

Assessment of waste exports from Australia in March 2019

21 May 2019

Joe Pickin and Jenny Trinh

Blue Environment is commissioned by the Department of the Environment and Energy to undertake a monthly analysis of waste export data 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.

For this month's report we have reclassified three wood-based export codes from 'hazardous' (due to their potential to include treated timber) to 'other' (organics). This follows research indicating a low probability of significant contamination with treatment chemicals. The reclassification is backdated in trend data.

Summary

In March 2019, Australia exported about 438,600 tonnes of waste with a value of \$A574 million. This represents an increase of 29% in the quantity and 19% in the value of waste exports compared with February 2019. The increase is attributable to another rise in metal exports to the highest recorded monthly quantity metals since July 2017. Exports of waste plastics were also at their highest level in the 21-month timeframe.

Comparison by destination

In March 2019 six countries received 73% by weight of exported Australian waste. These were, in order, India, Vietnam, Indonesia, China (including Hong Kong and Macau), Malaysia and South Korea. Most of these countries were also the top six receivers of waste in February 2019, except for South Korea, which was ranked ninth in February. Table 1 compares exports to the top six receiving countries in February and March 2019, and also includes each country's 2017-18 monthly average. Waste exports to China and Indonesia in March 2019 were less than their 2017-18 averages, but those to the other countries in the top six were higher.

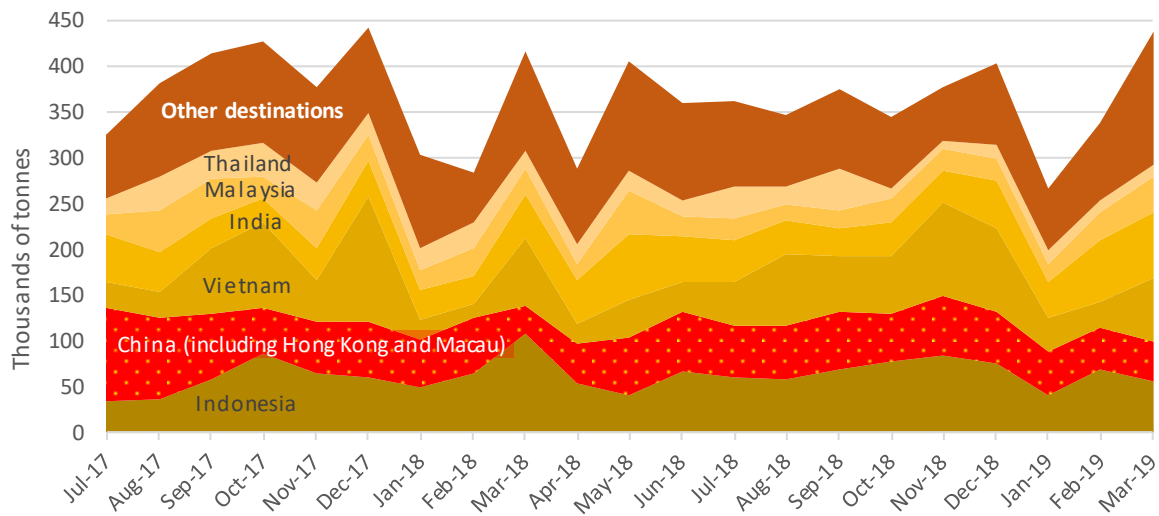
Table 1 Comparison of month-to-month waste export volume by destination

Export destination by monthly rank		March 19		February 19			2017-18	%
		Tonnes	% of total	Rank	Tonnes	% change	monthly avg	change
1	India	69,800	16%	2	67,600	3%	42,400	65%
2	Vietnam	69,300	16%	6	26,300	164%	50,300	38%
3	Indonesia	55,600	13%	1	69,800	-20%	60,600	-8%
4	China	44,900	10%	3	45,900	-2%	62,100	-28%
5	Malaysia	40,300	9%	5	31,900	26%	31,200	29%
6	South Korea	38,500	9%	9	9,700	296%	10,200	277%
Top 6 total		318,400	73%		251,200	27%		
Monthly total		438,600	-		339,100	29%		

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 March 2019. Examined over this timeframe, the top six includes Thailand but not South Korea.

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, remained fairly stable for several months and began declining again from December 2018. Exports to Vietnam have been highly variable over this timeframe, ranging between 16,000 and 135,000 tonnes per month. Exports to Indonesia have also varied widely. Overall, however, no clear trend is apparent in waste exports over the 21-month timeframe.

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



Comparison by material

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

Table 2 Comparison of waste export volume by material

Material category	Month			Monthly avg 2017-18	% change	Year to date (Jul-Mar)		
	Feb 19	Mar 19	% change			2017-18	2018-19	% change
Metals	192,800	268,400	39%	203,800	32%	1,818,700	1,919,600	6%
Plastics	19,200	19,500	2%	13,200	48%	112,900	137,600	22%
Paper & cardboard	92,500	95,000	3%	109,800	-13%	1,027,700	840,600	-18%
Hazardous	14,300	16,700	17%	11,400	46%	97,300	118,200	21%
Other	20,400	39,100	92%	30,300	29%	312,800	235,800	-25%
Total	339,100	438,600	29%	368,500	19%	3,369,600	3,251,800	-3%

Month to month –

- March 2019 saw a 39% increase in the export of metals, following a similar rise in the previous month. All the main metals export categories experienced an increase, with the largest being from ferrous waste and scrap. Metals exports are at their highest monthly level in the 21-month timeframe.
- Exports of waste plastics rose by 2% in March. This was attributable to a 49% increase in exports of ethylene polymers, which includes most plastics from household recycling. Like metals, waste plastics exports were at their highest monthly level in the 21-month timeframe. Both mixed plastics and styrene polymer exports declined slightly in March.
- Paper and cardboard quantities increased by 3%. All the main paper and cardboard export grades experienced growth except for unsorted low-grade material which fell by 3%.
- Exports of hazardous waste increased in March by 21%. The largest fraction was waste tyres (shredded 10,500 tonnes; unshredded 1,000 tonnes) followed by lead waste and scrap (3,100 tonnes) and slag and ash containing mainly aluminium (840 tonnes).
- The ‘other wastes’ category also increased sharply in March, mainly due to increased exports of organic wastes including sawdust and wood waste and scrap.

2017-18 monthly average – The quantities of metals, plastics, hazardous waste and ‘other’ exported in March 2019 were 29-48% higher than their monthly averages for 2017-18, but exports of waste

paper and cardboard were 13% lower. Overall, exports of waste in March 2019 were 19% higher than the monthly average for 2017-18.

Year to date – Year-to-date waste exports in March 2019 were about 3.25 million tonnes, compared with 3.37 million tonnes in the equivalent period last financial year (3% less). Most of the difference is due to lower exports of paper and cardboard.

Figure 2 presents the monthly trend in exports of waste from Australia by material type between July 2017 and March 2019. Metals exports remain volatile. Waste paper and cardboard exports have remained fairly stable since falling below 100,000 tonnes per month in February 2018. Waste plastics now appear to be on a rising trend, having doubled since their nadir in January 2018.

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

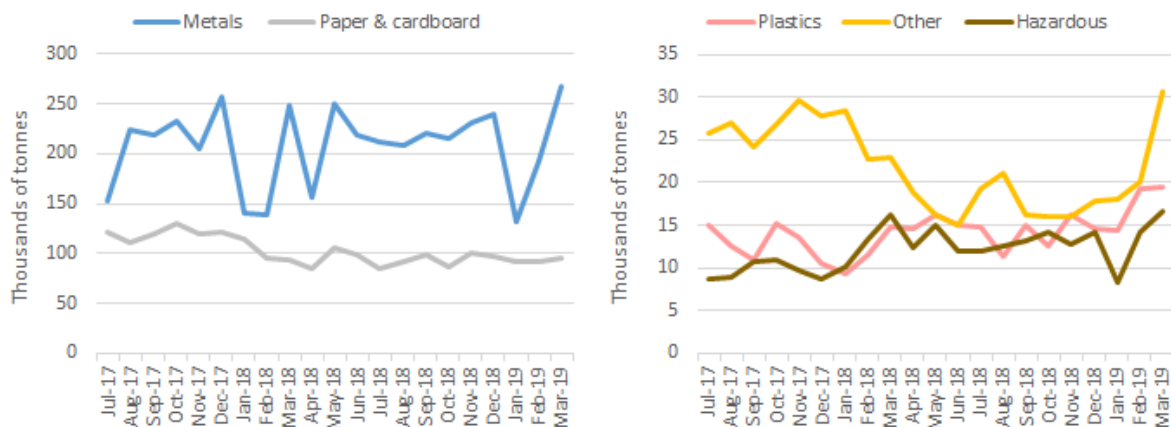
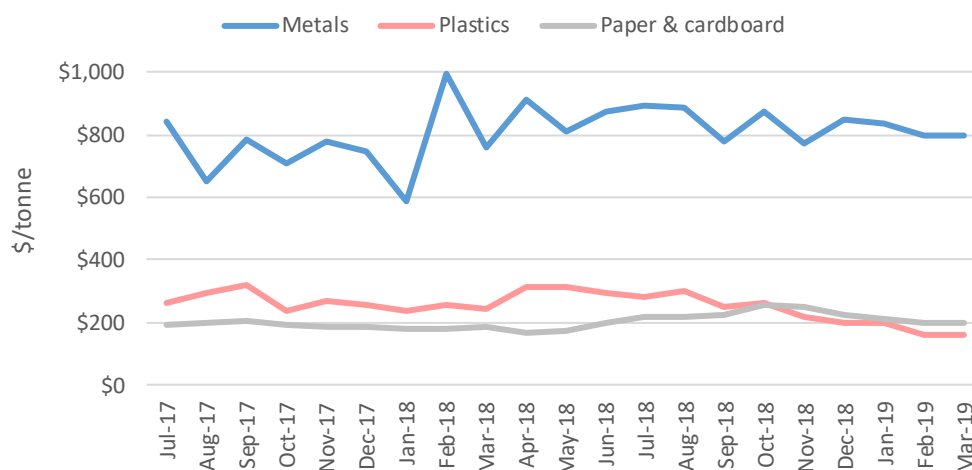


Figure 3 presents monthly trends in the unit prices of key waste exports between July 2017 and March 2019. Over this timeframe, average unit prices for metals and paper and cardboard have remained fairly stable. Average prices for waste plastics appear to be falling. This is mostly attributable to declining prices for low-grade mixed plastics, which averaged \$181/t in March 2019 compared with \$262/t over 2017-18.

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



The current status of waste import restrictions

Table 3 (overleaf) presents our understanding of waste import restrictions that countries have implemented or are planning to implement. This information has been compiled based on the best publicly available sources, sometimes translated from languages other than English.

Table 3 Current status of waste import restrictions

Country	Scope of restrictions	Announced & implemented	Associated exports (tonnes)			Impact and uncertainties
			Types	2017-18	Mar 19	
China	<p>Restricted the import of certain materials covering specific commodity codes, mainly by specifying a threshold contamination rate of 0.5%¹.</p> <p>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 2019².</p> <p>Further restrictions on metals imports flagged in Dec. 18³</p>	<p>Ann.: Jul & Nov-17, Apr-18.</p> <p>Imp.: Jan & Mar-18, Dec-18, Dec-19</p>	Plastic, paper, metals, other	745,700 (62,100/month)	44,800	Impact evident (2016-17 exports averaged 105,300/month)
India	<p>Import of scrap plastics banned. Also covers areas that were previously exempt under the 2016 ban such as special economic zones (SEZ) and export-oriented units (EOU)⁴. Excludes electrical/electronic assemblies or components that are defective which can be imported within a year of export.</p>	<p>Ann.: Mar-19</p> <p>Imp.: Mar-19, Aug-19 for importers currently exempt under SEZs and EOUs.</p>	Plastic	800 (70/month)	100	Impact uncertain.
Indonesia	<p>All imported scrap paper must be inspected, similar to steel and plastic. A maximum 0.5% contamination rate will apply⁵.</p>	<p>Ann.: Apr-19</p> <p>Imp.: Apr-19</p>	Paper	296,000 (24,700/month)	6,000	No impact apparent
Malaysia	<p>Import permits revoked from 114 factories that process imported plastic waste^{6,7}. Import of non-recyclable plastic waste to be banned⁸.</p>	<p>Jul-18.</p>	Plastic	71,300 (5,900/month)	7,900	No impact apparent

¹ Blue Environment (2018) [Data on exports of recyclables from Australia to China](#)

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 Ministry of Environment, Forest and Climate Change (2019) [Amendment in Hazardous Waste \(Management & Transboundary Movement Rules, 2016\)](#)

⁵ Waste Management Review (2019) [Indonesia announces 100 per cent paper inspection rate](#)

⁶ FMT News (2018) [Permits to import plastic waste for 114 factories revoked](#)

⁷ Waste Management Review (2018) [Malaysia, Thailand and Vietnam waste imports crackdown](#)

⁸ The Star Online (2018) [Govt to ban import of all non-recyclable waste](#)

Country	Scope of restrictions	Announced & implemented	Associated exports (tonnes)		Impact and uncertainties	
			Types	2017-18 Mar 19		
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 ⁹ . 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)	1,700	
Thailand	Revoked a broad plastic scrap import allowance, meaning plastic waste and scrap is banned from import by 2021 ^{10,11,12} . Looking to ban e-waste imports within 2 yrs ⁷ .	Both ann. Aug-18, plastic imp. Aug-18, e-waste within 2 years.	Plastic	26,900 (2,200/month)	1,200	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 ¹³ . No new licences issued for waste imports ⁷ . Plastic scrap imports to be banned by 2025 ¹⁴ . Under the new national standard QCVN 32: 2019/BTNMT, import of e-waste plastics such as cases of TVs, computers, office equipment would be forbidden ¹⁵ . From 22 February 2019, all imports through road and railway border gates to be banned ¹⁶ . 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 ¹⁷ .	Ann. in Aug-18, appears to be implemented. Mixed metal waste restricted from October 2018.	Plastic, paper, metals	603,000 (50,300/month)	69,300	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.

⁹ Taipei Times (2018) [New waste plastic, paper import rules to take effect](#)

¹⁰ The Nation (2018) [Import of plastic waste banned](#)

¹¹ CIWM (2018) [Thailand set to ban plastic waste imports by 2021](#)

¹² [Government Gazette Thailand](#) (2018)

¹³ Vietnam Briefing (2018) [Vietnam to Restrict Surging Scrap Imports](#)

¹⁴ VN Express International (2019) [Vietnam to end plastic scrap imports from 2025](#)

¹⁵ Ministry of Natural Resources and Environment of the Socialist Republic of Vietnam (2018) [Vietnam to ban imports of plastic from used electronics](#)

¹⁶ VietnamPlus (2019) [Scrap imports through road, railway border gates to be banned](#), Ministry of Information and Communications

¹⁷ S&P Global Platts (2019) [Vietnam's Jan scrap imports plunge amid stricter government rules](#)