

6 September 2014

## Submission from Low Energy Supplies & Services.

- Thank you for the opportunity to provide a submission to the consultation paper and for the meeting with John Denlay, Inty Khan and Craig Walker in Adelaide on 27<sup>th</sup> August.
- We appreciate the long term support for the scheme by the state government and for the steps taken to further develop the scheme to provide meaningful support to energy efficiency initiatives in both residential and commercial sectors.
- With the proposed set of activities and the allocation of energy saving values the scheme is open to support high volumes of energy saving initiatives in the commercial lighting sector and introduces new opportunities in the residential low-income/priority group sector. However the mix of activities delivered in the residential sector is set to change dramatically, in the absence of 'free activities' that have dominated the scheme over the past 6 years.

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## 1. Activities in the Residential Sector with a full subsidy through the scheme

In the residential sector the core activities will require customer co-contribution which is a positive development in terms of maturing the energy efficiency effort from all stakeholders and providing support to initiatives that have a lasting impact.

The few activities that may be provided to the residents with a 100% subsidy through the scheme are:

- the activity of replacing an inefficient showerhead (WH2);
- various building sealing activities (BS2);
- install CFL general purpose lamp (L1);
- Energy Audits.

**WH2** The scheme supported showerhead replacements have been going for 6 years now and the opportunity to cut down by installing a 9l/min flow rate showerheads is practically exhausted.

The proposed activity with low flow showerheads of 6 litres per minute replacing showerheads with a flow rate higher than 9l/min is not practical in the residential sector - in many cases the flow restrictors are either removed by the householder or the installer is requested to reinstall the original showerhead.

On the other hand there is a substantial opportunity to improve energy efficiency in the commercial sector by installing showerheads with 9 litres per minute flow in motels, caravan parks, sporting clubs and some food processing facilities. To ensure compliance such activity in commercial sector should have record keeping requirements similar to those of commercial lighting - inspection by a qualified assessor before and after the activity has taken place, hot water supply and consumption audit form, photographs. In the commercial sector the replacement of the shower rose should be carried out by a licensed plumber.

**BS2** Various building sealing activities have a value to some householders, however they are unlikely to make significant opportunity in meeting the targets. A special note should be made on the removable activity of Fireplace or chimney Sealing - Chimney Balloons. With removable chimney balloons, as with the 6l/min flow showerheads, there is a high likelihood of it being removed by the householder. Chimney Balloons should only be available for reasonable quality, should have pumps and clear safety and replacement instructions.

**L1** The activity of installing CFL general purpose lamps has limited opportunity as it has been going for 6 years and the market has reached the point of saturation.

The specification of **Energy Audit** only allows this assistance to the few low-income households who haven't received the service over the 6 years of the schemes existence or where the recipients have moved to a new address.

The definition of priority group customers is limited to concession card holders and does not include those working for low wages/part time and living in privately rented properties.

## 2. Recommendations: Energy Audits and Activities in the Residential Sector

The increase in number and breadth of energy efficiency activities is welcomed.

Most of the proposed activities in the residential sector will require customer co-contribution and this will further strengthen the scheme and increase stakeholder engagement.

However it is notable that quite a few of these activities are available under the current scheme, and their uptake is very limited. In fact there is little or no additionality effect that could be observed in the market. The number of these energy efficient retrofits per year is not affected by the schemes existence and in the few cases where REES subsidised activities took place (i.e. ceiling insulation, hot water services) the financial incentive was absorbed by the industry.

As this point of transitioning the residential part of the REES scheme into the next level, a few adjustments to procedures and activities in the scheme can significantly improve its impact.

Unlike the NSW and Vic schemes, REES has an Energy Audit component which over the recent years resulted in developing a qualified workforce with strong work ethics. These qualified home energy assessors are in fact the only true ambassadors of the scheme and can play a very significant role in promoting the structural improvement activities directly to the householders and ensuring proper record keeping for scheme compliance.

The continuing requirement for the energy assessors to complete nationally recognised qualification modules further strengthens this aspect of the scheme.

A set of rules combining the advisory service in the residential sector with a structural improvement activity can direct the REES subsidy to activities with a meaningful long term impact and help retrofit the existing homes for energy efficiency:

- For low-income householders a second Energy Audit should be allowed in conjunction with a REES activity where customer co-contribution for a structural/thermal improvement takes place, i.e.: Insulation, Efficient Hot Water Service, Thermally Efficient Windows, a combination of various Building Sealing Activities, Heating and Cooling Systems and Ductwork.  
In these cases Energy Audit with also allow to collect evidence and improve the data kept on record with Activities such as ceiling insulation.
- To help with the uptake in the first year of the revised scheme consider applying a multiplier (i.e. multiplier of 2) for some structural/thermal improvement activities i.e. top-up of ceiling insulation, thermally efficient windows, heating and cooling systems and thermally efficient ductwork in priority group households only.

- Energy Audit combined with structural/thermal performance improvement activity should also be made available to private renters not holding Commonwealth Government concession cards. This makes the independent advisory service available to the tenant and information on subsidies for structural improvements available to the landlord.
- An Energy Audit on its own should be made available to private renters not necessarily holding Commonwealth Government concession cards, in the event of a new rental agreement or the renewal of an existing rental agreement. A QA/follow up call should be directed to both the tenant and the property manager:
  - to ensure compliance and
  - to inform about the scheme support available for structural improvements and the level of subsidy available through REES.

Combination of the above amendments to scheme activities and procedures will:

- help to promote the REES activities requiring customer co-contribution;
- make the advisory service available to priority group households seeking to improve energy efficiency in their home;
- extend the advisory assistance through the scheme to tenants in rental properties and include people on low income who are working casual and part time jobs;
- ensure the targets for Activities and Energy Audits can be met at the level similar to that of the past years or higher;
- ensure a high level of compliance with the structural/thermal improvement;
- Activities through involvement of qualified Home Energy Assessors and appropriate record keeping.

In our view the targets for Activities and Energy Audits in the residential sector should continue increasing year to year on the basis of

- Increase in number and breadth of energy efficiency activities
- Likely reduction in cost of delivery due to further development of the sector and the inclusion of Commercial activities.
- Significant benefits available for SA households
- Building on successful scheme.

LESS along with other members of EECCA (energy efficiency certificate creators association) should be further consulted about the requirements for quality assurance and record keeping for Activities involving structural and thermal improvements.

### 3. Recommendations: Activities in the Commercial Sector

We support the harmonisation of the state schemes in terms of product accreditation and the use of the NSW ESS calculator tool for lighting activities.

- Commercial lighting (CL1) - we recommend to reduce the threshold to 250-300MWh per facility per year to prevent a situation where a few large projects dominate and the availability of the subsidy to SMEs is severally reduced (as the 'REES certificate' price will reduce with oversupply from large facilities)
- We recommend to introduce WH2 activity into commercial sector for shower roses with a flow rate of 9 l/min and a relevant savings factor. To document the activity we recommend inspections by a qualified assessor before and after the activity has taken place, hot water supply and consumption audit form, photographs.  
In the commercial sector the replacement of the shower rose should be carried out by a licensed plumber.

#### 4. Answers to questions and notes on individual activities

- Are there any sections of the commercial buildings market that should not be open to delivery of REES activities? Why?
  - Considering the energy savings threshold could be lowered to 250-300MWh per facility per year, all commercial buildings should be open to delivery of REES activities, including lighting and the low flow showerheads as proposed in this submission
  
- Is the proposal metric appropriate for use in the REES?
  - The proposed metric is appropriate for energy efficiency initiatives
  - Careful consideration has to be made about the conversion factors for excess REES activities of 2014 vintage if these are to be applied against the targets of 2015. These conversion factors should be made public as soon as possible to prevent confusion. At the same time the compliance plans for 2015 activities should be approved no later than January 2015.
  
- Is the proposed Ministerial Protocol appropriate for the purpose in guiding the selection of energy saving activities and calculation methods for the REES?
  - The Ministerial Protocol indicates that activities and specifications will be reviewed once every three years.  
This allows stability for the scheme participants and at the same time it presumes that every effort will be made to get the scheme activities and specifications to a best possible standard based on the submissions to this consultation.

## ENERGY AUDITS

- Is the proposed Energy audit specification appropriate for use in the REES?
  - Yes - the audit specification is appropriate
- Are there alternative or additional specifications relating to the conduct of an energy audit that should be considered?
  - To ensure continuous professional development of Energy Auditors consider a requirement for their membership in a relevant industry association - EECCA, ABSA, HIA.
- Should telephone audits continue to be allowed for regional and remote areas, or should this be limited to remote areas?
  - Should be limited to remote areas only
- What impact would such a limit have on the ability for the REES to deliver energy audits to regional and remote areas?
  - Little impact, if the combining of Energy Audit and structural/thermal improvement Activity is adopted as proposed in this submission

To ensure there is sufficient capacity to enable combining of Energy Audit and structural/thermal improvement Activity under the proposed setup, there should be a limit (%) on the number of Energy Audits of 2014 vintage that can be applied against the 2015 targets.

## ACTIVITIES - GENERAL QUESTIONS

- Is the activity an appropriate activity to deliver through the REES?
  - Generally speaking 'Yes' for all activities except for
    - **WH2** - the proposed activity with low flow showerheads of 6 litres per minute replacing showerheads with a flow rate higher than 9l/min is not practical in the residential sector - in many cases the flow restrictors are either removed by the householder or the installer is requested to reinstall the original showerhead.  
An activity with 9l/min showerhead should remain in place for those households who haven't received the service in the past.
    - **BS2** - Chimney Balloons should only be available for reasonable quality, should have pumps and clear safety and replacement instructions.
- Is the proposed specification for the activity appropriate for use in the REES?
- Does the proposed specification allow for the activity to be delivered in an efficient and effective way?
  - Not for all activities. If proper activity documentation requirements are not put in place, some activities are prone to manipulation. LESS along with other members of EECCA (energy efficiency certificate creators association) should be further consulted about the requirements for activity documentation, quality assurance and record keeping.

- Are there any energy savings activities that would be suitable for use in the REES that are not proposed?
  - Installation of In-home displays should be an activity on its own, as there is a statistical record of In-home displays enabling a reduction in energy use by as much as 12-18% (ATA).  
This activity should be combined with an Energy Audit.
  
- Is the set of proposed energy savings activities sufficient to allow the scheme to extend to the business sector?
  - In our opinion Yes.
  - Also recommends WH1 activity with 9l/min flow showerheads in the commercial sector.
  
- Use of climate zones
- Is the use of two climate zones for thermal performance, heating and cooling activities appropriate?
  - Yes, as it correlates with the NatHERS.
  
- Health and safety
- Are there any health and safety concerns with the delivery of the activity that are not adequately addressed by the specification?
  - Additional risk management measures should be applied:
    - if Ceiling Insulation Activities are combined with Energy Audits. In addition to Energy Audit, the OH&S trained assessor would fill out a proforma JSA sheet or inspect the installation for appropriate instatement around downlights, if present.
    - Chimney Baloons should have very clear replacement instructions.
  
- Uptake of the activity
- Based on the proposed specification and energy saving factors, do you consider that this activity will be delivered through the REES?
  - To help with the uptake in the first year of the revised scheme consider applying a multiplier (i.e. multiplier of 2) for some structural/thermal improvement activities i.e. top-up of ceiling insulation, thermally efficient windows, heating and cooling systems and thermally efficient ductwork in priority group households only. The multiplier could be individual for each activity (i.e. higher multiplier for new activities such as 'Windows' and 'top-up ceiling insulation'.  
There should be a mechanism to review the multiplier annually.

## ACTIVITIES - SPECIFIC

### 7.5 Installation of insulation in an uninsulated ceiling - BS1A

- Support the specification and the proposed savings factor.
- Suggest an Energy Audit as a prerequisite for the activity
- Suggest introducing a lesser multiplier on the savings factor in the first two years of the revised scheme
- Suggest a set of additional requirements for record keeping, achieved through Energy Audit in combination with the activity.
  - I.e. with Ceiling Insulation Activity combined with an Energy Audit, the OH&S/White Card trained home energy assessor would fill out a proforma JSA sheet and forward it to the installer.  
If down lights are present, to complete activity records photographs should be provided showing the way insulation is installed around the downlights.

### 7.6 Installation of (top up) ceiling insulation - BS1B

- Support the specification in general.
- Suggest an Energy Audit as a prerequisite for the activity
- Suggest introducing a multiplier on the savings factor in the first two years of the revised scheme
- Suggest a set of additional requirements for record keeping, achieved through Energy Audit before and after

### 7.7 Installation of insulation to an external wall - BS1C

- Support the specification in general.
- Suggest an Energy Audit as a prerequisite for the activity
- Suggest introducing a multiplier on the savings factor in the first two years of the revised scheme
- Suggest a set of additional requirements for record keeping, achieved through Energy Audit before and after

### 7.8 Installation of insulation to floors - BS1D

- Support the specification in general.
- Suggest an Energy Audit as a prerequisite for the activity
- Suggest introducing a multiplier on the savings factor in the first two years of the revised scheme
- Suggest a set of additional requirements for record keeping, achieved through Energy Audit before and after

### 7.9 Building Sealing Activities (Various) - BS2

- Support the specification in general, except for the Fireplace or Chimney Sealing Removable ('chimney balloons'). Chimney Balloons should only be available for reasonable quality, should have pumps and clear safety and replacement instructions.
- The activity per house should not be limited to one of the door sealing, window sealing and fireplace options.
- The activity should require customer co-contribution record (copy of receipt) and should follow an Energy Audit.  
Where the household has received an Audit earlier in the scheme, a second energy audit should be allowed and precede the Building Sealing Activity.

### 7.10 Replace an inefficient window with a thermal efficient window - BS3A

- Support the specification in general.
- Suggest an Energy Audit as a prerequisite for the activity
- Suggest introducing a high multiplier on the savings factor in the first two years of the revised scheme
- Suggest a set of additional requirements for record keeping, achieved through Energy Audit before and after

### 7.11 Secondary glazing retrofit - BS3B

- Support the specification in general.
- Suggest an Energy Audit as a prerequisite for the activity
- Suggest a multiplier on the savings factor in the first year of the revised scheme

### 7.12 Heating and Cooling Systems - HC1, HC2A, HC2B

- Support the specification in general.
- Suggest an Energy Audit as a prerequisite for the activity
- Suggest a multiplier on the savings factor in the first year of the revised scheme

### 7.13 Install efficient new ductwork - HC3A

- Support the specification in general.
- Suggest an Energy Audit as a prerequisite for the activity
- Suggest a multiplier on the savings factor in the first year of the revised scheme

#### 7.14 Replace ductwork with an enhanced ductwork system - HC3B

- Support the specification in general.
- Suggest an Energy Audit as a prerequisite for the activity
- Suggest a multiplier on the savings factor in the first year of the revised scheme

#### 7.15 Replace or upgrade water heater - WH1

- Support the specification in general.
- Suggest an Energy Audit as a prerequisite for the activity
- Suggest a set of additional requirements for record keeping, achieved through Energy Audit before and after

#### 7.16 Replace an inefficient showerhead with an efficient showerhead - WH2

- The activity WH2 in residential sector should only involve low flow showerheads with a flow rate of 9l/min and a relevant savings factor.

#### 7.17 Install CFL or LED general purpose lamp - L1

- Support the specification in general.

#### 7.18 Install LED down-light Lamp or LED down-light luminaire - L2

- Support the specification in general.
- Consider installation w/o involving an electrician if the current installation has individual power outlet for each luminaire and the replacement of the entire luminaire is plug and play.
- Suggest a set of additional requirements for record keeping. Exemption - where an electrical safety certificate is issued by a licensed electrician.
- Remove the requirement to keep old products for 20 days long cooling off period. Standard product and installation warranties apply. Customer co-contribution is expected in every case as the min is set to 500 lumens.

#### 7.19 Replace halogen floodlight luminaire - L3

- Support the specification in general.
- Remove the requirement to keep old products for 20 days long cooling off period. Standard product and installation warranties apply. Customer co-contribution is expected in every case as the fees of an electrician apply.

#### 7.20 Replace linear fluorescent luminaire - L4

- Support the specification in general.

#### 7.21 Standby power controllers SPC1, SPC2

- Support the specification in general.

#### 7.22 High efficiency appliances APP1A APP1B APP1D APP1F

- Support the specification in general.

#### 7.23 Remove and destroy an unwanted household refrigerator or freezer - APP2

- Support the specification in general.

#### 7.24 Installation of a high efficiency pool pump - APP3

- Support the specification in general.