



Summary of Key Scheme Metrics to Assist with July 2018 True Up Calculations

1. Introduction

Welcome to the first true up newsletter for the ACT CDS. Each month we will be providing a summary of the key inputs to the true up calculation to provide you with a better understanding of the true up adjustment contained in your invoice.

There are two types of regular true up calculation, a monthly true up that focuses predominantly on containers returned through the Network Operator channel (Express Return Points and Bulk Depots) and a quarterly true up associated with containers returned through the kerbside recycling channel (yellow lidded bins) via the Hume Materials Recovery Facility.

The invoice issued on 4 September 2018 contained a monthly true up associated with adjustments for the difference between the forecast and actual container collections by the Network Operator during the month of July 2018. For the purposes of this first true up, collections from 30 June 2018 will be added to the collection volumes for July 2018.

True up adjustments can only be calculated for suppliers that have provided their actual supply volumes for the relevant true up month, which in this case is the month of July 2018.

Even if you have not supplied any eligible containers during the month, you must report your volumes to be eligible for a true up adjustment. If you have not supplied any containers, you must enter zero (0) against each container category in the reporting portal. Once you have provided your actual supply volumes your true up adjustment will be released in the next invoicing cycle.

If you are having any problems with access to the reporting portal, please contact us via e-mail using the address portalsupport@exchangeforchange.com.au

Please note: all monetary values provided in this paper are presented excluding GST

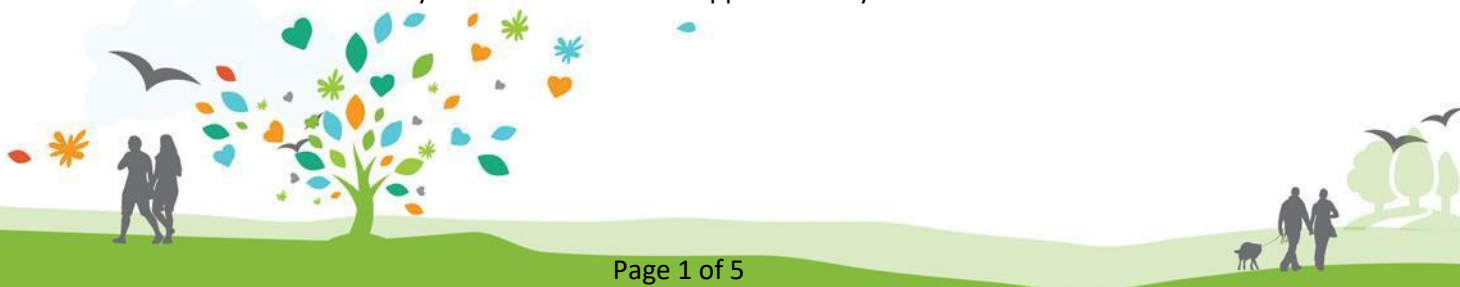
2. Monthly True Up Adjustment

The monthly true up is a three step process:

Step 1: Determine the cost of the scheme for each container type based on the actual volume of containers returned through the Network Operator in July 2018

Step 2: Determine the market share for each First Supplier based on the actual volumes supplied in July 2018

Step 3: Multiply the market share for each material type by the total cost of that material type to arrive at the cost to be borne by each individual First Supplier for July 2018





Material type means: Aluminium, Glass, HDPE, PET, Mixed Plastic, Liquid Paper Board, Steel and Other Material.

For those of you that are interested, the calculation methodology has been provided in Appendix 1 with a worked example.

Several aspects of the pricing are confidential and cannot be published, however, the table below provides the total cost for each container type used for the monthly true up for July 2018:

Container Material Type	Cost (\$)
	July 2018
Aluminium	\$ 257,679.02
Glass	\$ 223,296.97
HDPE	\$ 22,010.00
PET	\$ 167,392.00
Liquid Paper Board	\$ 37,252.00
Steel	\$ 467.00
Other Plastics	\$ 120.00
Other materials	\$ 222.00
Total	\$ 708,438.99

The total containers supplied in July 2018 by all suppliers were as follows:

Container Material Type	Supplier Volumes
	July 2018
Aluminium	2,756,362
Glass	2,513,031
HDPE	585,464
PET	2,728,873
Liquid Paper Board	484,481
Steel	10,694
Other Plastics	2,669
Other materials	8,283
Total	9,089,857

For those suppliers that have not provide their actuals for July 2018, their forecast volumes will be used.

2.1 Actual prices per container type for July 2018

As stated earlier, the actual prices per container are not used to calculate the cost of the scheme to each





first supplier. They are a by-product of the calculations and are wholly dependent on the total volume of containers of each material type supplied into the ACT market during the month.

The table below shows the actual container pricing associated with the volumes and costs used during the July 2018 true up calculations.

Container Material Type	Price per Container July 2018
Aluminium	\$ 0.0934852038
Glass	\$ 0.0888556385
HDPE	\$ 0.0375941139
PET	\$ 0.0613410713
Liquid Paper Board	\$ 0.0768905245
Steel	\$ 0.0436693474
Other Plastics	\$ 0.0449606593
Other materials	\$ 0.0268018833

If the volumes reported for July are subsequently adjusted by suppliers, the rates will change, however, the total cost of the scheme will not. You may still see an adjustment to your individual contributions if your relative market share changes due to these volume adjustments.





Appendix 1 – Detailed Explanation of the Monthly True Up

Detailed Process with Worked Example

The true up that you have just received was calculated using the following information:

1. The number of containers of each material type that were returned via the Network Operator stream in July (NO actual returns).
2. The number of containers of each material type reported to be supplied in July by each First Supplier (actual supply).
3. The forecast containers of each material type calculated to be supplied by each First Supplier in July (forecast supply). This volume was used to calculate your advanced contribution in the July 2018 invoice.
4. The rate invoiced for the forecast number of containers of each material type assigned to each First Supplier by the Scheme Coordinator (forecast rate). This rate was the published price of 9.940 cents per container.
5. The cost of collecting, handling and processing each container by the Network Operator (NO processing cost)
6. The fixed costs for administering the scheme (fixed scheme cost)
7. The forecast number of containers returned through the Materials Recovery Facility stream (yellow lidded bins) (MRF forecast returns)
8. The refund amount paid for each container processed through the Materials Recovery Facility (MRF refund amount)
9. Interest earned on the scheme accounts (interest earned)
10. Penalty interest levied (penalty interest)

Step 1: Determine the cost of the scheme for each container type based on the actual volume of containers returned through the Network Operator in July 2018

Scheme Cost = Network Operator Cost + Materials Recovery Facility Cost + Fixed Costs

Using aluminium containers as an example the calculation is as follows:

$[\text{Aluminium NO actual returns} \times \text{Aluminium NO processing cost}] + [\text{Aluminium MRF forecast returns} \times \text{MRF refund amount}] + [(\text{fixed scheme cost} - \text{interest earned} - \text{penalty interest levied}) \times (\text{Aluminium NO actual returns} + \text{Aluminium MRF forecast returns}) / (\text{total NO actual returns} + \text{total MRF forecast returns})]$.

NO means Network Operator

MRF means Materials Recovery Facility

This provides the total cost of aluminium container returns for the month of July 2018. The process is then repeated for each container material type.





Step 2: Determine the market share for each First Supplier Based on the actual volumes supplied in July 2018

For each commodity type for each supplier the market share is determined by dividing the number of containers supplied by that supplier by the total number of containers supplied during that period by all suppliers.

Step 3: Multiply the market share for each material type by the total cost of that material type to arrive at the cost to be borne by each individual First Supplier for July 2018

Continuing with Aluminium as an example, let's assume Supplier ABC supplied 275,632 in July 2018. Supplier ABC's market share is $275,632/2,756,362 = 10\%$

Supplier ABC's actual cost for the supply of aluminium is then the product of the market share and the total cost of the Aluminium stream: $10\% \times \$257,679.02 = \$25,767.90$ This process is then repeated for each material type for each First Supplier.

