

4 Audit of individual retailers

4.1 ACTEW Retail Ltd

Strategy documents

ACTEW Retail Ltd (ACTEW; formerly ACTEW Energy Ltd) negotiated a Greenhouse Gas Reduction Strategy dated 11 September 1998 with the NSW Minister for Energy. ACTEW has subsequently submitted updated 1-, 3- and 5-year plan documents as follows:

Title	Date of issue
ACTEW Energy Ltd Environment Management Plan 1998–2003	Undated, but assumed to be around August 1999

In general, the EPA has audited for effectiveness against the plan that was in effect on 30 June 2000, so it would normally assess ACTEW against the document issued in August 1999. However, where the ACTEW Environment Management Plan 1998–2003 supplied to the EPA did not provide all the information required by the EPA to undertake the audit, the EPA reverted to the 1998 strategy document.

Independent verification report

Examination and assessment of ACTEW's IVR

In assessing the IVRs for 1999–2000, the EPA has reviewed each IVR against the criteria listed in Figure 3.1 and ranked each criterion using the grading system given on page 18.

*In respect of the reliability and accuracy of the GHG emission data reported by ACTEW, the EPA is of the opinion that there was a **low quantity** of appropriate information to provide the EPA with reasonable assurance that the GHG emission data reported by ACTEW is reliable and accurate.*

The EPA has a particular concern over the failure of the independent verifier to clarify the status of the claims associated with the landfill projects.¹³

The audit opinion is based on the following findings in the IVR:

- The verification methodology appeared to be reported in a **medium level** of detail.
- There appeared to be a **high level** of detail on what was verified (e.g. which assigned generation declarations and attribution declarations for sales forgone were verified).
- There appeared to be a **low level** of detail on how and when GHG emissions, emission reductions and ESF were verified and assumptions made by the independent verifier.
- There appeared to be a **low level** of detail on records, documents or other information used as verification evidence.
- There appeared to be a **high level** of detail on the qualifications and experience of the independent verifier.

Recommendations for future IVRs

- Each of the mandatory reporting requirements could be addressed as separate sections.
- Clearly establish the status of claims associated with Greenpower or assigned generation. The verification methodology quoted (checking purchases from original invoice documents) appears rigorous, assuming that it includes a confirmation of Greenpower and assigned generation status, but this leaves the apparent discrepancies reported in the section titled "Claims for low-emission generation under the SEDA Greenpower scheme" unexplained.

Provision of performance data

The standalone greenhouse report attached to the licence compliance report from ACTEW fails to provide cost data for measures implemented, except for a single aggregated figure for all Greenpower purchases. The documentation provided does not contain the required data to allow the EPA to extract the required information. There are significant issues of data reliability, particularly in regard to Greenpower sales by ACTEW, as discussed in the following section.

This data deficiency was raised with ACTEW in a letter from IPART at the EPA's request, but no response has been received from ACTEW.

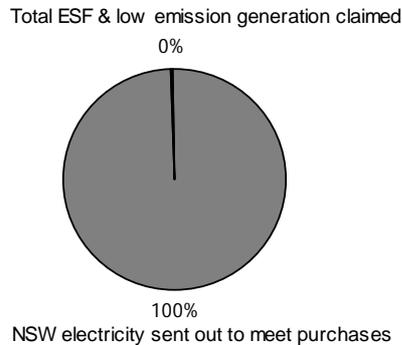
*The EPA is of the opinion that the performance data provided by ACTEW is generally of a **low level** of reliability.*

¹³ On page 5 of the IVR, the independent verifier states that they 'verify[jed] assignment declaration forms' but does not explain how the assigned generation forms were verified. The IVR was signed as completed on 1 September 2000. This would appear to be inconsistent with the letter from ACTEW dated 20 September 2000 notifying of a dispute as to the assignment of the projects. The EPA sought clarification from ACTEW but has received no response.

Effectiveness of ACTEW's GHG strategy

Comparison of pool purchases with low-emission options

Figure 4.1.1 Low-emission options relative to pool purchases



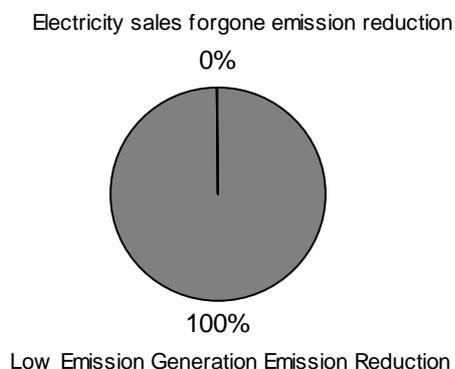
Under the methodology used for calculating the emissions attributed to each retailer, the electricity sold by a retailer is assumed to come from the 'NSW pool', unless it is specifically known to have come from a low-emission generation source. The NSW pool is supplied primarily by electricity generated from coal.

A retailer's purchases are classified as low-emission options when they fall into one of a number of categories of low-emission generation (such as generation purchased and 'assigned' to the retailer) or ESF (such as small, embedded, low-emission generation, or energy efficiency actions). All electricity retailers operating in NSW purchase the dominant portion of their electricity from the pool.

In aggregate terms, low-emission actions undertaken by ACTEW as part of implementing its GHG reduction strategy represent less than 1% of the total 'effective sales'¹⁴ in NSW (Figure 4.1.1).

Comparison of contributions from supply-side (low-emission generation) and demand-side (ESF) measures

Figure 4.1.2 Proportion of ESF and low-emission generation activities claimed



¹⁴ The EPA uses the term 'effective sales' to represent actual sales plus claims for ESF.

One hundred per cent of ACTEW's claims for abatement actions relate to standalone low-emission generation (Figure 4.1.2). There are no claims for ESF from either small-scale generation or energy efficiency actions.

Effectiveness of supply-side strategies (low-emission generation measures)

ACTEW has made claims for low-emission generation both using assigned declarations and under the SEDA Greenpower scheme. These are discussed below.

Claims for low-emission generation under the SEDA Greenpower scheme

ACTEW based its GHG emission reduction strategy on the purchase of low-emission generation, primarily under the sale of Greenpower.

Greenpower is accounted for in the *Emissions Workbook*¹⁵ in the following manner:

- 1) The methodology allows a retailer to claim 100% of Greenpower sales to customers in NSW, provided the retailer purchases at least as much Greenpower from approved generators, regardless of whether the generators are located in NSW or elsewhere.
- 2) The methodology also allows a retailer to claim any excess of Greenpower purchases above its Greenpower sales. However, an interstate scaling factor is applied to any excess from out-of-state generation, as with other categories of assigned generation.

SEDA manages the National Greenpower Accreditation Program (NGAP). SEDA engaged a consultant (Environmental Resources Management) to conduct a national audit of NGAP. This audit (which is a public document available from SEDA) lists the total Greenpower sales for each retailer on a national basis.

The first check performed by the EPA regarding Greenpower claims under the NSW licence conditions is to compare the Greenpower sales shown in the SEDA Greenpower audit for 1999–2000 against the total Greenpower sales claimed by the retailer under this NSW licence compliance requirement.

The SEDA Greenpower audit is a national audit, whereas under the NSW scheme, retailers may claim Greenpower sales only in NSW. Clearly the amount a retailer claims under the NSW licence condition must be less than or equal to its total national Greenpower sales reported in the SEDA NGAP audit.

However, ACTEW's greenhouse report claims approximately three times the national Greenpower sales as reported in the SEDA NGAP audit.

Further, a significant portion of ACTEW's reported Greenpower purchases comes from certain landfill gas projects. ACTEW has subsequently advised the MEU that a commercial dispute exists regarding the right of ACTEW to claim the 'green credits' for these plants under the NSW GHG reduction licence condition.

¹⁵ The methodology for calculating the emission attributable to each retailer under the NSW Licence Conditions is outlined in the *Greenhouse Gas Emissions from Electricity Supplied in NSW: Emissions Workbook*, published by the Ministry of Energy and Utilities. The most recent version is October 2000.

The EPA wrote to ACTEW seeking clarification but has received no response. In any event, the direct impact is relatively minor, since ACTEW does not appear to have had significant Greenpower sales in NSW.

The significance of this dispute arises in the treatment of any excess Greenpower generation. In its greenhouse report ACTEW claims that there is an excess of Greenpower generation relative to Greenpower sales, and assigns that amount towards its compliance benchmark.

It would appear, however (on the basis of Greenpower sales claimed in its greenhouse report), that without the landfill gas projects ACTEW would have a shortfall of Greenpower generation relative to sales, and thus the claim for excess should be removed.

How this reconciles with the much lower claims for both Greenpower sales and Greenpower generation listed for ACTEW in the SEDA Greenpower audit for 1999–2000 is unclear. However, if the SEDA audit figures are accepted, there is only an insignificant level of excess Greenpower generation relative to Greenpower sales.

The EPA notes that ACTEW's IVR also does not provide any explanation of the significant non-reconciliation.

Accordingly, the EPA would attach a low level of reliability to ACTEW's claims for emission reductions related to Greenpower sales, and has removed them from the assessment.

Effectiveness of non-Greenpower low-emission assigned generation measures

ACTEW's plan for implementing its GHG emission reduction strategy for 1999–2000 comprised hydro and biomass/biogas. However, ACTEW has made only one claim for a non-Greenpower-related assigned generation measure, which involves biomass and biogas generation.

A comparison of the forecast performance of measures in the 1998 strategy against the actual performance claimed by ACTEW in its 1999–2000 greenhouse report is shown below.

	% of forecast achieved	Effectiveness	Proportion of total claim
Hydro generation measures	+0.0%	Low	0%
Biomass and biogas (including landfill) generation measures	+0.8%	Low	100%
Total	+0.8%	Low	100%

EPA's audit opinion on supply-side strategies

ACTEW's supply-side GHG emission reduction strategy based on 'hydro generation measures' achieved a **low level** (< 35% of forecast) of effectiveness in reducing GHG emissions during 1999–2000.

ACTEW's supply-side GHG emission reduction strategy based on 'biomass and biogas generation measures' achieved a **low level** (< 35% of forecast) of effectiveness in reducing GHG emissions during 1999–2000.

Overall, the EPA is of the opinion that the effectiveness of implementation of supply-side measures (low-emission generation measures) by ACTEW as compared with the forecasts agreed with the Minister for Energy in the 1998 strategy document is **low** (< 35% of forecast).

Effectiveness of demand-side strategies (ESF measures)

The strategy that ACTEW negotiated with the Minister for Energy in 1998 placed strong emphasis on the delivery of energy efficiency programs to ACTEW customers.

ACTEW has included ESF targets in its *Environmental Performance Report 1999–2000*, but its ESF strategy appears to have been ineffective, having failed to achieve any outcomes in 1997–98, 1998–99 or 1999–2000.

The following table shows ESF targets as quoted in the ACTEW's 1998 strategy, along with actual ESF achieved in 1997–98, 1998–99 and 1999–2000, expressed as a percentage of total NSW sales:

Financial year	ESF target	ESF achieved
1997–98	0.4%	0.0%
1998–99	1.8%	0.0%
1999–2000	4.0%	0.0%
2000–01	5.1%	n/a
2001–02	5.6%	n/a

The table below shows the performance of ACTEW's ESF measures against forecast GHG emission reductions for 1999–2000:

	% of forecast achieved	Effectiveness	Proportion of total claim
ESF measure 1—ACTEW Environmental System (EMS)	+0.0%	Low	100%
Total	+0.0%	Low	100%

EPA's audit opinion on demand-side strategies

ACTEW's demand-side GHG emission reduction strategy based on the ESF measure 'Environmental System (EMS)' achieved a **low level** (< 35% of forecast) of effectiveness in reducing GHG emissions during 1999–2000.

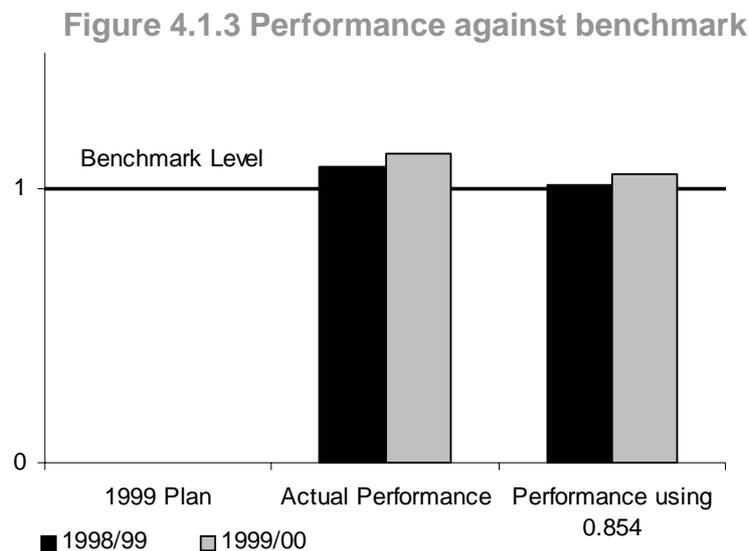
Overall, ACTEW achieved a **low level** (< 35% of forecast) of effectiveness in delivering its ESF program compared with the projections contained in the strategy negotiated with the Minister for Energy in 1998.

Assessment of overall effectiveness in reaching benchmark

ACTEW has significantly under-performed against the benchmark (see below).

ACTEW's performance against benchmark

Figure 4.1.3 shows ACTEW's reported performance against its emission benchmark (the 1998–99 performance is included for comparison). A positive value implies that actual emissions exceeded the benchmark.



'1999 Plan' indicates the level of performance against the target benchmark for 1999–2000 that would be achieved if the strategy plan were implemented 100% as outlined. A positive figure (e.g. 10%) indicates that even if the plan were fully implemented, emissions would exceed the benchmark by 10%. A figure of 0% indicates that if the plan were fully implemented, compliance would be achieved. A negative figure indicates that if the plan is fully implemented, over-compliance will occur. A statement of 'not reported' indicates that insufficient information was provided to assess the planned performance level.

'Actual Performance' indicates the actual level of emissions in 1999–2000 compared with the benchmark. Thus, a positive figure (e.g. 10%) indicates that actual performance exceeded the benchmark for 1999–2000 by 10%. The actual level of emissions depends to some extent on the actual NSW pool emission coefficient, which is advised to the retailers after the end of the compliance period each year. Thus, variation between the 'plan' performance and the 'actual' performance may be due to either differences in actual implementation compared with the plan (which is directly within the retailers' control) or a variation in the overall NSW pool emissions coefficient (which is not directly in the control of any individual retailer.)

'Performance using 0.854' indicates the performance of the retailer if the NSW pool emission coefficient is assumed to be 0.854 kg/kWh CO₂-e. This figure is the 'reference pool coefficient' used in original strategy development. Performance against this figure separates out performance variation caused by a change in the actual pool coefficient from the value used when planning.

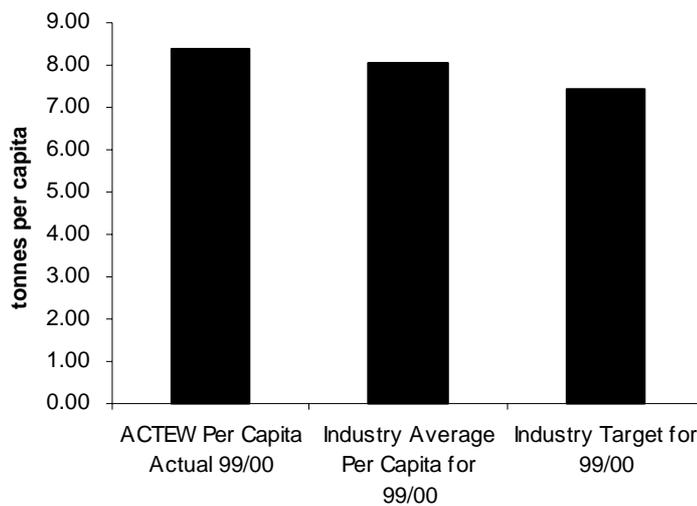
ACTEW did not provide data about the performance targeted under the 1-, 3- and 5-year plans. This information is not in any of the documents supplied to the EPA. Accordingly, the EPA is unable to quote ACTEW's planned performance against the benchmark.

*The EPA is of the opinion that the overall effectiveness of ACTEW's strategy implementation is **low**.*¹⁶

Per capita performance

Figure 4.1.4 shows ACTEW's performance on a per capita basis (which is the manner of the target formulation).

Figure 4.1.4 Per capita performance



¹⁶ The EPA gradings are as follows: high: retailer achieved benchmark emissions or lower; medium: retailer exceeded the benchmark emissions by < 10%; low: retailer exceeded the benchmark emissions by > 10%.