

While public views on the usefulness of packaging are notoriously difficult to shift, the industry has made significant steps in creating improved packaging solutions across the packaged goods value chain.

June 2012



Executive summary

Packaging and its role in our society has rarely been out of the headlines. Praised, criticised, minimised, redesigned – it is always there to spark a debate and divide opinions.

From manufacturers to users, the entire packaged goods supply chain is subject to change, some incremental and some radical. The overall impact of all these changes is difficult to measure and even harder to summarise in a statement that would be representative for the main stakeholder groups in the debate. These are: packaging manufacturers, FMCG companies, retailers and Government and trade bodies.

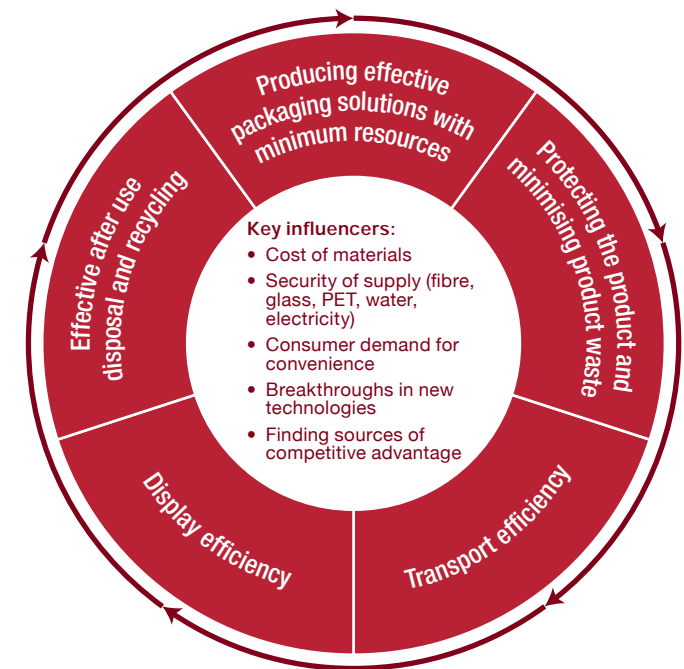
In this report we have set out to revisit the packaging debate and track the progress towards closer collaboration and common language that goes beyond the phrase “sustainable packaging”.

Progress is undoubtedly being made in spite of, or maybe even assisted by, the protracted economic downturn. Interviews with our select group of representatives

across the four key groups showed that progress has been made in the following areas:

- **Efficiency drives** (materials, energy, cost): these have helped the debate focus on tangible, measurable initiatives that drive sustainable thinking in everything from sourcing to after-life disposal;
- **Common language:** the long awaited reporting framework containing flexible structures of Key Performance Indicators (KPIs) and dimensions covering the Consumer Goods Forum members has been agreed and put in place; and
- **Shared understanding:** the product, its packaging and the related supply chain has to be viewed as a single solution, not a sum of disconnected parts when it comes to reducing the impact on the environment.

We found that the direction of travel that the industry has taken towards most effective packaging solutions is encouraging. It remains to be seen if the new materials and technologies, coupled with new consumer trends and retail channels will accelerate or side track this journey.



Taking another look

Overview

What does the term ‘sustainable packaging’ mean and does it even exist?

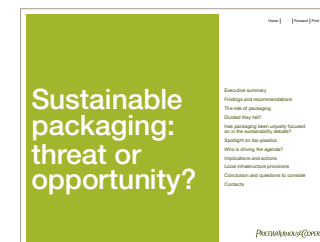
In this new report, we aim to reignite the packaging debate sparked two years ago when we visited a group of companies on this issue. We published a report in 2010 which looked at the growing interest in sustainable packaging¹, based on a series of interviews with four key stakeholder groups: retailers, fast moving consumer goods (FMCG) companies; packaging producers; and government and trade bodies. We asked a number of fundamental questions including;

- What does sustainable packaging mean?
- What do consumers understand as sustainable?
- How are each of these four key groups approaching the issue?

Our initial report was published at the beginning of a protracted economic downturn that significantly changed consumer behaviour and spending patterns. Our aim is to see if the perceptions they held then are still valid now. As economic times remain turbulent, we ask if the downturn has affected the way sustainable packaging is perceived. Is it a threat, an opportunity, or even a myth?

Macroeconomic trends and consumer behaviour

Economies around the world are beginning to recover from the depths of the financial downturn in late 2008 and early 2009. Growth in Asia and other emerging markets has been strong, but slow and uneven in the UK and other western economies. Business and consumer confidence in most western economies remains fragile; the financial markets’ preoccupation with the euro downturn is the latest in a long worry list of issues. Volatility has become a feature of the economic climate. Since the mid-2000s neither western economies nor emerging markets have been able to achieve healthy



Original report

Sustainable packaging: threat or opportunity?

growth without pushing up energy and commodity prices. These bursts of inflation have made cost control difficult for business and have pushed up consumer prices, choking off spending growth. Many businesses are asking themselves how long this pattern of disappointing growth and volatility will last. Or indeed, whether this might be the new normal for the foreseeable future².

These trends are expected to influence consumer spending as we enter a new period of economic instability. There’s no expectation of a return to the pre-downturn world of financial exuberance and strong

1 Sustainable Packaging – Threat or opportunity, PwC 2010

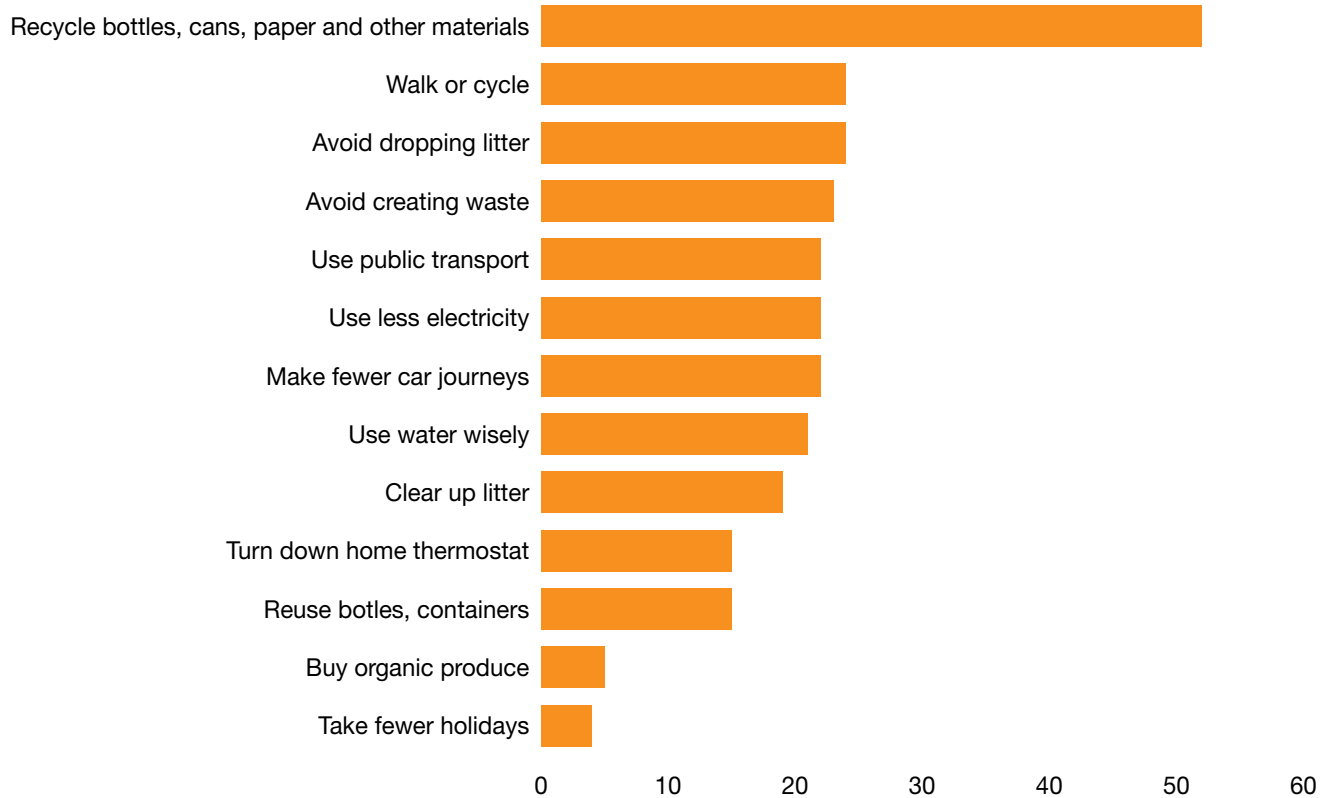
2 PwC Senior economic advisor, Andrew Sentance

consumer growth in the developed world, but as a new middle class emerges in developing countries, we'd expect to see rapid growth in consumer spending in those regions. Spending patterns around the world will continue to be volatile, as a result of financial instability and bursts of energy and food inflation.

Globally, buying patterns have shifted and consumers tend to look for the best value for money and for products that perform well. Consumers are far less willing to pay a premium for greener products than they were before the downturn, even in the grocery sector. According to Kantar's survey of 52 weeks to January 2012, only two of the Big Four supermarkets in the UK (Waitrose and Sainsbury's) say that environmentally friendly products are outselling expectations³.

All of these trends have an effect on the way consumers think about how they can contribute to a more sustainable environment. An IPSOS MORI poll in 2011 (Figure 1) showed that consumers see recycling as having the most significant impact⁴.

Figure 1: Consumers' view of contributing to more sustainable environment



Source: IPSOS MORI Packaging poll 2011

3 Kantar Survey, 52 weeks to Jan 2012

4 IPSOS MORI Packaging Poll 2011

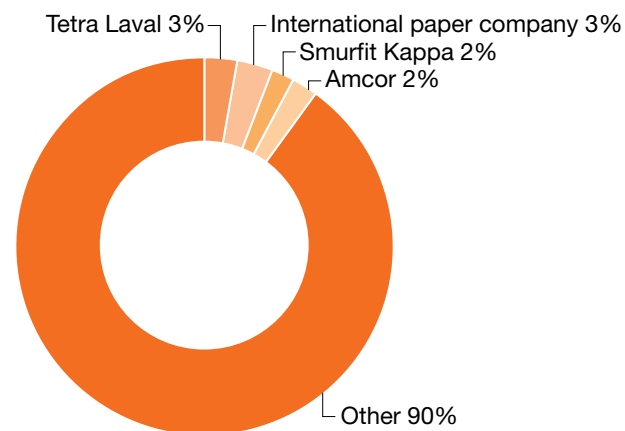
Packaging supply and demand

As far as supply is concerned, the packaging market is still highly fragmented and even large companies have been unable to gain a substantial share of the market (Figure 2). Barriers to entry are quite low for the industry; the main expense for new entrants is the necessary machinery and equipment. Finding skilled staff such as designers and chemical engineers is now becoming a bigger issue and a potential barrier in the future.

The food and drinks industry is still the biggest market for packaging products. It's a stable and non-cyclical market which is growing steadily, which makes it attractive for material producers. Even so, wider external factors such as variations in the price of oil, metals, plastic resin, paper and cardboard will always have an impact.

In terms of demand, consumers have shown great resilience in the past two years. The use of packaging by FMCG companies and retailers remains strong worldwide, with growth in demand in emerging markets in low double figures and developed countries showing more modest, single digit growth. Consumer demand, which encourages innovation in product design as well as more efficient packaging, will continue to shape the industry.

Figure 2: Global packaging markets

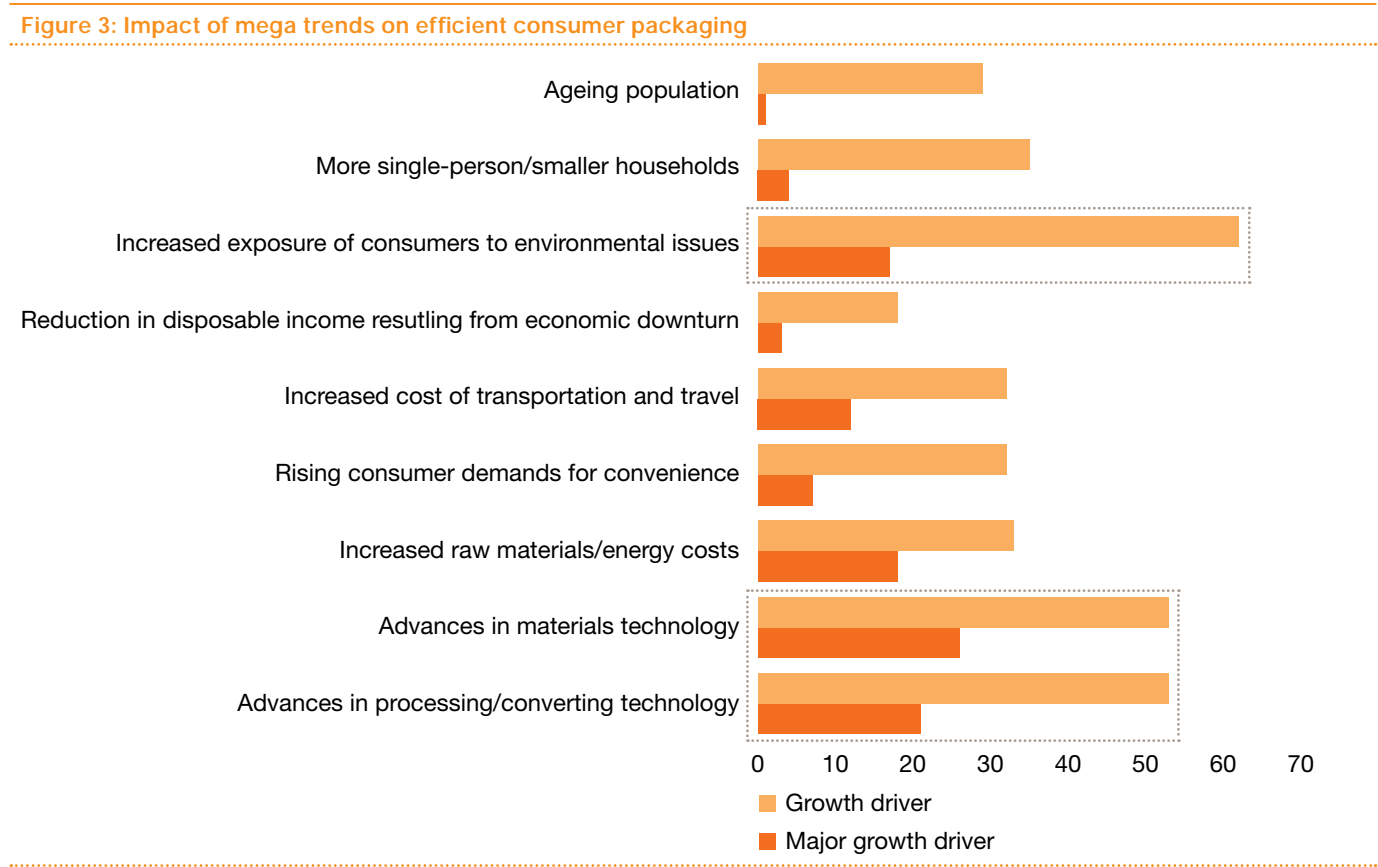


(Source: Datamonitor, February 2011)

'The main interests that consumers have in packaging are about the personal benefit they gain in terms of price, convenience and about how it helps them with their purchasing decision. Only when it's discarded do local environmental impacts become a consideration.'

Rowland Hill, Marks & Spencer

The packaging, paper and print industry supply chains analyst, PIRA International Ltd, conducted a survey across the global packaging value chain, researching the key drivers of the development in more efficient packaging. Almost 80% of the respondents stated that consumer exposure to environmental issues was either a growth driver or a major growth driver. Other significant drivers of more efficient packaging were advances in materials, processing and converting technologies. All market mega-trends were more widely seen as growth drivers rather than growth barriers (Figure 3).



(Source: PIRA International, January 2011)

Discovering the changes

Two years on

Key stakeholder groups and their influence

In our 2010 report we identified the four key stakeholder groups that were driving the development of sustainable packaging but all from a slightly different perspective. Governments, through regulation; FMCG companies and packaging producers, who react to the needs of retailers; retailers and customers, who say they're looking for more sustainable packaging but who are often unwilling to pay a premium for it. There have been subtle changes in emphasis for all of these groups over the past two years, but all have been influenced by one overriding driving force that is the voice of their customers.

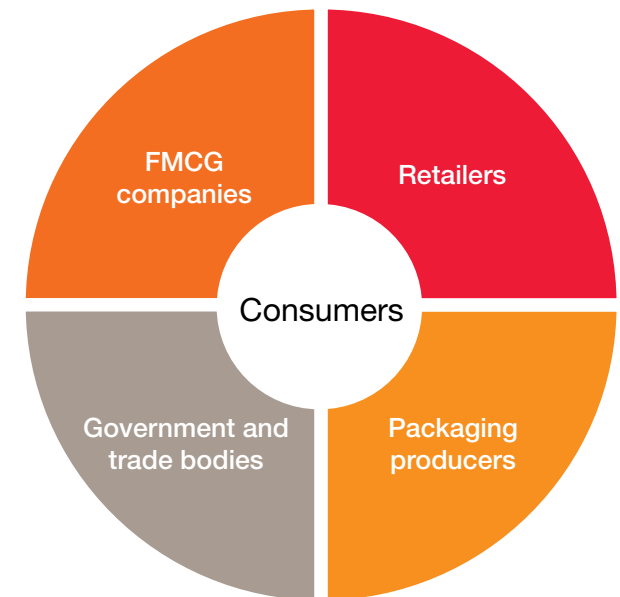
Retailers

It's a tough time for traditional retailers who are struggling with shrinking demand from increasingly cautious and cost-conscious customers, coupled with the increasing pace of online shopping. This new model for retail has opened up new opportunities for more efficient use of packaging materials for example, in distribution centres where products come with minimal primary packaging.

Food and grocery retailers have generally fared better than their non-food counterparts, despite sinking margins. This sector is particularly active in the sustainability debate and the US and UK, are driving it.

One retailer told us that it has moved towards a more informed consensus over the past two years, and now looks for products with the lowest possible environmental impact, as well as packaging that has as low as possible an impact in the supply chain it's designed for.

Figure 4: Key stakeholder groups



‘Sustainable development is at the heart of our commitment to Creating Shared Value by increasing the world’s access to higher quality food & beverages whilst contributing to environmentally sustainable social & economic development. It is even more important than ever before to find the so-called innovation sweet spot where consumer needs, environmental impact, technical & business capabilities converge.’

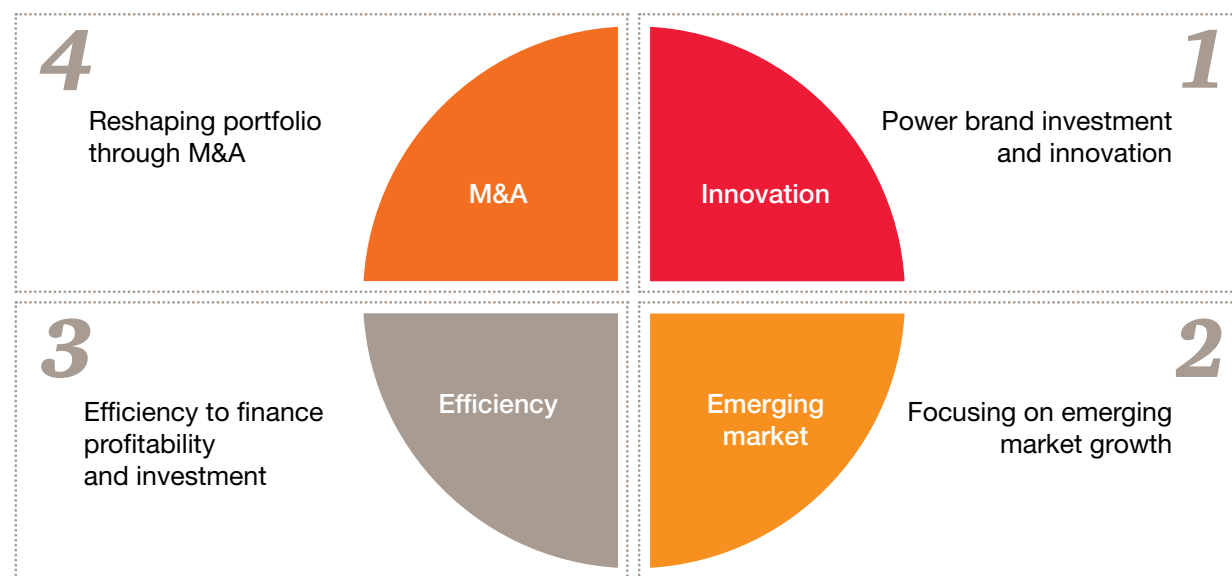
Anne Roulin, Nestle

FMCG companies

By contrast, most of the major FMCG companies are reappraising their growth strategies to address emerging trends, such as a surge in demand in emerging economies and the rise of power brands (Figure 5). Many FMCG companies have invested heavily in product development and innovation, and it’s clear that there’s a far closer collaboration between retailers, suppliers and packaging manufacturers as a result.

In some cases, though, this has led to tension between FMCG companies and retailers. One FMCG company told us that they had some tough discussions with retailers, who were making big data demands for all of their products, from carbon foot-printing to ethical sourcing. These could not be met without adding a significant overhead and a compromise was found. Compromise has become the order of the day, aided by an improvement in the common understanding of the language and metrics around sustainability.

Figure 5: Key trends for FMCG companies



‘The consensus around what represents sustainable packaging has developed significantly in the past few years. The debates about lightweighting, recycled content or recyclability as the ultimate measures of how sustainable a package is have been replaced by a more holistic debate around the product, the package and their use from inception to post-consumer use.’

Peter White, P&G

‘The pressure for change comes directly from our customers and not so much from retailers. It’s mostly specific product-related, and the larger global drinks producers seem to be more focused than other groups in driving improvements to their products today. We have been very active in supporting their initiatives, especially in closing the material to material loop on beverage cans side.’

John Revess, Rexam

Packaging manufacturers

We said in the 2010 report that packaging manufacturers have been historically slow to engage in the sustainable packaging debate, and were sometimes at the mercy of the conflicting opinions of other stakeholders, particularly consumers and regulatory bodies. The past two years have seen the industry take an active role in the debate, but emphasising that packaging is only a part of the wider sustainability story. The industry as a whole has argued that focusing on packaging alone in the sustainability debate is counterproductive and short-sighted. As a result the industry has increased its communication efforts, particularly in explaining to the public why and how packaging is used, the contribution that it makes to a sustainable society and how consumers can play their part in the life cycle.

It seems that sustainability investment has increased rather than decreased during the economic downturn, as companies pay greater attention to the effective use of resources. Manufacturers are tending to

use less material, of a lighter weight, and have concentrated on creating efficient processes for the production, distribution and disposal of their products. Rather than concentrating purely on their products, the intention is to think of ways of making the entire business more sustainable, and of the role of manufacturers in improving the sustainability of the products’ entire supply chain.

Manufacturers are also entering into a conversation with their customers, actively encouraging them to look at product design and developing relationships with clients with a view to creating packaging solutions that benefit everyone involved. A good example of this is found in the corrugated packaging industry, where the move to substitute virgin materials with recycled ones is gathering pace thanks to the more open and informed dialogue between packaging manufacturers and FMCGs and retailers. The financial benefits are significant and often shared among this group.

Government and trade bodies

The role of Government in the past two years has changed focus, but it still remains an important communication forum for all stakeholder groups, if not a driver, for efficient packaging solutions. Governments are increasingly providing platform for discussion among the stakeholder groups on topics from household collection schemes to running return schemes for recycled plastics. Packaging Recovery Note (PRN) or Packaging Export Recovery Note (PERN) schemes for recycled plastics

The role of educating citizens into more sustainable ways of life is still there, and various campaigns aimed at food waste had a positive impact on customers. They highlighted the fact that actually food waste has a far bigger impact on the environment than food packaging, as one third of all food in the UK ends up in the bin.

The other important role remains setting the recovery and recycling targets for packaging manufacturers. In the UK, the March 2012 Budget has a new measure aimed at increasing glass recycling by linking the targets from 2013 to percentage of glass recycled coming from remelt.

In Europe, the EU Commission believes that an increase in the annual turnover of the waste management and recycling sector by EUR 42 billion will create over 400 000 new jobs by 2020, according to a new Commission study entitled Implementing EU waste legislation for green growth. The report analysed case studies in Cyprus, Germany, Ireland, Italy and the Netherlands. Its observations will feed into the legal and economic measures being developed under the Roadmap for a Resource Efficient Europe.

Interestingly, when asked about the importance of Government/NGO work in driving the demand for improvements in the sustainability of packaging and products, two of our interviewees rated this as 3 on a scale of 1 to 5 (1 is excellent), compared to 4 on the same scale two years ago.

Key themes emerging from the changing role of Government in sustainability are:

- Government regulation and legislation in packaging is still a long way off.
- Shift from educating end consumers to helping retailers, packaging producers and FMCG companies find common language.
- Focus on practical measures and metrics
- Keeping the public focus on the role of packaging and the personal contribution to reducing, reusing and recycling.

‘The balance of my work as INCPEN Chief Executive has shifted: five years ago it was 80% research, 20% communications but today it’s 20% research and 80% communication. We’re giving the issue of packaging the voice it deserves.’

Jane Bickerstaffe, INCPEN

Across the supply chain



The trade bodies, similarly, are focusing on brokering honest debate and driving collaborative behaviours. For this survey we interviewed INCPEN (Industry Council for Packaging and the Environment) and ACE (Alliance for Beverage Cartons and the Environment). Although very different in scope, focus and membership, INCPEN's and ACE's view of the role of packaging converges around the following three themes:

- Environmentally – saves more resources than it uses.
- Economically – reduces costs of distribution and merchandising.
- Socially – meets consumers' expectations by providing product protection, safety, handling and information.

From harvesting cocoa beans to running a waste collection scheme, decisions made at any point in the value chain are felt across the life cycle of the product and its packaging. These incremental changes all contribute to the overall sustainability performance of a product value chain.

The companies we talked to in each of the main stakeholder groups were making significant efforts to understand a number of factors. These included the impact of their decisions at each stage of the value chain. They then identify the most serious impact on the sustainability hot spots and finally, developing relationships with partners who are affected the most. Plans are then put in place to minimise the impact so that the success of the plan is measured, monitored and adjusted when necessary.

As one FMCG company in our study put it, sustainable packaging isn't seen as a stand-alone concept anymore; rather companies are concentrating on trying to reduce the environmental impact of their products throughout the entire life cycle. Packaging, on its own, is seen as having a relatively small impact on the environment and as a result many companies are choosing to analyse the environmental impact throughout the value chain, from ingredients to transport.

'Companies have shifted their attention from addressing just one issue or a selection of issues on one topic to a more holistic approach incorporating economic, environmental and social considerations.'

Jane Bickerstaffe, INCPEN

A significant step change in allowing this collaboration to happen across the supply chain is the introduction of more sophisticated performance management solutions in retailers, FMCG companies and packaging manufacturers that track one product with its packaging throughout its life.

This has made the interdependence even more prominent. Now vital data can flow from one system to another, underpinned by a shared commitment to robust and auditable reporting up and down the supply chain. Good practice examples of reporting now exist.

Case study

Puma

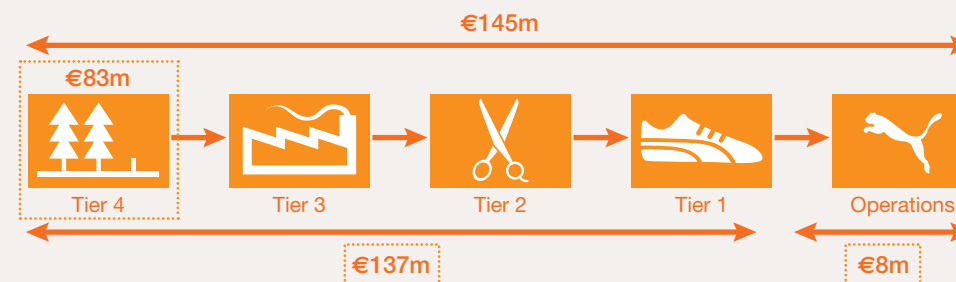
Puma has the long-term mission of “becoming the most desirable and sustainable sport lifestyle company”. PwC recently supported PUMA to reach a major milestone in this ambition. PwC worked with Trucost to help PUMA produce the first global environmental profit and loss (P&L) account. The focus of this P&L statement was water usage and carbon emissions within PUMA’s operations and supply chain. (See insert)

In a second phase of work, PwC is supporting PUMA measure land use, waste, and air pollution. By understanding the financial value of environmental impacts, PUMA is better prepared for potential future regulatory requirements. It can also focus its resources on the most material impacts and business risks.

PUMA’s 2010 E P&L results

EUR million	Water use	GHGs	Land use	Other air pollution	Waste	Total	% of total
	33%	33%	25%	7%	2%	100%	
Total	47	47	37	11	3	145	100%
PUMA operations	<1	7	<1	1	<1	8	6%
Tier 1	1	9	<1	1	2	13	9%
Tier 2	4	7	<1	2	1	14	9%
Tier 3	17	7	<1	3	<1	27	19%
Tier 4	25	17	37	4	<1	83	57%

PUMA’s environmental impacts across operations and supply chain



‘Gaining a better understanding of the source of the natural goods and services PUMA relies on and the declining availability of the basic resources required for our business growth, will help PUMA build a more resilient and sustainable business model and ultimately better manage its impacts on the environment.’

Jochen Zeitz, Chairman and CEO of PUMA and Chief Sustainability Officer PPR

Focusing on collaboration

It's clear that the debate around what constitutes good or bad packaging has moved on, to the extent that we would argue that 'sustainable packaging', as a term, is no longer relevant. No single definition emerges from any of the key stakeholder groups. Instead, a more balanced view of efficient packaging is emerging. This means taking into account efficiencies that can be made during the entire life cycle of the product, including a packaging solution that uses the minimum amount of resources and produces the minimum amount of waste, while also protecting the product. And beyond that, transport and display efficiency, and what happens after the product is used, is also taken into account.

In 2010 we argued that retailers, suppliers and the packaging industry needed to look beyond their own horizons and consider the wider environmental impact of packaging. We said that there were trade-offs at all points in the packaging value chain and more creativity and collaboration was needed. Two years on, it's clear that this is happening. Packaging companies are talking to suppliers, retailers and customers are trying to make sure

that the objectives for sustainable packaging are aligned. This increased collaboration brings many benefits, including the fact that research and development can be targeted more effectively.

We're in the same boat

The need for collaboration came up frequently throughout our interviews and it is an encouraging sign. At PwC we believe strongly in looking for partnerships and shared objectives with suppliers and customers. It's evident that the packaging industry, retailers and suppliers are putting aside their traditional views of commercial sensitivities and the 'silo' approach to sustainability. In its place is a willingness to develop an overall solution to sustainability that covers the entire life cycle.

The current economic pressures have contributed to the feeling that everyone shares the same problems in terms of maintaining margins and growing profit, without losing sight of the impact that growth might have on the environment.

'Our approach hasn't changed dramatically but we are looking to collaborate more with our suppliers and customers. Collaboration up and down the supply chain is the way forward, with technology and innovation being the crucial components of progress.'

Michael Wilson, Diageo

Case study Accor Group

The first global study to calculate the environmental impact of an international hospitality group.

PwC collaborated with Accor to record the environmental impact of the group's activities across the entire life-cycle of its activities, taking into account both direct and indirect impacts. The study covered 4,200 hotels in 90 countries and included 2,800 suppliers.

To carry out this pioneering study, baseline methodologies and studies were used and adapted to create a model that would be most relevant to the hotel industry. Environmental impact was assessed with respect to water consumption and pollution, energy, and waste. The learning from the study have served to increase Accor's commitment to sustainable development and act as a basis from which to build an even more relevant environmental strategy for the Group.

Life cycle analysis applied to an international hospitality group



'The learning of this study are priceless. It goes beyond intuition to provide reliable data about actual environmental challenges.'

Accor 2010

Navigating future trends

Technology and innovation

New packaging materials, improved efficiency processes and ‘smart design’ products are all helping to improve the impact of packaging across the supply chain. Product reformulation and usage of filler materials are only two of the number of innovative interventions used today. FMCGs in particular have invested heavily in more energy-efficient processes and equipment, and in new technologies, such as micro milling, that helps to improve the flavour and smell of food.

Nanotechnology, the process of manipulating atoms and molecules, has the potential to create new materials helping with the development of better-performing sustainable packaging. R&D into new materials has already been evidenced with the development of fibril cellulose by the paper manufacturer UPM. This innovation is a strengthening element derived from wood that has the potential to make products tougher, lighter and thinner. It began pre-commercial production in 2011.

Printed functionality, sometimes known as printed intelligence, is another exciting area of innovation. This moves traditional printing beyond graphics by introducing functionality into print on paper or plastics. These could range from codes containing links to additional information to more sophisticated visual effects and images, electronics, optics and sensors.

The benefits of the technology behind intelligent packaging have already been seen through the use of product tagging through electronic article surveillance and radio frequency identification tags. In this case, packaging is not merely protecting the physical integrity of the product – it’s also ensuring that it is delivered as intended, from a known source manufacturer to the appointed supplier. It can provide confidence about the authenticity of products and be a disincentive to theft and tampering. It also allows manufacturers and retailers to track and trace products.

Retail-ready packs (RRPs) have grown in popularity as retailers look to increase their bottom line, and this should provide new opportunities for packaging producers. RRP are mostly used in food packaging, accounting for 78% of the total. Corrugated RRP currently dominate the market but are expected to lose 0.5% of market share by 2016 as new technologies allow for better graphics and performance. Plastic RRP are expected to make the most gains and, according to the analyst PIRA International⁵, and should account for almost a quarter of demand by 2016.

Speaking the same language

One of the strongest indications that the key stakeholder groups are coming together is in the greater degree of uniformity of language and increasingly, the metrics and key performance indicators (KPIs) used in the sustainability debate. This is an improvement from two years ago, when firms were pursuing a whole host of objectives, presented by different metrics, which was at times confusing and detracting from the common goals.

⁵ www.smitherspira.com

‘We have better tools available to analyse environmental impact than ever before. Life cycle assessment is the tool of choice, and it is fully embedded into our R&D processes.’

Anne Roulin, Nestle AR Nestle

In September 2011, the Global Consumer Goods Forum launched the Global Protocol on Packaging Sustainability. It provides the consumer goods and packaging industries with a much-needed common language with which to discuss and assess the relative sustainability of packaging. The Protocol consists of a framework and a measurement system. The framework sets a range of life cycle indicators and their relationship to the common sustainability indicators, such as recycled content.

Figure 6 represents the reporting framework that GCC Forum came up with as a comprehensive set of attributes and life cycle indicators, allowing members to choose the ones most suitable for their role and responsibility in the supply chain.

The measurement system uses a series of metrics, underpinned by definitions and units of measure allowing stakeholders from all four groups to choose those that are most meaningful for their business and agree them with their partners up and down the supply chain.

The Protocol increases the potential for everyone involved to have thorough business discussions and to make well-informed decisions on anything from sourcing to transport. It remains to be seen if the take-up of the Protocol will live up to expectations.

Figure 6: GCG Forum reporting framework

	Attributes											Life cycle indicators													
	Packaging and weight optimisation	Packaging to product weight ration	Material waste	Recycled content	Renewable content	Chain of custody	Substances hazardous to the environment	Production in areas of water scarcity	Packaging recovery rate	Cube utilisation	Packaging reuse rate	Cumulative energy demand	Freshwater consumption	Land occupation	Global warming potential	Ozone depletion	Toxicity/cancer	Toxicity/non-cancer	Particle respiratory effects	Ionizing radiation (human)	Photochemical ozone creation potential	Acidification potential	Aquatic eutrophication	Freshwater ecotoxicity potential	Non-renewable resource depletion
Attributes	Packaging and weight optimisation																								
	Packaging to product weight ration																								
	Material waste																								
	Recycled content																								
	Renewable content																								
	Chain of custody																								
	Substances hazardous to the environment																								
	Production in areas of water scarcity																								
	Packaging recovery rate																								
	Cube utilisation																								
Life cycle indicators	Packaging reuse rate																								
	Cumulative energy demand																								
	Freshwater consumption																								
	Land occupation																								
	Global warming potential																								
	Ozone depletion																								
	Toxicity/cancer																								
	Toxicity/non-cancer																								
	Particle respiratory effects																								
	Ionizing radiation (human)																								
	Photochemical ozone creation potential																								
	Acidification potential																								
	Aquatic eutrophication																								
	Freshwater ecotoxicity potential																								
	Non-renewable resource depletion																								

Key Is automatically derived Will likely be derived Will help to derive

Summarising the findings

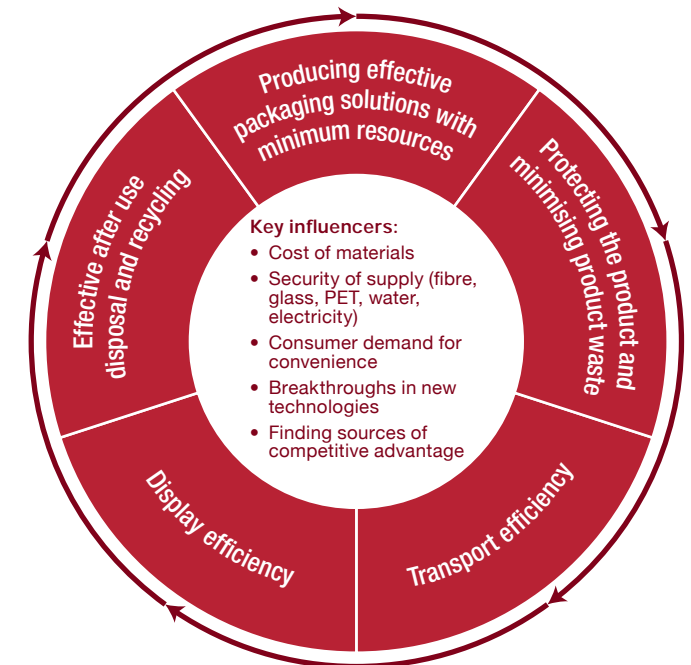
The conclusion of our study is that sustainable packaging as a term is no longer relevant today as the debate about good vs. bad packaging has moved on. Sustainable packaging was used as an umbrella term to cover many aspects of sustainability and as such, is deemed too broad a term to be useful at a practical level. The idea that anyone from the key stakeholder groups can come up with a single meaningful definition of sustainable packaging is largely proving to be a red herring and has been consigned to history. The reality is that it has been substituted with a more balanced view of efficient packaging:

1. Producing effective packaging solutions with minimum resources
2. Protecting the product and minimising product waste
3. Transport efficiency
4. Display efficiency and
5. Effective after use disposal and recycling.

The evolution of efficient packaging solutions will be shaped by:

- Cost of materials
- Breakthroughs in new technologies, such as nano, applied to both product and packaging
- Security of supply (fibre, glass, PET, water, electricity)
- Consumer demand for convenience
- Finding sources of competitive advantage in falling consumer spending.

Figure 7



Appendix 1: Methodology

For this report, which is not based on full survey, we have chosen a small but representative sample of stakeholders from all four stakeholders groups. We conducted interviews with seven firms (nine representatives) in total and drew our conclusions from interviews, PwC publications, EU Commission websites and various analyst sources (Datamonitor, PIRA, Kantar etc.). We are grateful to senior representatives in the following companies who participated in the survey:

- ACE UK
- Diageo
- INCPEN
- M&S
- Nestle
- Proctor & Gamble
- Rexam

The questionnaire attached served as a basis for discussion rather than a script and participants could choose the questions they felt were most applicable to them.



Appendix 2

This are examples of the questions we asked in our survey of representatives of each of the key stakeholder groups.

Topic	Question	Answer options
Defining Sustainable Packaging	What is your understanding of the meaning of “sustainable packaging”? Has it evolved in the past two years?	
	How much agreement is there in the industry compared to two years ago on what “sustainable packaging” means in practice? Do you think that different stakeholders have different opinions on what “sustainable packaging” means? (For example, retailers vs. FMCGs vs. customers vs. government vs. packaging companies)	
Drivers of Sustainable Packaging	Where is the pressure to improve the sustainability of your packaging coming from?	
	How, if at all has this pressure changed over the last 2 to 3 years? Please rate on a scale of 1-5 (1 = very important, 5 = not important) each of the following factors in driving the demand for improvements in the sustainability of packaging? (Please explain your choices:)	Government regulation FMCG (manufacturer) demands Retailer demands Consumer demands NGOs (agencies such as Green Peace, Friends of the Earth) In order to keep pace with other packaging companies

Topic	Question	Answer options
	How important a role do you think that each of the following factors are playing in the drive towards more sustainable packaging (Please explain your choices:)	<p>General environmental concerns (CO₂ footprints etc)</p> <p>The need to reduce the volume of waste sent to landfill in the UK</p> <p>Cost reduction initiatives by retailers and FMCGs</p> <p>Desire to use sustainable packaging as a prominent factor in the brand image of products</p> <p>Customer pressure</p>
	Do you believe that an ability to provide / develop sustainable packaging solutions for customers will be an important source of competitive advantage for packaging companies?	<p>Is currently</p> <p>Will be in the future</p>
Leaders in Sustainable Packaging	Which retailers / FMCGs (or other packaging companies) do you perceive to be leading the way in driving the adoption of sustainable packaging products and strategies? (names of companies in the table can be used as prompts)	
	Please also provide an explanation of why you see them as leaders	
	Do you have a regular dialogue with FMCGs/retailers around their sustainability needs in packaging? Why/why not?	

Topic	Question	Answer options
Strategies for sustainable packaging	Which of the following strategies are you currently employing or expect to employ?	<p>Strategies prompt list:</p> <p>Eliminating packaging through re-design (of both products and packaging)</p> <p>Developing reusable packaging</p> <p>Using recycled materials in our packaging Product reformulation</p> <p>Usage of filler materials</p> <p>Reducing the weight of the packaging</p> <p>Substitution of different materials</p> <p>Usage of renewable materials (e.g. Bio Plastics)</p> <p>Developing and using fully recyclable materials</p> <p>Improving the efficiency of our own production process (lowering wastage and energy use etc)</p> <p>Reduced fuel consumption</p>
	Which of the strategies are your customers (retailers, FMCGs, packagers etc) focusing on and pushing you to do more around?	
	Do you publicise any of these initiatives? Yes/no (please tick as appropriate)	
	Which ones? Why/why not?	
Recycled Materials If aware of this measure:	What barriers do you face to the usage of recycled materials?	<p>Accessibility</p> <p>Price (are they more expensive than virgin materials?)</p> <p>Performance</p> <p>Other</p>
	How are these being or could these be addressed?	
	What role do you think recycled materials will play in the future?	
	Are you planning to use more/less recycled material in the future?	

Topic	Question	Answer options
Future Developments	What role do you think sustainability will play in the packaging market in the future?	
	What role is innovation and technological development likely to play within this?	
	How do you think packaging companies will respond to the growing environmental awareness amongst consumers in the future?	
Impact of current economic conditions	How do you think demand for sustainable packaging is affected by the economic slowdown?	
	What is the impact of an economic downturn on your approach to sustainability?	
	Will the current decrease in oil prices affect sustainable packaging trends, e.g. by lightening cost pressure on the use of plastic packaging?	

Keeping in contact



Malcolm Preston
Partner
020 7213 2502
malcolm.h.preston@uk.pwc.com



Chris Baker
Partner
020 7213 1500
chris.baker@uk.pwc.com



Mark Thompson
Director
020 7804 9643
mark.z.thompson@uk.pwc.com



Maya Bankovich
Senior Consultant
020 7804 2968
maya.bankovich@uk.pwc.com

Why PwC?

We have over 161,000 people in 154 countries helping organisations to work smarter and grow faster. Our work is always evolving to respond to industry trends and management focus, and we combine our deep technical skills in response to our clients' changing needs.

Our Forestry, Paper, Packaging practice is a part of the Industrial Products practice and has over 1,400 industry professionals located in over 20 countries, giving our clients access to an international network of knowledge and experience. We also have the largest Sustainability and Climate Change (S&CC) practice of the Big Four and in 2011 won Consultancy of the Year at the Business Green Leaders Awards. We have a global network of 700 people and a team of more than 100 specialists in the UK.

Our clients choose us because:

- We represent a leading breadth and depth of sustainability and commercial expertise, and experience
- We have extensive local networks and insight
- We deliver quality, tailored solutions
- We innovate and work in partnership with our clients
- We are a leading edge sustainable business ourselves

Over time, what we do remains closely linked with helping our clients improve the way they operate; innovate and grow; reduce costs; manage risks; leverage talent; and change the way they do business.

PwC firms help organisations and individuals create the value they're looking for. We're a network of firms in 158 countries with close to 169,000 people who are committed to delivering quality in assurance, tax and advisory services. Tell us what matters to you and find out more by visiting us at www.pwc.com.

This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, PricewaterhouseCoopers LLP, its members, employees and agents do not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.

© 2012 PricewaterhouseCoopers LLP. All rights reserved. In this document, "PwC" refers to PricewaterhouseCoopers LLP (a limited liability partnership in the United Kingdom), which is a member firm of PricewaterhouseCoopers International Limited, each member firm of which is a separate legal entity.

Design & Media – The Studio 21155 (05/12)