



FY2011 BHP Billiton EEO Public Report

Controlling Corporation

BHP Billiton Limited

Period to which this report relates

Start

1 July 2010

End

30 June 2011



Part 1 – Information on assessments completed to date

Table 1.1 – Description of the way in which the Corporate Group (or part of it) has carried out its assessments

BHP Billiton EEO reporting entities

Figure 1 illustrates BHP Billiton's Group structure and participation status under the Energy Efficiency Opportunities (EEO) regulations. Discrete locations are referred to as sites. Some sites form combined groups referred to as businesses, and reporting entities may be either sites or businesses depending on the grouping. All sites and businesses are categorised into Customer Sector Groups (CSGs) according to their main product type.

Summary of BHP Billiton EEO reporting and results

The period of this report is from 1 July 2010 to 30 June 2011. Energy use data is sourced from energy consumption information gathered for the purposes of National Greenhouse and Energy Reporting (NGER) and is reported for the trigger year and the financial year July 2010 to June 2011.

As reported in December 2008 (the First Public Report), all site assessments were generally completed as of December 2007 with the exception of Stybarrow, which was assessed in financial year July 2009 to June 2010. Activity in the current reporting period has therefore focused on the progress of opportunities identified as a result of these assessments.

In the First Public Report, 447 opportunities were reported with a payback of less than four years, in the Second Public Report (for the period July 2008 – June 2009) 334 opportunities were reported with a payback of less than four years, while in the Third Public Report (for the period July 2009 – June 2010), 258 opportunities were reported. In the current report, 216 opportunities are reported. The reduction in the number of opportunities reported compared to previous Public Reports is a result of improvements to opportunity evaluations resulting in payback periods of greater than four years for some opportunities.

In the First Public Report, 72 opportunities were classified either as "Implementation Commenced" or "Implemented". The Second Public Report contained 110 and the Third Public Report contained 127 under these classifications. In the current report, 135 opportunities are classified either as "Implementation Commenced" or "Implemented". This year-on-year increase in the number of implemented (or implemented commenced projects) reflects the continued evaluation and progression of projects across the business. Furthermore, opportunities classified as either "Implementation Commenced" or "Implemented" in the current reporting period represented 5,630 TJ of cumulative annual energy savings. The corresponding amount of annual energy saved in the First, Second and Third Public Reports (i.e. from opportunities classified as either "Implementation Commenced" or "Implemented") was 4,420 TJ, 5,360 TJ and 5,670 TJ respectively. In the current year, this represents a reduction of approximately 6% in energy consumption for the Group.

Changes to Group Members since the previous reporting period

A restructuring of arrangements affecting operational control has resulted in the addition of two sites, Poitrel and South Walker Creek, to BHP Billiton Limited's registration under EEO with effect from 1 July 2010. As a consequence, BHP Mitsui Coal Pty Ltd ABN 34 009 713 875 becomes a new affected group member of controlling corporation BHP Billiton Limited. As the sites were acquired for reporting purposes within the last 18 months of the current 5-year cycle (ending 30 June 2011), they are not required to be assessed before the next EEO cycle. The impact of energy use at both Poitrel and South Walker Creek will be identified following assessment of these sites in the next EEO cycle.



Figure 1: BHP Billiton Group Structure

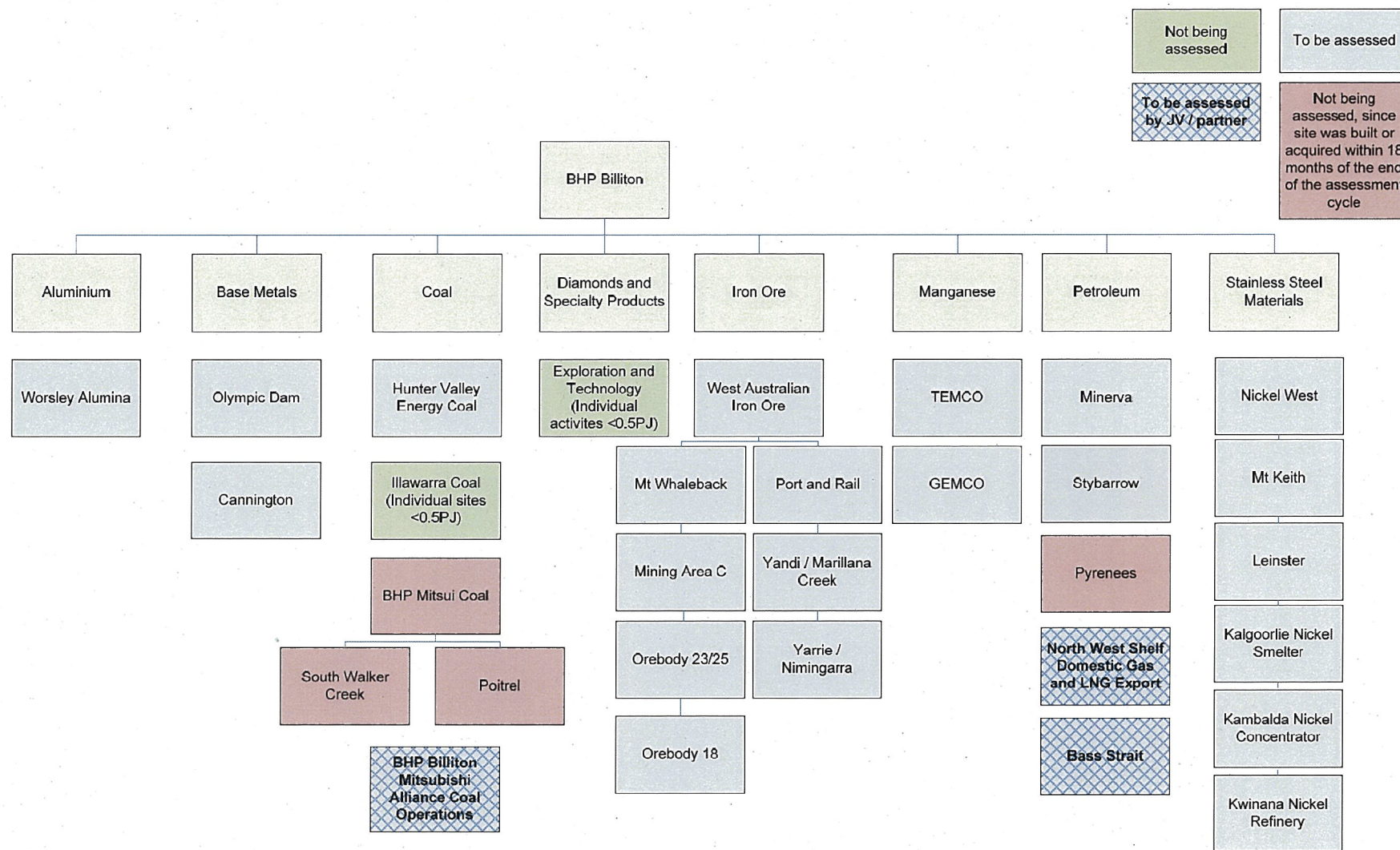




Table 1.2 – Energy use assessed

Group member and/or business unit and/or key activity and/or site (or part thereof) that has had an assessment completed by 30 June 2011 (Include all assessments completed to date for the current 5 year cycle) ¹ .	Period over which the assessment was undertaken ¹	Energy use in the trigger year of the assessed entity expressed in TJ ¹	Energy use for the period 1.7.2010 to 30.6.2011 of the assessed entity expressed in TJ ^{2,3,4}
Worsley Alumina	Jul 06 - Dec 07	34,820	35,640
Olympic Dam	Jul 07 - Dec 07	5,460	5,510
Cannington	Jul 07 - Dec 07	2,450	2,580
Hunter Valley Energy Coal (formerly Mt Arthur Coal)	Jul 07 - Dec 07	2,490	4,090
Port & Rail – WAIO	Apr 07 - Dec 07	3,900	6,630
Mt Whaleback – WAIO	Apr 07 - Dec 07	3,240	2,720
Area C – WAIO	Apr 07 - Dec 07	1,130	2,800
Marillana Creek (Yandi) – WAIO	Apr 07 - Dec 07	1,140	1,890
Ore Body 18 – WAIO	Apr 07 - Dec 07	400	849
Ore Body 23/25 – WAIO	Apr 07 - Dec 07	360	593
Yarrie / Nimingarra – WAIO	Apr 07 - Dec 07	620	252
Groote Eylandt Mining Company – GEMCO	May 07 - Dec 07	880	1,590
Tasmanian Electro Metallurgical Company – TEMCO	Jul 07 - Dec 07	4,160	7,970
Kalgoorlie Smelter (KNS) – Nickel West	Jul 07 - Dec 07	4,940	2,990
Kambalda Concentrator (KNC) – Nickel West	Jul 07 - Dec 07	940	352
Kwinana Refinery (KNR) – Nickel West	Jul 07 - Dec 07	5,070	2,520
Leinster Operations (LNO) – Nickel West	Jul 07 - Dec 07	2,180	1,150
Mt Keith Operations (MKO) – Nickel West	Jul 07 - Dec 07	5,960	3,450
Minerva - Petroleum	Jun 07 - Dec 07	730	486
Stybarrow – Petroleum (acquired FY09)	Jul 09 - Dec 09	2,110	1,710
Total energy use of assessed entities (or part thereof)		82,980	85,770
Total energy use of the whole corporate group		84,050	93,360
Total energy use of assessed entities (or part thereof)		99%	92%

1. FY2006 energy use as per current Assessment and Reporting Schedule, with the exception of Stybarrow, where energy use is reported for FY2009. Energy Use Data in the trigger year was sourced from individual sites prior to the introduction of NGER.
2. Energy Use Data is a subset of FY2011 NGER Energy Consumption Data, includes only primary energy sources, and excludes non-combusted energy sources. Totals include energy used as reductants and electrodes.
3. Differences between total and individual energy use are due to rounding.
4. Total Energy Use of the group in the current reporting year is the sum of energy use of all sites in the Assessment and Reporting Schedule (ARS) (both assessed and non-assessed sites) plus other small NGER facilities (such as offices and closed sites). Illawarra Coal sites are not assessed as part of the program as individual site energy use falls below 0.5PJ. Note that Total Energy Use does not include BHP Billiton Mitsubishi Alliance Coal Operations.



Table 1.3 – Accuracy of energy use assessed data

Entity	% achieved ¹	Reasons for not achieving data accuracy to within $\pm 5\%$
Worsley Alumina	$\pm 5\%$	N/A
Olympic Dam	$\pm 5\%$	N/A
Cannington	$\pm 5\%$	N/A
Hunter Valley Energy Coal (formerly Mt Arthur Coal)	$\pm 5\%$	N/A
Port & Rail – WAIO	$\pm 5\%$	N/A
Mt Whaleback – WAIO	$\pm 5\%$	N/A
Area C – WAIO	$\pm 5\%$	N/A
Marillana Creek (Yandi) – WAIO	$\pm 5\%$	N/A
Ore Body 18 – WAIO	$\pm 5\%$	N/A
Ore Body 23/25 – WAIO	$\pm 5\%$	N/A
Yarrie / Nimingarra – WAIO	$\pm 5\%$	N/A
Groote Eylandt Mining Company – GEMCO	$\pm 5\%$	N/A
Tasmanian Electro Metallurgical Company – TEMCO	$\pm 5\%$	N/A
Kalgoorlie Smelter (KNS) – Nickel West	$\pm 5\%$	N/A
Kambalda Concentrator (KNC) – Nickel West	$\pm 5\%$	N/A
Kwinana Refinery (KNR) – Nickel West	$\pm 5\%$	N/A
Leinster Operations (LNO) – Nickel West	$\pm 5\%$	N/A
Mt Keith Operations (MKO) – Nickel West	$\pm 5\%$	N/A
Minerva - Petroleum	$\pm 5\%$	N/A
Stybarrow – Petroleum (Trigger Year FY09)	$\pm 5\%$	N/A

1. Satisfies the methods and criteria for the measurement of the consumption of energy provided in the National Greenhouse and Energy Reporting (Measurement) Determination 2008.



Part 2 - Energy Efficiency Opportunities that have been identified and evaluated

Part 2A - New assessments completed or not reported since your last Public Report

Table 2.1(a) - New assessments completed or not reported since your last Public Report

There were no new assessments completed since the last Public Report.



Part 2B - Update of assessments reported in previous Public Reports

Table 2.2(a) - Update of assessments reported in previous Public Reports

Name of Group member or business unit or key activity or site: Worsley Alumina

Total energy use for the period 1.7.2010 to 30.6.2011 of the assessed entity (or part thereof) from which the opportunities identified below were generated (and is reported in Table 1.2).

35,640

TJ

Table 2.2(a) Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (GJ)		Total estimated energy savings per annum (GJ)
			0 – < 2 years	2 – ≤4 years	
Outcomes of assessment	Identified (accuracy ≤±30%)	33	3,445,230	742,867	4,188,097
	Identified (accuracy > ±30%)	-	-	-	-
	Total Identified	33			
Business Response	Under Investigation				
	(accuracy ≤±30%)	3	53,559	-	53,559
	(accuracy > ±30%)	-	-	-	-
	To be Implemented				
	(accuracy ≤±30%)	1	14,272	-	14,272
	(accuracy > ±30%)	-	-	-	-
	Implementation Commenced				
	(accuracy ≤±30%)	11	2,748,154	398,643	3,146,797
	(accuracy > ±30%)	-	-	-	-
	Implemented				
	(accuracy ≤±30%)	15	470,537	344,224	814,761
	(accuracy > ±30%)	-	-	-	-
	Not to be Implemented				
	(accuracy ≤±30%)	3	158,708	-	158,708
	(accuracy > ±30%)	-	-	-	-

BHP Billiton note: Differences between total and individual energy savings are due to rounding

Contextual notes:

- [1] Compared to the FY2010 EEO Public Report, the FY2011 EEO Public Report contains one more opportunity classified as Implemented.
- [2] Two fewer opportunities are currently Under Investigation compared to the FY2009 EEO Public Report, indicating progress in opportunity evaluation.
- [3] Total energy savings identified is due to several projects not meeting the energy reduction that was first anticipated.

Table 2.2(b) - Update of assessments reported in previous Public Reports
Name of Group member or business unit or key activity or site: Olympic Dam

Total energy use for the period 1.7.2010 to 30.6.2011 of the assessed entity (or part thereof) from which the opportunities identified below were generated (and is reported in Table 1.2).

5,510	TJ
-------	----

Table 2.2(b) Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (GJ)		Total estimated energy savings per annum (GJ)
			0 – < 2 years	2 – ≤4 years	
Outcomes of assessment	Identified (accuracy ≤±30%)	5	84,753	4,600	89,353
	Identified (accuracy > ±30%)	3	V-NA	V-NA	V-NA
	Total Identified	8			
Business Response	Under Investigation				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	1	V-NA	V-NA	V-NA
	To be Implemented				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	-	-	-	-
	Implementation Commenced				
	(accuracy ≤±30%)	1	1,728	-	1,728
	(accuracy > ±30%)	1	V-NA	V-NA	V-NA
	Implemented				
	(accuracy ≤±30%)	3	82,363	4,600	86,963
	(accuracy > ±30%)	-	-	-	-
	Not to be Implemented				
	(accuracy ≤±30%)	1	662	-	662
	(accuracy > ±30%)	1	V-NA	V-NA	V-NA

BHP Billiton note: V-NA indicates voluntary information – Not Available

BHP Billiton note: Differences between total and individual energy savings are due to rounding

Contextual notes:

[1] 15 fewer opportunities are reported in the FY2011 EEO Public Report compared to the FY2010 EEO Public Report. The reduction in the number of opportunities, particularly those that are Under Investigation, is due to the exclusion of long payback opportunities, projects with no actual energy savings or significant technical/engineering barriers to implementation.



Table 2.2(c) - Update of assessments reported in previous Public Reports
Name of Group member or business unit or key activity or site: Cannington

Total energy use for the period 1.7.2010 to 30.6.2011 of the assessed entity (or part thereof) from which the opportunities identified below were generated (and is reported in Table 1.2).

2,580

TJ

Table 2.2(c) Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (GJ)		Total estimated energy savings per annum (GJ)
			0 – < 2 years	2 – ≤4 years	
Outcomes of assessment	Identified (accuracy ≤±30%)	5	162,605	-	162,605
	Identified (accuracy > ±30%)	-	-	-	-
	Total Identified	5			
Business Response	Under Investigation				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	-	-	-	-
	To be Implemented				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	-	-	-	-
	Implementation Commenced				
	(accuracy ≤±30%)	1	50,930	-	50,930
	(accuracy > ±30%)	-	-	-	-
	Implemented				
	(accuracy ≤±30%)	2	105,366	-	105,366
	(accuracy > ±30%)	-	-	-	-
	Not to be Implemented				
	(accuracy ≤±30%)	2	6,309	-	6,309
	(accuracy > ±30%)	-	-	-	-

BHP Billiton note: Differences between total and individual energy savings are due to rounding

Contextual notes:

- [1] Compared to the FY2010 EEO Public Report, the FY2011 EEO Public Report contains one more opportunity classified as Implemented.
[2] Energy reduction associated with Implemented projects has increased from approximately 5,000 GJ to over 105,000 GJ.

Table 2.2(d) - Update of assessments reported in previous Public Reports

Name of Group member or business unit or key activity or site: Hunter Valley Energy Coal (formerly Mt Arthur Coal)

Total energy use for the period 1.7.2010 to 30.6.2011 of the assessed entity (or part thereof) from which the opportunities identified below were generated (and is reported in Table 1.2).

4,090 TJ

Table 2.2(d) Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (GJ)		Total estimated energy savings per annum (GJ)
			0 – < 2 years	2 – ≤4 years	
Outcomes of assessment	Identified (accuracy ≤±30%)	7	40,570	230	40,800
	Identified (accuracy > ±30%)	5	V-NA	V-NA	V-NA
	Total Identified	12			
Business Response	Under Investigation				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	1	V-NA	V-NA	V-NA
	To be Implemented				
	(accuracy ≤±30%)	2	2,401	230	2,631
	(accuracy > ±30%)	-	-	-	-
	Implementation Commenced				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	-	-	-	-
	Implemented				
	(accuracy ≤±30%)	5	38,169	-	38,169
	(accuracy > ±30%)	4	V-NA	V-NA	V-NA
	Not to be Implemented				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	-	-	-	-

BHP Billiton note: V-NA indicates voluntary information – Not Available

BHP Billiton note: Differences between total and individual energy savings are due to rounding

Contextual notes:

[1] Six projects were Under Investigation in FY2010. In FY2011, the number of projects classified as Under Investigation has decreased to 1. This demonstrates good progress in the evaluation of opportunities.

[2] The majority of projects that have not been evaluated within ±30% are classified as Implemented. In most cases, the accuracy of evaluation will increase following measurement of post-implementation performance.

Table 2.2(e) - Update of assessments reported in previous Public Reports

Name of Group member or business unit or key activity or site: Western Australia Iron Ore - WAIO

Total energy use for the period 1.7.2010 to 30.6.2011 of the assessed entity (or part thereof) from which the opportunities identified below were generated (and is reported in Table 1.2).

15,734

TJ

Table 2.2(e) Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (GJ)		Total estimated energy savings per annum (GJ)
			0 – < 2 years	2 – ≤4 years	
Outcomes of assessment	Identified (accuracy ≤±30%)	14	307,001	243	307,244
	Identified (accuracy > ±30%)	17	V-NA	V-NA	V-NA
	Total Identified	31			
Business Response	Under Investigation				
	(accuracy ≤±30%)	8	169,251	-	169,251
	(accuracy > ±30%)	-	-	-	-
	To be Implemented				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	-	-	-	-
	Implementation Commenced				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	-	-	-	-
	Implemented				
	(accuracy ≤±30%)	6	137,749	243	137,992
	(accuracy > ±30%)	-	-	-	-
	Not to be Implemented				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	17	V-NA	V-NA	V-NA

BHP Billiton note: V-NA indicates voluntary information – Not Available

BHP Billiton note: Differences between total and individual energy savings are due to rounding

Contextual notes: [1] Compared to the FY2010 EEO Public Report, the FY2011 EEO Public Report contains one more opportunity classified as Implemented.

Table 2.2(f) - Update of assessments reported in previous Public Reports

Name of Group member or business unit or key activity or site: Groote Eylandt Mining Company - GEMCO

Total energy use for the period 1.7.2010 to 30.6.2011 of the assessed entity (or part thereof) from which the opportunities identified below were generated (and is reported in Table 1.2).

1,590	TJ
-------	----

Table 2.2(f) Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (GJ)		Total estimated energy savings per annum (GJ)
			0 – < 2 years	2 – ≤4 years	
Outcomes of assessment	Identified (accuracy ≤±30%)	12	33,134	56,913	90,047
	Identified (accuracy > ±30%)	2	V-NA	V-NA	V-NA
	Total Identified	14			
Business Response	Under Investigation				
	(accuracy ≤±30%)	2	7,565	-	7,565
	(accuracy > ±30%)	1	V-NA	V-NA	V-NA
	To be Implemented				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	1	V-NA	V-NA	V-NA
	Implementation Commenced				
	(accuracy ≤±30%)	2	14,765	46,320	61,085
	(accuracy > ±30%)	-	-	-	-
	Implemented				
	(accuracy ≤±30%)	7	10,804	9,253	20,057
	(accuracy > ±30%)	-	-	-	-
	Not to be Implemented				
	(accuracy ≤±30%)	1	-	1,340	1,340
	(accuracy > ±30%)	-	-	-	-

BHP Billiton note: V-NA indicates voluntary information – Not Available

BHP Billiton note: Differences between total and individual energy savings are due to rounding

Contextual notes:

- [1] Energy reduction associated with all identified projects (evaluated to within ±30%) has increased from approximately 47,900 GJ to 90,047 GJ.
[2] Two projects remain at an evaluation accuracy of greater than ±30%). Next steps have been identified to improve the evaluation.

Table 2.2(g) - Update of assessments reported in previous Public Reports

Name of Group member or business unit or key activity or site: Tasmania Electro Metallurgical Company - TEMCO

Total energy use for the period 1.7.2010 to 30.6.2011 of the assessed entity (or part thereof) from which the opportunities identified below were generated (and is reported in Table 1.2).

7,970

TJ

Table 2.2(g) Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (GJ)		Total estimated energy savings per annum (GJ)
			0 – < 2 years	2 – ≤4 years	
Outcomes of assessment	Identified (accuracy ≤±30%)	6	403,569	-	403,569
	Identified (accuracy > ±30%)	1	V-NA	V-NA	V-NA
	Total Identified	7			
Business Response	Under Investigation				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	1	V-NA	V-NA	V-NA
	To be Implemented				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	-	-	-	-
	Implementation Commenced				
	(accuracy ≤±30%)	1	16,769	-	16,769
	(accuracy > ±30%)	-	-	-	-
	Implemented				
	(accuracy ≤±30%)	4	370,074	-	370,074
	(accuracy > ±30%)	-	-	-	-
	Not to be Implemented				
	(accuracy ≤±30%)	1	16,726	-	16,726
	(accuracy > ±30%)	-	-	-	-

BHP Billiton note: V-NA indicates voluntary information – Not Available

BHP Billiton note: Differences between total and individual energy savings are due to rounding

Contextual notes:

[1] Two new projects (one Under Investigation, one Implemented) were added to TEMCO's project list in FY2011. This has resulted in a significant increase in annual energy savings of identified opportunities (from approximately 118,000 GJ in FY2010 to 403,569 GJ in FY2011).

Table 2.2(h) - Update of assessments reported in previous Public Reports

Name of Group member or business unit or key activity or site: Nickel West

Total energy use for the period 1.7.2010 to 30.6.2011 of the assessed entity (or part thereof) from which the opportunities identified below were generated (and is reported in Table 1.2).

10,462

TJ

Table 2.2(h) Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (GJ)		Total estimated energy savings per annum (GJ)
			0 – < 2 years	2 – ≤4 years	
Outcomes of assessment	Identified (accuracy ≤±30%)	53	765,495	1,166,673	1,932,168
	Identified (accuracy > ±30%)	39	V-NA	V-NA	V-NA
	Total Identified	92			
Business Response	Under Investigation				
	(accuracy ≤±30%)	2	84,920	1,113,500	1,198,420
	(accuracy > ±30%)	21	V-NA	V-NA	V-NA
	To be Implemented				
	(accuracy ≤±30%)	1	-	16,726	16,726
	(accuracy > ±30%)	2	V-NA	V-NA	V-NA
	Implementation Commenced				
	(accuracy ≤±30%)	8	74,312	1,332	75,643
	(accuracy > ±30%)	6	V-NA	V-NA	V-NA
	Implemented				
	(accuracy ≤±30%)	41	605,967	35,115	641,082
	(accuracy > ±30%)	9	V-NA	V-NA	V-NA
	Not to be Implemented				
	(accuracy ≤±30%)	1	297	-	297
	(accuracy > ±30%)	1	V-NA	V-NA	V-NA

BHP Billiton note: V-NA indicates voluntary information – Not Available

BHP Billiton note: Differences between total and individual energy savings are due to rounding

Contextual notes:

[1] 92 opportunities are reported in the FY2011 EEO Public Report for Nickel West, compared to 113 in the FY010EEO Public Report.

[2] 41 opportunities in the FY2011 EEO Public Report are Implemented and evaluated to within ±30%), compared to 32 opportunities in FY2010.

[3] 23 opportunities remain Under Investigation. This is compared to 45 projects in FY2010, indicating that evaluation of the large number of identified opportunities continues steadily.

Table 2.2(i) - Update of assessments reported in previous Public Reports

Name of Group member or business unit or key activity or site: Petroleum - Minerva

Total energy use for the period 1.7.2010 to 30.6.2011 of the assessed entity (or part thereof) from which the opportunities identified below were generated (and is reported in Table 1.2).

486	TJ
-----	----

Table 2.2(i) Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (GJ)		Total estimated energy savings per annum (GJ)
			0 – < 2 years	2 – ≤4 years	
Outcomes of assessment	Identified (accuracy ≤±30%)	6	45,558	2,700	48,258
	Identified (accuracy > ±30%)	-	-	-	-
	Total Identified	6			
Business Response	Under Investigation				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	-	-	-	-
	To be Implemented				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	-	-	-	-
	Implementation Commenced				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	-	-	-	-
	Implemented				
	(accuracy ≤±30%)	6	45,558	2,700	48,258
	(accuracy > ±30%)	-	-	-	-
	Not to be Implemented				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	-	-	-	-

BHP Billiton note: Differences between total and individual energy savings are due to rounding

Contextual notes:

[1] There has been no change in the outcomes of the assessment at Minerva since FY2010. All six opportunities have been implemented.

Table 2.2(j) - Update of assessments reported in previous Public Reports

Name of Group member or business unit or key activity or site: Petroleum - Stybarrow

Total energy use for the period 1.7.2010 to 30.6.2011 of the assessed entity (or part thereof) from which the opportunities identified below were generated (and is reported in Table 1.2).

1,710	TJ
-------	----

Table 2.2(j) Status of opportunities identified		Number of opportunities	Estimated energy savings per annum by payback period (GJ)		Total estimated energy savings per annum (GJ)
			0 – < 2 years	2 – ≤4 years	
Outcomes of assessment	Identified (accuracy ≤±30%)	2	35,450	-	35,450
	Identified (accuracy > ±30%)	6	V-NA	V-NA	V-NA
	Total Identified	8			
Business Response	Under Investigation				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	-	-	-	-
	To be Implemented				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	-	-	-	-
	Implementation Commenced				
	(accuracy ≤±30%)	-	-	-	-
	(accuracy > ±30%)	-	-	-	-
	Implemented				
	(accuracy ≤±30%)	1	19,000	-	19,000
	(accuracy > ±30%)	1	V-NA	V-NA	V-NA
	Not to be Implemented				
	(accuracy ≤±30%)	1	16,450	-	16,450
	(accuracy > ±30%)	5	V-NA	V-NA	V-NA

BHP Billiton note: V-NA indicates voluntary information – Not Available

BHP Billiton note: Differences between total and individual energy savings are due to rounding

Contextual notes:

[1] In FY2010, three opportunities were classified as Under Investigation. These three opportunities were evaluated further in FY2011, resulting in no remaining opportunities classified as Under Investigation.

Part 2 - Energy Efficiency Opportunities that have been identified and evaluated

Part 2C - Details of at least three significant opportunities found through EEO assessments

Table 2.5 – Description of 3 significant opportunities

Underground Secondary Ventilation Management – Cannington

Status: Implemented

Area: Mining

Prior to the implementation of this project, all secondary underground ventilation fans were controlled via a group start up / shutdown control strategy. This project implemented the ability to individually control the start-up / shutdown of each secondary ventilation fan, allowing fans in area of low or no activity to be shutdown. This resulted in an annual energy saving of 100 TJ.

Anode furnace improved operation strategy – Olympic Dam

Status: Implemented

Area: Smelter

The anode furnace is used to remove impurities from molten copper in the copper smelting process. This project involved re-lining the anode furnaces, replacing porous plugs and implementing an improved operating strategy. The improvements led to a reduction in LPG usage per tonne of anode produced and have resulted in an annual energy saving of approximately 76.0 TJ.

Module #1 SAG throughput improvement – Nickel West

Status: Implemented

Area: Milling

Analysis of the energy efficiency of SAG milling indicated that Module #2 had consistently outperformed Module #1. Investigations identified design improvements to the pulp lifter and discharge grate, which were subsequently implemented on Module #1. The design improvements resulted in an increased throughput and a reduction in energy consumption per tonne, corresponding to an annual energy saving of 59.6 TJ.

Part 3 - Voluntary Contextual Information

Voluntary Information is not available for the reporting period.



Part 4 - Declaration

Table 4.1 - Declaration of accuracy and compliance (mandatory information)

The information included in this report has been reviewed and noted by the board of directors and is to the best of my knowledge, correct and in accordance with the *Energy Efficiency Opportunities Act 2006* and *Energy Efficiency Opportunities Regulations 2006*.

Marius Kloppers
Chief Executive Officer

Date 23/11/2011