

California Public Employees' Retirement System

Public Divestiture of Thermal Coal Companies Act Report to the California Legislature and Governor

Prepared: July 14, 2017

Public Divestiture of Thermal Coal Companies Act
CalPERS Report

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Public Divestiture of Thermal Coal Companies Act

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Executive Summary

This report is provided by the California Public Employees' Retirement System (CalPERS) pursuant to the requirements of Government Code § 7513.75, also known as the Public Divestiture of Thermal Coal Companies Act (Act). The Act became law effective October 8, 2015. The Act requires the CalPERS Board of Administration (Board), consistent with its fiduciary responsibilities, to identify, engage, and potentially divest from companies meeting the definition of "thermal coal companies" as identified by the Act.

In 2015, CalPERS identified approximately two dozen companies in the CalPERS public asset investment universe as potentially meeting the definition of a "thermal coal company" as specified in the Act. Following the October 19, 2015, Investment Committee meeting, CalPERS prohibited new or additional investments in the identified companies and began engagement activities. In May 2017, the Investment Committee (Committee) of the CalPERS Board evaluated the outcome of engagement activities undertaken per the requirements of the Act, as well as the investment performance and risk considerations of the identified companies, and implications for the portfolio. The Committee considered the following:

- Three companies had indicated plans to adapt their business models in consideration of clean energy generation (such as through a reduction of thermal coal mining revenues), and were exempt from the divestment requirement of the Act
- Fourteen companies failed to indicate applicable business plan adaptations, or failed to respond to CalPERS engagement efforts and were subject to divestment per the requirements of the Act
- Although CalPERS had no holdings to divest, an additional eight companies were identified as subject to the Act

All applicable holdings were divested in advance of the July 1, 2017 deadline specified by the Act.

Additional information on the requirements of the Act, and the required reporting is available in the following pages.

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The Act

The Act added § 7513.75 to the California Government Code, to read:

- (a) The Legislature finds and declares all of the following:
- (1) The combustion of coal resources is the single largest contributor to global climate change in the United States.
 - (2) Climate change affects all parts of the California economy and environment, and the Legislature has adopted numerous laws to mitigate greenhouse gas emissions and to adapt to a changing climate.
 - (3) The purpose of this section is to require the Public Employees' Retirement System and the State Teachers' Retirement System, consistent with, and not in violation of, their fiduciary responsibilities, to divest their holding of thermal coal power as one part of the state's broader efforts to decarbonize the California economy and to transition to clean, pollution free energy resources.
- (b) As used in this section, the following definitions apply:
- (1) "Board" means the Board of Administration of the Public Employees' Retirement System or the Teachers' Retirement Board of the State Teachers' Retirement System, as applicable.
 - (2) "Company" means a sole proprietorship, organization, association, corporation, partnership, venture, or other entity, or its subsidiary or affiliate, that exists for profit-making purposes or to otherwise secure economic advantage.
 - (3) "Investment" means the purchase, ownership, or control of publicly issued stock, corporate bonds, or other debt instruments issued by a company.
 - (4) "Public employee retirement funds" means the Public Employees' Retirement Fund described in Section 20062 of this code, and the Teachers' Retirement Fund described in Section 22167 of the Education Code.
 - (5) "Thermal coal" means coal used to generate electricity, such as that which is burned to create steam to run turbines. Thermal coal does not mean metallurgical coal or coking coal used to produce steel.
 - (6) "Thermal coal company" means a publicly traded company that generates 50 percent or more of its revenue from the mining of thermal coal, as determined by the board.
- (c) The board shall not make additional or new investments or renew existing investments of public employee retirement funds in a thermal coal company.
- (d) The board shall liquidate investments in a thermal coal company on or before July 1, 2017. In making a determination to liquidate investments, the board shall constructively engage with a thermal coal company to establish whether the company is transitioning its business model to adapt to clean energy generation, such as through a decrease in its reliance on thermal coal as a revenue source.

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- (e) On or before January 1, 2018, the board shall file a report with the Legislature, in compliance with Section 9795, and the Governor, which shall include the following:
 - (1) A list of thermal coal companies of which the board has liquidated its investments pursuant to subdivision (d).
 - (2) A list of companies with which the board engaged pursuant to subdivision (d) that the board established were transitioning to clean energy generation, with supporting documentation to substantiate the board's determination.
 - (3) A list of thermal coal companies of which the board has not liquidated its investments as a result of a determination made pursuant to subdivision (f) that a sale or transfer of investments is inconsistent with the fiduciary responsibilities of the board as described in Section 17 of Article XVI of the California Constitution and the board's findings adopted in support of that determination.
- (f) Nothing in this section shall require a board to take action as described in this section unless the board determines in good faith that the action described in this section is consistent with the fiduciary responsibilities of the board described in Section 17 of Article XVI of the California Constitution.

The Act also amended §16642 of the California Government Code to read:

Present, future, and former board members of the Public Employees' Retirement System or the State Teachers' Retirement System, jointly and individually, state officers and employees, research firms described in subdivision (d) of Section 7513.6, and investment managers under contract with the Public Employees' Retirement System or the State Teachers' Retirement System shall be indemnified from the General Fund and held harmless by the State of California from all claims, demands, suits, actions, damages, judgments, costs, charges and expenses, including court costs and attorney's fees, and against all liability, losses, and damages of any nature whatsoever that these present, future, or former board members, officers, employees, research firms as described in subdivision (d) of Section 7513.6, or contract investment managers shall or may at any time sustain by reason of any decision to restrict, reduce, or eliminate investments pursuant to Sections 7513.6, 7513.7, and 7513.75.

CalPERS Compliance with the Act

All applicable holdings were divested in advance of the July 1, 2017 deadline specified by the Act. The tables below provide additional information.

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Table 1: Thermal coal companies of which the CalPERS board has liquidated its investments pursuant to Government Code § 7513.75, subdivision (d).

Table 1	
Ref #	Company
1.	Alliance Holdings GP LP
2.	Alliance Resource Partners
3.	Arch Coal Inc.
4.	China Coal Energy
5.	Cloud Peak Energy Inc.
6.	Gujarat Mineral Development Corp. LTD
7.	Hallador Energy Co.
8.	INDO Tambangraya Megah TBK P
9.	Inner Mongolia Yitai Coal
10.	Lubelski Wegiel Bogdanka SA
11.	Peabody Energy Corp
12.	Tambang Batubara Bukit Asam
13.	Westmoreland Coal Co.
14.	Whitehaven Coal Ltd.

Table 2: Thermal coal companies in which the CalPERS board had no holdings to divest.

Table 2	
Ref #	Company
1.	Asia Resource Minerals PLC
2.	Alpha Natural Resources Ltd.
3.	James River Coal Company
4.	Coal India Limited
5.	PT Bumi Resources
6.	PT Harum Energy
7.	Foresight Energy
8.	Rhino Resources

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Table 3: Thermal coal companies the board engaged and determined were not subject to the divestment requirement of the Act because they had indicated plans to transition their business models to adapt to clean energy generation (such as through a decrease in reliance on thermal coal mining as a revenue source).

Table 3		
Ref #	Company	Basis of Decision
1.	Banpu Public Co. Ltd.	In correspondence with Banpu Public Limited dated February 1, 2016, the company stated: <ol style="list-style-type: none"> a. It has started investing in renewable power, namely solar power b. That revenue from solar power will gradually become a significant part of the company's earnings over a multi-year period
2.	Exxaro Resources Limited	In correspondence with Exxaro Resources Limited, dated June 15, 2016, the company stated: <ol style="list-style-type: none"> a. It is utilizing a multi-pronged approach to become carbon neutral and thrive in a low-carbon economy b. Its approach includes utilizing 1) an energy and carbon management program to address mitigation and adaptation issues, and 2) integrating environmental friendly and cleaner energy projects into the company's growth pipeline c. It has long-term strategic planning initiatives regarding sustainable energy d. As part of its portfolio diversification, and efforts to transition to cleaner energy projects, the company has undertaken several clean energy projects, including two wind farm projects
3.	PT Adaro Energy	In a meeting with Adaro Energy on November 10, 2015 in Jakarta, the company stated: <ol style="list-style-type: none"> a. It has developed a strategic plan to diversify its business mix over the long term (next 5-15 years) <p>In correspondence with Adaro Energy dated November 19, 2015 the company stated:</p>

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Table 3		
Ref #	Company	Basis of Decision
		b. As it increases the percentage of revenue from power generation the company will look at renewables as a source, including solar, and that it has invested in geo-thermal in the past In correspondence with Adaro Energy dated November 26, 2015 the company stated: c. That in the future the business model will focus on three components, with power generation to be the most prominent, sourced from a variety of energy sources including solar and renewables

Table 4: A list of thermal coal companies of which the board has not liquidated its investments as a result of a determination made pursuant to subdivision (f) that a sale or transfer of investments is inconsistent with the fiduciary responsibilities of the board as described in Section 17 of Article XVI of the California Constitution and the board’s findings adopted in support of that determination.

Table 4		
Ref #	Company	Basis of Decision
1.	No items to report	Not Applicable – No investments were retained on the basis of perceived conflicts with CalPERS’ fiduciary duties.

Correspondence

The correspondence received by CalPERS associated with Table 3 above is attached.

From: [Virach Vudhidhanaseth](#)
To: [Pokk, Tiffany](#)
Cc: [REDACTED]
Subject: Response to CalPERS from Banpu Public Company Limited
Date: Monday, February 01, 2016 2:27:56 AM

Dear Sirs,

According to your letter dated January 29, 2016 requesting Banpu Public Company Limited to provide information regarding our business, we would like to provide responses to your questions as following.

1. What is the total percentage of revenue that Banpu Public Company Limited generated from mining thermal coal based upon your most recent reporting period?

The sale revenue of Banpu based on the latest quarterly financial report (July to September 2015) consists of revenue from coal mining business 93.1%, revenue from power business 5.6% and revenue from other business 1.3%.

2. How is Banpu Public Company Limited transitioning its business model to adapt to clean energy generation, such as through a decrease in its reliance on thermal coal as a revenue source?

The company has studied and invested in clean coal technology such as ultra super critical power plant. In addition, the company has also started investing in renewable power namely solar power business. The revenue from solar power business will gradually become a significant part of the company's earnings over the next 4-5 years.

Should you have any questions or would like to discuss in detail, please feel free to contact me at this email or by telephone call at [REDACTED]

Regards,

Virach Vudhidhanaseth
Investor Relations Manager
BANPU PUBLIC COMPANY LIMITED

[REDACTED]
www.banpu.com



15 June 2016

Ms Tiffany Pokk
Investment Officer
California Public Employees Retirement System
P.O. Box 2749
LPE Suite E4800
Sacramento, CA 95812-2749

Ref: Request for information on Exxaro Resources Limited operational exposure to thermal coal and strategic position on clean energy

Dear Ms. Pokk,

I'm writing in response to your enquiry in the letter dated January 29, 2016 regarding our percentage of revenue generated from thermal coal and our strategic response to transitioning to clean energy,

Introduction

I would like to thank your organisation for the continued investment in Exxaro Resources Limited ("Exxaro"). Our financial performance during 2015 continued to be robust, driven by the coal business, even under challenging global economic and commodity markets.

About 75% of South Africa's total primary energy supply and 90% of electricity generation comes from locally mined coal. The demand of coal for electricity is ultimately governed by South Africa's Integrated Resource Plan (IRP) published in 2010. This version of the IRP shows the installed coal-fired capacity increasing from 35 GW in 2010 to 40 GW in 2030. An update to the IRP in 2013, which has not yet been promulgated, has several scenarios, with a base case with installed coal-fired capacity increasing from 37 GW in 2013, through 39 GW in 2030, to 41 GW in 2050. Given this scenario of the country's long-term energy requirements, Exxaro has made significant capital investment in coal mining to support the South African government's IRP. Consequently we are a significant supplier of coal to our national power utility and over the past years we have seen a steady increase in revenue contribution as a percentage of the group revenue in line with electricity generation capacity.



Roger Dyason Road Pretoria West 0183 | PO Box 9229 Pretoria 0001 South Africa | Tel +27 12 307 5000 | Fax +27 86 201 6309 | www.exxaro.com
Exxaro Resources Ltd. Reg No 2000/011076/06 | Directors: Dr D Konar (Chairman) MDM Mgojo (Chief Executive Officer) WA de Klerk (Finance Director)
S Dakile-Hlongwane Dr C.J Fauconnier MW Hlatla S Mayet VZ Mntambo V Nkonyeni Dr MF Randers J van Rooyen D Zihlangu
Group Company Secretary: CH Wessels

Exxaro revenue from thermal coal

As you will see from the table below our revenue from thermal coal as a percentage of group revenue has been increasing since 2007 from 40% in 2015 to 94% for the financial year ending 31 December 2015. This increase is attributable to various corporate activities over these years where we have been disposing of assets, such as our base metals (zinc), where we remain with an interest of 26.0%, and TiO₂ feedstock businesses. The latter was Mergers and Acquisition activity which resulted in Exxaro acquiring an interest of 44 % in the NYSE-listed Tronox and 26% in their South African business. Earnings from these interests are equity accounted in our operating profit.

	2015	2014	2013	2012	2011	2010	2009	2008	2007
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Total group revenue	18,380	16,401	13,568	16,122	20,962	17,155	15,009	13,843	10,157
Total coal business revenue	18,093	16,176	13,362	12,064	12,420	10,515	9,731	9,040	5,087
Rm revenue from mining thermal coal	17,225	14,361	11,616	10,199	10,493	8,670	8,392	7,333	4,077
Revenue from mining thermal coal (as a percentage of group revenue)	94%	88%	86%	63%	50%	51%	56%	59%	40%
Revenue from mining thermal coal (as a percentage of coal business revenue)	95%	89%	87%	85%	84%	82%	86%	81%	80%

Transitioning into low carbon energy strategy

Energy and climate challenges are broad and potential solutions are complex. Exxaro is addressing three imperatives simultaneously in our drive to become carbon neutral and thrive in a low-carbon economy, namely energy security, economic productivity and environmental impact. We acknowledge that we have to address potential energy shortages, rising costs of energy, climate change and related environmental concerns as imperatives in our long-term business strategy. To achieve this, we have implemented a dual approach:

- An energy and carbon management programme to address mitigation and adaptation issues;
- Integrating environmentally friendly and cleaner energy projects into our growth pipeline.

Carbon mitigation and adaptation strategy and the Carbon Disclosure Project (CDP)

Exxaro adheres to the principles of the CDP and measures and reports its emissions annually. Exxaro has participated in the CDP since 2008 and we have consistently improved our disclosure and performance band on the Carbon Disclosure Leadership Index and Carbon Performance Leadership Index (*see table below*).



Year	Disclosure Score	Performance Band
2008	Not Scored	Not Scored
2009	73	Not Scored
2010	87	B
2011	94	A-
2012	100	B
2013	97	B
2014	98	B
2015	99	B

Future trends relevant to the mining industry are under increasing pressure on licence-to-operate aspects (social and environmental), automation, ever-reducing ore quality, more complex and remote ore bodies and step changes in technological innovation. To align our business to these future requirements we are currently working on conceptualising a thriving Exxaro in the future, the world and industry of 2030, based on key design criteria derived from global and industry megatrends, as well as disruptive technologies. Senior managers have been assigned to oversee detailed research in specific areas for application in Exxaro. Known as strategic thrusts, these are aligned to our strategy and are providing a roadmap to move from our current state to an optimum, sustainable mining state. Our 10 strategic thrusts include long-term planning in:

- **Smart exploration:** focuses on new and developing exploration methods and technologies to accurately define and model the ore body and perform efficient resource characterisation;
- **Next-generation mining processes:** focuses on new mining methods and technologies to maximise production and efficiency, decrease cost and allow recovery of difficult reserves;
- **Next-generation processing:** focuses on new processing methods and technologies that will increase the mineral recovery, minimise waste, and are much more water and energy efficient;
- **Logistics and physical asset management:** an integrated approach to manage all assets and the logistics chain, while examining possibilities to improve performance, risk management and expenditure over the total life cycle;
- **Clean-coal technology:** technologies that increase the efficiency of coal use and reduce the environmental impact of coal on emissions, water pollution and waste;
- **Automation:** an integrated platform to manage production information and automated equipment to maximise the value of the entire operation along the value chain;
- **Innovation to zero harm:** ensures zero harm to employees and communities, and minimises environmental impact;
- **Social responsibility:** focuses on equipping employees for the future and co-creating a sustainable economic environment for mining communities beyond the life of mine;
- **Sustainable energy:** focuses on optimising energy consumption as well as maximising energy generation and recovery opportunities at current and future operations;



- Redefining the value chain: improves the value chain by implementing innovative solutions and redefining and integrating the current value chain, including downstream processing and by-products.

Clean energy projects

As part of our portfolio diversification and transitioning into cleaner energy projects, Exxaro established an energy supply company, Cennergi (Pty) Ltd to feed the national grid and third-party customers. This is a joint venture with Tata Power Company Ltd which focuses on greener power production to contribute to lowering carbon emissions and position South Africa as proactively driving sustainability. Cennergi is currently commissioning two wind farm projects in the Eastern Cape Province, South Africa:

1. The Amakhala Emoyeni Wind Farm project is a 134 MW installed capacity wind farm located near the town of Bedford in the Eastern Cape. It has an excellent wind resource and close proximity to infrastructure, most importantly the national electricity supply grid, and;
2. The 95MW Tsitsikamma Community Wind Energy Facility is located approximately 30 km west of Humansdorp, south of the N2 National Road in the Tsitsikamma area, falling within the Koukamma Local Municipality of the Eastern Cape Province.

We remain committed to actively integrating clean energy in our core business and reducing our carbon emissions.

I trust we will continue to receive the investment support from your organisation and that you will partner with us in this journey of transitioning into clean energy.

Yours sincerely

MMD Mgojo
Chief Executive Officer



From: [Cameron Tough](#)
To: [Rhines, Craig](#)
Cc: [REDACTED]; [Pokk, Tiffany](#); [REDACTED];
[Simpson, Anne](#)
Subject: RE: CalPERS Follow Up - Adaro
Date: Thursday, November 26, 2015 12:10:35 AM

Dear Craig,

Here is the link to our 2014 Annual Report: <http://www.adaro.com/wp-content/uploads/2015/05/AR2014-English-for-Web.pdf>

I would suggest to at least read the Letter from the Board of Directors, and specifically on page 20 which describes our Three Engines strategy.

The contribution to group ebitda of coal mining has dropped to 63% from 84% in 2009. In the future we will have three engines, with power (not just from coal, but from all manner of energy sources including solar and renewables) to have the most prominence.

Mikhail, please send the soft copy attachment of our latest IR presentation.

Kind regards,

Cameron

From: Rhines, Craig [Craig.Rhines@calpers.ca.gov]
Sent: Thursday, November 19, 2015 10:50 AM
To: Cameron Tough
Cc: [REDACTED]; [Pokk, Tiffany](#); [REDACTED];
[Simpson, Anne](#)
Subject: Re: CalPERS Follow Up - Adaro

Cameron, thanks for the prompt response -we'll take a look.

Best, Craig

Sent from my iPhone

On Nov 18, 2015, at 7:31 PM, Cameron Tough
[REDACTED]

Dear Craig,

Here is the link to the latest presentation <http://www.adaro.com/publication/view/adaro-energy-investor-presentation-november-2015>

We will send a soft copy of the presentation plus an excerpt from our BoD Letter from our 2014 annual report which speaks to the three engines.

Best,

Cameron

Delivering Positive Energy

Click here<<http://www.adaro.com/about-adaro/our-business-at-a-glance/>> to find out more

From: Cameron Tough

Sent: Thursday, November 19, 2015 10:18 AM

To: 'Rhines, Craig'

Cc: [REDACTED]; Pokk, Tiffany; [REDACTED]

Subject: RE: CalPERS Follow Up - Adaro

Dear Craig,

[REDACTED]

The Three Engines of Growth is a strategy we have deployed for a few years now. We began our move into power before 2010, when we established our power division, Adaro Power. While our mining activities are in coal, and we don't plan to mine other material, Adaro Power is agnostic when it comes to fuel and will look at gas, renewables, etc. We have invested in geothermal in the past and are looking at installing solar at our Kelanis river terminal.

It's mentioned in our Letter from the Board of Directors in our annual report and elsewhere. Dicky, could you please send him the link to the section in our annual report?

Could someone also please send a link, or attach a copy of our latest IR presentation.

Best,

Cameron

Delivering Positive Energy

Click here<<http://www.adaro.com/about-adaro/our-business-at-a-glance/>> to find out more

From: Rhines, Craig [<mailto:Craig.Rhines@calpers.ca.gov>]

Sent: Thursday, November 19, 2015 2:38 AM

To: Cameron Tough

Cc: [REDACTED]; Pokk, Tiffany

Subject: CalPERS Follow Up - Adaro

Hi Cameron-

[REDACTED]

Also, per our discussion after the meeting, I would greatly appreciate if you could share any public disclosures concerning Adaro's long-term strategy to diversify the business mix into 1/3rd segments.

We look forward to speaking in the near future.

Warm Regards,

Craig Rhines

Investment Officer | CalPERS Investments - Global Governance

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