

# **Communicating Sustainable Production and Consumption Challenges and Strategies**

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## ***Abstract***

Assessing the range of ecological and socio-economic threats afflicting the planet, the causal chain eventually leads back to various underlying configurations of unsustainable production and consumption practices, policies and systems. Awareness of these drivers and the need to address them has evolved over the past four decades, resulting in the 2002 declaration at the World Summit on Sustainable Development that changing unsustainable production and consumption is one of the “overarching objectives” of and essential to sustainable development. However, the message and values of sustainable production and consumption tends to clash with those of mainstream consumer culture and the global advertising industry, as well as political ideologies promoting unlimited economic growth. This paper examines some of the challenges facing organizations involved in communicating the concepts and values of sustainable production and consumption among different audiences and stakeholder groups, with attention to different strategies addressing these challenges.

## ***In pursuit of the overarching objective***

Assessing the range of ecological and socio-economic threats afflicting the planet, the causal chain eventually leads back to various underlying configurations of unsustainable production and consumption practices, policies and systems. Moving from the impacts of climate change to the drivers, the increase in greenhouse gas emissions is especially associated with expanding consumption (Hedenus et al, 2014; Stephenson et al, 2013; Kysar and Vandenberg, 2010). Tukker et al (2010) identify three high-carbon behavioral clusters with major impacts on the environment in general.

*Mobility (automobile and air transport, including holiday travel), food (meat and dairy, followed by the other foodstuffs), and home building and demolition (including the use of energy-using products [as responsible for] the largest proportion of consumption-related environmental impacts...accounting for 70% to 80% of the life cycle environmental impacts in industrialized countries and thus should arguably be the focus of policy interventions.*

Official awareness of these drivers and the need to address them has been given voice over the past four decades, identified by Agenda 21 (UN, 1992) as “the major cause of the continued deterioration of the global environment,” whereby “States should reduce and eliminate unsustainable patterns of production and consumption” in order “to achieve sustainable development and a higher quality of life for all people” (Rio Declaration on Environment and Development, 1992). In 2002 the World Summit on Sustainable Development declared this effort to be one of the “overarching objectives of and essential to sustainable development,” reaffirmed in 2012 by the UN Conference on Sustainable Development (UN, 2012) calling for “urgent action.”

Yet progress towards this overarching objective continues to be overtaken by ongoing growth of the global economy, spurred by the dominant economic growth ideologies. Progress is also hampered by institutional inertia and active political resistance.

Nevertheless, those within governments, business and civil society who are committed to the transition to sustainable production and consumption systems and practices continue to implement and propose programs and social innovations, making the case for sustainable alternatives to a range of different audiences with an interest and stake in the quality and future of food, energy, transportation, housing, water and other systems, sectors and needs.

In “making the case” for sustainable production and consumption, advocates and practitioners confront a wide range of communicative challenges as well as strategic options, depending on the particular messages, audiences and contexts they are dealing with. In this paper we examine some of these challenges and strategies.

## ***Communication strategies***

The most familiar model of the communication process is Harold Lasswell’s (1948) question “Who Says What In Which Channel To Whom With What Effect?” followed by Shannon and Weaver’s (1949) model of sender-encoding-channel-decoding-receiver (Figure 1, feedback loop added). In this paper we are interested in the experience of sustainability advocates (senders) in their efforts to explain, inform, persuade or otherwise construct and frame messages (encode) about the need and ways to help make the transition to sustainable practices throughout the production and consumption systems making up the economy, using various vehicles (channels) to transmit these messages (e.g., books, workshops and conferences, broadcast media, social media).

A major concern is to what degree the targeted audience (receiver) noticed, paid attention, understood (decoded) and possibly was influenced by the message, hopefully enough to adopt and promote sustainable practices and values. The response (feedback) is hopefully positive,

resulting in constructive dialogue and active engagement practicing and promoting sustainability values.

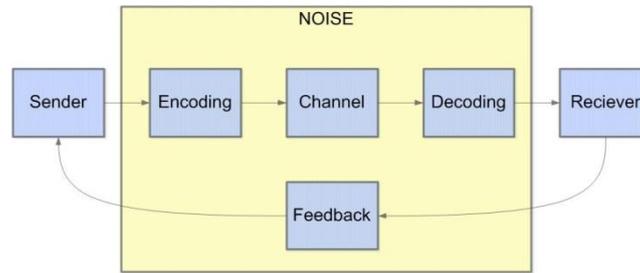


Figure 1 Traditional communication model (Shannon & Weaver, 1949)

Over the years other theorists have expanded understanding of the process, moving from one-way transmission theory to two-step flow (Katz & Lazarsfeld, 1955), interactive, transactional (Barnlund, 2008) and constructionist (Lanham, 2006; Goffman, 1974, 1959) models. Theories of communication evolved in sociology, anthropology, psychology, political science and other disciplines. As a unified field, Craig (1999) points out, it is afflicted with “productive fragmentation.” Illustrating the complexity of the topic, he identifies seven different “metadiscursive” traditions and vocabularies<sup>1</sup> among efforts to establish a common conceptual framework.

This paper will draw on some of the basic concepts and principles as they apply to practical efforts to communicate and promote the transition to sustainability practices and systems (i.e., SPaC). Focusing on this practical side, Patterson and Radtke’s *Strategic Communications for Nonprofits* (2009) offers one operational model for organizations,<sup>2</sup> which is useful in examining various SPaC communication cases. They highlight eight steps:

1. Preparing to plan: Review Organization’s Mission
2. Situation Analysis
3. Target and Research Audiences
4. Communications Objectives
5. Issue Frames and Message Development
6. Vehicles and Dissemination Strategies
7. Measurement and Evaluation
8. Creating the Plan and Timeline

### Mission and situation analysis

Most organizations with a mission to promote sustainability have likely invested a good amount of time studying the global situation of ecological and social crises and threats which frame the specific problem areas they are addressing in their mission, Population growth, economic and technological globalization, trade, the internet and other factors are familiar trends recognized as part of the broader context of forces to be considered in developing strategies and plans. The

<sup>1</sup> The seven traditions are: rhetorical (the practical art of discourse), semiotic (intersubjective mediation by signs), phenomenological (the experience of otherness), cybernetic (information processing), sociopsychological (expression, interaction and influence), sociocultural (the re-production of social order), and critical (discursive reflection).

<sup>2</sup> There have also been a number of efforts to provide guides for developing sustainability communication strategies and campaigns (UNEP, 2006; GTZ & German Federal Ministry, 2006; Futerra, 2005), although these also tend to draw on this basic set of strategic planning steps, but focusing on environmental and social priorities and related audiences, barriers, frames and message.

aim to target and change a particular unsustainable production and/or consumption pattern is often initially motivated by a concern and understanding of the impacts of that « pattern » on human and/or ecosystem health.

Although an organization's situation analysis might prioritize a particular threat or problem area such as climate change, biodiversity loss, fresh water shortages, poverty and inequality, narrowing the scope to a particular country, region or neighborhood, it is important to understand not only the causal linkages and flows between drivers and crises, but the web of institutions, players and politics shaping the changing context of rules, priorities and pressures.<sup>3</sup>

### **Audience targeting**

The audiences which sustainability advocates target greatly vary, from constituent audiences they hope to inform or inspire, to the potential partners they hope to join in collaboration, to current and potential funders, to the policy and decision makers wielding the power to make a difference, and other segments making up the « public » whose support is needed to confirm or sway the other groups.

Overly broad strokes used to delineate the mythical « Public » as the target can often squander the resources of organizations with modest budgets, trying to reach everyone yet leaving most untouched – a common mistake made by far too many social change campaigns. More experienced communicators know to identify and research the specific audience segments which are most likely to make a difference, gearing their message, framing, tone and delivery method to the interests, inclinations, and other traits contributing to the degree and quality of attention. As Patterson and Radtke (2009) put it, « There is no general public anymore, only target audiences, key constituencies, and influentials who, by virtue of their education, income and activism, have a more powerful impact on community affairs and public policy than their numbers would suggest. »

### **Communication objectives**

Given the overall goal of transition to sustainable production and consumption systems, there is the question of the more specific strategic *communication objectives* to be achieved. The more clearly an organization's communication objectives are defined the better chance of choosing the most effective methods and strategy in getting across "the message". Servaes and Malikhao (FAO, 2007) note three levels of communication strategies for implementing sustainable development, which apply to SPaC:

1. Behaviour change communication (e.g., individual, interpersonal, community)
2. Advocacy communication (targeting policymakers and decision-makers)
3. Communication for social change (focus on broader structural and institutional targets)

The objectives will be chosen and defined according to the mission, priorities, interests and outlook of the organization, including the constituencies which they serve.

The three major institutional categories of players shaping much of the content and flow of the thousands of messages across the media, routinely assaulting the average person's senses each day, are business, government and civil society – sometimes collectively known as the « Triangle of Change » (Figure 2). Ideally, the communication objectives of these entities with regard to sustainable production and consumption would be mutually supportive. However, business, politics and the public interest do not always so happily coincide. Thus, one meta-objective is to share a joint vision and path to a sustainable society. The reality is that there are major differences as to what needs to be achieved.

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<sup>3</sup> Sometimes this is done through a SWOT (strengths, weaknesses, opportunities, threats) analysis

For business there is the requisite need to be profitable, to provide a reasonable return on investment to stockholders. However, growing public awareness and concern regarding the various environmental and social crises have caused companies to begin considering the « triple bottom line » regarding their priorities. Further, in order to claim credibility they need to do more than talk sustainability but « walk the talk », as Utopies manager Stanislas Dupre (UNEP/Global Compact/Utopies, 2005) put it. This means that companies will have to

*embed sustainability goals into product development and their business model evolution. In this respect, the communication side of marketing plays a key role, since it allows the company both to communicate its difference and to change consumers' attitudes.*

Ottman (2011) describes this shift in priorities as the « new green marketing paradigm, » whereby the strategic communication objectives of companies now go beyond a focus on profit, market share, public image and return on investment to an expansion of the company's social identity within a long-term vision. « To successfully market to environmentally and socially aware consumers credibly and with impact, » she explains, « requires first that one no longer view people as mere 'consumers' with insatiable appetites for material goods, but as human beings looking to lead full, healthy lives. » One of the key objectives of such green marketing communications is to « understand the deeply held environmental and social beliefs and values of your consumers and other stakeholders and develop a long-term plan to align with them. »

Establishing credibility is an essential objective, achieved by « communicating your corporate commitment and striving for complete transparency. » Esty and Winston (2006) refer to the « eco-advantage » earned by companies committing to a sustainability track : « In the end, Eco-Advantage is about a new way for inspired people – executives, managers, and workers – to build companies and industries that are not just innovative, powerful, and great...but good too. »

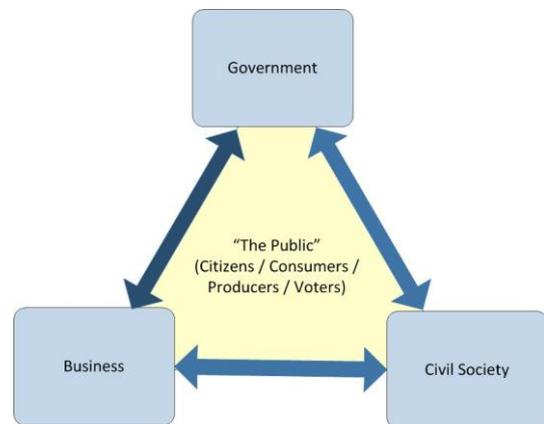


Figure 2 Triangle of Change

The communication objectives of these different players can sometimes come together, as in multi-stakeholder partnerships and coalitions, or bitterly compete. For example, in the case of climate change policy, as sustainability advocates from civil society and scientific organizations lobbied for strong governmental actions, several major companies from the oil and auto industries (e.g., Exxon/Esso, Shell Oil USA, Ford Motor Company, General Motors Company, and others) came together to form the Global Climate Coalition (Revkin, 2009), not only challenging the IPCC's findings on global warming, but actively lobbying against government climate action, including US ratification of the Kyoto Protocol. Although several of the original corporate members later dropped out and began taking more progressive positions regarding climate, others, such as Exxon (UCS, 2007) and Koch Industries, continue to lobby the government and citizens against strong climate actions, especially those involving changes in automobile and fossil fuel consumption.

As an example of civil society objectives and approach, the environmental group Greenpeace is well-known for their innovative communication strategies to influence environmental policy through highly dramatic actions (including the famous Rainbow Warrior incident) and campaigns designed to capture international media attention (Marmino, 2013 ; Sievers, 2009; Doyle, 2007), mobilizing public opinion to pressure governments towards environmental priorities.

## Issue Frames and Message Development

Depending on their aims and objectives, business, civil society and governments may generate complementary or competing messages about sustainable production and consumption. To be effective and persuasive, *messages* should clearly define the issue, capture the attention and interest of their target audience, and identify a course of action.

To capture and hold the audience's attention involves framing an issue so that they recognize it as a problem that needs to be addressed, that there is a solution that can be achieved, and that their individual actions can help advance that solution. In order to mobilize community action, an issue must move from an *episodic* frame, focusing on separate events or particular cases, to *thematic* frames, placing public issues in a broader context by focusing on general conditions or outcomes (Patterson and Radtke, 2012).

Lakoff (2004) defines *frames* as « mental structures that shape the way we see the world. As a result, they shape the goals we seek, the plans we make, the way we act. » Given the aim and objectives of changing behavior and viewpoints, the act of reframing is crucial. Reframing, Lakoff explains, « is social change » ; it is

*changing the way the public sees the world. It is changing what counts as common sense. Because language activates frames, new language is required for new frames. Thinking differently requires speaking differently.*

For behavior change objectives such as reducing individual fossil fuel and meat consumption, (episodic) messages and frames need to be crafted which clearly establish the linkage with impacts of concern to the audience being addressed. This may be climate change and biodiversity loss, health risks, or the opinion of one's friends and community. The proposed solution must be scaled to doable actions that can be seen as meaningful and making a difference.

For advocacy objectives, the message and frame may need to focus on the institutional processes and priorities within which policymakers must operate. For business lobbyists, this message and frame may focus on how a proposed solution (e.g., subsidies to solar technology research and development) advance the government or agency's policy agenda (e.g., providing jobs, reducing greenhouse gases, supporting business development).

For social change objectives, the (thematic) message and framing for sustainable production and consumption involves the long-term vision of society's transition to another type of economic system, where the needs of current and future generations are sustainably produce and consumed -- food, water, energy, transport, healthcare and other products and services – without damage to the planet or human health and well-being. This involves a new narrative. As Thomas Berry (1988) put it,

*It's all a question of story. We are in trouble just now because we do not have a good story. We are in between stories. The old story, the account of how we fit into the world, is no longer effective. Yet we have not learned the new story.*

Naomi Klein (2013) also calls for replacing the old frame whose time has come.

*I think the narrative that got us into this – that's part of the reason why you have climate change denialism being such a powerful force in North America and in Australia – is really tied to the frontier mentality. It's really tied to the idea of there always being more. We live on lands that were supposedly innocent, "discovered" lands where nature was so abundant. You could not imagine depletion ever. These are foundational myths.*

## Vehicles and Dissemination Strategies

A range of vehicles and strategies exist for carrying the message and frame to targeted audiences. These include face-to-face meetings, (e.g., interpersonal conversations, workshops and conferences, town meetings), print (e.g., press releases, brochures, flyers/fact sheets and pamphlets, direct mail, photos, reports and white papers, books, newspaper, magazine and

journal articles and editorials, advertisements), electronic communications (e.g., email, listserves, instant messaging, websites), audio vehicles (e.g., teleconferences, direct phone calls, radio talk shows, radio news and PSAs, talk shows), video (e.g., films, documentaries, YouTube, internet streaming, video conferencing, TV ads and PSAs, broadcast TV, cable, DVDs, closed-circuit video), and street actions (e.g., protests, demonstrations, sit-ins, guerilla theater, occupy actions, civil disobedience).

Sustainability change agents might then ask: What effect do different vehicles have on the message in the delivery to target audiences? Which vehicles work in concert with each other in delivering the message? What is the ideal mix and timing?

### **Measurement and Evaluation**

Monitoring and evaluation of a communication strategy's results allows for reporting successes to funders and supporters, building greater community credibility and stronger constituent backing. Internally, the ability to measure performance and effectiveness allows campaign managers to know what does and does not work, to improve weaknesses, maximize strengths, and encourage innovations. One of the tragedies of too many campaigns and programs is the failure to assess performance, learn from mistakes and experience, and initiate the necessary changes to future methods and actions.

The most basic measure is a count of the activities held, messages sent and those placed in the media. The more complicated measure is of the impact on the targeted audiences, whether behavior and views changed and to what degree. How many people actually received the message? How many responded? How many heard and remembered the message? How many changed their behavior – and did it stay changed or revert back to previous ways?

In 2002, when the World Summit on Sustainable Development announced that changing unsustainable production and consumption patterns was one of the overarching objectives of sustainable development, it did not specify how progress towards that objective might be measured. In 2014 the UN Open Working Group on Sustainable Development Goals (SDGs) considered this question with regard to what kind of indicators might be used for a goal on sustainable production and consumption. Whether or not SPaC (or « SCP ») is included as an SDG in the UN's Post-2015 Development Agenda is currently an open question. However, for sustainability advocates and researchers it is a standing challenge

### **Creating the Plan and Timeline**

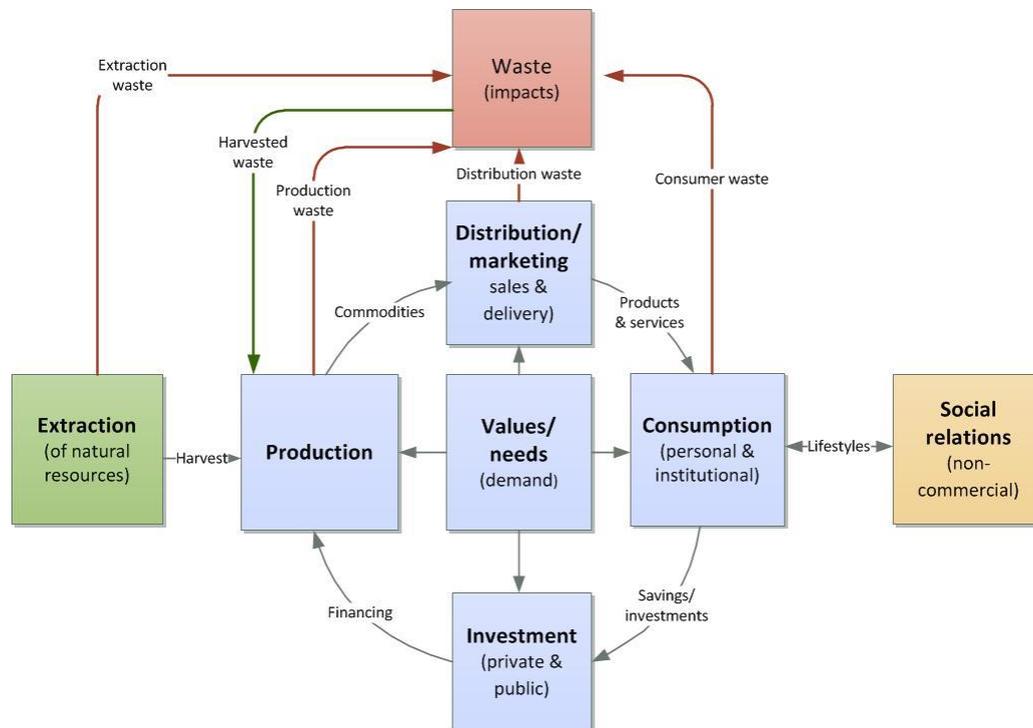
The final step in the process is putting the pieces together into a coherent communications plan and implementation calendar, and then working to get buy-in among staff and supporters, making the plan a part of the organization's culture.

### ***Communicating SPaC***

The idea of “communicating sustainable production and consumption” refers to those efforts, on the one hand, to raise awareness and understanding of the negative social and environmental impacts of unsustainable production and consumption practices and policies and, on the other, to encourage adoption of more socially and environmentally responsible (i.e. “sustainable”) practices and policies among producers, consumers, retailers, investors, regulators, and other actors within the system.

Communication about “sustainable production and consumption” builds from and promotes a systemic understanding of the interlinkages between the problems and the root behavioral and infrastructural forces driving them. One of the critical concepts within the research and knowledge domain of SPaC is the product lifecycle, with systematic attention given to the actual and potential social and environmental impacts of various products (e.g., automobiles, houses, electricity, chemicals, meat) across their various stages of development. Such analysis may move

from extraction of raw materials to design and production, to distribution (including packaging, transport, wholesale and retail, trade, consumption and disposal/recycling and also including attention to the role of investment decisions and values, identifying the flows of waste, emissions, and other impacts resulting from the practices and processes at each phase (Fig. 3).



**Figure 3 : The Production-Consumption Cycle (Source: ISF)**

Intervention strategies are developed to change those practices and processes and thus the nature of product, linked with specific harmful impacts. The strategy may aim to simply stop further production of the product. The objective may be to end sweatshop factory labor practices or to replace toxic material with a benign substitute. For defenders of biodiversity the concern may be with chemical pollution of watersheds, thus targeting suburban homeowners to stop the run-off of fertilizers and pesticides used on residential suburban lawns. Addressing the impacts on climate change the objective might be to significantly reduce production of electricity from coal-fired plants, consumption of meat and dairy products, and/or gasoline consumption by automobile owners. Intervention points ideally focus on that stage or point in the cycle that will make the most difference, targeting the most relevant actors involved.

The choice of communication strategy and tactics to support these interventions is decided, taking shape with regard to the audiences and institutions targeted, economic sector, political context, and communities affected.<sup>4</sup> A snapshot of the variety of intervention strategies used by sustainability change agents can be seen in Figure 4.

Consumption-focused intervention strategies, for example, include consumer information campaigns, voluntary simplicity circles, right to know legislative lobbying, education for sustainability, consumer boycotts and ethical shopping. These may share overlapping target audiences, but represent a diversity of approaches, methodologies and conceptual frames, with

<sup>4</sup> UNEP's SCP Clearinghouse<sup>4</sup> provides a helpful tool to explore the many initiatives and programs mounted around the world to foster sustainable production and consumption behavior, including the communication strategies used.

some crafting messages and activities aimed at changing individual behavior and lifestyle, others attempting to engage, influence and mobilize whole communities.

### **Social marketing**

«The cornerstone of sustainability is delivering programs that are effective in changing people's behavior,» says McKenzie-Mohr (2011) in his book *Fostering Sustainable Behavior*, explaining that «the transition to a sustainable future will require that the vast majority of people be persuaded to adopt different lifestyles.» McKenzie-Mohr's intervention strategy of choice is social marketing, in particular *community-based social marketing* (CBSM), which many organizations are using to promote sustainable practices in different sectors and problem areas. This approach involves five basic steps:

1. Selecting behaviors
2. Identifying barriers and benefits
3. Developing strategies
4. Conducting a pilot
5. Broad-scale implementation

Social marketing draws on many of the elements of communication strategy identified by Patterson and Radke, including researching the target audience, crafting and framing the message to the audience's interests and orientations. Identifying barriers and benefits are key elements of the situation analysis. The social marketing strategy is a communication strategy, drawing on the techniques and insights of commercial marketers and market researchers.

Whereas some might question whether this approach commodifies sustainability as if it were just another product or brand, practitioners claim that a paradigm within the marketing field itself is taking place, what Ottman describes as «the new green marketing paradigm». In *The Green Marketing Manifesto*, John Grant (2007) claims that the reverse is taking place, that «there is every commercial reason to tackle green issues. For a start, if we don't, there may be no markets, and hence no marketing in 30-50 years' time!» Grant claims that this is a »post-advertising model» which «avoids the dangers of greenwashing and offers more authentic approaches compatible with green companies, brands and products.» There are two types of Grant claims : to change what people do and to change the way they see the world :

*If you get someone to recycle, that doesn't necessarily translate into other activities. But if, perhaps, you get them to put themselves on a carbon diet, then this can manifest itself in numerous behaviours. Further, you can build new service concepts, new types of market which meet people's needs in greener ways, like city car clubs or power tool libraries. What these often require is Trojan horse cultural ideas, i.e., ways to make them seem normal and intuitive.*

### **Collaborative consumption**

Also known as the sharing economy or collaborative economy, the strategy of collaborative consumption is currently a major subject of many discussions about sustainable production and consumption.<sup>5</sup>

Noting how, since the middle of the twentieth century, economic prosperity has been equated with consumerism and ownership, Xavier de Lecaros Aquise, co-founder of Girl Meet Dress.com, explains how the the game has changed, with the strategy of collaborative consumption representing a radical move away from ownership to service, how “in today's hyper-connected world, this view of the world is beginning to change.”

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<sup>5</sup> Center for a New American Dream, Collaborative Communities Program, see <http://www.newdream.org/programs/collaborative-communities/sharing-resources/emerging-sharing-economy>

*The abundance of assets along with the relative affordability of almost anything, high-tech consumer platforms, the digitisation of products, close-knit social media communities and the economic downturn of 2008 have all meant that collaborative consumption is flourishing.*

« It is the young who are leading the way, » de Lecaros Aquise explains, « understanding that it is not the DVD they want but the movie it carries, not the drill they need but the hole it creates, and the needs or experiences these assets fulfil rather than the assets themselves. Today time, experience and access trumps possession. »

Internet communication technologies (ICTs) are playing a major role as enabling channels for collaborative consumption exchanges. Nicholas (2013), studying the influence of internet, smartphones and social network sites (SNSs) describes ways in which the technology is driving much of the movement toward collaborative consumption, whereby “online practices of sharing (on Twitter and Facebook) are encouraging offline practices of sharing.” Botsman and Rogers (2010) claim that « social networks, smart grids, and real-time technologies are also making it possible to leapfrog over outdated modes of hyper-consumption and create innovative systems based on shared usage such as bike or car sharing.”<sup>6</sup>

*The Internet and mobile technology are allowing movements to become self-conscious and identifiable in real time and, in turn, spread and grow. In the same way that individuals reflect on and report their daily activities and thoughts on Twitter or Facebook—and, in turn, have those contributions reflected on, mimicked, edited, and disseminated—society is undergoing a constant process of reflexivity and adaptation.*

For this strategy, the critical channel or vehicle is “the perfect storm of mobile, location-based capabilities, Web and social network growth, changing consumer attitudes, and the historically understood market benefits of share platforms” (Gensky, 2010). The message is simple: Access rather than ownership.

### **Sustainable public procurement**

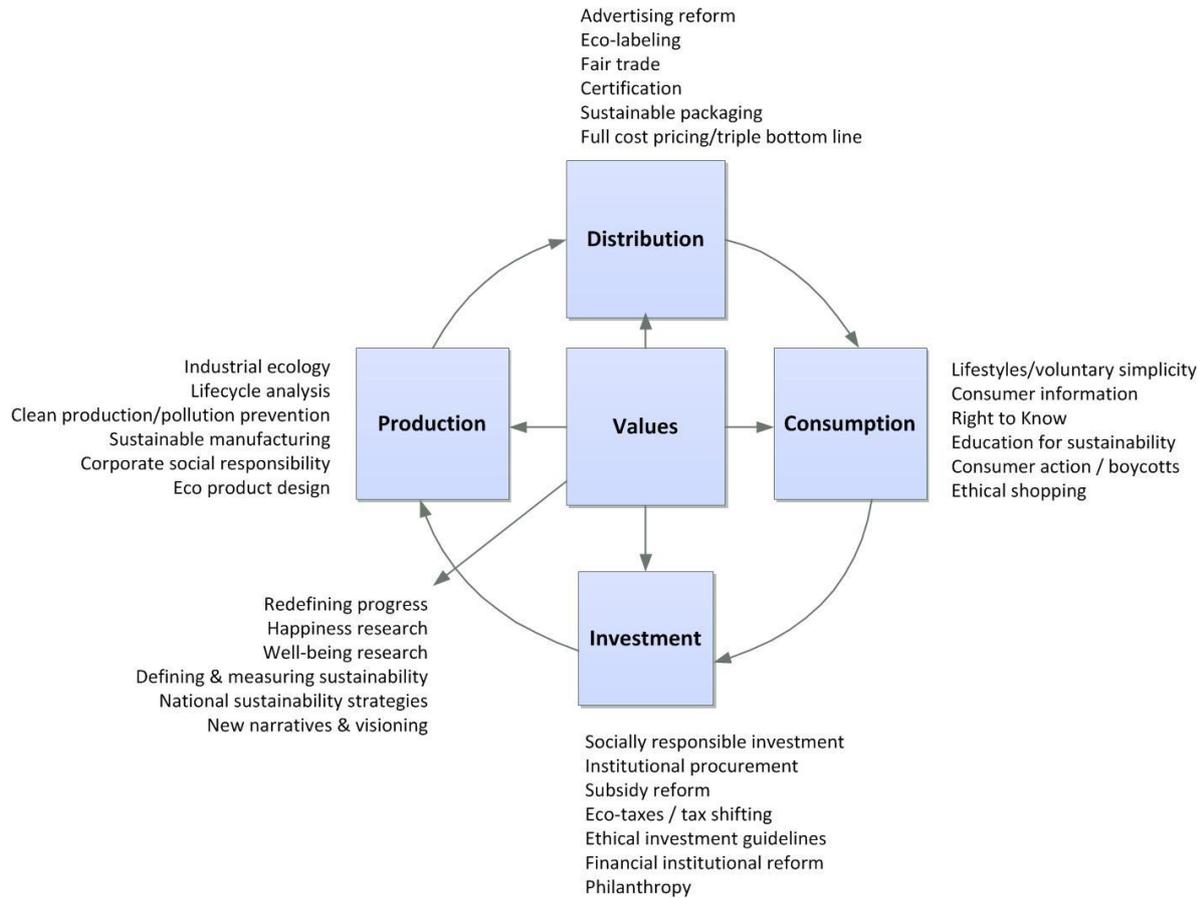
Another example of a strategy to change institutional consumption decisions and behavior is *sustainable public procurement* (SPP), in this case targeting government agencies and/or companies to persuade them to adopt and actively promote sustainability values and standards throughout their chain of suppliers.

The Procura+ Campaign,<sup>7</sup> founded in 2004 by ICLEI, is one example of putting this strategy into practice, targeting various European public authorities to adopt and implement sustainability standards and raising the bar regarding environmental performance. The SPP strategy also works closely with the strategy of ecolabeling, providing measures and information addressing the ecological impacts of specific products, thus providing procurement decision makers as well as other consumers with the capacity to be more discriminative in their choices regarding green electricity, cleaning and maintenance products, food and catering services, building construction/renovation, and other areas. As part of its communication strategy, Procura+ established the Sustainable Procurement Resource Centre website to provide an easy source of procurement information and news, which provides an easy download of the *Procura+ Manual : A Guide to Cost-Effective Sustainable Public Procurement* (ICLEI, 2007).

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<sup>6</sup> Hamari et al (2013), however, complains of the « dearth of empirical studies on attitudes toward such peer-to-peer economies and the intentions to participate in them, » such as between doing good and gaining economic benefits and how these are played out in behaviour.

<sup>7</sup> <http://www.procuraplus.org/>



**Figure 4: SPaC intervention strategies (Source: ISF)**

Another level of strategic communication taking place with the SPP strategy is among other SPP organizations and agencies, forming networks, coalitions and communities of practice sharing knowledge, data, case studies, experience, skills and political clout, such as the Sustainable Purchasing Leadership Council<sup>8</sup> in the US, providing members with a vehicle for developing common principles, sharing information on guidance programs, webinars and an annual conference for networking and mutual learning. At broader level is the International Green Purchasing Network,<sup>9</sup> « coordinating those who take the initiative in implementing Green Purchasing towards sustainable consumption and production. » IGPN provides members with a « Green Purchasing & Green Public Procurement Starter Kit, » an « interactive web and CD-ROM based package which provides a wealth of information in interactive modules. »

### ***From impacts to drivers : The case of climate change***

The above briefly touches on just three of the many categories of strategy used to directly address and change production/consumption practices. These in turn draw on a buffet of communicative tools, techniques and vehicles for reaching and engaging target audiences.

Looking at SPaC communication from another perspective, we move to the other end of the causal chain, from the points of origin to points of end impacts. If we take the case of climate change, particularly the different efforts to communicate about climate change and the kinds of

<sup>88</sup> <http://www.purchasingcouncil.org/>

<sup>9</sup> <http://www.igpn.org/>

changes that need to take place at the behavioral and institutional levels, we can consider the role which SPaC communications play -- or could possibly play more effectively.

Although the international policy community has recognized climate change as a policy priority, institutional implementation continues to lag far behind the ongoing calls for urgent action, as global temperature and sea levels slowly but relentlessly rise. This implementation gap is understandable if not acceptable given the politically unpalatable task of pitting future risks to future generations against presently comfortable high-carbon lifestyles and ingrained habits as well as jobs and livelihoods rooted in fossil-fuel based industries.

The first wave of climate change communications, establishing the role of “human influence” on climate change was highly contentious, as the majority of scientists weighed in with scientific evidence documenting the causal links between the rise in temperature and sea levels with the increase in greenhouse gases from fossil-fuel based energy production and consumption the methane generated by cattle bred for meat and dairy consumption.

Unfortunately the mass media weighed into the discussion with an interest and emphasis more focused on the drama of the debate instigated by relatively small but highly vocal and organized number of “climate skeptics”. Also unfortunate is Brittle and Muthuswamy’s (2009) observation that «attitudes about global warming do not appear to be influenced by strong scientific evidence even when scientists are presented as agreeing,». As climate change activists have been trying to translate scientifically complex facts to a non-science audience, climate “skeptics” have been aggressively warning media audiences and local communities against the threat posed to consumers’ comforts and freedom by a conspiracy of liberals, obsessed environmentalists, and unscrupulous scientists promoting a huge scheme to fund themselves.

Getting the world to recognize climate change as a real and urgent threat continues to be one of the major communication goals. As Abassi (2006) put it

*The facts of climate change cannot be left to speak for themselves. They must be actively communicated with the right words, in the right dosages, packaged with narrative storytelling that is based rigorously on reality, personalized with human faces, made vivid through visual imagery – and delivered by the right messengers.*

*Crafting the optimal message requires research; it should be meticulously based on accurate scientific information about the threat to begin with and calibrated in relation to the existing concern level of the audience and their perceived ability to do something about the threat. Findings are often situational to the specific threat, the point-in-time and the specific audience, and social scientists can usefully be recruited to assist in finding answers that are of great value to communications practitioners.*

Capturing and holding the attention of an audience requires more than “accurate scientific information” that is “packaged with narrative storytelling.” The nature, style and quality of the story and how it is “personalized” are critical elements, which must speak to the particular audiences in question. However, as Giddens (2011) notes, bringing the issue onto the political agenda is just the first wave of action. The second wave involves “embedding it in our institutions and in the everyday concerns of citizens.”

Aside from advocacy efforts focused on accelerating the high-level, slow moving international policy negotiations taking place, there is the urgent need for research and communication efforts to identify, understand and speak to the specific behaviors, norms and infrastructures defining current production and consumption practices and processes in those specific realms of transportation, food, housing, energy, tourism and other systems of provision. Corner & van Eck (2014) ask:

*What does the construction sector need to know about climate change to create low-carbon infrastructure? How can conservationists get the facts they need about climate change to design programmes for adaptation? How will programmes of health care for the elderly be impacted in a changing climate?*

SWITCH-Asia (2009) stress the need to establish the linkage between climate change and sustainable production and consumption and the need to integrate this into strategic actions:

*Sustainable consumption and production offers the potential and necessary tools to create a sustainable low-carbon economy that cannot only mitigate climate change, but is also economically viable, socially just, and based on principles of global equity....For the three consumption areas with the highest climate change impacts – housing, mobility and food – technological and non-technological aspects are equally important. If SCP thinking is applied to these areas, dramatic reductions could be realised in greenhouse gas emissions, as well as improvements in the local social and environmental surroundings. Moreover, SCP approaches can address climate change mitigation and adaptation simultaneously.*

There are clearly many different messages, frames and audiences implied in applying SPaC (or “SCP”) as a “necessary tool” in creating a sustainable low-carbon economy. In turn, over past years climate communication has developed into a discipline of its own. Exponents include George Mason University’s Center for Climate Change Communication (USA), The Yale Project on Climate Change Communication (USA), Climate Access (« a global network of climate and clean energy communicators, serving more than 2,000 members in 57 countries », USA), Climate Outreach and Information Network (COIN), the UC Merced Center for Climate Communications (USA), the International Climate Change Information Programme (Germany), Climate Communication: Science and Outreach (USA), and ClimateCentral (US).

As a result, many guides to developing and implementing climate communication strategies and campaigns have been produced, such as Futerra’s *Sizzle: The New Climate Message*, NESTA’s *Selling Sustainability: Seven lessons from advertising and marketing to sell low-carbon living* (2008), CRED’s *The Psychology of Climate Change Communication: A Guide for Scientists, Journalists, Educators, Political Aides, and the Interested Public* (2009), Suzanne Moser’s *Creating a Climate for Change: Communicating Climate Change and Facilitating Social Change* (2007), the Metcalf Institute’s *Communicating on Climate Change: An Essential Resource for Journalists, Scientists and Educators* (2008).

Yet in 2014, despite the overwhelming confirmation by the majority of the world’s scientists, the investment of time, effort and millions of dollars in making the case for climate change, and the disastrous consequences of inaction, the issue essentially stands at a stalemate. In the US this issue, along with the environment, recently dropped almost to the bottom of the list of things Americans worry about.<sup>10</sup> How is it that these efforts have not managed to move forward? « Why, » asks Giddens, « do most people, most of the time, act as though a threat of such magnitude can be ignored? »

One of the challenges frequently cited is in effectively communicating the scientific facts about climate change, that the complexity of the science can be overwhelming to the average non-expert. While the technical reports from the International Panel on Climate Change are essential for summarizing the state of knowledge on the problem, they are only read and understood by a small fraction of the population affected by the problem.

Corner (2014) points out that “although the IPCC is succeeding in its aim of presenting facts about climate change to policy makers, this role reflects an outdated model of how science is incorporated into society, and how social change occurs. In order to catalyze a proportionate political and public response to climate change, there is a need to rethink how climate change is

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<sup>10</sup> Riffkin (2014) reported the results of a national Gallup survey where Americans’ were presented with a list of problems facing the country and asked how much they personally worry about each one. Only 24% said they worried a “great deal” about climate change, just below environment (31%), whereas 51% admitted being only “a little” or not at all worried. By contrast, the top five concerns were the economy (59%), federal spending and the budget deficit (58%), the availability and affordability of healthcare (57%), unemployment (49%) and the size and power of the federal government (48%).

communicated: from science to human stories.” Corner & van Eck (2014) lament the situation in which « the careful, considered science and statistics of the IPCC cannot compete with the siren stories of climate change scepticism or the priorities of parts of the right-wing media. »

Reflecting on the conflicted public attitudes about climate change in the aftermath of Hurricane Sandy, Zadie Smith (2014) notes that “there is the scientific and ideological language for what is happening to the weather, but there are hardly any intimate words.”

*Although many harsh words are said about the childlike response of the public to the coming emergency, the response doesn't seem to me very surprising, either. It's hard to keep apocalypse consistently in mind, especially if you want to get out of bed in the morning. What's missing from the account is how much of our reaction is emotional.*

On the other hand the « siren stories » of skepticism speak directly to the emotions, especially fear (threats to loss of freedom and familiar comforts) and suspicion. Further, a widespread and well-funded disinformation campaign has actively created confusion and doubt about the IPCC and scientific evidence. In 2008, after a study by the Royal Society found that ExxonMobil had distributed \$2.9 million to 39 groups which « misrepresented the science of climate change by outright denial of the evidence, » the oil giant admitted this may have hindered action to tackle the problem (Adam, 2008).

In their analysis of the U.S. failure to pass climate legislation, despite two decades of well-funded and organized efforts by the environmental community to create a federal market-based carbon emissions cap, Bartosiewicz and Miley (2014) noted the mobilization of more than three billion dollars in lobbying on Capitol Hill by the major corporate polluters in oil, gas and electric utilities to ensure such legislation is prevented. While the coalition of major environmental groups were vastly outspent by industry lobbyists, they also made the mistake of pursuing an «inside-the-Beltway approach, » whereas instead of marshalling « the power of public concerns, these groups have focused on lobbying Capitol Hill. » More simply, « the climate campaign suffered from a chronic and historic underinvestment in grassroots mobilizing.» In this case, one of the most important audiences, the grassroots, was not targeted or engaged.

## ***Challenges in communicating SPaC***

In the few cases touched on above we encountered a number of the key challenges in communicating the concepts and values of sustainable production and consumption. These range from efforts to change individual behavior and habits within different production and consumption systems to understanding and reducing the wider impacts of those practices, and finally to helping envision and enable the transition to post-carbon, post-consumerist society.

### **Confronting consumerism**

Most immediate is the challenge of confronting the entrenched and dominant culture and system of consumerism, promoting endless individual cycles of desire and accumulation and the ultimate social and political priority of continuous economic growth. This system of values and practices ultimately dominated the past century as a feature of industrial modernization. In *Land of Desire: Merchants, Power and the Rise of a New American Culture*, historian William Leach (1994) describes the emergence of American consumer culture:

*From the 1890s on, American corporate business, in league with key institutions, began the transformation of American society into a society preoccupied with consumption, with comfort and bodily well-being, with luxury, spending and acquisition, with more goods this year than last, more next year than this. American consumer capitalism produced a culture almost violently hostile to the past and to tradition, a future-oriented culture of desire that confused the good life with goods.*

The culture as well as the politics of consumerism remains as a primary obstacle in the transition to sustainability. Unfortunately this clash in message and values with mainstream

consumer culture and global advertising industry, as well as political ideologies promoting unlimited economic growth, does not take place on a level playing field.

Despite the « green turn » and gradual embrace of triple bottom line thinking and accounting, traditional commercial business values and practices continue to dominate the global media system, with annual advertising spending now over \$500 billion (Bradley, 2013), most on television ads. « A worthy investment, » insists Randall Beard, global head of Advertiser Solutions for the Nielsen Company, “considering that global consumers reportedly trust TV over all other paid media channels. » Beard explains that « recognizing the usage habits of consumers to best reach them through increased exposure is the savvy marketer’s game plan to make those messages hit home.”

In 2010 the population of cars in the world hit one billion, with the US (240 million) and China (78 million) claiming the most vehicles (Sousanis, 2011). The automobile is one of the major contributors of greenhouse gases, despite the appearance of the Prius and other hybrids. Communication managers in this industry invest heavily in massive marketing campaigns to persuade different targeted consumer groups to buy cars. According to Kantar Media, General Motors spent \$1.8 billion on car advertising in 2013, followed by Toyota’s \$1.3 billion, with the car industry overall spending \$15.2 billion a year to add new models to populate new highways and parking lots.

Another share of corporate communication budgets and strategy is aimed at governments, employing an army of industry lobbyists and public relations firms to ensure industry-friendly legislation, elections and policies. Many of these companies also employ sustainability directors who continually face the public question as to whether they are truly working to raise the ethical bar and environmental performance of their companies or to paint a green veneer of « corporate responsibility » imagery around the company’s public image, or a bit of both.

While outgunned financially, sustainability advocates, especially in the nonprofit sector, hold the advantage of capturing the major share of public credibility and trust, far above both corporations and government.

### **SPaC and sustainability communication**

There is the ongoing challenge faced by of all those using and promoting the contested normative concept of *sustainability* (Brown, 2013; Ziemann, 2011; NESTA, 2008; Connelly, 2007; Williams and Millington, 2004). In the case of SPaC<sup>11</sup> there is the further challenge of applying this concept within the various sectors and systems of the economy as well as in society as a whole. The meanings given to this term often vary as to the particular speakers and audiences involved (Connelly, 2007; Williams & Millington, 2004).

As a practice, the task of communicating SPaC also appears within and intersects a wide range of communication fields. It is prominent within the field of environmental communication but extends beyond it to include health communication, development communication, political communication, as well as marketing communications. One challenge is in developing a

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<sup>11</sup> In this paper the acronym “SPaC” is used rather than “SCP” to distinguish from the tendency to define this term using the oft-quoted definition of “sustainable consumption” presented at the 1994 Oslo Roundtable on Sustainable Production and Consumption (UNEP, 2010; Norwegian Ministry, 1994):

*The use of services and related products, which respond to basic needs and bring a better quality of life while minimising the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardise the needs of future generations.*

In this paper, the term “SPaC” refers not only to the “use of services and related products” (i.e., consumption) but also bringing sustainability into the broader system and cycles of production, packaging, transportation, marketing and purchase of those products and services, the investment decisions and actions initiating that production, and the cultural values and norms informing these activities.

transdisciplinary framework enabling understanding and cross-learning of these overlapping knowledge areas.

It may also be helpful to view SPaC communication activities as a subset of the broader field of *sustainability communication*. Godemann and Michelsen (2011) define this term as

*a process of mutual understanding dealing with the future development of society at the core of which is a vision of sustainability. It is both about values and norms such as inter- and intragenerational justice and about research into the causes and awareness of problems as well as about the individual and societal possibilities to take action and influence development.*

Sustainability communication<sup>12</sup> “takes place on a number of different levels in the public sphere” in a field of discourse addressing issues such as biodiversity, climate change, mobility and consumption, requiring “an inter- or transdisciplinary approach in order to comprehend both the breadth and the depth of a problem and its possible solutions.”

Whereas sustainability communication addresses the broader scope and vision of “the future development of society,” SPaC communication may be seen focusing particular attention on the causal chain and types of changes and strategic interventions needed to the production/consumption practices and policies shaping the development process (Schor, 2010; McDonough & Braungart, 2002; Princen, Maniates, Conca, 2002; Durning, 1992.)

### **Vision of transition**

Sustainability strategies and interventions competing with entrenched structures, counter-interventions and normative influences within and outside each production/consumption system need a viable local-global perspective, a “bigger picture” vision of society in transition towards sustainability. This vision may vary for different groups, interests and geographic regions, but needs to come to terms with the “limits to growth” discussions and events following the 1972 Club of Rome report (Komiya, 2014; Parenti, 2012; Strauss, 2012; Lomborg, 2012; Schor, 2010; Hall & Day, 2009; Jackson, 2009; Victor, 2008; Krugman, 2008; Meadows et al, 2004; Nordhaus, 1992; Durning, 1992; Daly, 1991; Schumacher, 1973; Meadows, et al, 1972). One of the essential challenges of SPaC communicators is in providing a meaningful narrative to replace the traditional and previously dominant limitless growth/consumerist model of 20<sup>th</sup> century industrial society.

McNall and Basile (2013) argue that we need to “create a new narrative for sustainability that will work.”

*Environmental narratives that focus exclusively on the harm humans are causing to the biosphere without equal consideration for human needs, are insufficient. Narratives that offer up simple causal models—all we need to do is stop or lower CO2 emissions—are incomplete because they fail to deal with the interactions among social equity, the economy, and the environment. Sustainability is a complex phenomenon that does not yield itself to a simple solution or explanation, but achieving a sustainable future is possible—if we can change how we think about it. We need to move beyond crisis explanations to ones that focus on our ability to develop scientifically based, adaptive management systems.*

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<sup>12</sup> “Sustainability communication” may or may not mean the same thing as “sustainable development communication”, depending on how the critical qualifier “sustainability” is understood and used. In some cases “sustainability” is used simply to refer to a development project’s capacity to continue getting financial and political support or ability to consistently mobilize and engage target constituencies, without substantially modifying or questioning a more conventional underlying economic development model emphasizing “sustainable growth” rather than more far-reaching sustainability criteria.

On an operational level, there is then the challenge of translating this vision and understanding in the immediate terms as to what “sustainable production and consumption” means to and for different audiences. This goes beyond agreement on a technical definition of the concept to establishing its role and function within the broader context of the future direction and fate of our human civilization and species. Ultimately, we need to communicate a meaningful narrative of the transition to sustainable production and consumption systems, to a sustainable, post-carbon, post-consumerist economy and society.

“For peoples, generally, their story of the universe and the human role in the universe is their primary source of intelligibility and value,” says Thomas Berry (1988) in *The Dream of the Earth*. However,

*We are confused at present because our historical situation has changed so profoundly. Our story, too, has changed. We no longer know its meaning or how to benefit from its guidance. Yet more than most societies, our Western society is dependent upon its story, its pattern of historical interpretation. Our story not only interprets the past, it also guides and inspires our shaping of the future. The study of our major historians reveals the visions of the future that have determined not only their interpretation of the past, but also their guidance into the future.*

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