



# Quarterly Report

CARBON ENERGY  
December 2010





# Quarterly Report – December 2010

## Highlights

- Underground Coal Gasification (UCG) Panel 2 completed and ready for initiation.
- A concept study was completed that confirmed the potential to utilise the gas produced by Carbon Energy's UCG technology for the manufacture of ammonia and synthetic natural gas (pipeline quality gas). The study was jointly commissioned by Carbon Energy and Incitec Pivot Limited.
- Carbon Energy's site near Dalby in South East Queensland was not affected by the recent severe flooding experienced in Queensland. Some access roads were affected by flooding but waters have subsided by late January.
- Throughout the quarter further discussions were held with the Queensland Department of Environment and Resource Management (DERM) regarding amendments they require to the existing Environmental Authority for the Bloodwood Creek site to enable commissioning of UCG Panel 2 to proceed. A response from DERM is expected on 11 February 2011.
- Carbon Energy successfully concluded a \$20M capital raising in December 2010 with funds raised to be used for the advancement of Australian and Chilean projects.
- The Company retained cash reserves of \$11.8 million as at 31 December 2010, with the balance of the funds raised in December received during January of \$10 million (before costs).

## Resource

### Queensland – Bloodwood Creek

In November the Queensland Department of Environment and Resource Management (DERM) advised Carbon Energy that it had accepted the Company's environmental report as addressing the requirements of the Environmental Evaluation notice issued on 21 July and additional information notice issued on 21 September 2010.

The evaluation related specifically to the containment of surface water on site, a common situation faced by many industries and not specifically Underground Coal Gasification (UCG), and at no time was groundwater impacted by the incident.



As part of the evaluation, a comprehensive soil testing program was undertaken and has been independently assessed by a tier 1 Environmental Consultancy which confirmed that there was no ongoing effects or environmental harm.

As part of its report, the Company detailed engineering and operating changes it has established on site to ensure that any reoccurrence is mitigated and has already put in place additional environmental controls.

DERM advised at that time it intended to amend some of the environmental conditions for the site to reflect the outcome of the environmental report and the Company's proposed mitigation measures.

The Company worked cooperatively with DERM to finalise amendments to the environmental conditions during the Quarter. On the 23<sup>rd</sup> December DERM advised that that they required further consultation with internal experts before confirming the final conditions of the Environmental Authority.

On 28<sup>th</sup> January DERM advised a response would be provided on 11 February 2011.

Panel 2 infrastructure is completed with changes made to the process water management to meet the proposed amendments to the Environmental Authorities. These involved dedicated pumps and tanks for the process water disposal system.

Ongoing monitoring of the ground water continued around the lease area with no adverse results being identified.

The Bloodwood Creek site was not affected by the recent severe flooding in Queensland, however, the access to the site was restricted on several occasions and contingency plans were activated to maintain site operations. In addition, site facilities were made available to assist some of the local rural businesses to accommodate persons stranded by the regional flooding.

Panel 2 is completed and stands ready for initiation. It is anticipated that once the revised environmental conditions are finalised a notice will be issued to Carbon Energy enabling the Company to proceed with the initiation of UCG Panel 2 to enable commencement of syngas production.

The Company continues to work proactively with DERM in an effort to expedite this process to ensure that UCG Panel 2 can be commissioned as soon as practicable.

The controlled decommissioning of UCG Panel 1 is continuing. Results from this process will be used in submission for further developments to demonstrate the full life cycle of a UCG panel.

#### Tenement Status at end December 2010

Tenement	Status	Sub-blocks as at Sept 2010	Sub-blocks as at Dec 2010	Area Sq km
MLA 50253	Application	1342 ha	1342 ha	15
MDL 374	Granted	2687 ha	2687 ha	32
867	Granted	191	191	670
869	Granted	64	64	213
868	Granted	177	177	605
1132	Granted	23	23	78
1109	Granted	65	65	224
			<b>TOTAL</b>	1,837



**Process water facility under construction**



**Panel 2 Knock out pots and access platforms**



## Chile - Mulpun

A Carbon Energy team visited Chile during the Quarter to commence site assessment for the drilling of the trial panel with Mulpun Energy, the subsidiary of Antofagasta formed to proceed with the UCG project with Carbon Energy.

Seismic studies are being assessed to confirm the location and configuration of the initial UCG Panel. Drilling of bore holes for site characterisation and water monitoring is scheduled to commence during the first quarter of 2011 calendar year.

A Chilean subsidiary company is being formalised as part of ongoing joint venture negotiations with Antofagasta.

## USA

Carbon Energy has previously announced its intention to establish a presence in the USA and to develop projects in States where there is suitable coal and access to markets for power, gas and related products including carbon dioxide use for enhanced oil recovery. Specific opportunities are being identified and discussions being held with prospective partners and regulatory officials to prepare a market entry strategy for the 2011 calendar year.

## Markets

### Ammonia and Synthetic Natural Gas (SNG)

In December Carbon Energy announced that a concept study undertaken with significant shareholder Incitec Pivot Limited concluded that Carbon Energy's UCG syngas is suitable for commercial production of both ammonia and synthetic natural gas (SNG).

The joint study was undertaken by international ammonia experts Ammonia Casale and confirms that Carbon Energy will be able to produce higher value added products. The study assessed the feasibility of a standalone ammonia plant, a combination of ammonia plant and a 300MW power station and an independent synthetic natural gas plant. Each option assessed produced positive results confirming that there are a number of options for Carbon Energy to successfully bring UCG syngas to market.

### Power Station Development

Carbon Energy continues to progress plans for power station development at Bloodwood Creek to provide the first commercial scale UCG-syngas fired power generation into the Queensland grid.

### Phase 1: 5MW Power Station Development

The 5MW power station is awaiting initiation of Panel 2 to allow the production of UCG syngas to feed the engines at Bloodwood Creek. Initial testing of the engines on LPG to trial the operation of the power station has been completed. Connection agreements with Ergon Energy are well advanced.



**Phase 2: 25MW Power Station Development** - to be co-located at the Company's Bloodwood Creek site. The company announced in the previous quarterly report that a Power Station Development Agreement had been executed with Arcadia Energy Trading for the future development of a 25MW and 300MW power station fuelled by Carbon Energy's syngas at Bloodwood Creek. Negotiations with Arcadia are continuing for an arrangement that will result in Arcadia initially entering into a Power Purchase Agreement with the option to acquire the power station once Carbon Energy is issued with a Mining Lease providing security of tenure. Given the historically low power prices in Queensland it is likely that finalisation of the Power Purchase Agreement will occur once there is greater power market certainty.

**Phase 3: 300 MW Power Station – Blue Gum Energy**

Initial planning is underway for the proposed siting of a 300MW power station fuelled by Carbon Energy's Bloodwood Creek site at the adjoining Blue Gum Energy Park on land owned by Carbon Energy. Other than the Power Station Development Agreement with Arcadia for the power station itself, long-term planning of key infrastructure is necessary to ensure that a transmission connection into Powerlink's local grid is secured such that power can be provided into the National Electricity Market.

## Corporate

**Shareholder Meeting:**

The Company held its Annual General Meeting of Shareholders on 25<sup>th</sup> November 2010 in Brisbane. All resolutions put to Shareholders were unanimously passed on a show of hands.

**Board**

As advised at the AGM, as part of the next phase of the evolution of the Company's Board we are currently seeking a new Non-Executive Chairman for the Company. It is intended that the current Chair, Kim Robinson, will step down from this role once we appoint the new Chair and continue as an independent Non-Executive Director.

The Company is cognisant that we have a large Board for a Company of our size and to facilitate a reduction Mr Ian Walker, who was Managing Director of the Company up until December 2008, resigned from the Board at the end of December 2010 as a Non Executive Director. The Company would like to thank Ian for his valuable contribution to the Company in his capacity as both an Executive and Director over the years.

A further reduction to the board size and achieving a majority of independent Directors is necessary and to this end subsequent changes to the makeup of the Board will occur in the forthcoming months and be advised in due course.



### Capital Raising:

On 9 December 2010, the Company announced that it had successfully completed a share placement of approximately 61 million ordinary shares at \$0.33 each raising a gross of \$20 million before costs. The raising was conducted by Southern Cross Equities under the 15% placement capacity of the Company and scheduled to be completed in two tranches. The first tranche settled on the 16<sup>th</sup> December raising net funds of \$9.5 million and the second tranche of \$10 million settled on the 19<sup>th</sup> January raising net funds of \$9.9 million.

### Issued Capital & Cash Funds

- The total issued capital at the end of the December Quarter was 640,569,620 fully paid ordinary shares quoted on the Australian Stock Exchange.
- A total of 39,955,000 unlisted options with exercise prices between 20c and \$1.60 are on issue (with expiry dates ranging between 30 June 2011 and 22 March 2015) and with the vast majority subject to meeting annual performance measures. 375,000 employee options were exercised during the quarter with 9.6 million options cancelled during the quarter.
- The Company retains cash reserves of \$11.8 million as at 31 December 2010 with a further \$9.9 million from the second tranche placement was received in January 2011.

### Listed Investments

- Carbon Energy held 29 million shares in ASX listed uranium company, Energia Minerals Limited, as at 31 December 2010.

For and on behalf of the Board



A.M. Dash  
Managing Director  
31 January 2010



## Coal Resource Summary – Appendix A

As at 31<sup>st</sup> December 2010

December 2010 Quarter Resource Statement

Location	Seam Thickness Cut-Off	Indicated (Mt)	Inferred (Mt)	TOTAL (Mt)
Bloodwood Creek	2	218	280	498
	5 <sup>1</sup>	158	57	215
Kogan	2		170	170
	5 <sup>1</sup>		149	149
Total Resource	2	218	450	668
	5 <sup>1</sup>	158	206	364

Notes:

1. Optimal target for Underground Coal Gasification

### Competent Person Statement – Coal

*The information in this release that relates to resources is based on information compiled by Dr C.W. Mallett, Executive Director Carbon Energy Limited who is a member of the Australian Institute of Mining and Metallurgy. Dr Mallett has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”.*

*Dr Mallett consents to the inclusion in the release of the matters based on his information in the form and context in which it appears.*

In accordance with Society of Petroleum Engineers (SPE) guidelines, the reserves in these properties are:

AREA	CATEGORY	GROSS GAS VOLUMES(PJ)
Bloodwood Creek EPC 867 (including MDL 374)	1P Reserve (Proven)	11
	2P Reserve (Proven + Probable)	743
	3P Reserve (Proven + Probable + Possible)	1,042

*The reserve estimates used in this document were compiled by Mr Timothy Hower of MHA Petroleum consultants, Colorado, USA, a qualified person under ASX Listing Rule 5.11. Mr Hower has consented to the use of the reserve information contained within this document in the form and context in which it appears.*



# Appendix 5B

## Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001.

Name of entity

CARBON ENERGY LIMITED

ABN

ABN 56 057 552 137

Quarter ended ("current quarter")

31 DECEMBER 2010

### Consolidated statement of cash flows

	Current Quarter \$A'000	Year to Date (6 months) \$A'000
<b>Cash flows related to operating activities</b>		
1.1 Receipts from product sales and related debtors	-	-
1.2 Payments for		
(a) exploration and evaluation (net)	-	-
(b) development - BWC Operations	(1,294)	(2,493)
(c) technical services	(429)	(821)
(d) administration (net)	(1,300)	(2,133)
(e) commercial and business devel.	(374)	(576)
(g) Other projects- UCG panel 1, Project labour support, Project Chile and IT Project	(317)	(698)
1.3 Interest and other items of a similar nature received	123	258
1.4 Interest and other costs of finance paid	-	-
1.5 Income taxes benefit received	-	-
1.6 Other (provide details if material) Fuel tax credits	20	62
<b>Net Operating Cash Flows</b>	<b>(3,571)</b>	<b>(6,401)</b>
<b>Cash flows related to investing activities</b>		
1.7 Payment for purchases of:		
(a) prospects	-	-
(b) equity investments	-	-
(c) other fixed assets	-	-
1.8 Proceeds from sale of:		
(a) prospects	-	-
(b) equity investments	-	-
(c) other assets sales	-	-
1.9 Loans to other entities	-	-
1.10 Loans repaid by other entities	-	-
1.11 Other (provide details if material) -Construction of 5MW Plant, 2 <sup>nd</sup> & 3 <sup>rd</sup> UCG Panels and other site works	(3,829)	(6,565)
<b>Net investing cash flows</b>	<b>(3,829)</b>	<b>(6,565)</b>
1.12 Total operating and investing cash flows (carried forward)	(7,400)	(12,966)

+ See chapter 19 for defined terms.

**Appendix 5B**  
**Mining exploration entity quarterly report**

	Current Quarter \$A'000	Year to Date (12 months) \$A'000
1.13 Total operating and investing cash flows (brought forward)	(7,400)	(12,966)
<b>Cash flows related to financing activities</b>		
1.14 Proceeds from issues of shares, options, etc.	9,549	9,549
1.15 Proceeds from sale of forfeited shares	-	-
1.16 Proceeds from borrowings	-	-
1.17 Repayment of borrowings	-	-
1.18 Dividends paid	-	-
1.19 Other - Trade Creditors/Debtors	(316)	(3,827)
<b>Net financing cash flows</b>	<b>9,233</b>	<b>5,722</b>
<b>Net increase (decrease) in cash held</b>	<b>1,833</b>	<b>(7,244)</b>
1.20 Cash at beginning of quarter/year to date	10,000	19,077
1.21 Exchange rate adjustments to item 1.20	-	-
1.22 <b>Cash at end of quarter</b>	<b>11,833</b>	<b>11,833</b>

**Payments to directors of the entity and associates of the directors**

**Payments to related entities of the entity and associates of the related entities**

	Current Quarter \$A'000
1.23 Aggregate amount of payments to the parties included in item 1.2	95
1.24 Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

First tranche of capital raising completed in December 2010, providing net cash inflows of \$9.474 million from the issue of 30,696,970 shares. A second tranche of capital raising was completed in January 2011, providing additional cash inflows of \$9.944 million from the issue of 30,303,030 shares.

Costs included in item 1.23 above covers Directors' expenses for any services undertaken outside the scope of directors duties, salaries for the Brisbane based executive Directors plus Non-Executive Director's fees and superannuation.

**Non-cash financing and investing activities**

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

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+ See chapter 19 for defined terms.

- 2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

Nil

### Financing facilities available

*Add notes as necessary for an understanding of the position.*

	Amount available \$A'000	Amount used \$A'000
3.1 Loan facilities	-	-
3.2 Credit standby arrangements/bonds	<b>203</b>	<b>203</b>

### Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	0
4.2 Development & Capital work projects	4,300
4.3 Production	0
4.4 Administration	1,100
<b>Total</b>	<b>5,400</b>

### Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.	Current quarter \$A'000	Previous quarter \$A'000
5.1 Cash on hand and at bank	3,216	3,797
5.2 Deposits at call	8,600	6,000
5.3 Bank overdraft	-	-
5.4 Other (Deposit Bonds)	17	203
<b>Total: cash at end of quarter (item 1.22)</b>	<b>11,833</b>	<b>10,000</b>

+ See chapter 19 for defined terms.

### Changes in interests in mining tenements

	Tenement reference	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
6.1	Interests in mining tenements relinquished, reduced or lapsed		Nil	Nil
6.2	Interests in mining tenements acquired or increased	<b>Coal</b> Refer Covering Quarterly Activity Report attached hereto	100%	100%

### Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

	Total number	Number quoted	Issue price per security (cents)	Amount paid up per security (cents)
7.1 <b>Preference + securities</b> (description)	Nil	Nil	-	-
7.2 Changes during quarter	Nil	Nil		
7.3 <b>+Ordinary securities</b>	<b>640,569,620</b>	<b>640,569,620</b>	Various	Fully Paid
7.4 Changes during quarter				
(a) Increases through Placement made to Institutional & Sophisticated investors	30,696,970	30,696,970	33c	Fully Paid
(b) Increases due to exercise of Options	375,000	375,000	125,000 @ 20c 250,000 @ 20c	Fully Paid Fully Paid
7.5 <b>+Convertible debt securities</b> (description)	Nil	Nil	-	-
7.6 Changes during quarter				
(a) Increases through issues	-	-	-	-
(b) Decreases through securities matured, converted	-	-	-	-

+ See chapter 19 for defined terms.

**Appendix 5B**  
**Mining exploration entity quarterly report**

7.7	<b>Options</b>			<i>Exercise price</i>	<i>Expiry date</i>
	Unlisted Options 30c	500,000	-	30c	30/06/2011
	Unlisted Options 60c	1,000,000	-	60c	30/06/2011
	Unlisted Options 25c	100,000	-	25c	01/04/2012
	Unlisted Options 40c	205,000	-	40c	01/04/2012
	Unlisted Options 25c	5,000,000	-	25c	10/12/2013
	Unlisted Options 35c	1,400,000	-	35c	10/12/2013
	Unlisted Options 70c	8,000,000	-	70c	10/12/2013
	Unlisted Options 80c	7,250,000	-	80c	10/12/2013
	Unlisted Options 80c	1,000,000	-	80c	22/03/2015
	Unlisted Options \$1.00	10,000,000	-	\$1.00	10/12/2014
	Unlisted Options \$1.20	1,750,000	-	\$1.20	10/12/2013
	Unlisted Options \$1.20	1,000,000	-	\$1.20	22/03/2015
	Unlisted Options \$1.60	1,750,000	-	\$1.60	10/12/2013
	Unlisted Options \$1.60	1,000,000	-	\$1.60	22/03/2015
			-		
			-		
7.8	<b>Options</b>				
	Issued during quarter	-	-	-	-
7.9	Exercised during quarter				
	Unlisted	125,000	-	20c	-
	Employee/Other Options	250,000		20c	
7.10	Expired during quarter				
	Unlisted Employee Options - cancelled	5,600,000	-	35c	-
		2,000,000	-	\$1.20	-
		2,000,000	-	\$1.60	-
7.11	<b>Debentures</b>				
	(totals only)	Nil	Nil		
7.12	<b>Unsecured notes</b>				
	(totals only)	Nil	Nil		

+ See chapter 19 for defined terms.

## Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX.
- 2 This statement does give a true and fair view of the matters disclosed.

Sign here: 

Date: 31 January 2011  
Print name: Prem Nair  
Title: **Chief Financial Officer &  
Company Secretary**

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+ See chapter 19 for defined terms.