


31 January 2022, ASX ANNOUNCEMENT (ASX:LCK)



Quarterly Report – December 2021

Leigh Creek Energy Limited (“LCK” or “the Company”) provides this operations update for the three months to 31 December 2021.

Highlights

- LCUP Development Progress
- Approval under Section 23 of the *Aboriginal Heritage Act 1988*
- Urea offtake Heads of Agreement
- LCUP carbon capture and storage feasibility study completed
- Post quarter end executed MoU to acquire Mulpun ISG project in Chile
- Successful institutional share placement to raise up to \$20 million

LCK Managing Director Phil Staveley commented on the December 2021 quarter’s activities:

“At LCK we are very proud of the forward steps we are taking in our development of ESG. Critical is the fact that LCUP will be carbon neutral from 2022 – eight years earlier than previously planned. This enables the LCUP to lead the industry in ESG which we emphasised at COP26 in Glasgow when we outlined our methods for achieving it. It is of note that LCK will take up its responsibilities with regard to ESG in a clear, transparent and auditable manner – hence our early adoption of TCFD reporting (task force for financial disclosures).

We will be the only fully integrated fertiliser producer in Australia. We look forward to the further development of the project as we move rapidly towards our final investment decision, scheduled for the end of this year.”

Leigh Creek Urea Project Update

The LCUP’s EPCC contractor, leading South Korean global engineering, and construction contractor, Daelim continues to progress the work activities associated with the Front-End Engineering and Design (FEED) for Stage 2 of the LCUP.

Along with the work on the FEED by Daelim, LCK continues to progress other areas of the project development with key milestones including:

- Secured the rigs required for the LCUP by awarding the drilling contract for the LCUP Stage 1 works from Silver City Drilling, an experienced Australian provider of professional drilling services. Silver

City Drilling will conduct drilling services for Stage 1 including drilling wells for gasification operations, investigation, monitoring and water supply.

- Supply of the Siemens power generators to supply power for LCUP Stage 1 operations is on track for completion early in 2022.
- EMM Consulting Pty Ltd (EMM) has been appointed to assist with the downstream development approval process of the Leigh Creek Urea Project (LCUP). EMM will ensure the project remains on schedule and manage the necessary documentation.



LCUP Pre-Commercial Demonstration facility, Leigh Creek, South Australia

Section 23 Approval

The South Australian Minister for Aboriginal Affairs and Reconciliation approved LCK's application under Section 23 of the *Aboriginal Heritage Act 1988* (delegated authority).

The Section 23 approval complements the Petroleum Production Licence (PPL), granted by the South Australian government to LCK in November 2020.

Urea Offtake Agreement

Daelim Co., Ltd. (Daelim) and LCK entered into a Heads of Agreement (HOA) for an offtake of a minimum of 500,000 metric tonnes of granular urea per year for a minimum of five years. Key components included:

- Exclusivity to work through and finalise detailed terms of the offtake agreement contract. Entering a HoA prior to entering contracts gives Daelim exclusivity while finalising details – this was the

framework used to enter the Engineering, Procurement, Construction and Commissioning (EPCC) contract in June 2021;

- Minimum of 500,000 tonnes per annum;
- Minimum period of five years; and
- Pricing is to be according to formula-based pricing (i.e. index linked).

This is the first and last offtake agreement LCK will necessarily need to execute to secure the balance of capital funding for the project.

Along with an offtake agreement, and because of the exceptionally low production cost (A\$109/t) of LCK's carbon neutral urea fertiliser, and the concomitantly high margins, this should provide sufficient certainty for financiers.

However, this HoA does not exclude LCK securing other offtake agreements and we continue to progress additional offtake discussions with other parties.

LCK will announce, early next year, its marketing plan for total production. That plan will incorporate this agreement. It is also expected to include a new low-cost urea distribution arrangement to the Australian market.

Carbon Capture and Storage feasibility study completed

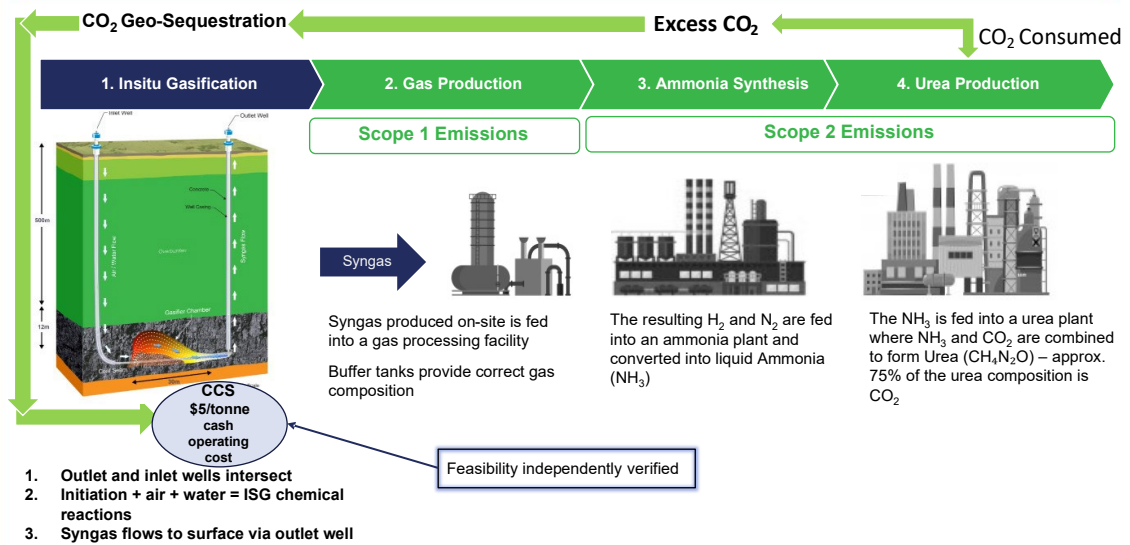
An independent feasibility study by engineering group inGauge concluded that the Leigh Creek Urea Project's (LCUP) potential for carbon capture and storage (CCS) is feasible.

The technical study covered both engineering and geological spheres and confirmed that the LCUP has all the critical elements for large scale retention of CO₂ within an underground storage facility, that include:

- Reservoir presence and sufficient capacity;
- Seal presence; seal thickness; seal integrity;
- Injectivity;
- Sufficient depth.

This is independent proof that LCK has solved the CCS issue. The next step is for Daelim to incorporate the CCS plans into the FEED (Front-End Engineering and Design) process.

LCUP CCS “by design” - Urea Manufacturing Process



Carbon Neutral, Sustainable Production 22

Carbon Neutral from 2022

The LCUP will be carbon neutral from 2022 – eight years earlier than previously planned. This voluntary carbon neutral program includes stage 1 commercial development and operations commencing in 2022.

To support its commitment LCK has been accepted as a signatory to the United Nations Global Compact (UNGC) in 2020 and more recently voluntarily joined the Climate Market Institute (the peak carbon industry body in Australia) and voluntarily committed to the Task Force on Climate-related Financial Disclosures (TCFD), which requires transparent, reliable, verifiable, and more importantly auditable reporting on climate related financial matters.

The carbon neutral program enables LCUP to lead the industry in ESG principles and provide a significant strategic advantage as well as benefits for all stakeholders.



COP26

LCK was invited to COP26 as a delegate by the Carbon Market Institute to participate in a series of workshops for leading corporations with carbon neutral plans and commitments to the UNGC. COP26 was hosted by the United Nations in Glasgow, Scotland. COP26 is the conference for representatives and governments from 197 countries to discuss steps to addressing climate change and agreeing on global and national targets.

LCK outlined the methods that will be used to ensure the LCUP project is carbon neutral from 2022, the voluntary commitment to achieve independently audited evidence through the Climate Active accreditation process and TCFD.

The company also gave an update on the rollout of the Environment, Social, Governance (ESG) initiatives that qualified it as a signatory of the UNGC in December 2020 and how it is creating enduring value for all stakeholders.



Noreen Byrne, LCK General Manager of Sustainability and People with The Hon Angus Taylor MP, Federal Minister for Industry, Energy and Emissions Reduction, at the Australia Pavilion at COP26

Emission Reduction Fund Support

LCK commenced the process to register LCUP's CCS activities under the Federal Government's Emissions Reduction Fund to generate Australian Carbon Credit Units (ACCUs).

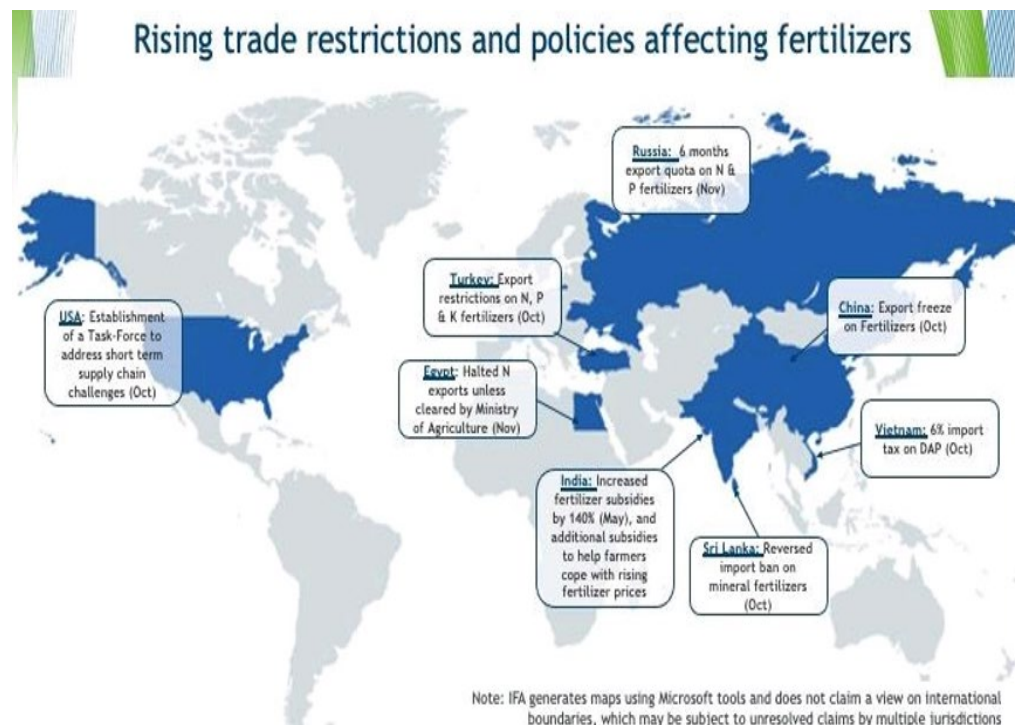
The Emissions Reduction Fund (EMF) is a voluntary scheme that aims to provide incentives for a range of organisations and individuals to adopt new practices and technologies to reduce their emissions. The EMF provides for participants to earn ACCUs for emissions reductions, which provide for one ACCU for each tonne of carbon dioxide equivalent stored or avoided by a project.

LCK will immediately seek to have LCUP project registered and generate ACCU through the EMF.

Urea Market Update

Globally, the strong demand for natural gas to provide energy has restricted availability of gas feedstock for the urea industry. This constrained supply placed upside pressure on urea prices. The Middle East Urea FOB (Free-On-Board) urea price peaked at US\$960/t during the December quarter, with pricing remaining strong into the early part of Calendar Year (CY) 2022. Recent freeze on fertiliser exports from China highlight the global supply issues, governmental involvement, and the risks of having no domestic production.

The growing urea supply shortage in domestic market highlights the strategic importance of the LCUP in South Australia. The LCUP will be the only fully integrated urea production facility in Australia, with all inputs for low carbon urea production on-site. Average nominal operating cost are forecast to be A\$109 per tonne, which is within the lowest cost quartile of the global urea production cost curve (refer ASX Announcement 2 November 2020).



International expansion via acquisition of the Mulpun ISG project in Chile

Post quarter end, LCK announced the Company has signed a MoU to exclusively negotiate the acquisition of the Mulpun ISG project in Chile from Antofagasta Mineral SA (AMSA). The Mulpun project includes freehold title to the land, approvals, assets and property that are currently held by AMSA. Under the MoU the broad commercial terms have been agreed. LCK will progress immediately with the last stage of due diligence, and negotiating the final acquisition terms and conditions with a target completion in April 2022.

The Mulpun site is located in southern central Chile, 840 km south of Santiago and 40 km east of Valdivia, a city with a population of 150,000. The estimated recoverable gas of 1,100PJ¹ is more than sufficient for long term development which may include power, urea (all urea is imported into Chile) or other developments. This large reserve effectively doubles LCK's current 2P reserve certification.

Whilst LCK's major focus is on the production of urea from the LCUP to meet increasing world demand, local needs will also be considered in the choice of final product mix.

About Antofagasta Minerals S.A. and Minera Mulpun Limitada.

Antofagasta Minerals S.A. and Minera Mulpun Limitada are a wholly owned subsidiary of Antofagasta plc, which is listed on the London Stock Exchange and is a constituent of the FTSE-100 index, with interests in mining and transport. Its Chilean mining operations, which comprise Los Pelambres, Centinela, Antucoya and Zaldívar produce around 700,000 tonnes of copper a year. It is currently carrying out an expansion at its Los Pelambres operation and plans to increase production at Centinela. With these two projects, the company has the potential to produce 900,000 tonnes of copper a year by 2026. Antofagasta Minerals also has exploration programmes in the Americas, namely Peru, the U.S. and Canada.

Finance & Corporate

LCK announced a private share placement to Energy Exploration Capital Partners, LLC (the Investor or EECP), a US-based institutional investor that previously invested in LCK and remains a shareholder. The proceeds will be used for key aspects of Stage 1 onsite works and ongoing Stage 2 study and development costs. The financing consists of the phased payments of up to \$20,000,000 to be made to LCK by the Investor.

Post the end of the quarter, LCK launched a Share Purchase Plan (SPP) for existing eligible shareholders to raise up to approximately \$5 million. Funds raised under the SPP will be used to progress the development of the LCUP.

As of 31 December 2021, the Company's total cash balance was \$8.3 million.

The accompanying Appendix 5B (Quarterly Cashflow Report) includes a summary of cashflow inflows and outflows for the quarter, including amounts in item 6.1 which include executive and non-executive director fees paid as salaries and wages.



Tenements

The tenements held by the Company at the end of the quarter are shown in the table below.

Tenement	Percentage Interest	Grant Date	Location
Petroleum Exploration Licence 650	100%	18 November 2014	Leigh Creek, SA
Petroleum Exploration Licence Application 582	100%	Application Approved	Finniss Springs, SA
Petroleum Exploration Licence Application 643	100%	Application Approved	Callabonna, SA
Petroleum Exploration Licence Application 644	100%	Application Approved	Roxby Downs, SA
Petroleum Exploration Licence Application 647	100%	Application Approved	Leigh Creek, SA
Petroleum Exploration Licence Application 649	100%	Application Approved	Oakdale, SA
Petroleum Exploration Licence Application 675	100%	Application Approved	Cooper Basin, SA
Petroleum Exploration Licence 676	100%	2 September 2021	Cooper Basin, SA
Petroleum Retention Licence 247	100%	5 June 2020	Leigh Creek, SA
Petroleum Production Licence 269	100%	24 November 2020	Leigh Creek, SA
Gas Storage Exploration Licence 662	100%	5 February 2016	Leigh Creek, SA
Authority to Prospect 2023	0%	8 April 2020	Cooper Basin, SA
Authority to Prospect 2024	0%	8 April 2020	Cooper Basin, SA

The Board of Leigh Creek Energy Limited authorised this announcement to be given to the ASX.

Further information:

Investors

Tony Lawry

T: +61 412 467 160 | E: tony.lawry@lcke.com.au

Media

Tristan Everett

T: +61 403 789 096 | E: tristan.everett@marketeye.com.au

www.lcke.com.au

About Leigh Creek Energy

The Leigh Creek Urea Project (LCUP) is Leigh Creek Energy's (ASX:LCK) flagship project, developing low-cost nitrogen-based fertiliser for local and export agriculture markets. Located in South Australia, 550 kilometres north of Adelaide, the LCUP will initially produce 1Mtpa (with potential to increase to 2Mtpa) of urea.

LCK has a comprehensive environment, social and governance strategy. It has produced syngas within all approved environmental parameters set by the regulator and will be **carbon neutral from 2022**.

The LCUP will be one of the biggest infrastructure projects of its type in Australia, providing long term economic development and employment opportunities for the communities of the Upper Spencer Gulf region, northern Flinders Ranges and South Australia. The LCUP will be the only fully integrated urea production facility in Australia, with all inputs for low carbon urea production on-site.

(1) Mulpun Resource Compliance Statement

Carbon Energy ASX announcement from 25 October 2011, has confirmed that the reserve estimates used in that document were compiled by Mr Timothy Hower of MHA Petroleum Consultants, Colorado, USA, a qualified person under ASX Listing Rule 5.11.

Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

LEIGH CREEK ENERGY LIMITED

ABN

31 107 531 822

Quarter ended ("current quarter")

December 2021

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
1. Cash flows from operating activities			
1.1 Receipts from customers			
1.2 Payments for			
(a) exploration & evaluation			
(b) development			
(c) production			
(d) staff costs		(702)	(1,487)
(e) administration and corporate costs		(1,423)	(2,758)
1.3 Dividends received (see note 3)			
1.4 Interest received			
1.5 Interest and other costs of finance paid			
1.6 Income taxes paid			
1.7 Government grants and tax incentives			
1.8 Other – movements in long-term bank deposits		-	(630)
1.9 Net cash from / (used in) operating activities		(2,125)	(4,875)
2. Cash flows from investing activities			
2.1 Payments to acquire:			
(a) entities			
(b) tenements			
(c) property, plant and equipment		(2)	(32)
(d) exploration & evaluation		(14,491)	(16,813)
(e) investments			
(f) other non-current assets			

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities		
	(b) tenements		
	(c) property, plant and equipment		
	(d) investments		
	(e) other non-current assets		
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other (provide details if material)		
2.6	Net cash from / (used in) investing activities	(14,493)	(16,845)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	7,500	7,500
3.2	Proceeds from issue of convertible debt securities		
3.3	Proceeds from exercise of options	30	30
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(300)	(303)
3.5	Proceeds from borrowings		
3.6	Repayment of borrowings	(6)	(4)
3.7	Transaction costs related to loans and borrowings		
3.8	Dividends paid		
3.9	Other (provide details if material)		
3.10	Net cash from / (used in) financing activities	7,224	7,223

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	17,710	22,813
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(2,125)	(4,875)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(14,493)	(16,845)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	7,224	7,223

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held		
4.6	Cash and cash equivalents at end of period	8,316	8,316

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	6,793	16,187
5.2	Call deposits	1,523	1,523
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	8,316	17,710

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	365
6.2	Aggregate amount of payments to related parties and their associates included in item 2	
<p><i>Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.</i></p> <p>Explanation:</p> <p>Executive and Non-Executive Directors fees.</p> <p>Piper Alderman lawyers were paid for legal services rendered to the Group. Previous Non-Executive Director Mr Greg English is a partner at Piper Alderman lawyers.</p>		

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

7. Financing facilities	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
<i>Note: the term "facility" includes all forms of financing arrangements available to the entity.</i>		
<i>Add notes as necessary for an understanding of the sources of finance available to the entity.</i>		
7.1 Loan facilities		
7.2 Credit standby arrangements		
7.3 Other (please specify)	15,000	7,500
7.4 Total financing facilities	15,000	7,500
7.5 Unused financing facilities available at quarter end		7,500
7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		
As per ASX Announcement 17 December 2021, the Company entered into a share placement agreement with Energy Exploration Capital Partners, LLC to raise net proceeds of \$15m. \$7.5m had been received at 31 December 2021.		

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (item 1.9)	(2,125)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(14,491)
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(16,616)
8.4 Cash and cash equivalents at quarter end (item 4.6)	8,316
8.5 Unused finance facilities available at quarter end (item 7.5)	7,500
8.6 Total available funding (item 8.4 + item 8.5)	15,816
8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)	0.95
<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>	
8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
Answer: Yes	
8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
Answer: Yes, funding for operations has and will continue to be sourced as per ASX Announcements 17 December 2021 and 11 January 2022.	
8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?	
Answer: Yes, funding for operations has and will continue to be sourced as per ASX Announcements 17 December 2021 and 11 January 2022.	
<i>Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.</i>	

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 31 January 2022

Authorised by: By the Board
(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.