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PROJECT MANAGEMENT

RESPONSE TO PRODUCTIVITY COMMISSION DRAFT REPORT (MAY 2006)

on

Waste Generation &

Resource Efficiency in Australia

July 2006

Response Summary

Whilst we find ourselves in agreement with eight out of the twelve Draft Recommendations and conditional approval with a further three, the discussion in and around the Draft Findings we find alarming and almost completely lacking in the sort of intellectual rigour and robustness that the Commission so vehemently extols all other stakeholders to adopt.

The constrained boundary limits that the Commission has chosen to place around the scope of this report in the evaluation of “net social benefit” and “sustainability” seem to be of its own choosing, and not an outcome decreed by the Terms of Reference.

In fact, these artificial constraints seriously impinge on the net value of the report in our opinion, and demonstrate a wasted opportunity to promote systemic change for the benefit of GDP, jobs growth, net economic benefit and future generations.

At issue must be whether any subsequent bureaucracy or politician can afford to trust the recommendations as the basis for future action, when so much of the supporting argument and findings is so muddled, wrong or riddled with non-sequiturs.

Response to each Draft Finding

Draft Finding 2.1, 13.1 and 13.2

Whilst this observation is substantially true, there are nascent data bases that could be upgraded, eg. the Australian Waste Database. Certainly, in any focused initiatives in the future, the collection, collation and publication of constantly improved data would be of lasting benefit, but, the current deficiencies in data are no impediment to systematic, sustained and coordinated national agenda to address the Urban Solid Waste problem which is squandering 50,000 t/day of renewable and non-renewable resources to landfill disposal.

Draft Finding 2.2

The WMAA EfW Division leadership of the IEA Bioenergy Task 36 Topic 1 project (Stage 1 and 2 reports available http://www.wmaa.asn.au/efw/home.html) demonstrates that working closely with appropriate and informed parties can be informative and productive, especially if undertaken with the intellectual rigour, so strongly advocated by the Productivity Commission throughout this draft report.

Draft Finding 4.1

This observation is at best a tortured and invalid interpretation of the term “external costs”, at worst, it is a deliberate attempt to misunderstand, and thus mislead any concerned stakeholder seeking to derive useful information from this draft report.

Throughout this draft report the Commission has, **quite rightly**, advocated for robustness and rigour in determining tangible social benefit “…in order to maximise community wellbeing”, but then completely failed to assess, measure, or articulate any understanding of the key social, environmental and economic drivers behind the current urban solid waste issue. This assertion is confirmed in this particular finding.

The major externality of USW disposal, whether to landfill or incineration, is the **lost opportunity value of the materials themselves**.

This issue was alluded to in some two thirds of the written submissions and best articulated in the ACOR submission.

Not only did the commission **not** apply rigour and robust cost/benefit analysis to the issue, it failed to address it at all, preferring to publish a draft report that appears to have only considered submission #70.

Whilst the ACOR Table 1 (repeated here for convenience) needs an assessment of the **net** commodity value (after recovery costs), the potential is too great a figure to have been ignored by the commission.

Table 1: Summary of Australia's current waste generation, recycling and disposal performance (nearest 10,000 tonnes)

Material Type	Total Tonnes Generated	Total Tonnes Recycled	Total Tonnes Disposed	Commodity Value ($/tn)	Commodity Value
Paper & Cardboard	5,000,000	2,310,000	2,690,000	$70	$161,700,000
Glass	870,000	370,000	500,000	$72	$26,640,000
Adjusted Non-Ferrous	230,000	100,000	130,000	$1,500	$150,000,000
Ferrous	3,670,000	2,790,000	880,000	$75	$209,250,000
Plastic	1,690,000	190,000	1,500,000	$300	$57,000,000
Garden Organics	3,800,000	1,550,000	2,250,000	$20	$31,000,000
Food and other organics	3,200,000	310,000	2,890,000	$20	$6,200,000
Wood/Timber	2,070,000	440,000	1,630,000	$20	$8,800,000
Soil/Rubble and Other Clean Excavated Material	3,840,000	1,390,000	2,450,000	$15	$20,850,000
Concrete, bricks and asphalt	6,780,000	4,810,000	1,970,000	$15	$72,150,000
Other recyclables (inc Textiles)	980,000	700,000	280,000	$10	$7,000,000
Other (waste)	250,000	-	250,000	-	$-
Totals	32,380,000	14,960,000	17,420,000		$750,590,000

(Note that non-ferrous has been estimated on the basis of 0.7% of total waste generation)[1]

Draft Finding 4.2

The WMAA EfW Division spent $500,000 and 3 years to robustly and rigorously address the issues of sustainable energy recovery from wastes.

The Commissioner expressed the view in the public hearings that the resulting Sustainability Guide "was motherhood" and that "no one could take issue with the document". Then, in the draft report, the rigour and thoroughness of the EfW Sustainability Guide has been ignored in favour of unsubstantiated and badly articulated calls for EfW plants.

Draft Finding 4.3

This poorly researched and badly articulated opinion demonstrates a complete lack of understanding of where alternative technologies could fit into a nationally planned and coordinated resource recovery network of systems and infrastructure, designed and operated to realise the highest **net** resource value from the materials currently being squandered to (landfill) disposal.

The systematic network of reverse logistics advocated by Eco Waste submission #112 does not call for disposal, EfW, composting, recycling, AWT etc. as defined silos or isolated and competitive functions, but for a national network planned, as with roads, rail, power distribution, water reticulation etc., to provide an integrated and complementary framework of functionality. In such a system, AWT facilities would have more control over supply, end markets for products and support to optimise by-products utilisation. No objective evaluation of the nascent AWT sector is valid without assessing the medium to long term benefits rather than the rather artificial framework that the first generation of facilities find themselves in.

Draft Finding 4.4

For this opinion to be valid, kerbside recycling needs to be assessed for its full potential and value, in a nationally coordinated and systematic reverse logistics framework, to produce clearly specified material streams that can present as inputs back into the productive economy without apologising for their origins.

The subjective opinion that there "… is significant doubt that kerbside recycling will deliver net social benefits…" is totally unsupported and totally lacking in **rigorous cost benefit analysis** that the Commission demands of any other stakeholder who dares to venture a contrary view.

Draft Finding 5.1 and 5.2

The view that resource conservation objectives should be driven from the specialist agencies respectively is a fine, perfect world proposition. But such agencies are **not** acting as proposed and there is no prospect of them doing so any time soon. In the meantime, as a direct result of their lack of vision, action and leadership, 50,000 t/**day** of complex manufactures, embodied and inherent energy and a wide range of non-renewable resources are being squandered to (landfill) disposal. The only agencies that are acting to stem the unsustainable wastefulness of landfill are those currently charged with the regulation and management of such landfills. Such agencies are in effect applying "sustainability triage" on unsustainable resource application "accidents", that should never have happened, but since they have, at least a level of society endorsed response is of some basic value.

To suggest that such waste management policy responses should be terminated, in the vain and unsubstantiated hope that the specialist resource agencies will suddenly assume their responsibilities, is fanciful and misleading.

Sustainability Issues 5.4

This section of the draft report does not conclude with any specific findings, but touches on the issues of Natural Capital and its inter-changeability with man made and human capital, as if to demonstrate that such lofty issues have properly informed the commission's deliberations.

This discourse concludes "Hence this is a complex area requiring judgement and careful evaluation rather than simplistic notions that actions or policies in a particular area must always be supported".

Let's apply some "careful evaluation".

Natural Capital presents in three main forms:

1) Resources

    a) Renewable – biomass, food, fibre, water

    b) Non-renewable – fossil fuels

2) Sinks – that absorb, neutralize or recycle waste, and

3) Services – such as climate regulation and nutrient cycles

Natural Capital thus provides the basis for all production in the economy, without which society could not sustain itself.

The Natural Capital that the Commission seems so cavalier in sanctioning the conversion to man made (or human capital) is the resources portion. However in so doing, the biosphere's ability to continue to deliver "sinks" and "services" is correspondingly impaired – **without** any commensurate conversion to any other form of capital.

We recommend that this section of the draft report be completely reconsidered and rewritten after the topic has received the intellectual rigour and attention to detail so correctly advocated by the Commission in all other areas of the report.

The conversion from Natural Capital to other forms of capital is effectively a one way conversion. To achieve the Commission's objective of maintaining and improving the "stock of Capital" this issue does indeed need "careful evaluation". It is the very foundation argument to inform the "net social benefit" criteria advocated by the Commission.

Daly 1996 – provides some relevant context,

> *Economic logic requires that we maximise the productivity of the limiting factor in the short run and invest in increasing its supply in the long run. When the limiting factor changes, then behaviour that used to be economic becomes uneconomic. Economic logic remains the same; but the patterns of scarcity in the world change, with the result that behaviour must change if it is to remain economic. Instead of maximising returns to and investing in man made capital (as was appropriate in an empty world), we must now maximise returns to and invest in Natural Capital (as appropriate in a full world). This is not "new economics", but behaviour consistent with "old economics" in a world with a new pattern of scarcities.*

In a developed economy such as Australia's, is the Commission seriously arguing that it is sustainable, cost effective and of net social benefit to waste 50,000 t/day of non-renewable resources, embodied and inherent energy and renewable biomass that is readily available for conversion to products and energy just because we can't be bothered to organise collectively (via Government action) to retain those same resources for cost effective reintroduction into the productive economy. Or that whilst current waste management practices might not be sustainable, it is OK to let the current situation run until other market forces such as scarcity of landfill, valuation of resources or new technologies exert a greater influence.

To revisit the concept of "Sustainability triage", this recommendation is akin to passing by accident victims in distress and not even attempting to help. Of course this is exactly what governments should be doing. They should be commissioning accurate and erudite reports and then acting in the interest of net social benefit.

The Commission applied the "empty world" thinking to the glass (cullet) recycling issue at the public hearings in Sydney, seeking to demonstrate that recycling assorted glass fines would always be uneconomic. Eco Waste responded in a supplementary submission, applying "full world" practicality to show that all currently non recycled forms of glass (fines, CRT screens, plate, MV glass) could all be processed into cost effective, profitable products, if only a national framework existed that **facilitated access** to the "waste" materials.

What is so baffling is that the proactive approach advocated by Eco Waste is being so vehemently avoided in the draft report; as if such an approach was uneconomic, bad for business, or just a soft 'lefty' additional cost to big business. **It is NOT!**

The systematic processing and resource recovery from the 50,000 t/day that is currently being lost / wasted to landfill provides sustainable investment / employment opportunities – all based on the resource value of the materials themselves (Table 1) to both this and future generations.

This issue would seem to be the core issue for the Commission to investigate (with rigour and robustness) in even basic compliance with the first of the specific Terms of Reference.

(NB: in response to the "…factors which impede optimal resource recovery", the answer is access. All those capable and motivated to apply capital to the recovery of **net** value from URWs have almost insurmountable problems getting access to URWs which are controlled by the current configurations of government, generators and contractors).

We give the final word on the subject to the British Prime Minister 2004, which could be equally true in Australia,

> *We need to develop the new green industrial revolution that develops the new technologies that can confront and overcome the challenge of climate change. Just as British know-how brought the railways and mass production to the world, so British scientists, innovators and business people can lead the world in ways to grow and develop sustainably. I'm confident business will seize this opportunity. Cutting waste and saving energy could save billions of pounds each year. With about 90% of production materials never becoming part of the final product and 80% of products discarded after single use, the opportunities are clear.*

Not if the Productivity Commission's "empty world" thinking, attitudes and recommendations are adopted. The draft report even manages to waste the opportunity available to it in undertaking this current review; even "wasting" the time and effort put into the preparation of submissions by concerned and conscientious citizens, whose combined supplications have been drowned out by the fawning and slavish adherence to the myopic and uninformed self interest expressed in submission #70.

Draft Finding 7.1

The finding seems to assume that optimum resource recovery, that may approach zero waste, is uneconomic.

Certainly, with the current lack of systematic reverse logistics systems and infrastructure, the cost of Highest **Net** Resource Value recovery will be uneconomic. This submission asserts that this would not be the case if the lack of common systems and infrastructure was addressed systematically at a national level.

This finding is only valid within inappropriately drawn boundary conditions for the assumptions made.

Certainly the finding lacks the rigour and detailed cost benefit analysis advocated of other stakeholders.

Draft Finding 7.2

When all other more efficient initiatives have been put in place by the aforementioned "specialist resource agencies" – they won't need to. But in the meantime, such initiatives might stimulate those with the more direct responsibility to lift a finger.

Draft Finding 8.1

Probably true, but for a range of muddled reasons.

Where recycling wastes is being done well and cost effectively (metals, oil, ONP, OCC, glass bottles, aggregates) the systems, infrastructure, standards and market structures are available or have been developed such that recovered resources compete favourably with virgin resources as inputs into the productive economy.

Such outcomes and pathways are available for all materials currently presenting as USW but for a little central planning and coordination.

Under these circumstances, mandatory content rules would not be needed. Currently, such initiatives can act as important pump priming activities to support medium to long term sustainability and as such are quite valid activities.

Draft Finding 8.2

Gas recovery is the most important impact mitigation measure for landfills (over a certain size) and even the WMAA Landfill Division advocates for its continuation.

Draft Finding 8.3

Agreed.

Draft Finding 8.4

The Commission's unsustainable preconceived concepts are clearly in evidence here.

It is not a valid societal objective to be disposing of wastes. Whilst some management of "last resort" USW may be a necessary service in the short to medium term, it is not a key objective.

This issue has been comprehensively addressed in the EfW Sustainability Guide, which was produced with transparency and rigour, to facilitate sustainable energy recovery from USW.

Even the community perceptions and Community Licence to Operate have been thought through in considerable detail, and could be beneficially called up at this point to provide clarity and direction.

Draft Finding 8.5

Agreed.

Draft Finding 9.1

This opinion may have merit if examined in detail and in light of the considerable body of evidence, track record and past experience and in concert with all the other needed improvements in clean production and consumer choice, linked with purpose built collection and processing systems.

In isolation, this finding can not be cost effective.

Draft Finding 9.2

Determination of such matters and possibilities can only be sustainably resolved in integration with a systematic and focused policy development process.

Draft Finding 9.3

As above.

Draft Finding 10.1

See Joint Working Group on Tyres (JWGT) response under separate cover.

Draft Finding 11.1

Agreed.

Draft Finding 11.2

See Draft Finding 8.1 above.

Most often the Government procurement practices can achieve the desired "pump priming" benefit by simply establishing performance based specifications.

Draft Finding 13.1

Maybe – but in the absence of the Commission's higher level "specialist resource agency" initiatives, these indicators provide at least some feedback.

Draft Finding 13.2

Agreed.

Draft Finding 13.1

Agreed.

Response to each Draft Recommendation

Draft Recommendation 8.1

Agreed. If the systematic, nationally coordinated suite of cost effective reverse logistics and resource (value) recovery systems and infrastructure was in place, plastic bags would be manufactured, used and processed without the need for special attention.

There are much bigger issues to address than plastic bags, and the current initiative is taking EPHC attention away from the main tasks.

Draft Recommendation 8.2

Yes, GHG issues should be handled within a "broad national response…" but in its absence, LFG must be addressed in any way it can be by the authorities currently left facing the problem.

Draft Recommendation 8.3

If this recommendation is code for get-the-public-softened-up-to-accept-incinerators (even with token energy recovery), then it is quite WRONG and quite unsustainable. See EfW Sustainability Guide and Code of Practice. Systematic embodied and inherent (CV) energy recovery is vital – but it will never need mass burn incinerators to achieve the optimum HNRV outcome.

Draft Recommendation 9.1

Just as the Commission has observed (Draft Finding 9.3) "Further consideration should be delayed until…" so implementation of this recommendation must be delayed until:

a) The proposed national GHG strategy has been developed, delivered and proved effective, and

b) The "specialist resource agencies" have developed and implemented comprehensive sustainable resource application strategies, and such strategies have **proved** effective.

Draft Recommendation 10.1

Agreed.

Draft Recommendation 10.2

See JWGT submission under separate cover.

Draft Recommendation 12.1

Agreed.

Draft Recommendation 12.2

Agreed and strongly supported as part of a nationally coordinated strategy to develop such regional grouping into "supply" authorities, feeding material flows into a systematic network of cost effective resource recovery systems and infrastructure.

Draft Recommendation 12.3

Agreed.

Draft Recommendation 12.4

Agreed.

Draft Recommendation 13.1

Agreed.

Draft Recommendation 13.2

Agreed.