



Revised Proposal Attachment 5.24.1 Motor vehicle, plant and minor assets capex

January 2019

Table of contents

1	EXECUTIVE SUMMARY	3
	Overview	3
2	OUR CUSTOMERS	5
2.1	Fleet reductions delivering customer savings	5
2.2	Benchmarking analysis	6
2.3	Revised proposal based on the lowest net present cost	7
3	REVISED PROPOSAL	10
3.1	Responding to emerging risks with our fleet	10
3.2	Key changes in our approach	11
3.2.1	Unit cost escalation	11
3.2.2	Replacement lifecycle	11
3.3	Sustainably managing the age of our fleet	12
3.4	Technological improvements	15
3.4.1	Investing in new vehicles can save lives	15
3.4.2	In-vehicle monitoring	15
3.4.3	Environmental benefits	15
3.4.4	Transformation risks	15
4	MINOR ASSETS	16
5	SUMMARY – CHANGES FROM OUR INITIAL PROPOSAL	17
5.1	Mapping from initial proposal to revised proposal	18
5.1.1	Car	18
5.1.2	Light commercial	18
5.1.3	Elevated work platform (HCV)	18
5.1.4	Crane borer plant (HCV)	18
5.1.5	Heavy commercial vehicles	18
5.1.6	Plant	19
5.1.7	Minor assets	19

1 Executive summary

Overview

We propose a revised motor vehicle and plant capex of \$86.7 million (real, FY19). This is 12 percent lower than the \$98.6 million (real, FY19) we put forward in our Initial Proposal to the Australian Energy Regulator (AER). Separate to our fleet and plant capex, we propose \$22.7 million in minor assets capex for the 2019-24 period.

Each element of our forecast is outlined in Figure 1 below. Our Revised Proposal compared to the AER's Draft Decision and our Initial Proposal is also set out in Table 1. This is using the same cost categories as in the AER's regulatory information notice (RIN). The changes since our Initial Proposal, in terms of each individual cost category making up our forecast, are summarised in section 5 below.

Figure 1

Fleet, plant and minor assets forecast (\$m, FY19)



Motor vehicles

Our fleet of motor vehicles and trucks support our operations in the field by providing a safe and reliable mode of transportation.



Plant

Plant assets comprise of the equipment we use in the field, such as elevated work platforms and vehicle loading cranes.



Minor assets

Minor assets include tools with an individual or group value below \$1000 as well as other miscellaneous items such as office furniture.

Table 1

Forecast according to AER’s RIN cost categories (\$m, FY19)

		INITIAL PROPOSAL	DRAFT DECISION	REVISED PROPOSAL
Motor Vehicles	Car	7.3	5.4	7.5
	Light commercial	23.0	17.0	11.2
	Elevated work platform	44.9	33.2	22.6
	Crane borer plant HCV	5.9	4.3	19.2
	Heavy commercial vehicles	13.0	9.6	12.3
	Subtotal	94.0	69.6	72.8
Other	Plant (not included in motor vehicles)	4.6	3.4	13.8
	Minor assets	25.4	0.0	22.7
	Subtotal	30.0	3.4	36.6
Total		124.1	73.0	109.4

Key points

- Customers will save up to \$19 million in capex next period as result of our revised forecast embedding a reduction in our replacement rate of 30% for light vehicles and 15% for all other motor vehicle and plant categories.
- Based on the AER RIN categories, we are forecasting \$72.8 million in motor vehicle capex. This is \$21.2 million (23%) lower than our Initial Proposal for this component of our forecast (see Table 1 above)
- We are forecasting \$13.8 million in plant capex compared to \$4.6 million in our Initial Proposal. In developing our Revised Proposal, we utilised an updated financial model (see attachment 5.24.1). We also had access to an improved set of data on our plant equipment requirements which was not available when we developed our Initial Proposal.
- We have undertaken economic analysis finding that the least cost option in relation to crane borer equipment is to adopt a 10 year, instead of a 15 year, replacement lifecycle (see section 3.2.2 below). This is consistent with the AER’s Draft Decision.
- Ausgrid benchmarks well against our peers. In FY2020, we will have 0.52 motor vehicles per full time equivalent (FTE) employee. As set out in section 2.2, this ratio is in line with other distribution network businesses in the national electricity market (NEM).
- Key changes in our forecast since our Initial Proposal are set out in section 5 of this attachment.

2 Our customers

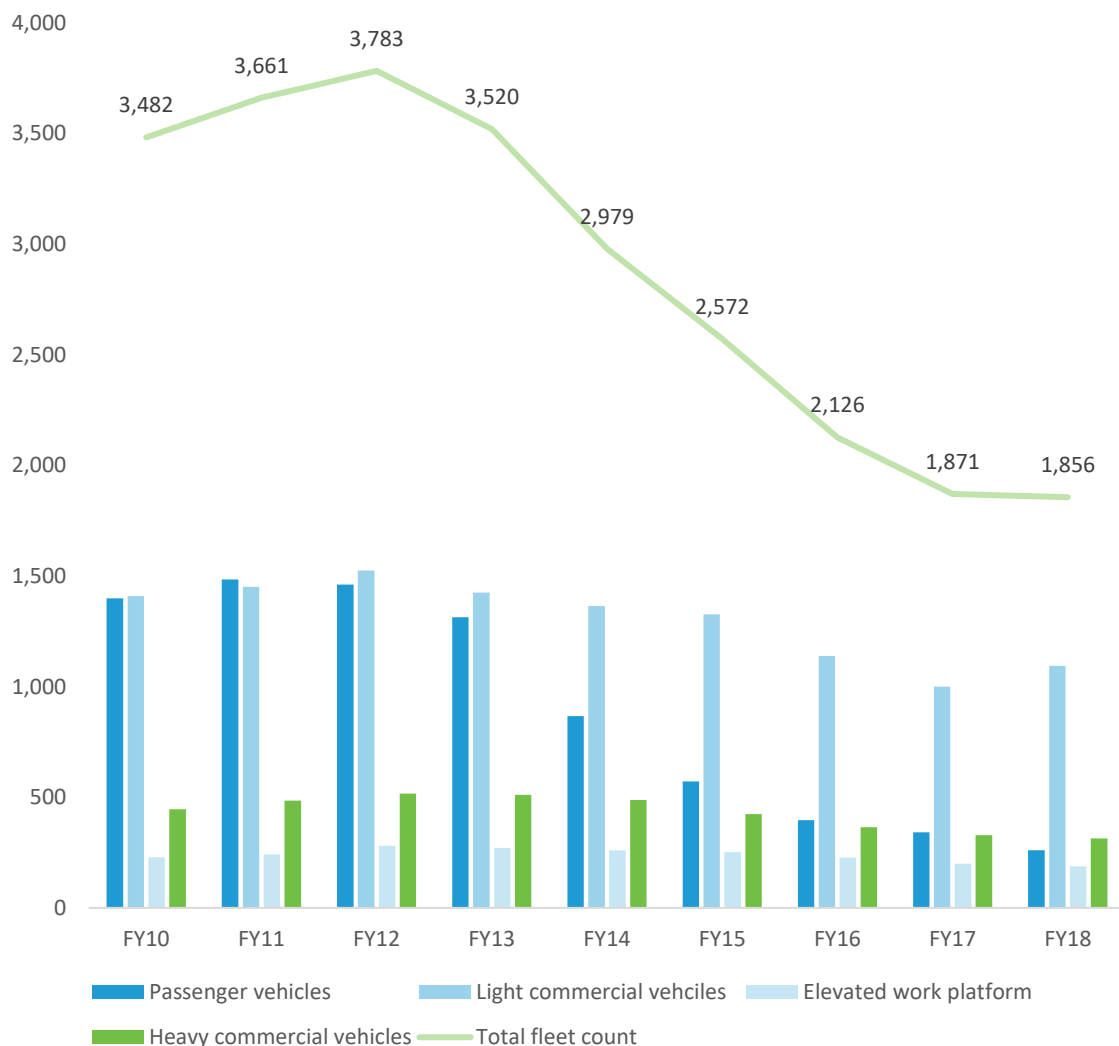
Ausgrid is exiting a period of significant transformation. In terms of our motor vehicle and plant equipment, this transformation has unlocked substantial benefits for our customers. This is principally from a reduction in the size of our fleet and the avoided capex that this entails. In the 2019-24 period, we will build on these achievements by managing emerging risks through sustainable investment.

2.1 Fleet reductions delivering customer savings

In recent years, we have reduced the size of our motor vehicle fleet significantly. Ausgrid currently has a fleet of 1,856 motor vehicles – 50% less than our peak of 3,783 motor vehicles.

The achievements we have made in terms of fleet reduction are shown in Figure 2 below. It shows that while we have reduced our fleet count across all vehicle categories, passenger vehicles have in particular been targeted through a rationalisation process. We targeted passenger vehicles given that they cannot carry equipment and tools to job sites. They are therefore less productive than other vehicles types, such as light commercials or trucks.

Figure 2
Historical fleet count by vehicle category (\$m, FY19)

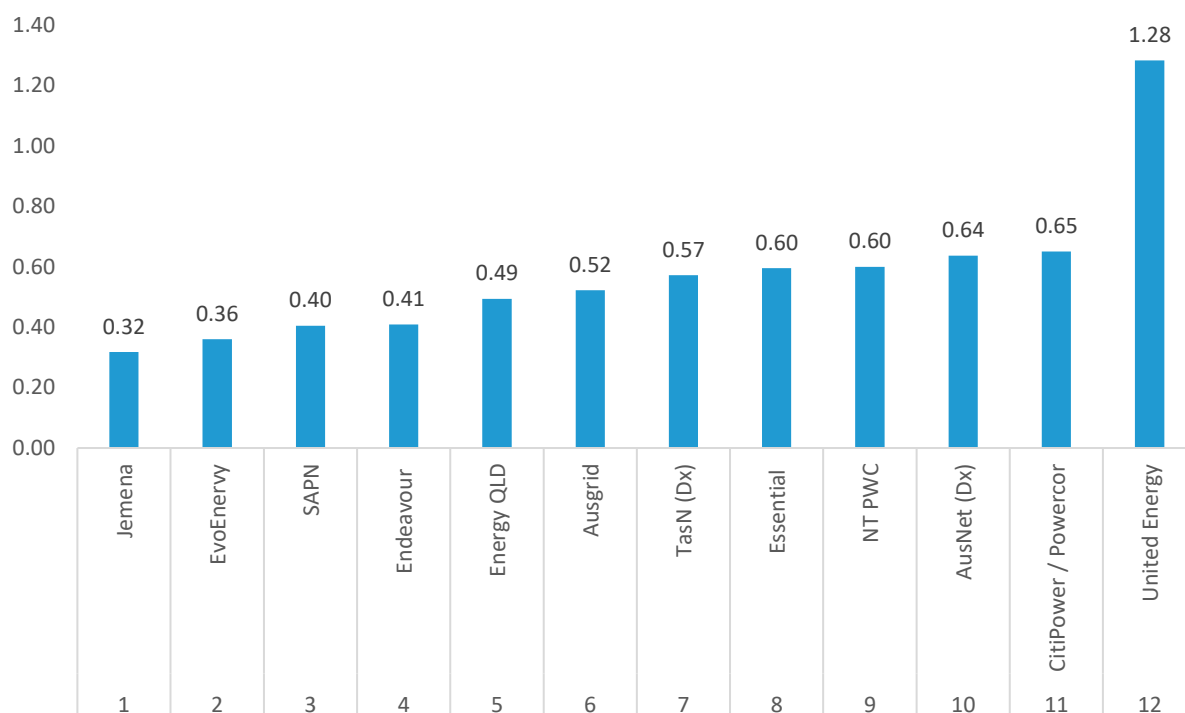


2.2 Benchmarking analysis

We can obtain an indication of the benefits we are delivering our customers in terms of efficiency by measuring our performance against our peers in the NEM.

Ausgrid's fleet of motor vehicles per FTE compared against other NEM businesses is set out in Figure 3. Vehicle per FTE was used to provide an indication of efficiency as it provides a guide with respect to the utilisation, and therefore productivity, of these assets. In the lead up to the submission of our revised proposal, the AER and stakeholders also indicated that motor vehicle per FTE was their preferred measure for benchmarking an electricity distributor's relative efficiency.

Figure 3
Motor vehicles per full-time equivalent (FTE) employee



It is shown above that Ausgrid performs well against our peers. In FY2020, we forecast a vehicle per FTE ratio of 0.52, which is roughly in line with Energy Queensland (0.49). This vehicle to FTE ratio is based on our expected employee count of 3,651 FTEs as of 1 July 2019 and our forecast motor vehicle count of 1,907 as of the same date. Data on the fleet count and FTEs of each other business in the NEM is based on their last published Category Analysis RIN response.¹ Note we have combined CitiPower and Powercor for benchmarking purposes given their shared corporate structure. This is consistent with past AER decisions.²

While our analysis reveals that some businesses have a lower vehicle per FTE counts than Ausgrid, a significant driver of this appears to be factors outside of management control. For example, Jemena (0.32) and Evoenergy (0.36) both have lower vehicle to FTE ratios, yet they have relatively small networks. Jemena has 6,345 km of line length while Evoenergy's has 5,333 km. Ausgrid, by comparison, has 41,642 km of line length – equivalent to 12 EvoEnergy networks. In practice, this means that our field crews have considerably more network to maintain and drive to when there is a fault. To do this safely and reliably, requires additional motor vehicles.

There is also likely to be a link between customer numbers and fleet size. While, for example, SA Power Networks has a vehicle to FTE ratio which is lower than Ausgrid, SA Power Network has fewer customers – it has 0.878 million connections while we have 1.706 million. This is important factor to consider as it would be inefficient to increase the

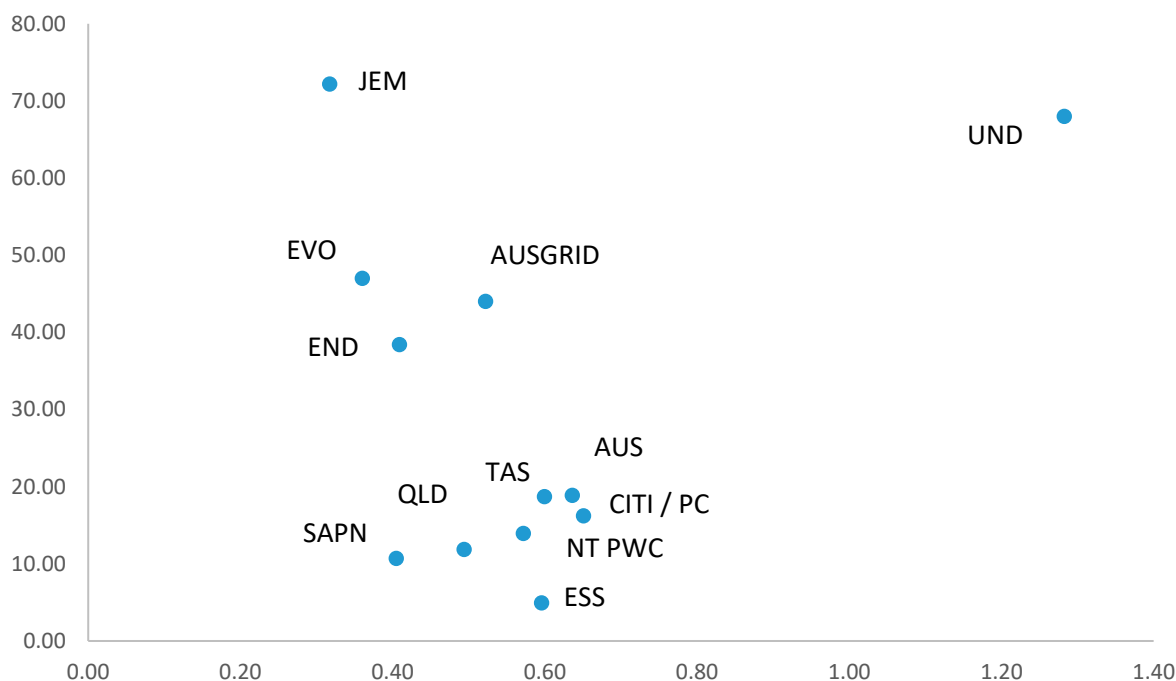
¹ Category Analysis RIN, Template 2.6 'Non-Network'.

² Ausgrid. Final decision: AMI transition charges applications, December 2016, p.25

number of vehicles a network operator has within its fleet if the additional cost will only have a small benefit to that operator’s overall customer base. For example, an additional light commercial vehicle added to a depot in a regional area may not be an efficient investment if the additional cost only improves the outage times of a handful of customers on a long, isolated feeder. It follows that Ausgrid – with a large customer base – requires more vehicles per FTE to maintain our service, in line with efficient service delivery.

For completeness, we considered our performance on a vehicle per FTE basis in conjunction with the respective customer densities of each distributor in the NEM. Figure 4 below plots this relationship. It shows two businesses with a higher network density than Ausgrid have a lower vehicle per FTE count (Jemena and EvoEnergy). In general, however, there does not appear to be a strong relationship between these metrics. For example, United Energy, has a higher network densities than Ausgrid, yet it has a materially higher vehicle count per FTE.

Figure 4
Motor vehicles per full-time equivalent (FTE) employee



We have undertaken the above benchmarking analysis to see if we are delivering for our customers in terms of efficiency. Ausgrid cautions against using partial performance indicators, and benchmarking in general, to deterministically adjudicate on the efficiency of an investment program. Nonetheless, we consider our performance against other businesses, particularly when adjusting for exogenous factors such as the size of our network and customer numbers, is strong. This reveals, in our view, that the transformation program we have undertaken in recent years has delivered customer benefits in terms of our motor vehicle fleet.

2.3 Revised proposal based on the lowest net present cost

In relation to our Initial Proposal, the AER’s Consumer Challenge Panel (CCP) submitted:

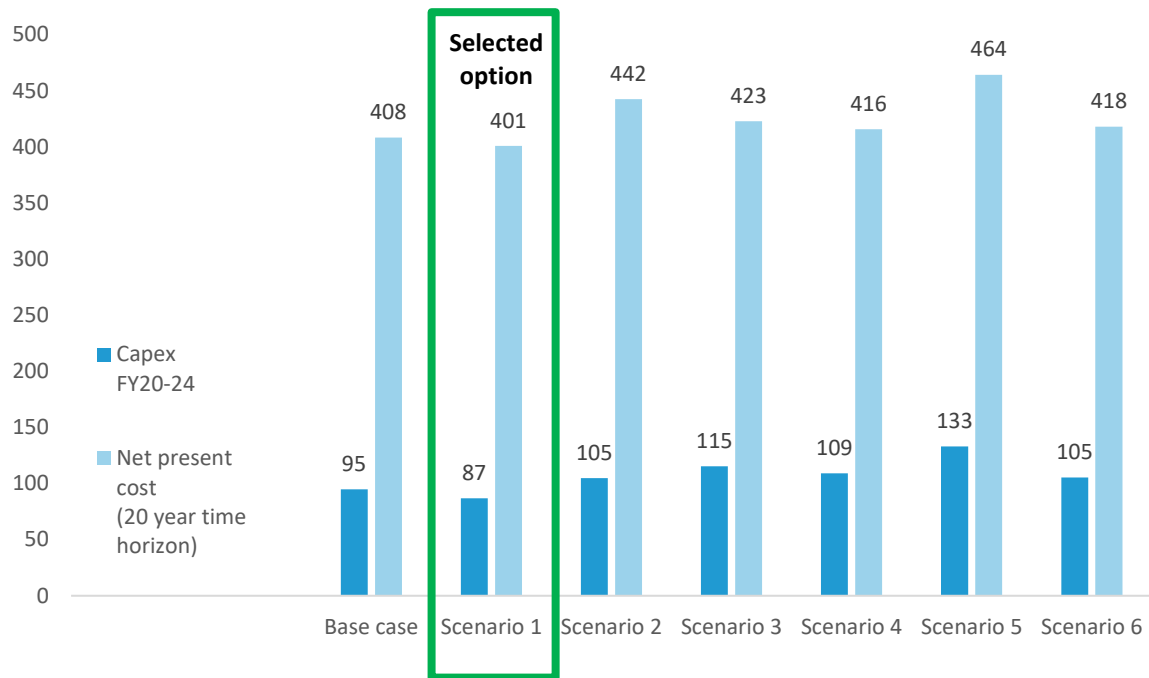
Ausgrid plans to make significant investments in vehicles, property upgrades and facilities. Against the backdrop of rapidly falling staff numbers, we believe that Ausgrid should demonstrate opportunities to rationalise property and fleet services.³

We considered the CPP’s submission when developing our Revised Proposal. Opportunities for rationalising our motor vehicle and plant equipment were also considered during our review and challenge processes, led by our Investment Governance Committee (IGC).

³ Consumer Challenge Panel, Submission on Ausgrid’s regulatory proposal, August 2018, p.61.

Ultimately, these considerations have led to updates to our financial modelling which ran multiple investment scenarios using different assumptions regarding price, escalation and replacement lifecycles. The results of this analysis and the assumptions underpinning each option are summarised in Figure 5. It is shown that the scenario forming the basis of our revised proposal has the lowest net present cost (NPC) for Ausgrid and, ultimately, our customers. This NPC analysis was run over a 20-year time horizon from FY2020 to FY2039 and factored in both capital and ongoing operating and maintenance costs.

Figure 5
Investment scenarios for motor vehicle and plant program (\$m, FY19)



	BASE CASE	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
Unit price source	Supplier quote	Historical average	SG Fleet data	Supplier quote	Historical average	SG Fleet	Historical average
Escalation source	Not applied	Glass data escalation	Not applied	Not applied	Glass data	Not applied	Glass data escalation
Replacement life cycle	15 years	15 years	15 years	10 years	10 years	10 years	15 years
Light vehicle	-10%	-30%	-10%	-10%	-10%	-10%	0%
EWP	-10%	-15%	-10%	-10%	-10%	-10%	0%
Heavy vehicle	-10%	-15%	-10%	-10%	-10%	-10%	0%

Note: We have provided our Motor Vehicle and Plant financial model at attachment 5.24.1. The 'scenarios' tab provides scope for investment scenarios in addition to those listed above to be run.

The investment scenario we have selected applies the AER's Draft Decision in relation to unit cost escalation. This involved using our historical unit rates for motor vehicle and plant equipment and escalating them using a data source

provided by an independent advisory firm (Glass). Similarly, we have responded to the AER's concerns about our assumed EWP replacement lifecycle by applying the same assumption (15-years) as in the AER's Draft Decision.

We elaborate further on the key components of our forecast and how we have responded to the findings in the AER's Draft Decision in section 3.2 below. It should, however, be noted that we have embedded in our revised forecast a 30% reduction to our replacement rate for light vehicles and 15% for all other asset categories. This, in our view, responds to the CPP's submission that we should consider a rationalisation of our motor vehicle and plant equipment in the 2019-24 period in anticipation of further transformation initiatives.

3 Revised proposal

The AER's Draft Decision raised specific concerns about our unit cost escalation and assumptions regarding an efficient replacement lifecycle for elevated work platforms (EWPs).

We have considered the AER's concerns as well as the views of our stakeholders. This has led to us adopting the same unit cost escalation and EWP replacement lifecycle assumptions that the AER applied in its Draft Decision. We have also updated our financial modelling to improve its transparency and incorporated feedback from our stakeholders by embedding a reduction in our motor vehicle and plant equipment replacement rate in the 2019-24 period.

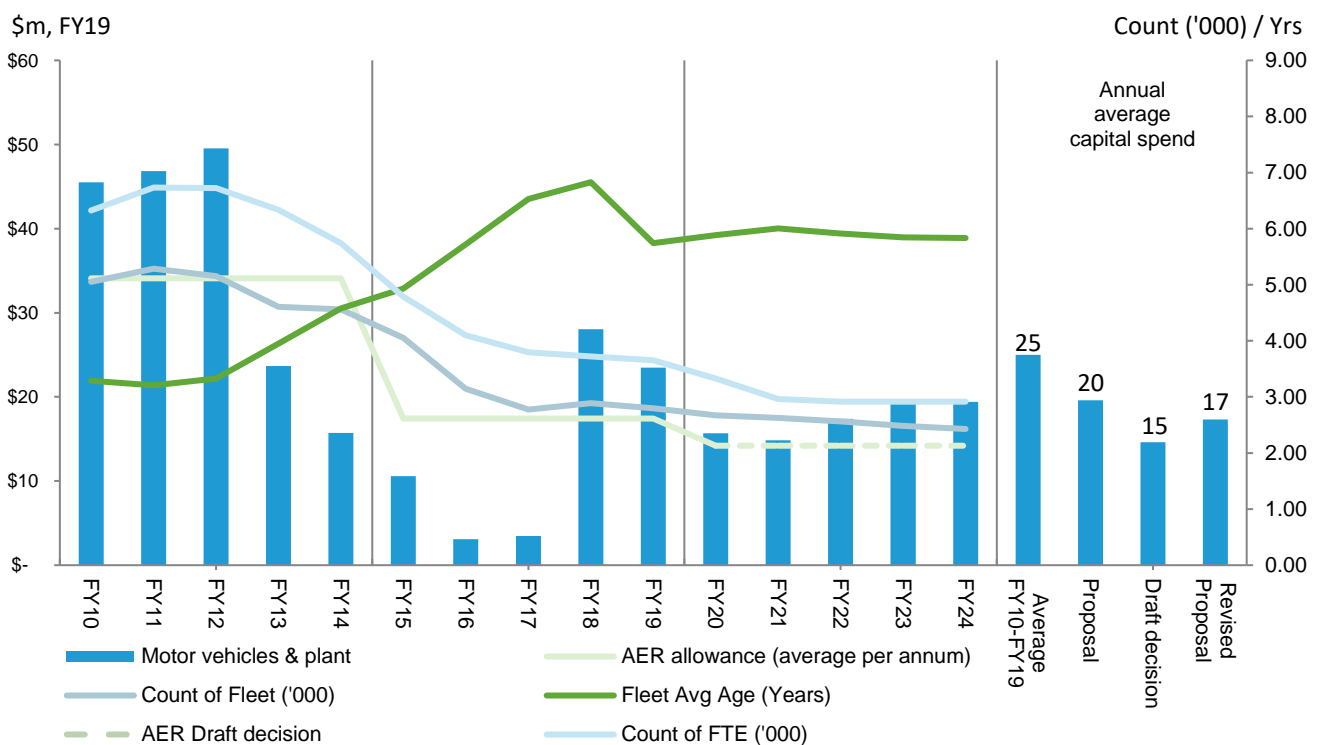
3.1 Responding to emerging risks with our fleet

Our fleet capex forecast has been developed in the context of a recent transformation of our business.

In the 2014-19 period, Ausgrid undertook a motor-vehicles rationalisation process. This formed part of a broader transformation strategy targeted at improving business efficiencies. The subsequent suspension of capital investments was also influenced by significant regulatory uncertainty surrounding our 2014-19 revenue allowance and a disruptive long-term lease-transaction process.

The figure below sets out our actual capex on motor vehicles, plant and minor assets in the current period, compared with our forecast in the upcoming 2019-24 period. It shows that our Initial Proposal included a forecast that would have restored our level of investment to the historical average. Since then, however, we have undertaken additional analysis that revealed a lower forecast would be sufficient to meet our prudent and efficient investment requirements. This additional analysis is set out in a revised financial model, the inputs of which have incorporated the views of our IGC during our internal review-and-challenge processes, as well as the AER's Draft Decision and stakeholder comments about prudent and efficient investment practices. The revised financial model is set out in full in attachment 5.24.2.

Figure 6
Historical and forecast motor vehicle capex



3.2 Key changes in our approach

Our updated forecast takes a different approach to key assumptions, compared to our Initial Proposal. These changes have followed on from our internal “review and challenge” processes – chief among which is our IGC. The updates which we have made to our forecast also respond to key findings made by the AER in its Draft Decision and submissions made by stakeholders.

3.2.1 Unit cost escalation

We used our historical replacement costs to develop our Initial Proposal for motor vehicle and plant equipment. To adjust for movements in vehicle prices from year-to-year, we then applied a 15% uniform adjustment on those historical rates.

Ausgrid acknowledges that substantial supporting information confirming the accuracy of a uniform escalation factor would have to be provided for it to be accepted as a prudent and efficient basis for forecasting our motor vehicle and plant capex. In the absence of this supporting information, we understand that the AER and stakeholders would consider that a uniform escalator would risk adjusting our historical replacement costs above, or below, our likely future costs. This in turn could lead to our customers paying too much for our replacement and refurbishment costs. Equally, the forecasting risk inherent with a uniform adjustment factor could lead to our business not having sufficient funding, potentially resulting in underinvestment at the expense of safety and reliability.

Revised Proposal

We have not applied a uniform escalation factor in forecasting our unit costs for the Revised Proposal.

Our updated modelling ran multiple investment scenarios using different assumptions regarding price and escalation. We considered the most accurate forecast to be our “supplier” unit costs with no escalation applied to them. This is given that these reflect the current market rates sourced from an independent advisory firm (SG Fleet).

When selecting the unit rates applied in our financial modelling, we have nonetheless considered our stakeholders' views. Given that they told us that they have a clear priority in favour of affordability in the 2019-24 period, we have decided to apply rates that are below the supplier unit costs sourced by SG Fleet. These lower rates are based on our historical procurement costs with escalators applied to them sourced from Glass Advisory. This method of forecasting our unit costs also aligns with the AER's position in its Draft Decision.

The approach we have taken, in our view, is an example of Ausgrid actively seeking to incorporate our stakeholders' views and the AER's Draft Decision findings. It has, moreover, resulted in our motor vehicle and plant capex in our Revised Proposal being \$2.3 million lower over the 2019-24 period, compared to if we applied the “supplied costs” recommended by SG Fleet. If we are to recover our costs following our decision to embed this saving in our Revised Proposal, Ausgrid will have to pursue productivity improvements that unlock efficiencies in other areas of our motor vehicle and plant line of business.

3.2.2 Replacement lifecycle

The replacement lifecycle assumed for motor vehicles is an important input into the rate at which we replace our motor vehicles in the 2019-24 period. Its length also presents trade-offs for our customers.

A shorter replacement lifecycle will mean that we are replacing more assets in a class of vehicles. In a short 5-year regulatory period this may come at a higher capital cost. Over the long run, however, customers could benefit from a short asset lifecycle by avoiding expensive refurbishment costs. There are also additional maintenance and other costs associated with operating older assets. Safety, environmental and other qualitative factors should also be considered when making these decisions.

Our Initial Proposal flagged a potential change from our current 15-year replacement lifecycle for EWPs, to a 10-year strategy. In support, we provided economic analysis which showed that this was, over the long run, the lowest cost option to pursue. In addition to this, the AER accepted a 10-year replacement lifecycle for EvoEnergy just prior to our Draft Decision. The AER even referred to the NSW distributors 10-year strategy in not accepting Evoenergy's proposal for an 8-year cycle. It stated: 'We have adjusted to [sic] Evoenergy's model to change the replacement ages from 8 to 10 years, consistent with industry practice (NSW distributors)'.⁴ Notwithstanding that the AER accepted a 10-year

⁴ Ausgrid. Draft Decision: Evoenergy distribution determination 2019-24, December 2016, p.74

replacement lifecycle for EWPs for Evoenergy, the AER concluded that a 15-year replacement rate was prudent and efficient for Ausgrid.

Revised proposal

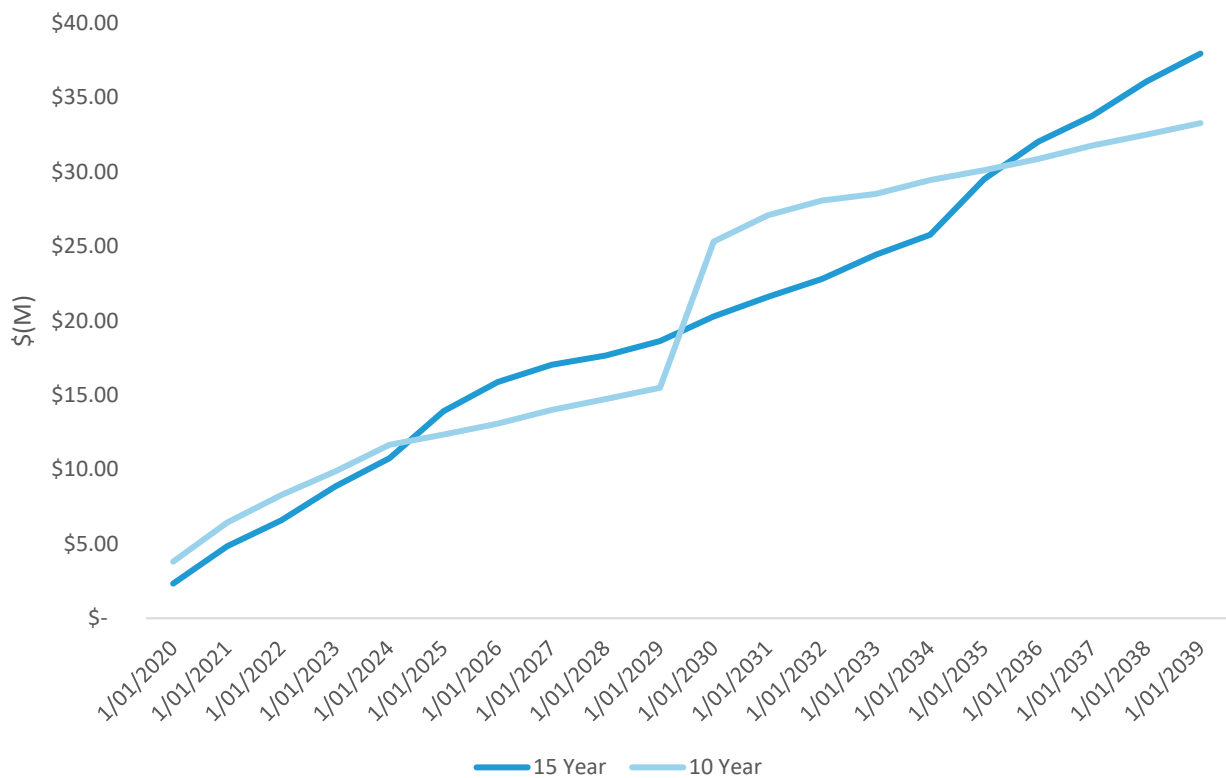
Our Revised Proposal is to:

- apply a 15-year replacement lifecycle for EWPs, in line with the AER’s Draft Decision
- incorporate a 10-year asset replacement lifecycle for crane borers in the 2019-24 period.

The adoption of a 10-year replacement lifecycle for crane borers is based on economic analysis showing that this is the least cost option for Ausgrid and, ultimately, our customers. The NPC analysis demonstrating that this is the case is set out in Figure 7 below. It shows that although a 10-year replacement strategy would incur an additional cost after 10-years, by 15-years and beyond, it becomes the least cost option.

Figure 7

NPC analysis of crane borer replacement life cycles (m, nominal)



Our NPC for both crane borers and EWPs is set out in full at attachment 5.24.3. It is shown that under a 15-year replacement lifecycle Ausgrid is required to spend significant capex on refurbishing a crane borer equipment. This is in undertaking all reasonably practicable steps needed to maintain the safety of these assets. Under a 10-year lifecycle, by contrast, we can avoid these significant refurbishment costs, unlocking long-term savings (as shown in Figure 7 above) to the benefit of our customers.

3.3 Sustainably managing the age of our fleet

Age is a key driver for motor vehicle and plant investment. Over time these assets decline in condition, become more prone to breakdown, present safety risks and are costlier to operate and maintain. Age also impacts productivity, as assets that are approaching the end of their technical life tend to require additional maintenance, during which time they cannot be utilised by our field crews to deliver services to our customers.

In the 2019-24 period, we plan to manage the age of our motor vehicle and plant assets within a “sustainability benchmark”. We calculated this benchmark as the midpoint in the technical life of an asset. SG Fleet – an asset management firm specialising in motor vehicles and plant equipment – advised us on this approach and provided us with the data to make the calculation.

We selected the midpoint in an asset’s technical life as our benchmark since this is when its age, and therefore condition, is optimally managed in terms of sustainability. By contrast, when an asset class has an average technical life that is:

- below the midpoint of their technical age – there is likely to be a high volume of assets of a **young** age indicating that too many assets above a sustainable level may be recently replaced
- above the midpoint of their technical age – there is likely to be a high volume of assets of an **old** age indicating that too few assets below a sustainable level may be recently replaced

The table below tests our Revised Proposal against this sustainability benchmark. It shows that for each asset class the average age will be in line with, or above, our benchmark. This indicates to Ausgrid that our planned motor vehicle and plant investment aligns with a sustainable management of the condition, safety and efficiency of these assets. Ultimately, we consider this to be in the long-term interests of our customers.

Table 2

Average age compared to sustainability benchmark

	AVERAGE AGE OVER PERIOD	BENCHMARK SUSTAINABLE AVERAGE AGE	DIFFERENCE
Passenger vehicles	2.3	2.5	-0.25
EWPs	9.0	7.5	+1.49
Heavy commercial vehicles	8.0	7.5	+0.47
Light commercial vehicles	4.1	3.5	+0.60
Plant equipment	7.8	7.5	+0.32

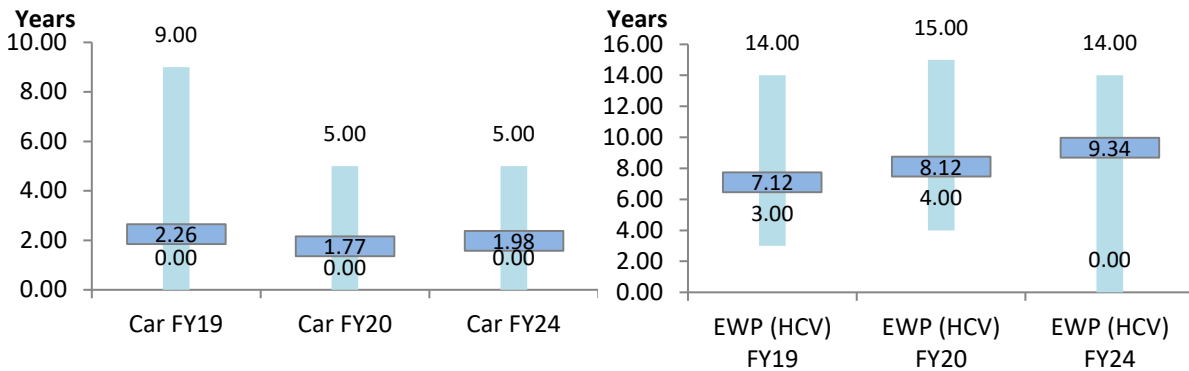
We have also considered how the average age of each asset class will change over the 2019-24 period. Figure 8 (on the next page) sets out this information for each motor vehicle category and our plant equipment. It also shows the spread of ages within an asset category; for example, in FY19 the youngest EWP asset is 3 years old and the oldest is 14 years. This is an important consideration because the spread in the age of an asset class can influence its performance relative to our sustainability benchmark.

This analysis shows that for certain asset classes (heavy commercial vehicles and plant equipment) we have an average age that is above our sustainable benchmark set at the midpoint of their technical life. By the end of our investment program, in FY2024, our Revised Proposal will address this risk by bringing the average age of these asset categories into line with our benchmark.

Other asset categories (EWPs and light commercial vehicles) start off below our sustainability benchmark but by FY2024 are above, on average, the midpoint of their technical life. Ausgrid has considered the risks which this presents and determined that any additional expenditure to manage the age of these assets would not align with what our customers have told us during our stakeholder consultation, nor with the priorities that they place on energy affordability.

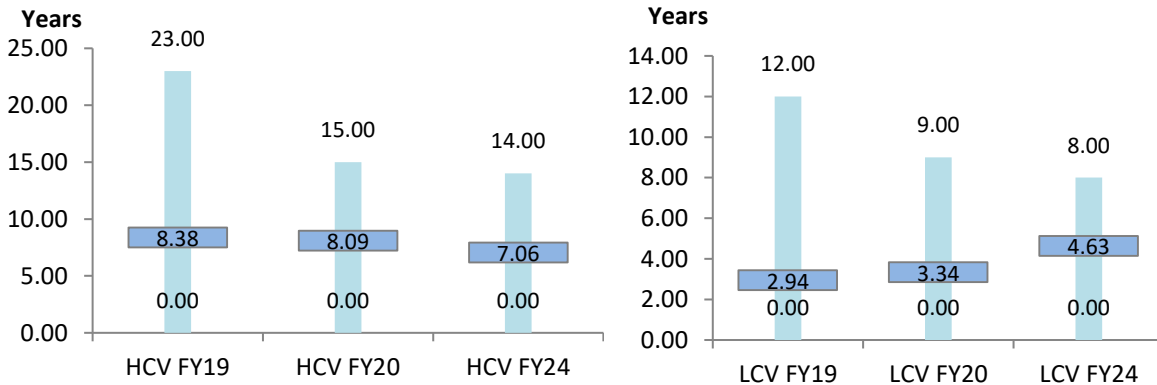
Figure 8

Change in vehicle and plant age in 2019-24 period



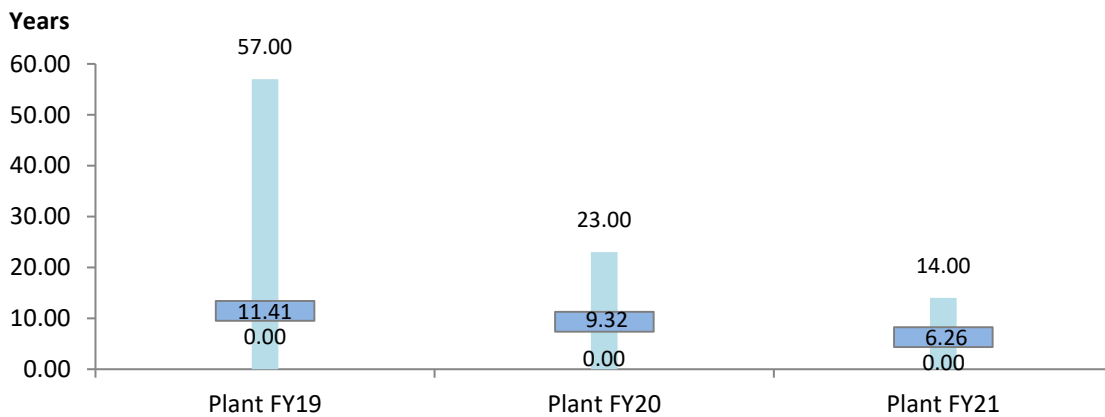
Passenger vehicles (cars)
Average age by FY24 (1.98 years) in line with sustainability benchmark of 2.5 years.

Elevated Work Platforms
Average age by FY24 (9.34 years) in line with sustainability benchmark of 7.5 years.



Heavy commercial vehicles
Average age by FY24 (7.06 years) in line with sustainability benchmark of 7.5 years.

Light commercial vehicles
Average age by FY24 (4.63 years) in line with sustainability benchmark of 3.5 years.



Plant equipment
Average age by FY24 (6.26 years) in line with sustainability benchmark of 7.5 years.

3.4 Technological improvements

Advancements in safety technology, now more than ever, are moving at a rapid pace. Our motor vehicle and plant investment program in the 2019-24 period will allow us to take advantage of these developments.

Our aim in implementing improved safety technology is, primarily, to protect our workforce – who we want to be able to do their job and get home safely, every day. Customers will, nonetheless, benefit too. Our roads will be safer if the cars, trucks and light commercial vehicles we operate on them have access to technology which can help avoid a collision with other vehicles or even pedestrians.

3.4.1 Investing in new vehicles can save lives

The severity of the injuries experienced as result of a motor vehicle accident decline over time as new technology is introduced which protects passengers during a collision. Data from the Australian New Car Assessment Program (ANCAP) reveals that the outcome for a passenger in a collision of equivalent force can improve from a fatality to only minor injuries in just 7 years of vehicle development.

Our most recent vehicle acquisitions, for example, have provided our workforce with access to AEB (Autonomous Emergency Braking) and LKA (Lane Keep Assist) capabilities. With the rollout of these more advanced safety features we expect to see a measurable decline in accidents. This translates directly to safer roads for not only our employees but our communities as well.

3.4.2 In-vehicle monitoring

We are currently rolling out an IVMS (in-vehicle monitoring system) system across our entire fleet of vehicles. This program is currently underway and we are expecting to reach full coverage by the end of January 2019.

There is an instant safety uplift of these vehicles once the system is fitted. A dashcam provides lane departure and forward collision warnings. The Garmin display shows current and posted speeds and notifies drivers when exceeding limits. The IVMS device itself records driving behaviours that will be reported back through the organisation to drive a cultural change in how we drive. There is also a duress button and pendant that gives lone or remote workers a way alert staff to an incident or dangerous situation.

3.4.3 Environmental benefits

In recent years we've seen the addition of Diesel Particulate Filters and Selective Catalytic Reduction to our heavy commercial vehicles. These technologies drastically reduce the particulate matter and poisonous gases (NOx) that are released into the atmosphere. For example, Elevating Work Platforms often work in a single position for extended periods of time. In urban areas especially, this is usually in close proximity to houses where our customers live.

The EWP itself is also subject to similar advancements in both operational capability and safety technology. Models currently being introduced to the market offer a host of features that could unlock efficiencies not available to older machines. These features include weight and stability monitoring, reduced operating footprint, automated recovery and remote diagnostics. Ultimately these deliver a machine that requires less effort from the operator to get the job done all while improving safety outcomes.

3.4.4 Transformation risks

Ausgrid is likely to continue its transformation program in the 2019-24 period as we work towards operating within a reduced funding budget and undertake measures to maintain or improve productivity, within the existing regulatory incentive framework. As we undertake this challenge, we will have to make sure that we have the right processes in place to manage the risks of safety incidents that commonly increase when a business undertakes transformation initiatives. Investing in vehicles with improved safety features will be an important initiative among the processes we implement.

4 Minor assets

Our Revised Proposal forecasts \$22.7 million in minor assets capex over the 2019-24 period. This expenditure category includes tools that have an individual or group value below \$1000, as well as portable testing equipment and office furniture.

The AER did not accept any of our proposed minor assets capex in its Draft Decision. It stated ‘we [the AER] have made no allocation for minor asset expenditure in the absence of information in regards to historical expenditure for this aspect of Ausgrid’s forecast’.⁵ We understand that the AER sought additional information as “minor assets” is not a standalone cost category in our annual reporting to the AER.

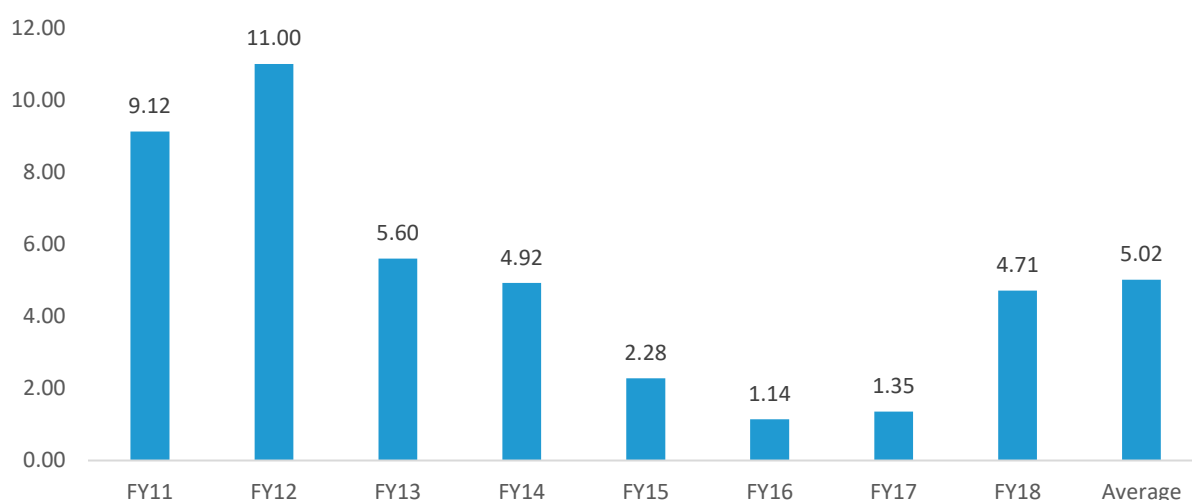
To provide the AER and stakeholders with greater visibility of our historical minor asset capex, we engaged PWC to review these costs. PWC verified that our historical minor assets capex has been reported to the AER as “other” in the ‘Non-Network template’ of our annual response to the AER’s regulatory information notice (RIN). PWC’s report is set out in attachment 6.03.

We applied PWC’s findings in the development of our Revised Proposal. Our minor asset costs are recurrent in nature and therefore, to develop our forecast, we have trended forward the historical expenditure which PWC verified in its report. This is the same forecasting approach the AER applied in its recent decision for Evoenergy, when it assessed a corresponding category of expenditure.⁶

In developing our base level of minor asset capex, we have adopted an average of the last 7 years’ worth of expenditure. We took an average of 7-years given that it would adjust for the annual variability in investment requirements from year-to-year. A longer-term view also smooths out historically-low investment in recent years which has arisen from the disruptions caused to our business by the lease transaction issue.

Our historical trend in minor assets capex which we have used to develop our forecast is set out below. It shows, on average, our minor asset capex has been \$5 million per year since FY2011. This average is in line with Ausgrid’s actual capex in our most recently completed financial year (FY2018). By applying this trend over the 2019-24 period, we forecast minor asset capex of \$25 million. We then applied our CAM to derive the standard control services component of our forecast, which is \$22.7 million.

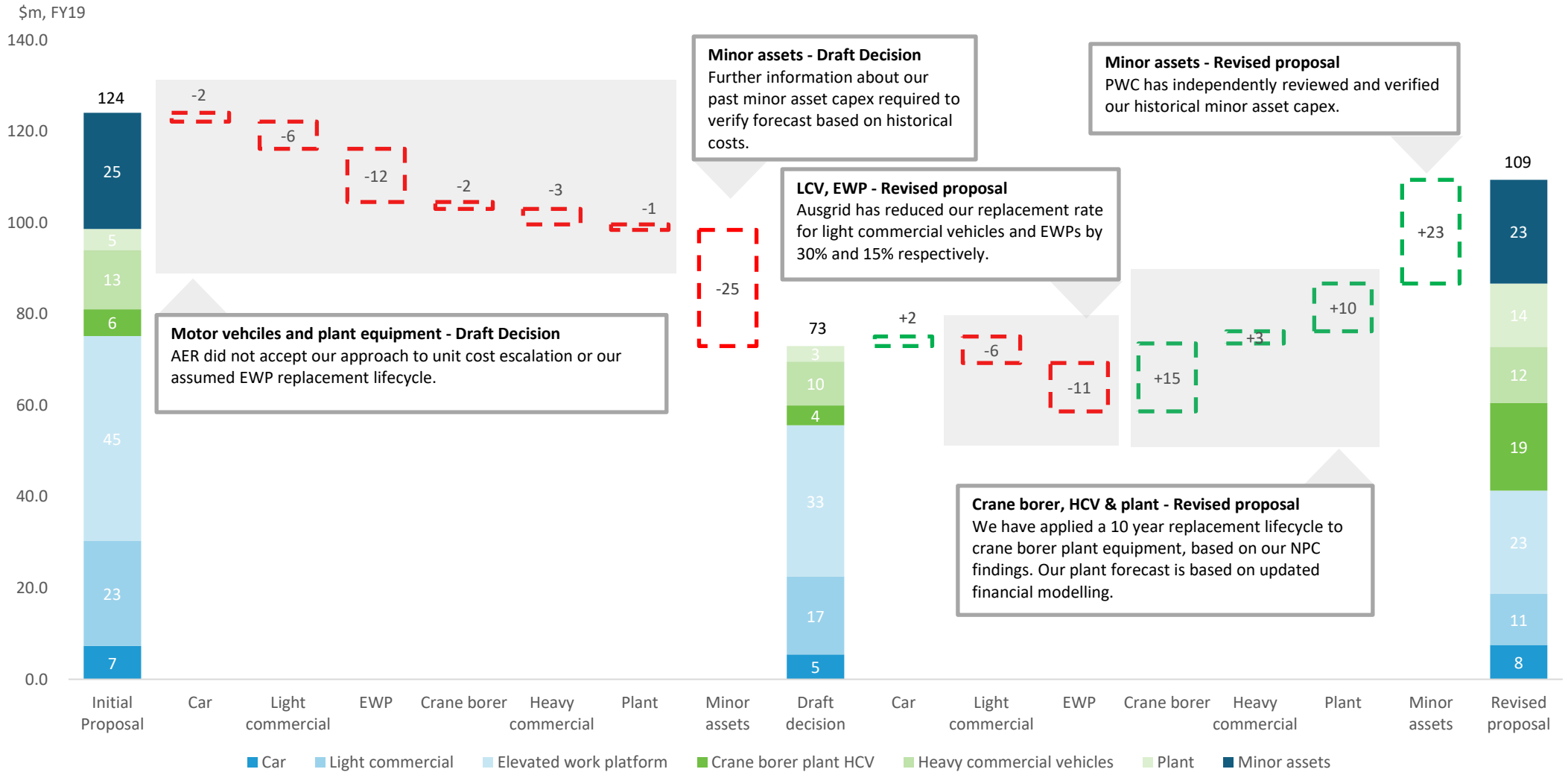
Figure 9
Historical minor asset capex – total (\$FY19)



⁵ AER, Draft Decision: Ausgrid 2019-24 period, November 2018, p.5-110.

⁶ AER, Draft Decision: Evoenergy 2019-24 period, September 2018, p.5-63.

5 Summary – Changes from our Initial Proposal



5.1 Mapping from initial proposal to revised proposal

To aid the AER and stakeholders in making their assessment, we have provided a mapping of the changes which we have made since submitting our Initial Proposal. The percentage change from our Initial to our Revised Proposal for each asset category is shown in Table 3 below. The driver of these changes is set out in sections 5.1.1 to 5.1.7.

Table 3
Historical minor asset capex – total (\$FY19)

	INITIAL PROPOSAL	DRAFT DECISION	REVISED PROPOSAL	INITIAL TO REVISED CHANGE (%)
Car	7.3	5.4	7.5	3%
Light commercial	23.0	17.0	11.2	-51%
Elevated work platform	44.9	33.2	22.6	-50%
Crane borer plant HCV	5.9	4.3	19.2	226%
Heavy commercial vehicles	13.0	9.6	12.3	-5%
Subtotal	94.0	69.6	72.8	-23%
Plant (not included in motor vehicles)	4.6	3.4	13.8	201%
Minor assets	25.4	0.0	22.7	-11%
	124.1	73.0	109.4	-12%

Note: AER values are estimated as no breakdown of the draft decision was provided by the AER when requested.

5.1.1 Car

Spend has largely remained the same with a change of 3% largely attributable to the difference in time of data snapshots that the proposals were based on. Ausgrid has significantly reduced our Car fleet in previous years and as such the current numbers are a good representation of business need. Since submitting our Initial Proposal, the data we hold on our fleet requirements has also been updated and improved with the assistance of EY.

5.1.2 Light commercial

Through improved management of Fleet we have proposed a 51% reduction to spend in this category. This is a significant reduction compared to our initial proposal

5.1.3 Elevated work platform (HCV)

A 50% reduction in spend has been proposed based on increased retirements. Our Revised Proposal for EWPs is in line with our investment decision to adopt a 15-year replacement life cycle for these assets, consistent with the AER's Draft Decision.

5.1.4 Crane borer plant (HCV)

This category sees the largest change from our initial proposal. As part of the development of the new fleet model for the revised proposal was an NPV analysis across all categories. On review, this analysis showed that replacing crane borers at 10 years delivered greater value for our customers than incurring the significant cost of major inspection required to extend life.

5.1.5 Heavy commercial vehicles

Heavy commercial vehicles have seen a reduction in spend of 5% from our initial proposal. This could be attributable to the difference in time of data snapshots that the proposals were based on. Using the recently installed IVMS system we will push for further efficiencies with our current numbers.

5.1.6 Plant

Based on the newly developed fleet replacement model, spend has increased in the plant category. This captures assets that are beyond their useful life and plans to replace them with current day units.

5.1.7 Minor assets

Minor assets spend has been verified by an external party and remains almost identical to the original submission.