



THE BOURSE FACTOR RESEARCH NOTE

APRIL 2018

TIMAH RESOURCES LIMITED

MARKET DATA

ASX Code	TML
Current Price	\$0.050
Total Shares	93.48 million
Market Cap	\$ 4.67 million

BOARD OF DIRECTORS

Tan Sri Dr Mah King Thian	(Executive Chairman)
Dato' Seri Mah King Seng	(Managing Director)
Soong Swee Koon	(Executive Director)
Billy Lee Chong Hoe	(Independent Director)
Michelle Siew Yee Lee	(Independent Director)
Jack Tian Hock Tan	(Independent Director)
Andrew Wallis	(Company Secretary)

KEY MANAGEMENT

Soong Swee Koon	(Chief Operating Officer)
Eric Wong Kai Lih	(Chief Financial Officer)

MAJOR SHAREHOLDERS

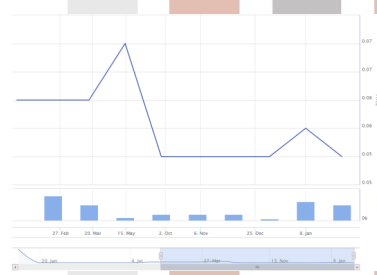
Cash Nexus (M) Sdn Bhd	61.51%
Timah Pasir Sdn Bhd	5.62%
Time Elemental Sdn Bhd	4.02%
Mrs Phaik Suan Kang	2.14%

COMPANY VISION

Excellence in sustainable renewable energy power generation.

Timah Resources aims to operate an efficient and sustainable renewable energy power plant to create positive economic, social and environmental values for Company stakeholders.

SHARE PRICE CHART



OVERVIEW

Timah Resources Limited ("Timah Resources") focuses on generating energy to meet the needs of society in a sustainable manner.

The Company listed on the National Stock Exchange (NSX) in 2008. In 2011 the Company changed its name to Timah Resources Limited and subsequently, it was listed on the Australian Securities Exchange (ASX) on 16th September 2015.

Timah Resources and its wholly owned Malaysian-based subsidiary, Mistral Engineering Sdn. Bhd. ("Mistral"), are involved in the generation of renewable energy in Malaysia. This production of energy by Mistral uses green technology to produce environmentally friendly and renewable power from Palm Oil Mill Effluent (POME).

Mistral operates a biogas power plant in Sabah, Malaysia that uses the methane released from the treatment of the POME from the adjacent palm oil mill owned by Prolific Yield Sdn. Bhd. ("PYSB"). Timah Resources and Mistral are helping to reduce the emission of greenhouse gases by capturing this methane and using it to create bioenergy.

Timah Resources aims to become a leading biogas renewable energy producer in Malaysia, adopting appropriate standards of occupational health and safety, environmental management and ethics.

Currently, all electricity produced by the Mistral Plant is sold to the national grid under the new Feed-in Tariff (FiT) Programme Renewable Energy Power Purchase Agreement for RM0.397 per KWh.

Timah Resources works with Government bodies in order to meet the requirements of Malaysia's FiT Programme. By meeting the FiT's environmental and technical standards, Timah Resources creates shareholder value through the FiT incentives that are offered by the Government.

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IN FOCUS

Positioning

- Timah Resources is principally involved in the production of renewable energy in Malaysia
- Timah Resources' wholly owned subsidiary, Mistral, owns and operates a biogas power plant in Malaysia with a 4.0MW production capacity and an export capacity of approximately 3.5MW
- Timah Resources focuses on the generation of sustainable and green energy with Mistral using POME to create biogas
- Timah Resources aims to become a leading biogas renewable energy producer in Malaysia
- Timah Resources & Mistral strive to meet the Sustainable Energy Development Authority's (SEDA) standards while being operationally efficient and generating revenue

Short Term Core Growth

Short term core growth from the improvement in the efficiency of the biogas power plant in order to maximise profit from the existing Renewable Energy Power Purchase Agreement (REPPA).

Long Term Core Growth

Long term core growth will occur by using the experience and expertise gained from Mistral's plant to expand the business by investing in other biogas power plants.



"Timah Resources aims to become a leading biogas renewable energy producer in Malaysia."



ORGANIC GROWTH STORY

Organic Growth

There is potential to transform the CEPAT Group's business model into a more eco-friendly and sustainable model.

Timah Resources believes there are many green opportunities to be explored within the Group.

"Timah Resources focuses on generating energy in a sustainable manner."

GROWTH STRATEGY

Short Term Strategy

Timah Resources will replace four existing engines (1 x 1.204 MW engine, 3 x 900kW engines) with three new 1.205MW biogas engines, assembled locally in Malaysia. These new biogas engines will meet SEDA Malaysia's bonus criteria that require the units to have an electrical efficiency above 40%. The local assembly of the engines also meets the additional bonus criteria.

The new biogas engines are expected to generate additional revenue estimated at around AU\$1.59 million (RM\$5 million) per annum, in comparison to the existing revenue before the engine replacement. The new engines will be expected to achieve higher operational efficiency, lower maintenance costs and improved plant performance.

Long Term Strategy

Mistral began selling and exporting electricity to the national grid on 15 Feb 2017 at RM0.397 per KWh.

After the engine replacements in 2019 and if the FiT bonus criteria are tested and met, the revised FiT rate will be RM0.4669 per kWh.

STRATEGIC PLAN

Organic Vision

Timah Resources aims is to operate an efficient and sustainable renewable energy power plant to create positive economic, social and environmental values for our stakeholders.





FINANCIAL HIGHLIGHTS

CONSOLIDATED STATEMENT OF PROFIT OR LOSS FOR THE HALF-YEAR ENDED
31 DECEMBER 2017

	Note	Consolidated Group	
		Half-year Ended 31 December 2017	Half-year Ended 31 December 2016
		RM'000	RM'000
Revenue	2	2,540	11,738
Cost of sales		(2,605)	(11,891)
Gross loss		(65)	(153)
Other income	2	1,868	1,137
Administrative expenses		(403)	(452)
Finance costs		(1,068)	(824)
Profit/(Loss) before income tax		332	(292)
Income tax benefit/(expense)		210	(423)
Profit/(Loss) for the period		542	(715)
Other comprehensive income:			
Exchange differences on translation of foreign operations		(249)	441
Total comprehensive income for the period		293	(274)
Earnings per share (cents)		0.058	(0.076)

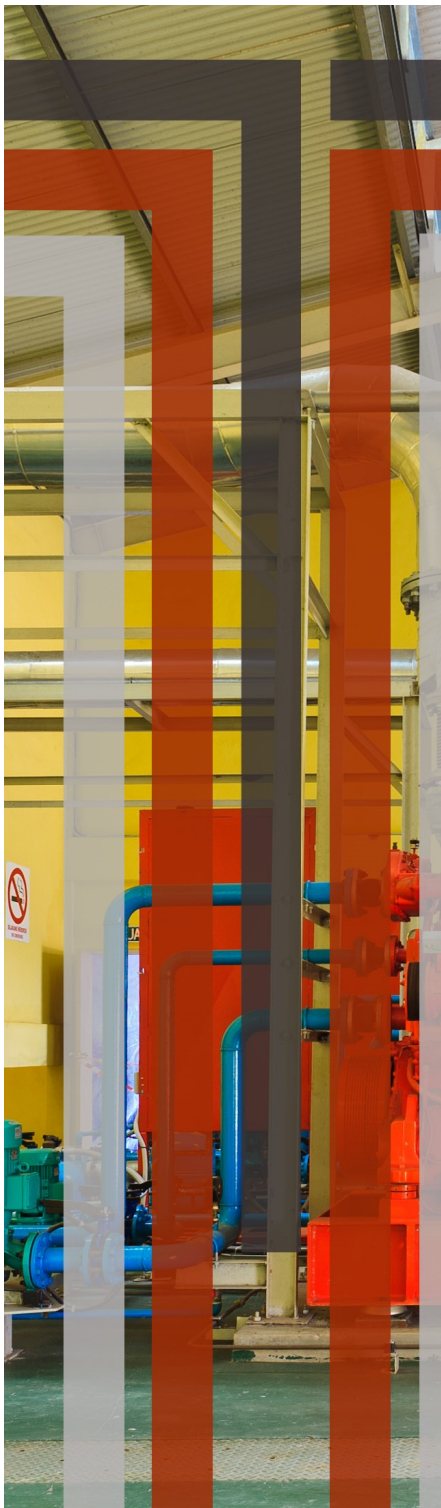
“Timah Resources works with Government bodies in Malaysia in order to meet the highest environmental and technical standards required under the Government’s Feed-in Tariff Programme.”

BUSINESS MODEL

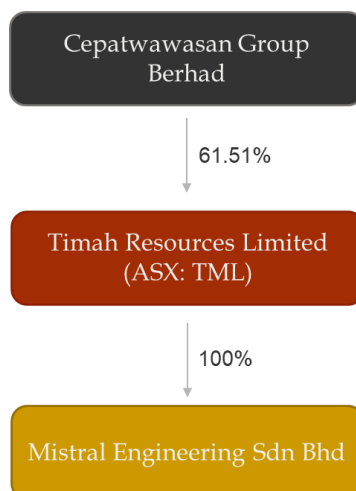
The FiT is the most commonly applied policy mechanism to spur growth in the renewable energy industry and allows electricity produced from a renewable energy source, such as POME, to be sold to authorised power utility companies at a fixed premium price (FiT Rate) for a specific duration. In Malaysia, the FiT mechanism was established under the Renewable Energy Act 2011 (Malaysia).

Malaysia’s FiT system requires utility companies to purchase electricity produced from renewable resources from approved renewable energy producers for supply to the electricity grid for a set period, in preference to energy produced from non-renewable sources. By guaranteeing access to the Grid and setting a favourable price per unit of renewable energy, the FiT mechanism is intended to ensure that renewable energy becomes a viable and long-term investment.

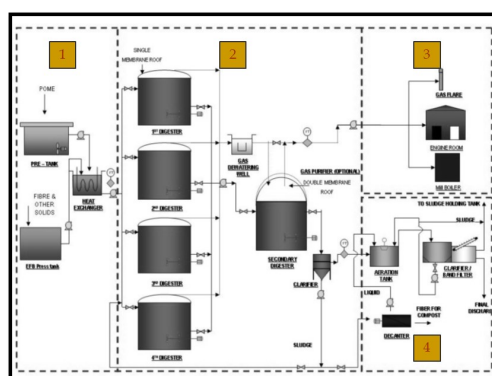




COMPANY OVERVIEW



- Timah Resources and its subsidiary, Mistral are principally involved in the renewable energy power generation business in Malaysia
- Mistral owns and operates a biogas power plant located in Sabah, Malaysia, with an export capacity of approximately 3.5MW
- The biogas power plant processes the POME from the adjacent palm oil mill and converts it into bio-fuel to generate electricity
- Timah is a subsidiary of Cepatwawasan Group Berhad ("CEPAT"), a Plantation Group listed on the Malaysian Stock Exchange (KLSE: CEPAT)
- CEPAT has over 30 subsidiary companies incorporated in Malaysia involved in milling, quarrying, power generation and owns 10,290 hectares of oil palm plantations in Sabah



Biogas Electricity Generation Process

1. Reception and conditioning of the POME
2. Methane recovery from the POME in digester tanks
3. Power generation from gas engines
4. Waste water and sludge treatment



CORPORATE STRUCTURE

Industry Overview

Malaysia produces approximately 39% of the world's palm oil. Due to an increasing global demand for palm oil products, palm oil plantations in Malaysia have expanded over the past 10 years, which in turn has increased the output of by-products from the production of palm oil, in particular POME, which is a liquid waste with a high organic content.

Due to its high solids concentration and acidity, POME will pollute watercourses if discharged directly into the watercourses without proper treatment. POME treatment ponds in oil mills are still not the most environmentally effective method of treating this palm oil by-product as the release of methane gas into the atmosphere from open POME ponds contributes to global warming.

It has been estimated that, in 2011, approximately 57 million tonnes of POME were generated. If treated anaerobically, this quantity of POME could have been expected to produce approximately 500,000 tonnes of methane and approximately 3.2 million MWh of potential energy (which could potentially provide electricity to 700,000 households in Malaysia).

Reportedly, less than 30% of the waste is utilised in renewable power generation. Hence, there is big potential for the utilisation of POME for power generation in Malaysia. The Malaysian Government has implemented the Entry Point Project No 5 (EPP 5) under the National Key Economic Areas, which aims to achieve the installation of biogas facilities in all palm oil mills in Malaysia by 2020.

The Malaysian Government is actively encouraging industries, including the palm oil industry, to adopt technologies that reduce greenhouse gas emissions. It does this through generous legislated renewable energy initiatives, including the FiT mechanism that was established under the Renewable Energy Act 2011 (Malaysia).

Under the Tenth Malaysian Plan 2011-2015, several new initiatives anchored upon the Renewable Energy Policy and Action Plan will be undertaken to achieve a renewable energy target of 985 MW by 2015, contributing 5.5% to Malaysia's total electricity generation mix. In constructing the Plant, Mistral has taken advantage of these initiatives and will seek to continue to benefit from them through the operation of the Plant and the selling of the electricity generated.

In addition, CEPAT owns a total of 10,290 hectares of oil palm plantations in Sabah, Malaysia, which will ensure adequate internal supply of POME to Mistral to sustain its growth.

Products/Services

Timah Resources, through its wholly owned subsidiary, Mistral, generates electricity by utilising captured methane gas generated from POME as a fuel.



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Customers

The electricity produced and delivered by Timah's wholly-owned subsidiary, Mistral, is currently exported to the grid and sold to the power utility, Sabah Electricity Sdn Bhd (SESB) at the rate of RM0.397 per KWh under Malaysia's FiT Programme.

Relevant Authorities

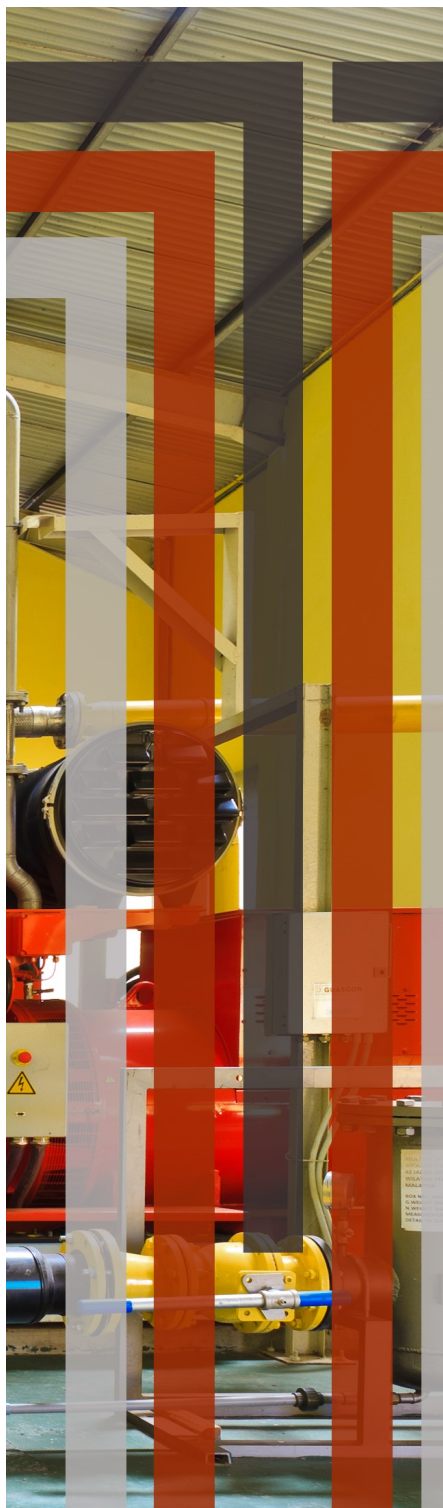


The Malaysian Government declared in the 8th Malaysian Plan (2001-2005) that renewable energy is the country's fifth fuel in order to diversify its energy supply mix in order to diversify its energy sources, and launched the Green Technology Financing Scheme (GTFS) to provide subsidised financing to approved renewable energy projects. Mistral is a beneficiary of the scheme.



In the 10th Malaysian Plan (2011-2015), the Malaysian Government set up SEDA to further support and promote the development of the Malaysian renewable energy industry. Feed-in Tariffs have been introduced and implemented by SEDA to ensure the profit sustainability of local renewable energy projects, including the Mistral Power Plant.

The Malaysian Industrial Development Authority (MIDA) has granted Investment Tax Allowance to the Group as additional tax credit against the income tax.



Captured biogas emitted from POME is used as fuel to combust in biogas engines to generate green and renewable electricity



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UNIQUE ADVANTAGE

Competitive Advantage & Strengths

1. Internal source of fuel
2. Almost zero cost of feedstock
3. Secured buyer with 16 year contract - guaranteed purchases
4. Government incentives—FiT, Green Technology Financing and Investment Tax Allowance
5. Directors' experience and skilled operators and employees
6. Growth potential in view of the number of palm oil mills still without biogas plants in Malaysia
7. Strong internal financial support from the holding company - a sign of confidence

Strategy & Objectives

The short term strategic goal for Timah Resources is to maximise profit by striving to improve the efficiency of the Mistral's biogas power plant and meeting the FiT bonus criteria.

This strategy will assist Timah Resources to achieve the long term objectives of becoming one of the leading eco-friendly and sustainable energy providers in Malaysia, and transforming the CEPAT Group to a greener business entity to create new positive economic, environmental and social values.



Mistral Power Plant in Sabah, Malaysia





DIRECTORS & SENIOR MANAGEMENT

Executive Chairman: Tan Sri Dr Mah King Thian

Tan Sri Dr Mah King Thian has almost 29 years of experience in palm oil cultivation, milling and construction.

He graduated from Monash University with a Bachelor of Economics Degree majoring in Accounting. He also holds a Bachelor of Law and was admitted and enrolled as an Advocate and Solicitor of the High Court of Malaya in 1988. He is also a Fellow Member of Certified Practising Accountant Australia (FCPA). In 2018 he completed his postgraduate study on palm oil renewable energy businesses and was awarded a Doctorate of Philosophy (PhD) by Liverpool Business School, United Kingdom.

Tan Sri Dr Mah King Thian is also the Managing Director of MHC Plantations Bhd and Executive Chairman of Cepatwawasan Group Berhad, both of which are listed on the Bursa Malaysia exchange.

Tan Sri Dr Mah King Thian currently resides in Malaysia.

Managing Director: Dato' Seri Mah King Seng

Dato' Seri Mah King Seng has more than 38 years of experience in palm oil cultivation, milling and construction.

He graduated from University of Minnesota with a degree in Agricultural Science in 1978. In 1980, he attended the Palm Oil Mill Engineer/ Executive Training course on palm oil milling organised by the Malaysian Oil Palm Growers Council. He subsequently obtained his Bachelor of Laws Degree in 1985 from the University of Buckingham, United Kingdom, and was admitted and enrolled as an Advocate and Solicitor of the High Court of Malaya in 1990.

He is also the Executive Chairman of MHC Plantations Bhd and Managing Director of Cepatwawasan Group Berhad, both of which are listed on the Bursa Malaysia exchange.

Dato' Seri Mah King Seng currently resides in Malaysia.

Executive Director: Soong Swee Koon

Soong Swee Koon is a qualified engineer and holds a Steam Engineers' Certificate of Competency (First Grade).

He started his career in power generation with Perak Hydro Electric Power Company (UK firm) in 1974. In the following years, he trained and specialised in power generation, Hydro and Steam Thermal Power Plants, and in the field maintenance and workshop overhaul of Cummins Diesel Engines and generators. Subsequently, from 1980 to 1996, he worked as a mill engineer in United Plantations Bhd. The palm oil mill under Mr Soong's management was the winner of the Award for Best Palm Oil Mill in Malaysia (2nd Place from year 1990- 1995).

From 1996 to 2010, Mr Soong served as senior engineer, technical advisor, project manager and regional consultant to a number of companies involved in power generation. He joined his current company, MHC Plantations Bhd, in 2010 and is currently its Chief Operating Officer.

Soong Swee Koon currently resides in Malaysia.



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Independent Director: Billy Lee Chong Hoe

He graduated from Monash University, Australia, with a double degree in Economics (Accounting) and Law in 1988 and was admitted to the Supreme Court of Victoria in 1989.

Billy Lee carried out research on the merger of family investment trusts while working at Price Waterhouse, Melbourne and presented a paper on the Australian Budget 1989.

He was admitted to the Malaysian Bar in 1991 and began practice at Messrs Oon Kong & Lee. In March 1997 he joined Messrs Lee, Ferrara & Tan.

Billy Lee has been involved in the listing of a number of publicly listed companies and privatisation projects and is presently a partner at Teh & Lee, Advocates and Solicitors. He currently resides in Malaysia.

Independent Director: Michelle Siew Yee Lee

Michelle Siew Yee Lee graduated from Monash University, Australia, with a Bachelor of Business (Accounting) in 2003.

Michelle is an experienced accountant having worked for Brisbane legal firm, MF Lyons & Associates. She also has been employed as a Project Accountant for Bechtel Australia Pty Ltd and as a Property Accountant at Centro Properties Group, Melbourne.

Michelle currently lives in Australia.

Independent Director: Jack Tian Hock Tan

Jack Tan is an investment banker with over 40 years' experience in the capital markets and finance sector in Australia and Malaysia. Jack has been instrumental in project acquisitions, evaluations and valuations and capital raisings, including several public offerings on the ASX.

Jack has a Bachelor of Business Administration from University of Singapore (1973) and a Master of Applied Finance from Macquarie University (1995).

Jack was a founding director of Norton Goldfields Ltd, Rocklands Richfield Ltd, Orocobre Limited and Vietnam Emerging Capital Limited.

Currently Jack is a director for Coin Equities in Sydney.



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Company Secretary: Andrew Wallis

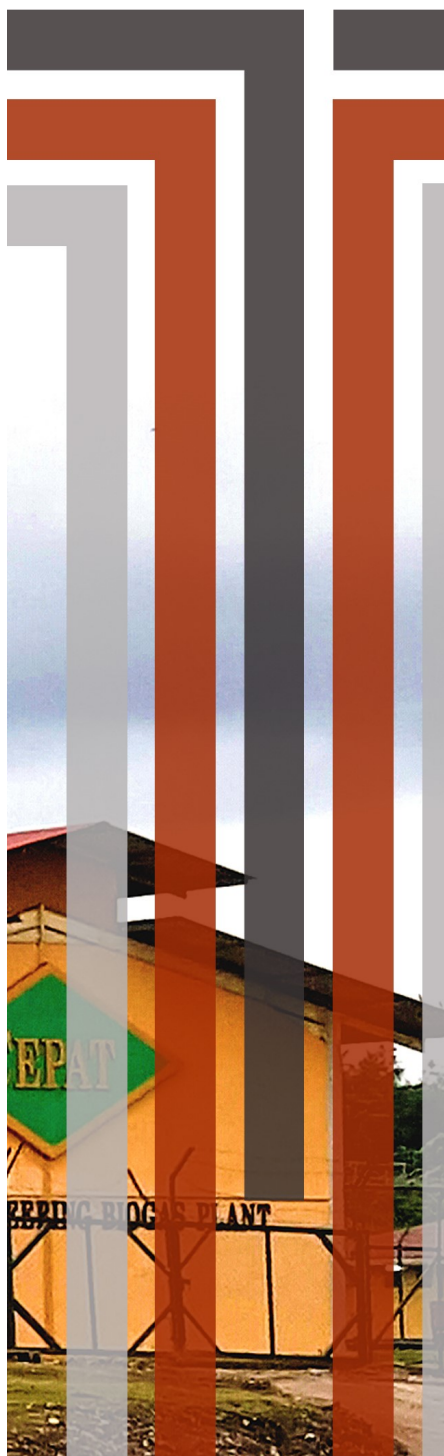
Andrew Wallis was appointed as Company Secretary on 13 March 2013.

Andrew is a registered company auditor, tax agent, Justice of Peace and a member of the Institute of Chartered Accountants for over 27 years and a graduate of Sydney University with a Bachelor of Economics.

Andrew has considerable experience in secretarial and corporate advisory roles. He has been working in the chartered accounting profession for over 32 years and has operated as the Managing Director of Sydney accounting firm, A F Wallis & Co, for nearly 20 years.

GLOSSARY OF ACRONYMS

ASX	Australian Securities Exchange
CEPAT	Cepatwawasan Group Berhad
FiT	Feed-in Tariff
GTFS	Green Technology Financing Scheme
KLSE	Malaysia (Kuala Lumpur) Stock Exchange
MIDA	Malaysian Industrial Development Authority
NSX	National Stock Exchange
POME	Palm Oil Mill Effluent
PYSB	Prolific Yield Sdn. Bhd.
REPPA	Renewable Energy Power Purchase Agreement
SEDA	Sustainable Energy Development Authority
TML	Timah Resources Limited
SESB	Sabah Electricity Sdn Bhd



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