

Assessment of waste exports from Australia in May 2019

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Blue Environment is commissioned by the Department of the Environment and Energy to analyse and report on waste exports monthly to June 2019. The data is provided by the Australian Bureau of Statistics, and comprises monthly data covering the previous six months, including any updates. On a tonnage basis nearly all these exports are materials recovered from waste streams for recycling or energy recovery. For convenience, the term 'wastes' is used to include these recovered materials.

Summary

In May 2019, Australia exported about 343,400 tonnes of wastes with a value of \$A536 million. This represents a reduction of 23% in the quantity and 5% in the value of these exports compared with April 2019. The decrease is attributable to a large fall in scrap metals exports, reversing a significant increase in the previous month. Exports of scrap paper and cardboard declined slightly compared to April, while plastics and hazardous waste exports were similar.

Comparison by destination

In May 2019 six countries received 75% by weight of Australia's waste exports. These were, in order, China (including Hong Kong and Macau), India, Bangladesh, Indonesia, Malaysia and Thailand. Vietnam ranked as the top receiver in April but fell outside the top six in May, recording its lowest recorded monthly total over the 23-month assessment period.

Table 1 compares exports to the top six receiving countries in April and May 2019, and also includes each country's 2017-18 monthly average. Waste exports to India and Bangladesh in May 2019 were higher than their 2017-18 averages, but those to the other countries in the top six were lower.

In May, exports of waste-derived materials to China were mostly recovered paper and cardboard (79%). India's were 56% metals and 33% paper and cardboard. Those to Bangladesh and Indonesia were dominated by scrap metals. Malaysia's were 37% metals and 22% paper and cardboard. Thailand's were 49% metals and 45% paper and cardboard.

Table 1 Comparison of month-to-month waste export volume by destination

	,		May 19 April 19				2017-18	%
Export destination by monthly rank		Tonnes	% of	Rank Tonnes			monthly	change
Бу	monthly rank		total			change	avg	
1	China	54,700	16%	3	56,600	-3%	62,100	-12%
2	India	54,000	16%	2	67,200	-20%	42,400	27%
3	Bangladesh	51,400	15%	6	26,600	93%	13,900	270%
4	Indonesia	48,600	14%	4	45,000	8%	60,600	-20%
5	Malaysia	27,000	8%	8	24,200	11%	31,200	-14%
6	Thailand	22,900	7%	7	26,400	-13%	25,700	-11%
То	p 6 total	258,600	75%		246,000	5%		
М	onthly total	343,400	-		444,900	-23%		

Figure 1 (overleaf) presents the monthly trend in exports of waste from Australia to the top six receiving countries and the other destinations between July 2017 and May 2019. Examined over this timeframe, the top six includes Vietnam but not Bangladesh.

As recorded in previous reports, exports to China fell markedly during much of 2017-18. They reached a low of 30,000 tonnes in March 2018, recovered to 63,000 in May and have remained fairly stable since. Exports to Vietnam have been highly variable over this timeframe, ranging between



7,000 and 135,000 tonnes per month. Exports to Indonesia have also varied widely. Overall, no clear trend is apparent in waste exports over the 23-month timeframe.

500 450 400 Other destinations 350 Thousands of tonnes 300 Thailand Malaysia 250 India 200 Vietnam 150 100 China (including Hong Kong and Macau) 50 Indonesia 0 Aug-17 Sep-17 Jan-18 Oct-17 Jul-18 Aug-18 Feb-18 Jun-18 Oct-18 Feb-19 Apr-19 Mar-18 May-18 Sep-18 Jan-19 Mar-19 May-19

Monthly exports of waste from Australia by destination, ranked by total quantity Figure 1 received, July 2017 – May 2019

Comparison by material

Table 2 presents a comparison of waste export volumes between April and May 2019, the monthly average from 2017-18 and the year to date volumes.

Table 2 Comparison of waste export volume by material								
Material actions	Month			Monthly %		Year to dat		
Material category	Apr 19	May 19	change	avg 2017- 18	change	2017-18	2018-19	change
Metals	292,800	194,300	-34%	203,800	-5%	2,226,400	2,356,000	6%
Plastics	17,200	17,100	-1%	13,200	29%	143,700	170,800	19%
Paper & cardboard	98,400	91,100	-7%	109,800	-17%	1,219,200	1,025,000	-16%
Hazardous	16,800	16,400	-3%	11,300	45%	123,800	150,800	22%
Other	19,700	24,600	25%	23,800	3%	270,900	207,100	-24%
Total	444,900	343,400	-23%	362,000	-5%	3,984,100	3,909,700	-2%

Month to month -

- May 2019 saw a 34% reduction in the export of metals compared to the month of April. Most of this reduction was in 'ferrous waste and scrap' exports to Vietnam. Exports of the aluminium and copper waste and scrap categories remained consistent.
- Exports of waste plastics declined by 1% in May. Indonesia and Malaysia received half our exports. These two countries have received most of Australia's waste plastics since China implemented its export restrictions. Mixed plastics represented 83% of the total.
- Paper and cardboard quantities fell by 7%. Exports of recovered newsprint and magazines increased slightly (7%) but other grades declined. Unbleached kraft (old corrugated containers) and mixed paper make up 95% of scrap paper and cardboard exports.
- Exports of hazardous waste decreased in May by 3%. The largest fraction was waste tyres (shredded 8,400 tonnes; unshredded 1,200 tonnes) followed by lead waste and scrap (3,500 tonnes).
- Exports in the 'other wastes' category increased sharply in May, mainly due to higher exports of organic materials.

2017-18 monthly average – Exports of scrap plastics and hazardous wastes were considerably higher in May 2019 than their monthly average for 2017-18, while exports of scrap metals and paper and



cardboard were 5% and 17% lower respectively. Overall, exports of waste in May 2019 were 5% lower than the monthly average for 2017-18.

Year to date – Year-to-date waste exports in May 2019 were about 3.91 million tonnes, compared with 3.98 million tonnes in the equivalent period last financial year (2% less). Most of the difference is lower volumes of paper and cardboard exports.

Figure 2 presents the monthly trend in exports of waste from Australia by material type between July 2017 and May 2019. Metals exports remain volatile. Waste paper and cardboard exports have remained fairly stable since January 2018. The rise in exports of recovered plastics over the same timeframe may have reached its peak, with falls in the last three months.

Paper & cardboard Plastics -Other 350 35 30 300 Thousands of tonnes **Phousands** of tonnes 250 25 200 20 150 15 100 10 50 5

Figure 2 Monthly exports of waste from Australia by material type, July 2017 – May 2019

Figure 3 presents monthly trends in the unit prices of key waste exports between July 2017 and May 2019. Over this timeframe, average unit prices for metals and paper and cardboard have remained fairly stable. Average prices for waste plastics are driven mainly by the low-grade mixed materials grade, which represent most of the exported tonnes. Prices for this grade fell from an average of \$276/t over 2017-18 to a low of \$137/t in February 2019, then recovered to \$235/t in May.

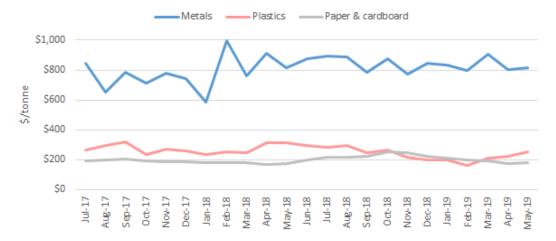


Figure 3 Comparison of unit prices by material (in \$/tonne), July 2017 – May 2019

The current status of waste import restrictions

Following the lead of China, several Asian countries have flagged or implemented restrictions on the import of waste-derived materials. These are described in Table 3 (overleaf). The information presented has been compiled based on publicly available sources, sometimes translated from languages other than English.



Table 3 Status of waste import restrictions

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		Announced &				
Country	Scope of restrictions	implemented	Types	2017-18	May 19	Impact and uncertainties
China	Restricted the import of certain materials covering specific commodity codes, mainly by specifying a threshold contamination rate of 0.5% ¹ . A ban (issued in April 2018) on the import of 32 varieties of solid waste codes which were previously restricted. 16 of these are banned from 31 December and the other 16 to take effect from 31 December 2019 ² . Further restrictions on metals imports flagged in Dec. 18 ³	Ann.: Jul & Nov-17, Apr-18. Imp.: Jan & Mar-18, Dec-18, Dec-19	Plastic, paper, metals, other	745,700 (62,100/month)	54,600	Impact evident (2016-17 exports averaged 105,300/month)
India	Import of scrap plastics banned from August 2019 ⁴ . Also covers areas that were previously exempt under the 2016 ban such as special economic zones (SEZ) and export-oriented units (EOU) ⁵ . Excludes electrical/electronic assemblies or components that are defective which can be imported within a year of export.	Ann.: Mar-19 Imp.: Mar-19, Aug- 19 for importers currently exempt under SEZs and EOUs.	Plastic	800 (70/month)	300	Impact uncertain.
Indonesia	All imported scrap paper must be inspected, similar to steel and plastic. A maximum 0.5% contamination rate will apply ⁶ ⁷ . Illegally imported plastic waste to be returned back to exporters ⁸ . This month, reportedly rejected nine containers of 'contaminated' paper and plastic material.	Ann.: Apr-19 Imp.: Apr-19	Paper	296,000 (24,700/month)	4,000	No impact apparent
Malaysia	Import permits revoked from 114 factories that process imported plastic waste ^{9,10} . Import of non-recyclable plastic waste to be banned ¹¹ . Contaminated, mislabelled or illegally imported plastic waste loads to	Jul-18.	Plastic	71,300 (5,900/month)	4,100	No impact apparent

¹ Blue Environment (2018) <u>Data on exports of recyclables from Australia to China</u>

² Ministry of Commerce, State Development & Reform Commission (incl. former State Development Planning Commission), General Administration of Customs (2018) Announcement No. 6 [2018] of the Ministry of Ecology and Environment, the Ministry of Commerce, the National Development and Reform Commission and the General Administration of Customs

³ Reuters, 28/12/18, China to restrict imports of scrap steel, aluminium from July

⁴ Business Today, (24 June 2019) <u>India bans import of plastic waste from August this year to curb pollution</u>

⁵ Ministry of Environment, Forest and Climate Change (2019) <u>Amendment in Hazardous Waste (Management & Transboundary Movement Rules, 2016)</u>

⁶ Sydney Morning Herald, 9/7/19, <u>Eight more containers of 'toxic' rubbish to be sent back to Australia</u>

⁷ Waste Management Review (2019) <u>Indonesia announces 100 per cent paper inspection rate</u>

⁸ VOA news (2019) <u>Indonesia vows to send back illegal plastic waste</u>

⁹ FMT News (2018) <u>Permits to import plastic waste for 114 factories revoked</u>

¹⁰ Waste Management Review (2018) <u>Malaysia, Thailand and Vietnam waste imports crackdown</u>

¹¹ The Star Online (2018) *Govt to ban import of all non-recyclable waste*



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	Announced & Associated exports (tonnes					
Country	Scope of restrictions	implemented	Types	2017-18	May 19	Impact and uncertainties
	be sent back to source ^{12 13} .					
Taiwan	Import of plastic waste is banned. Exceptions are made to licensed local firms that import plastic waste originating from their own overseas production processes or are a single material, but not from original production processes ¹⁴ . Paper imports restricted to only deinked paper, kraft paper, corrugated paper or cardboard that is not bleached. Import of waste newspapers and magazines banned.	Ann.: Aug-18 Imp.: Oct-18	Plastic, paper	14,100 (500/month)	1,800	
Thailand	Revoked a broad plastic scrap import allowance, meaning plastic waste and scrap is banned from import by 2021 ^{15,16,17} . Looking to ban e-waste imports within 2 yrs ¹⁰ .	Both ann. Aug-18, plastic imp. Aug-18, e-waste within 2 years.	Plastic	26,900 (2,200/month)	1,300	Apparent impact evident. Government announcement available in Thai only.
Vietnam	Tighter controls over imports of plastic, paper and metals. Only accepted if importers can prove that their shipment meets the specified environmental standards and there is capacity in the country to process the materials ¹⁸ . No new licences issued for waste imports ¹⁰ . Plastic scrap imports to be banned by 2025 ¹⁹ . Under the new national standard QCVN 32: 2019/BTNMT, import of e-waste plastics (e.g. cases of TVs and computers) would be forbidden ²⁰ . From 22 February 2019, all imports through road and railway border gates to be banned ²¹ . Import of mixed metal waste (containing any plastic, paper, other non-metallic metals) now understood to be restricted. Composition of metal waste needs to be 99% metal to be allowed in ²² .	Ann. in Aug-18, appears to be implemented. Mixed metal waste restricted from October 2018.	Plastic, paper, metals	603,000 (50,300/month)	7,300	Apparent impact evident for plastic exports from Australia. Environmental standards used to determine when shipments are acceptable or when the ban on e-waste plastic imports would take effect unavailable in English.

¹² The Australian (2019) <u>Australia would vet any waste returns, says Ley</u>

¹³ Malaymail (2019) <u>Yeo Bee Yin moots RM1,500 charge per shipping container to cut illegal imported plastic waste</u>

¹⁴ Taipei Times (2018) *New waste plastic, paper import rules to take effect*

¹⁵ The Nation (2018) <u>Import of plastic waste banned</u>

¹⁶ CIWM (2018) <u>Thailand set to ban plastic waste imports by 2021</u>

¹⁷ <u>Government Gazette Thailand</u> (2018)

¹⁸ Vietnam Briefing (2018) <u>Vietnam to Restrict Surging Scrap Imports</u>

¹⁹ VN Express International (2019) *Vietnam to end plastic scrap imports from 2025*

²⁰ Ministry of Natural Resources and Environment of the Socialist Republic of Vietnam (2018) <u>Vietnam to ban imports of plastic from used electronics</u>

²¹ VietnamPlus (2019) <u>Scrap imports through road, railway border gates to be banned</u>, Ministry of Information and Communications

 $^{^{22}}$ S&P Global Platts (2019) $\underline{\it Vietnam's Jan scrap imports plunge amid stricter government rules}$