

# **Future Gearing For Sustainability**

**Strategic Foresight Program Swinburne University**

**Client Report**

**AMCOR Research & Technology**

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# Executive Summary

Amcor engaged two teams of final year students from the Swinburne University Masters of Science of Strategic Foresight Program to investigate the sustainability of plastic packaging, and to explore the sensitivity of Amcor to a range of current and future risks in its broader operating environment. This report from Team A explores these issues, and provides a range of strategic options for Amcor to consider now and into the future.

## Amcor Is Potentially Sensitive To A Number Of Important Risks

At the present time Amcor is confronted with four broad types of risk. They include:

1. A new requirement for strategic 'fitness' in a rapidly changing business environment;
2. Changing perceptions and expectations of communities, government and business, with increasing emphasis on business ethics, corporate social responsibility, extended producer responsibility, and sustainable development;
3. Resource depletion and associated cost increases, and environmental impacts of unsustainable use of raw materials; and
4. Legislation and compliance requirements beyond the National Packaging Covenant.

Some of the main macro-environmental pressures facing Amcor include:

- Bio-security equating to 'paddock to plate' security;
- Globalisation requiring productivity and efficiency improvements, with increased exposure to competitive risks;
- Changing demographics, lifestyles and consumer preferences, e.g. increasing consumer demand for convenience goods and emergence of 'green packaging;'
- Wildcards, including unexpected competitor responses and the emergence of services less reliant on packaging; and,
- Petrochemical resources including the impact of petrochemicals on the supply chain.

## Amcor's Business Ecology Reveals Sensitivity...And Leverage Points

Amcor's business ecology is characterised by regulations, resource and technology, current market and customer chains. Both upstream and down stream influences are significant. Two key drivers of change highlighted in our analysis are:

1. Population growth which drives the demand for plastics (projected to double over the next 50 years); and,
2. Resource input and output flows.

We have also identified two feedback loops within our systems maps that indicate opportunities, constraints and leverage points for system intervention. The first is a desirable loop associated with the current low level of recycling (around 10% of plastics) presently. Changing consumer preferences are likely to intensify the significance of this loop for Amcor.

The second is an undesirable loop associated with landfill and litter. Amcor has acknowledged the visibility of plastic litter and the risks it presents. This loop is likely to moderate the demand for plastic through its influence on changing community and government expectations.

## **Current Plastic Packaging Processes Are Not Inherently Sustainable**

Our analysis of the current and emerging risks in the context of the broader production chain indicates that Amcor's plastic packaging processes are unsustainable for the medium and long-term futures

## **Amcor Requires A Broader And Deeper Interpretation Of Sustainability**

In the face of these new changes to the business environment and the unsustainability of current operations, Amcor would be wise to seek a fundamentally new way of viewing sustainability, and a new suite of integrated, future-focused responses. We highlight the benefits of taking a broader and deeper approach to interpreting sustainability that takes into account the past, present and future.

We believe that Amcor would benefit from a science-based approach to sustainability that builds upon its strong science-based reputation and 'leapfrogs' the competition's apparent 'window dressing' approach.

## **A "Future-Gearing" Approach Sees ART Lead The Way In Shaping The Future**

We have designed a model called 'future gearing' to assist Amcor in implementing a science-based, future focused solution to its present sustainability concerns. 'Future gearing' Amcor means understanding that ART, Corporate and the Business Units all have a unique and vital role to play in ensuring a sustainable future for Amcor. They are like 'cogs' in a wheel that operate in an integrated way. Each does and should have its own priorities and definitions of sustainability:

- **Business Units** – Sustainability here means 'business sustainability' where timeframes are measured in normal fiscal cycles;
- **Corporate** – Corporate sustainability means gearing up for the future internal and external needs of the company; and,
- **ART** – Sustainability means identifying future risks to compliance and opportunities for innovation.

There is a key opportunity for ART to play a leadership role in 'future gearing' Amcor through providing strategic intelligence to both Business Units and Corporate. This requires ART to address emerging issues and broader drivers of change well beyond the normal planning timeframes of each. This information may be channeled back to the Business Units and Corporate in a way that enables timely responses to be made within appropriate planning cycles.

## **Recommendations For A Way Forward For Amcor**

The main recommendations for each entity are as follows.

### **Amcor Research & Technology**

1. Review the Platforms in line with a broader and deeper approach to sustainability;
2. Future-Gearing Amcor's Business Units, Corporate and ART structures to provide integrated and timely responses to risk;
3. Provide long-range strategic intelligence to Corporate and the Business Units;
4. Reframe the value propositions;
5. Move from technology scanning to introduction of STEEP scanning; and,
6. Move from strategic planning to inclusion of strategic foresight.

### **Business Units**

1. Upstream / midstream /downstream solutions;
2. Research alternative materials;
3. New products through resource recovery (recycling/waste management); and,
4. Eliminate waste – biodegradable products.

## **Corporate**

1. Re-branding and responsibility shifts;
2. Eco-efficiency + socio-efficiency; and,
3. Move towards Extended Producer Responsibility (EPR).

## Introduction

Amcor has a long history of managing change. This history has led Amcor to become a leading supplier of quality packaging solutions in Australia and overseas. To sustain this impressive market position, Amcor recognises the need to successfully navigate the range of potentially significant challenges and opportunities that now lie ahead.

To assist in responding to these challenges, Amcor engaged two teams (Team A and B) of final year students from the Swinburne University Masters of Science of Strategic Foresight Program to investigate the sustainability of plastic packaging, and to explore the sensitivity of Amcor to a range of current and future risks in its broader operating environment.

This report outlines the aspects of Team A's inquiry, undertaken for Amcor during a five-day period in October 2005. It supplements the presentation of findings to Amcor staff made on 19 October 2005.

While time constraints have limited a comprehensive exploration of the future risks and challenges to the sustainability of Amcor's products and operations, we have welcomed this opportunity to provide Amcor with a range of broad strategic directions to consider and further develop into Amcor's future.

## The Masters Of Science Of Strategic Foresight Team A

Team A comprises mid-career professionals and consultants from the fields of strategy, sustainability planning, change management, law, accounting, and human value systems analysis. Members have brought their own unique insights to the project informed by their individual subject areas and their Masters-level studies in Strategic Foresight.

## Approach And Structure Of The Inquiry

The scope of the inquiry was defined by the client brief in terms of the following key questions:

1. How sustainable is plastic packaging?
2. How sensitive are Amcor businesses to risks?

To address these questions, considerable complexity and uncertainty must be navigated. Time limitations necessitated discussions with Amcor consisted of an initial two-hour presentation by Amcor staff and a follow-up one-hour telephone conversation. As a result, our interpretations of the issues arise from a predominantly outside Amcor's perspective. Our inquiry explored the following key concepts:

- Key risks in Amcor's future operating context;
- Review of Amcor's broader business environment;
- How sustainable is plastic packaging?;
- Broader and deeper interpretation of sustainability;
- A "future-gearing" approach for response generation; and,
- Example leverage points and possible strategic responses.

## Structure Of This Report

The report is structured as an annotated presentation. Each presentation slide is provided with a discussion of the key messages and findings. The report is structured to address the following major issues:

1. **Risk Exposure** – We examined four key areas of risk and use a systems mapping approach to explore some of these risks in greater detail;
2. **Interpretations Of Sustainability** – During the project we became aware Amcor did not have a working definition of sustainability relevant to its context. The report provides a broader and deeper

interpretation for consideration by Amcor in developing an organisational definition of sustainability;

3. **A Way Forward** – This report provides a number of recommendations for Amcor consideration including the opportunity to build a strategic foresight<sup>1</sup> capability within Amcor’s ART group. The report presents a number of techniques for Amcor consideration including:
  - Systems mapping and leverage points; and,
  - Two new techniques called ‘Future-Gearing’ and ‘Future-Time-Gearing;’
4. **Recommendations** – We provide a series of recommendations in this report for different organisational entities within Amcor. These include ART, Corporate and the Business Units.

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<sup>1</sup> What is Strategic Foresight? 'Strategic foresight is the ability to create and maintain high-quality forward views and to use the insights arising in organisationally useful ways'. It will be a cornerstone of organisational success in the early 21st Century. Organisations equipped with an effective foresight capability will be able to understand, and respond to, an emerging pattern of threats and opportunities in their field.' ([http://www.swin.edu.au/afi/about/afi\\_faq.htm](http://www.swin.edu.au/afi/about/afi_faq.htm))



## We Heard You Say That...

- Innovating through PLI
- Becoming more sustainable through:
  - Corporate Sustainability Charter and Reporting
  - Research and Technology Environment and Sustainability Platform
  - Increasing Business Unit awareness
- Three different meanings of sustainability:
  - Corporate – Reputation and Branding
  - Business Unit – Business Sustainability
  - Research & Technology – Compliance + Innovation

## Innovating Through PLI

Amcor described its commitment to being at the forefront of product leadership and innovation. In support of this objective Amcor's product leadership and innovation program (PLI) was launched in 2002. PLI is about Amcor having a key competitive advantage in the marketplace by developing and delivering innovative products, systems and processes to its customers. In the changing face of business as part of needs identification it is also advantageous to recognise distant signals of change on the horizon using a broader environmental scanning framework innovating through PLI.

Ian Wilson (Strategic Development Director), states in the 2004 Annual Report that 'the Company is now focusing on having better insight into customer needs, and that of the ultimate consumer, so that focus on resources in PLI program is on the opportunities which our customers truly value and ensuring that these new solutions give our customers a competitive edge.'<sup>2</sup>

## Sustainability Initiatives

Amcor's 2004 Sustainability Report reflects a triple bottom line approach to sustainability. 'Amcor recognises that the success of its business strategy and economic performance is dependant on a balanced and focused approach to social and environmental responsibility over the long term'.<sup>3</sup>

## Future Challenges

Despite moving towards a sustainable approach, a recent assessment of Amcor's publicly available documentation and internal information using Global Reporting Initiative guidelines, has indicated that Amcor's public reporting can be improved further and does not reflect appropriately the actual performance against many criteria.<sup>4</sup> Recommendations from the review include:

- Consolidating existing separate policies into a definitive sustainability commitment policy;
- Expanding the Australian National Packaging Covenant commitments to reflect a global approach;
- Investigating further cleaner production key performance indicators and reporting publicly on the results;
- Using the Amcor internet site to publicise social commitments and involvement;
- Conducting dialogue with all stakeholders for their input into development and production of a separate sustainability report; and,
- Reviewing further Amcor's involvement in product recycling.

<sup>2</sup> 2005 Amcor Annual Report, p11

<sup>3</sup> 2004 Sustainability Report – in the Linking economic, social and environmental performance section

<sup>4</sup> [www.Amcor.com](http://www.Amcor.com) Global Reporting Initiative section

Of relevance to ART's Environmental and Sustainability Platform are the results of a survey<sup>5</sup> conducted by Amcor of key stakeholder groups<sup>6</sup> during 2002-2003. The key environmental issues identified of concern by the stakeholders are:

- The impacts of Amcor products after they have been used by customers;
- Use of recycled materials;
- The types of raw materials that Amcor uses in production; and,
- Greenhouse gases emitted from Amcor manufacturing facilities.

This approach is supported by Ken Mackensie (Managing Director), who would like to see Amcor 'move from an organisation that is more inwardly focused to being more customer and market focused. The businesses will develop a better understanding of the market and customer needs, gaining unique insights of the value proposition for our customers'.<sup>7</sup>

### **Amcor's Capacity For Change**

Recent history demonstrates that Amcor has great capacity to change. This is illustrated<sup>8</sup> by a dramatic change in the Amcor global product mix between 1995 and 2005. Amcor's product mix changed from 80% paper and packaging and 20% plastic and can containers, PET, flexibles etc to 16% paper and packaging, 30% PET, 26% flexibles and 28% other.

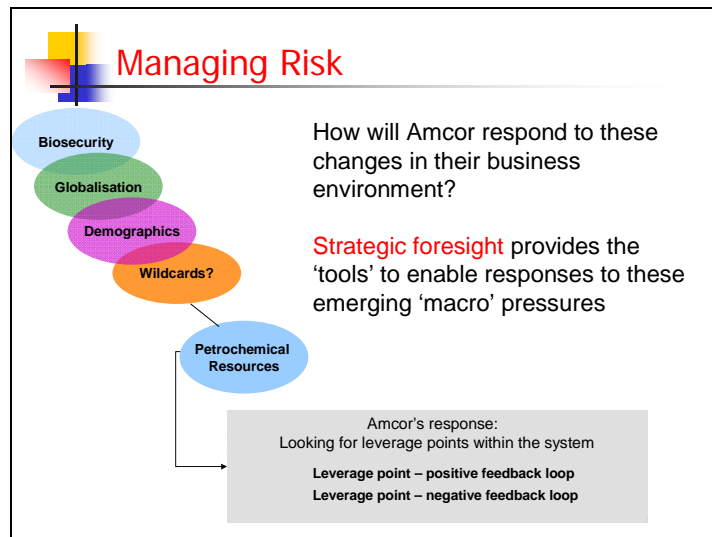
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<sup>5</sup> Reported on [www.Amcor.com](http://www.Amcor.com) in the Corporate Sustainability Section.

<sup>6</sup> The stakeholder groups are not identified in the website report.

<sup>7</sup> 2005 Amcor Annual Report, p4.

<sup>8</sup> Illustrated in the ART team presentation to Swinburne Students October 2005.




## External Forces Translate Into Risks

There are many external forces that can influence Amcor's organisational performance in the short, medium and long term. These forces may present a range of risks or threats to Amcor. Some of the main pressures within Amcor's external operating environment include:

- **Bio-Security** – In the context of the food industry bio-security translates as 'paddock to plate' security. Food chain safety and security will be actively managed by leading organisations. Intelligent packaging may be used to provide evidence of abuse or tampering;
- **Globalisation** – Insightful organisations will respond to the forces of globalisation, which will include a focus on productivity and efficiency improvements. Globalisation of food markets will expose organisations to competitive risks;
- **Demographics** – Changing demographics, lifestyles and consumer preferences will all have an influence on the packaging industry. This is illustrated in the recent trend of increasing consumer demand for convenience goods. Despite this consumers are increasingly aware of the environmental impacts of packaging and the emergence of 'green packaging;'
- **Wildcards** – These are events that may eventuate. For example, a competitor may develop a cost-effective alternative to plastic that is biodegradable, satisfies packaging criteria and is economically feasible. There may be an emergence of services that are less reliant on packaging. Waste disposal levies may be imposed; and,
- **Petrochemical Resources** – There is an increasing awareness within Amcor of the risks associated with packaging materials manufactured from petrochemical resources. The risks include increasing material scarcity and increasing material prices. Amcor should also consider the impact of petrochemicals on the supply chain.

To anticipate Amcor's response to these emerging risks. We recommend Amcor use a *strategic foresight* approach which includes building STEEP scanning systems that provide timely business intelligence.



## Amcor's Four Key Risks

- Resource depletion – Increasing and volatile prices, availability declining
- Legislation/compliance – Increasing taxation/levies for resource/waste/pollution management – increasing liability for product producers
- Public perception – Pressure increasing from lobby groups and community for 'responsible producer'
- Strategic Fitness – Adaptability and resilience to broad business environment drivers

## Amcor's Four Key Risks

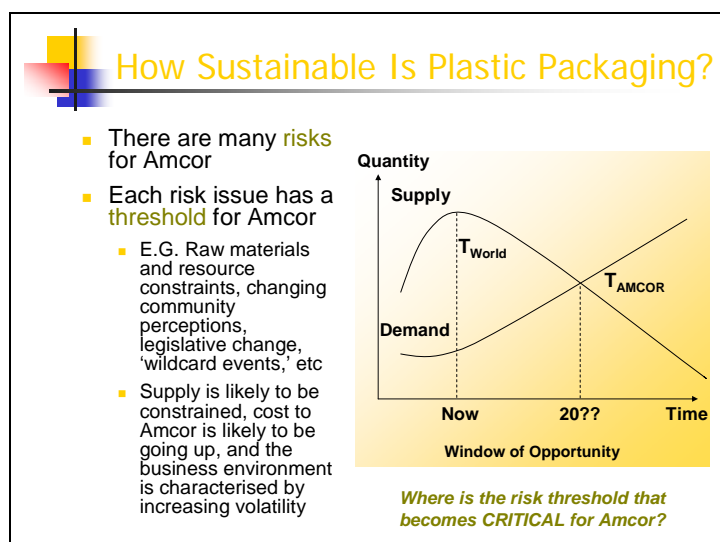
The previous section has highlighted a few examples of risk and suggested an approach to managing current and emerging risks based on a foresight approach.

At the present time Amcor is confronted with four broad types of risk. They include:

1. **'Strategic Fitness'** – The business environment is changing rapidly and adaptive organisations are able to maintain their resilience (or fitness) to respond to different situations. Development of a range of business intelligence processes will support strategic fitness.
2. **Perception** – Increasing community and government expectations, increasing influence of business ethics, corporate social responsibility, extended producer responsibility and sustainable development mean that organisations need to be clear on their purpose and their unique differentiation.
3. **Resource Depletion** – Manufacturing processes reliant on a single material are exposed to risk. This risk is magnified in situations where there is a growing realisation that the material is in limited supply, is likely to become more expensive and has adverse environmental impacts.
4. **Legislation And Compliance** – Amcor is currently participating in a voluntary approach known as the National Packaging Covenant. There is growing awareness however, that such approaches have not been effective. Typically organisations develop a range of key performance indicators associated with an action plan. In many cases the organisations reporting against the NPC have action success rates well above 95% completion, (this outcome is evidenced in the current Amcor NPC report)<sup>9</sup>. Such high levels of 'success' generally mean that the bar needs to be raised<sup>10</sup>. In response, government is likely to lose patience and respond through legislation to enforce compliance.

<sup>9</sup> See [http://www.Amcor.com/content/environment/pubs/npc\\_2005.pdf](http://www.Amcor.com/content/environment/pubs/npc_2005.pdf)

<sup>10</sup> This is an example of the lowest (and easiest) intervention point identified by Meadows (see slide on Amcor's Key Drivers and Places to Intervene in a System, by Donella H. Meadows. (Whole Earth Winter 1997). See [www.sustainabilityinstitute.org/pubs/Leverage\\_Points.pdf](http://www.sustainabilityinstitute.org/pubs/Leverage_Points.pdf)).



## PET Plastic Packaging Is Not Sustainable

If the current estimates of the rapidly declining global oil reserves are correct then PET technology for plastic packaging is not sustainable. In the 2005 Amcor Annual Report “it is estimated that around 90% of [petroleum] cost increases were passed through to customers and although this was a significant achievement, the inability to recover the other cost increases in a timely fashion, negatively impacted earnings during the year. ... The rising oil price was also responsible for higher than anticipated increases in a number of other costs, including energy and transport.”<sup>11</sup>

## Turning Risk Into An Opportunity

Most business activity and decision making carries some level of risk. An organisation’s risk tolerance determines the extent to which a perceived risk is mitigated or avoided in the context of its probability of occurring. Where there is little opportunity to mitigate risk and no presently available alternative, a risk issue may be tolerated as long as economic, political, environmental and social conditions allow. Moderating this however is the risk threshold beyond which economic, political, environmental or social forces constrain or halt business activity. Clarity around the current risk profile and a strong sense of the critical risk threshold presents a window of opportunity for Amcor within which to plan and implement alternative solutions.

Amcor has identified risk issues in petrochemical resource constraints, potential legislative imposition and changing community perceptions. Each of these issues must be assessed for its critical risk threshold and to scope its window of opportunity. The chart above represents the economic un-sustainability of oil resulting from an environmental constraint shown as the peak and decline of oil supply against rising demand. Peak oil is estimated to occur around 2008<sup>12</sup>. By 2020 the World will require 40 percent more energy than today<sup>13</sup>. Amcor’s critical risk threshold will be reached well before 2020. At this time a commercially viable alternative substrate will have to be found. Amcor’s challenge is to prepare for this now and turn it into an opportunity.

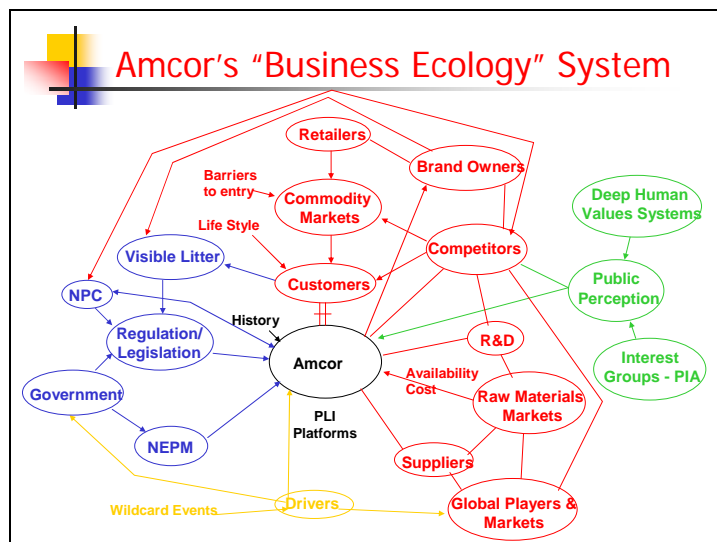
## Product Sustainability Is Only One Small Part

The sustainability of Amcor’s businesses is not limited to the sustainability of business’ products. Sustainability of Amcor is about the entire organisation, the system in which it operates, the business environment and emerging issues. Amcor needs a clear understanding of what sustainability means to the whole company its people and its parts.

<sup>11</sup> 2005 Amcor Annual Report, p2.

<sup>12</sup> <http://www.peakoil.net/uhdsg/Default.htm>

<sup>13</sup> <http://www.peakoil.net/Publications/20040201ExxonMobil.pdf>, p2.



## Building A Business Ecology

Articulating Amcor's business ecology helps clarify the key actors, influencers, and relationships in the total system. Similar to a 'mind-map', these circled elements were captured in brain-storm style with relational connectors added last. From this it was possible to cluster elements with strong relationships as indicated by the colour coding.

The emerging system map shows Amcor at the nexus of a customer and market cluster, a regulatory cluster, and a resource and technology cluster with drivers and values clusters that also influence the ecology of the system.

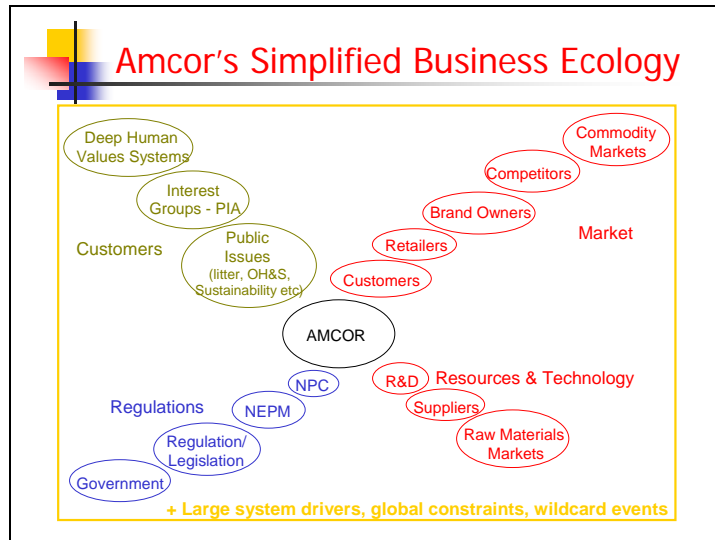
## Colour Mapping

The red coding encompasses the entire value chain both upstream and downstream. The upstream cluster includes raw materials markets, suppliers, and actors in the global arena. Downstream are retailers, brand owners, customers and competitors.

Blue coding includes the government, its regulatory and legislative arm, and other guiding actors such as the National Packaging Covenant.

The green and yellow colours represent the drivers that influence the system in subtle yet powerful ways. The public perception is influenced by not only what it sees and hears but by how it relates these signals against its values system. People with similar value structures who galvanise around an issue of concern commonly form public interest groups.

This slide is complex and is only included as an insight into the process that gave rise to the development of a comprehensive overview with which to contextualise the Amcor operating ecology.

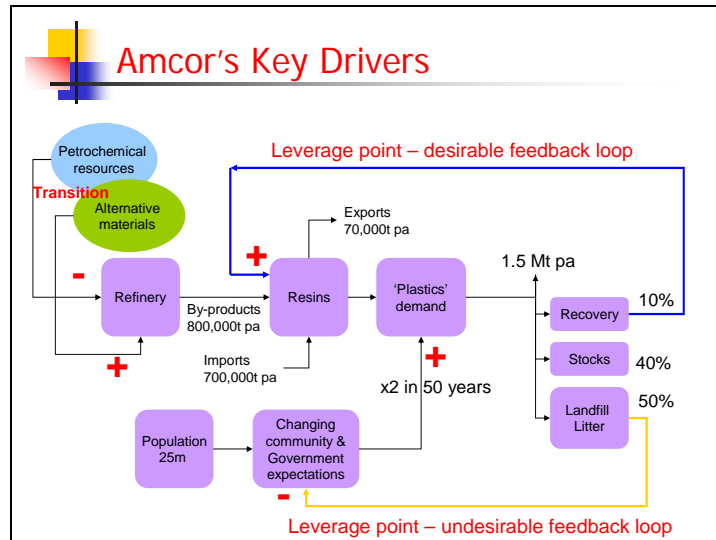


## Amcor's Simplified Business Ecology

The preceding business ecology has been distilled into a simplified, workable form. The clusters of key elements are represented as chains. The regulatory, resource and technology, market and customer chains are clear. The ecology is enveloped in larger system drivers such as global constraints and wildcards.

The general public and associated interest groups will respond to both the business and its products on the basis of deep human values systems. Values systems have a significant affect on attitudes and preferences dictating in how Amcor is perceived regardless of reality or fact.

To lead the thoughts of interest groups, Amcor must engage stakeholders to develop relationships and understand their concerns and motivations from a shorter-term product development point of view and also from a deeper societal change perspective.



## A Systems Map

Systems mapping is another useful technique to obtain a view of the ‘whole system’. The system map above is a ‘stocks and flows’ representation in terms of information flows or relationships between entities. In the slide above two drivers are highlighted:

1. Population growth which drives the demand for plastics (as shown projected to double over the next 50 years);<sup>14</sup> and,
2. Resource inputs.

## Feedback Loops

The feedback loops within systems maps give an indication of opportunities, constraints and leverage points for system intervention. There are a number of leverage points within which to intervene in a system<sup>15</sup> however this report recommends focusing on the following:

- Development and tracking of indicators and performance measures (similar to the measures contained within the National Packaging Covenant); and,
- Positive and negative feedback loops (which are presented in the slide above).

In the graphic two leverage points are illustrated in the ‘desirable’ feedback loop and the ‘undesirable’ feedback loop. The first is a desirable loop associated with the current low level of recycling (around 10% of plastics). Changing consumer preferences are likely to elevate the significance of this loop for Amcor.

The second is an undesirable loop associated with landfill and litter. Visibility of plastic litter and the risks it presents have been acknowledged by Amcor. This loop is likely to moderate the demand for plastic through its influence on changing community and government expectations.

It is recommended that ART research Donella Meadows’ approach to identifying leverage points and progressively examines different key drivers, as well as exploring the applicability of deeper leverage points.

<sup>14</sup> Data in this slide has been sourced from Foran, B., Lensen, M., Dey, C. 2005 Balancing Act: A Triple Bottom Line Analysis of the Australian Economy, Volume 3, CSIRO Technical Report, pp 134 - 135

<sup>15</sup> Places to Intervene in a System. By Donella H. Meadows. (Whole Earth Winter 1997). See [www.sustainabilityinstitute.org/pubs/Leverage\\_Points.pdf](http://www.sustainabilityinstitute.org/pubs/Leverage_Points.pdf)

**Leapfrogging the Competition?**

<p><b>AMCOR</b> Leading through innovation</p> <p><b>Mission:</b></p> <ul style="list-style-type: none"> <li>• Become a premier packaging solutions provider</li> <li>• Creating superior customer service relationships and value</li> <li>• Encouraging and rewarding employees to achieve the highest standards of performance</li> </ul> <p><b>Vision:</b></p> <ul style="list-style-type: none"> <li>• Top three participant in chosen market</li> <li>• Top five global packaging company</li> <li>• Globally recognised brand</li> </ul> <p><b>AMCOR's five core values:</b></p> <ul style="list-style-type: none"> <li>• Customer satisfaction</li> <li>• Integrity</li> <li>• Teamwork</li> <li>• Safety and environment responsibility</li> <li>• Innovation and creativity</li> </ul>	<p><b>VISY</b> <b>PACKAGING AND RECYCLING FOR A BETTER WORLD.</b></p> <p><b>Vision:</b> Creating innovative packaging and recycling solutions for a sustainable future</p> <p><b>Mission:</b> Making our customers more profitable (and more environmentally sustainable)</p> <p><b>VISY STRIVES TO MAKE THE WORLD A BETTER PLACE...</b></p>  <p><b>ENVIRONMENTALLY</b> By creating value for our employees and customers, and investing in new business opportunities.</p> <p><b>FINANCIALLY</b> By converting waste into value, managing our impacts and creating environmentally sensitive products and services.</p> <p><b>SOCIALLY</b> For our employees, the communities in which we operate, and the broader community through the Pratt Foundation and Visy Cares.</p>
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## The Public Face Of Amcor Branding

Amcor's business ecology highlights the importance of public perception in the broader system. In systems mapping terms public perception is also a potential intervention point. Combining these with the fact that ART have reported Amcor has poor consumer brand recognition, it is useful to examine the company's public face. For this we have looked to Amcor's web-site.

The name Amcor and the tag-line 'Leading through innovation' does not identify Amcor's business purpose or market segment. A person reading the tag line 'Leading through innovation' may be left asking the question, 'Leading what?' Amcor's corporate page leads with its 'mission statement' that ascribes to being the best at what it does for its investors. Amcor's vision is about becoming the biggest and most recognised in its field. These statements are focused on economic success leaving out the messages that portray what Amcor gives back to the community, its responsibility for the environment, and its quest for cleaner, greener 'premier packaging solutions.'

Corporate sustainability goes beyond economic sustainability. It is intrinsically linked with environmental and social sustainability. The questions for Amcor to consider are:

- *Does Amcor's public face clearly communicate a set of values underpinned by corporate sustainability? or*
- *Does Amcor's safety and environmental reporting convey a mechanistic approach to a compliance culture?*

## Putting Values into Practice

ART described Amcor's prime market differentiator as the science, research and rigor behind their packaging solutions however this deeply held value is not part of the corporate or public image of Amcor. Amcor personnel may live this ideal however this energy and achievement is not promoted in the branding or identity of Amcor.

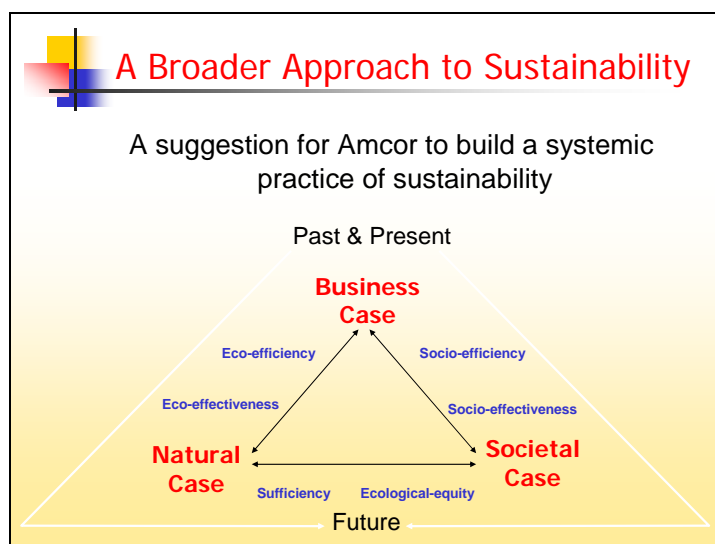
## The Competition

The Visy corporate information is provided as an example of branding and marketing that communicates what the company does and the ideals it strives to achieve. We are not advocating the Visy image as a direction Amcor should imitate or pursue but as a leverage point from which to consider the public face and messages that Amcor would like to articulate regarding corporate sustainability and social responsibility.

## **Leapfrogging The Competition**

It is critical for Amcor to enact it's own vision of sustainability to both manage risk internally and to position market advantages externally.

Amcor has the opportunity to 'leapfrog' the potential 'window dressing' approach toward sustainability that competitors may be utilising, through implementing a science-based, future-focused sustainable solution. *We suggest his new approach be known as 'Future-Gearing' for a sustainable Amcor.*



## Defining Sustainability

A definition of sustainable development<sup>16</sup>, adopted by many corporations as their underlying sustainability principle, defines sustainable development as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’. Understanding how such a principle translates into a corporate environment can be complex.

The above diagram<sup>17</sup> illustrates a broader approach which when implemented will make Amcor truly sustainable in all aspects.

## Sustainability In The Business Environment

The widely used ‘business case’ for sustainable development, encourages corporations to further their economic sustainability by increasing their ecological and social efficiency. Both eco-efficiency and socio-efficiency are concerned with increasing economic sustainability. This is the approach adopted by most corporations, although not always actively put into practice.

The business case incorporates the triple bottom line of corporate sustainability - economic capital, natural capital and social capital. For a corporation to become truly sustainable, there are six criteria to address authenticating the business case, the natural case and the societal case.

## A Broader Approach

The natural case is underpinned by eco-effectiveness and sufficiency. Eco-effectiveness overcomes the problems caused by not considering absolute thresholds and the principles of non-substitutability, non-linearity and irreversibility.<sup>18</sup> Sufficiency is used to describe the situation where consumer demand and corporate response is detrimental to the environment.

The societal case is maintained by socio-effectiveness and ecological equity. To be socially effective a company is able to self-assess the absolute positive social impact the organisation could reasonably have

<sup>16</sup> Found in the Brundtland Report World Commission on Environment and Development, *Our Common Future*, (Oxford University Press, 1987), p43

<sup>17</sup> Dyllick, T & Hockerts, K, “Beyond the Business Case for Corporate Sustainability”, (Business Strategy and the Environment, (2002), 11, 130-141

<sup>18</sup> Dyllick and Hockerts argue that to be truly sustainable these approaches must also take account of:

- The non-substitutability of capital – there are many examples where economic capital cannot be substituted for natural or social capital;
- The irreversibility of capital depletion – where the level of deterioration can no longer be reversed; and,
- The non-linearity of capital depletion – where the level of deterioration can no longer be reversed – where the consumption of natural and social capital has no impact until a certain threshold is reached.

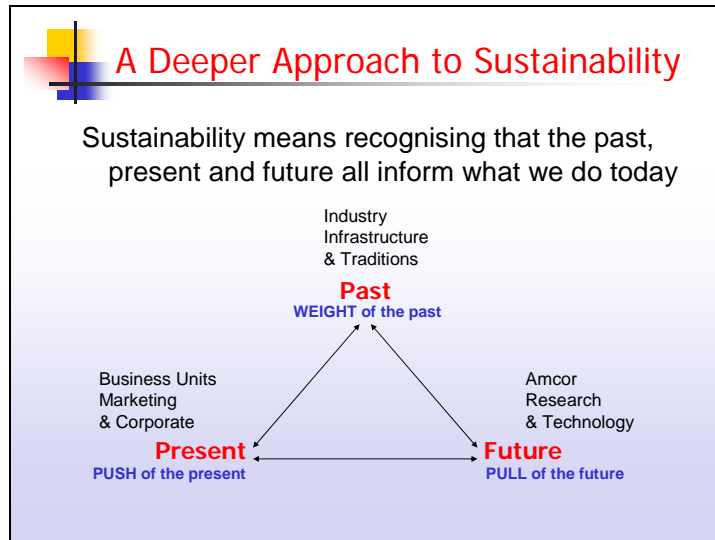
achieved. Ecological equity is the equitable solution that an organisation must find for the use of natural capital now and the impact this will have on future generations.

### **A More Responsible Approach**

It is clear through examples around the world that the public and governments are moving towards a definition of corporate sustainability that includes the six criteria outlined above. This definition embraces the concept of Extended Producer Responsibility (EPR) and Corporate Responsibility in the broadest sense. An example relevant to Amcor is the situation in Germany where corporations are required to take full responsibility for disposal of their products. This situation has made an impact on Amcor's economic results in Europe where the 2005 Amcor Annual Report indicates that in Europe the significant reduction in refillable PET containers in Germany is a significant factor in the lower volumes of PET packaging'.<sup>19</sup>

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<sup>19</sup> 2005 Amcor Annual Report, p14.



## Sustainability Incorporating Dimensions Of Time

The above triangle maps three dimensions:

- **The Push Of The Present** – Globalisation, new technologies, demographic shifts such as aging;
- **The Pull Of The Future** – Competing images of the future: global divide versus accelerating now versus think global shop local and natural competition; and,
- **The Weight Of The Past** – What has made change occur in the past? What are the deep structures?

There is a tension between past, present and future. Future opportunities generally compete with the “business as usual” mindset of today and past successes and failures not analysed appropriately in the context of future opportunities.

### Present

Amcor’s Business Units operate very much in the present, dealing with production, processes, deadlines, customer demands, resources and employees working conditions. They are aligned with the ‘business case’ definition of sustainability, which is logical and necessary for growth. The response to sustainability is compliance driven, doing the right thing according to legislation.

### Present And Future

Amcor Corporate engages with the present and the future. An organisation’s vision is to define the purpose of the organisation - the distant destination towards which the company will strive. In the medium term an organisation will define its strategic objectives – the goals that challenge it. Today’s organisation is defined by its strategic identity, its values and the motivations that drive them, strengths and weaknesses, past experience and current reality.

### Future

ART, through innovation and invention, is focused on developing Amcor’s future. ART’s role is critical in ensuring information and ideas flow from ART thought leadership to:

- Amcor Corporate concerning the short, medium and longer term future (0 – 30years); and,
- Amcor Business Units in a near future context (0-5years).



## A Science-Based Approach To Sustainability Is Required

Amcor is already building on its philosophy of providing scientifically sound packaging solutions through taking a similarly robust approach to sustainability. Activities such as instigating the ART Environment and Sustainability platform, increasing Business Unit awareness of sustainability and Corporate sustainability reporting and marketing are all examples of this commitment. Yet challenges such as the changing business environment and negative community perceptions around litter and waste have the potential to significantly impact Amcor's operations in unprecedented ways. Solutions to such problems require an integrated, scientific approach to sustainability that engages *all three* of the entities concerned with sustainability at Amcor.

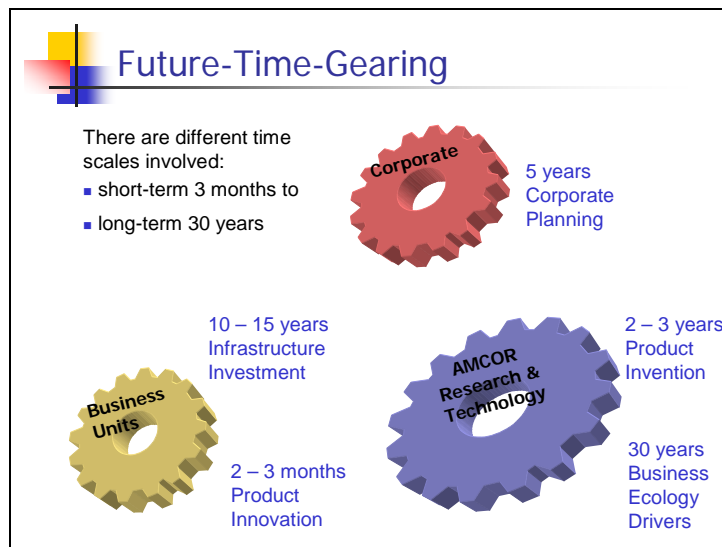
## 'Future-Gearing' Amcor For A Sustainable Future

Our future gearing approach takes into account the needs and priorities of the three entities within Amcor concerned with sustainability, as well as the timeframes and operating context for each division to consider. When the priorities and timeframes for each division are considered, *it is clear that sustainability does and should mean different things to Corporate, Business Units and ART*. For this reason, each 'cog in the wheel' has a unique and vital role to play in generating a sustainable future for Amcor.

## Three Gears Means Three Roles For A Sustainable Amcor

- **Business Unit Gearing** – The Business Units within Amcor provide quality products to suit brand-owners' needs. Scientifically sound products are readily available and offered to clients for immediate purchase. *Sustainability here means 'business sustainability' where timeframes are measured in normal fiscal cycles;*
- **Corporate Gearing** – Corporate is concerned with managing the mid to longer-term viability and risks to Amcor through strategic planning and foresight. Corporate also promotes the public face of the company. *Corporate sustainability means gearing up for the future internal and external needs of the company.* The planning timeframes to keep abreast of social, legislative and political changes that impact Amcor requires a 5-15 year outlook; and,
- **ART Gearing** – ART researches and investigates new solutions and identifies risks and opportunities for Amcor that may be addressed through technology into the future. *Sustainability means identifying future risks to compliance and identifying opportunities for innovation.* The timeframes and thought leadership horizon varies from 2-3 years to a 30-year outlook.

Future gearing means equipping each 'cog in the wheel' of Amcor's sustainability approach to operate to its full potential. This requires identifying and managing risks within the right timeframes. When each gear is operating effectively and working to support the others, Amcor will be 'geared up' for a productive sustainable future.



### Each Role Involves Carefully Considering Relevant Time Frames For Change

Amcor is aware of the need to be responsive to the pressures faced by retailers to provide increasingly sustainable packaging solutions. The rising price of petroleum and other inputs, and the changing national and global focus on product reuse, demand that Amcor stay ahead of the consumer and therefore brand-owner/retailer desires.

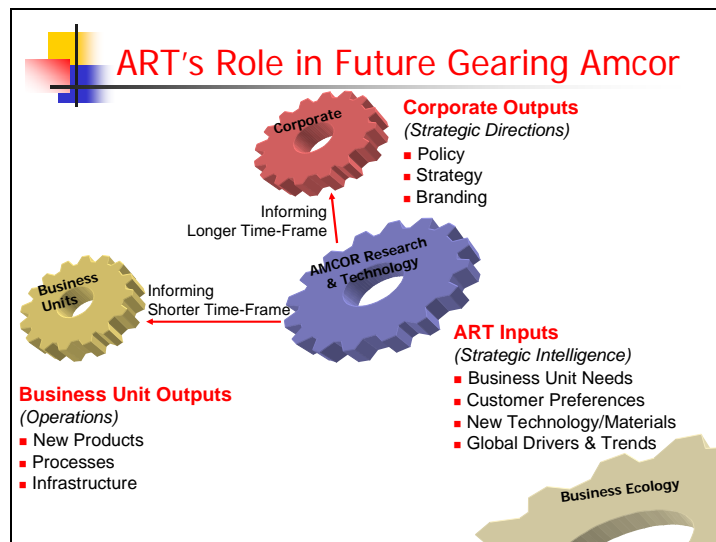
A range of timeframes needs to be considered by each of the three ‘cogs of sustainability’ to enable Amcor to be appropriately responsive to these changes. *We call this approach ‘Future-Time-Gearing’.*

Future-Time-Gearing involves carefully isolating the timeframes within which Amcor will need to respond to risks given the current cycles of each ‘cog’ of Amcor’s operations. The slide above indicates the general timeframes required for each ‘cog’ to respond to change. ART has a key role to play in assessing and responding to the pressures created within each time frame. This role is addressed within the next slide.

### Drivers Of Change Can Be Detected, Managed And Influenced

Importantly, future-gearing also suggests that the *drivers* of change should be understood so that potential risks may be anticipated before they become pressing. This allows Amcor to respond to changes where they are of concern, *and to drive changes where they have control.*

For instance, Amcor may decide to develop new lines of packaging that are well beyond the current standards outlined in the National Packaging Covenant where they anticipate such a general shift in consumer desires. By leading the market in sustainable packaging, Amcor would be well placed to influence the introduction of tighter legislation around packaging requirements, significantly offsetting the market position of less sustainable competitors.



## ART Can Play A Leadership Role Through Providing Strategic Intelligence

ART is well placed to assist in future-gearing Amcor through providing timely thought leadership to the Business Units and Corporate ‘cogs’ of sustainability.

Thought leadership in future gearing Amcor requires anticipating changes in the Social, Technological, Economic, Environmental and Political (STEEP) landscape that may affect Amcor’s product lines, viability and reputation – strategic intelligence in anticipating and managing risk.

Thought leadership also involves converting information about key risks into research, products and information and channeling this information back to Business Units and Corporate in a way that reflects their priorities and timeframes.

## ART Requires A Broader Steep Approach To Environmental Scanning

To fulfill this role, ART requires a broader environmental scanning framework that is capable of identifying both short and medium term drivers and risks, *and more distant signals of change*. This framework would need to be robust enough to identify the possible risks of ‘business as usual’, the emerging need for change, and specific aspects of environmental sustainability, triple bottom line, corporate business responsibility and corporate social responsibility.

ART can assist Amcor to stay ahead of the game by constantly sourcing strategic intelligence, opening up possibilities through creative and long range scenario generation, and assisting in providing a vision for Amcor around the meaning of sustainability for each of its three core sustainability units.

## ART Needs To Consider Longer Timeframes To Provide Leadership


*ART will look beyond the Business Units’ timeframe of 2-3 months* to anticipate future challenges and demands that will affect the Business Unit operating environment. In particular, ART’s thought leadership responsibilities should include the broader social, environmental and economic conditions that will affect brand-owners and retailers product requirements. ART’s research into sustainable products will enable the Business Units to offer a broader range of products that when required, will meet demand without the need for prohibitive time lags.

*ART is responsible to similarly investigate the STEEP dimensions that will affect corporate strategic planning* for major infrastructure change within the Business Units and those that affect Amcor’s reputation and branding for sustainability. ART’s role should be to provide strategic direction to Corporate based on much longer (up to 30 year) STEEP timeframes of change.

## **Shaping The Future Through Extended Producer Responsibility**

If ART adopts this approach, it will position Corporate to *influence* as well as respond to major changes in Amcor's external legislative, social, political and biophysical environment. It will ensure that Amcor has a sustainable business environment within which to operate, encourage more pro-active and less reactive responses, and increase Amcor's capability to lead the market.

Ensuring the long-term health of the business, social and physical environment within which Amcor operates directly contributes to Amcor's long-term sustainability. This is the meaning of *Extended Producer Responsibility* (EPR). ART has a key role to play in creating such an environment.




## Recommendations

- ART**
  - Platform Program Review
    - Future-Gearing, Future-Time-Gearing, System Mapping
  - Reframing the value proposition
    - From technology scanning to STEEP scanning
    - From strategic planning to strategic foresight
- Business units**
  - Upstream / Midstream / Downstream
    - Research alternative materials
    - New products through resource recovery (recycling/waste management), efficiency, effectiveness
    - Eliminate waste – biodegradable products
- Corporate**
  - Re-branding and responsibility shift
    - Eco-efficiency + socio-efficiency
    - Moving towards Extended Producer Responsibility (EPR)

We recommend that Amcor considers three prime directives:

1. ART's platform program review in terms of future gearing, and reframing the value propositions with regard to Future-Time-Gearing;
2. Business units taking on more responsibility upstream, midstream and downstream; and,
3. Corporate responsibility in leading and communicating with economic, environmental and societal stakeholders.

The remainder of this report explores these recommendations.



## ART - Platform / Program Review

- Review Platform in light of:
  - Broader/deeper definition of Sustainability
  - Understanding of Business Ecology (e.g. systems mapping, identification of collaboration opportunities)
  - Different time-based requirements of Amcor
  
- Strategic solutions
  - Longer term view
  - Anticipation
  - STEEP scanning

### **Review Using A New Sustainability Framework**

The opportunity exists for ART to review its platforms and programs and implement research practice within the framework of a broader and deeper definition of sustainability. This will enable ART to put into practice the different interpretations of economic, environmental and social sustainability recommended for Amcor Corporate, Business Units and ART. Strategic solutions can be found now and greater impact will be felt *Time-Gearing* into the future.

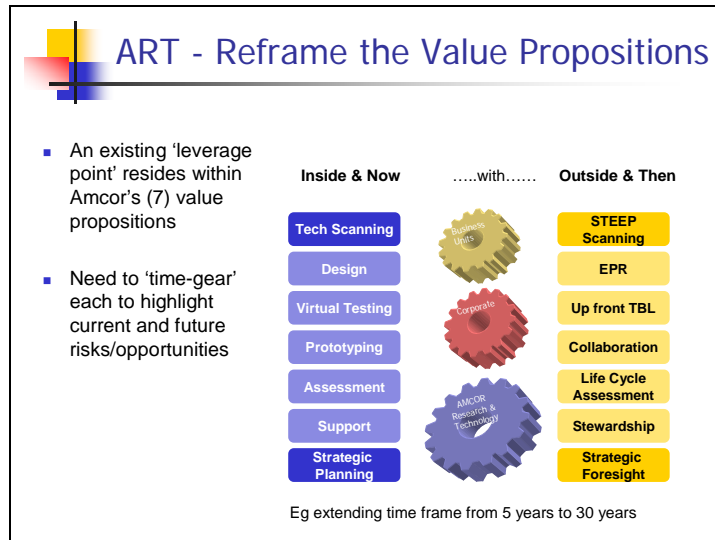
### **Review With An Understanding Of Amcor's Business Ecology**

A deeper understanding of the business ecology within which ART operates is vital for ART to anticipate emerging issues that will materially impact on Amcor, recognise opportunities and avoid negative impacts. We have demonstrated in a very simple way, methods of business ecology and systems mapping to assist ART's understanding of how it can identify all stakeholders and material elements of the business environment in which Amcor operates. Future-Time-Gearing will provide useful information and give substance to interpreting these maps.

### **Strategic Solutions**

- Within the proposed new sustainability framework;
- With an enlightened understanding of Amcor's business ecology;
- Using well developed STEEP scanning techniques;
- Taking a longer-term view considering Amcor's time based requirements;
- With an understanding of future-time-gearing; and,
- Communicated to all sectors & aligned with Amcor's values...

...will establish timely implementation of strategic solutions enhancing day to day operations and secure for Amcor sustainable successes.



## An Organisation's Values

Organisational values are usually compiled and stated at the corporate level. The collective values of an organisation manifest themselves in the organisations culture, the way things are done, the employees it attracts and retains, and the public face of the organisation. These values consist of the collective values of individuals within the organisation. To be workable they are aligned with the stated organisational values making the organisation congruent and sustainable. Amcor's Value Propositions can include stated end values (deeper values) and means values (surface values) to achieve the desired results.

## Value Propositions As A Leverage Point

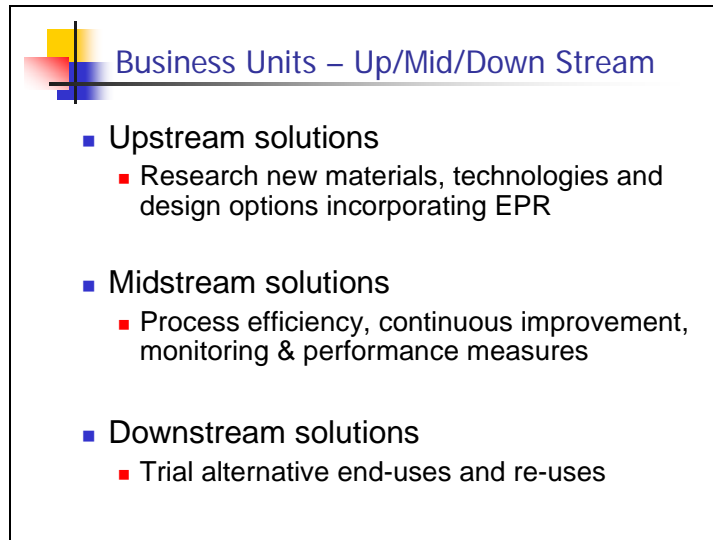
There is leverage in aligning the values held by people within Amcor having a dramatic effect on all aspects of the organisation. Value aligning or shifting requires a number of conditions within the organisation to be considered for change to be sustainable.

- **Potential** – In the brain syndicate of the organisation to understand the need for and have the ability to overcome barriers to change.
- **Solutions** – To immediate problems must be present to allow for more complex issues to be addressed and sustainable change to take place.
- **Dissonance** – Discomfort with knowing things will not stay the same as business changes.
- **Insight** – Ability to consider alternative futures and thinking them through.
- **Barriers** – Identified and worked through, managed for sustainable change.
- **Consolidation and Support** – During the transition phase of any change is necessary from every level of the organisation.

Leverage can be achieved addressing the interests of corporate at a corporate level, and business units at a business unit level, with ART taking a big picture view researching possibilities.

## ART's Use Of Reframed Value Propositions

The challenge for ART is to use reframed value propositions to understand current and future risks and opportunities. With ART gaining some insight into the deeper meaning of its seven value propositions it will develop a greater awareness of the emerging issues. The diagram above illustrates how ART might through thought leadership shift its existing seven value propositions. The deeper values we have listed are illustrative. These seven value propositions invite ART's assessment, consideration and input ensuring they are strategically appropriate, systemically viable and socially acceptable, aligned with Amcor's deeper values into the future.



## Strategic Focus Upstream, Downstream And Midstream

If ART recognises that petrochemical based plastic packaging is not sustainable beyond an approaching risk-threshold then there are at least three resource-based areas of Amcor’s operations that invite strategic attention.

The three areas were identified through the generation of the focused business ecology systems map. In general supply chain terminology they are the upstream, downstream and midstream areas.

## Strategic Solutions

Suggestions for strategic solutions in these areas are indicative of opportunities Amcor has during its ‘window of opportunity’ before the risk-threshold is reached to:

1. Increase the duration of the window of opportunity by reducing resource consumption through midstream continuous improvement, and reductions in total resource consumption per quantity of product sold through innovative downstream ventures; and,
2. Mitigate the exposure to the risk-threshold by developing a broader strategic profile through the diversification of upstream resource acquisition and development, and downstream product and consumer markets.

## Investment Opportunities

Accordingly the overall strategic directions recommended by this approach can be seen as ‘future proofing’ through two investment opportunities that mitigate against risk and present growth opportunities:

1. **Invest in research for replacement resources and resource use reduction.**

This research would prudently include existing materials, emerging materials and business ecology collaborations to identify and test potential replacement and diversification materials and resulting products; and,

2. **Invest in the development and trialing of strategically identified product diversifications based, in particular, on recycling and product re-use programs.**

Such programs would need to be coordinated across the company to ensure strategic fit so that opportunities for strategic re-branding and operational realignment are investigated. In addition, such programs would prudently require a collaborative engagement with downstream stakeholders in Amcor’s business ecology.



## Corporate - Expanded Responsibility

**Re-branding and responsibility shift**

- Corporate
  - Extended Producer Responsibility (EPR)
  - Cleaner production
- ART
  - Refresh corporate strategy inputs
  - Provide leadership (ecology road-mapping for leadership and directions for business units)
  - Research (collaboration and stewardship within business ecology)
- Business Units
  - Implement TBL systems and processes
  - Recognise their active role within the business ecology

## Rebranding Opportunity

Rebranding can be complex, expensive and risky. However it is suggested as a strategic opportunity for Amcor in concert with this reports other solutions. The solution formulation is based on the Future-Gearing approach recommended in this report for Amcor to face future strategic challenges. Re-branding considerations have arisen out of a comparative analysis of Amcor’s current operating realities, current competitor positioning – eg Visy, future operating environment pressures, future resource constraints, and current corporate strategy in light of the historical cycle of acquisition and streamlining of different areas of operations.

## Strategic Flow-On Opportunities

Based on the assumption the previous strategic solutions to Amcor’s strategic challenges are adopted in some form the re-branding and responsibility shift for Amcor is highlighted as an area of strategic opportunity to:

1. Re-position to mitigate exposure to the risks of:
  - Community perceptions, pressure group campaigns and the increased implementation of sustainability principles through more restrictive legislation.
  - Possible ‘buck passing’ by downstream stakeholders in Amcor’s business ecosystem in light of an active community shift towards sustainability.
2. Compliment the strategic initiatives of:
  - Current best practice approach to the ‘science of sustainability;’
  - New resource procurement and development practices;
  - The development of potential recycling and re-use operations; and,
  - Internal company practices, to support these initiatives, provide additional incentive for continual improvement processes and to aid human resource management in recruitment and retention of talent.
3. Establish a leadership role recognised by the public, governments and business ecology for generating leverage with these direct and indirect stakeholders to:
  - Secure support and attract resources for changes in operations;
  - Develop more beneficial collaborations in the business ecology to smooth the transition from petrochemical resources; and,
  - Be in an advanced competitive position in order to obtain greater operational security and market share in view of any quickened legislative requirements or aroused public perceptions, and supply chain interest.



## A Way Forward

New interpretations of sustainability and a new approach:

- A new concept of time and risk
  - Multiple time-lines
  - Future-gearing
  - Create a strategic foresight value proposition within ART
- Adopt a life cycle perspective
- Re-brand Amcor in the marketplace

.. leading to new sustainable strategies

## Conclusion

This report has presented a way forward for Amcor to be a leader in sustainability. The suggested approach is both broader and deeper and is aligned with critical business functions within Amcor. This is important, since sustainability is not the responsibility of one department or one person.

Sustainability is presented as an integral element of Amcor's way of doing business. In particular, specific roles for Amcor's Corporate Group, Business Units and Research&Technology are emphasised since they provide leadership platforms that can make a significant difference in delivering economically, socially and environmentally responsible outcomes.

The presentation of the initial Study Team findings to Amcor personnel has confirmed a receptivity to new ideas and a readiness for change. The rich conversations arising from the presentations of both Study Teams confirms our view that Amcor currently has an opportunity to be the industry leader in sustainable packaging.

The Study Team supports Amcor's view that its 'science-based' innovation and technology leadership provide a platform to develop a 'science of sustainability' as a critical element of Amcor's differentiation and its re-branding in the market place.

The future has already begun. The opportunity for Amcor is to continue this strategic conversation with a spirit of discovery. Many questions will arise, however, as in the words of Earl Gray Stevens "Confidence, like art, never comes from having all the answers; it comes from being open to all the questions."