

Overview of Fleet Capex Plan 2014-19



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Executive Summary

This document details the capital expenditure (capex) associated with the Fleet Plan for the regulatory period 2014/15 to 2018/19 and is summarised in the table below:

	2009-10	2010-11	2011-12	2012-13	2013-14	Total
Standard Control Services	11.1	8.8	9.8	12.4	13.3	55.4
Alternate Control Services	0.2	0.1	0.1	0.2	0.2	0.8
Public Lighting	0.1	0.1	0.1	0.2	0.2	0.7
Unregulated	0.2	0.2	0.2	0.2	0.3	1.1
Total Fleet Capex	11.6	9.2	10.2	13.0	14.0	58.1

Table 1: Proposed technology Capex by regulated and unregulated services (\$ million 13/14)

The Fleet plan includes all capital expenditure relating to Ausgrid's non system fleet portfolio. This includes passenger vehicles light, commercial vehicles, trucks, specialised fleet units including Elevating Work Platforms and Crane Borer/ Lifters, and plant units

The key points covered are:

Section	Key Points
Purpose of the expenditure	Alignment of Ausgrids fleet portfolio to provide efficient, effective and reliable service delivery
Strategy for 2014-19 period	The main focus of the investment is to extend the life of existing heavy fleet and plant with a rebuild and recertification program. To optimise utilisation across the portfolio through the utilisation of web based tracking and scheduling systems
Forecasting method for capex	Feasibility analysis of options on a fleet type by fleet basis has been used to forecast capital requirements for replacement, refurbishment and standardisation.

Background

Ausgrid manages an electricity distribution network which is the largest in Australia supplying power to more than 3 million people. Operations cover an area of more than 22,000 square kilometres ranging from fast growing and densely populated urban areas to geographically dispersed rural areas. These areas include the Sydney CBD, Hunter Valley and Central Coast of NSW.

Ausgrid is one of the largest Fleet operators in NSW and is committed to setting industry best practice in Fleet Management. The acquisition and maintenance of Fleet Capital is essential in supporting Ausgrid's delivery of infrastructure and service to the NSW Government. A safe, reliable and efficient fleet assists in the attainment of the capital and operational investment of the business as provided for in Ausgrid's Statement of Corporate Intent and Regulatory Submissions.

The strategic aim of Ausgrid's Fleet Capital process is to:

- Provide a range of vehicles and plant that facilitates efficiency and productivity of Ausgrid's workforce whilst maintaining and expanding the distribution network
- Ensure that vehicles acquired would promote safety, optimal work practices and be cost effective to operate
- Undertake regular consultation with fleet operators, suppliers and industry to ensure that the strategy is effective and successful.

Fleet Capital Forecasts comprise of Replacement and Additional Capital which involves the consideration of replacement costs for units due for retirement and any increases to the Fleet for a projected five year period.

An underlying tenant of the Fleet strategy is that sustainable levels of Fleet Capital are maintained. Any reductions will result in an increase in the age of the fleet with potential of:

- increased maintenance costs
- reduced Fleet reliability and availability
- compromise of workplace safety
- loss of productivity

During the 2009 – 2014 Regulatory period, Ausgrid experienced unprecedented expansion and maintenance of the Network. Increased apprenticeship intake necessitated an increase in the provision of fleet for the operational workforce to undertake capital and operational investment. Work depots in each of the franchise regions provide maintenance services and breakdown repairs as required. Accordingly the provision of a reliable and effective fleet is an integral component of this activity.

Historically, Fleet forecasts have been developed taking into consideration:

- the planned fleet replacement cycle
- increased purchase and equipping costs due to inflation
- increases in equipping costs to accommodate changes in work practices and multi-skilling
- increased levels of vehicle safety – as vehicle manufacturers provide additional safety features for employee safety such as Electronic Stability Control (ESC) or Brake Assist (BA), these are included in standard vehicle specifications and usually attract a marginal purchase cost increase.
- changes in vehicle configurations required due to variation of work practices or multi-skilling

- deferral of replacement of vehicles or plant due to either operational requirements or availability of suitable replacement options.

As noted in our proposal in July 2012 Networks NSW, was formed to identify and deliver savings and efficiencies to the three (3) Distribution network Service Providers (DNSP), Ausgrid, Endeavour Energy and Essential Energy. As part of the reform process a wide variety of fleet initiatives were developed to reduce current and future costs associated with the fleets of each DNSP.

These initiatives would be individually validated and implemented progressively, where appropriate, as part of the restructure process within each Network business.

Accordingly as well as the aforementioned factors there have also been additional contributory factors considered in the initial Forecast development for Fleet Capital for the 2014 – 2019 period. These are as identified below.

Revision of Fleet retention or replacement life cycles

Reduction in requirement of additional fleet

Potential reduction in requirement of light commercial fleet unit numbers

Reduction in private use travel of fleet

Opportunity to standardise Fleet and equipment across all Network providers

Increase in refurbishment of heavy fleet in lieu of replacement following life cycle revision

Scope of this document

The purpose and scope of this document is to identify and validate the capital expenditure that Ausgrid will require to maintain, and expand if necessary, its fleet of motor vehicles and associated plant to effectively and efficiently provide maintenance and associated support services to the provision of its distribution network system.

Ausgrid's fleet requirements are limited to:

- The capital costs of procuring new and replacement fleet
- The capital costs of equipping and commissioning of new and replacement fleet
- The capital costs of enhancing or modifying its fleet to enhance safety following risk assessment processes or hazard identifications
- The capital costs of implementation of new technologies to improve the safety, reliability or efficiency of its fleet following a robust system of evaluation and approval regimes.
- Efficiency benefits from the change to Ausgrid's fleet strategy.

Passenger vehicle variants such as sedans and station wagons are leased by Ausgrid from a contracted Fleet Services Provider (FSP) and associated costs are included in opex determinations. Whilst these vehicles are important in the delivery of business objectives, it is the light commercial, heavy vehicle and plant fleets that deliver the critical business outcomes and accordingly capital expenditure is concentrated on these fleet categories.

Leased vehicle categories can be provided and managed cost effectively by a third party provider whilst the critical category of fleet can be more effectively managed under business ownership.

Reason for expenditure in 2014 / 2019

As at 30 June 2013 Ausgrid's motor vehicle fleet consisted of the following high level Fleet categories.

1,314 passenger vehicles

1,422 light commercial vehicles

467 trucks

312 specialised fleet units including Elevating Work Platforms and Crane Borer – Lifters

926 plant units

Ausgrid currently has a workforce in excess of 5,200 employees and the mobility of this workforce to conduct day to day operational tasks is essential to the delivery of services.

Passenger vehicles are required for staff to conduct field inspections and monitor maintenance and construction projects whilst the light commercial fleet is essential for the electrical technicians and other trades persons to deliver services to customers and also numerous projects.

Ausgrid's fleet of trucks and specialised plant such as Elevating Work Platforms (EWP) and Crane Borers are critical equipment in the construction and maintenance of the distribution network.

The Ausgrid fleet is diverse in nature to meet the needs of a large multi-functional workforce. Passenger vehicles primarily meet the transportation needs of the supervisory and managerial function of the business. The majority of these vehicles are leased units and do not constitute a component of Ausgrid's capex requirements. These vehicles are often classified as the "white Taxi" fleet as the core function of these is the transportation of staff for business related purposes.

Plant and equipment that is classified as fleet includes the categories as shown below. It should be noted that assets such as elevating work platforms, vehicle loading cranes or crane borers are categorised as individual fleet assets despite their being permanently attached to a vehicle. Purchase and operating costs are separate from those of the associated vehicle. Major plant categories are:

- Elevating Work Platforms
- Crane Borer / Lifter
- Cable Pulling Winches
- Cable Drum Trailers
- Vehicle Loading Cranes
- Trailers
- Front End Loader / Back Hoe
- Air Compressors
- Forklifts

Light commercial fleet including panel vans and utility variants are utilised by electrical field workers to transport tools and equipment to various work sites across the Ausgrid franchise area whilst heavy trucks are required for transportation of work crews as well as large equipment such as cable and stores between depots and work locations.

Chapter 2

Strategic underpinnings of expenditure forecast for 2014-19 period

1. Review of historical and future circumstances

During the 2009 – 2014 period, Ausgrid experienced expansion across the distribution network. The increase in work volume was supported by strong growth of apprentice intake into the business and resultant from this was an increased demand for fleet.

During the previous regulatory period, Ausgrid had increased the apprentice intake significantly and the entry of these staff into the field workforce had necessitated an increase in additional equipment and vehicles to absorb them. The apprentice numbers below are as at September 2012.

Apprentice Nos	2009	2010	2011	2012
Electrical Mechanic	75	70	80	45
Line worker	52	46	48	30
Cable Jointer	13	22	20	4
Motor Mechanic	3	2	4	3
Total	143	140	152	82

The large numbers of electrical trade apprentices required an increase of field support vehicles such as gang trucks and also EWP's that were not identified or included in the original addition fleet requirements at the time of previous determination preparation.

Increases in the Ausgrid fleet since June 2008 are shown below.

	Leased Fleet (Opex)	Owned Fleet (Capex)	Plant (Capex)
30 June 2008	1350	1800	736
30 Jun 2009	1369	1875	761
30 June 2010	1521	1960	786
30 June 2011	1657	2004	884
30 June 2012	1671	2112	921
30 June 2013	1528	1992	926

2. High level strategic options

So as to ensure our fleet capital expenditure is prudent and efficient, Ausgrid identifies strategic options to address future circumstances. Our decisions in this respect inform the options we consider when addressing needs as part of our forecasting process.

The development of the Ausgrid 2014-19 fleet capital requirements were based on the success of current initiatives resulting from the Network reform process being led by Networks NSW and the expectation of further savings resulting from a lower capital program.

Revision of Fleet Retention Periods – Network Reform Program

As part of the reform process being led by Networks NSW a wide variety of fleet initiatives were developed to reduce current and future costs associated with each DNSP fleet. These initiatives would be individually validated and implemented progressively, where appropriate, as part of the restructure process within each Network business.

Accordingly it is difficult to forecast the implications and effects many of these initiatives may have on future capital requirements and expenses, however where known, these will be factored into the preparation of this initial Fleet Capital Expenditure submission.

Several key assumptions were critical in the development of the forecast figures, that being:-

- Revised Fleet Retention periods
- Reduced requirement for additional fleet
- Potential reductions in light commercial fleet and increased retention due to lesser distance travelled

Fleet retention periods utilised to formulate the Replacement cycle over the 2014/2019 regulatory period are as below.

Light Commercials (vans, utilities)	6 years / 150,000 kilometres
Trucks	15 years / 250,000 kilometres
Elevating Work Platforms < 15 metres	10 years
Elevating Work Platforms > 15 metres	15 years
Crane Borers	15 years
Front End Loader / Excavators	15 years
Trailers	15 years

Major strategic options that were considered in the preparation of the submission included the following:

- Increased retention period for heavy fleet and light commercial vehicles
- Continued reduction in fleet composition
- Standardisation of fleet category and design specifications across functional activities
- Changes in fleet procurement strategies
- Development of fleet efficiency ratio for work groups or locations
- Increase in refurbishment of EWP and crane borers in lieu of purchase of new units
- Reduction in Ausgrid operational work force
- Introduction of new Fleet Policy
- Increase in pool vehicle allocations

Significant reductions to 2009-2014 fleet replacement capex were achieved following a revision of the replacement criteria for heavy fleet and light commercial vehicles. Prior to the review and reset all heavy fleet inclusive of EWP and crane borers were considered for replacement following 10 years active service. This was also validated by the design life of the associated plant that was also 10 years. Australian Standards

allow for a major inspection and refurbishment option after 10 years that will further extend the design life for a further 5 years.

Also previously all light commercials were considered for replacement after a 5 year period or 100,000 kilometre cycle, whichever occurred first.

A team formed by Network NSW , consisting of the Fleet Managers of Ausgrid, Endeavour and Essential and chaired by the Group Manager – Property, Logistics and Fleet determined that the replacement cycles for fleet should be revised to allow potential fleet savings to be realised.

The projected capital expenditure, based on revised retention periods, for the 2012-13 and 2013-14 remaining periods were then adjusted in accordance and are shown below.

	FY13	FY14
Replacement numbers (Pre Review)	288	317
Capital Expenditure (Pre Review) \$000	18,192	22,421
Replacement numbers (Post Review)	192	261
Capital Expenditure (Post Review) \$000	15,938	18,210

(Financials based on 2012/2013)

Whilst the impacts and benefits of the increased retention period for fleet are recognised in this submission there are numerous other potential benefits whereby the impacts and benefits may be considerable however it is currently not possible to quantify these.

Network NSW initiatives

Standardisation of Fleet and Equipment across 3 DNSPs.

- This process will be ongoing and benefits will be realised progressively over the next two (2) year period..

Reduction in private use travel of fleet

- The introduction of changes to the fleet usage policy has resulted in a reduction of distances travelled from home to work, leading to retention periods potentially increasing. Under the revised replacement conditions the primary consideration is for the kilometre ceiling thereby if the time taken to reach these limits were extended then the number of years for retention may increase accordingly. A decision to reduce the private travel of heavy fleet, trucks and equipment, has been considered in the decision process to increase retention life from 10 years to 15 years.

Increased use of Market testing or Contract out

- Ausgrid continues to evaluate with NNSW the benefits of outsourcing to ensure the most cost effective solution. It is noted that Ausgrid current hybrid model of outsourcing standard servicing requirements and completing specialists servicing and rebuilds in house continues to provide a cost effective solution.

Retention changes – Refurbishment of Elevating Work Platforms and Crane Borers

- Previously Ausgrid replaced all Elevating Work Platforms (EWP) after a ten (10) year period as the equipment had a 10 year design life. Australian Standards dictate that after a ten (10) year period, EWP and crane borers require a major inspection with certain parts to be inspected and replaced

where required. Successful completion and certification of this inspection allows for a further five (5) year serviceable life, where after the inspection regime must be repeated.

In reviewing the retention period of fleets for the 3 DNSP a decision was made whereby those more expensive units should be retained for 15 years and a refurbishment and inspection be conducted at the 10 year due time. In order for a consistent approach by each network business it was decided that only units above 15 metres be considered for major inspection and refurbishment while smaller units continue to be replaced after 10 years.

Additionally, Standards require that vehicle loading cranes also undergo a major inspection after a ten (10) year period and due to the change that will retain trucks for a further five years to 15 years, it will now be necessary to conduct inspections and refurbishments on the cranes at the mandatory period.

In formulation of this submission the scheduling of inspections / refurbishments has been considered however the actual expenditure associated with these regimes is not fully known. Historically costs are known, however currently Network NSW are preparing a market approach to obtain suppliers and costs to allow for this activity to be carried out across the 3 network businesses. This procurement is expected to be completed within six months.

It should be noted that small vehicle loading cranes are included in the below inspection / refurbishment requirements for the 2014/2019 regulatory period, however there is a likelihood that they would be replaced as they are a low expenditure item at approximately \$3000.

Also Ausgrid has included the Redmond Gary TF13 13 metre units as refurbishment candidates as the capital cost of these units is high in comparison to similar other OEM units.

Chapter 3

Forecast Methodology

The forecast process included several factors that aligned with BAU activities as shown below:

- Estimated numbers of replacement units required each Regulatory year were adjusted in alignment with extended life cycle and reduced distances to be travelled resultant from new policy.
- Replacement numbers for heavy plant adjusted to allow for refurbishment of existing plant in lieu of new replacement units.
- Current replacement costs of existing fleet utilised as a Baseline for forecast of future capex expenditure.

Forecasting of replacement fleet requirements for the duration of the regulatory period is a difficult process due to the number of unknown variables that may eventuate during the five (5) year determination period. Whilst previous trends in replacement requirements could assist the forecast process, the changes in factors such as those previously mentioned could seriously alter the fleet requirements of Ausgrid.

In order to forecast the future replacement cycles and associated related costs a finite set of assumptions are to be adopted in the preparation of this submission. These assumptions are as identified below.

All EWP identified for refurbishment may not be suitable therefore either new units may be required or alternately units may be disposed without replacement. For submission preparation, all EWP numbers identified for refurbishment to be carried out.

Assumption	Impact of assumption
Integration with NSW DNSPs	Replacement criteria is as at November 2012 following revision by Network NSW Fleet Core Working Group
Procurement strategy	Standardising of fleet to continue and accelerate. Additional savings to be delivered by revised procurement methods and options. For cost calculation for replacement costs, listing of replacement types and costs to be included in (3) of this submission.
Refurbishment of major plant	Light commercial fleet (Panel vans, Light cab chassis and utilities) replacement numbers to reduce. This reduction will be based on natural attrition (both staff and fleet), possible contract out policy decisions and rollover of vehicles due to lesser kilometres thereby increased retention. A 20% reduction on each regulatory year replacement number has been applied
Increased Retention / New Policy	All EWP identified for refurbishment may not be suitable therefore either new units may be required or alternately units may be disposed without replacement. For submission preparation, all EWP numbers identified for refurbishment to be carried out.

Ausgrid's approach was to identify the capital expenditure requirements as a result of the need to replace fleet and to purchase new fleet.

Replacement of existing fleet is determined by a schedule by time or kilometres travelled with the latest occurring condition being the deciding factor. For example a light commercial vehicle with a life cycle of 6 years or 150,000 kilometres would not be replaced after 6 years if it had only travelled 80,000 kilometres. Economic repair costs also contribute to the replacement decision.

Major revisions of workforce practice or WH&S incidents may contribute to the triggering of replacement decisions.

Revised replacement criteria for major fleet categories are shown below.

Light Commercials (vans, utilities)	6 years / 150,000 kilometres
Trucks	15 years / 250,000 kilometres
Elevating Work Platforms < 15 metres	10 years
Elevating Work Platforms > 15 metres	15 years
Crane Borers	15 years
Front End Loader / Excavators	15 years
Forklifts	15 years
Trailers	15 years
Miscellaneous Plant	15 years

To forecast the estimated expenditure required for replacement during the 2014/2019 regulatory period a standard set of baseline costs for standard vehicles and associated equipping will be provided in this section.

Purchase costs for vehicles have been derived from the NSW Contract 653 – Purchase of Motor Vehicles and based on a standard replacement vehicle type however this selection may change during the regulatory term.

Purchase costs of fleet not available on Government contract have been based on most recent actual purchase cost of units by Ausgrid.

The estimated equipping costs have been determined from historical data from similar fleet procurement exercises which are conducted in accordance with Ausgrid procurement policy.

Refer to Appendices C and D for sample information.

Decision on Replacement Fleet Selection and Approval Process

Ausgrid, in accordance with Networks NSW recommendations, seeks to standardize its fleet requirements where possible and this is supported by development and regular update of the Ausgrid Motor Vehicle Selection Guide. These guidelines assist in determining the most suitable vehicle based on defined criteria.

Full details on the Selection Guide are available in Appendix A.

The replacement determination is also supported by declarations of evidence as to business requirements and frequency of need to ensure that vehicle selections are justified and also the approval process requires that a Level 3 Manager is accountable for replacement approval and exceptions to normal options are subject to COO (Level 2) approval.

A sample document is provided in Appendix B.

Chapter 4

Major Plant Refurbishment forecast for 2014-19 period (Elevating Work Platform, Crane Borer, Vehicle Loading Crane)

Resulting from recommendations for review of Networks NSW Fleet Working Group it was determined that the life cycle of heavy plant that was truck mounted such as Elevating Work Platforms (EWP), Crane Borers and Vehicle Loading Cranes (VLC) could be extended from ten (10) years to Fifteen (15) years and deliver significant savings in replacement expenditure.

These units are critical, high cost fleet that are necessary to maintain an electrical distribution network and involve large investment. The option to retain the units for an additional five years allows for deferral of significant replacement expenditure.

Below are numbers of units per year by category that will attain ten (10) years in age and will be considered for refurbishment. Dependant on each unit's condition and any future safety or manufacturer enhancements they may not be suitable for refurbishment. In those cases, new replacement units may be required.

Fleet Type	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	Total
13 m EWP	<u>2</u>	<u>3</u>			<u>1</u>	<u>6</u>
16 m EWP	<u>6</u>	<u>5</u>	<u>4</u>	<u>5</u>	<u>9</u>	<u>29</u>
17 m EWP			<u>1</u>			<u>1</u>
18 m EWP				<u>1</u>	<u>3</u>	<u>4</u>
22 m EWP	<u>2</u>		<u>3</u>		<u>2</u>	<u>7</u>
Crane Borer	<u>2</u>	<u>3</u>	<u>4</u>	<u>7</u>	<u>4</u>	<u>20</u>
VLC – 3-10t/m	<u>2</u>		<u>2</u>	<u>4</u>	<u>8</u>	<u>16</u>
VLC – > 10 t/m	<u>1</u>	<u>6</u>		<u>3</u>	<u>3</u>	<u>13</u>
VLC - < 3 t/m	<u>1</u>		<u>1</u>		<u>1</u>	<u>3</u>
VLC - < 1 t/m	<u>1</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>7</u>

In order to forecast the potential costs of refurbishments for inclusion in regulatory submission the costs below have been used. These costs have been derived from average actual costs either conducted by internal workshop facilities or external service providers.

The introduction of a Contract for these activities by Network NSW will impact on these budget calculations. Numbers provided above have been included as baseline data in the preparation and issue of a Tender to seek service providers capable of providing major plant refurbishment capacity to Ausgrid, Endeavour and Essential.

Estimated costs for calculation purposes are shown below.

Elevating Work Platform – Average costs of \$80,000 across all categories
Crane Borers – Average cost of \$150,000 across all makes

Vehicle Loading Cranes– Average costs of \$25,000 across all categories, excluding under 1 tonne/metre.

Criteria that will be assessed to determine suitability of unit for refurbishment in lieu of replacement will be:-

- Number of kilometres on truck and mechanical history
- Condition of truck chassis including rust evidence
- Scope of refurbishment required following risk assessment

Estimated replacement cost for a replacement 16 metre EWP would be approximately \$380K whilst a major overhaul to extend the life cycle by five (5) years has been calculated at a baseline cost of \$80K. A potential increase in maintenance costs should be factored when assessing total savings from this decision.

Forecast Cost Of Major Plant Refurbishment

Numbers in brackets indicate the number of units scheduled for refurbishment based on replacement criteria.

<u>Fleet Type</u>	<u>2014/2015</u> <u>\$000</u>	<u>2015/2016</u> <u>\$000</u>	<u>2016/2017</u> <u>\$000</u>	<u>2017/2018</u> <u>\$000</u>	<u>2018/2019</u> <u>\$000</u>	<u>Total</u>
<u>13 metre EWP</u>	<u>160 (2)</u>	<u>240 (3)</u>			<u>80 (1)</u>	<u>480 (6)</u>
<u>16 metre EWP</u>	<u>480 (6)</u>	<u>400 (5)</u>	<u>320 (4)</u>	<u>400 (5)</u>	<u>720 (9)</u>	<u>2,320 (29)</u>
<u>17 metre EWP</u>			<u>80 (1)</u>			<u>80 (1)</u>
<u>18 metre EWP</u>				<u>80 (1)</u>	<u>240 (3)</u>	<u>320 (4)</u>
<u>22 metre EWP</u>	<u>80 (1)</u>		<u>240 (3)</u>		<u>160 (2)</u>	<u>480 (6)</u>
<u>Total EWP</u>	<u>720 (9)</u>	<u>640 (8)</u>	<u>640 (8)</u>	<u>480 (6)</u>	<u>1,200 (15)</u>	<u>3,680 (46)</u>
<u>Crane Borer</u>	<u>300 (2)</u>	<u>450 (3)</u>	<u>600 (4)</u>	<u>1,050 (7)</u>	<u>600 (4)</u>	<u>3,000 (20)</u>
<u>VLC – 3-10t/m</u>	<u>50 (2)</u>		<u>50 (2)</u>	<u>100 (4)</u>	<u>200 (8)</u>	<u>400 (16)</u>
<u>VLC – > 10 t/m</u>	<u>50 (2)</u>	<u>150 (6)</u>		<u>75 (3)</u>	<u>75 (3)</u>	<u>350 (14)</u>
<u>VLC - < 3 t/m</u>	<u>25 (1)</u>		<u>25 (1)</u>		<u>25 (1)</u>	<u>75 (3)</u>
<u>VLC - < 1 t/m</u>	<u>3 (1)</u>	<u>9 (3)</u>	<u>3 (1)</u>	<u>3 (1)</u>	<u>3 (1)</u>	<u>21 (7)</u>
<u>Total VLC</u>	<u>128 (4)</u>	<u>159 (9)</u>	<u>78 (4)</u>	<u>178 (8)</u>	<u>303 (13)</u>	<u>846 (38)</u>
<u>Total</u>	<u>1,148 (17)</u>	<u>1,249 (20)</u>	<u>1,318 (16)</u>	<u>1,708 (21)</u>	<u>2,103 (32)</u>	<u>7,526 (106)</u>

(Financials based on 2013/2014)

Chapter 5

Replacement Baseline Cost Structure

Below are baseline costs used for calculation of replacement expenditure required to maintain the Fleet Replacement Program during the 2014 / 2019 regulatory period.

Fleet Type	Baseline Vehicle	Purchase Cost \$'000	Equip Cost \$'000	Total Cost \$'000
Cable Drum Trailer	Rockcrush 1.5 tonne	50		50
Cable Winch	Redmond Gary 3 Drum	270		270
Vehicle Load Crane	Palfinger PK7001	50		50
10 metre EWP	GMJ LL10	135		135
10 metre Truck	Isuzu FRR600	75	30	105
13 metre EWP	Redmond Gary TF13	293		293
13 metre Truck	Isuzu FVD1000	120	35	155
14 metre EWP	GMJ LLF14	180		180
14 metre Truck	Hino 1728 Long	115	35	150
16 metre EWP	GMJ LLF16	225		225
16 metre Truck	Hino 1728 Long Isuzu FVZ1400	115	35	150
17 metre EWP	Redmond Gary TF17	310		310
17 metre Truck	Isuzu FVD1000	120	30	150
22 metre EWP	GMJ LL22	232		232
22 metre Truck	Isuzu FVZ1400	150	45	195
Crane Borer	Ozzy Cranes 5/10	410		410
Crane Borer Truck	Isuzu FVZ1400	150	10	160

Fleet Type	Baseline Vehicle	Purchase Cost \$'000	Equip Cost \$'000	Total Cost \$'000
Light Cab Chassis	Ford Ranger XL	27	9	36
Panel Vans	Toyota Hiace	30	9	39
Utilities	Ford Ranger XL	28	4	32
Station Wagons 4x4	Nissan Patrol DX	42	10	52
Truck < 5 tonne	Isuzu NPR300	50	35	85
Truck > 5 tonne	Isuzu FRR600	75	40	115
Tipping Trucks	Isuzu FRR600	75	20	95
Specialised Trucks	Isuzu FVZ1400	150	20	170

(Financials based on 2013/2014)

The above Baseline Costs will be the calculative factor to be used in Chapter 6 to provide the total cost allocations required for replacement of Ausgrid vehicles and plant

Chapter 6

Replacement Fleet Forecast 2014 / 2019

Current Projected Replacement Numbers for Regulatory Period 2014-2019 are shown below. The number of units scheduled for replacement is determined in accordance with the Ausgrid Fleet Replacement Schedule.

Fleet Type	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	Total
Air Compressor					1	1
Semi Trailer		1				1
Cable Drum Trailer	2		1	2	1	6
Cable Winch		1			1	2
EWP – Plant	8	12	10	9	8	47
EWP – Truck	8	12	10	9	8	47
Front End Loader / BH				3	2	5
Pole Loader					1	1
Excavators	2	2	5		1	10
Forklifts	3		2		2	7
Generator Sets			1			1
Crane Borer – Plant			2	3	2	7
Crane Borer – Truck			2	3	2	7
Vehicle Loading Crane	2	4	4	4	5	19
Trailers	4		5	8	6	23
Tailboard Loader		1		1	1	3
Light Cab chassis	25	40	40	31	20	156
Panel Vans	70	50	60	50	19	249
Utilities	40	18	21	18	16	113
Station Wagons 4x4	11	25	16	5	11	68
Fleet Type	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	Total
Trucks – > 5 t	3	2	13	13	13	44
Trucks - < 5 t				4	5	9
Tipping Trucks		1	5	6	6	18
Specialised Trucks		1	4	2	7	14
Total Fleet	178	170	201	171	138	858

Forecast Replacement Costs for EWP and crane borer units

The costs below have been determined by multiplying the number of each unit type for replacement by the baseline cost of an identical new replacement unit. Vehicle and attached plant calculations have been individually provided.

The associated costs for equipping vehicles including provision of storage lockers, trays and ancillary equipment has been included in the vehicle costs. These costs are determined by commercial approaches to the market in accordance with Ausgrid procurement policy. Samples are provided in the appendices.

() - Numbers in brackets indicate the number of units scheduled for replacement during the regulatory year.

<u>Fleet Type</u>	<u>2014/2015 \$000</u>	<u>2015/2016 \$000</u>	<u>2016/2017 \$000</u>	<u>2017/2018 \$000</u>	<u>2018/2019 \$000</u>	<u>Total</u>
<u>10 metre EWP</u>	<u>135 (1)</u>	<u>675 (5)</u>	<u>945 (7)</u>		<u>135 (1)</u>	<u>1,890 (14)</u>
<u>10 metre Truck / Fitout</u>	<u>105 (1)</u>	<u>525 (5)</u>	<u>735 (7)</u>		<u>105 (1)</u>	<u>1,470 (14)</u>
<u>13 metre EWP</u>				<u>879 (3)</u>	<u>879 (3)</u>	<u>1,758 (6)</u>
<u>13 metre Truck / Fitout</u>				<u>465 (3)</u>	<u>465 (3)</u>	<u>930 (6)</u>
<u>14 metre EWP</u>	<u>1,080 (6)</u>	<u>1,260 (7)</u>	<u>540 (3)</u>	<u>1080 (6)</u>	<u>540 (3)</u>	<u>4,500 (25)</u>
<u>14 metre Truck / Fitout</u>	<u>900 (6)</u>	<u>1,050 (7)</u>	<u>450 (3)</u>	<u>900 (6)</u>	<u>450 (3)</u>	<u>3,750 (25)</u>
<u>16 metre EWP</u>	<u>225 (1)</u>					<u>225 (1)</u>
<u>16 metre Truck / Fitout</u>	<u>150 (1)</u>					<u>150 (1)</u>
<u>Fleet Type</u>	<u>2014/2015 \$000</u>	<u>2015/2016 \$000</u>	<u>2016/2017 \$000</u>	<u>2017/2018 \$000</u>	<u>2018/2019 \$000</u>	<u>Total</u>
<u>22 metre Truck / Fitout</u>					<u>427 (2)</u>	<u>195 (1)</u>
<u>Total EWP</u>	<u>2,595 (16)</u>	<u>3,510 (24)</u>	<u>2,670 (20)</u>	<u>3,324 (18)</u>	<u>3,001 (16)</u>	<u>15,100 (94)</u>
<u>Crane Borer</u>			<u>820 (2)</u>	<u>1,230 (3)</u>	<u>820 (2)</u>	<u>2,870 (7)</u>
<u>Borer Truck</u>			<u>320 (2)</u>	<u>480 (3)</u>	<u>320 (2)</u>	<u>1,120 (7)</u>
<u>Total Borer</u>	<u>0</u>	<u>0</u>	<u>1,140 (4)</u>	<u>1,710 (6)</u>	<u>1,140 (4)</u>	<u>3,990 (14)</u>

(Financials based on 2013/2014)

Total Replacement and Refurbishment Cost for Heavy Fleet

Fleet Type	2014/2015 \$000	2015/2016 \$000	2016/2017 \$000	2017/2018 \$000	2018/2019 \$000	Total
EWP	2,595	3,510	2,670	3,324	3,001	15,100
Crane Borer	0	0	1,140	1,710	1,140	3,990
EWP Refurbishment	720	640	640	480	1,200	3,680
Crane Borer Refurbishment	300	450	600	1,050	600	3,000
VLC Refurbishment	128	159	78	178	303	846
Total	3,743	4,759	5,128	6,742	6,244	26,616

(Financials based on 2013/2014)

Total forecast costs for all replacement fleet during the 2014/2019 regulatory period

The figures below have been derived from total planned units for replacement multiplied by the Baseline replacement costs. These statistics are shown previously and detailed information is provided in the appendices.

() - Brackets indicate number of units for replacement consideration.

Fleet Type	2014/2015 \$000	2015/2016 \$000	2016/2017 \$000	2017/2018 \$000	2018/2019 \$000	Total \$000
Air Compressor					45 (1)	45 (1)
Semi Trailer		80 (1)				80 (1)
Cable Drum Trailer	100 (2)		50 (1)	100 (2)	50 (1)	300 (6)
Cable Winch		270 (1)			270 (1)	540 (2)
EWP - Plant	1,440 (8)	1,935 (12)	1,485 (10)	1,959 (9)	1,786 (8)	8,605 (47)
EWP - Vehicles	1,155 (8)	1,575 (12)	1,185 (10)	1,365 (9)	1,215 (8)	6,495 (47)
Borer - Plant			820 (2)	1,230 (3)	820 (2)	2,870 (7)
Borer - Vehicle			320 (2)	480 (3)	320 (2)	1,120 (7)
Front End Loader / BH				210 (3)	140 (2)	350 (5)
Pole Loader					200 (1)	200 (1)
Excavators	100 (2)	100 (2)	250 (5)		50 (1)	500 (10)
Forklifts	150 (3)		100 (2)		100 (2)	350 (7)
Generator Sets			250 (1)			250 (1)

Vehicle Loading Cranes	100 (2)	200 (4)	200 (4)	200 (4)	250 (5)	950 (19)
Trailers	40 (4)		50 (5)	80 (8)	60 (6)	230 (23)
Tailboard Loader		5 (1)		5 (1)	5 (1)	15 (3)
Light Cab chassis	900 (25)	1,440 (40)	1,440 (40)	1,116 (31)	720 (20)	5,616 (156)
Fleet Type	2014/2015 \$,000	2015/2016 \$,000	2016/2017 \$,000	2017/2018 \$,000	2018/2019 \$,000	Total
Panel Vans	2,730 (70)	1,950 (50)	2,340 (60)	1,950 (50)	741(19)	9,711 (249)
Utilities	1,280 (40)	576 (18)	672 (21)	576(18)	512 (16)	3,616 (113)
Station Wagons 4x4	572 (11)	1,300 (25)	832 (16)	260 (5)	572 (11)	3,536 (68)
Trucks – > 5 t	345 (3)	230 (2)	1,495 (13)	1,495 (13)	1,495 (13)	5,060 (44)
Trucks - < 5 t				340 (4)	425(5)	765 (9)
Tipping Trucks		95 (1)	475 (5)	570 (6)	570 (6)	1,710 (18)
Specialised Trucks		170 (1)	680 (4)	340 (2)	1,190 (7)	2,380 (14)
Total Fleet	8,912 (178)	9,926 (170)	12,644 (201)	12,276 (171)	11,536 (138)	55,294 (858)

(Financials based on 2013/2014)

Chapter 7

Summary of Fleet Forecast Plan 2014 / 2019

Total Capex Forecast Period 2014 - 2019

	2014-15	2015-16	2016-17	2017-18	2018-19	Total 2014-19
Total fleet capex						
- Replacement \$,000	8,912	9,926	12,644	12,276	11,536	55,294
- Replacement Number fleet	178	170	201	171	138	858
- Refurbishment \$,000	1,148	1,249	1,318	1,708	2,103	7,526
- Refurbishment Number fleet	17	20	16	21	32	106
Total Capex Forecast - \$,000	10,060	11,175	13,962	13,984	13,639	62,820

(Financials based on 2013/2014)

Replacement volumes by category

	2014-15	2015-16	2016-17	2017-18	2018-19	Total 2014-19
Replacement volumes						
EWP	8	12	10	9	8	47
Trucks	8	12	10	9	8	47
Crane Borer			2	3	2	7
Truck			2	3	2	7
Light Commercial cab chassis	25	40	40	31	20	156
Panel Vans	70	50	60	50	19	249
Utility / Station Wagons	51	43	37	23	27	181
Trucks	3	4	22	25	31	85
Plant (Other)	13	9	18	18	21	79
Total capex	178	170	201	171	138	858

Appendix A: Reference documents

Document Name
Ausgrid Motor Vehicle Selection Guide
Ausgrid Leased Vehicle Replacement Requisition
Ausgrid Heavy Plant Refurbishment Forecast Plan – 2014-2019
Ausgrid Fleet Replacement Forecast Plan – 2014-2019