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# **Municipal Waste Management**

### Summary:

SITA welcomes the Parliamentary Inquiry and makes the following summary points:

- Market based instruments (MBI) drive waste and recycling reform
- State Waste Targets are useful guidelines but they need to be specific, achievable and measured annually
- There is a lack of uniformity in the standard of operation of landfills in NSW particularly between rural and metro areas which undermines the credibility of this disposal method and creates a competitive disadvantage for the more professional operators
- Full cost accounting should be implemented for all landfill operations to ensure that all costs are incorporated into gate fees including post closure remediation, leachate control and gas extraction
- The waste levy is the most significant MBI at present and the recent increases proposed in NSW are welcomed
- The levy acts both as an economic driver and as a source of funds for waste infrastructure and reform programs. However hypothecation rates for the levy should be progressively increased to support the State Waste Strategy
- Landfill levies should be applied across regional NSW as well as metro areas

- Waste planning needs major reform with key priorities being to define waste and resource recovery separately, to implement specific waste policies which create the right market and planning regime for resource recovery infrastructure
- Education remains important in waste reform
- EPR schemes are an important albeit small part of an integrated waste strategy. They will never cover significant waste streams as the application of EPR is restricted to specific streams with a known generator and specific commodity type
- The government's recent decision to limit landfill contracts to 5 years in duration for disposal of putrescible waste is supported. This decision will limit long term contracting of landfill disposal and create the environment allowing Alternative Waste Treatment
- All landfills (whether publicly or privately owned, metro or regional) should operate to common minimum standards including:
  - Gas capture
  - Leachate capture including a liner
  - Weighbridge for data collection
  - o Post closure remediation provision in pricing and budgets
- All compost operations should operate to common minimum standards and particular should only operate in "controlled environments" in metropolitan areas
- There is a need for specific regulatory provisions and standards for the application of AWT composts to land which DEC is currently developing in partnership with the industry. These actions are supported
- Local government tender processes need to be reviewed by the state government in relation to waste management infrastructure

#### Introduction – SITA Environmental Solutions

SITA Environmental Solutions is one of Australia's leading environmental waste management companies.

Our industry knowledge and experience combined with our comprehensive service range enables SITA Environmental Solutions to provide customers' with 'cradle to grave' environmental and sustainable waste management solutions.

SITA operates in all mainland States and the Australian Capital Territory.

Our Services include domestic, bulk and commercial / industrial collection, waste identification and resource recovery options, sorting, processing such as composting, autoclaving, product destruction, waste stabilisation, engineered landfill operations and transfer facilities.

We provide services to more than 43,000 commercial / industrial customers and more than 800,000 households each week across Australia.

SITA provides municipal services to a range of Councils in NSW including:

- Campbelltown City Council
- Ashfield Council
- Shoalhaven Shire Council
- Gosford City Council

We provide the full range of recycling services to our customers. SITA has a vehicle fleet of 300 trucks operating in Sydney, Gosford, Shoalhaven, Wollongong, Wagga and Lithgow.

SITA is bringing the best available technology to NSW and Australia. This includes our Biowise Composting plant, and SAWT (SITA Advanced Waste Technology) for the processing of municipal solid waste.

SITA is passionately committed to waste minimisation and sustainable waste management.

SITA is an active member of the Waste Management Association of Australia and a key proponent of further extensive reform in the waste management sector.

## **SITA Environmental Solutions - nationally**

- One of Australia's largest solid waste service providers
- Largest service provider to the C+I sector
- 43,000 Commercial /Industrial customers nationally,
- 6 major depots and 20 service outlets nationally
- 4 engineered landfills
- 2 transfer stations
- 3 resource recovery facilities
- 1 compost facility
- AWT proponent in many tenders
- 18 municipal contracts throughout Australia, servicing over 800,000 households each week
- Opened Australia's first fully engineered sanitary landfill
- Introduced the first split mobile cart for recycling services
- Employing over 900 people including owner drivers

### **SITA Environmental Solutions - NSW**

- 1 engineered landfill
- 2 transfer stations
- 3 Council contracts Ashfield, Shoalhaven, Gosford
- 3 recycling facilities
- 300 trucks
- 14,000 commercial customers
- Paper recycling
- Commercial waste resource recovery

# **Waste Hierarchy**

SITA Environmental Solutions recognises and supports the NSW Government Waste Strategy and its stated intention to reduce waste to landfill, to increase resource recovery and maximise recycling.

SITA strongly supports these principles on the basis that they are good for the environment but also open up significant business opportunities in the waste, resource recovery and recycling markets.

The waste hierarchy is a useful guiding principle for waste avoidance, minimization and recycling.

Government intervention in the form of regulations, market based instruments and policies have driven improved recycling and resource recovery.

Unfortunately the pace of reform is slow and the pattern patchy.

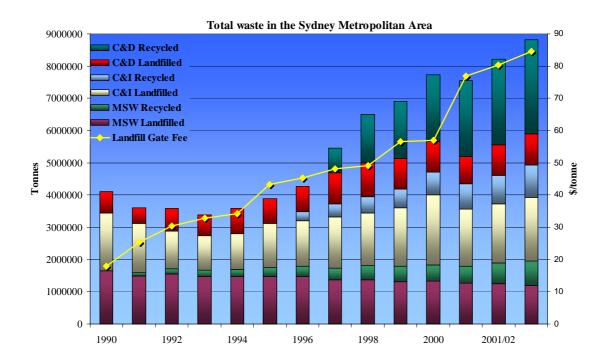
## **Targets**

The graphs below were prepared by SITA and Hyder consulting on the growth in waste to landfill in NSW.

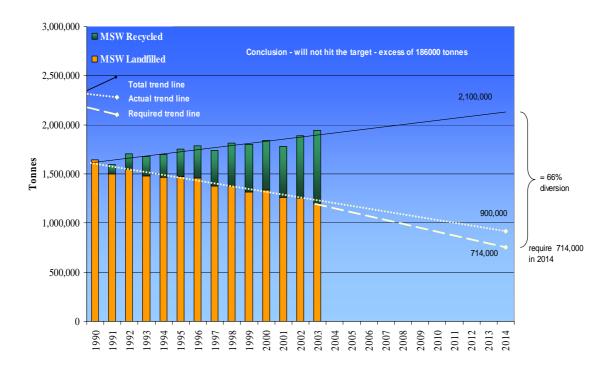
The graphs show that on the policy settings prevailing in September 2005 waste to landfill was accelerating particularly for the C+I sector.

Neither the MSW sector (nor the C+I sector) were going to achieve their targets without government intervention to encourage source separation (increased parity between the cost of recycling and the cost of landfill), AWT (increased parity between the gate fee for an AWT plant and gate fee at landfill) and C+I MRFs (increased parity between the C+I MRF gate fee and the landfill gate fee).

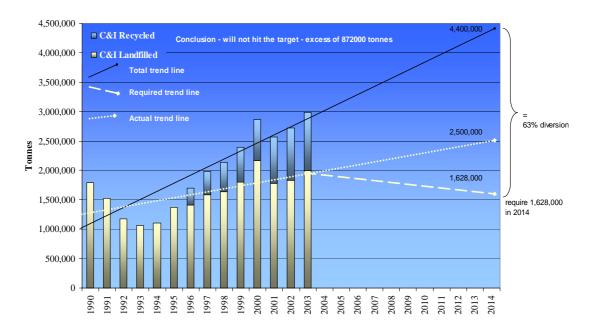
In the absence of changes to the landfill levy (in the absence of some other regulatory intervention) the waste targets would not be met.



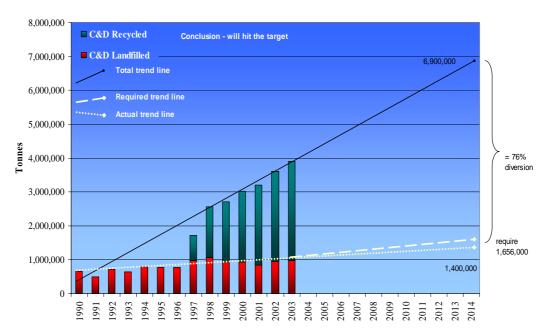
MSW landfill trend in the Sydney Metropolitan Area



### C&I landfill trend in the Sydney Metropolitan Area



### C&D landfill trend in the Sydney Metropolitan Area



Whilst the MSW trend line was heading in the right direction (as compared to C+I) the fact is the strategy targets would not have been achieved because:

- The rate of diversion from landfill was not fast enough.
- The low hanging fruit in the form of kerbside recycling and green waste had all be taken
- Future growth in kerbside recycling and green waste tonnes would not be as high as past growth since most Councils had adopted such programs
- Green waste recycling in metro Sydney had overwhelmed the market capacity to absorb compost with 450,000 tonnes of compost stockpiled in Sydney
- The adoption of AWT technologies was too slow and patchy

In December 2005 the NSW government acted to change the policy settings by:

- Increasing the waste levy from \$22 to \$58 per tonne over 5 years
- Removing the levy exemption for alternative daily cover
- Removing the exemptions for recycling and stockpiling waste on landfills

These changes were intended to drive further reform and SITA (along with the Waste Management Association Australia NSW division) strongly supports the intervention by the NSW Government.

SITA supports the establishment of government waste reduction targets and specifically the 66% diversion of MSW waste from landfill by 2014.

Whilst SITA supports targets it believes they should be:

- Specific to specific waste streams and periods
- Measurable against specific streams and agreed measuring protocols
- Long term with specific annual interim targets (so that achievement can be measured and tracked)

SITA believes that more significant interventions by the NSW government is now required to meet government waste targets and to drive resource recovery and recycling.

SITA supports greater levels of resource recovery and therefore government policies to facilitate the establishment of economically viable resource markets.

# **Banning materials**

The NSW Government could intervene to ban particular wastes to landfill. Bans have been used successfully elsewhere:

- German regulations requiring prestabilisation of putrescible waste prior to landfill
- European bans on E waste to landfill

SITA would support bans on particular wastes to landfill including electronics, white goods, oils and hazardous household waste, it believes that market based instruments are more effective for the bulk wastes which make up the waste streams.

# **Resource Efficiency**

SITA strongly supports the existing State strategy for reducing waste to landfill. While we may be critical of the pace of reform the direction is the correct one.

SITA itself is one of Australia's leading landfill operators. However SITA believes that resources should be recovered for their "highest and best use" and not simply be disposed of in the most "efficient" manner to landfill. Efficiency in these terms reflects only current costs and not the externalities of continuous and accelerating resource consumption.

SITA believes that Full Cost Accounting (including externalities) should be applied to decision making in the waste, resources and recycling arenas. As such the one way flow of materials through the economy to landfill is both unsustainable and inefficient.

SITA believes the Australian and NSW economies will benefit more from job creation, wealth generation, product reuse and pollution avoidance by resource reuse, than they would by landfilling recyclable materials.

SITA is heavily investing in resource recovery technologies including:

- Alternative waste treatment technologies
- C+I sorting facilities
- Paper baling operations
- Kerbside recycling fleets
- Product destruction and recycling processes.

SITA believes that to be a leading waste management company in Australia requires leadership in policy advocacy, leadership in resource recovery investment and leadership in research and development. SITA is pursuing all of these streams.

# **Government Intervention**

There is an absence of an overarching policy framework for recycling, resource recovery and diversion from landfill at a national level.

That absence has meant each State has created its own strategy and actions to achieve it.

Whereas Europe has been driven by the European Directive and national interpretation of it, Australia has not had a consistent set of national waste policies to drive State programs.

In part this is a function of the constitutional separation of State responsibilities. However meaningful reform of waste requires strong state AND national leadership.

To this end SITA would support strong advocacy by the NSW Government to the national government on waste issues particularly in the areas of:

- o Extended producer responsibility and coregulatory regimes
- Review of the economic efficiency of kerbside recycling compared to CDL
- o Coordination of waste targets and policy development

# **Regulatory Barriers**

SITA believes a range of regulatory barriers and approaches are preventing the uptake of better waste management practices. These barriers include:

- absence of coherent and agreed definition of waste
- absence of ability to differentiate waste facilities from resource recovery facilities
- poor government tendering processes and systems (95% of all AWT tenders in the past 5 years have failed to produce a result)
- lack of appropriate Zones to permit waste infrastructure
- a lack of regulatory drivers for waste diversion, resource recovery, limits to landfill disposal
- inadequate policing of existing regulations to limit "cowboys" in landfill operations
- inability of the State government to "call in" significant developments such as AWT facilities and approve them in spite of local opposition (though this issue may improve with recent amendments to planning regulations)
- lack of minimum standards and minimum recycled content policies by government to drive recycling
- lack of minimum planning standards for waste infrastructure

SITA supports the rapid roll out of AWT and resource recovery technology to process municipal waste and to achieve diversion of this waste from landfill.

SITA supports government regulations to ban or reduce particular wastes from landfill including:

- household hazardous waste
- paper and cardboard
- electronic waste.

SITA also supports strict regulation of waste collectors, recyclers and operators.

It is too easy for entrants to this industry to set up shop, avoid minimum regulatory and environmental standards and undercut the professional and law abiding operators.

To create a level playing field minimum environmental standards must be applied to all players.

Two particular groups must be strictly regulated:

- Illegitimate landfill operators who undercut properly functioning landfills
- Irresponsible trucking operators who run businesses in spite of OH+S standards, licences etc

# **Policy Options**

The private sector will not invest in large scale waste infrastructure such as AWT plants to process Municipal Solid Waste unless it can achieve:

- a site
- a guaranteed long term waste stream
- the right gate price (return on capital employed)

Without these three key preconditions being met the NSW Government will be forced to fill the infrastructure and funding gap.

SITA and the WMAA recently investigated the cost for the NSW government to implement its waste strategy and achieve its targets.

Bearing in mind the NSW targets are far more conservative than other states (66% diversion by 2014 for MSW) it still required \$134 million to be injected into infrastructure (refer table below).

This \$134 million cost, the industry suggested, would need to be borne by the Government unless it changed its policy settings to make resource recovery and AWT infrastructure more financially attractive to the private sector.

To their credit the NSW government responded by increasing the waste levy fundamentally and irrevocably altering the gate prices payable for landfill – thus making resource recovery more viable.

The effect of this government intervention was to increase the likelihood of Councils entering long term contracts for the supply of waste to AWT's and that the gate fee chargeable reflects true operating costs.

Key Action Areas	Additional amount required to meet the target	Additional processing / diversion required to meet the target	Additional expense to extract these tonnes \$/t	\$M/yr
C&I Source Separation	2.1Mt more than now	0.84	25	21
C&I Mixed Sorting	2.1 Mt more than now	1.26	35	44
AWT - MSW	1.4 Mt more than now	1.50	35	53
Kerbside recycling	250,000 t additional recovery	0.25	-	
Garden Organics	Additional 0.15 Mt/yr	0.15	30	5
National Packing Covenant	Additional 260,000 t	-	-	-
Away from recycling	Additional 50,000 t/yr	0.05	20	1.0
Other minor waste streams – tyres, mobiles	Additional 40,000 t/yr	0.05	20	1.0
Education	-	3.30	3 per generator	10
TOTAL	*		*	134.0

The interface of the targets with the funding of the necessary infrastructure and programs is the place for policy reform and action.

# Recycling

Recycling rates are mixed across product types and geography.

Some products such as paper and cardboard are being successfully recycled both from the residential and the commercial markets.

However commercial recycling lags consistently behind municipal systems only because of the heavy level of subsidy provided by local Councils.

Key areas of reform of recycling include:

- Glass breakage in MRF's is around 50%. Glass is inefficient in the kerbside system. Various proposals to remove glass from kerbside recycling should be considered including CDL on glass. There are mechanisms to limit shelf price impacts on glass products.
- C+I dirty MRF's are required to achieve the waste targets both in terms
  of commercial waste but also municipal solid waste collected from
  "away from home" locations by Councils. Again these facilities will only
  be built by the private sector when they can achieve a return on capital.
  That requires either:
  - o an increase in the cost of the alternative landfill disposal
  - o recycling rebates payable on tonnes recovered
  - o regulations requiring waste recycling and diversion
  - o better market prices for the recovered materials
- White paper recycling rates are a lowly 11%. It remains considerably cheaper to landfill office paper than to install separate collection and transport services. Office white recycling rates will only increase when there is:
  - o an increase in the cost of the alternative landfill disposal
  - o recycling rebates payable on tonnes recovered
  - o regulations requiring office white recycling
  - government purchasing requirements positively biased in favour of recycled office paper
- Agreement by local government on tendering processes to facilitate the implementation of new recycling technologies including AWT's and sorting plants:
  - Development of standard AWT tender specifications

- o Identification of sites so that tenders assess technology and operating experience, not just which tenderer has an approved site
- Agreements on cross boundary tender arrangements
   Agreements on waste characterisation in the tender documents
   Appropriate risk allocation and sharing
- Removal of biases from tender documents

# **Pricing**

SITA believes that local governments are generally aware of best practice approaches in relation to resource recovery and AWT. However to date, most Councils have baulked at accepting the increased costs associated with such best practice approaches.

In pursuing its objectives for waste minimisation and diversion from landfill, the NSW Government has primarily two options – pricing or regulation.

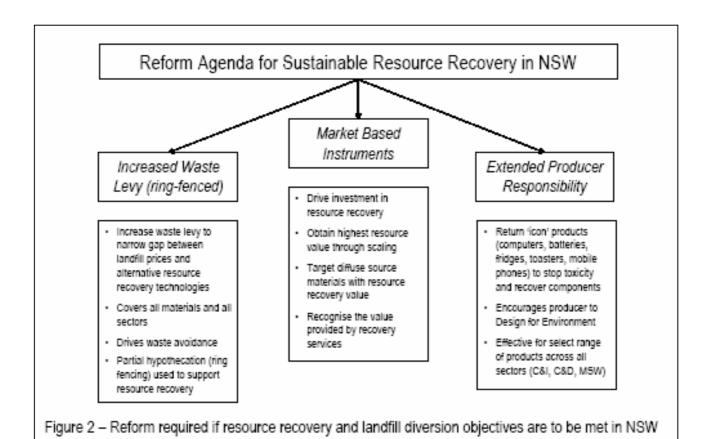
SITA supports the targeted implementation of both pricing and regulatory instruments with the choice between the two being driven by efficacy and costs.

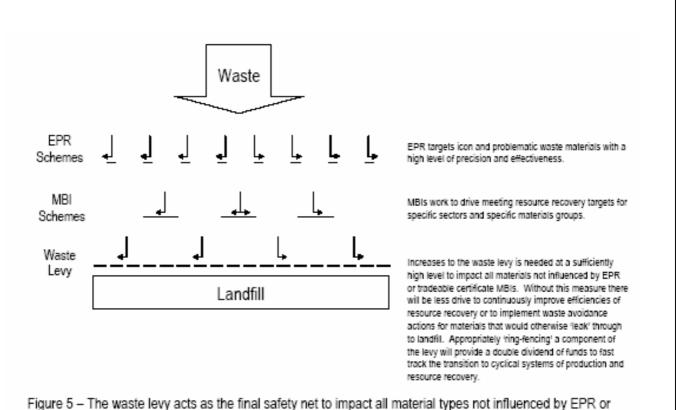
### Waste levies and market based instruments

SITA supports the introduction of economic / market instruments to encourage diversion of waste from landfill and to encourage the establishment of economically viable and profitable resource recovery businesses. Market mechanisms includes but are not limited to, landfill levies.

SITA believes that a suite of instruments is required to drive waste reform nationally. Some instruments will need to be implemented nationally (EPR schemes), others at the state level (landfill levies) and others at the local level (gate fee at Council operated landfills).

SITA believes that EPR schemes, MBI's and landfill levies are complementary instruments to drive reform (refer extract below from MBI paper).





MBI schemes and provides pressure to continuously improve recovery rates and efficiency

SITA (like most of the members of the WMAA) believes that the price of landfill is too low and that low landfill prices undermine commercial and domestic recycling systems.

SITA believes that the existing NSW landfill levy (as the highest levy in Australia) has a positive effect on reducing waste to landfill (albeit limited for some waste streams) and providing a financial incentive for waste generators to explore recycling options instead of landfill.

Landfill levies have the following effects:

- Increase the cost of landfill
- Make the higher gate price of recycling facilities more competitive
- Make AWT plants and MRF's more competitive
- Levy costs are passed on to the generator (somewhat like the GST) so have little impact upon the recycling operator's bottom line costs (contrary to ACOR's oft expressed position - car recyclers importing cars into the Sydney Regulated Area being the exception to the rule)
- Rewards recyclers who are able to charge higher prices for their services vis landfill
- Is a "catch all" MBI which penalises final disposal to landfill
- Redirects materials back through the economy
- Is a bottom line cost for all waste generators providing an ongoing incentive for reform and continuous improvement

SITA believes that all state governments should implement landfill levies and set the price at a level which drives the necessary diversion from landfill to achieve the state targets.

SITA has a preference for the hypothecation of levy funds back to delivering the waste strategy, but this should not be a precondition for increasing waste levies. They perform a strong economic function over and above the revenue streams they generate.

SITA makes the following recommendations for the expenditure of levy monies:

- 1. local government kerbside recycling subsidies for best practice
- 2. local government subsidies for transport of recyclables from remote areas to markets
- 3. funding support for local government environmental education programs
- 4. funding support for local government investigation of AWT
- 5. funding support for local government litter and waste programs
- 6. infrastructure grants to build recycling and alternative waste systems
- 7. funding for public place recycling infrastructure
- 8. seed funding for new resource recovery and Alternative Waste Treatment infrastructure
- 9. infrastructure support for recycling from office towers
- 10. EPR related schemes
- 11. Contaminated land remediation including orphan sites

Whilst individual households are not generally responsive to landfill price signals in terms of waste generation rates, Councils as their agent are very price sensitive. The rise in the landfill levy in NSW has seen many more councils consider AWT technologies and source separated services such as green waste and kerbside recycling.

That is Councils are very landfill price sensitive and the application of landfill levies will drive AWT technology expansion – diverting waste from landfill.

Discussions with many council officers indicate that future predicted and announced rises in the NSW levy are already having an effect upon Council deliberations on their long term waste strategies with an increase in officer expectation that AWT will be seriously considered.

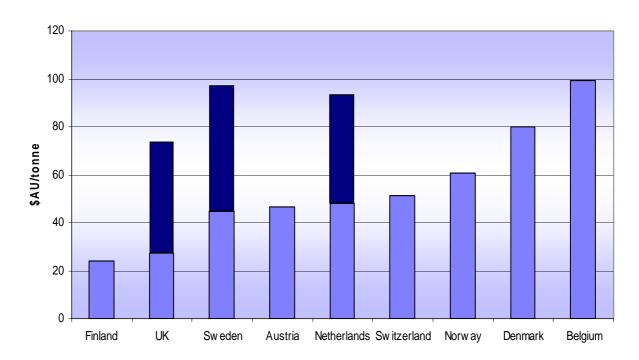
SITA also believes that levies should be applied to all landfills in regional as well as metro areas. There is simply no rational justification for the use of pricing measures to drive reform in the City not being applied in the country.

If anything the comparative costs of recycling are higher, requiring a levy marginally higher to provide a bias for recycling. Of course the marginal utility of recycling in the country needs to be fully considered. SITA does not support cross subsidizing the transportation of recyclables vast distances just to meet recycling targets.

SITA also supports Advanced Disposal Fees to fund end of life recycling and to create economically viable recycling businesses (refer EPR below)

Landfill taxes or levies are becoming widely adopted throughout the world. SITA has provided a summary paper on landfill levies from Europe and the United States in its supporting documentation. A summary graph is presented below.

# Landfill tax in European countries (\$AU/tonne): the escalador system



(SITA notes that levy increases on C+D and C+I waste streams will deliver significant increases in resource recovery because of the more elastic nature of these streams and their responsiveness to price triggers.

However the level of the levy is important. C+I waste to landfill has been growing nationally. The waste levy (and any other market based instruments) need to be set high enough to affect behaviour.

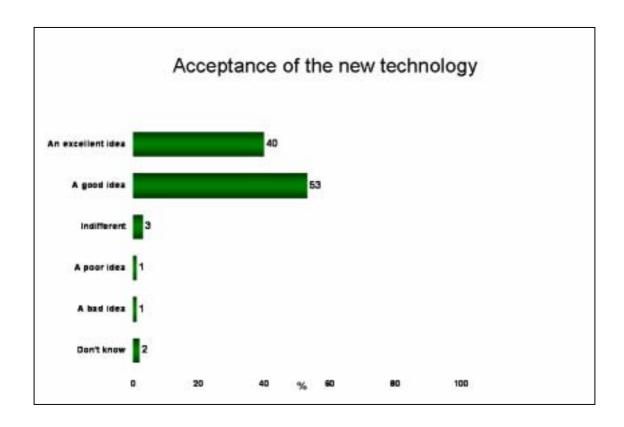
The fact that landfill disposal costs and the costs of collection are generally combined as a single invoice to a C+I waste generator means that as a price signal, the levy effect can be diluted. The higher the levy the stronger the price signal to the ultimate waste generator.)

## Willingness to Pay for AWT technologies

SITA and the AWT Working Group recently completed research on Council willingness to pay for AWT technologies (attached research paper).

The key findings of the research, conducted nationally with a 2% margin for error were:

- More than 93% of ratepayers support for the concept of Alternative Waste Treatment of household waste (refer below)
- 70% of ratepayers would willingly pay an additional \$1/week for AWT treatment of their waste
- This is equivalent to \$50/year and greatly in excess of the required price premium between landfill and AWT





SITA and the AWT Working Group have provided the Inquiry a separate paper on the reform agenda required to deliver AWT technology across Australia. The paper was drafted by Hyder Consulting on behalf of the AWT Working Group.

# **New Technology – AWT and other processes**

SITA strongly supports the introduction of new technology such as AWT's to divert waste from landfill and to achieve the government's stated waste targets.

There are excellent examples of AWT's operating both here in Australia and overseas.

Industry will not invest in new technology unless three key preconditions are met:

- 1. a long terms **supply** contract for waste
- 2. a known **site** with appropriate planning approvals
- 3. the right **price** for processing the waste

These are dealt with in turn.

## Supply of waste

Municipal Councils have been reluctant to enter into long term supply contracts for AWT technology without clear guidance from the State Government.

To date the government has not made specific requirements of local Councils to divert waste from landfill, unlike the UK where the UK Waste Strategy and LATS Scheme specifically require diversion of municipal waste from landfills.

AWT providers will not build multimillion dollar capital projects on a speculative hunch that the market will move in that direction. All AWT providers will require long term contracted tonnages in order to secure capital financing.

Understandably local councils have been reluctant to enter such arrangements (and to pay the premium price for AWT) without absolute commitments from the State Government that such is the policy direction for the State.

### Sites with appropriate approvals

It is difficult to achieve planning approval for waste related activities.

Furthermore those companies or State Government agencies which already own land have a significant competitive advantage when it comes to Council tender processes. One reform recommended by the AWT Working Group to the Government (attached AWT Policy Paper) is for Councils to nominate the site prior to any AWT tender process.

This means tenderers will be competing on their technology and operating experience rather than on their landholdings.

#### **Price**

The recent amendments to the waste levy have made AWT and other processing more competitive with landfill in the SMA and ERA.

However the absence of a levy in the regional areas of NSW means that the price premium between landfill and AWT is a hurdle most Councils cannot and will not jump.

Consequently the Government should look at other mechanisms to provide incentives to Councils to move to AWT and other waste processing capacity such as rebates, targets and infrastructure grants.

## Other policy issues

AWT has the capacity to divert greater than 70% of a Councils waste from landfill for beneficial uses.

The SITA SAWT technology for example generates:

- AS4454 compliant composts
- Recovered recyclables
- o Inert rocks and stones for road base
- Materials useful for Waste to Energy plants

In order to facilitate AWT development in NSW there are a range of additional policy measures which need to be actioned by the Government. These include:

- Standards for the operation and output of AWT plants such as the AWT Organic Output standards being developed by the AWT Working Group in partnership with the DEC
- Common minimum environmental standards for the operation of landfills
- Common minimum environmental standards for the operation of compost facilities

- Tendering policies to guide local Council AWT tender processes particularly in relation to land issues (above) and regional joint arrangements between Councils
- Infrastructure planning policies for waste infrastructure driven at the state government level
- o Full cost accounting for the operation of landfill facilities
- Specific policies and targets for the diversion of waste from landfill for non metro regional Councils
- Adoption of market based instruments to drive reform from a "waste diversion" philosophy to a "resource management" philosophy.

# **Producer Responsibility**

SITA supports government EPR schemes where they require producers of waste to take more active financial responsibility for end of life disposal.

SITA recognises that waste companies will only enter the recycling and resource recovery markets where they can make a fair profit and return on capital. Creating the right economic environment for this to occur is the role of government through schemes such as EPR and Advanced Disposal Fees.

Specific EPR schemes should be introduced for wastes which:

- Can be classified as uniquely identifiable
- Have a known generator who can be identified
- Can be diverted from landfill cost effectively
- Have a higher and better resource value or assist in protecting the environment through pollution avoidance

SITA supports the early and vigorous implementation of EPR schemes for the following waste types:

- Tyres
- Batteries
- TV's
- Computers
- oil
- Paint
- Pesticides

because these wastes meet the above criteria.

These waste streams have higher and better resource value, can be reasonably easily identified and lend themselves to source separation through dedicated collection systems.

To be effective EPR schemes must catch all of the waste type (eliminate "orphans") and prevent "free riders". As such they are more difficult to implement than "catch all" landfill levies or other more targeted MBI's. (refer attached paper on the relationship between MBI's, levies and EPR schemes.

In this context SITA supports the National Packaging Covenant EPR scheme only so far as it incorporates specific targets backed up by regulatory interventions to prevent avoidance and "free riders".

SITA would support a national or state study into the efficiency of Container Deposit Legislation (CDL) against kerbside recycling on a pure cost per tonne basis. The appropriate model is one which parallels the Californian system of not sorting to brand and spending unredeemed deposits on support of the recycling system.

# Regulation

### Minimum environmental standards of operation

SITA considers that all landfills must be managed to high levels of environmental performance and that minimum environmental standards should be applied to all landfills without exception whether urban or rural, government or private sector.

Currently many rural landfills, privately and publicly operated are exempt from a range of minimum environmental control requirements including standard waste cell development practices, leachate control systems (liners, leachate pumps and treatment processes), gas capture, monitoring and remediation provisions.

Where the absence of these measures poses a risk to the environment (which by definition they do), the landfill should be regulated and brought up to a minimum operating standard.

The increased cost to landfill operators due to greater regulations has been significant, especially with regards to the construction of landfill lining systems. The greater regulation requiring landfill liners however is considered a positive step towards ensuring the protection of the environment.

It is still the case however where there is a large variance between the landfill liner system adopted across all landfills. It is suggest that more targeted regulation be directed at these landfills that are not adopted best practices for landfill liner designs, including all landfills in regional areas.

The NSW Government and local Councils have been reluctant to enforce strict environmental standards on all landfill operators, preferring instead to establish arbitrary distinctions between rural and metropolitan landfill operations and public and private operations.

SITA believes in a level playing field and would see all operators (including local Council operators) meeting the same minimum environmental standards for :

- Gas capture
- Leachate liners
- Post closure remediation
- Provision for long term monitoring and remediation

## Provision for post closure remediation

SITA believes all landfill operators should be required to make financial provisions for post closure costs and remediation.

Operators who ignore post closure costs in their current gate pricing are therefore able to compete at a lower cost base than others who make such provisions. The playing field is not balanced.

In the absence of post closure provisions being extracted from current waste generators there may be no funding available when the post closure liabilities are realized. That may leave governments picking up the costs.

Only Victoria has guidelines for post closure remediation and this based upon a remediation period of 30 years after care. The Victorian standards are based upon the European model and could be rolled out to all NSW jurisdictions.

## Ongoing role of landfill

SITA believes that landfills will have a role to play for the foreseeable future, as a final disposal option for:

- intractable waste
- residuals from AWT and recycling plants
- wastes not amenable to AWT or recycling
- rural regions where AWT is not feasible.

# Definitions of waste and recycling

Definitions of waste and resource recovery differ state by state.

The same wastes can be classified differently and therefore have different costs of disposal depending upon which state it is in. For example in Victoria quarantine waste goes to deep burial whereas in other states it must be treated in an autoclave. In Western Australia some classes of medical waste can still be disposed of to landfill.

Resource recovery activities are caught under the same planning controls as landfills and transfer stations.

Specific provisions for recycling and resource activities should be built into NSW local and state planning schemes to facilitate the establishment of resource recovery infrastructure.

For too long waste and resource recovery infrastructure development applications have been frustrated by local and often parochial interests.

SITA welcomes the NSW Government's recent decisions to include Alternative Waste Treatment Facilities as projects of state significance which can be called in and approved by the Minister.

SITA believes that AWT infrastructure, landfills and resource recovery plants which operate to service more than one local authority area should be classified as of state significance and be approved via a different mechanism to other local development applications.

## Planning requirements

Many of today's landfills that are now surrounded by industrial estates and some residential estates were once located in open rural areas. In many cases the zoning of land has changed in recent years following the development of the landfills.

Looking to the future and the changes that need to take place to achieve the '66% diversion of MSW" or extending the policy toward "zero waste to landfill', sizable pre-treatment facilities will be required.

The most appropriate location for these facilities is on an existing landfills, due to the availability of land and the ease of disposal for any residual wastes that will still need to be disposed in landfills.

For this to be achieved it will be critical that local councils are willing to approve planning permits for the construction of such pre-treatment facilities on existing landfills, even though the landfills may now be surrounded by industrial or residential estate as a result of re-zoning.

Specific action is required at all levels of government to:

- define waste separately from resource recovery
- create new zones and schemes to permit resource recovery operations
- simplify the development approval process and increase the likelihood of success
- ensure that existing facilities can expand and develop in line with government waste objectives

# **National Coordination**

The fact that significant regulatory differences exist between states and territories poses significant complications to those companies that operate across state boundaries.

It would therefore be of great advantage if the NSW government took a leadership position in striving for national coordination, particularly in relation to:

- Policy leadership in relation to resource value
- Creating market incentives and MBI's
- Address market failures preventing resource recovery expansion particularly pricing mechanisms, regulation and purchasing policies
- Setting national waste targets
- Developing national data and monitoring protocols
- Establishing EPR schemes
- Definitions of waste and recovered resources
- Regulation of AWT output composts
- Funding and grants for major infrastructure
- Facilitating State EPA's and Ministerial agreements
- Accelerating the rate of reform