

## Assessment of waste exports from Australia in April 2019

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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. On a tonnage basis nearly all these exports are materials recovered from our waste streams for recycling or energy recovery. For convenience, the term 'wastes' is used to include these recovered materials.

### Summary

In April 2019, Australia exported about 452,200 tonnes of wastes with a value of \$A559 million. This represents an increase of 25% in the quantity and 2% in the value of these exports compared with March 2019<sup>1</sup>, and is the highest monthly quantity in the 22 months covered in this series of analyses. The increase is attributable to a large rise in scrap metals exports. Exports of scrap paper and cardboard increased by 16% compared with March, and plastics declined by 4%.

#### **Comparison by destination**

In April 2019 six countries received 75% by weight of exported Australian waste. These were, in order, Vietnam, India, China (including Hong Kong and Macau), Indonesia, Kuwait and Thailand. Most of these countries were also the top six receivers of waste in March 2019. Table 1 compares exports to the top six receiving countries in March and April 2019, and also includes each country's 2017-18 monthly average. Waste exports to China and Indonesia in April 2019 were less than their 2017-18 averages, but those to the other countries in the top six were higher.

The exports of waste-derived materials to Vietnam, India, Kuwait and Indonesia were dominated by scrap metals. Those to China were 83% recovered paper and cardboard. Indonesia's were 66% metal, 22% paper and cardboard and 11% plastic. Thailand's were 53% paper and cardboard and 43% metals.

Export destination by		Ар	April 19		rch 19		2017-18	
mo	nthly rank	Tonnes	% of total	Rank	Tonnes	% change	monthly avg	change
1	Vietnam	109,000	24%	4	39,700	175%	50,300	117%
2	India	67,300	15%	1	69,500	-3%	42,400	59%
3	China	59,500	13%	3	42,100	41%	62,100	-4%
4	Indonesia	45,100	10%	2	52,800	-15%	60,600	-26%
5	Kuwait	29,200	6%	11	5,600	423%	4,900	495%
6	Thailand	27,400	6%	9	12,900	113%	25,700	7%
Тор	o 6 total	337,500	75%		222,600	52%		
Мо	onthly total	452,200	-		362,300	25%		

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

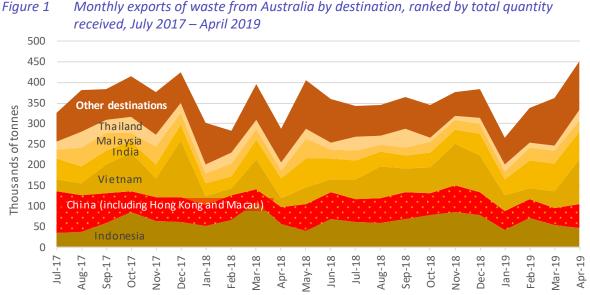
Figure 1 (overleaf) presents the monthly trend in exports of waste from Australia to the top six receiving countries and the other destinations between July 2017 and April 2019. Examined over this timeframe, the top six includes Malaysia but not Kuwait.

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

<sup>&</sup>lt;sup>1</sup> The Australian Bureau of Statistics (ABS) data set for March 2019 assessed in this month's analysis included some significant corrections on the same data provided last month – in particular, a large reduction in recorded exports of scrap metals. For a range of reasons, the ABS export data is subject to revision for up to six months from its initial data of issue.

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stable since. 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 22-month timeframe.



### **Comparison by material**

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

	Month		% Monthly		%	Year to dat	%	
Material category	Mar 19	Apr 19	change	avg 2017- 18	change	2017-18	2018-19	change
Metals	219,600	293,500	34%	203,800	44%	1,975,800	2,164,500	10%
Plastics	18,400	17,700	-4%	13,200	34%	127,500	154,200	21%
Paper & cardboard	89,700	104,500	16%	109,800	-5%	1,112,800	939,900	-16%
Other	18,100	20,300	12%	23,800	-15%	254,600	183,000	-28%
Hazardous	16,400	16,300	-1%	11,300	44%	108,900	134,000	23%
Total	362,300	452,200	25%	362,000	25%	3,291,700	3,123,300	-5%

#### Table 2Comparison of waste export volume by material

### Month to month –

- March 2019 saw a 34% increase in the export of metals to the highest level in the 22-month data set. Nearly all of the increase was in the 'ferrous waste and scrap' category.
- Exports of waste plastics fell by 4% in April. This was attributable to a 17% decrease in exports of ethylene polymers, which includes most plastics from household recycling. About 14,300 tonnes of mixed plastics, which are mainly sourced from domestic collections, were exported. Sixty percent went to Indonesia and Malaysia; the remainder went to 11 other countries.
- Paper and cardboard quantities increased by 16%. The grade that increased the most was the mixed paper grade, which is mainly from domestic collections. Exports of this material increased by 33% to reach 44,600 tonnes, the highest level in the 22-month timeframe.
- Exports of hazardous waste decreased in April by 1%. The largest fraction was waste tyres (shredded 8,400 tonnes; unshredded 1,000 tonnes) followed by lead waste and scrap (2,800 tonnes) and municipal waste (1,600 tonnes).
- Exports of the 'other wastes' category declined in April, mainly due to decreased exports of organic wastes including sawdust and wood waste.

2017-18 monthly average – The quantities of metals, plastics and hazardous waste exported in April 2019 were 34 to 44% higher than their monthly averages for 2017-18, but exports of waste paper and cardboard and 'other' were 5-15% lower. Overall, exports of waste in April 2019 were 25% higher than the monthly average for 2017-18.

*Year to date* – Year-to-date waste exports in April 2019 were about 3.12 million tonnes, compared with 3.29 million tonnes in the equivalent period last financial year (5% 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 April 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 two months.



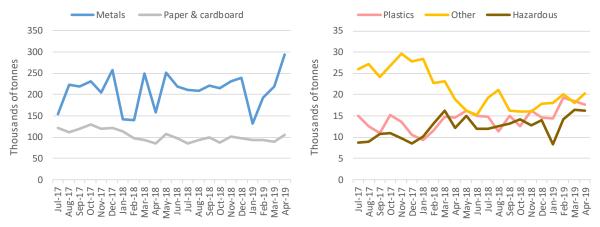
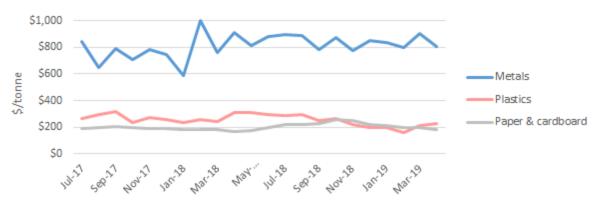


Figure 3 presents monthly trends in the unit prices of key waste exports between July 2017 and April 2019. Over this timeframe, average unit prices for metals and paper and cardboard have remained fairly stable. Average prices for waste plastics appear to be falling. This is mostly attributable to declining prices for low-grade mixed plastics, which averaged \$211/t in April 2019 compared with \$276/t over 2017-18.

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



		Announced &	Associated exports (tonnes)			
Country	Scope of restrictions	implemented	Types	2017-18	Apr 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% <sup>2</sup> . 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 <sup>3</sup> . Further restrictions on metals imports flagged in Dec. 18 <sup>4</sup>	Ann.: Jul & Nov-17, Apr-18. Imp.: Jan & Mar-18, Dec-18, Dec-19	Plastic, paper, metals, other	745,700 (62,100/month)	59,500	Impact evident (2016-17 exports averaged 105,300/month)
India	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) <sup>5</sup> . 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)	200	Impact uncertain.
Indonesia	All imported scrap paper must be inspected, similar to steel and plastic. A maximum 0.5% contamination rate will apply <sup>6</sup> . Illegally imported plastic waste to be returned back to exporters <sup>7</sup> .	Ann.: Apr-19 Imp.: Apr-19	Paper	296,000 (24,700/month)	5,000	No impact apparent
Malaysia	Import permits revoked from 114 factories that process imported plastic waste <sup>8,9</sup> . Import of non-recyclable plastic waste to be banned <sup>10</sup> . Contaminated, mislabelled or illegally imported plastic waste loads to be sent back to source <sup>11 12</sup> .	Jul-18.	Plastic	71,300 (5,900/month)	6,100	No impact apparent

#### Table 3Current status of waste import restrictions

<sup>&</sup>lt;sup>2</sup> Blue Environment (2018) *Data on exports of recyclables from Australia to China* 

<sup>&</sup>lt;sup>3</sup> 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

<sup>&</sup>lt;sup>4</sup> Reuters, 28/12/18, <u>China to restrict imports of scrap steel</u>, aluminium from July

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

<sup>&</sup>lt;sup>6</sup> Waste Management Review (2019) *Indonesia announces 100 per cent paper inspection rate* 

<sup>&</sup>lt;sup>7</sup> VOA news (2019) *Indonesia vows to send back illegal plastic waste* 

<sup>&</sup>lt;sup>8</sup> FMT News (2018) <u>Permits to import plastic waste for 114 factories revoked</u>

<sup>&</sup>lt;sup>9</sup> Waste Management Review (2018) *Malaysia, Thailand and Vietnam waste imports crackdown* 

<sup>&</sup>lt;sup>10</sup> The Star Online (2018) <u>Govt to ban import of all non-recyclable waste</u>

<sup>&</sup>lt;sup>11</sup> The Australian (2019) <u>Australia would vet any waste returns, says Ley</u>

<sup>&</sup>lt;sup>12</sup> Malaymail (2019) <u>Yeo Bee Yin moots RM1,500 charge per shipping container to cut illegal imported plastic waste</u>



		Announced &	Associate	ed exports (tonnes)		
Country	Scope of restrictions	implemented	Types	2017-18	Apr 19	Impact and uncertainties
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 <sup>13</sup> . 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 <sup>14,15,16</sup> . Looking to ban e-waste imports within 2 yrs <sup>9</sup> .	Both ann. Aug-18, plastic imp. Aug-18, e-waste within 2 years.	Plastic	26,900 (2,200/month)	1,000	Apparent impact evident. Government announcement available in Thai only.
Vietnam	<ul> <li>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<sup>17</sup>. No new licences issued for waste imports<sup>9</sup>. Plastic scrap imports to be banned by 2025<sup>18</sup>.</li> <li>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<sup>19</sup>.</li> <li>From 22 February 2019, all imports through road and railway border gates to be banned<sup>20</sup>.</li> <li>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<sup>21</sup>.</li> </ul>	Ann. in Aug-18, appears to be implemented. Mixed metal waste restricted from October 2018.	Plastic, paper, metals	603,000 (50,300/month)	109,100	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.

<sup>&</sup>lt;sup>13</sup> Taipei Times (2018) <u>New waste plastic, paper import rules to take effect</u>

<sup>&</sup>lt;sup>14</sup> The Nation (2018) <u>Import of plastic waste banned</u>

<sup>&</sup>lt;sup>15</sup> CIWM (2018) *Thailand set to ban plastic waste imports by 2021* 

<sup>&</sup>lt;sup>16</sup> <u>Government Gazette Thailand</u> (2018)

<sup>&</sup>lt;sup>17</sup> Vietnam Briefing (2018) <u>Vietnam to Restrict Surging Scrap Imports</u>

<sup>&</sup>lt;sup>18</sup> VN Express International (2019) *Vietnam to end plastic scrap imports from 2025* 

<sup>&</sup>lt;sup>19</sup> Ministry of Natural Resources and Environment of the Socialist Republic of Vietnam (2018) <u>Vietnam to ban imports of plastic from used electronics</u>

<sup>&</sup>lt;sup>20</sup> VietnamPlus (2019) Scrap imports through road, railway border gates to be banned, Ministry of Information and Communications

<sup>&</sup>lt;sup>21</sup> S&P Global Platts (2019) Vietnam's Jan scrap imports plunge amid stricter government rules