

AUSTRALIAN SUSTAINABLE BUSINESS GROUP'S

Submission on

**Banning exports of waste plastic, paper, glass and
tyres” discussion paper on implementing the
August 2019 decision of the Council of Australian
Governments**

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EXECUTIVE SUMMARY

The Australian Sustainable Business Group (ASBG) welcomes the opportunity to comment on the Council of Australian Government's *Banning exports of waste plastic, paper, glass and tyres* discussion paper.

ASBG is confused how a Waste Export Ban (WEB) supports the Circular Economy Principles for Waste under the National Waste Policy. Plastic waste was considered the main focus of the WEB, and with the changes to the Basel and Stockholm Convention, there is already a difficult path for export of plastics.

There is no doubt that Australia can take many improvements to recycle and reduce waste to landfill more, especially through better separation practices including source separation methods and further downstream processing. Also there are some collected recycle streams such as mixed paper and cardboard and mixed plastics which have low to negative values in international markets. Consequently there is considerable scope to improve on these streams by lowering contamination levels. However, higher quality recyclates which has *bona fide* recycling export destinations should be encouraged as this will best serve the circular economy. Noting that Australia is a net importer of manufactured products, consequently circularising this material stream means exporting excess recyclates back to the manufacturing nations, which can use this as a replacement to natural resources.

Of most concern is the broadness of the WEB based on its narrow *value-add* criteria. Most affected by this are paper and cardboard exports representing well over 1 million tonnes per annum. Limiting the export to paper pulp will simply result in large quantities of export quality materials going to landfill in the short term. The small size of Australia makes it uneconomic to invest in all paper and cardboard recycling plants to cater for all the different markets. Added to this is the closure of the Albury newsprint mill. Other Australia cardboard and paper mills will not be in a position to accept the excess old newspapers, leaving export as the only circular economic solution. There are other cases put forward in this submission.

ASBG does not support the use of subsidies, directly or indirectly to prop up inefficient, unprofitable recycling systems.

If a WEB must be implemented it can be made to work well. ASBG recommends a twofold solution:

- Accept *bona fide* recycle streams for export which meet recognised standards and acceptance criteria as being products, not wastes. Note; Australia's Act covering the Basel Convention defines wastes as those being disposed of.
- Redefine value-adding to ensuring the exported recycle product streams are:
 - Sent to recognised countries and recycling facilities ensuring that positively valued recycle materials will be processed into products with known markets.
 - If the country and or recycling facility receiving the recycle is suspect in its environmental credentials, subject the export to an assessment and approval process.

Using the above gate keeper role the Commonwealth can ensure Australia is being a responsible environmental citizen in the global circular economy.

ASBG also discusses the issues in managing recycling, down-cycling and Energy from Waste.

1 INTRODUCTION

The Australian Sustainable Business Group (ASBG) welcomes the opportunity to comment on the Council of Australian Government's *Banning exports of waste plastic, paper, glass and tyres" discussion paper*, which is being led by the National Waste and Recycling Taskforce.

The [Australian Sustainable Business Group](#) (ASBG) is a leading environment and energy business representative body that specializes in providing the latest information, including changes to environmental legislation, regulations and policy that may impact industry, business and other organisations. We operate in NSW and Queensland and have over 110 members comprising of Australia's largest manufacturing companies and other related businesses.

ASBG represents a broad range of industries and businesses, consequently represents the business waste generation areas and the concerns affecting them. Business wishes to reduce waste to landfill, recycle and reuse wastes made and supports government policy in this direction. ASBG supports the continuing export of recyclate commodities (called recyclate streams in this report) which meet international and local acceptable standards for recycling. In this context export is an essential way for Australia to better participate in an internationally based circular economy. Consequently, if a Waste Export Ban must be imposed, it must do so to maximise recycling in Australia and minimise waste to landfill.

To assist Government in addressing the impacts associated with China's National Sword and on-going import restrictions on certain recyclates, ASBG published its *Framework Approach to a Revamped/Reengineered Recycling System* (see Appendix). It is a summary of national and local actions required for a long term solution to the recycling crisis. Key elements include:

- To ensure that efficient cost-effective revamped recycling systems replace systems that are no longer viable.
- To standardise the categories of collected recyclate streams, where appropriate, especially in kerbside.
- Reduction of contamination levels from point of collection to recycled product is essential to access existing markets and generation of new markets for such products.
- Regulatory reform to reduce green tape, high costs, permit further down-cycling and improve the planning approval processes for waste infrastructure.
- Support for Energy from Waste and improved streamlined approaches for B2B recycling.
- A suite of financing methods of revamped recycling systems are provided.

This submission considers three basic issues arising out of the discussion paper:

- The need for a Waste Ban
- Timing issues
- A workable Value-Adding criteria

ASBG also is concerned of the gridlock which can occur at jurisdictional level in recycling and waste management. Siting systems under the planning system and overly cautious environmental protection approaches is limiting the options for down cycling, land application and use as fuels for many recyclate streams.

2 NEED FOR A WASTE BAN

ASBG is somewhat confused as to the outcomes that a Waste Export Ban will achieve for Australia. The National Waste Policy listed the following Circular Economy Principles for Waste:

1. Avoid waste
2. Improve resource recovery

3. Increase use of recycled material and build demand and markets for recycled products
4. Better manage material flows to benefit human health, the environment and the economy
5. Improve information to support innovation, guide investment and enable informed consumer decisions

ASBG members consider the proposed Waste Export Ban (WEB), will harm items 2, 3, and 4 due to the narrow interpretation of value-adding as outlined in the discussion paper.

ASBG does not support the use of subsidies, directly or indirectly to prop up inefficient, unprofitable recycling systems.

The proposed Waste Export Ban (WEB) was when announced was thought to largely target highly contaminated material that has very low value in international markets and generally contain high levels of contamination. Mixed paper and mixed plastic wastes with well over 5% contamination rates have a major source of the much increased restriction in China, Thailand, Indonesia, Malaysia, India and Vietnam. Internal management of such contaminants can be an environmental concern for such countries.

While these countries have some issues with highly contaminated and low value recycle materials, this is not the case for OECD nations and other nations where Australian recyclates are exported to.

Australia in the short to medium term simply does not have the capacity to recycle most of its waste materials back into similar products from, which they are made. The reasons are simple. China's National Sword broke a working Circular Economy system where used Australian materials went back to the manufacturing sources which consume them. Australia simply does not have the manufacturing capacity to absorb such materials. Just consider plastic recycling – see Box 1.

Box 1: Plastic Waste in Australia

The [2016-17 Australian Plastics Recycling Survey](#) said: *Of the 415,200 tonnes of plastics collected for recycling, 180,100 tonnes (43.4%) was reprocessed in Australia and 235,100 tonnes (56.6%) was exported for reprocessing.* So consider the mass balance, 3.513 MT of plastic is consumed and 12% is recycled, so 88% of this waste is landfilled or remains in the anthropogenic sphere.

Australia only recycles 5.1% internally and remains flat; *'Local reprocessing was flat from 2015–16, with export for reprocessing falling by 20%.'* As export is falling more is landfilled. Also 2.33 MT of all plastics were imported in 2015-16, leaving about 1.03 Mt made locally, simply about 70% of all plastic is imported. Consequently, there is no way that Australia has the manufacturing capacity to fill the 70% gap of imported plastic. If an export ban is applied it will mean that all this currently unrecyclable plastic will simply be landfilled.

Given the high costs of source separation to flake level purity the most cost effective non-landfill solution will be Energy from Waste with a few alternative processing systems including blending with asphalt for road surfaces or making mixed plastic products, but these will be small in scale compared to EfW solutions.

In addition, the internet has been a disruptive force against newspapers. It was recently announced that the Norske Skog newsprint mill will be closed by the end of the year to be replaced by equipment to supply cardboard market and not newsprint. While there is some capacity for existing cardboard mills to accept newsprint this is generally limited to a maximum around 15%. Nevertheless, there is still an export market for newsprint and paper outside China, India and South East Asia, such as the USA. Is there an issue for COAG regarding the environmental impacts of our recycled materials on such developing countries?

Key actions required at the National Level to assist in improving the reuse and recycling of used products includes.

- **Improved source separation:** Contamination removal is the key to making a valuable material for further processing into an end product. Standardisation in kerbside collections – more bins for more types - with better quality enforcement will assist in providing lower contamination rates. Encouragement for better source separation should also extend to the commercial and industrial areas, noting these generally have the higher quality collected materials. The next steps of minimisation of contamination in the transport and processing should also be encouraged.
- **Economies of Scale:** For large volume of collected recycle the economies of scale are essential for a profitable recycling. There are many issues to reducing the current contamination levels in collected kerbside. The size of the equipment is currently a limiting factor. Changing Multiple Recycling Facilities (MRFs) to incorporate optically separate many collected materials for recycling is impacted by the small foot print of current MRFs. Their factory area is for almost all simply too small to include this additional equipment.
- **Development of new markets:** Given Australia’s limited manufacturing sector, purification of more material back to starting raw materials is limited to largely export markets. It is also a high cost high energy process where Australia is not competitively based. To do so would involve subsidisation which ASBG does not support. Down-cycling and Energy from Waste is the obvious choices for Australia, other than landfill. As discussed in Section 4 there are numerous regulatory road blocks here where the Commonwealth can assist with.
- **Regulatory Framework:** Outcome based policy, establishing a framework for markets to flourish and avoid regulation where possible.
- **Education:** Helped by a standardised kerbside collection system, rather than the current mix of systems across small groups of Council, a common approach is far easier to uniformly educate and simplify the task for us all to source separate and do this well.

Further details are provided in ASBG’s Framework for a Revamped Re-engineered Recycling System in the Appendix.

2.1 Impact on Paper

According to the Discussion paper 1.18 million tonnes of paper and cardboard is exported. It is by far the largest sector to be impacted by the WEB. ASBG members indicated:

- A WEB will suppress collected paper prices helping paper mills input cost. But in doing so, it will have much larger impacts on the collection of paper and cardboard. Orora B9 Mill for example, collects 600 kT per annum, but only recycles 450 kT, the rest being exported. Mills must have excess supply at hand. To keep profitable they must continuously operate where practicable. Consequently, with a WEB only the highest quality will be accepted and the excess will be landfilled. Paper and cardboard collectors will then need to budget for this drop in quantities and revenue, undermining the long term resources put into its collection and source separation. If a new mill is developed it will face years to grow a damaged collection system again.
- Mills have limited storage capacity, so during oversupply,, the excess is exported. Larger storage is not a viable option as it poses a fire risk as paper and cardboard are known to spontaneously combust¹. Insurance covering this fire risk is either unobtainable or very expensive. Oversupplies vary over time and location. An international export / import market greatly assists in the smoothing out of supply variations using market mechanisms.
- Different grades of collected papers and cardboards cannot be recycled in Australia, but can so overseas. Mills are designed for specific inputs to make specific products: cardboard, newsprint, office papers, wet fibreboard packaging, tissue paper etc. Building specific mills is simply uneconomic within Australia.

¹ See [Waste Paper Risk Factors – Self Heating: Transport Information Services German Marine Insurers](#)

- Newsprint is especially facing a challenging time with the closure of the Albury newsprint mill. As existing mills are not designed for newsprint, Australia will simply not have the mill capacity to recycle the majority of newsprint in Australia. The only option available to sustain similar recycling levels is to export collected newsprint. NewsMediaWorks estimates if the WEB was imposed in 2018 Australia's newsprint recycling rate would drop from 74% to 37%. Population centres isolated from Australian based mills currently rely on export of their collected old newspapers.
- There are multiple grades for recycled paper and cardboard. The lowest grade is mixed paper and cardboard, (called unsorted waste and scrap paper in the Discussion Paper) largely from municipal recycling schemes. Except for these lowest grades there are many international mills which can process old paper and cardboard into valuable product, completing the circular economy. With better source separation and perhaps additional sorting better grade of paper and cardboard recycle can be made, but will exceed the capacity for Australia to process it. This is assuming the mills are expected to make a profit. Subsidisation of paper recycling is not considered a viable option for many reasons.
- One option for dealing with lower grades of paper is to make Refuse Derived Fuel (RDF). However, as paper value-adding only includes paper pulp, this would be a banned for export. This approach is contrary to that for tyres which under value-adding can be shredded and exported as RDF.

In general a broad WEB on paper will collapse the collection systems due to price signals. Most excess will simply be directed to landfill. Australian mills rely on the export process to manage their supply and fire risks. Only the lowest quality paper grades may have some justification for a WEB, but this is hard to see.

Australia has an opportunity to improve the quality of its paper and cardboard collected, perhaps subject to further contamination removal and then on-sell it as a valuable product to paper mills overseas.

2.2 Impact on Plastic

Given the recent [Basel and Stockholm Convention controls on the export / import of plastic waste](#), the WEB seems to have the purpose of simplifying the issue, by banning it. While only 12% of plastic is recycled, and of this 5.1% internally in Australia, most is landfilled. At issue is the WEB the solution. ASBG considers the fate of plastic waste is what will bestow on other materials if a broad based WEB is introduced.

Plastic waste is a current focus internationally and facing considerable pressure for its reduction. For Australia the path should be to either go down the path of:

- Further source separation and processing, to make a variety of recycle streams which meet international standards and Basel and Stockholm convention requirements, not necessarily limited to pure plastic flake
- Developing new innovative recycled plastic products
- Use of innovative processes to make liquid fuels.
- Utilise the fuel value in plastics by either direct Energy from Waste or

Most mixed waste plastics are far too contaminated to undertake sorting and purification. When the use of natural resources, water, energy, land etc exceeds that of the product being made purification recycling becomes environmental negative. Down-cycling and EfW process then become the main techniques required to recycled such plastic waste. Even then contamination is a considerable issue and removal of certain substances is often required for down-cycling to proceed. These issues are expanded in Section 4.

2.3 Impact on Glass and Tyres

There are very small amounts of either being exported, with 0.25% of glass and 4% of tyres. A WEB could be applied with little impacts on the market. However, transport costs and use of old tyres within Australia

especially for EfW will require better assessment, approvals and licensing arrangements in most Australia jurisdictions. EfW faces considerable NIMBY challenges especially on the East coast. However, it is considered a better solution compared to the limited landfill capacities affecting most Australian capital cities.

3 A WORKABLE VALUE-ADDING CRITERIA

If Australia has to have a Waste Export Ban (WEB) then it should be narrow in what it bans. In this context ASBG recommends changes to:

- The Timing of the Bans
- Defining what is a waste for the bans
- The value-adding approach

3.1 Timing issues

With timeframes set for between 6 months glass (or less when officially implemented) to two and half years, for paper, is considered unworkable to order to achieve the principles of the Circular Economy set out under the National Waste Policy 2019.

As discussed above, even to install new equipment to upgrade MRFs, mills and other recycling infrastructure, these timeframes are unrealistic. Even minor planning approval processes to waste and recycling facilities common take over a year to gain approval and major developments multiple years. If such infrastructure are not given enough time and support to be established then the majority of the proposed WEB materials will simply be landfilled until infrastructure is developed, if it is affordable to do so.

R1 ASBG recommends the timing of the Waste Export Bans be aligned with the capacity of the recycling chain and processing facilities to cope with the increased quantities to avoid unnecessary landfilling of these materials.

3.2 What is a Waste?

Internationally there are many grades of collected old paper and cardboard² and other recyclates. Measurement methods, standards required and rejection processes by receiving recycling facilities are well established for paper and cardboard and other recyclate streams. Australian paper mills and recyclers often export higher grades of paper than mixed paper and cardboard. Export is not limited to just developing countries, but includes European, North American and other OECD and other developed nations. ASBG argues that internationally recognised grades are *bona fide* products with positive value. Subsequently, they should not be classified as *wastes* as they are indeed tradeable commodities.

Under the World Trade Organisation, Australia has agreed to the [Environmental Goods Agreement](#) (EGA) with 45 other nations. This agreement, according to its website states:

Eighteen participants representing 46 WTO members are engaged in negotiations seeking to eliminate tariffs on a number of important environment-related products. These include products that can help achieve environmental and climate protection goals, such as generating clean and renewable energy, improving energy and resource efficiency, controlling air pollution, managing waste, treating waste water, monitoring

² For example, [En 643 European List of Standard Grades of Paper and Board for Recycling](#).

the quality of the environment, and combatting noise pollution. The participants to these negotiations account for the majority of global trade in environmental goods.

Australia has signed on to eliminate tariffs, which help achieve environmental goals, such as resource efficiency and managing wastes. Using a broad based WEB based on the current value-added criteria would appear to be contrary to the EGA. So the application of the WEB also has to consider its potential for criticisms at the World Trade Organisation.

Additionally, the way *waste* is defined at the Commonwealth level can also be called into play. While state jurisdictions have very broad definitions for waste, the Commonwealth does not. Under [section 4 Hazardous Waste \(Exports and Imports\) Act 1989](#), *waste means a substance or object that:*

- (a) is proposed to be disposed³ of; or*
- (b) is disposed of; or*
- (c) is required by a law of the Commonwealth, a State or a Territory to be disposed of.*

Paper, plastic, glass or tyre material destined for overseas recycling are not disposed, consequently are not defined as wastes under this Commonwealth Act. Consequently, any *bona fide* positively valued recycle, which can meet recognised international standards and the acceptance criteria imposed by the importing country can and should be defined as a product, not as a waste.

3.3 An Alternative Value-adding Approach

ASBG considers there is a method around the insistence of having a WEB and permitting export of *bona fide* recycle products. It appears that COAG wishes to achieve a number of outcomes by the instigation of the WEB, though these are not clear in the discussion paper and perhaps should be clarified later. ASBG considers they include:

- Take further action on plastic waste given its international attention, though the changes to Basel and Stockholm Convention largely achieve this.
- Promote an improved circular economy, after the impacts and knock on effects of China's National Sword.
- Promote improved recycling and less waste to landfill across Australia.

With the current value-add criteria, all that will largely occur in the short and even medium term is to increase waste to landfill. This is contrary to Circular Economy Principles for Waste under the National Waste Policy. ASBG proposes by adjusting the value-adding criteria to make it align with Commonwealth and international definitions of a product the downsides WEB can be minimised. The key to redefining value-adding is to consider the outcomes:

- Ensure *bona fide* recycle materials are permitted for export including:
 - Where a fair price is paid by the importer, which is at a higher value rate to them than a disposal alternative.
 - The recycle meets a recognised international or equivalent standard and criteria for acceptance into the importing country.
 - The recycling facility is *bona fide* and generates a value-added product which can be demonstrated by its sales data.
- Review the environmental protection systems of certain suspect countries so Australian recycle do not generate residues, which cannot be managed well enough to prevent environmental harm. This practice is already undertaken, at a more detailed level, by the Commonwealth in its management of the Basel

³ Disposal is defined as per the Basel Convention Annex IV – Disposal Operations

Convention. However, OECD countries and other developed countries or those with well managed waste systems should be exempt from this process. An inclusive list of suspect countries or recycling facilities of concern could be compiled and perhaps require assessment and approval prior to export.

Measurement of contamination / quality should generally not be required as quality issues are corrected in the usual way in commercial transactions where failure to meet customers specifications results in returned faulty products. Only where there is suspected circumvention of the proper recycling process should contamination be a concern.

R2 ASBG recommends the value-adding process be modified to permit bona fide recyclates to be exported to genuine recycling facilities, which produce a marketable product and can if necessary demonstrate residues are management in an environmentally suitable manner.

4 ISSUE: ENVIRONMENTAL PROTECTION V CIRCULAR ECONOMY

Balance between the Environmental Protection and the Circular Economy policy direction has been distinctly swung against the circular economy, significantly increasing recycling costs and liabilities. For Australia to properly manage this additional waste Australian Governments should be encouraging investment in:

- Construction and demolition waste recycling sector
- Contaminated soil treatment and recycling sector
- Energy from Waste
- Recycling in specific markets and materials
- Boosting end markets in appropriate recyclable materials

Australia in the short to medium term simply does not have the capacity to recycle most of its waste materials back into similar products from which they are made.

For Australia there are two main options:

- Use [down-cycling](#) where the used materials is made for a lower use
- Reform the recycling processing facilities so they can produce a recycled material suitable for overseas markets

The third option is starting new and expanding existing internal recycling sectors. While this is strongly supported, it will only manage small increases in quantities currently being recycled in Australia the short and medium term. As discussed above, finding export markets for improved recycle (lower contamination rates) is likely the best option due to lower energy and processing costs overseas. Growth of this sector is possible but will take time, but is subject to major cost and attitudinal issues towards waste and its source separation especially for kerbside sources.

Down-cycling usually involves the placement of waste into land. It can also mean EfW as both processes can cater for higher levels of contamination than processing back to pure replacement raw materials. For example, recycling of glass into engineered fill, crushing of concrete into road base, using certain plastics to supplant bitumen in asphalt, or burnt for energy use or thermally treated etc. In other words down-cycling can use a higher level of entropy⁴⁵ in the recycle. In addition, all recycling systems will generate a waste stream due to the contaminants being removed from the input stream. Because down-cycled wastes will be largely put back

⁴ See Wikipedia [Introduction to entropy](#)

⁵ [Waste-to-Energy: Decreasing the Entropy of Solid Wastes and Increasing Metal Recovery](#), H Rechberger, Renewable Energy Systems, 2016

into the environment (applied to land or burnt or thermally processed), this triggers environmental protection laws, which are highly conservative.

A strategy based on recycling, especially down-cycling will face considerable difficulties and costs associated in meeting tight environmental controls and liabilities. Consideration of the impacts on remaining landfill capacities, recycling should be part of this strategy. If recycling and down-cycling becomes too costly against landfill this will continue to affect the millions of tonnes of recycled materials each year. A good strategy will consider the full impacts of its actions, which include the costs in managing asbestos waste and the supply of infrastructure to achieve effective outcomes.

4.1 Need for Certainty

ASBG members find the current choice of materials, especially for packaging difficult. Uncertainty over which material type will be the more easily recycled in a sustainable manner in the future makes current choices a more of lottery. Until recycling systems settle down and new markets for recycled materials emerge and existing ones expand, prediction of future trends is currently at a level of high uncertainty.

While Government policy can support certain recyclable material types, it will have limited control. It is preferable for a national approach to be adopted so appropriate economies of scale can affect sustainable recycling solutions for each material type. Even a national approach will be significantly affected by international conditions. Australia is a net importer of many of its consumer goods where material choice is made based on the suppliers' main market. In addition, non-tariff barriers like China's National Sword and recent changes to the Basel Convention on plastic waste are also subject to future changes which can be unpredictable creating recycled material market disruption. As a consequence, Australia should not undertake unilateral actions in the recycling area, as this can result in highly inefficient, costly and indirectly subsidised waste recycling practices, which will largely be transferred via higher product prices.

ASBG fully supports the continuation of the Australian Packaging Covenant Organisation and encourages the Commonwealth to continue to support its work in reducing packaging waste to landfill and litter reduction.

ASBG refers to our prior submission [NSW Circular Economy Policy Statement and Discussion Paper 2018](#) for further details regarding our position on this area.

This submission has been prepared with the input and assistance of members of ASBG's Policy Reference Group (PRG).

Should you require further details and clarification of the contents of this submission please contact me.

Yours Sincerely

Andrew Doig

Andrew Doig

CEO

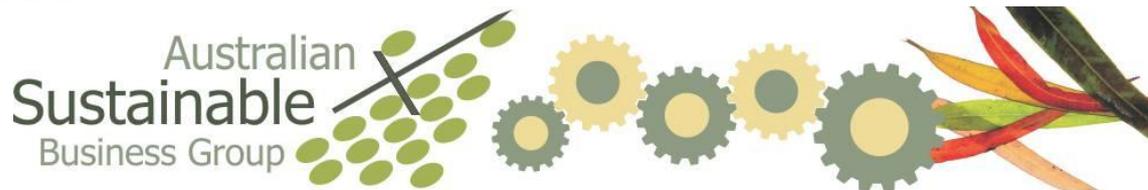
Australian Sustainable Business Group (ASBG)

T. +612 9453 3348

A. (PO Box 326, Willoughby NSW 2068)

andrew@asbg.net.au

APPENDIX



ASBG's Framework Approach to a Revamped/Reengineered Recycling System

ASBG has developed this long term framework, based on member input, in response to the increasingly difficult economic environment of recycling across Australia. To provide confidence that businesses are concerned about recycling ASBG is looking to maintain existing recycling levels in this time frame. ASBG's key actions include:

Scale of the issue and response: Identification of the scale of the economic problems affecting recycling. Its purpose is to identify the extent of support and investment required in the sector. Minimising cost to revamp recycling is essential.

Physical Approaches: The two bin recycling system is no longer effective and new systems are required in collection, transport, MRFs and recycling facilities aiming for lower contamination levels and higher quality recycled products attracting higher prices. A key element in this approach is to develop a national *Agreed standardised set of source separated categories* for collections, which is likely to increase the number of categories for collection. Standardised inputs with should provide increased certainty in reengineering MRF and other recycling facilities. Improved education of the public and other recyclate generators will be simplified and revamped following this standardisation.

Markets – New and expanding existing: Improved lower contamination levels via use of *source separated systems* will deliver higher classes of recyclate for domestic and international markets. However, there is a need to develop new end uses for recycled materials, such as those based on engineered fill, down-cycling and other markets. Adoption of recycled content procurement policies by Government is also required. For example, require the use of glass fines for engineered materials by government agencies in infrastructure, provided standards are met. *Industry innovation* → Supporting concept to market ready innovative new recycled materials, processes, products and end markets, including regulatory and grant supports and removal of green tape.

Regulatory / Policy Framework: Working with industry and the waste sector to deal with recycling in a cooperative manner to develop efficient governance and remove over regulation [green tape] on recycling, such as:

- *Outcome* based [environmental] measures preferred with *process and activity* based measures avoided.
- Avoid regulation of B2B by-product recycling where a common raw material used in another *bond fide* process.
- Promote the use of EfW, including use of existing industrial thermal processes.
- Establish the national waste database, increased waste tracking and economic modelling of waste and recycling.
- Review waste levies to: better support recycling via hypothecation and levy discounts on their waste streams, lowered to levels to reduce illegal dumping and disposal and to disincentivise long haulage of waste.
- Government to lead in progressing regulatory approvals for new and reengineered recycling facilities.
- Review of planning rules to increase community responsibilities for their wastes on a regional basis as in the UK.
- Remove planning approval road blocks to waste infrastructure, recognising waste is also a local health issue.

Financial Support and Approaches: including new grant schemes for new kerbside bins, MRF upgrades, and market support. Revised contracts to better share the risks in recycling markets between Councils and contractors. Development of low cost finance such as Australia's CEFC to support the revamped recycling system funding required.

Main Actions for Governments based on the above:

Progress an efficient; low-cost revamped reengineered recycling system with actions to:

1. Develop *Agreed standardised set of source separated categories* for collection.
2. Develop *recycled product standards* that are cost effective and environmentally responsible.
3. Review waste legislation, levies and polices to enable recycling to become efficient and profitable again.
4. Establish National, State and Territory Taskforces to enable the above actions, which include all major stakeholders to facilitate a new revamped and reengineered recycling system for Australia.
5. Establish improved financial funding for improved recycling.

Identify the scale of the recycling issue, the economic impact and support required and to establish the balance between onshore and off shore processing.