

SUBMISSION ON “TRANSFORMING QUEENSLAND’S WASTE AND RECYCLING INDUSTRY DIRECTIONS PAPER”

Introduction

Australian Council of Recycling (ACOR) is the peak body for the recycling sector with 36-member companies operating across the spectrum of recycling activities of:

- recycle collection, sorting, reprocessing and recycled content product manufacturing;
- recycling supply chains in the municipal, commercial & industrial, and construction & demolition spheres, and;
- recycle streams from domestic kerbside materials to e-waste materials.

ACOR’s members include Queensland’s leading organisations in Materials Recovery Facility (MRF) operations, recovered glass and paper reprocessing, and recycled content packaging manufacturing.

Key Feedback

With regard to the Discussion Paper, ACOR supports:

- a) the strategic directions outlined as they are likely to provide greater investment certainty for the recycling industry in Queensland;
- b) the appropriately joint introduction of the recycling and waste management Strategy with a waste disposal levy;
- c) the emphasis on industry development and jobs growth, as well as environmental gains, via enhanced resource recovery and circular economy-related activity;
- d) reinvestment of funds collected from the new waste disposal levy into resource recovery activities;
- e) concessional treatment or exemption under the waste disposal levy of legitimate residuals from recycling operations – with appropriate controls;
- f) application of the waste disposal levy to waste that is transported from levy zones to non-levy zones;
- g) well-planned introduction of landfill bans for higher risk items such as e-waste and batteries where collection arrangements and end-markets are in place;
- h) the emphasis on State-applied schemes for Extended Producer Responsibility in order to fully fund the recovery of materials and products for economic and environmental gain, and;
- i) the development of a strategy for waste-to-energy (WTE) with the proviso that WTE’s core role be value-extraction from residual materials.

For the future strategy, ACOR further urges:

1. greater emphasis on establishing a **strategic waste planning** and development consent framework, including for infrastructure projects of regional or State significance;
2. greater emphasis on increasing **regulatory capability and enforcement** for waste management and resource recovery facilities in order to “level the playing field” for quality operators;
3. direct support for **voluntary accreditation** efforts by the recycling industry through ACOR;
4. **incentives** for continual improvement in the performance of the resource recovery sector;
5. delineation of **institutional arrangements** and responsibilities within Government for Strategy implementation, including greater regulatory/enforcement functionality through DES and the separate establishment of a well-resourced “delivery agency” along the lines of Sustainability Victoria or Green Industries South Australia;
6. on-going involvement of industry stakeholders in progressing the Strategy, including through skills-based **Board membership** on a future “delivery agency”;
7. development of a specific **timetable for the introduction of landfill bans on e-waste and batteries** and transitional investment in collection and processing infrastructure, potentially “piggy backing” the consumer convenience and logistical benefits afforded by the upcoming introduction of a Container Refund Scheme (CRS) network;
8. firm commitment and resolute action by the Queensland Government to the **positive procurement by Government** agencies of recycled content products, including through their product specifications and preference provisions, to support local market development for recycle;
9. greater emphasis on community and stakeholder **education** and behavioural change for high-quality participation in resource recovery and recycling systems;
10. greater emphasis on the development of agreed **standards** for Council recycling schemes, including materials scope;
11. timely provision of further detail and **clarity on the operation of the levy and concessions** / exemptions from the levy in order that industry may make the appropriate preparations and plan its investments.

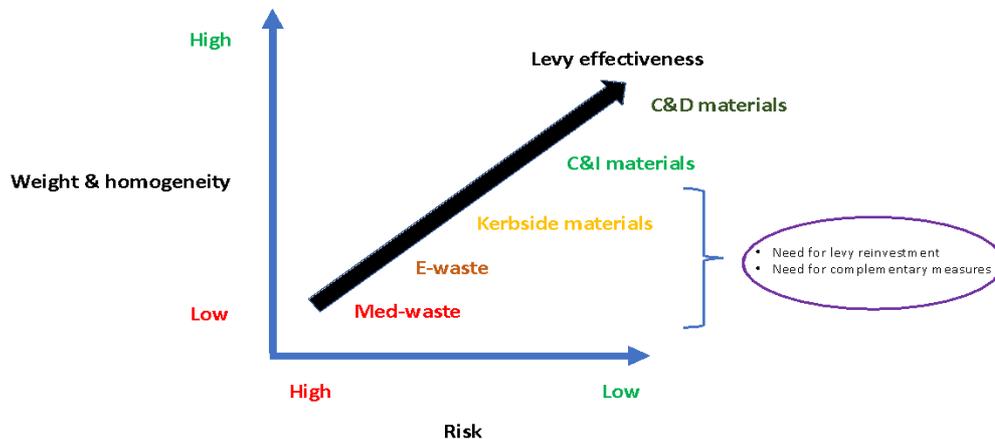
Building on points 3 and 4 above, this submission further details ACOR’s position on the use of waste disposal levy concessions and exemptions as a targeted policy instrument to further support resource recovery. ACOR acknowledges the Queensland Government’s commitment to apply concessional treatment to legitimate recycling residuals and here ACOR formally documents its preferred model for doing so in a way that is simple, effective and drives continual improvement, such as greater resource recovery, in our sector.

Policy Principles

As an organisation focussed on recycling and resource recovery, ACOR supports the introduction and use of a waste disposal levy in all Australian jurisdictions, including Queensland, provided they do not apply to legitimate residues from recycling operations that cannot be recycled based on current best practices.

Waste disposal levies recognise the environmental and social costs of disposal of waste to landfill and thereby redress market failure created by historically under-costed disposal. Generally, waste disposal levies incentivise resource recovery activity over waste disposal activity.

However, a waste disposal levy is a “blunt” policy instrument, which is weight based, and therefore achieves the best results for heavier and more homogeneous materials and less optimal results for lighter, more heterogeneous material and more complex products.



Of note is that waste levies are only partially effective in supporting kerbside recycling activities as those activities remain relatively costly. This is due to the generally commingled material stream that characterises kerbside recycling, the comparatively higher rates of contamination in collected kerbside material, and the need for considerable capital and infrastructure investment to manage the complexities, such as sorting and beneficiation.

In these respects, the Centre for International Economics (CIE), in its 2011 review of the NSW waste disposal levy on behalf of the NSW Government, pointed out: *“The levy can have complicated and potentially unintended impacts on recyclers. On the one hand, recyclers may be able to obtain input materials at lower prices because the alternative of disposing of these to landfill is now costlier. On the other hand, recyclers themselves dispose of substantial amounts of material to landfill in the form of residual waste for which they have to pay the levy.”*

Therefore, ACOR believes that, in order to be optimally effective, a waste disposal levy should be designed according to the following principles:

- As part of an integrated resource recovery strategy aligned with the waste hierarchy framework, infrastructure planning, and circular economy goals (and it is pleasing that Queensland has chosen this path);
- In concert with other measures, such as Extended Producer Responsibility policy and schemes, which generally better support increased resource recovery of more heterogeneous material and/or more complex products.
- A levy rate that sees a broad spectrum of resource recovery activities sustained and expanded.
- A levy rate that truly internalises social and environmental costs of landfill disposal and is generally commensurate and harmonised with other jurisdictions to preclude inter-jurisdictional distortions.

- Comprehensive geographical coverage within a jurisdiction to preclude intra-jurisdictional distortions.
- Within a comprehensive regulatory framework, including proper licensing of waste disposal and resource recovery facilities of **all** volume levels, and the enforcement of license provisions, including adequate resourcing, strong training and inter-agency collaboration.
- Re-investment of 100% of funds raised from the levy back into resource recovery activities based on optimising results.
- Key levy reinvestments should be focussed on resource recovery efficiency and effectiveness and therefore follow the following tiers of priority.

Tier A: implementation of the levy scheme including: 1) support for a dedicated agency/wing of government aimed at facilitating resource recovery outcomes along the lines of Sustainability Victoria or Green Industries South Australia; 2) licensing and regulatory enforcement activity in the resource recovery sector, including interagency work between DES, Queensland Police and other stakeholder agencies, and; 3) support for voluntary accreditation efforts in the resource recovery sector through ACOR.

Tier B: reducing resource recovery system costs, including: 1) education initiatives to reduce recyclate contamination; 2) standardisation of recyclate collection arrangements, including limitations on collected materials scope and greater source segregation, including for materials such as glass; 3) provision of standardised contractual models for Councils that recognise value, and; 4) development of collection networks for lighter, more heterogeneous and more complex materials, such as e-waste, batteries, and soft plastics, including in concert with CDS systems and infrastructure where they exist.

Tier C: supporting market development for resource recovery activity, including: 1) development of recyclate markets through support for capital equipment and product/technology commercialisation, and; 2) development of pro-active and positive procurement policies and practices by governments to source recycled content products.

- Any exemptions or concessions should occur where there is a sound case in favour of improved resource recovery results and where there are systems in place to ensure operator performance.
- Voluntary accreditation of waste disposal and resource recovery activities, and related operations, is desirable and the introduction of a waste disposal levy is a good opportunity to foster their further development. Accreditation is a key tool to drive complementary industry improvements and activities that are in part incentivised by the waste disposal levy.

Legitimate Residuals Concession: ACOR's Model

ACOR advocates that there is a sound case for fully exempting disposed materials that are legitimate residuals from: a) Category A - recyclate material sorting companies who become licensed and accredited, and; b) Category B - recyclate material reprocessing and remanufacturing companies.

Residuals are typically the result of contamination in input feedstock received by Category A companies (e.g., kerbside or C&I MRF, similar positive sorting facility with multiple materials such as e-waste sorter, or charitable recycling centre) or by Category B companies (e.g., pulp and paper mill, glass manufacturer, metal reprocessor, or plastics manufacturer).

In reality in Queensland, under current contractual conditions, most Category A companies have no capacity to influence the quality of the input materials at their facilities. Some of the following materials are often found in kerbside recycling collection loads and then deposited at MRFs as contaminants that need to be extracted and separated from worthwhile material: car batteries; handheld batteries (which are increasing in consumption by 300% per year); bricks and concrete; ceramics, tiles and pottery; e-waste (which is rapidly increasing in line with consumer trends and further digitisation); food or kitchen scraps; pharmacy or clinical waste (which are increasing with an older demographic); textiles and rags (which are increasing with the consumer trend known as 'fast fashion'); soft plastics (which are increasing with the diversification of packaging applications); plastic bags; dead animals, and; many other types. Some of these items also cause occupational health and safety concerns at MRFs that must be actively managed.

As a result, at the rate of \$70 per tonne, the application of the waste disposal levy on residuals from MRFs and related facilities in Queensland could cost operators many millions per year if fully applied (which inherently decreases their competitiveness).

There is no short-term opportunity to renegotiate contracts with local government customers to easily address the impacts generated by kerbside-generated contamination. Nor is there any currently available or affordable alternative to landfill disposal for this residual material, e.g., AWT, EfW, or export.

The application of the waste disposal levy to some MRF residuals would therefore be a direct cost to these companies and thereby a disincentive for recycling activity, which is the exact opposite of the purpose of the levy. Such a direct cost would be experienced at a time when commodity prices paid for outputs from MRFs are at twenty-year lows and the main export market for some of those materials – the People's Republic of China – has been made basically inaccessible for most of collected mixed paper or mixed plastic.

Moreover, even where contamination costs could conceptually be "passed on" to Councils in different contracts and gate fees, this would likely become a cost increase for Councils that they in turn could have to "pass on" to ratepayers. Passing costs on to ratepayers is not in line with Cabinet's decision to avoid householder impacts.

Queensland-based Category B companies compete in international markets where overseas reprocessors of recyclate material or overseas manufacturers of paper, metals, glass or plastics are generally not subject to any local waste disposal levies and where labour, energy and virgin resource costs are significantly lower. As with sorting companies, the application of the waste disposal levy to reprocessing and remanufacturing residuals would be a direct cost and a global competitive disadvantage; it would thereby become a disincentive for remanufacturing operations and further investment in Queensland, including among metal remanufacturers, glass beneficiators and remanufacturers (for whom some 40% of received post-MRF material cannot be used in bottle manufacturing regardless of beneficiation efforts), and pulp and paper mill operators.

The CIE found that the NSW waste disposal levy can have an impact on the profitability of metal and pulp and paper manufacturers (who were within the scope of their study). A variable modelled at that time was the income-generating export of residual mixed paper from local mills. Since the study in 2011, and particularly in the last six months, this variable has significantly changed due to the Chinese situation. The metal sector, on the other hand, is also currently

subject to seemingly haphazard Chinese interventions in world metal markets. Hence, modelled impacts and costs are undoubtedly greater than in 2011 – which again is the exact opposite of the purpose of the levy.

This perverse impact of waste disposal levies has been or continues to be recognised in several ways in several jurisdictions and mitigated against, including but not limited to:

- Exemptions / concessions for recycling residual waste under the previous Queensland waste disposal levy, and;
- Concessional rates for shredder floc from metal recyclers in NSW and South Australia.

It should also be recognised that both Category A and Category B companies generate significant environmental and social benefits in Queensland from their recycling efforts, and these should be recognised compared to landfill disposal.

ACOR therefore proposes that in relation to the waste disposal levy the following treatment apply:

Category A companies

In the case of MRFs and similar sorting facilities, given that Queensland has decided to curtail householder impacts from the levy, it could be argued that post-MRF residual material as generated by households too should be fully exempt. However, ACOR suggests that there would be unintended and unwelcome consequences to this approach, such as unscrupulous operators “passing through” waste masked as recyclate to receive the benefits of “blanket” exemption.

Therefore, we recommend a targeted approach that is: a) more in keeping with the goal of landfill waste diversion and resource recovery optimisation; b) encourages the growth of the positive externalities of recyclate sorting activities as a key part of the remanufacturing supply chain and relative to landfill disposal; c) encourages greater Queensland-based and domestic capability for recycling; d) is subject to scrutiny and creates public confidence in the “provenance” of their own recycling efforts, and; e) less costly.

To that end, ACOR suggests that concessional exemption for Category A residual waste materials disposal should be subject to voluntary accreditation of Category A companies.

The core of the accreditation method would be: a) licensing of Category A facilities; b) regular independent auditing of Category A companies using a simple methodology based on mass balances.

On a periodic basis to be determined, a Category A company would be subject to a random, independent audit of material exiting its facility for waste disposal. The auditing protocol would be designed in collaboration with DES. The audit would identify: a) the total amount of post-sorting material for landfill disposal, and; b) the sub-total amount that is the post-sorting material that should have been recovered during sorting but was not.

As a worked example, a MRF has 1000 tonnes of waste for landfill disposal per month. The audit determines that 10% of that waste is actually recyclable material that the MRF should have recovered but failed to do so. The other 90% is “genuine” contaminant material. As a result, the MRF is required to pay the levy on the 10% fraction of the 1000 tonnes (e.g., material that should have been recovered during the MRFinng process and over which it has some control) while being exempt for the other 90% fraction (e.g., genuine contaminant material over which it has basically no control).

Such a simple method also creates a clear incentive for the MRF to continually improve its performance and recovery rate for higher percentages of exemption. This would be determined by the operator and could take the form of capital, technological or process improvements or through collaborations with Council / contractor suppliers at the ratepayer level.

Through greater transparency, the model could see companies move toward investments in additional methods that supplement - rather than supplant - conventional recycle sorting. This could include production (where there are off-take markets) of Refuse Derived Fuel from contaminants that would be otherwise disposed to landfill, such as textiles and non-recyclable plastics.

ACOR further recommends the following mechanics:

- An inventory of all Category A facilities in Queensland is undertaken jointly by DES and ACOR, including their licensing status, operational footprints and estimated landfill disposal volumes for the past year;
- All companies are given the opportunity to 'opt in' to the accreditation scheme (and be licensed where necessary) and thereby be eligible for concessional exemption of residuals at the end of Year 1;
- During Year 1, companies are subjected to regular auditing and the determination of an annual average or benchmark in terms of material eligible for the concessional exemption, and they continue to pay the waste disposal levy at the full rate on all landfill disposed material;
- At the end of Year 1, all participating companies are 100% rebated the equivalent value of their average of contaminated residuals - while companies who have not signed up to the system are not eligible for any concessional exemption or rebate at the end of Year 1 or thereafter;
- In subsequent years, the Year 1 average is used as the benchmark to determine whether a company is achieving continual improvement in resource recovery;
- A 100% concession rate and annual rebate (e.g., full exemption for all genuine contaminants) is then established for companies maintaining their accreditation and demonstrating continual improvement in contamination reduction;
- A dropping concessional rate and annual rebate (e.g., say only half exemption for genuine contaminants) is established every year for every company that does not demonstrate continual improvement in contamination reduction (and raised accordingly if they reverse a trend).

Category B companies

Category B companies have no capacity to control contaminants entering their reprocessing and/or remanufacturing processes. Nor, in the case of the metal sector (shredder floc) or the glass sector (mixed contaminated cullet), is there any readily available domestic or export alternative to landfill disposal.

In the case of the pulp and paper and plastics sectors, the formerly available export alternative has become highly constrained and effectively inaccessible for mixed streams, such as those

from kerbside recycling, and is unsustainable in the longer-term. Other alternatives are not cost competitive even with the application of the waste disposal levy.

It is estimated that a \$70 per tonne waste disposal levy could cost ACOR members in Category B many millions of dollars per year. Such application of a waste disposal levy puts these companies at a significant competitive disadvantage to overseas reprocessors and remanufacturers who are not subject to similar economic instruments and operate in lower cost contexts. Hence, to maintain competitive parity and to acknowledge the positive externalities – such as job generation, greenhouse gas emission reduction, energy conservation, water conservation and resource conservation – associated with domestic reprocessing, the residual waste materials from the direct manufacturing processes of these facilities should be made exempt from the waste disposal levy.

It is appropriate to treat these facilities – be they remanufacturers of pulp and paper, metal, glass, plastic or e-waste – in a universal way as the market factors that shape their business operations and cases are similar. It is also more effective from an administrative and regulatory standpoint.

ACOR would, though, propose to develop an additional accreditation system for these organisations – again fundamentally based on material mass balance auditing and on license holding – which nevertheless acknowledges the differences in their operational footprints. There is a window to do this in Year 1 of the levy scheme, and ready them for voluntary compliance (and eligibility for concessional exemption rebates) by year's end.

Some Concerns

ACOR acknowledges the Government's recognition that there are legitimate recycling residuals that should be treated differently for the purposes of the new waste disposal levy, and the time pressures that the Government is facing in instituting new legislative arrangements.

It is our understanding that the Government is considering taking an approach to implementing concessional treatment based on "efficiency thresholds" as per 2011.

ACOR suggests that there are workability issues with taking an "efficiency threshold" approach - as per 2011 - to determining the application of concessional treatment for legitimate recycling residuals.

In the first respect, the 2011 "efficiency thresholds" for contamination are out of date due to subsequent changes in products and markets that impact on materials coming into MRFs and reprocessing facilities, and on their competitive settings. Product example: lighter cars with more plastic (and more shredder floc). Competitive example: greater importation of virgin material glass bottles from low cost countries and increased pressure on domestic reprocessors and manufacturers of recycled content bottles.

Secondly, it is unclear whether the "thresholds" for different streams / processes are "hair-trigger" or not for application. For example, it is unclear what happens, say, when a MRF has 16% contamination versus the assigned 15% "threshold".

Thirdly, the use of uniform-level "efficiency thresholds" does not reflect operational reality given the strong degree of variability in inputs across the State, including geographical and socio-economic differences between different waste-generating communities, and the degree of

investment or lack of investment by Councils and collection operators in anti-contamination measures.

Finally, and perhaps most importantly, an "efficiency threshold" that is static – e.g., set at one level to determine applicability etc - provides no incentive for continual improvement toward greater resource recovery inside a MRF or recycling reprocessing facility. If anything, it enshrines the acceptability of a certain amount of contamination which is contrary to the ethos of the new Queensland strategy.

In light of these concerns about implementation, ACOR continues to maintain that a more efficient method is to simply provide a 100% exemption for legitimate residuals based on an auditing regime. This is more workable and fully recognises the costs borne by recycling operators over which they have no control. It is also necessary given the reality that waste disposal prices in Queensland are likely to rise to a level greater than that of current prices plus levy - and thereby create a greater disincentive for recycling operators.

If the sub-optimal position must for various reasons be temporarily maintained – e.g., of an "efficiency threshold" based regime - the following provisions need to apply: a) commitment to transitioning to an audit and improvement-based regime as per the ACOR model within three years; b) commitment to providing sensitivity settings around each "efficiency threshold" (such as a range between 5% and 25% for a MRF); c) commitment to annually review the operational impacts of the temporary "efficiency thresholds".