

Workshop Questions and Answers

Note: Questions are de-identified and grouped where relevant for distribution outside of the workshop. Where answers where provided in the workshop, answers utilise captions recorded at the time. The answers provided during the workshop are italised.

General

1. Will the copy of presentation slides be available later?

A link to the webinar recording and slides has been sent to all webinar attendees. The recording and slides can be found under the "Review of Lighting Methods" section of the webpage here: https://energy.nsw.gov.au/government-and-regulation/energy-savings-scheme

2. Can we access the consultants' report now?

The consultant's work is in the draft stage and is not yet available for release. We are seeking feedback on the initial framing as presented in the webinar, to inform the consultant's recommendations.

We expect to release the final report when it is ready toward the end of this year, in advance of the Public Consultation on proposed changes to the Rule (due to take place mid 2021).

3. Are we able to provide additional comments to DPIE after today? Once we have had time to digest the study?

Yes. The NSW Government invited feedback from webinar participants to supplement responses given during the webinar by **COB 25 September 2020**.

Pre-workshop and chat pod questions

- 4. Has any specific research been done for the residential strata sector, or is it just assumed it's the same as commercial?
- 5. Where does residential strata common property fit in to [the 2020-2022 building types and assumptions] table?

We have assumed a refurbishment time of 15 years for all residential activities (which is considered generous given that bulb replacements are straightforward). However, the point is taken that common areas in strata buildings are quite different – potentially the longer refurbishment time of 20 years could be given here. We'll take it on notice.

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6. What about legacy LED installations (non-sensor)?

The deemed IPD baseline method is intended to cater for replacing LEDs with LEDs.

7. What happens when the space size and the electricity consumption overlap? E.g. a medium Office greater than 1000m² but consuming less than 100MWh/year? Do we have to choose? Or will there be one method only?

First response is that the Accredited Certificate Provider (ACP) can choose. We will examine this detail further. There is also a case for converging all commercial lighting to a simplified CLF method instead of HEER. Note that deemed lifetimes between HEERS and CLF will be the same.

- 8. Given the dramatic fall in residential does that mean they no longer need to contribute to the scheme?
- 9. Not the right balance between residential and commercial. NSW consumers have been paying close to \$650 million for ESS through higher electricity bills but mostly benefited businesses?
- 10. Residential all but wiped out after 2022 so I assume they won't need to contribute to the scheme anymore?

The ESS is a cross sectoral scheme that aims to put downward pressure on wholesale electricity prices for all customers by investing in the lowest cost energy savings activities, wherever they are found. It can't incentivise particular activity types. Over the next 30 years the scheme is legislated for it is expected savings will come from different sectors and activity types over time. There will be new methods, new activities and new equipment that comes in over time. For lighting, everything is getting more efficient and the opportunities for savings are diminishing.

- 11. Are you looking to extend the HEER Eligibility List to entire ELT? What about adding controls?
- 12. How will the use of smart controls influence ESC quantity in this new IPD model? Will the full range of control device factors in the IPD Calculation come into the ESS calculation?
- 13. Unless I am mistaken, the proposed solution does not seem to be fact based? The building performance before and after should be compared, similar to the project-based activities of the VEU scheme. Comparing the building AFTER upgrades to generic baseline data could be problematic, e.g. a building that already has energy efficient lighting could be upgraded and create an inaccurately high amount of certificates?

We are conducting further research into the more detailed aspects of the method.

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14. Was lighting specifically asked about when discussing office refurbishments, or were they just refurbished possibly without upgrading the lighting.

Lighting upgrades do not always occur when a space is refurbished. We would welcome any data and input into this.

15. Whilst DPIE can't encourage one technology over another, has DPIE modeled which technologies and activities and are expected to generate ESCs and in what volumes? Is there an expectation or strong possibility that not enough ESCs will be created and that Energy Retailers will need to pay the penalty price instead?

This type of analysis happens under the ESS Review. The ESS Review which is legislated to take place every 5 years assesses the operation of the NSW Energy Savings Scheme and determines whether the:

- Policy objectives of the scheme are being met
- Policy objectives remain valid
- Overall scheme design remains appropriate for securing those objectives

The ESS Final Statutory Review Report was tabled in the NSW Parliament on 26 June 2020 and can be found here:

https://www.parliament.nsw.gov.au/tp/files/77775/ESS%20Statutory%20Review%20Report%2020 20.pdf

The Energy Security Target and Safeguard Consultation paper further consulted on energy efficiency opportunities once commercial lighting reaches market maturity. The outcomes of the consultation and the results of the additional modelling will be published in the NSW Government's Position Paper.

Engagement Session 1

16. Considering the three options given, makes option three most suitable - balanced approach. The staged approach hopefully provides participants time to manage change. Current conditions -pandemic may have longer term impacts on commercial viability. Have these been accounted in the transition process? Should a longer transition time be considered? This will also allow participants to manage supply to meet obligations.

The three proposed solutions are not options, they are three components of a single strategy. We have consulted on the impacts of COVID-19 as part of stakeholder interviews and have incorporated the feedback into the proposed multi-year approach.

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17. Did the study interview any NSW consumers who effectively subsidised the scheme since 2009?

End-users (NSW consumers) were not interviewed as part of this study. However, we will seek feedback from a much broader range of stakeholders as part of the Rule Change Public Consultation.

18. Currently the lifetimes used for HEER Activity E11 (GLS replacements) and Activity E3 (PAR38s) are 10 years. Does this proposal mean that the E11 and E3 residential lifetimes will be increased to 15 years through to the end of 2021?

We have no plans to amend the rule to provide a 15-year residential lifetime. The presentation was designed to demonstrate process, using a snapshot of the rule. It is not exhaustive. However, we note that the assigned lifetime does not match the average refurbishment cycle. Rather, lifetime is formulated using 2018 as the point where spaces are assumed to be 50% through their refurbishment cycle.

19. Will these changes affect works that have already been budgeted for and due to commence in 2023? There is limited capacity to bulk changeover street lighting and installation crews have works booked in post 2022 already. If lifetimes are stepped down, some local government alliances will have an issue with one council getting full compensation while the next not receiving as much only due to how they fit in an installation schedule

We have not planned to grandfather any proposed projects.

20. Curious about further comments on co-contribution as believe HEER at \$30 is too low and has encouraged poor quality lighting. Will this be discussed further?

The proposed solution is to apply a minimum product quality requirement.

21. Office lighting and other like space types like public lighting/ Govt buildings requires larger incentive, industrial clients still seek strong commercials to proceed especially in weaker COVID economy. Why not let the program runs it natural course? I would argue transition period not long enough for business to adopt to this rapid change.

The proposed transition period is considered adequate, in light of the rapidly diminishing energy savings available from lighting upgrades.

22. I think it is overly complicated, differentiating based on office size for example, and reducing it over 2 years. Why not use an average and keep it simple?

We could and that's effectively what happens now. What we were told by stakeholders in the interviews is that different spaces and the quality (size) of different spaces has a strong bearing on

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how often it is refurbished. If we use an average, then the spaces that do deserve a longer refurbishment time wouldn't get it – they'd get a lower value as the average. So even though it makes it more complex we are trying to take a nuanced approach so that we can more accurately assign savings where they are worthwhile - to those types of spaces that deserve them, rather than giving everyone an average.

An average will result in excluding lighting for smaller/ lower grade office tenancies where there might be greater opportunity.

23. I am curious if the studies conducted included refurbishment rates in other states where there are NO energy efficiency incentives in place? If these states are refurbishing slower then perhaps to assumption of the meantime refurbishment rates are not so accurate.

There does not appear to be any data on this topic (in any state) thus we would welcome it if anybody is aware of any data sources.

There is no real dataset that we have been able to find which will tells how often a lighting system is replaced. We have had to use qualitative information and make some estimates. We did ask this question in stakeholder interviews in 2017 and got some answers and we have increased those refurbishment rates. So, it is not an exact science. To give you an example, for a medium sized office with an assumed 20-year refurbishment rate, what we're saying is that in 2023 if you find a fluorescent fixture it has five years to run. That is, in 2028, we will still find significant quantities of fluorescent fixtures. That's a generous assumption. If anyone has datasets to support anything else, please let us know.

24. What is the assumed baseline of installed stock of light bulbs in residential homes?

The remaining installed stock is not relevant to the calculations. What matters is *when* any remaining bulbs will transition to LED.

25. I think it's very difficult to talk about commercial viability without showing any analysis of the cost to purchase a LED without ESCs vs the costs including the ESC rebate but also the extra admin. What about a comparison between states with/ without rebates?

Our use of "commercial viability" referred to ACPs and our intent to provide them with sufficient notice to adjust to the changes and to stage the changes over time.

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Engagement Session 2

26. Not sure if the problem was low quality products or the fact that the co-contribution process encouraged use of previous generation products to reduce customer outgoings? Are you fixing the right issue?

We would welcome any data and input into this. Our understanding was that low quality (where quality includes the parameter efficacy) products were being used in order to reduce the customer co-contribution.

27. If the scheme only approves high quality and high efficiency products, is there even a need for co-payments? Who cares if products are incentivised to the point of being free if they are high quality?

Co-payments are not designed to maintain quality – they exist to ensure a minimum level of customer engagement to place a stop gap of poor installer and ACP practice. In the past in GGAS, ESS and VEET mass giveaways tended to attract short term opportunists to the schemes - increasing the risk to government and all other scheme participants of schemes failing.

28. Quality lighting outcomes goes beyond efficacy requirements. Lighting designers are already required for commercial upgrades in the ESS. Why not make use of them and ensure adequate light levels and high-quality lighting outcomes are provided? Colour shifting, motion sensing task lighting, human centric lighting, glare, CRI, lighting control systems etc. should all be considered.

We intend to strike a balance between administrative complexity and good lighting design outcomes. Currently, adequate light levels are required by demonstrating compliance with the lighting design code AS/NZS 1680. Going beyond this would risk increasing the administrative complexity of the scheme.

29. Complying to changes in regulations places a higher bar for business as usual then additionality factor is required to increase energy savings. Better quality vs cost of customer – shouldn't be a hinderance to take up energy saving activity as it becomes too costly due to increased quality?

If we understand the question correctly, it suggests that increasing product quality requirements for ESS installations will make them unaffordable? This is not the intention. The intention is to simply ensure that the quality of products is higher than the market average.

30. So many variables! In theory it might result in better additionality but why is the ESS trying to do what MEPS should do by increasing product performance?

The intention is to ensure that the quality of products is higher than the market average.

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Engagement Session 3

31. How to ensure IPD and AS1680 is met without Lighting Design and highly accurate space dimensions for every single space?

The ESS already requires installations to comply with NCC IPD requirements, meaning that dimensions should already be measured. Note also that under the new proposal the requirement to prove what types of lights were replaced would also effectively be removed, which would significantly decrease the administrative burden.

- 32. NABERS already uses the IPD calculation which incentivises building owners to increase efficiencies which result in greater tenant occupation and rental returns. Therefore, why would the ESS want to increase the level of incentive above what has already been put in place and will happen anyway?
- 33. With NABERS already implementing energy efficiency protocols what benefit, over the goal of increasing efficiency, does the ESS provide?
- 34. If it is being done under NABERS where is the additionality?

The CBD scheme does not regulate increased efficiency of lighting – it simply requires the disclosure of lighting performance. The ESS would only incentivise performance above the baseline level thereby encouraging improved outcomes.

35. Lower quantity of ESCs from this IPD Baseline proposal will only result in installations if ESC price skyrockets, is that what the scheme needs?

The Scheme is focused on the integrity of the energy savings it rewards. ESC price and the ESS market trends will be determined by a range of market variables.

36. I can see administrative costs increasing with more emphasis on lighting designs in order to determine whether you will achieve AS1680 standards while still trying to minimise w/sqm to maximise ESC savings. A good thing in the end of the day but high cost and little reward from the programme with ever declining ESC generation. What will be passed onto the OES?

The proposal does not aim to increase emphasis on lighting design. It aims to reduce administrative burden by (a) not having to demonstrate the type and nature of the old lights that were replaced, and (b) leveraging from trained NABERS assessors who are already performing large quantities of tenancy lighting assessments.

37. The ESS is planning significantly increased targets. However, what is proposed today will (a) significantly reduce commercial lighting certificate generation from 2022 because it will no longer be viable without significantly increased ESC prices and b) kill

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off HEER residential. Given that most of the ESC generation to date has come from commercial lighting, it is unlikely the ESS could deliver its targets without dramatically increased ESC prices - and therefore much higher Scheme costs to residential NSW consumers who will not benefit directly from the ESS. I assume this will be challenging politically to the future of the ESS?

We trust that as lighting incentives change, ACPs will continue to find opportunities, including those in other areas of the Scheme. The Energy Security Safeguard consultation paper consulted on potentially expanded range of activities, including those in the residential sector.

38. Would the penalty price be increased?

This is not something we can answer in this forum.

39. It seems like extra admin - is the ESS trying to duplicate the purpose of MEPS and NABERS? NABERS is commercially driven so default factors will only hinder the market.

The deemed IPD baseline proposal is not intended to duplicate, it is intended to take advantage of synergies – thereby reducing administration costs. Note that there will be an administrative improvement from not having to demonstrate the type and nature of the old lights that were replaced.

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