

Queensland Competition Authority Should Exit Dalrymple Bay Coal Terminal Pricing Regulation

*The A\$850m Rehabilitation Provision Is Out
of Line With Industry Standards*

Executive Summary

In the footnotes of Dalrymple Bay Infrastructure's (DBI) investor presentation published on 7 April¹, there is an unusual disclosure.

The rehabilitation provision, which represents the estimated cost for the 2049 lease expiry (potentially 2100 if DBI exercises its option) and rehabilitation of its sole asset, the Dalrymple Bay Coal Terminal (DBCT) in Queensland, increased a staggering 96% to \$850m from a 2017 determination of \$433m.

The 2017 determination made by regulator the Queensland Competition Authority (QCA) comes on page 162 of a 213 page document that includes 784 footnotes. It is titled the Final Decision 2019 Draft Undertaking, except it makes no decision and is therefore presumably not final.

The \$850m rehabilitation provision was determined after the QCA ruled that DBI's original proposal of an increase to \$1.22 billion was excessive. There is no clear explanation for why the provision has increased so dramatically in four years

DBI is allowed by the QCA to add estimated future rehabilitation costs to its capital base when determining the price it requires to make an acceptable level of return. DBI is therefore in the unique position of arguing with the regulator that it should provision more for clean-up because it will make more money by doing so.

**It's hard to imagine
how rehabilitation of
a coal terminal would
cost \$850 million.**

It is hard to imagine how rehabilitation of a coal terminal would cost \$850m.

Port Waratah Coal Services (PWCS) operates the largest export terminal in the world at the Port of Newcastle in New South Wales. It carries a rehabilitation provision of \$101m.

¹ DBI Corporate Presentation April 2021, p 6 footnote 5.

The QCA neither notes nor comments on this discrepancy between the two coal terminals' expected provisions. PWCS' annual report does not appear amongst the 2 pages of references or the footnotes so it presumably was not read.

It is hardly the QCA's job to facilitate an increase in the value of DBI by allowing inflated costs to be included in its notional asset base. The QCA's role should essentially be in setting maximum prices and ensuring transparency.

If DBCT will not publish prices the QCA could update, say quarterly, the actual average revenue per tonne received by DBCT. Most people would accept average revenue per tonne as a proxy for price. The QCA could then handle complaints and arbitrate disagreements on an MLB style basis (i.e. both sides submit a price and make a 60 minute argument, and QCA chooses from the two).

QCA's regulation of DBCT is almost certainly a waste of time and taxpayer money. The solution is less regulation, not more.

Instead, the risk is that the QCA starts unintentionally setting dangerous precedents for rehabilitation costs, a portion of which, history suggests, will inevitably be borne by the taxpayer.

The risk is that the QCA starts unintentionally setting dangerous precedents for rehabilitation costs.

This briefing note reviews how clean-up costs are normally determined and accounted for and provides two case studies to highlight how reputable listed companies have treated these liabilities. We consider how another multiuser coal loader measures these liabilities and suggest a somewhat altered role for the QCA with respect to DBCT in future.

Introduction

The Queensland Competition Authority (QCA), which regulates monopolies in Queensland for the benefit of citizens and taxpayers, recently handed down its decision regarding handling charges at the listed Dalrymple Bay Coal Terminal (ASX: DBI, generically DBCT).

The QCA determined² that Dalrymple Bay Infrastructure's (DBI) suggestion of an increase to \$1.22bn as a remediation cost for the site was excessive and reduced its proposal to a still eye-watering sum of \$850m. As DBI noted in a recent presentation, this \$850m represented a staggering 96% increase over the \$433m the QCA had allowed in a previous determination in 2017.

How Rehabilitation Provisions Are Determined

In a number of industries (extractive, waste management, heavy industry, chemicals), older facilities were *not* managed against the rehabilitation, remediation and restoration standards now demanded.

Today, companies that own these facilities have a legal responsibility to clean them up, leaving sites as near as possible to what they were prior to development. The standard of outcomes (i.e. how clean is clean) is determined by government, not the asset owner.³

Companies are required to take regular charges (called provisions) against current earnings to build a fund to cover these costs. Companies already do this to cover all sorts of expected costs such as long service leave, workers compensation, maternity leave and in some cases pension costs, in addition to the less predictable environmental remediation and restoration costs.

For environmental costs, the rules have a certain degree of elasticity intended to allow informed people to make sensible judgements, as certainty about the future does not exist. Companies typically engage an engineering firm⁴ to estimate what clean-up might be required and what that would cost today. The engineer applies a growth rate - essentially inflation, and an end time - effectively at the end of the project, or likely time of work to be done, given the propensity (and financial reward) that results from kicking the can down the road.

For instance, an engineer might say a company's asset will cost \$100m to clean up, but with costs rising at 3% a year, at the end of 40 years when the site requires rehabilitation, the final cost would be \$326m (future dollars). The company would then apply a discount rate to that cost to get a net present value (NPV). In this

² [DBCT 2019 Draft Access Undertaking Final Decision](#), March 2021, p 162.

³ Most people agree with this premise, although the concept of the Australian government as arbiter is becoming less supported over time, particularly with respect to military sites. Continued follies such as Woodside's Northern Endeavour may well see the government eventually relieved of all responsibility in this area.

⁴ There is a small cottage industry of consultants emerging who specialise in these sorts of processes for the benefit of corporations and Government agencies.

example, if a 5% discount rate is used, the provision would be \$46m. Every year as the period of time until rehabilitation becomes shorter, the provision increases as the discount is unwound. In our example, the increase would be around \$2.3m/per annum. This increment generally goes through the profit and loss statement (P&L) as a finance cost.

How Regulators Can Make Small Messes Into Big Messes

In 2015 Woodside (WPL) sold the Northern Endeavour floating platform northwest of Darwin to Northern Oil & Gas (NOG). NOG had a number of safety breaches and in 2019 NOPSEMA, a Commonwealth agency, shut down operations. NOG went into administration.

In February 2020 the Commonwealth took control of the vessel. In December 2020 the Minister for Resources decommissioned the vessel. The Government signed a one-year contract with the operator, a subsidiary of GR Engineering, for \$130m to manage the vessel. This was more than the contract to actually produce oil. There were a further \$101m of contracts doled out by the Commonwealth to perform other tasks at the site. Among these, the Commonwealth paid WPL \$8m to estimate decommissioning costs. These are estimated at \$360m, making the total known bill \$591m. At Senate Estimates a preliminary estimate for completion of \$1bn was bandied about.

Thanks to the involvement of the Commonwealth, the country has less oil production, fewer people gainfully employed and the taxpayer is on the hook for at least \$591m.

This is like the trifecta of bad regulatory outcomes.

ABC NT Country Hour 14/4/21, Peter Milne Boiling Cold 23/12/20, GR Engineering ASX announcement 23/12/20.

In addition to the impact of unwinding the discount, the value of provisions can rise or fall depending on:

- how much is actually spent against the provision,
- whether the provision is reassessed, as is commonly done every few years,
- whether assets are bought or sold, and whether inflation or interest

There is short term financial incentive for listed companies to never increase the value of the initial provision or to use a discount rate.

rate assumptions are altered.

It is worth noting that in addition to the unwinding, increments to the provision must also go through the P&L. So in our example above, if the engineers determine that the likely cost will now be \$110m, the company must take an incremental expense to the P&L.

There is, therefore, a short term financial incentive for listed companies to:

- never increase the value of the initial provision;
- use a discount rate that is higher than the assumed rate of growth in costs; and,
- push the liability further into the future, reducing the NPV.

In the longer term, markets detest uncertainty. Listed companies want a situation in which the provision, and importantly the annual cost of servicing it, are static. If they cannot be static, they ought to at the very least be predictable.

DBCT's massive overnight increase in remediation costs from \$433m to \$850m highlights a very serious regulatory issue and increases market uncertainty. In normal circumstances this would negatively impact the value of the company, if the market considered it a real cash cost likely to be incurred.

DBCT's massive overnight increase in remediation costs highlights a very serious regulatory issue.

Environmental Remediation Provisions in Australia

Two of the larger, easily identifiable environmental remediation provisions amongst listed Australian companies are Cleanaway's and Orica's.

Cleanaway is a waste management business that owns rubbish tips which have required significant remediation costs, particularly in Melbourne, Victoria. Orica owns a number of old chemicals sites that also have a number of very serious issues, particularly at Botany in New South Wales. In particular, the Botany ground water contamination and hexachlorobenzene remediations will end up taking a generation to sort out.

Cleanaway

Cleanaway Waste Management (CWY) was born from the ashes of Transpacific Industries (TPI). TPI barely survived the global financial crisis (GFC), with earnings per share (EPS) falling a rather immodest 96% between 2008 - 2010 and flatlining

from there. During that period, \$1.5bn in new equity was raised to retire debt but interest cover remained at 1.5x, a level considered appropriate for toll roads but very tight for normal businesses.

The proximate cause of TPI's near-death experience was a series of terrible acquisitions, one of which was Waste Management NZ, which owned Baxter Waste, which in turn owned a number of Melbourne garbage sites that happened to have indeterminate but ultimately large environmental issues.

In 2013 the company discovered the extent of the issues within its Melbourne area landfill sites. This required an increase in the rehabilitation provision to \$225m with an expectation that the company would spend \$50m/pa for 6 or 7 years to fix the issue. At the time, after tax profits were \$60-70m.

Table 1: Cleanaway Provisions A\$M

	2013	2014	2015	2016	2017	2018	2019	2020
Start of year	142.4	347.7	385.5	374.1	374.1	332.8	318.1	336.4
PV adj	11.2	13.8	14.0	13.8	9.0	7.7	7.3	4.1
Melb regional/other	-26.4	32.6		-1.1	-17.1	6.5	-0.4	-13.1
Rate adj	2.9	0.0	0.0	0.0	0.0	0.0	43.2	12.9
New provisions	<u>225.6</u>	<u>6.3</u>	<u>19.7</u>	<u>35.4</u>	<u>9.3</u>	<u>8.1</u>	<u>4.2</u>	<u>14.7</u>
Total	355.7	400.4	419.2	422.2	375.3	355.1	372.4	355.0
Cash spent	<u>-8.0</u>	<u>-14.9</u>	<u>-45.1</u>	<u>-48.1</u>	<u>-42.5</u>	<u>-37.0</u>	<u>-36.0</u>	<u>-53.7</u>
End of year	347.7	385.5	374.1	374.1	332.8	318.1	336.4	301.3

Source: Annual Report Note 27.

To date, the company has spent nearly \$300m against these provisions. It charges through the P&L roughly \$15m/year from unwinding the discount in the provisions. It now uses a 1.12% discount factor in calculating the NPV of provisions, an extremely conservative rate that has added \$56m to the value over the past 2 years.

Orica

Orica (ORI) was created when Imperial Chemical Industries (ICI Plc) sold out of Institute of Civil Infrastructure (ICI) Australia in 1997. At one point the company was a major producer of petrochemicals-based plastics, making products such as polyethylene, polypropylene, vinyl chlorine monomer and poly vinyl chlorine from sites at Botany in NSW and Deer Park and Yarraville in Victoria.

The Botany site in particular has been a known problem for decades, requiring regular expansions of remediation work and increases in provisioning. The remediation work there is believed⁵ to be the largest non-military clean-up underway in Australia. Given the size of Orica, its problem sites are not company threatening but the issues are, in the context of Australia, very large.

⁵ PWCS Annual Report.

Table 2: Orica Provisions (\$M)

	2013	2014	2015	2016	2017	2018	2019	2020
Botany groundwater	59.2	59.3	63.8	64.1	63.3	175.8	171.3	201.3
Botany HCB	35.7	35.0	34.3	35.4	41.4	35.4	41.1	31.3
Others	<u>93.1</u>	<u>87.5</u>	<u>144.0</u>	<u>134.6</u>	<u>110.8</u>	<u>108.1</u>	<u>104.7</u>	<u>156.3</u>
Total	188.0	181.8	242.1	234.1	215.5	319.3	317.1	388.9
Start of year	202.7	188.0	181.8	242.1	234.1	215.5	319.3	317.1
+ provisions made	10.7	13.0	69.0	15.0	0.0	114.7	55.3	43.5
- payments	-36.3	-32.6	-32.4	-32.4	-33.8	-35.7	-51.6	-48.2
+/- change in rates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.1
+/- other	<u>10.9</u>	<u>13.4</u>	<u>23.7</u>	<u>9.4</u>	<u>15.2</u>	<u>24.8</u>	<u>-5.9</u>	<u>3.4</u>
= End of year	188.0	181.8	242.1	234.1	215.5	319.3	317.1	388.9

Source: Annual Report Note 6.

In 2017 Orica proposed, and the NSW Environment Protection Authority (EPA) approved, a new process for cleaning ground water at Botany that is expected to take 18 years, after which it is hoped the water will no longer require specific treatment. The previous expectation had assumed a 5-year project as a bridge to a newer but unknown methodology. This resulted in a major increase in the provision. The change in treatment process saw a large increase in the cost of remediation from \$35m/pa to \$50m/pa. We found no indication that Orica expects a material decline anytime soon.

In 2020 Orica reduced the discount rate it uses with the new rate yet to be disclosed. Previously Orica disclosed a discount rate of 2.3% so a rate of 2% or below seems likely.

Costs of Removing Capital Equipment from Sites

Orica and Cleanaway represent large provisions to clean up major urban environmental disasters. Another type of rehabilitation or restoration is the requirement to remove equipment from a site once production ceases.

Port Waratah Coal Services

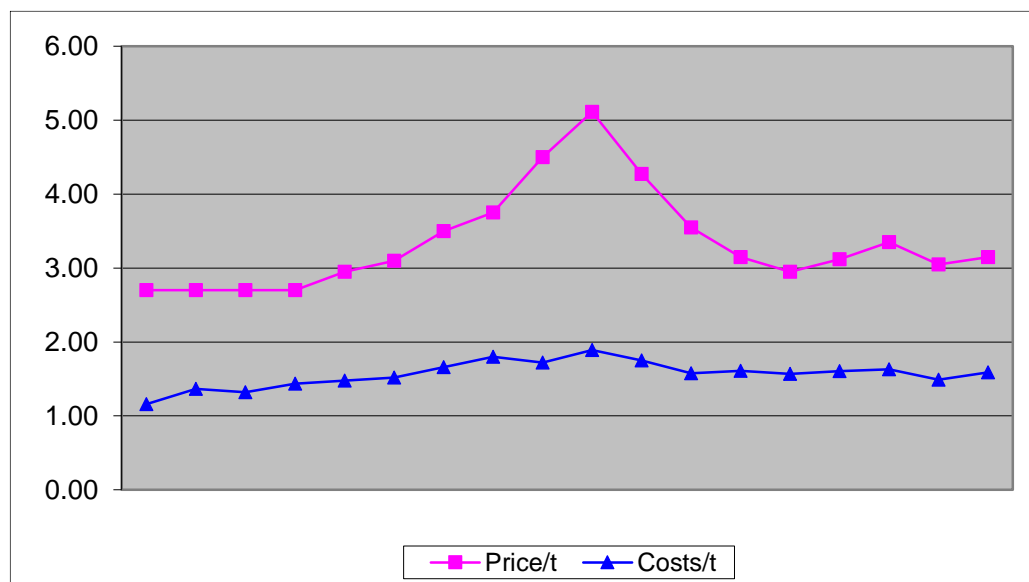
Port Waratah Coal Services (PWCS) operates the world's largest coal loading facility at the Port of Newcastle. The facility has capacity to handle and load onto ships 145 million tonnes per annum (mtpa). It presently manages around 110mtpa.

PWCS is owned by its main coal mining customers and two of their Japanese customers. It operates outside of NSW Government direct pricing regulation. In reality, if customers are unhappy with its performance, they would be perfectly capable of changing management with two phone calls without requiring the assistance of the NSW taxpayer.

As a profit entity, PWCS can increase or decrease charges to suit the circumstances of its customer base. In 2012 it charged \$5.11 per tonne (/t) of capacity. In 2020 it charged \$3.15/t.

Befitting the highest volume coal export facility in the world, PWCS costs are quite competitive. In 2012 its cash costs were \$1.89/t. In 2020 they were \$1.59/t. Aside from scale, one of the key reasons for its cost competitiveness is low capital costs.

Figure 1: PWCS Price and Cost per Tonne 2003-2020 (\$)



Source: Annual Reports.

PWCS has capital employed of \$7.04/t of capacity. Operating at even 70% utilisation, PWCS generates a 5% pre-tax return on 50% margins. Since 2004 the industry has added 241mt of annual port capacity at an average cost of \$42/t.⁶

Operating at 75% utilisation, a 5% return would require a margin of \$2.80/t. Presuming operating costs are 25% higher than PWCS suggests, a price of around \$4.80/t is required to generate the same return PWCS generates at \$3.15/t.

⁶ This data excludes WICET, which is so awful it skews the numbers to insensibility.

Table 3: Coal Terminal Expansions 2007-2014 (\$M)

	Year	Tonnes (m)	\$M	\$/t
PWCS '04 (book)	2004	81	672	8.3
PWCS '07	2007	20	380	19.0
PWCS '10	2010	10	210	21.0
Hay Point '05	2005	10	230	23.0
Abbott Pt '08-'11	2011	35	898	25.7
PWCS '12	2012	30	880	29.3
NCIG '09-12	2012	53	1660	31.3
RGT '07	2007	25	800	32.0
DBCT '09	2009	35	1350	38.6
NCIG '14	2014	13	1030	79.2
WICIT '14	2014	27	2950	109.3
Hay Point '13	2013	<u>10</u>	<u>2700</u>	<u>270.0</u>
Totals		268	13088	48.8

Sources: PWCS AR; NCIG & Hay Point BHP AR or Quarterly Development Report; DBCT BBI AR; RGT, AP & WICET company reports.

Into the future, when Australia becomes a low cost exporter of green hydrogen or renewables powered electricity via cooled superconductive cables, PWCS will likely cease to operate. At that time, PWCS will be required to rehabilitate the sole-use site. This will require removing all capital equipment such as ship loaders, stackers and reclaimers, buildings, etc. PWCS will also need to clean up any loose coal lying around and leave the site vacant. There is no reasonable expectation that PWCS has created or will create a toxic site as it generally does not deal with toxins.

PWCS provisions for this, just as Cleanaway and Orica do. The unwinding of the discount is charged as a finance cost through the P&L. From time to time adjustments to the underlying assumptions are made.

In 2020, PWCS' discount rate was cut from 8% to 5% and the growth rate in costs from 2.4% to 2.3%. While the discount rate is relatively high, it is comfortably within the range of the possible. As a forecast, it is likely no worse than any other.

Table 4: PWCS Provisions (\$M)

Rehabilitation Provisions	2015	2016	2017	2018	2019	2020
Start of year	55.1	58.5	62.2	62.0	66.4	67.1
+ disc unwind	4.4	4.7	5.1	5.0	5.0	5.5
- money spent	-1.0	-1.0	-5.3	-0.6	-4.3	-1.0
+/- change in rates	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>29.3</u>
= End of Year	58.5	62.2	62.0	66.4	67.1	100.9

Source: Annual Report Note 19.

Dalrymple Bay Coal Terminal

Which brings us back to Dalrymple Bay Coal Terminal (ASX: DBI). DBCT was built by the Queensland Government in 1983. In 1999, Babcock & Brown Infrastructure Group (BBI) purchased a 99-year lease from the state. In 2008, BBI financed a \$1.35bn 35mt expansion of the terminal to 85mt. In the same year, BBI went to the wall due to financial excesses following the GFC.

In 2009, BBI was taken over by Brookfield Asset Management. Brookfield regularly published accounts for DBCT as it had listed bonds still outstanding. In 2020, when the DBCT bonds matured, Brookfield considered a new issue of bonds or an initial public offering (IPO). In the end it settled for an IPO, in effect halving its ownership of the asset and sending an unambiguous message regarding its longer term intentions.

**The decision to conduct
an IPO was odd.**

The decision to conduct an IPO was odd. Brookfield is generally regarded as the Macquarie Group of Canada. Investors therefore sensibly presume, as a general rule, that Brookfield is both more knowledgeable about its assets and smarter about markets than the individual investor and therefore wait for the aftermarket. That the offering was done as a dual track with a bond raising was unusual.

The IPO was also hamstrung by a number of other factors: the ongoing QCA process, an emerging global distaste for coal assets, the staggering \$132m in fees and costs associated with the transaction (a full 10.3% of the \$1,285m raised), the debt required to fund the proposed distribution, and the Queensland government's insistence, by way of the Queensland Investment Corporation (QIC), that they buy 10% of the company.

To the surprise of no one the IPO tanked, opening at \$2.16, a 16% discount to issue price. It immediately fell to \$1.90 before stabilising at between \$2.00 and \$2.10. In early April 2021 it had a 10% bounce to above \$2.30 where it presently sits. Since the IPO, the market is up 6% and DBI is down 9%.

The Role of Brookfield and QCA in Affecting Prices

The QCA does not care, nor should it, about DBI's poor share price. Past experience has demonstrated that the underlying asset remains resilient even if the owner is not. Similarly, accusing the QCA of dithering over, in this case, a pricing decision, is not a criticism. That is what regulators, particularly those who determine pricing, are supposed to do.

It does however seem fair to ask if the QCA is being played by Brookfield regarding DBI's future rehabilitation costs. While most companies have an incentive to reduce provisions for rehabilitation as they reduce reported profits, DBCT has a perverse incentive to increase the provision because it makes a guaranteed return on its total

regulated capital base. It is hardly the QCA's job to facilitate an increase in the value of DBI by allowing inflated costs to be included in the notional asset base.

The QCA is supposed to allow DBI a return on capital sufficient to keep it operating smoothly and efficiently. QCA's job is to determine how much capital that entails and what the appropriate return is on that capital. It takes most companies years to work this out.

It seems fair to ask if the QCA is being played by Brookfield regarding DBI's future rehabilitation costs.

QCA is presently thinking about making a final ruling in the 2019 pricing round. The preliminary ruling was 213 pages long. Between 20-25% of DBI's regulated asset base is the notional provision to restore the site. The QCA covers this in two pages.⁷

A report from GHD⁸, paid for by DBI, suggested \$1.2bn for remediation. Another report from Worley subsidiary Advisian⁹ was 140 pages plus appendices. Paid for by QCA, it suggested a cost of \$850m. Why DBCT's cost doubled, or in fact trebled since the last pricing determination in 2017, and why the QCA appears untroubled at this prospect, hasn't been explained.

No one, at any time, is noted as having consulted the PWCS Annual Report to understand its charges, asset base and rehabilitation provisioning. The PWCS Annual Report ably covers the financials of a company that does exactly what DBI does. One would have expected it to be of compelling interest to the QCA.

If QCA had consulted that report, it would have noticed that PWCS has capital employed of \$1.0bn and that it has provided \$101m to restore its site. The notion of allowing \$850m to restore the DBCT site seems absurd in comparison. If nothing else, a viable defence by QCA of the proposed doubling of this cost could be offered.

We would suggest that the Queensland Government has no real business being involved on a regular basis in this asset. There are large companies with leverage on both sides of the facility paying, on average, about \$600m a year in royalties to the Queensland Government.¹⁰

The QCA suggested it fixed the price because DBI does not publish prices. Rather than getting involved in this, the QCA's role should essentially be in setting maximum prices. Last year they charged \$3.20 per tonne. They could add to that plus CPI *0.5% this year, or minus CPI *.5, or similar. Or the QCA could publish

⁷ DBCT 2019 Draft Access Undertaking Final Decision, March 2021, pg 162.

⁸ GHD Advisory (GHD), DBCT Rehabilitation Plan and Rehabilitation Cost Estimate, prepared for DBCT Management, June 2019.

⁹ Advisian, Dalrymple Bay Coal Terminal Rehabilitation Cost Review, prepared for the QCA, May 2020, as revised 5 August 2020.

¹⁰ Queensland Budget, Budget Paper 2, Sec 4.7.1.

average monthly revenue per tonne, which most reasonable people would accept as a proxy for price. This ought to be achievable.

The QCA could also become an arbiter when DBI and its customers could not agree. An MLB style arbitration system would reduce arguments down to an hour for each side and allow decisions within a fortnight. If it works for MLB, it is likely to work for a similarly sized industry such as the portion of Queensland export coal that goes through DBCT.

A pricing and arbitration model such as this would probably result in similar, or slightly lower costs to operators, a substantial reduction in time wasted, professional fees paid and more timely decisions. There is no evidence that economic efficiency might suffer.

Being spared the requirement of regularly reading and writing massive tomes on arcane subjects, the QCA would have considerable spare time on its hands. They could, perhaps, focus on serving the taxpayers and citizens of Queensland by looking into bus and rail fares, gas pipelines, water and power costs and other areas where monopolists prey on small and potentially unsuspecting members of the population and a neutral regulator can actually add social value.

**PWCS has capital
employed of \$1.0b
and has provided \$101m
to restore its site.**

About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

About the Author

Owen Evans

Since 1985 Owen Evans has been a financial analyst covering a broad variety of Australian companies, primarily with UBS where he was an MD and Head of Emerging Companies research until 2010. He is presently on the board of MWBA, a not-for-profit sporting association and The Investment Collective, a Queensland-based financial planning group.

This report is for information and educational purposes only. The Institute for Energy Economics and Financial Analysis ("IEEFA") does not provide tax, legal, investment, financial product or accounting advice. This report is not intended to provide, and should not be relied on for, tax, legal, investment, financial product or accounting advice. Nothing in this report is intended as investment or financial product advice, as an offer or solicitation of an offer to buy or sell, or as a recommendation, opinion, endorsement, or sponsorship of any financial product, class of financial products, security, company, or fund. IEEFA is not responsible for any investment or other decision made by you. You are responsible for your own investment research and investment decisions. This report is not meant as a general guide to investing, nor as a source of any specific or general recommendation or opinion in relation to any financial products. Unless attributed to others, any opinions expressed are our current opinions only. Certain information presented may have been provided by third-parties. IEEFA believes that such third-party information is reliable, and has checked public records to verify it where possible, but does not guarantee its accuracy, timeliness or completeness; and it is subject to change without notice.