



SUSTAINABLE MATERIALS MANAGEMENT AND NGOs

A horizontal analysis of international
non-governmental initiatives

Sander Happaerts & Sarah Van Eynde

The Policy Research Centre for Sustainable Materials Management brings together six renowned knowledge institutes: KU Leuven, Universiteit Antwerpen, Universiteit Gent, Universiteit Hasselt, HUBrussel and VITO.



Report number: n° 9

Category: Research paper

Leuven, June 2014

Please refer to this publication as follows:

Happaerts, Sander and Sarah Van Eynde. 2014. *Sustainable Materials Management and NGOs. A horizontal analysis of international non-governmental initiatives* (Research paper 9). Leuven: Policy Research Centre on Sustainable Materials Management.

For more information sander.happaerts@kuleuven.be

This publication was sponsored by the Flemish Government, under the 2012-2015 Policy Research Centre Programme.

This publication reflects the views only of the author, and the Flemish Government cannot be held responsible for any use which may be made of the information contained therein.

Template designed by HIVA - KU Leuven

© 2014 POLICY RESEARCH CENTRE FOR SUSTAINABLE MATERIALS,
KASTEEL ARENBERG 44, BUS 2450, B-3001 HEVERLEE

Contents

1. Introduction	1
2. Identifying international non-governmental SMM initiatives	2
2.1 Selection criteria	2
2.2 Data collection	3
2.3 List of selected initiatives	3
3. Horizontal analysis	5
3.1 Initiating NGO and objective	5
3.2 Activities: addressing production and consumption	5
3.3 Target group: speaking to business and consumers	8
3.4 SMM topics: taking the angle of daily-life products	9
3.5 The life-cycle of materials: tackling various phases	10
4. Findings and research agenda	12
References	15
Annex: Details of the selected initiatives	17

Executive summary

In the framework of a broader project on the international transition towards sustainable materials management (SMM), this paper provides a first analysis of the involvement of non-governmental organizations (NGOs) in that transition. It is argued that a more systematic understanding of NGO efforts at the international level could lead to recommendations on an enhanced cooperation between NGOs, governments and other actors.

After a screening, we identified 20 representative initiatives that NGOs undertake at the international level to support the transition towards SMM. In this paper, we analyze those 20 initiatives with regard to their objectives, activities and target group, and we look into the topics and the phases of the life-cycle of materials that they address.

The analysis shows a rich variety of initiatives, including a small group that is targeted at improving the conditions of people that experience damage throughout the life-cycle of materials, a large group that focuses on one specific product in order to reduce its impacts, and a small number of initiatives that influence market dynamics by introducing their own product or business model.

Most initiatives address unsustainable patterns of production and consumption, often by focusing on daily products and recognizable materials. As a consequence, the NGO initiatives are predominantly aimed at producers and at consumers. NGOs target those groups without involving public policies or governmental intervention.

Within the broader transition towards SMM, NGOs can fulfill two major roles:

1. International non-governmental SMM initiatives have the potential to introduce SMM into the daily life of consumers, by means of specific products and materials. In a transition perspective, they can thus influence the practices of socio-technical systems, through their direct link to citizens. Public policy actors, in contrast, often signal their difficulty to reach consumers directly.
2. International non-governmental SMM initiatives have the potential to induce changes in production processes, by addressing producers through non-regulatory means. Such activities of civil regulation can lead to the adoption of new standards in specific sectors across the globe, before changes are made in (international) public policies.

Those roles fit well with recent recommendations made at the international level, with regard to inducing more sustainable consumer choices and business models. Future research in this project will focus on the interaction between governments, producers and consumers, and on the specific mechanisms that NGO initiatives use. The goal is to learn from the successes and obstacles of those initiatives and to identify how public policies can support, encourage or emulate them.

The paper concludes by indicating some avenues for policy recommendations for the Flemish Government, with regard to the collaboration between the government and NGOs.

1. Introduction

This paper is part of a project of the Policy Research Centre on Sustainable Materials Management (2012-2015), a multidisciplinary consortium funded by the Flemish Government. The project looks at the global and European context of the transition towards sustainable materials management (SMM), a policy priority of Flanders, that is coordinated by the Flemish Public Waste Agency (OVAM). The project understands SMM as shifting society's behaviour toward meeting its material needs, without destabilizing the natural system nor mortgaging its future. In other words: to preserve the natural capital and reduce the environmental impacts of the materials life-cycles (SuMMa 2011). Like any transformation of socio-technical systems, a transition towards SMM is strongly embedded in international dynamics. Materials are particularly rooted within global patterns of production and consumption, and linked to various international rule systems.

Essential aspects of the global context of this transition are steering initiatives by intergovernmental organizations (Happaerts 2014), some of which are overtly inspired by the transitions paradigm (Happaerts 2015). In this paper, we turn to the efforts of non-governmental organizations (NGOs), motivated by the observation that there is little systematic knowledge about the significance of civil society efforts in the global transition towards SMM. In general, we know that NGOs can fulfil a number of significant roles in global environmental governance, such as advocacy and representation of deprived groups, provision of information and technical expertise, norm institutionalization and civil regulation, monitoring public and private governance, creating awareness and mobilizing public opinion (cf Corell & Betsill 2001; Falkner 2003; Gemmill & Bamidele-Izu 2002; McCormick 2011). In recent years, SMM and related concepts such as the 'circular economy' generate increasing attention by civil society. That is of interest to policy-makers, who are pushed to take the non-governmental sphere into account in a context of the transition towards SMM, which is necessarily a multi-actor governance challenge (Dubois et al. 2013; OECD 2012b; VanDeveer 2013). Deeper insights into the nature of NGO involvement in SMM at an international scale should thus ultimately lead to suggestions for enhanced cooperation between NGOs, governments and other actors to accelerate the transition towards SMM.

The first step towards understanding the role of NGOs in the global transition towards SMM, is unravelling the international efforts that those actors are initiating towards managing natural resources more sustainably. We therefore conducted a broad screening of international non-governmental SMM initiatives. This paper presents the results of that screening, as well as a first horizontal analysis of the features of the initiatives that we identified. It leads to suggestions for deeper research that can be conducted at a later stage in this project.

The next section describes how we selected the NGO initiatives for our screening (2). Subsequently, the main features of those initiatives are analyzed in a horizontal way, in order to discern the significant trends that characterize non-governmental contributions to SMM (3). In the final part, we present our main conclusions and suggestions for further research (4). A detailed description of each of the selected initiatives can be found in annex to this paper.

2. Identifying international non-governmental SMM initiatives

In order to gain a more systematic understanding of non-governmental SMM initiatives at the international level, we first need to identify a good number of those initiatives for further analysis. This part of the paper deals with how we undertook that challenge. We start by clarifying the criteria that we used to select or reject initiatives that we encountered in our search (2.1). Then we explain our data collection strategies (2.2) and present the final list of selected initiatives (2.3).

2.1 Selection criteria

The first step in the screening process consisted of the definition of criteria to select the initiatives that we use in our analysis. International non-governmental SMM initiatives are:

1. initiatives initiated by an NGO
2. that are international in scope
3. and that promote, support or take concrete steps towards a more sustainable management of a specific material or a specific product.

First, our unit of analysis is not NGOs, but NGO initiatives. Many NGOs throughout the world are committed to SMM or related issues (e.g. Friends of the Earth, Stichting Onderzoek Multinationale Ondernemingen...). Mapping all those NGOs would not only go beyond the scope of this four-year project, it would also not help us gain a more systematic understanding of their efforts. Our interest therefore goes out to specific initiatives that they undertake.

There is no commonly accepted definition of an NGO, but a number of features characterize those organizations. Most importantly, NGOs are not-for-profit organizations (thus excluding private companies), in the public sphere but independent from the direct control of governments (although they can receive funding by governments), and excluding political parties and criminal groups (Gemmill & Bamidele-Izu 2002; Willetts 2006). NGOs operate in the sphere of *civil society*, which is defined as “social interaction between the household and the state characterized by community cooperation, structures of voluntary association, and networks of public communication” (Bratton 1994).

Second, as this research project focuses on the international context of the transition towards SMM, we are interested exclusively in initiatives that are international in scope. Applying a very wide definition, we accept all initiatives that exceed the boundaries of one nation state. That leaves out, however, a very large number of creditable initiatives that NGOs undertake to advance SMM at the national and local level (e.g. the Courtauld Commitment of Waste & Resources Action Programme in the UK), which are the levels where most NGO work is situated (McCormick 2011). We are aware of the fact that many local NGO initiatives can engage in networking activities with each other, thereby increasing their reach. But until that transboundary reach is formalized, such initiatives would fall outside of our search.

The third selection criterion is the least objective, but substantively the most important one. Guided by the definition of SMM stated above, and the predominant emphasis on the life-cycle of materials in the conceptualization of SMM, we focused on initiatives that promote, support or take concrete steps towards a more sustainable management of either a specific material (e.g. gold) or a specific product (e.g. jeans), and thereby make a significant attempt in advancing a life-cycle approach of materials management. We excluded international NGO initiatives that are aimed solely at influencing policy-making (e.g. CoolProducts or Marketwatch). As will be clarified in the analysis below, the lobby function is present in most NGO initiatives,¹ but we did not include those initiatives that have lobbying as their only goal, as this activity is well-known and extensively described in the literature (e.g. Andonova & Mitchell 2010; Betsill & Corell 2008; Gemmill & Bamidele-Izu 2002; McCormick 2011; Mori 2004). As our unit of analysis is that of NGO initiatives and not NGOs, it is possible that we include initiatives of NGOs that also undertake lobbying activities in the framework of other initiatives (e.g. Greenpeace).

2.2 Data collection

Our screening of international non-governmental NGO initiatives followed four data collection methods.

In first instance, we consulted experts and asked them to list the initiatives that they know and that fulfill our three selection criteria. We launched two enquiries within internet groups of which we are members: Gep-Ed (a mailing list devoted to environmental studies research and teaching, linked to the Environmental Studies Section of the International Studies Association) and Ecological Minerals Management (Ecominerals, a group of academics and professionals who are interested in innovative approaches to materials management across the mineral development cycle). Moreover, we asked the same question to a number of NGO professionals who work on these issues, via e-mail.

Secondly, we conducted a simple internet search with key words such as 'life-cycle' and 'materials' and looked for possible NGO initiatives that appeared among the search results.

We complemented those strategies by a screening of existing academic studies that include NGO activities in matters related to SMM (e.g. Gulbrandsen 2012; VanDeveer 2013).

Finally, through the 'snowball effect' we came across other initiatives while analyzing initiatives that we found through any of the above techniques.

2.3 List of selected initiatives

Although we do not claim to present an exhaustive selection, we do pretend to construct a list of international non-governmental SMM initiatives that is representative for the efforts that NGOs undertake to support the global transition towards SMM, and thus valid for the kind of horizontal analysis that is set out in this paper.

Our screening initially yielded a series of around 40 initiatives. But a closer investigation and a strict application of our selection criteria narrowed them down to the following list of 20 initiatives:

1. Alliance for Responsible Mining (ARM)
2. Beat the Microbead

¹ The lobby function of NGOs falls under the category of 'government-challenging' (see 3.2).

3. BizNGO
4. Circular Economy 100 (CE 100)
5. Detox
6. Fairphone
7. Global Alliance of Waste Pickers (GAWP)
8. Global Ecolabelling Network (GEN)
9. Gold Campaign
10. Goodelectronics
11. Love, Earth
12. makeITfair!
13. Partnership between McDonalds and the Environmental Defense Fund
14. Pharos
15. Rank a Brand
16. REdUSE
17. RReuse
18. Sustainable Packaging Coalition (SPC)
19. The Story of Stuff
20. WorldLoop

The 20 selected initiatives are described in more detail in the annex to this paper. In the next part, a horizontal analysis of their main features is presented.

3. Horizontal analysis

After selecting the 20 initiatives, we used the following six questions to analyze each of them:

- Who initiated the initiative?
- What is the objective of the initiative?
- What activities are included in the initiative?
- Who is targeted by the initiative?
- What SMM topic is addressed by the initiative?
- What phase of the life-cycle is addressed by the initiative?

The results of our horizontal analysis are solely based on the public websites and documents that the NGOs provide themselves. We predominantly used inductive reasoning to analyze the data according to those different aspects, complemented by established insights from the literature where possible.

3.1 Initiating NGO and objective

The large majority of our cases are specific initiatives that were launched by a single existing NGO (e.g. Greenpeace International). Four of our initiatives are the result of the collaboration between two or more NGOs. In rare instances, the initiative actually is a newly created NGO (in which cases the initiative corresponds with the NGO in question).

As illustrated in the remainder of the analysis, the objectives of non-governmental NGO initiatives are varied. Most initiatives aim at improving the sustainability or responsibility of an entire sector or (part of) the life-cycle of a specific material or product. In doing so, the initiatives target almost systematically the environmental and social impacts of materials jointly. Some initiatives place the emphasis on replacing a certain aspect of production and consumption patterns by a more sustainable alternative, others seek to provide better information or to raise awareness. A small part of the initiatives has additional objectives, such as improving the quality of life of particular target groups or promoting North-South solidarity.

3.2 Activities: addressing production and consumption

In a first attempt to systematize the various and divergent non-governmental efforts, we categorized the NGO initiatives in a typology of activities. Our typology distinguishes ten types of activities and functions that are based on existing research on the role of NGOs in global environmental governance and on our own inductive analysis:²

² Gemmill & Bamidele-Izu (2002) distinguish five functions of NGOs in global environmental governance: (1) introducing technical knowledge, (2) introducing the voice of the public, (3) linking local activities to global issues, (4) enhancing transparency and accountability and (5) mobilizing public opinion pressurizing political decision-making. VanDeveer (2013), on the other hand, states that non-state initiatives can undertake the following activities in the area of natural resources: (1) awareness-raising and education campaigns, (2) certification and labeling schemes, (3) ethical

1. **Voice:** NGO initiatives represent individuals, groups or communities that are harmed or suffer damage by activities undertaken along the life-cycle of a specific material or product, or by the side-effects of those activities. Examples include factory workers, artisanal miners, or neighbouring communities.
2. **Education:** NGOs provide training sessions or they teach actors about the social and environmental impacts along the life-cycle of certain products or resources.
3. **Research:** NGOs conduct research and assessments, or they provide quality information about life-cycles, products and industrial activities related to materials management.
4. **Inform through naming and shaming:** NGO initiatives provide information about materials (management), by awarding or denouncing companies or governments whose activities have a beneficial or damaging impact along the life-cycle of materials or products.
5. **Inform through certification or labelling:** NGO initiatives provide information about materials (management), by certifying or labeling consumption products.³
6. **Consumer-challenging:** NGO initiatives are aimed at demonstrating the benefits of purchasing sustainable products, or making consumers consider the impact of their consumption patterns on materials (management).
7. **Business-challenging:** NGO initiatives are aimed at changing the practices of private companies along the life-cycle of materials according to SMM criteria.
8. **Government-challenging:** NGO initiatives are aimed at changing policies (at subnational, national, EU... level) according to SMM criteria.
9. **Awareness-raising:** NGO initiatives attempt to focus the attention of individuals, groups or communities on (a certain aspect of) SMM.
10. **Enhancing transparency:** NGO initiatives advocate openness and accountability in aspects of SMM along the life-cycle of materials or products.

In Table 1, we categorize the activities of the selected initiatives.

consumption or purchasing campaigns, (4) corporate social responsibility and (5) research and assessment initiatives. Useful insights were also drawn from Brown and Ebrahim (2012) and McCormick (2011).

³ We adopted a broad definition of labelling, and also include initiatives in this category that 'rank' products or companies according to sustainability criteria, without attaching a specific label to them.

Table 1. Activities

	Voice	Education	Research	Inform through naming and shaming	Inform through certification or labelling	Consumer-challenging	Business-challenging	Government-challenging	Awareness-raising	Enhancing transparency
ARM	x	x			x	x	x	x		x
Beat the Microbead						x	x	x		x
BizNGO			x				x		x	
CE 100		x	x						x	
Detox	x			x		x	x		x	
Fairphone			x			x				
GAWP	x							x		
GEN					x	x	x			
Gold Campaign	x				x	x	x		x	
Goodelectronics	x		x				x			x
Love, Earth					x	x	x		x	
makeITfair!		x	x	x		x	x			
McDonalds and the EDF		x	x				x			
Pharos			x		x	x	x		x	
Rank a Brand		x	x	x		x	x		x	
REdUSE	x	x	x			x		x		x
RReuse			x				x	x		
SPC		x	x				x			
The Story of Stuff		x				x			x	
WorldLoop			x			x	x		x	
total	6	8	12	3	5	13	15	5	9	4

Categorizing non-governmental NGO initiatives along a typology of activities uncovers several distinguished trends.

All initiatives can be grouped in two and usually more activities. That shows the ambition and potential of non-governmental efforts to fulfill multiple functions in the transition towards SMM. With only rare exceptions, all cases are either business-challenging or consumer-challenging, and many are both, thus clearly revealing the two most popular activities of non-governmental NGO initiatives. In the transition towards SMM, NGOs appear to feel that consumption and production practices must change, and that it is a challenge to which their initiatives can contribute.

A little under half of the initiatives provide information through naming and shaming or through labelling and certification. Those activities refer to the established roles of NGOs as information brokers and whistle-blowers in global environmental governance (McCormick 2011). Provision of information is indirectly meant to influence the practices of consumers or producers, by revealing a type of characteristic of products or producers, related to SMM, that would otherwise be hidden, leaving actors the choice to adapt to that information. Those categories could therefore be considered as a subtype of business-challenging and consumer-challenging. Another popular activity of NGO initiatives is research, and many of those initiatives also engage in education. But the initiatives active in research or education always commit to other activities as well, and research is usually not their core mission.

A small group of initiatives, categorized under 'voice', has the representation of vulnerable groups as their core mission. Those initiatives place the emphasis on the social impacts that are found along the life-cycle of materials, and ultimately strive for a better socio-economic position for deprived groups in SMM.

The government-challenging category assembles a series of initiatives that is much smaller than its business-challenging and consumer-challenging counterparts. The reasons, we assume, can be found in the fact that most NGO lobby activities are located at the national level (McCormick 2011), and in our choice to exclude from the analysis NGO initiatives that are purely aimed at lobbying (see 2.1). Indeed, a large number of NGOs focus solely on changing policies related to SMM (e.g. at EU level in Brussels), and the type of initiatives that we selected through our criteria leaves out those lobby activities. Rather, government-challenging in our selection is the side-effect of other activities, such as voice or business-challenging.

The final two activities of our typology, awareness-raising and enhancing transparency, were the most difficult categories to assign. As those are two functions that are deeply rooted in the fabric of civil society, almost all NGO initiatives are marked by them, although not all of them are explicit about it. In essence, we could say that these are goals that many initiatives pursue by challenging production and consumption patterns.

3.3 Target group: speaking to business and consumers

Taking the results of our typology of activities as a starting point, we screened the selected initiatives for the target groups that they set out. Five different target groups are identified: business, consumers, governments, national organizations and local communities. Table 2 displays the distribution of those target groups among the initiatives.

Table 2. Target group

	business	consumers	government	national organizations	local communities
ARM	x	x	x		x
Beat the Microbead	x	x	x		
BizNGO	x				
CE 100	x		x		
Detox	x	x	x		
Fairphone	x	x			
GAWP			x		
GEN	x	x		x	
Gold Campaign	x	x			
Goodelectronics	x				
Love, Earth	x	x			
makeITfair!	x	x			
McDonalds and the EDF	x				
Pharos	x	x			
Rank a Brand	x	x			
REdUSE		x	x		
RReuse		x	x	x	
SPC	x				
The Story of Stuff	x	x			
WorldLoop	x	x			
total	17	14	7	2	1

The conclusion is clear. Almost all international non-governmental SMM initiatives address business as their target group. When they do not, governmental actors are their target group. In addition, most initiatives that target business also count consumers among their target groups. This conclusion strengthens our earlier observation that NGO initiatives for SMM mainly address our production and consumption patterns.

The observation that governmental actors constitute a less frequent target group follows naturally from the absence of exclusively lobby-oriented initiatives in our selection. The low attention to local communities and national organizations is probably due to the international scope of the initiatives in our analysis.

3.4 SMM topics: taking the angle of daily-life products

As SMM is so broad, it comes as no surprise that many different materials are addressed by our selected initiatives. Moreover, not only specific materials are the core focus of the initiative. In an attempt to distinguish different SMM topics, we found that most initiatives focus on a combination of materials, products and impacts.

Specific materials that are often targeted by the NGO initiatives include gold and other precious or rare metals and minerals, plastics and hazardous chemicals. Some initiatives focus on a broad set of materials (e.g. building materials) or on waste as a resource.

More than half of the cases single out a specific type of product around which the initiative revolves. The most popular products are consumer electronics (e.g. computers and smartphones) and jewellery. Other targeted products are cosmetics, clothes, and food and drink products.

With respect to the impact that materials and products have along their life-cycle, the selected SMM initiatives focus on environmental, health or social impacts, or on a combination of those. Environmental impact, which is the most common focus, ranges from traditional forms of pollution such as water and soil contamination, to ‘new’ problems on the global agenda such as plastic litter in oceans. Besides environmental impact, health concerns figure prominently in SMM initiatives. They either target the physical wellbeing of workers involved in the extraction or production phases (example), or they address the (sometimes unknown) health hazards for the end users of products (such as the health impacts of chemicals used in clothes). Finally, other impacts that are less frequently invoked, include the unfavourable socioeconomic position of people associated with the extraction, production or disposal phases (e.g. miners or waste pickers).

An interesting pattern emerges from the analysis of SMM topics. Although SMM is associated with a wide range of industrial processes and sectors, the focus of NGO initiatives is quite narrow. They approach the issue of SMM predominantly from the angle of materials that appeal to the imagination (such as rare or precious metals), and of products that are inextricably bound up with daily life, such as electronics, jewellery and cosmetics.

3.5 The life-cycle of materials: tackling various phases

Finally, we gauged the different phases of the life-cycle that are targeted by the non-governmental SMM initiatives. We made a distinction between the extraction, production, consumption, reuse, recycling, recovery and disposal of materials. An overview is presented in Table 3.

Table 3. Phases of the life-cycle

	extraction	production	consumption	reuse	recycling	recovery	disposal
ARM	x		x				
Beat the Microbead		x	x				
BizNGO	x	x					
CE 100		x					
Detox		x	x				x
Fairphone	x	x	x		x	x	x
GAWP				x	x	x	
GEN		x	x				
Gold Campaign	x	x	x				
Goodelectronics	x	x			x		x
Love, Earth	x	x	x				
makeITfair!	x	x	x		x		x
McDonalds and the EDF		x		x	x	x	x
Pharos	x	x	x				
Rank a Brand	x	x	x				x
REdUSE	x	x	x	x	x		x
RReuse				x	x	x	x
SPC	x	x					x
The Story of Stuff	x	x	x				x
WorldLoop				x	x	x	x
total	12	16	12	5	8	5	11

Non-governmental SMM initiatives cannot be reproached for having an end-of-pipe orientation. To the contrary, initiatives in the non-governmental sphere are predominantly aimed at the early phases of the life-cycle of materials. The production phase receives the most attention, followed by the extraction phase. That is in line with the observation that business is the main target group of NGO initiatives. Especially the early phases of the life-cycle of materials are characterized by strong business involvement, when raw materials are extracted from the biosphere and turned into commodities and consumable products.

Nevertheless, the consumption phase and the end-of-life of materials (especially as waste) are also targeted to a significant extent. NGO initiatives therefore are not limited to specific phases of the life-cycle, but present a varied engagement. Each initiative is also aimed at tackling two or more phases of the life-cycle, although very few offer a full life-cycle perspective. Fairphone is the best example of a broad life-cycle vision. Most other initiatives that target many phases are the ones dealing with consumer electronics.

4. Findings and research agenda

Through a thorough screening using a collection of strategies, we identified 20 initiatives that NGOs undertake at the international level to support the transition towards SMM.

That set of initiatives presents a rich variety of efforts, the details of which are outlined in annex. A small group of initiatives is especially targeted at improving the living or working conditions of people that are involved in the production processes or that experience damage at certain phases of the life-cycle of materials or the value chain of products, such as the Global Alliance of Waste Pickers or RReuse. A larger group focuses on one specific product in order to reduce the detrimental impacts that are manifested during the production or use of that product, be it environmental, health or other impacts. Examples of that strategy are Beat the Microbead and Detox. A subgroup of that larger group tackles products by attaching a label to them that provides information related to the management of materials, for instance the Gold Campaign. Certain other initiatives, such as Fairphone, try to influence market dynamics by introducing their own product. And, finally, in rare cases an entirely new business model is promoted by the initiatives. The prime example there is WorldLoop.

Throughout that variety, the most distinct trend is that the overwhelming majority of non-governmental initiatives addresses unsustainable patterns of production and consumption. That is visible in the fact that ‘business-challenging’ and ‘consumer-challenging’ are the two most frequent activities, with business and consumers being the main target groups, and in the fact that the production phase is the most targeted part of the life-cycle. NGO initiatives introduce this perspective predominantly with a specific daily product or recognizable material as their starting point.

The focus on production and consumption patterns is in line with the assessment that those patterns form the core of persistent environmental problems, especially in the context of globalization (Bruyninckx 2013). It also follows logically from the traditional roles of NGOs in global governance. On the one hand, addressing production patterns is related to ‘civil regulation’, the process through which NGOs put pressure on companies to change their environmentally or socially damaging behaviour and be publicly accountable, and to adopt higher standards—which can ultimately lead to a worldwide adoption of such standards, especially when transnational corporations are involved (Falkner 2003; Mason 2005). Of course, introducing new products or business models goes much beyond civil regulation. On the other hand, addressing consumption patterns is also an appropriate task for NGOs, which are situated “between the household and the state” (see 2.1). Maintaining a close and direct link to citizens, many NGO activities take the form of campaigns that try to motivate the largest number of individuals as possible (cf Gemmill & Bamidele-Izu 2002). The underlying argument is that sustainable development can be advanced by making changes in prevailing practices of individual citizens.

An important characteristic of NGO activities is that (in most cases) they address both producers and consumers to change their practices, without involving public policies or governmental intervention. In general, civil society initiatives are more likely to appear in areas where governmental regulation is low or weak (Gulbrandsen 2012).

Non-governmental initiatives clearly have the potential, in our view, to contribute to the global transition towards SMM. The added value lies precisely in the introduction of SMM into the daily life of consumers, and in the pressure on producers without involving public regulation. Furthermore, it appears that some NGO initiatives have less difficulty than some public initiatives in integrating several goals and perspectives, especially the combination of social and environmental concerns. That combination is a growing and indispensable focus of SMM (Bleischwitz et al. 2012).

We identify two major roles for NGO initiatives in the global transition towards SMM:

1. International non-governmental SMM initiatives have the potential to introduce SMM into the daily life of consumers, by means of specific products and materials. In a transitions perspective, they can thus influence the practices of socio-technical systems, through their direct link to citizens. Public policy actors, in contrast, often signal their difficulty to reach consumers directly.
2. International non-governmental SMM initiatives have the potential to induce changes in production processes, by addressing producers through non-regulatory means. Such activities of civil regulation can lead to the adoption of new standards in specific sectors across the globe, before changes are made in (international) public policies.

These potential roles fit well with some recent recommendations made at the European and global level. In general, partnerships with multiple stakeholders including NGOs are promoted at the international level in order to increase the legitimacy of decision-making, and the design and impact of SMM policies (European Commission 2011; OECD 2012a; UNEP 2012). In that perspective, governments are pushed to act as conveners and facilitators of multi-stakeholder dialogues or coalitions that address SMM challenges, and to take the results of such exercises into account in the formulation and implementation of policies (OECD 2012b).

More concretely, we see a task for NGO initiatives—and, by extension, multi-stakeholder partnerships involving those NGOs—in two of the recent policy recommendations formulated by the European Resource Efficiency Platform (EREP), i.e. “Enabling consumers to make more sustainable choices” and “Promoting new, resource efficient business models” (EREP 2014). In both cases, NGO initiatives are well placed to experiment with new solutions, and to test and enhance their social and economic acceptability.

Future research should thus focus on the interaction between governments, producers and consumers, and on the specific mechanisms that NGO initiatives promote to induce more sustainable consumer choices and business models. The goal is to learn from the successes and obstacles of those initiatives and to identify how public policies can support, encourage or emulate them. We will do so in the remainder of this project, by conducting a more in depth analysis of one or two cases.

As this paper constitutes only the first part of our research on NGO initiatives for SMM, it is too early to provide final policy recommendations for the Flemish Government. At this point, however, we can indicate three avenues along which policy recommendations can likely be formulated in a later step, provided that further research looks into these issues in depth.

First, it is useful to explore whether the Flemish Government can **rely on NGO initiatives to involve the perspective of consumers** in SMM processes. In multi-stakeholder cooperation mechanisms on SMM, including those animated by OVAM, it appears that consumers are absent (e.g. Dubois et al. 2013). In cases where the scope of existing NGO initiatives overlaps significantly with the goals of multi-stakeholder platforms convened by the Flemish Government, it could be considered to invite the initiating NGOs in order to act as intermediaries between consumers and the government.

Second, future research should determine what the Flemish Government can **learn from NGOs about how to influence consumer choices and propel new business models**. Exactly those two roles that NGOs can fulfill are the ones governments struggle with. In a transitions perspective, the Flemish Government could conclude partnerships with NGOs so that the latter contribute to the achievement of Flemish policy goals. In a weaker form, the Flemish Government could choose to offer support to those NGO initiatives that it considers relevant for its SMM strategy. Government support could be aimed at granting legitimacy, facilitating market access or offering expert knowledge and financial assistance (Gulbrandsen 2012).

A collaboration between the Flemish Government and promising NGOs would provide visibility to Flanders's strategy. That relates to an earlier recommendation made in the framework of this project, i.e. that the Flemish Government should invest in a true **visibility strategy** (see Happaerts 2014). One opportunity could be the Circular Economy 100. If Flanders becomes a member to that initiative—as, for instance, Wallonia and Scotland have done—it could participate at the Annual Summits, where it could interact with representatives from leading and innovative businesses. The membership of Flanders could thus be used as a leverage for more innovative ideas within Flanders. It would also give more visibility to Flemish policy initiatives within the framework of the circular economy, also through other initiatives by the Ellen MacArthur Foundation.

References

- Andonova L. B. & Mitchell R. B. (2010), 'The Rescaling of Global Environmental Politics'. *The Annual Review of Environment and Resources*, 35 p. 255-282.
- Betsill M. M. & Corell E. (Eds.) (2008), *NGO Diplomacy. The Influence of Nongovernmental Organizations in International Environmental Negotiations*, The MIT Press, Cambridge & London.
- Bleischwitz R., Bahn-Walkowiak B., Ekardt F., Feldt H. & Fuhr L. (2012), *International Resource Politics. New challenges demanding new governance approaches for a green economy*. Berlin: Heinrich Böll Stiftung & Wuppertal Institute. Available from www.boell.de.
- Bratton M. (1994), *Civil Society and Political Transition in Africa*. Institute for Development Research, Boston.
- Brown L. D. & Ebrahim A. (2012), 'Governing International Advocacy NGOs'. *World Development*, 40 (6) p. 1098-1108.
- Bruyninckx H. (2013), 'Globalisering, milieu en duurzame ontwikkeling', in LONDO (Ed.), *Duurzame ontwikkeling. Een multidisciplinaire visie*, Leuven: Acco, p. 229-242.
- Corell E. & Betsill M. M. (2001), 'A Comparative Look at NGO Influence in International Environmental Negotiations: Desertification and Climate Change'. *Global Environmental Politics*, 1 (4) p. 86-107.
- Dubois M., Christis M., Crabbé A., De Römph T., Happaerts S., Hoogmartens R., Huysman S., Vermeesch I., Bergmans A., Craps M. & Van Acker K. (2013), *Duurzaam beheer van vlakglas in de bouw. Een stand van zaken (Case Report n° XX)*. Leuven: Steunpunt Duurzaam Materialenbeheer.
- European Commission (2011), *Roadmap to a Resource Efficient Europe (COM(2011) 571 final)*. Brussels: European Commission. Available from <http://ec.europa.eu/resource-efficient-europe/>.
- European Resource Efficiency Platform (EREP) (2014), *Manifesto & Policy Recommendations*. Brussels: European Commission, DG Environment.
- Falkner R. (2003), 'Private Environmental Governance and International Relations: Exploring the Links'. *Global Environmental Politics*, 3 (2) p. 72-87.
- Gemmill B. & Bamidele-Izu A. (2002), 'The Role of NGOs and Civil Society in Global Environmental Governance', in D. C. Esty & Ivanova M. H. (Eds.), *Global Environmental Governance. Options & Opportunities*, New Haven: Yale School of Forestry & Environmental Studies.
- Gulbrandsen L. H. (2012), *Transnational environmental governance : the emergence and effects of the certification of forests and fisheries*. Edward Elgar, Cheltenham.
- Happaerts S. (2014), *International Discourses and Practices of Sustainable Materials Management (Research Paper n° 5)*. Leuven: Policy Research Centre on Sustainable Materials Management. Available from <http://steunpuntsumma.be/english/publications>.
- — — (2015 (forthcoming)), 'The discourse and practices of transitions in global governance', in H. G. Brauch, Oswald Spring U., Grin J. & Scheffran J. (Eds.), *Handbook of Sustainability Transitions and Sustainable Peace*, Cham: Springer.

- Mason M. (2005), *The New Accountability. Environmental Responsibility Across Borders*. Earthscan, London.
- McCormick J. (2011), 'The Role of Environmental NGOs in International Regimes', in R. S. Axelrod, VanDeveer S. D. & Downie D. L. (Eds.), *The Global Environment: Institutions, Law, and Policy*, Washington: CQ Press.
- Mori S. (2004), 'Institutionalization of NGO Involvement in Policy Functions for Global Environmental Governance', in N. Kanie & Haas P. M. (Eds.), *Emerging Forces in Environmental Governance*, Tokyo, New York, Paris: United Nations University Press.
- OECD (2012a), *Sustainable Materials Management (Green Growth Policy Brief)*. Paris: OECD.
- (2012b), *Sustainable materials management. Making better use of resources*. OECD Publishing. Available from <http://dx.doi.org/10.1787/9789264174269-en>.
- United Nations Environment Programme (UNEP) (2012), *Global Outlook on Sustainable Consumption and Production Policies*. Nairobi: UNEP. Available from <http://www.unep.fr/scp/go/>.
- VanDeveer S. D. (2013), *Still Digging. Extractive Industries, Resource Curses, and Transnational Governance in the Anthropocene*. Washington, DC: Transatlantic Academy. Available from <http://www.transatlanticacademy.org/publications/>.
- Willetts P. (2006), 'What is a Non-Governmental Organization? ', in UNESCO-EOLSS (Ed.), *UNESCO Encyclopaedia of Life Support Systems*, London: City University.

Annex: Details of the selected initiatives

Alliance for Responsible Mining (ARM)	
Short description	Established in 2004, the Alliance for Responsible Mining (ARM) is dedicated to improve wellbeing and equity in the sector of artisanal and small-scale mining in Latin America, Africa and Asia. It looks at labour conditions, human rights, environmental concerns and good governance at the level of miners and their communities. ARM is active in standard-setting, market development, producer support and advocacy. It developed the FAIRMINED Standard for gold, which includes social and environmental criteria.
Initiating NGO	ARM is an alliance created by a network of national producer organizations in South America and other stakeholders.
Objective	ARM ultimately wants to improve the quality of life of miners and their communities, by making artisanal and small-scale mining an economically just and socially and environmentally responsible sector.
Activities	<ul style="list-style-type: none"> - voice: representing miners by for example organizing regional workshops - education: capacity-building for local NGOs, training programmes - inform through certification and labelling: development of the FAIRMINED Standard for Gold from Artisanal and Small-scale Mining - enhance transparency about the social and environmental conditions in the mining sector - consumer challenging: encourage consumers to purchase sustainable minerals and ethical jewellery - business challenging: ARM wants business to develop fair market access for certified products and include artisanal and small-scale mining into the mining sector - government challenging: ARM advocates policy reforms in the mining sector (mainly in Latin America, Africa and Asia)
Target group	<ul style="list-style-type: none"> - local communities: miners, miners' organizations, local support organizations - business: local mining companies and retailers - consumers of jewellery and minerals - government at different levels
SMM topics	<ul style="list-style-type: none"> - materials: minerals and metals (with a special emphasis on gold), mercury (elimination from mining) - products: precious metals and stones, with particular attention to jewellery - impacts: socio-economic impacts and health impacts of mining, water pollution, mercury emissions, other environmental impacts
Life-cycle phases	extraction, consumption
Website	http://www.communitymining.org/en

Beat the Microbead	
Short description	Beat the Microbead is an international campaign against microbeads in cosmetics, launched in 2012. Microbeads are very small particles of plastics that are used in many personal care products (e.g. tooth paste or scrubs). Through the consumption of those products, microbeads enter wastewater streams, pass through treatment systems, and are disposed in the marine environment. The campaign wants to encourage the production and purchase of plastic-free cosmetics. Its core instrument is a smartphone app that consumers can use to scan cosmetics and check whether they contain microbeads or not and whether their producers have taken steps to reduce them. In reaction to the app, several companies (such as Unilever) have already made pledges to phase out microbeads. At the governmental level, the Netherlands is taking the lead to promote cosmetics free of microbeads.
Initiating NGOs	Plastic Soup Foundation & Stichting De Noordzee, two Dutch NGOs (the initiative is furthermore supported by other NGOs worldwide)
Objective	Beat the Microbead aspires to the phase-out of microbeads, and their replacement by biodegradable alternatives.
Activities	<ul style="list-style-type: none"> - enhance transparency about the existence of microbeads in cosmetics - consumer challenging: encourage consumers to purchase plastic-free cosmetics - business challenging: encourage cosmetic producers to produce cosmetics free of microbeads and supply information on the presence of microbeads in their products; encourage retailers to refuse selling products containing microbeads - government challenging: the campaign <i>indirectly</i> demands national governments and the European Commission to prohibit the use of microbeads
Target group	<ul style="list-style-type: none"> - business (producers and retailers of cosmetics) - consumers of cosmetics - governments at national and European level
SMM topics	<ul style="list-style-type: none"> - materials: plastics - products: cosmetics (personal care products) - impact: presence of plastic particles in the marine environment
Life-cycle phases	production, consumption
Website	http://beatthemicrobead.org/en/

BizNGO	
Short description	Launched in 2006 by Clean Production Action, BizNGO is a collaboration network between environmental organizations and companies from a range of sectors (electronics, health care, building, apparel, outdoor industry, cleaning product and retail sectors). BizNGO develops criteria, strategies and principles for making materials and chemicals deployed in the economy more sustainable. Those criteria, strategies and principles should be picked up by companies from different economic sectors and those companies adopt cleaner production strategies along the life-cycle of products. Cleaner production implies the elimination of hazardous chemicals by replacing them with biobased chemicals.
Initiating NGO	Clean Production Action, a US based not-for-profit organization
Objective	The objective of BizNGO is the replacement of toxic chemicals with biobased chemicals along the supply chain in economic sectors like electronics, health care, building etc.
Activities	<ul style="list-style-type: none"> - research: developing tools and criteria for making materials and chemicals deployed in our economy more sustainable - awareness raising about the environmental impact of the use of toxic chemicals and materials in everyday products - business challenging: demand companies to introduce sustainability criteria in their usage of materials and chemicals
Target group	business (companies along the supply chain in different sectors, e.g. retail, health care, building, cleaning product, electronics)
SMM topics	<ul style="list-style-type: none"> - materials: chemicals - products: wide range of products of different sectors - impacts: environmental impact, health impact
Life-cycle phases	extraction, production
Website	http://www.bizngo.org/

Circular Economy 100 (CE 100)	
Short description	Since September 2010, the Ellen MacArthur Foundation is a leading voice in the promotion of the 'circular economy', targeting above all business innovation and education. With the Circular Economy 100 (CE 100), it assembles a global platform of large companies, emerging innovators (i.e. small businesses) and regions (such as Scotland and Wallonia). The Ellen MacArthur Foundation supports the platform with guidance on best practices and with other tools and advice. The support is facilitated by McKinsey as a key knowledge partner.
Initiating NGO	Ellen MacArthur Foundation
Objective	With the CE 100, along its with other activities, the Ellen MacArthur Foundation wants to accelerate the transition to a circular economy.
Activities	<ul style="list-style-type: none"> - education: the CE 100 involves the organization of workshops for member organizations - (indirectly) research: through the CE 100, members have privileged access to information provided by the Ellen MacArthur Foundation, including reports about the circular economy - awareness-raising: the CE 100 is one of the activities undertaken by the Ellen MacArthur Foundation to raise awareness about the circular economy, for instance through the Annual Summits of the CE 100
Target group	<ul style="list-style-type: none"> - business: small and large companies are invited to apply for leadership to the Circular Economy 100 - governments: regional governments (i.e. cities, administrative regions and small countries) are invited to apply for leadership to the Circular Economy 100
SMM topics	indirectly: all products and materials
Life-cycle phases	production (design)
Website	http://www.ellenmacarthurfoundation.org/business/ce100

Detox	
Short description	Launched by Greenpeace in 2011, the Detox campaign demands that clothing brands work with their suppliers to attain a cleaner clothing industry. The campaign especially wants to achieve the production of clothes with less toxic chemicals, and the reduced release of chemicals in water. More than half a million people have by now signed the <i>Detox Fashion Manifesto</i> , and many global fashion companies (such as Nike, H&M or Benetton) have committed to Detox.
Initiating NGO	Greenpeace International
Objective	Under the motto 'fashion without pollution', Detox aims at toxic-free clothes and clean water.
Activities	<ul style="list-style-type: none"> - voice: representing local people and communities who are harmed by toxic chemicals in their water supply (through, for example, videos in which the situation of local communities is demonstrated) - awareness raising among consumers about the existence of hazardous chemicals used throughout the supply chain of clothes - inform through naming and shaming: the campaign names brands who are committed to 'detoxing' and brands who are not - consumer challenging: the campaign encourages consumers to stop purchasing clothes from brands that are not committed to detoxing - business challenging: the campaign challenges clothing producers and retailers (and their suppliers) to detox
Target group	<ul style="list-style-type: none"> - business (clothing producers and retailers directly, and their suppliers indirectly) - consumers - governments
SMM topics	<ul style="list-style-type: none"> - materials: toxic chemicals - product: clothes - impact: water pollution
Life-cycle phases	production (of clothes), consumption (of clothes), disposal (of chemicals)
Website	http://www.greenpeace.org/international/en/campaigns/toxics/water/detox/

Fairphone	
Short description	Fairphone started in 2010 as a project of Waag Society, Action Aid and Schrijf-Schrijf that carried out research on the complex supply chain of smartphones. In 2013, the project partners became a 'social smartphone developer' that designs, creates, produces and sells 'fair' smartphones and enhances transparency in the sourcing, production, distribution and recycling of electronics (mainly smartphones). Fairphone addresses social and environmental issues along the supply chain of electronics e.g. extraction of conflict-free materials, fair working conditions and wages at the stage of production, and e-waste solutions. Fairphone will develop a buyback programme for Fairphones and has set up recycling projects in countries to facilitate safe e-waste recycling.
Initiating NGO	Fairphone is a campaign and social enterprise initiated by Waag Society, Action Aid and Schrijf-Schrijf (the Netherlands)
Objective	Fairphone aspires to greater transparency in the supply chain of electronics (smartphones), in addition to the creation of an industry that puts ethical and environmental considerations first.
Activities	<ul style="list-style-type: none"> - research about the supply chain of electronics - consumer challenging: encourage consumers to consider the sustainability along the supply chain of the production they purchase
Target group	<ul style="list-style-type: none"> - business (Fairphone sets up recycling facilities) - consumers (of electronics, especially smartphones)
SMM topics	<ul style="list-style-type: none"> - materials: precious metals and minerals, (electronic) waste - products: electronics, especially smartphones - impacts: environmental and social impact of extraction of precious materials and minerals, production of electronics, and e-waste
Life-cycle phases	extraction, production, consumption, recycling, recovery and disposal
Website	http://www.fairphone.com/#phone

Global Alliance of Waste Pickers (GAWP)	
Short description	The Global Alliance of Waste Pickers (GAWP) represents, since 2008, an estimated 15 million informal workers who collect, sort and process recyclable materials from waste in cities around the world. According to GAWP, besides providing employment to about 1% of the population in developing countries, waste picking lowers the demand for materials and reduces greenhouse gas emissions, as opposed to incineration or landfilling. The Alliance is devoted to the social and economic inclusion of waste pickers, the recognition of their work and their role in decision-making.
Initiating NGO	WIEGO network (Women in Informal Employment: Globalizing and Organizing), a global network that wants to enhance the status of the working poor, especially women in the informal economy.
Objective	GAWP targets the social and economic conditions of waste pickers and aims for 'zero waste', by advancing reuse, recycling and composting as viable alternatives for incineration and landfilling.
Activities	<ul style="list-style-type: none"> - voice: GAWP gives voice to an underrepresented group in the collection and recycling of waste, i.e. the waste pickers - government challenging: GAWP advocates the enhancement of the status of waste pickers through legislation and policies
Target group	government (at national and regional level)
SMM topics	materials: waste
Life-cycle phases	reuse, recycling, recovery
Website	http://globalrec.org/mission/

Global Ecolabelling Network (GEN)	
Short description	The Global Ecolabelling Network (GEN) was founded in 1994 to improve the cooperation between national ecolabelling organizations and other stakeholders and to promote the global use of ecolabelling. Concretely, GEN works on the mutual recognition and development of common criteria and offers technical assistance to members. GEN for instance developed an Internationally Coordinated Ecolabelling System (GENICES).
Initiating NGO	GEN is a non-profit association representing 26 members and 3 associate members, operating in about 50 countries.
Objective	GEN wants to develop the cooperation and information-exchange between national ecolabelling activities, promote ecolabelling of products and services, and improve the quality and credibility of ecolabelling programmes worldwide.
Activities	<ul style="list-style-type: none"> - inform through certification and labelling ('ecolabelling' is a voluntary mechanism of environmental performance certification of a product of service, audited by third-party organizations) - consumer challenging: GEN encourages consumers to purchase sustainable products (that have an ecolabel) - business challenging: GEN promotes the dissemination of certain standards in the manufacturing of products
Target group	<ul style="list-style-type: none"> - national ecolabelling organizations - business (producers) - consumers <p>Ecolabelling in general targets mostly producers (to promote certain standards in the manufacturing of products) and consumers (to encourage the purchase of sustainable products)</p>
SMM topics	products : ecolabels are awarded to different kinds of products and services
Life-cycle phases	<ul style="list-style-type: none"> - directly: production and consumption - indirectly: many ecolabels are based on life-cycle considerations, meaning that labels are awarded to products and services on the basis of criteria related to different stages of the life-cycle
Website	http://www.globalecolabelling.net/

Gold Campaign	
Short description	Launched by the international organization Solidaridad, the Gold Campaign supports the most vulnerable producers in the gold mining supply chain by working together with mining communities, small-scale miners and jewellery retailers. The campaign aims at enhancing transparency in the labour conditions of miners and environmental impacts of mining, at disseminating the Fairtrade-Fairmined Standard (which was established in 2010), and at supporting retailers of jewellery to only trade 'good gold'.
Initiating NGO	Solidaridad, an international not-for-profit network organization
Objective	The campaign aims at making the gold mining sector more sustainable by promoting 'good gold'. 'Good gold' refers to gold that is extracted by mining companies that ensure good labour conditions and protect the environment and health of local communities.
Activities	<ul style="list-style-type: none"> - voice: the campaign gives voice to local people and communities that are affected by mining companies - inform through labelling and certification: nine small-scale mining organizations have been credited with Fairtrade-Fairmined Standard - awareness raising: among consumers about the environmentally harmful impact of and poor working conditions in the gold mining sector. - consumer challenging: consumers can purchase a bracelet to support the campaign - business challenging: by showing the environmentally harmful practices of the gold mining sector, gold mining companies and traders of jewellery are challenged to make the supply chain of gold more sustainable
Target group	<ul style="list-style-type: none"> - business (gold mining companies and traders of jewellery) - consumers
SMM topics	<ul style="list-style-type: none"> - material: gold - product: jewellery - impacts: water and soil pollution
Life-cycle phases	extraction, production, consumption
Website	http://www.opwegnaargoedgoud.nl/english

Goodelectronics	
Short description	The Goodelectronics Network is an international network of 90 environmental, labour and human rights organizations, individuals, trade unions, and universities hosted by SOMO. The network advocates the protection of labour rights and the environment throughout the supply chain of the electronics sector from the mining of minerals, manufacturing, recycling and disposal of electronic waste. It does so by carrying out research on transnational corporations and naming corporations who fail to comply with human rights and environmental standards. In addition, the network developed the <i>Common Demands on the Electronics Sector</i> to guide companies along the supply chain of electronics on how to adopt labour and environmental standards.
Initiating NGO	Goodelectronics is a network hosted by SOMO (Stichting Onderzoek Multinationale Ondernemingen, the Netherlands).
Objective	The Goodelectronics Network advocates a global electronics industry that complies with international human rights and sustainability standards throughout the entire production cycle of electronic goods.
Activities	<ul style="list-style-type: none"> - voice: representing local communities in developing countries who are impacted by the conduct of companies of the extractive industry or who work in companies that manufacture electronics - research about the conduct of companies along the supply chain of electronics and its impact on employers, local communities and the environment - enhancing transparency about human rights abuses and environmentally damaging practices in the supply chain of the electronics sector - business challenging: advocate the adoption of sustainability criteria and the protection of international human rights in companies in the supply chain of the electronics sector
Target group	business (companies in the supply chain of the electronics sector)
SMM topics	<ul style="list-style-type: none"> - materials: minerals - products: electronics - impacts: environmental impact and impact on people in the entire life-cycle of electronics
Life-cycle phases	extraction, production, recycling, disposal
Website	http://goodelectronics.org/

Love, Earth	
Short description	The Love, Earth collection of Walmart jewellery collection is the outcome of a collaboration project between Walmart International, Conservation International, and Walmart's supply chain partners. The Love, Earth collection serves as a certification or standard of a completely traceable life-cycle of jewellery. It therefore provides consumers with a completely international traceable fine jewellery line and also hopes other industry players will follow this example.
Initiating NGO	Conservation International, a not-for-profit organization based in the US.
Objective	The collaboration project aims at enhancing transparency about the life-cycle of jewellery which enables consumers to make sustainable choices that benefit the environment and mining communities when purchasing jewellery, in addition to setting an example for the whole jewellery industry.
Activities	<ul style="list-style-type: none"> - awareness raising among consumers about the life-cycle of jewellery and its impact on the environment and mining communities - inform through certification and labelling of jewellery - consumer challenging: enabling consumers to make more sustainable purchasing decisions - business challenging: by other demanding jewellery retailers to follow their example and enhance transparency about the life-cycle of their jewellery collections
Target group	<ul style="list-style-type: none"> - business (jewellery retailers) - consumers (jewellery purchasers)
SMM topics	resource: gold product: jewellery impact: damaging impact on environment and mining communities
Life-cycle phases	extraction (of gold, silver and diamonds) production (of jewellery) consumption (of jewellery)
Website	http://getinvolved.conservation.org/site/MessageViewer?em_id=11921.0&dlv_id=20242

makeITfair!	
Short description	The campaign makeITfair, coordinated by SOMO, focuses on the labour abuses and environmental damage of big brand consumer electronics companies' supply chain. The campaign targets both business and consumers. It set up a dialogue with companies through the organization of round tables and individual meetings to disseminate the <i>List of Principles</i> , a set of recommendations about corporate social responsibility along the supply chain of consumer electronics. Seventeen companies have already responded (e.g. Philips, Samsung, Apple or Microsoft). To raise awareness about working conditions and environmental problems along the supply chains of consumer electronics among consumers, the campaign developed a webquest that can be used at school or at home.
Initiating NGO	SOMO (Stichting Onderzoek Multinationale Onderneming), a not-for-profit organization in the Netherlands
Objective	The objective of the makeITfair project is to reveal labour abuses and environmental damaging practices of consumer electronics companies along the supply chain of electronics, and to raise awareness about the consequences of consumerism.
Activities	<ul style="list-style-type: none"> - education: the webquest informs (young) consumers about labour and environmental issues in the supply chain of consumer electronics - research about the supply chain of consumer electronics (reports available on the website) - inform through naming and shaming: the campaign names companies who harm the environment or mistreat workers or local communities - consumer challenging: encourage consumers to consider the impact of consumerism and change consumption practices - business challenging: encourage consumer electronics companies to adjust their conduct according to the <i>List of Principles</i>
Target group	<ul style="list-style-type: none"> - business - consumers
SMM topics	<ul style="list-style-type: none"> - materials: metals and minerals - product: consumer electronics - impacts: environmental damage and labour abuses along the supply chain of consumer electronics
Life-cycle phases	extraction, production, consumption, recycling, disposal
Website	http://makeitfair.org/en

Partnership between McDonalds and the Environmental Defense Fund	
Short description	In 1990, McDonalds and the Environmental Defense Fund launched a corporate partnership to analyze McDonalds' restaurants, distribution centers and suppliers, with the objective to phase out its polystyrene clamshell food containers in order to reduce waste. The outcome of the collaboration was the phase out of McDonalds polystyrene clamshell food containers and 30% reduction of waste in McDonalds restaurants. This partnership was the first in a row of waste reduction plans between McDonalds and the Environmental Defense Fund.
Initiating NGO	Environmental Defense Fund
Objective	The collaboration project aimed at reducing materials and waste along the supply chain of the products sold in McDonalds restaurants by deploying reusable materials, recycling and composting along the supply chain.
Activities	<ul style="list-style-type: none"> - education: teach McDonalds employers and employees how to reduce waste along the supply chain - research about the deployment of materials along the supply chain of McDonalds products - business challenging: demand McDonalds to reflect upon the environmental impact and costs of waste generated along the supply chain
Target group	- business (McDonalds)
SMM topics	<ul style="list-style-type: none"> - materials: waste - product: food and drink products, packaging in McDonalds - impact: environmental impacts of waste
Life-cycle phases	production (of food and drink products) reuse, recycling, recovery, disposal (waste generated by the food and drink products and packaging)
Website	http://www.edf.org/partnerships/mcdonalds

Pharos	
Short description	Pharos is a project launched by the Healthy Building Network (HBN) in 2006. The project has developed a certification system for the building materials sector, the Building Product Library, with information of over 750 products in 9 product categories. This tool aims to enhance transparency in the building material market. By adopting a life-cycle approach, Pharos addresses impact of products and materials on human health, energy consumption and climate change.
Initiating NGO	Healthy Building Network, a US-based NGO
Objective	The objective of Pharos is to create objective criteria to evaluate the greenness of building materials (through research and consultation with producers and consumers) and enhance the production and consumption of green building materials.
Activities	<ul style="list-style-type: none"> - research: the project developed criteria for green building materials and created an online certification system where producers and consumers can look for building products and materials - inform through labelling and certification: the online certification system of building products and materials - awareness raising about the environmental and health impact of building materials - consumer challenging: encourage consumers to choose green building materials - business challenging: demand the building material sector to become more sustainable
Target group	<ul style="list-style-type: none"> - business - consumers
SMM topics	<ul style="list-style-type: none"> - materials: minerals (e.g. stone or quartz) - product: building materials - impacts: environmental impact, health impact
Life-cycle phases	extraction, production, consumption
Website	http://www.pharosproject.net/about/index/

Rank a Brand	
Short description	Rank a Brand is Europe's largest brand-comparison website with brands covering various sectors, e.g. fashion, electronics, food and beverages, and travel. Besides providing people with information on brands' sustainability credentials (based on the themes of environment, climate, labour issues and transparency), the brand-comparison website demands the active participation of consumers to research brands and sectors themselves. Through the provision of sustainability credentials to brands, Rank a Brand indirectly touches upon environmental issues along the life-cycle of different products and resources.
Initiating NGO	Rank a Brand
Objective	Rank a Brand aims at informing consumers about the sustainability criteria of their favorite sectors and brands, to encourage them to make better choices when purchasing products.
Activities	<ul style="list-style-type: none"> - research: a number of products and brands are evaluated on the basis of sustainability criteria - awareness raising among consumers about the sustainability of the products and brands they purchase - inform through naming and shaming: a number of products and brands are evaluated on the basis of the sustainability criteria. The evaluation is made public on the website. - consumer challenging: Rank a Brand's main objective is to encourage consumers to only purchase products from A-ranked brands - business challenging: producers and retailers are challenged to improve the sustainability criteria of their brands
Target group	<ul style="list-style-type: none"> - business (fashion and clothing industry, food and beverages, electronics, travel & tourism, telecom and internet, media, energy suppliers) - consumers
SMM topics	<ul style="list-style-type: none"> - materials: a wide range of resources are covered, e.g. organic cotton, chemicals, minerals etc. - products: a wide range of products, brands and sectors are covered (computers, jeans, etc.) - impact: the environmental impact of extraction (e.g. conflict minerals) and production (the usage of suspect chemicals) is indirectly uncovered through the sustainability criteria
Life-cycle phases	extraction, production, consumption, disposal
Website	http://rankabrand.org/

REdUSE	
Short description	REdUSE is a network that advocates a conscious handling of the world's natural resources and criticizes the unfair distribution of natural resource consumption. REdUSE therefore advocates resource decoupling and impact decoupling, by demanding a sustainable Europe that is characterized by decreased resource consumption and a minimization of the impact of overconsumption and extraction outside Europe, North America, and Oceania. REdUSE mainly targets consumers by providing information on how to change consumption patterns or on environmental damage occurring along the supply chain of everyday products and by raising awareness about the impact of consumption patterns through for example the Facebook game <i>Resource Rally</i> .
Initiating NGO	REdUSE is a network involving Global 2000, Sustainable Europe research Institute, Friends of the Earth Europe, and national Friends of the Earth member groups.
Objective	REdUSE aims at creating a fairer distribution of natural resource consumption between the Global South and the Global North, a more sustainable natural resource consumption in Europe, and a more sustainable resource extraction in the Global South.
Activities	<ul style="list-style-type: none"> - voice: representing local communities in developing countries who are impacted by the extractive industry - education: inform and educate local communities in the Global South about the environmental, social and health impact of resource extraction - research about natural resource extraction, consumption, recycling and disposal - enhancing transparency about the consequences of current global consumption patterns - consumer challenging: inform EU consumers about their consumption patterns and raise awareness among EU consumers about the consequences of current consumption patterns - government challenging: advocate robust EU legislation that regulates natural resource consumption
Target group	<ul style="list-style-type: none"> - government (at EU level) - consumers (in the EU)
SMM topics	impact : environmental and social impact of current consumption patterns and extraction
Life-cycle phases	indirectly: extraction, production, consumption, reuse, recycling, disposal
Website	http://www.reduse.org/en

RReuse	
Short description	The European NGO and umbrella organization RReuse was established in 2001 and consists of 22 members across 12 European countries that are social enterprises with activities in repair, reuse and recycling. Members of RReuse focus on collecting, sorting, redistribution and recycling of textiles, electronics, furniture, paper, wood, plastics, paint, metals, books and toys, second hand shops, community composting projects, awareness raising campaigns, and business support. RReuse serves as a platform to exchange information, encourage collaboration, and advocates for stronger policies in favour of repair, and reuse and waste management. RReuse not only targets policy-makers but also consumers through organizing and carrying out a number of projects like the 'lowwaste' project and campaigns like the 'reuse more throw less' campaign, by adopting a life-cycle approach.
Initiating NGO	RReuse, a European NGO and umbrella organization
Objective	RReuse aspires to a stronger European policy framework that addresses waste prevention and management based upon the idea that it protects the environment, creates jobs, makes goods more affordable.
Activities	<ul style="list-style-type: none"> - education: provision of work and training opportunities by the social enterprises - consumer challenging: demonstrate the benefits of using and purchasing second hand products - business challenging: raise awareness among retailers and producers of recycled and reused products, and demand the establishment of green buying procedures in companies - government challenging: demanding government at local, national and European level to decouple waste generation from economic growth
Target group	<ul style="list-style-type: none"> - national organizations: members of RReuse - government (at local, national and EU level) - consumers
SMM topics	materials: waste
Life-cycle phases	reuse, recovery, recycling, disposal
Website	http://rreuse.org/t3/

Sustainable Packaging Coalition (SPC)	
Short description	The Sustainable Packaging Coalition (SPC) is a business working group launched by GreenBlue that aims at providing business with sustainable packaging solutions along the entire packaging life-cycle (material sourcing, packaging design, manufacturing, transport and disposal). The membership of SPC ranges from large global corporations to small business enterprises. In cooperation with companies across the packaging supply chain, GreenBlue carries out research to integrate sustainability criteria into the packaging process on a global scale.
Initiating NGO	GreenBlue, a not-for-profit organization based in the US
Objective	The collaboration between GreenBlue and companies across the packaging supply chain aims at developing a robust environmental vision for packaging.
Activities	<ul style="list-style-type: none"> - education: teach companies across the packaging supply chain how to make packaging more sustainable - research: research possibilities to make packaging more sustainable - business challenging: demand companies across the packaging supply chain to introduce sustainability criteria in their packaging process
Target group	- business (companies across the packaging process)
SMM topics	<ul style="list-style-type: none"> - materials: materials used for packaging - impacts: environmental impact and cost of packaging
Life-cycle phases	extraction, production, disposal
Website	http://www.greenblue.org/activities/packaging/

The Story of Stuff	
Short description	Launched by the Sustainability Funders and the Tides Foundation in 2007, the Story of Stuff started as a short film and became a global movement that disseminates the often hidden environmental, social and economic impact of current global consumption patterns. Besides disseminating knowledge, it also serves as a platform to exchange information and organize conferences aiming at accelerating a global transition to sustainable production and consumption.
Initiating NGO	Tides Foundation and the Sustainability Funders
Objective	The Story of Stuff movement aims at transforming our current materials economy by promoting social and economic equity, public health and long-term environmental sustainability.
Activities	<ul style="list-style-type: none"> - education: the short film and message has been disseminated in schools, houses, business and translated into 10 languages - awareness raising about the environmental and social impact of current consumption and production patterns - consumer challenging: encourage consumers to make sustainable choices
Target group	<ul style="list-style-type: none"> - consumers - business
SMM topics	<ul style="list-style-type: none"> - products: all consumer goods - impacts: environmental impact of our production and consumption patterns
Life-cycle phases	extraction, production, consumption, disposal
Website	http://www.tides.org/impact/stories/show/story/single/title/the-story-of-stuff-project/

WorldLoop	
Short description	WorldLoop was established to offset the negative environmental impact of ICT hardware (mostly in the form of e-waste). By purchasing E-Resource Certificates, buyers of computers in OECD countries support the collection and sound recycling of e-waste in developing countries. WorldLoop supports facilities in developing countries that engage in the collection, manual dismantling, automated processing and recycling of e-waste, such as the WEEE Centre in Kenya. It also provides capacity-building and logistical assistance.
Initiating NGO	WorldLoop, an international non-profit organization that grew out of 'WorldPC', a project by Close the Gap
Objective	WorldLoop seeks to find a solution to a double problem: closing the digital divide by giving high-quality computers a second life in the South, and reducing the risks and impacts of e-waste.
Activities	<ul style="list-style-type: none"> - education: WorldLoop teaches local communities in developing countries how to develop a sustainable e-waste management system - awareness raising about e-waste management - consumer challenging: consumers of hardware in industrialized countries are encouraged to buy E-Resource Certificates - business challenging: WorldLoop provides expertise and infrastructure to developing countries and supports facilities that engage in sustainable e-waste management (collection, dismantling, processing, recycling)
Target group	<ul style="list-style-type: none"> - business in developing countries (e-waste collection and dismantling activities) - consumers (of hardware)
SMM topics	<ul style="list-style-type: none"> - products: ICT hardware (focus on computers) - impact: environmental impacts of e-waste
Life-cycle phases	reuse, recovery, recycling, disposal
Website	http://www.worldloop.org/