organisation</b> World Business Council for Sustainable Development		<b>Description</b> The World Business Council for Sustainable Development (WBCSD) is a CEO-led, global association of some 190 companies dealing exclusively with business and sustainable development	
<b>Description</b> The MMSD Project was an independent two-year process of consultation and research which aimed to understand how to maximise the contribution of the mining and minerals sector to sustainable development at the global, national, regional, and local levels. MMSD comprised nine WBCSD member companies in the mining sector			
<b>Overall objective</b> Examining key sustainability challenges for the mining sector			
<b>Specific goals</b> To assess the global mining and minerals sector in terms of the transition to sustainable development and to propose key elements for improvement			
<b>Results</b>	Organized several workshops; provided a means for ideas and information to surface; offered some opportunity to test those ideas with diverse, knowledgeable audiences; derived a set of guiding principles for sustainable development		
<b>Website</b>	<a href="http://www.wbcds.org/templates/TemplateWBCSD5/layout.asp?type=p&amp;MenuId=ODA&amp;doOpen=1&amp;ClickMenu=LeftMenu">http://www.wbcds.org/templates/TemplateWBCSD5/layout.asp?type=p&amp;MenuId=ODA&amp;doOpen=1&amp;ClickMenu=LeftMenu</a>		
<b>Reports</b>	<a href="http://www.iied.org/mmsd/finalreport/index.html">http://www.iied.org/mmsd/finalreport/index.html</a>		
<b>Initiative type</b>	Networking, information gathering		
<b>Instruments</b>			
<b>Starting year</b>	1999	<b>Ending year</b>	2002
<b>Scope of the initiative</b>			
<b>Sector</b>	Mining	<b>Product</b>	Not specific mining products
<b>Material</b>	Not specific, mined minerals	<b>Waste</b>	Not specific
<b>Env. impacts</b>	All; <i>see</i> 'scope: other aspects of relevance'	<b>Socio-econ. impacts</b>	Both addressed; <i>see</i> 'scope: other aspects of relevance'
<b>Geographical focus</b>	Worldwide	<b>Indicators</b>	
<b>Assessment</b>			
<b>Usefulness for SMM</b> Minimizing waste and environmental damage along the whole of the supply chain is listed as one of the principles of sustainable development. "Breaking New Ground: Mining, minerals & sustainable development" (WBCSD, 2002) is the final report of this initiative which emphasized that there are many perspectives and challenges for the mining sector with respect to both satisfying growing demand for materials and sustainable development			
<b>Relation to other initiatives</b> The International Council on Mining and Metals (ICMM; <a href="http://www.icmm.com">www.icmm.com</a> ) has been created by the companies to implement MMSD findings. Also related to the Global Mining Initiative( <a href="http://www.icmm.com/gmi.php">http://www.icmm.com/gmi.php</a> )			
<b>Contact</b> Director E. Derobert <a href="mailto:derobert@wbcds.org">derobert@wbcds.org</a>			

<b>Cement Sustainability Initiative</b>		<b>53</b>	
<b>Organisation</b> World Business Council for Sustainable Development		<b>Description</b> The World Business Council for Sustainable Development (WBCSD) is a CEO-led, global association of some 190 companies dealing exclusively with business and sustainable development	
<b>Description</b> In 1999, ten leading cement companies representing one-third of the world's cement production – embarked on the Cement Sustainability Initiative (CSI)			
<b>Overall objective</b> To find new ways to meet the sustainability challenge of: (i) reducing the industry's ecological footprint; (ii) increasing stakeholder engagement ; (iii) understanding the industry's social contributions			
<b>Specific goals</b> The Agenda for Action focuses on: (i) Climate protection, fuels and raw materials use, employee health and safety, emissions (ii) Reduction, local impacts (iii) Reporting and communication. The agenda details specific commitments for future company actions			
<b>Results</b>	Developed guidelines for use of fuels and raw materials relevant to cement production, for safety reporting, for CO <sub>2</sub> reporting, for environmental and social impact assessment and for emissions monitoring and reporting. Members have agreed to follow these guidelines		
<b>Website</b>	<a href="http://www.wbcd.org/templates/TemplateWBCSD5/layout.asp?type=p&amp;MenuId=NzY&amp;doOpen=1&amp;ClickMenu=LeftMenu">http://www.wbcd.org/templates/TemplateWBCSD5/layout.asp?type=p&amp;MenuId=NzY&amp;doOpen=1&amp;ClickMenu=LeftMenu</a>		
<b>Reports</b>	<a href="http://www.wbcd.org/templates/TemplateWBCSD5/layout.asp?type=p&amp;MenuId=NzY&amp;doOpen=1&amp;ClickMenu=LeftMenu">http://www.wbcd.org/templates/TemplateWBCSD5/layout.asp?type=p&amp;MenuId=NzY&amp;doOpen=1&amp;ClickMenu=LeftMenu</a>		
<b>Initiative type</b>			
<b>Instruments</b>			
<b>Starting year</b>	1999	<b>Ending year</b>	
<b>Scope of the initiative</b>			
<b>Sector</b>	Cement industry	<b>Product</b>	Cement
<b>Material</b>	Materials used for cement production	<b>Waste</b>	Air emissions, dust emissions, solid
<b>Env. impacts</b>	All, as specified in Environmental and social impact assessment guidelines waste and storm waters (i.e. all) (2005)	<b>Socio-econ. impacts</b>	Very broad, as specified in Environmental and social impact assessment guidelines (2005)
<b>Geographical focus</b>	Worldwide	<b>Indicators</b>	Environmental an social impact assessment guide: <a href="http://www.wbcd.org/web/publications/cement_esia_guidelines.pdf">http://www.wbcd.org/web/publications/cement_esia_guidelines.pdf</a>
<b>Assessment</b>			
<b>Usefulness for SMM</b> As a practical example how commitment of business can be set up. Participants have agreed upon the guidelines and monitor their environmental impacts in a comparable manner			
<b>Relation to other initiatives</b>			
<b>Contact</b> H. Klee: <a href="mailto:klee@wbcd.org">klee@wbcd.org</a>			

<b>The Global Eco-labelling Network (GEN)</b>		<b>54</b>	
<b>Organisation</b> Global Eco-labelling Network (GEN)		<b>Description</b> The Global Eco-labelling Network (GEN) is a non-profit association of third-party, environmental performance labelling organizations founded in 1994 to improve, promote, and develop the “eco-labelling” of products and services	
<b>Description</b> See above			
<b>Overall objective</b> To improve, promote, and develop the “eco-labelling” of products and services. To set criteria for and certify products and services with lower environmental burdens and impacts than comparable products/services with the same function.			
<b>Specific goals</b>			
<b>Results</b>	Organizing and visiting various conferences, providing Technical Assistance Programmes		
<b>Website</b>	<a href="http://www.gen.gr.jp/index.html">http://www.gen.gr.jp/index.html</a>		
<b>Reports</b>	<a href="http://www.gen.gr.jp/publications.html">http://www.gen.gr.jp/publications.html</a>		
<b>Initiative type</b>	Networking		
<b>Instruments</b>			
<b>Starting year</b>	1994	<b>Ending year</b>	
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	All types of environmental impacts (not specified)	<b>Socio-econ. impacts</b>	No explicit reference
<b>Geographical focus</b>	Worldwide	<b>Indicators</b>	No indicators specified
<b>Assessment</b>			
<b>Usefulness for SMM</b> Initiative aims to stimulate eco-labelling. An “eco-label” is a label which identifies overall environmental preference of a product (i.e. good or service) within a specific product category based on life cycle considerations			
<b>Relation to other initiatives</b> International Social and Environmental Accreditation and Labelling (ISEAL) Alliance			
<b>Contact</b> DaVinci KAMIYACHO: dc3h-mzn@asahi-net.or.jp			

<b>Eco-efficiency programme</b>		<b>55</b>	
<b>Organisation</b> World Business Council for Sustainable Development		<b>Description</b> The World Business Council for Sustainable Development (WBCSD) is a CEO-led, global association of some 190 companies dealing exclusively with business and sustainable development	
<b>Description</b> The programme is based on the concept of creating more goods and services while using fewer resources and creating less waste and pollution			
<b>Overall objective</b> Eco-efficiency calls for businesses to achieve more value from lower inputs of materials and energy and with reduced emissions			
<b>Specific goals</b> Companies should seize opportunities for more eco-efficiency, e.g. by reducing consumption, by cooperating with other companies, by designing eco-efficient products and by finding new ways to meet costumers' needs			
<b>Results</b>	The eco-efficiency concept has been adopted by numerous companies all over the world. The programme has developed indicators for measuring eco-efficiency. Business has also pushed eco-efficiency as a policy concept and has met with some success. In 2005 this programme was taken over by other programmes		
<b>Website</b>	<a href="http://www.wbcd.org/templates/TemplateWBCSD5/layout.asp?type=p&amp;MenuId=MTE1MQ&amp;doOpen=1&amp;ClickMenu=LeftMenu">http://www.wbcd.org/templates/TemplateWBCSD5/layout.asp?type=p&amp;MenuId=MTE1MQ&amp;doOpen=1&amp;ClickMenu=LeftMenu</a>		
<b>Reports</b>	Eco-efficiency: Creating more value with less impact. (WBCSD, 2000)		
<b>Initiative type</b>	Information and method development		
<b>Instruments</b>			
<b>Starting year</b>	1992	<b>Ending year</b>	2005
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	All	<b>Socio-econ. impacts</b>	To help companies grow more qualitatively than quantitatively. Social impacts not addressed
<b>Geographical focus</b>	Worldwide	<b>Indicators</b>	List of value and environmental indicators and eco-efficiency ratios
<b>Assessment</b>			
<b>Usefulness for SMM</b> Eco-efficiency opportunities can emerge at any point in the entire life-cycle of a product and offer a way of organizing the thinking about SMM			
<b>Relation to other initiatives</b> Eco-efficiency Metrics & Reporting, European Eco-efficiency Initiative (EEEI)			
<b>Contact</b> Project Director Brigitte Monsou: <a href="mailto:monsou@wbcd.org">monsou@wbcd.org</a>			

SAICM – Strategic Approach to International Chemicals Management		56	
<b>Organisation</b> UNEP Chemicals		<b>Description</b> The Strategic Approach was mandated by the United Nations Environmental Programme (UNEP) and endorsed by the Johannesburg World Summit on Sustainable Development in 2002 and the New York World Summit in September 2005. It has been developed by a multi-stakeholder Preparatory Committee, co-convened by UNEP, the Intergovernmental Forum on Chemical Safety (IFCS) and the Inter-Organization Programme for the Sound Management of Chemicals (IOMC).	
<b>Description</b> Adopted by the International Conference on Chemicals Management (ICCM) on 6 February 2006 in Dubai, United Arab Emirates, the Strategic Approach to International Chemicals Management (SAICM) is an international policy framework to foster the sound management of chemicals			
<b>Overall objective</b> SAICM was developed by a multi-stakeholder and multi-sectoral Preparatory Committee and supports the achievement of the goal agreed at the 2002 Johannesburg World Summit on Sustainable Development of ensuring that, by the year 2020, chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health.			
<b>Specific goals</b> SAICM comprises three core texts: <b>The Dubai Declaration</b> expressing the commitment to SAICM by Ministers, heads of delegation and representatives of civil society and the private sector, <b>The Overarching Policy Strategy</b> setting out the scope of SAICM, the needs it addresses and objectives for risk reduction, knowledge and information, governance, capacity-building and technical cooperation, and illegal international traffic, and <b>A Global Plan of Action</b> setting out proposed “work areas and activities” for implementation of the Strategic Approach.			
<b>Results</b>	The ICCM duly decided to establish the “Quick Start Programme for the implementation of Strategic Approach Objectives. The objective of the QSP is to support initial enabling capacity building and implementation activities in developing countries, least developed countries, small island developing States and countries with economies in transition. Several regional meetings planned and the second session of ICCM will take place in May 2009		
<b>Website</b>	<a href="http://www.chem.unep.ch/saicm/">http://www.chem.unep.ch/saicm/</a>		
<b>Reports</b>	<a href="http://www.chem.unep.ch/saicm/">http://www.chem.unep.ch/saicm/</a>		
<b>Initiative type</b>	Minimize significant adverse impacts of chemicals on the environment and human health.		
<b>Instruments</b>	Global Plan of Action implementing the Strategic Approach		
<b>Starting year</b>		<b>Ending year</b>	
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific	<b>Product</b>	Not specific
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	All, but strong focus on chemicals	<b>Socio-econ. impacts</b>	Human health and environment
<b>Geographical focus</b>	Global	<b>Indicators</b>	Not specific
<b>Assessment</b>			
<b>Usefulness for SMM</b> An international policy framework to foster the sound management of chemicals and minimize significant adverse impacts on the environment and human health.			
<b>Relation to other initiatives</b> UNEP, Chemicals Programme, UNEP Product Service Systems and Sustainability, UNEP Cleaner Production, UNEP Sustainable Building & Construction, UNEP Round Table of Sustainable Consumption and Production, Intergovernmental Forum on Chemical Safety (IFCS)			
<b>Contact</b> The secretariat is integrated within the <u>Chemicals Branch</u> ( <a href="mailto:chemicals@unep.ch">chemicals@unep.ch</a> ) of the UNEP Division of Technology, Industry and Economics. The secretariat works in coordination with the participating organization of the Inter-Organization Programme for the Sound Management of Chemicals (IOMC) and UNDP as well as other intergovernmental organizations.			

North American Sustainable Consumption and Production Database		57	
<b>Organisation</b> Intergovernmental Forum on Chemical Safety (IFCS)		<b>Description</b> IFCS provides an open, transparent and inclusive forum for discussing issues of common interest and also new and emerging issues in the area of sound management of chemicals	
<b>Description</b> Internet users can access a single website to find information on sustainable consumption and production initiatives and programmes throughout North America			
<b>Overall objective</b> The NASCP Database aims at facilitating cooperation among organizations in Canada, United States and Mexico that are interested in promoting sustainable consumption and production			
<b>Specific goals</b>			
<b>Results</b>	The Database currently contains over 200 entries, that can be searched by sector, focus area, country, 'tools and approaches', organization type or keyword		
<b>Website Reports</b>	<a href="http://nasca.icspac.net/db/">http://nasca.icspac.net/db/</a>		
<b>Initiative type</b>	Information gathering		
<b>Instruments</b>			
<b>Starting year</b>		<b>Ending year</b>	
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific	<b>Product</b>	Not specific/not specified
<b>Material</b>	Not specific/not specified	<b>Waste</b>	Not specific
<b>Env. impacts</b>	Not specified	<b>Socio-econ. impacts</b>	Several of the focus areas listed in the db consider social and economic impact (e.g. poverty, trade and transport)
<b>Geographical focus</b>	North America (Canada, Mexico, US)	<b>Indicators</b>	Not specified
<b>Assessment</b>			
<b>Usefulness for SMM</b> The database uses a sustainable production and consumption (SPAC) approach, which means that the production and consumption of a product are seen as inextricably interwoven stages in a product's life cycle chain			
<b>Relation to other initiatives</b> North American Sustainable Consumption Alliance partners: Commission for Environmental Cooperation of North America, Canadian Centre for Pollution Prevention, Environment Canada - National Office for Pollution Prevention, Integrative Strategies Forum, UNEP, Univ. of Massachusetts Lowell, univ. de Sonora			
<b>Contact</b>			

INFOCAP		58	
<b>Organisation</b> Intergovernmental Forum on Chemical Safety (IFCS)		<b>Description</b> IFCS provides an open, transparent and inclusive forum for discussing issues of common interest and also new and emerging issues in the area of sound management of chemicals	
<b>Description</b> Information Exchange Network on Capacity Building for the Sound Management of Chemicals. This initiative is purely an information exchange where contributors can post information relating to the sound management of chemicals			
<b>Overall objective</b> Facilitating systematic exchange and public accessibility of information on capacity building for the sound management of chemicals			
<b>Specific goals</b> INFOCAP provides the following five different information services related to chemicals management: (i) Information regarding National Profiles, Priorities/Related Needs, and Action Plans; (ii) Sources of Potential Support; (iii) Information regarding Past, On-going and Planned Projects; (iv) Training/Guidance Documents; (v) Network Points of Contact			
<b>Results</b>	The database has been established and evaluated <a href="http://www.who.int/ifcs/infocap/docs/SG39_INFOCAP_Evaluation_Future_with_SG34_annex.pdf">www.who.int/ifcs/infocap/docs/SG39_INFOCAP_Evaluation_Future_with_SG34_annex.pdf</a>		
<b>Website</b>	<a href="http://www.infocap.info">www.infocap.info</a>		
<b>Reports</b>	<a href="http://ecb.jrc.it/infocap/english/docs/brochure_Users_en.pdf">http://ecb.jrc.it/infocap/english/docs/brochure_Users_en.pdf</a>		
<b>Initiative type</b>	Information gathering		
<b>Instruments</b>			
<b>Starting year</b>	2003	<b>Ending year</b>	NA
<i>Scope of the initiative</i>			
<b>Sector</b>	Not specific sectors (not specified)	<b>Product</b>	Not specific chemical products
<b>Material</b>	Chemicals	<b>Waste</b>	Prevention and disposal of obsolete chemicals; sound management of hazardous waste
<b>Env. impacts</b>	All/not specified	<b>Socio-econ. impacts</b>	
<b>Geographical focus</b>	Worldwide	<b>Indicators</b>	Not specified
<i>Assessment</i>			
<b>Usefulness for SMM</b> The scope of INFOCAP covers information exchange on capacity building activities related to all chemicals and all stages of the chemical life cycle. The initiative might serve as a reference database for other initiatives going on in this field. However, the scope of initiatives is limited (see also section 4.4 of this report)			
<b>Relation to other initiatives</b>			
<b>Contact</b>			

SPAC Watch		59	
<b>Organisation</b> ICSPAC		<b>Description</b> International Coalition for Sustainable Production and Consumption	
<b>Description</b> An NGO initiative to monitor national progress towards sustainable production and consumption			
<b>Overall objective</b> The ultimate purpose of the SPAC Watch initiative is to help reverse the current negative environmental and social trends resulting from unsustainable production and consumption			
<b>Specific goals</b> SPAC Watch offers a civil society perspective to the dialogue on production and consumption policies and practices, monitoring and assessing progress by governments from rhetoric to realization			
<b>Results</b>		Organised side events at the World Summit on Sustainable Development at New York, Bali and Johannesburg; released a report called 'Waiting for delivery'	
<b>Website</b>		<a href="http://www.icspac.net/spacwatch/">http://www.icspac.net/spacwatch/</a>	
<b>Reports</b>		<a href="http://www.icspac.net/spacwatch/reports.aspx">http://www.icspac.net/spacwatch/reports.aspx</a>	
<b>Initiative type</b>		Information gathering	
<b>Instruments</b>			
<b>Starting year</b>	1999	<b>Ending year</b>	
<b>Scope of the initiative</b>			
<b>Sector</b>	Not specific	<b>Product</b>	Not specific consumption products
<b>Material</b>	Not specific	<b>Waste</b>	Not specific
<b>Env. impacts</b>	Not specific	<b>Socio-econ. impacts</b>	Help to reverse social trends resulting from unsustainable production and consumption
<b>Geographical focus</b>	Worldwide	<b>Indicators</b>	
<b>Assessment</b>			
<b>Usefulness for SMM</b> Initiative focuses on both the production and the consumption of goods. Life cycle analyses is one of the topics addressed in the production phase			
<b>Relation to other initiatives</b> ICSPAC			
<b>Contact</b> <a href="mailto:info@icspac.net">info@icspac.net</a>			

ICCA Global Product Strategy		60	
<b>Organisation</b> The International Council of Chemical Associations (ICCA)		<b>Description</b> ICCA is the world-wide voice of the chemical industry, representing chemical manufacturers and producers all over the world. It accounts for more than 75 per cent of chemical manufacturing	
<b>Description</b> The chemical industry, represented by ICCA, introduced an innovative Global Product Strategy (GPS) to enhance stewardship best practices within the industry and throughout the product chain. Product stewardship is defined as the industry's management of the health, safety and environmental aspects of a product throughout its total life cycle, working in cooperation with upstream and downstream users			
<b>Overall objective</b> To enhance stewardship best practices within the industry and throughout the product chain			
<b>Specific goals</b> The initiative, amongst others, sets guidelines for continuously improving product stewardship performance, including greater transparency; facilitates the development and sharing of management practices; promotes a tiered process for evaluating risk and identifying appropriate risk management actions for chemicals in commerce; calls for measuring industry performance and public reporting; improves product stewardship cooperation with downstream customers of the chemical industry; supports partnerships with intergovernmental organizations and others to enhance product stewardship			
<b>Results</b>	The initiative is announced but is still to be further developed		
<b>Website</b>	<a href="http://www.icca-chem.org/section02d.html">http://www.icca-chem.org/section02d.html</a>		
<b>Reports</b>	<a href="http://www.icca-chem.org/pdf/icca_global_product_strategy%20.pdf">http://www.icca-chem.org/pdf/icca_global_product_strategy%20.pdf</a>		
<b>Initiative type</b>	Networking and guidelines		
<b>Instruments</b>			
<b>Starting year</b>	2006	<b>Ending year</b>	
<b>Scope of the initiative</b>			
<b>Sector</b>	Chemical sector	<b>Product</b>	
<b>Material</b>	Chemicals	<b>Waste</b>	
<b>Env. impacts</b>	All	<b>Socio-econ. impacts</b>	
<b>Geographical focus</b>	Worldwide	<b>Indicators</b>	
<b>Assessment</b>			
<b>Usefulness for SMM</b> This initiative takes a life cycle perspective but is still to be developed. Could be interesting if ICCA establishes life cycle based principles in its guidelines			
<b>Relation to other initiatives</b> ICCA is now further developing their cooperation to ensure that the implementation of its Global Product Strategy contributes efficiently to UNEP's SAICM (Strategic Approach to International Chemicals Management) implementation and the global improvement of chemical safety			
<b>Contact</b>			

ISO 14000 family		61	
<b>Organisation</b> International Organization for Standardization (ISO)		<b>Description</b> ISO is the world's largest developer and publisher of International Standards. It is a network of the national standards institutes of 157 countries, one member per country, with a Central Secretariat in Geneva, Switzerland, that coordinates the system.  ISO is a non-governmental organization.	
<b>Description</b> ISO has more than 16 500 International Standards and other types of normative documents in its current portfolio. ISO's work programme ranges from standards for traditional activities, such as agriculture and construction, through mechanical engineering, manufacturing and distribution, to transport, medical devices, information and communication technologies, and to standards for good management practice and for services. The ISO 14000 family addresses "environmental management". This results in activities/initiatives the organization undertakes to minimize harmful effects on the environment caused by its activities and to achieve continual improvement of its environmental performance.			
<b>Overall objective</b> Standards ensure desirable characteristics of products and services such as quality, environmental friendliness, safety, reliability, efficiency and interchangeability - and at an economical cost. In the case of environmental standards their use or implementation is intended to be environmentally beneficial or to reduce negative environmental impacts of activities on the environment.			
<b>Specific goals</b> The ISO 14000 standards are practical tools for an organization with the vision to understand that implementing a strategic approach can bring return on investment in environment-related measures. The implementation of these standards is focused on the establishment of an environmental management system (EMS) that can guide an organization toward achieving its own environmental goals.			
<b>Results</b>	ISO 14000 standards can lead to benefits like the following: ⇒ reduced cost of waste management ⇒ savings in consumption of energy and materials ⇒ lower distribution costs ⇒ improved corporate image among regulators, customers and the public ⇒ framework for continual improvement of environmental performance.		
<b>Website Reports</b>	<a href="http://www.iso.org/iso/home.htm">http://www.iso.org/iso/home.htm</a> ISO 14000 Environmental Management Standards Collection is available at: <a href="http://www.iso.org/iso/publications_and_e-products/management_standards_publications.htm#090504">http://www.iso.org/iso/publications_and_e-products/management_standards_publications.htm#090504</a>		
<b>Initiative type Instruments</b>	Method development, networking Standards		
<b>Starting year</b>	1947	<b>Ending year</b>	Ongoing
<b>Scope of the initiative</b>			
<b>Sector</b>	All	<b>Product</b>	All
<b>Material</b>	All	<b>Waste</b>	Not specific
<b>Env. Impacts</b>	Environmental aspects and potential environmental impacts throughout product/process life-cycle	<b>Socio-econ. impacts</b>	
<b>Geographical focus</b>	All	<b>Indicators</b>	Through the work of environmental performance evaluation.
<b>Assessment</b>			
<b>Usefulness for SMM</b> ISO 14000 family could contribute to SMM in the following areas: • Environmental Management Systems (ISO 14001, 14004, 14005) • Environmental Labelling (ISO 14020 series) • Environmental Performance Evaluation (ISO 14030 series) • Environmental Life-cycle Assessment (ISO 14040 series) • Environmental Product Design (ISO Guide 64, ISO 14062)			
<b>Relation to other initiatives</b>			
<b>Contact</b> <a href="http://www.iso.org/iso/standards_development/contacts.htm">http://www.iso.org/iso/standards_development/contacts.htm</a>			

IEC Technical Committee 111		62	
<b>Organisation</b> International Electrotechnical Commission (IEC)		<b>Description</b> IEC is the leading global organization that prepares and publishes international standards for all electrical, electronic and related technologies. These serve as a basis for national standardization and as references when drafting international tenders and contracts.	
<b>Description</b> The work under IEC TC 111 intends preparing the necessary guidelines, basic and horizontal standards, including technical reports, in the environmental area on electrical and electronic equipment. The working groups under the committee are the following ones: <u>WG 1 : Material declaration for electrical and electronic equipment</u> <u>WG 2 : Environmentally conscious design for electrical and electronic products and systems</u> <u>WG 3 : Test methods of hazardous substances</u> <u>WG HWG4 : Recycling, reuse and recovery</u> In addition, there are Project Teams in the following areas : <u>PT 62476 : Guidance for assessing compliance of finished goods with respect to restriction of use of hazardous substances</u> <u>PT 62542 : Standardization of environmental aspects - Glossary of terms</u>			
<b>Overall objective</b> <ul style="list-style-type: none"> <li>To prepare the necessary guidelines, basic and horizontal standards, including technical reports, in the environmental area, in close cooperation with other product committees of IEC;</li> <li>To liaise with product committees in the elaboration of environmental requirements of product standards in order to foster common technical approaches and solutions for similar problems and thus assure consistency in IEC standards; and</li> <li>To monitor closely the corresponding regional standardization activities worldwide in order to become a focal point for discussions concerning standardization.</li> </ul>			
<b>Specific goals</b> <ul style="list-style-type: none"> <li>Give manufacturers a way to prove which substances their electrical and electronic products contain.</li> <li>Simplify importing and exporting electrical and electronic products through a uniform means of declaration which customs agents can use to ensure that products entering the market adhere to legislation concerning restricted substances, such as lead and cadmium.</li> </ul>			
<b>Results</b>	Standardized hazardous material declaration forms; Guidance on environmentally conscientious design (ECD); Test methods for selected hazardous materials; Guidance on sample preparation for testing; Guidance on assessing compliance of finished goods; Guidance on environmental terminology (as it pertains to EEE); Currently consideration is being given to the development of information on recycling, reuse and recovery as well as performance measurements for electronic recycling / recyclability		
<b>Website</b>	<a href="http://www.iec.ch/cgi-bin/procgi.pl/www/iecwww.p?wwwlang=e&amp;wwwprog=dirdet.p&amp;progdb=db1&amp;committee=TC&amp;number=111">http://www.iec.ch/cgi-bin/procgi.pl/www/iecwww.p?wwwlang=e&amp;wwwprog=dirdet.p&amp;progdb=db1&amp;committee=TC&amp;number=111</a>		
<b>Reports Initiative type</b>	Standard development		
<b>Instruments</b>	Guidance documents, international standards, test methods		
<b>Starting year</b>	2004	<b>Ending year</b>	Ongoing
<b>Scope of the initiative</b>			
<b>Sector</b>	Electrical energy services, electrical power equipment, information and communication technologies, medical devices, appliances	<b>Product</b>	Large household appliances; Small household appliances; Computing & communications equipment; Consumer electronics; Lighting; Power tools; Toys and sports; Automatic dispensers
<b>Material</b>	Current substances considered include lead, mercury, cadmium, hexavalent chromium (CrVI), polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE). The material declaration working group is also developing the forms so that the scope of substances of concern can be expanded if required.	<b>Waste</b>	Product waste management control of hazardous substances

<b>Env. Impacts</b>	Chemicals, energy efficiency, environmental consideration during product and systems design	<b>Socio-econ. Impacts</b>	
<b>Geographical focus</b>	Worldwide	<b>Indicators</b>	
<b>Assessment</b>			
<b>Usefulness for SMM</b>			
Environmentally conscious design for electrical and electronic products and systems			
Hazardous material profiles			
Performance measurement for recycling and recyclability			
<b>Relation to other initiatives</b>			
<b>Contact</b>			
Chairman: Mr. Koichi MORI (JP)			
<a href="http://www.iec.ch/cgi-bin/procgi.pl/www/iecwww.p?wwwlang=e&amp;wwwprog=dirdet.p&amp;progdb=db1&amp;css_color=purple&amp;committee=TC&amp;number=11">http://www.iec.ch/cgi-bin/procgi.pl/www/iecwww.p?wwwlang=e&amp;wwwprog=dirdet.p&amp;progdb=db1&amp;css_color=purple&amp;committee=TC&amp;number=11</a>			
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<b>Sustainable Building for Military Infrastructure</b>		<b>63</b>	
<b>Organisation</b> The North Atlantic Treaty Organization (NATO). Note: The Committee on the Challenges of Modern Society (CCMS) agreed to implement a short term ad hoc project "Sustainable Building in Military Infrastructure". The NATO Science for Peace and Security (SPS) Committee is the new Committee at NATO that was formed through the merger of the CCMS and the Science Committee.		<b>Description</b> NATO is an alliance of 26 countries from North America and Europe committed to fulfilling the goals of the North Atlantic Treaty. The SPS Committee is the primary NATO committee supporting practical cooperation in civil science and innovation. It focuses on security, environmental sustainability and other defined priorities of its Partner nations.	
<b>Description</b> In 1999 the Department of National Defence of Canada and the Ministry of Defence of the Netherlands agreed to organize a NATO CCMS short-term project on the environmental and economic benefits of applying sustainability concepts to specific elements of defence infrastructure. Fully appreciating the project's success as forums for the exchange of knowledge, the participants expressed keen interest in follow-up seminars.			
<b>Overall objective</b>			
<ul style="list-style-type: none"> <li>Reducing the environmental impact of military activities by improving their environmental practices, by assessing the environmental performance of their infrastructure and by sharing the lessons learned.</li> </ul>			
<b>Specific goals</b>			
<ul style="list-style-type: none"> <li>Surveying and presenting information on the implementation of sustainable building in the participating countries;</li> <li>Exchanging experiences concerning policy, strategies and implementation processes;</li> <li>Presenting examples of sustainable building projects;</li> <li>Providing information on design and decision-making tools available on the market;</li> <li>Expanding the network of experts; and</li> <li>Establishing plans for future action.</li> </ul>			
<b>Results</b>	The results from the seminars have been published as reports. Also, establishment of a sustainable building web site to facilitate ongoing knowledge transfer.		
<b>Website Reports</b>	<a href="http://www.nato.int/science/pilot-studies/SBMI/sbmi-index.htm">http://www.nato.int/science/pilot-studies/SBMI/sbmi-index.htm</a>		
<b>Initiative type Instruments</b>	The results of the "Sustainable Building for Military Infrastructure" project can be found in CCMS reports no. 246 (Phase I), no. 263 (Phase II) and No. 275 (proceedings of third Seminar). Networking. Exchange of knowledge and experience by means of seminars and website		
<b>Starting year</b>	1999	<b>Ending year</b>	Ongoing
<i>Scope of the initiative</i>			
<b>Sector Material</b>	Building, construction, demolition Construction materials	<b>Product Waste</b>	Buildings Building demolition hazardous waste
<b>Env. Impacts</b>	Environmental performance, energy saving, energy efficiency and sustainable energy issues in buildings	<b>Socio-econ. impacts</b>	
<b>Geographical focus</b>	Location independent/world	<b>Indicators</b>	
<i>Assessment</i>			
<b>Usefulness for SMM</b>			
A network to share information about the implementation of concrete projects that lead to energy efficiency and sustainability of the built environment. It considers the impacts of the built environment from a life cycle perspective.			
<b>Relation to other initiatives</b>			
<b>Contact</b> <a href="http://www.nato.int/science/pilot-studies/SBMI/sbmi-contact.htm">www.nato.int/science/pilot-studies/SBMI/sbmi-contact.htm</a>			

North American Green Purchasing Initiative (NAGPI) (Commission for Environmental Cooperation)		64	
<b>Organisation</b> Commission for Environmental Cooperation (CEC), established under the North American Agreement on Environmental Cooperation		<b>Description</b> The CEC was created by Canada, Mexico and the United States under the North American Agreement on Environmental Cooperation to address regional environmental concerns, help prevent potential trade and environmental conflicts, and promote the effective enforcement of environmental law.	
<b>Description</b> A steering committee made up of major governmental groups and agencies involved in green purchasing North America coordinates the activities of this initiative			
<b>Overall objective</b> To promote green procurement practices and policies in North America			
<b>Specific goals</b> <ul style="list-style-type: none"> <li>• Compile and maintain a list of ongoing green purchasing activities to avoid unintended duplication of effort;</li> <li>• Create a unified voice to engage manufacturers, purchasers, politicians, the media and the general public;</li> <li>• Develop and maintain a database of supporting tools and procurement policies used across North America;</li> <li>• Identify research needs (such as the need to better quantify environmental benefits of green purchasing);</li> <li>• Seek funding to address those needs;</li> <li>• Facilitate development of common marketing language beneficial to all; and</li> <li>• Launch coordinated campaigns to improve the performance of specific commodity areas.</li> </ul>			
<b>Results</b>	NAGPI developed "Eco-Eval", a green purchasing self-assessment tool which is designed to help organizations evaluate the environmental implications of their purchasing systems and to identify opportunities for improvement. They have published many papers to provide information about green purchasing on topics including best practices, trade policy, and environmental labelling, certification and procurement. NAGPI also holds annual workshops.		
<b>Website</b>	<a href="http://www.cec.org/programs_projects/trade_envIRON_econ/nagpi/index.cfm?varlan=english">http://www.cec.org/programs_projects/trade_envIRON_econ/nagpi/index.cfm?varlan=english</a>		
<b>Reports</b>	<a href="http://www.cec.org/programs_projects/trade_envIRON_econ/nagpi/docs.cfm?varlan=english">http://www.cec.org/programs_projects/trade_envIRON_econ/nagpi/docs.cfm?varlan=english</a>		
<b>Initiative type</b>	Network, method development, information gathering and dissemination		
<b>Instruments</b>	Green procurement, labelling		
<b>Starting year</b>	2002	<b>Ending year</b>	Completed
<b>Scope of the initiative</b>			
<b>Sector</b>	All sectors	<b>Product</b>	Any commodity purchased, including services
<b>Material</b>	Products and services purchased by an organization	<b>Waste</b>	All waste that could be generated by an organization's products or services
<b>Env. impacts</b>	All	<b>Socio-econ. impacts</b>	Governments and organizations can save money by: reducing costs associated with waste and hazardous materials management, conserving resources, reducing back-end costs of pollution by preventing it in the first place, and decreasing costs for green products and services by creating economies of scale. The health of employees and communities can be improved. Leading by example can encourage others to take up green procurement.
<b>Geographical focus</b>	North America (Canada, United States, Mexico)	<b>Indicators</b>	The "Eco-Eval" tool measures: Material/waste flow, Life-cycle indicators, Acquisition planning, Sourcing and Bid Solicitation practices
<b>Assessment</b>			
<b>Usefulness for SMM</b> Provides a concrete way for governments and organizations to analyse their procurement policies and practices; Employs consumption and production chain analysis management			
<b>Relation to other initiatives</b> Could help countries to implement OECD Recommendation of the Council C(2002)3 on Improving the Environmental Performance of Public Procurement			

<b>Contact</b> CEC's Environment, Economy and Trade Program: Tel: +1-514-350-4328.			
<b>The Interuniversity Research Centre for the Life Cycle of Products, Processes and Services (CIRAIG)</b>			<b>65</b>
<b>Organisation</b> Interuniversity research centre		<b>Description</b> The CIRAIG's mission is to generate, integrate, and interpret relevant knowledge in the fields of life cycle assessment and products, processes, and services management in order to support industries and governments in their transition towards sustainable development, notably in Québec and Canada.	
<b>Description</b> The CIRAIG generates, integrates, and interprets relevant knowledge in the fields of life cycle assessment and products, processes, and services management.			
<b>Overall objective</b> To improve credibility, acceptance and practice of Life Cycle Assessment (LCA) in business and public authorities, by providing reference data and recommended methods for LCA studies.			
<b>Specific goals</b> Main deliverables are: - LCA information hub to ease the access to data and methods and to facilitate knowledge exchange			
<b>Results</b>	Industrial projects, events, publications, scientific communications, news		
<b>Website</b>	<a href="http://www.ciraig.org">www.ciraig.org</a>		
<b>Reports</b>	Thousands of references in Life Cycle Assessment		
<b>Initiative type</b>	Research, teaching, networking, information gathering,		
<b>Instruments</b>	Documents centre, Qualification system for international LCA database, LCA software (Gabi, Simapro, TEAM, KCL-Eco), Simplified LCA methods, expert service for critical review (ISO 14040), technological and scientific watch services		
<b>Starting year</b>	2001	<b>Ending year</b>	ongoing
<b>Scope of the initiative</b>			
<b>Sector</b>	All	<b>Product</b>	all
<b>Material</b>	All	<b>Waste</b>	all
<b>Env. impacts</b>	All types of environmental impacts (not specified)	<b>Socio-econ. impacts</b>	yes
<b>Geographical focus</b>	Worldwide	<b>Indicators</b>	LCA-impact assessment indicators
<b>Assessment</b>			
<b>Usefulness for SMM</b> Supporting business and public authorities in Canada with reference data and recommended methods on Life Cycle Assessment (LCA)			
<b>Relation to other initiatives</b> The CIRAIG is an official partner of the United Nations Environment Programme (UNEP) / Society of Environmental Toxicology and Chemistry (SETAC) Life Cycle Initiative.			
<b>Contact</b> CIRAIG, Tel.: +1-514-340-4711 #4122, <a href="mailto:info-ciraig@polymtl.ca">info-ciraig@polymtl.ca</a>			

<b>Yale University Stocks and Flows Project</b>		<b>66</b>	
<b>Organisation</b> Yale University, Center for Industrial Ecology, School of Forestry & Environmental Studies		<b>Description</b> The Center for Industrial Ecology (CIE) was established in September 1998 to provide an organizational focus for research in industrial ecology. Faculty research interests include the theoretical basis of industrial ecology, the cycles of materials, technological change and the environment, eco-industrial urban development, industrial symbiosis, and product and producer policy issues.	
<b>Description</b> This project is evaluating current and historical flows of specific technologically significant materials, determining the stocks available in different types of reservoirs and the flows among the reservoirs, developing scenarios of possible futures of metal use, and assessing the environmental and policy implications of the results. As of fall, 2007, the group has completed work on copper, zinc, chromium, lead, iron, nickel, and silver, comprising complete cycle characterizations for all countries using significant amounts of these materials (more than 50), nine world regions including Europe, North America, and Asia, and the planet as a whole. Targeted studies of a few states and cities have also been accomplished. The group is now in the process of similar research on stainless steel. Specialized studies on tin, tungsten, and aluminum have been done as well. These comprehensive cycles, and their interpretation and implications, will be published in the scholarly literature as they are completed.			
<b>Overall objective</b> The historical reservoir for the materials used by our technological society has been virgin stocks (ore bodies, mineral deposits and the like). For a variety of reasons, those stocks may become inadequate or unavailable at some times or places in the future. Other reservoirs exist, however, a principal one being materials or products in use, stored, or discarded over the years by corporations and individuals. These reservoirs might become very important in the next few decades of rapid population growth and resource and energy use. A second consideration is that society's use of energy in the extraction and processing of materials is part of the general evaluation of energy limits and energy provisioning. A third issue is that the loss of resources by dissipation or landfilling can sometimes be problematic from an environmental standpoint. These issues can be addressed by developing cycles for the stocks and flows of materials of interest, particularly if the cycles are temporally and spatially resolved.			
<b>Specific goals</b>			
<b>Results</b>	http://research.yale.edu/stafproject/		
<b>Website</b>	http://research.yale.edu/stafproject/?q=publications		
<b>Reports</b>	Research		
<b>Initiative type</b>	Material Flow Analysis		
<b>Instruments</b>			
<b>Starting year</b>	1999	<b>Ending year</b>	Ongoing
<b>Scope of the initiative</b>			
<b>Sector</b>	All sectors	<b>Product</b>	Major metal containing products
<b>Material</b>	metals	<b>Waste</b>	Major metal containing waste
<b>Env. impacts</b>	All types	<b>Socio-econ. impacts</b>	
<b>Geographical focus</b>	Spatial levels of studies include cities, states, countries, regions, and the planet.	<b>Indicators</b>	
<b>Assessment</b>			
<b>Usefulness for SMM</b> Understanding global flows of metals and impacts			
<b>Relation to other initiatives</b> International Society for Industrial Ecology, ConAccount			
<b>Contact</b> Thomas Graedel <thomas.graedel@yale.edu>			

<b>Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)</b>			
			<b>67</b>
<b>Organisation</b> European Union European Commission DG ENV, ENTR		<b>Description</b> The European Union is a union of 27 European countries The European Commission is the executive body of the EU The Directorate General for the Environment develops environmental legislation in EU The Directorate General for Enterprise and Industry aims to ensure the competitiveness of European Industry	
<b>Description</b> EU Regulation introducing a new system for registration, evaluation, authorisation and restrictions of chemicals			
<b>Overall objective</b> To improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances. Enhancement of innovative capacity? and competitiveness of the EU chemicals industry			
<b>Specific goals</b> To create a central European database in the European Chemical Agency (ECHA) for chemical substances. Industry is to register substances including information on risks and safe use of chemical substances			
<b>Results</b>	ECHA operational; pre-registration ongoing until 1 December 2008		
<b>Website</b>	<a href="http://echa.europa.eu">http://echa.europa.eu</a>		
<b>Reports</b>			
<b>Initiative type</b>	Policy measures		
<b>Instruments</b>	Regulation; Database, authorisation of substances of very high concerns, restrictions		
<b>Starting year</b>	2007	<b>Ending year</b>	NA
<b>Scope of the initiative</b>			
<b>Sector</b>	All sectors	<b>Product</b>	Chemicals
<b>Material</b>	All chemical substances	<b>Waste</b>	Not specific
<b>Env. impacts</b>	Safe, authorised or restricted use of chemicals; substitution of dangerous chemicals	<b>Socio-econ. impacts</b>	Positive occupational and public health impact.. Estimated benefits €50 billion over 30 years. Estimated costs to industry €5.2 billion over 15 years
<b>Geographical focus</b>	EU	<b>Indicators</b>	Registration rate
<b>Assessment</b>			
<b>Usefulness for SMM</b> Creation of a knowledge base on chemical substances allowing earlier and better identification of intrinsic properties of substances. Progressive substitution of the most dangerous chemicals when suitable alternatives have been identified			
<b>Relation to other initiatives:</b> Proposal for Regulation on the Classification, Labelling and Packaging of Substances and Mixtures (2009). This incorporates the classification criteria and labelling rules agreed at UN level: Globally Harmonised System of Classification and Labelling of Chemicals (GHS).			
<b>Contact</b> <a href="mailto:ENV-REACH-Help-Net@ec.europa.eu">ENV-REACH-Help-Net@ec.europa.eu</a> ; <a href="mailto:ENTR-REACH-Help-Net@ec.europa.eu">ENTR-REACH-Help-Net@ec.europa.eu</a>			