# QUARTERLY REPORT DECEMBER 2011



# **HIGHLIGHTS**

- Carbon Energy achieves a successful Capital Raising program for the quarter raising \$18,264,784, including \$8,264,784 from the 1 for 8 rights issue (a take up of 79%) and a \$10,000,00 Convertible Loan Facility with Pacific Road Capital Management Nominees Pty Limited and Pacific Road Holdings NV (Pacific Road Capital).
- UCG Panel No. 2 at Carbon Energy's Bloodwood Creek site in Queensland, Australia has been producing syngas continuously for 9 months. Gas heating value has been consistently in the range of 6.0 to 7.5 MJ/m3.
- Over 13kms of powerlines direct from Carbon Energy's power station to Ergon Energy's distribution system has been completed. Carbon Energy has now completed all work required in readiness for the exporting of electricity to the local area network.
- Executive Management appointments Morné Engelbrecht appointed CFO & Company Secretary. Justin Haines appointed General Manager Technical Services and Terry Moore appointed to General Manager, Operations.
- Corporate advisor, Pacific Road Corporate Finance (PRCF), has been engaged
  to assist the Company with developing its strategic plan including expansion of
  the Company's interests internationally and the optimisation of its Queensland
  assets which contain coal suitable for UCG and conventional coal resources.

# **EVENTS SUBSEQUENT TO QUARTER END**

- Ergon Energy Corporation Ltd (Ergon Energy) has confirmed it installed a
  connection point between Carbon Energy's Bloodwood Creek site and its local
  area network on Friday 20 January. Completion of work and testing required by
  Ergon Energy to allow Carbon Energy to export to their local grid is expected in
  the next few weeks.
- On 18 January 2012 the Company announced that it has appointed Merriman Capital, Inc. as its Principal American Liaison to sponsor its American Depositary Receipt program on OTCQX International and who have further been retained to provide a suite of investor and market making services in the US.
- A drawdown notice for \$2,000,000 was issued to Pacific Road Capital on 17 January 2012, representing Tranche A of the \$10,000,000 Convertible Note Facility and the funds were subsequently received on 25 January 2012.



## **COMPANY OVERVIEW**

Carbon Energy is a world leader in advanced coal technology. Our business is transforming stranded coal resources in high-value fuels with lower emissions to meet the increasing global demand for, low cost, alternative energy sources.

This is being achieved through the execution of our three core strategic objectives:

- Build a targeted international portfolio of coal assets suitable for UCG;
- Apply our superior UCG technology, known as keyseam®; and
- Supply UCG syngas to high-value downstream markets.

The Company's proprietary technology, keyseam® is an innovation in underground coal gasification (UCG), incorporating a unique site selection methodology and advanced geological and hydrological modelling. keyseam maximises resource efficiency, extracting up to 20 times more energy from the same resource than coal seam gas, whilst minimising surface disturbance and preserving groundwater quality.

# STRATEGIC REVIEW

The Company is currently undertaking a strategic review of its business operations and has engaged corporate advisor Pacific Road Corporate Finance (PRCF) to assist in this review. PRCF are independent of Pacific Road Capital Management, who are major shareholders in Carbon Energy.

The review will include options for expansion of the Company's interests internationally as well as optimisation of its Queensland assets. In Queensland the Company currently holds a number of exploration permits for coal (EPC's) which contain coal suitable for UCG and conventional coal resources.



# CARBON ENERGY'S CURRENT RESOURCES AND TARGETS

Current Project Resources	JORC Resource <sup>2</sup> (Mt)	Recoverable Gas <sup>3</sup> (PJ)
Queensland, Australia	668	6,680
Mulpun, Chile	103	1,100
Total	771	7,780

Project Resource Target	Commercial Target <sup>1</sup> (Mt)	Recoverable Gas <sup>3</sup> (PJ)
Wyoming, United States	500	5,000 (target)
Total	500	5,000

#### Notes

- Carbon Energy target
- 2. JORC compliant Competent Person: Dr C. Mallett
- 3. Carbon Energy calculation based on estimated energy content of the coal and 50% recovery (that takes into account pillars, losses and a gasification efficiency of 80%)

# **AUSTRALIA**

Project	JORC Resource <sup>1</sup> (Mt)	Recoverable Gas² (PJ)
Queensland, Australia	668	6,680

#### Notes

- 1. JORC compliant Competent Person: Dr C. Mallett
- 2. Carbon Energy calculation based on estimated energy content of the coal and 50% recovery (that takes into account pillars, losses and a gasification efficiency of 80%)



#### Phase 1 Power Generation: 5MW Power Station

The Company's trial UCG Panel No. 2 has been performing above expectation with a consistently higher than anticipated calorific value of syngas being produced. The gas heating value has been consistently in the range of 6.0 to 7.5 MJ/m3. This energy content is amongst the highest quality UCG gas of its kind, being produced anywhere in the world. At the end of the December quarter, the panel has been operating continuously for over nine months providing valuable operating experience and data.

The connection of the powerline between the 5MW power station and Ergon Energy's distribution network has been completed with power expected to be sent to the grid as soon as Ergon Energy complete testing. This powerline can handle a maximum of 30MW.

Performance of the individual engines in the power station has achieved nameplate rating on Syngas. Each engine has been successfully load tested.

The Company is currently awaiting approval from the Queensland Department of Environment and Resource Management (DERM) to increase production from the current limit of 1.5MW (single engine operation) up to the power station capacity of 5MW (3 engines in operation). DERM advised late last year it required a further extension to determine the application and subsequently requested additional information from Carbon Energy. The information requested will take several months to collate and DERM has now advised of a further extension to April 2012.

It is important to note that the Company has been operating successfully at Bloodwood Creek for the past 3 years and obtained approval for revised environmental authorities In February 2011 that enabled the commissioning of Panel No. 2 and the testing of its power station. The technical and environmental performance of Panel No. 2 since that time has met or exceeded expectations.

#### **Queensland Government UCG Policy**

The Queensland Government's UCG Policy, announced in February 2009, provides for a trial period to assess the technical, environmental and commercial performance of UCG and assist the Government in making future policy decisions about this important technology.

As part of this process the Queensland Government established an Independent Scientific Panel (ISP) to assist Government in assessing the technical and environmental performance of UCG.



#### Queensland Government UCG Policy (continued)

Carbon Energy has been working on a report to the ISP on Carbon Energy's operations as part of this process. The ISP is currently due to report to Government in May 2012 with a Government submission to Cabinet due in June 2012. Based on the current timetable, a Government policy position regarding UCG is anticipated prior to the end of this year.

#### Tenement Status at end December 2011

Tenement <sup>1</sup>	Status	As at December 2011	Area km²
MLA 50253	Application	1,343 ha	13
MDL 374	Granted	2,868 ha	29
Total		4,211 ha	42
Tenement <sup>1</sup>	Status	As at December 2011 Sub-blocks	Area km²
EPC 867	Granted	191	670
EPC 869	Granted	64	213
EPC 868	Granted	177	605
EPC 1132	Granted	23	78
EPC 1109	Granted	65	224
Total		620	1,790

#### Notes

- 1. No change in tenement holding acreage since June 2011.
- 2. Approximate km2

#### Phase 2 Power Generation: 25MW Power Station

Bloodwood Creek's second phase of power generation and future planned export of a further 25MW from the Company's planned 25MW Power Station remains consistent with the previous quarter's update. Final commitments to the 25MW Power Station will be made once there is greater certainty on the Queensland Government's UCG policy such that the necessary financial investment is not subject to further tenure and regulatory risk.

#### Phase 3 Power Generation: 300 MW Power Station, Blue Gum Energy Park

Progress, plans and expectations for the third phase of power generation and the development of the 300MW remains consistent with the previous quarter's update. A satisfactory outcome to the Queensland Government's UCG policy will be required to provide tenure certainty prior to an investment decision proceeding.

# **CHILE**

Project	JORC Resource <sup>1</sup> (Mt)	Recoverable Gas <sup>2</sup> (PJ)
Mulpun, Chile <sup>3</sup>	103	1,100

#### Notes

- 1. 1. JORC compliant Competent Person: Dr C. Mallett
- 2. Carbon Energy calculation based on estimated energy content of the coal and 50% recovery (that takes into account pillars, losses and a gasification efficiency of 80%)
- 3. Carbon Energy has the right to 30% contributing interest in Chile deposit upon completion of agreed milestones

Activities at our project location in Mulpun, Chile continue to proceed. Following receipt of tender submissions for the first panel drilling contract, project staff have retested the market to secure better pricing and delivery timeframes. Dispatch of long lead items, such as well heads and related materials, supplied from Australia are being completed.

In addition, the following activities continue to progress as planned:

- Work associated with the preliminary site civil works including the construction of roadways and the drilling pads are substantially complete. Completion of the drilling of an extensive (ground water) monitoring well program is targeted for the first quarter of this calendar year.
- Front End Engineering and Design (FEED) for the above ground facilities is now complete, and Antofagasta Minerals and Carbon Energy are finalising the FEED documentation prior to entering the detailed Engineering, Procurement and Construction (EPC) phase.
- The underground FEED for the design and completion of the UCG panel has also been completed by Carbon Energy and submitted to Mulpun Energy. This is a key deliverable by Carbon Energy as part of its participation in the Mulpun UCG trial.

As the project moves towards commencement of the UCG production trial, Carbon Energy has promoted and relocated Manager UCG Technology Richard Duffy, into a new position to be located on-site and he will operate as part of the Mulpun Management team. Mr Duffy and his family will move to Chile in early January 2012.

Chile continues to provide an attractive market for energy projects due to the country's reliance on imported fuel and rapidly growing energy demand of 8% p.a. When Carbon Energy initially considered the Mulpun Project in late 2009, electricity spot prices were US\$120/MWh. Recently, reports have indicated that spot prices have increased to US\$220 /MWh making these some of the highest prices in the world. Electricity prices of \$120/MWh would equate to fuel prices into a power station of \$14.5/GJ to \$27/GJ on a short-run marginal cost basis.

# UNITED STATES OF AMERICA

Project	Commercial Target <sup>1</sup> (Mt)	Recoverable Gas <sup>3</sup> (PJ)
Wyoming, United States	500	5,000

#### Notes

- Carbon Energy target
- 2. JORC compliant Competent Person: Dr C. Mallett
- 3. Carbon Energy calculation based on estimated energy content of the coal and 50% recovery (that takes into account pillars, losses and a gasification efficiency of 80%)

Over the Quarter the Company continued to further its review of the UCG potential resources within the Wyoming and North Dakota project areas, and also continued discussions with parties on securing further North American UCG Partnerships.

#### Wyoming

Carbon Energy has established a positive working relationship with the Wyoming Government; lead by a Governor well-versed in the significant benefits UCG can potentially bring to the energy-rich State.

Open dialogue with environmental regulators continued over the Quarter and Carbon Energy is encouraged by the well-defined regulatory pathway for developing UCG projects in Wyoming which leads the US in facilitating this permitting process.

Field work has begun on Carbon Energy's site with cultural, biological and accessrelated surveys being undertaken to support the Company's environmental permit application.

# **CORPORATE**

#### **Executive Team Changes**

On 24 October 2011 the Company appointed Morné Engelbrecht as Chief Financial Officer & Company Secretary.

Mr Engelbrecht, has had an extensive career in the oil and gas, mining and audit and business advisory sectors, including InterOil Corporation Ltd, Lihir Gold Limited, Harmony Gold Limited and PricewaterhouseCoopers.



#### **Executive Team Changes (continued)**

He also brings with him considerable international experience, from which the Company stands to benefit. Mr Engelbrecht has a Bachelor of Commerce Honours Degree from the University of Pretoria and is a member of the South African Institute of Chartered Accountants.

In addition, the Company restructured the Executive team to provide a greater focus on exploration and technology, in line with the Company's strategy. This involved splitting the role of Chief Operating Officer into two specialised roles, General Manager Technical Services and General Manager Operations.

In late November Mr Justin Haines was appointed to the role of General Manager Technical Services.

Mr Haines brings to the Company solid industry expertise with 20 years experience in mining, project management and geological services, including, most recently, as Principal Engineer and Service Group Manager at GHD Pty Ltd. Prior to GHD, Mr Haines worked in multiple commodity areas including coal exploration and in-situ leach addressable uranium exploration and mining. Mr Haines has a Bachelor of Applied Science from QUT, Graduate Diploma of Science (Honours) from the University of Tasmania. He holds memberships of the Australasian Institute of Mining and Mineralogy (M.AuslMM) and of the Australian Institute of Geosciences (M.AIG) and is a Registered Professional Engineer of Queensland in the area of Geotechnical/Geological (RPEQ No. 9860).

In December 2011 the Company, appointed Terry Moore as the General Manager Operations, to commence work 30 January 2012. Mr Moore brings over of 15 years experience as a senior manager in the engineering sector including roles at Ausenco Operations and Downer EDI Mining. His experience includes electrical, mechanical, and civil engineering, design and construction projects from concept to commissioning and operational readiness. Mr Moore's solid track record incorporates management of projects including plant utilisation, cost control and business process.

#### **Issued Capital & Cash Funds**

The total issued capital at the end of the December 2011 Quarter was 768,126,960 fully paid ordinary shares quoted on the Australian Stock Exchange. On 14 November 2011 Carbon Energy announced the successful rights issue result raising \$8,264,784 or a total of 68,703,985 shares. The take-up of 79% was a strong achievement amidst the back drop of an uncertain economic environment.



#### Issued Capital & Cash Funds (continued)

A total of 32,171,000 unlisted options with exercise prices between \$0.25 and \$1.60 are on issue (with expiry dates ranging between 1 April 2012 and 10 December 2014) and with the vast majority subject to meeting annual performance measures. 3,409,000 employee options were cancelled during the Quarter.

The Consolidated Group retains cash of \$6,198,875 as at 31 December 2011. As at 31 December 2011 Carbon Energy was still to draw down on the \$10,000,000 Convertible Note Facility finalised with Pacific Road Capital.

#### Appointment of Merriman Capital, Inc as Principal American Liaison

On 18 January 2012 the Company announced that it has appointed Merriman Capital, Inc. as its Principal American Liaison to sponsor its American Depositary Receipt program on OTCQX International and who have further been retained to provide a suite of investor and market making services in the US.

#### **Legal Action**

On 12 July 2011 DERM advised Carbon Energy of charges laid against the Company and the Managing Director, associated with an alleged release of process water in August 2009. Carbon Energy conducted a thorough investigation of the issue at the time, and the resulting report concluded no ongoing environmental harm. DERM accepted the report in October 2010 and the Government subsequently confirmed the Company's findings. Proceedings in this matter have currently been adjourned until 31 January 2012.

The legal proceedings against Alexware Consulting Pty Ltd trading as Pangea Partners International and Mr John Wedgwood were still in progress during the period.

#### **Listed Investments**

Carbon Energy held 29 million shares in ASX listed uranium company, Energia Minerals Limited (26.5%) as at 31 December 2011.

For and on behalf of the Board

A.M. Dash

Managing Director

Ambler

31 January 2012



# COAL RESOURCE SUMMARY – APPENDIX A

As at 31 December 2011

December 2011 Quarter Resource Statement

Location	Coal Thickness Cut-Off (m)	Measured (Mt)	Indicated (Mt)	Inferred (Mt)	TOTAL (Mt)
Bloodwood	2	-	218	280	498
Creek,	51	-	158	57	215
Australia					
Kogan,	2	-	-	170	170
Australia	51	-	-	149	149
Mulpun, Chile2	2	26.4	36.7	40.1	103.2
	51	25.3	19	39.3	83.6
Total Resource	2	26.4	254.7	490.1	771.2
	51	25.3	177	245.3	447.6

#### Notes:

- 1. Optimal target for Underground Coal Gasification
- 2. Carbon Energy has the right to a 30% contributing interest in the Chile deposit upon completion of agreed milestones

#### **Competent Person Statement - Coal**

The information in this release that relates to resources is based on information compiled by Dr C.W. Mallett, Technical 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.



Rule 5.3

# Appendix 5B

# Mining exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10

Name of entity

CARBON ENERGY LIMITED		
ABN Quarter ended ("current quarter")		
56 057 552 137	31 December 2011	

#### Consolidated statement of cash flows

Cash flows related to operating activities		Current quarter	Year to date (6
			months)
		\$A'000	\$A'000
1.1	Receipts from product sales and related	-	-
	debtors		
1.2	Payments for (a) exploration & evaluation	-	-
	(b) development	(4,465)	(9,273)
	(c) production	-	-
	(d) administration	-	-
	(e) commercial & other	-	-
	business development		
	(g) Other projects	-	-
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature received	150	184
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Other (provide details if material)	-	-
	Net Operating Cash Flows	(4,315)	(9,089)
	Cash flows related to investing activities		
1.8	Payment for purchases of: (a) prospects	-	-
	(b) equity investments	(239)	(239)
	(c) other fixed assets		
1.9	Proceeds from sale of: (a) prospects	-	-
	(b) equity investments		
	(c) other fixed assets		
1.10	Loans to other entities	-	-
1.11	Loans repaid by other entities	-	-
1.12	Other (provide details if material) -	(1,435)	(2,413)
	Construction of 5MW Plant, UCG Panels,		
	Project Support, Project Chile and Project		
	USA		
	Notice and an early O		
	Net investing cash flows	(1,674)	(2,652)

<sup>+</sup> See chapter 19 for defined terms.

1.13	Total operating and investing cash flows (carried forward)	(5,989)	(11,741)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	8,265	8,265
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 (provide details if material) – Trade Creditors/Debtors	(419)	(124)
	Net financing cash flows	7,846	8,141
	Net increase (decrease) in cash held	1,857	(3,600)
1.20	Cash at beginning of quarter/year to date	4,342	9,799
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	Cash at end of quarter	6,199	6,199

# 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	209	
1.24	Aggregate amount of loans to the parties included in item 1.10	-	

1.25 Explanation necessary for an understanding of the transactions

Costs included in item 1.23 above cover Directors' expenses for any services undertaken outside the scope of Directors' duties, salaries for the Brisbane based executive Director, plus Non-Executive Directors' 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

N/A

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

N/A

<sup>+</sup> See chapter 19 for defined terms.

## Financing facilities available

Add notes as necessary for an understanding of the position.

		Amount available \$A'000	Amount used \$A'ooo
3.1	Loan facilities (Convertible Note Facility)	10,000	-
3.2	Credit standby arrangements	187	187

# Estimated cash outflows for next quarter

		\$A'000
4.1	Exploration and evaluation	-
4.2	Development	4,817
4.3	Production	-
4.4	Administration	1,651
	Total	6,468

# Reconciliation of cash

show	nciliation of cash at the end of the quarter (as n in the consolidated statement of cash flows) e related items in the accounts is as follows.	Current quarter \$A'000	Previous quarter \$A'000
5.1	Cash on hand and at bank	2,199	1,342
5.2	Deposits at call	4,000	3,000
5.3	Bank overdraft	-	-
5.4	Other (provide details)	-	-
	Total: cash at end of quarter (item 1.22)	6,199	4,342

## Changes in interests in mining tenements

		Tenement reference	Nature of (2))	interest(note	Interest at beginning of quarter	Interest at end of quarter
6.1	Interests in mining tenements relinquished, reduced or lapsed	-		-	-	-
6.2	Interests in mining tenements acquired or increased	-		-	-	-

<sup>+</sup> See chapter 19 for defined terms.

## 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	Amount paid up per
				security (see note	security (see note 3)
				3) (cents)	(cents)
7.1	Preference	Nil	Nil	-	-
	<sup>+</sup> securities				
	(description)				
7.2	Changes during				
	quarter				
	(a) Increases through	-	-	-	-
	issues				
	(b) Decreases through	-	-	-	-
	returns of capital, buy-				
	backs, redemptions				
7.3	<sup>+</sup> Ordinary securities	768,126,960	768,126,960	Various	Fully paid
7.4	Changes during				
	quarter (a) Increases through	68,873,204	68,873,204	\$0.12	\$0.12
	issues	587,544	587,544	\$0.12	\$0.12
	1554C5	148,355	148,355	\$0.19	\$0.29
	(b) Decreases through	-1-1000		+	+
	returns of capital, buy-				
	backs				
7.5	<sup>+</sup> Convertible debt	Nil	Nil	-	-
	securities				
	(description)				
		(Convertible note	Facility with Pacific	Road Capital still to	be drawn down)
7.6	Changes during				
	quarter				
	(a) Increases through	-	-	-	-
	issues (b) Decreases through				
	securities matured,	-	-	-	-
	converted				
7.7	Options			Exercise price	Expiry date
7.7	Unlisted Options 25c	100,000	_	25c	01/04/2012
	Unlisted Options 40c	196,000	-	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	5,600,000	-	70 <i>c</i>	10/12/2013
	Unlisted Options 80c	7,250,000	-	8oc	10/12/2013
	Unlisted Options \$1.00	10,000,000	-	\$1.00	10/12/2014
	Unlisted Options \$1.20	875,000	-	\$1.20	10/12/2013
	Unlisted Options \$1.60	1,750,000	-	\$1.60	10/12/2013
7.8	Issued during quarter	-	-	-	-
7.9	Exercised during	-	-	-	-
	quarter			ф » — -	
7.10	Expired/cancelled during quarter	2,400,000	-	\$0.70 \$0.80	10/12/2013
	during quarter	1,000,000 9,000	_	\$0.80 \$0.40	22/03/2015 01/04/2012
		9,000		\$0.40	01/04/2012
7.11	Debentures	-	_		

<sup>+</sup> See chapter 19 for defined terms.

7.12	Unsecured	notes	-
	(totals only)		

#### **Compliance statement**

- 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.
- This statement does give a true and fair view of the matters disclosed.

Sign here: \_\_\_\_\_ Date: 31 January 2012

Print name: Morne Engelbrecht

Title: Chief Financial Officer & Company Secretary

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<sup>+</sup> See chapter 19 for defined terms.