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#### MEDIA/ASX RELEASE

24th April 2012

#### Advanced Braking Technology Raises \$2.4 million in a Share Placement to Launch New Truck Brake

**Advanced Braking Technology Ltd (ASX:ABV)** today announced it has secured commitments to raise \$2.4 million at 1.7c per share in an oversubscribed share placement to sophisticated investors.

Under the placement 143 million shares will be issued. This amount is within the Company's 15% capacity to issue without shareholder approval. However, as Directors of the Company have subscribed for 12% of the total issue shareholder approval to allocate these shares will be required to be sought at a forthcoming General Meeting. The date of which is yet to be set.

Funds received from the placement will be used to:

- complete the final stages of product validation ahead of commercialisation the SIBS® garbage truck brake program;
- match the balance of the \$2 million Commonwealth Grant being provided to support the market launch of the SIBS<sup>®</sup> garbage truck brake;and
- provide additional working capital to fund the expected product launch and ongoing enhancements to the mining and garbage truck brake products.

The Company's CEO Ken Johnsen stated; "There has been a strong interest by sophisticated investors in the opportunity to support the final stages of the garbage truck brake project. The successful completion and commercialisation of this revolutionary approach to vehicle braking in the trucking industry will transition the Company from being very successful in the niche mining market to a major potential participant in the global waste industry and beyond."

The attached presentation provides further details regarding the company's current activities and future prospects.

The placement was undertaken by the Company with the advice and support of Blue Ocean Equities.

For further information, please contact:

Mr Ken Johnsen Chief Executive Officer Advanced Braking Technology Ltd Telephone: +61 (0)8 9273 4800

#### Background Information - Advanced Braking Technology Ltd (ASX: ABV)

Advanced Braking Technology Ltd (ASX: ABV) develops innovative braking systems, with its main product being the Sealed Integrated Braking System

(SIBS™), a comprehensively patented Australian invention, now used widely in light commercial vehicles in the mining industry.

SIBS™ is a fully enclosed, single rotor, high speed wet brake. The brake rotor runs in a bath of oil that serves to cool the brake and minimise wear. An innovative fail safe feature is incorporated into the rear axle brake. As a result, the brakes are virtually wear and maintenance-free and may outlast the vehicles they are fitted to, unlike conventional drum and disc brakes. SIBS™ brakes deliver better safety, improved productivity and lower operating costs, and are engineered to survive the harshest conditions. The proven technology is environmentally friendly, eliminating brake dust emissions and noise and squealing, and provides benefits for on-road, off-road and industrial applications in terms of safety, reliability, performance and adaptability.

Following the success of the product in the mining sector, the Company has branched into the waste disposal sector, developing the SIBS $^{\text{TM}}$  technology into an innovative garbage truck braking system. After four years of development, the project is now in its final testing phase before commercialisation of the product.

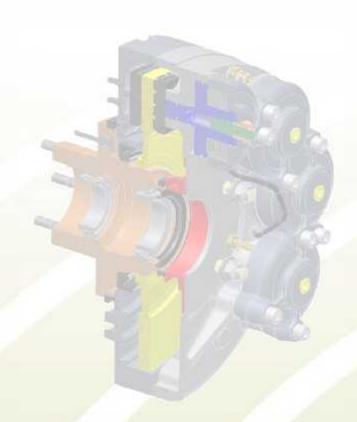
Based in Perth, Western Australia, Advanced Braking has a manufacturing plant in Thailand, worldwide patents on its technology and an extensive reseller network.





#### **Investor Presentation**

**April 2012** 





# **Company Overview**

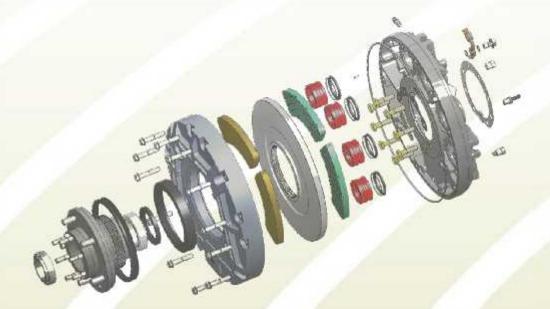
- ASX Listed Public Company (ASX: ABV)
- Headquarters and R&D Osborne Park, Western Australia
- Listed in 2002 to develop and commercialise specialised braking technologies
- Wholly owned subsidiary in Thailand manufacturing product for worldwide sales
- Technology well established in mining sector
- Global Exports



#### **ABT's Business**

ABT is in the business of developing, manufacturing and commercialising an innovative, patented enclosed "wet" braking system — the Sealed Integrated Braking System (SIBS) for both off-road (mining) applications and on-road (frequently stopping vehicles) applications.

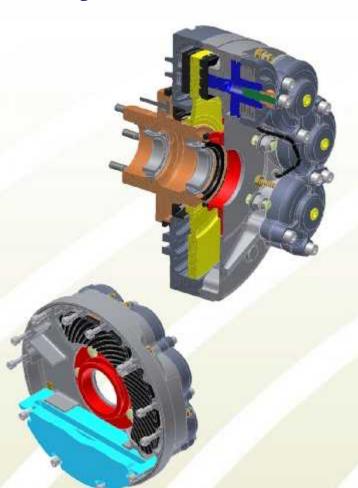






# Sealed Integrated Brake System (SIBS)

- Brake rotor and pads enclosed in a sealed housing.
- Braking elements operate in a fluid that dissipates the heat generated by braking.
- Very low wear rates due to reduced heat at braking interface.
- Floating rotor delivers balanced brake pad force and uniform pad wear.
- Designed for harsh operating conditions with heavy and or frequent braking
- Proven reliability over a decade of operation in mining





# The Mining Business

- The "brake system of choice" on major Australian mines
- Penetration doubled in FY2011 to an estimated
  20% market share
- 19% of total sales export combined with strong growth in Australian sales





# **Mining Applications**

Light Vehicle Wheel End Brakes



Light Truck Wheel End Brakes



Heavy Vehicle Driveline Brakes





# **Value Proposition**

#### SIBS offers:

- Reduced vehicle maintenance costs
- Reduced vehicle downtime
- Reduced brake temperature
- More reliable and consistent braking
- Fail to safe functionality
- Elimination of airborne particle emissions

SAFETY and RELIABILITY ENVIRONMENTALLY FRIENDLY



#### **ABT's Customers**





























# **ABT's Thai Production Facility**

ISO 9001-2000 Accredited











# Garbage Truck Brake Project Overview

- Commenced March 2008
- Designed as a \$4 million 4 year project
- \$2 million expenditure achieved "proof of concept" March 2010
- July 2010 Production Validation program commenced
- April 2011 \$2 million Commonwealth funding to assist commercialisation project expanded to include ABS and market launch activity



# **Defining the Opportunity**

**Brake Maintenance Is One Of The Major Cost Factors In Operating A Garbage Truck** 

#### **Project Aims**

Develop SIBS® braking technology for application on garbage trucks that:

- Has the same brake feel/stopping character as dry brakes.
- Can be retrofitted to trucks without modifications.
- Gives extended service intervals and vehicle up-time.
- Reduces brake emissions (noise & air-borne particles).
- Meets all regulatory and safety standards.
- Is approved for use by OEMs.



# **Value Proposition**

- 2 to 2.5 year payback on upfront cost of SIBS (Expecting at least 4 to 6 times extension to service interval)
- Target incremental cost \$25,000 per installation
- Pre-assembled wheel ends will be supplied and will be viable service exchange units
- No brake squeal
- No dust emissions



# **SIBS Garbage Truck Brake**

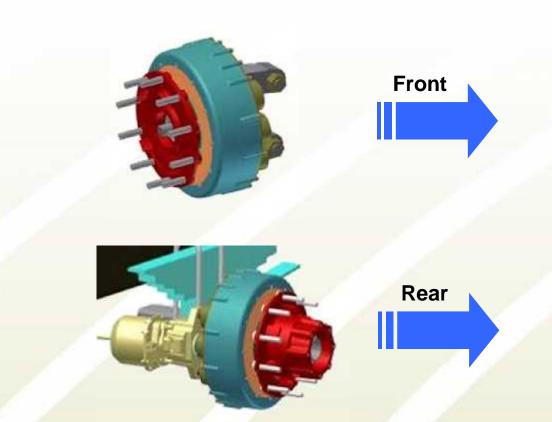
- Based on proven SIBS mining brake design
- Offers
  - Dramatic reductions in operating costs
  - Eliminates particle and noise pollution
  - Improves vehicle braking safety
  - Retrofit system for existing fleets
  - Applicable to most vehicles in global fleet







# From Concept to Reality









# **Proof of Concept**

- Achieved March 2010 following \$2 million of expenditure
  - 420 hrs of real world testing
  - Rig testing has validated other parts
  - Cooling Package developed
  - Core design ready for production release
  - 1% pad wear after 420hrs (average 60 microns)
    (Note standard brakes would be 50% worn at 375hrs)
  - 30% to 40% less tyre wear compared to truck on same rounds
  - Operator feedback very positive



### SIBS at Work!!





#### **Commonwealth Grant**

- Company has been awarded \$2 million grant to accelerate market launch of truck brake.
- Funding will enable:
  - Development of ABS version of brake
  - Production validation of ABS & non-ABS variants of brake
  - Pilot production of ABS version on new (OE) trucks
  - Support market launch of non-ABS brake (retro-fit on existing trucks)
  - Support market launch of ABS brake (installation on new trucks)



#### **Current Status**

- Production Validation ("PV") underway to confirm readiness for production and overall reliability
- Involves fleet testing 10 vehicles in real world conditions over 1,500 hrs each
- Includes bench and other testing
- Qualification of production suppliers and processes
- Project team recently expanded



### Fleet Trial Hardware Manufacture















# **Test Activity**



**Accelerated Wear Testing** 



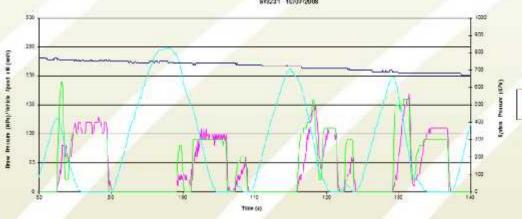
**ABS Baseline Testing** 



**Road Testing** 



Upgraded Cooling System





# **Next Steps**

- Complete fleet trial of 5 trucks retrofitted with SIBS in order to gain 1500hrs (each) of field service.
- This field service will confirm value proposition and reaffirm findings from "proof of concept" stage.
- Advance the development of ABS version and carry out in field verification
- Based on successful fleet trial prepare for initial commercial sales to retrofit market.
- Work with OEM for inclusion as a "factory fit" option
- Launch OE version of SIBS

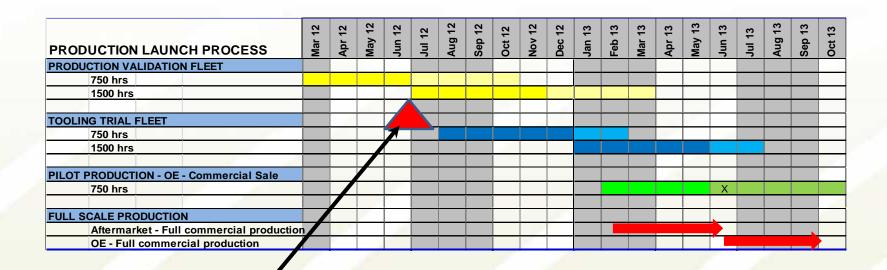


# **Planned Launch Strategy**

- Targeting retro-fit then new truck sales
- Commonwealth funding supporting launch
- Planning for initial launch for retro-fit applications
- Followed by "factory fit" applications
- Currently targeting a production decision Q4 FY12
- Production decision will be based on PV test results



### **Launch Timetable**



Decision Point – Commercial Go Ahead

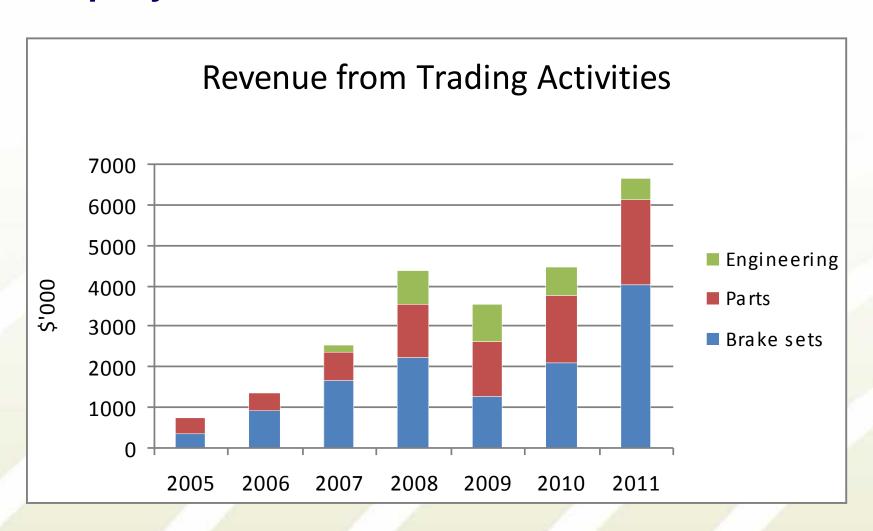


# **Company Financial Performance**





#### **Company Financial Performance**





#### FY 12 - H1 Results

#### **Highlights**

- Mining Segment profit \$671k (pre-tax) contribution from mining sales of \$3.264 million
- Increasing levels of export orders
- Full ADR Certification achieved for main products
- Solid prospects in open cut mining areas
- Truck brake project approaching production point
- Cash balance exceeds \$2 million



### **FY12 H1 - Profit and Loss**

	31.12.2011	31.12.2010
	\$'000	\$'000
Revenue		
Revenue from trading activities	3,264	4,080
Revenue from other activities	490	108
Total Revenue	3,754	4,188
Cost of Sales	-1,269	-1,391
Overhead Expenses	-3,154	-2,451
Overheads capitalised as pre-production activities	359	
Profit / (loss) before income tax	-310	346
Income tax benefit (R&D tax rebate)	250	307
Profit / (loss) from continuing operations	-60	653



# FY12 3<sup>rd</sup> Quarter Highlights

- Mining Sales for 9 months ending 31<sup>st</sup> March 2012 up 17% on prior corresponding period to \$5.24 million
- Sales for the 3 months ending 31<sup>st</sup> March 2012 just under \$2 million
- Cash being generated from mining sales supporting garbage truck development.
- Sales momentum in Bowen Basin and Hunter Valley building
- Export activity on the rise West Africa, South Africa, North America accounting for 33% of 3<sup>rd</sup> Qtr Sales
- Garbage truck testing continues.
- Key production suppliers selected
- Expanded engineering and sales team



# Mining Revenue Growth YTD 12 vs 10/11





### **Historical Balance Sheet**

			30	6 2010	31	12 2010	3	0 6 2011	31	12 2011	_	3 2012 -Audited)
		Cash and cash equivalents	\$	510	\$	2,740	\$	2,737	\$	2,034	\$	1,664
	Current	Trade and other receivables	\$	697	\$	2,346	\$	1,194	\$	1,188	\$	1,524
		Inventories	\$	1,339	\$	1,530	\$	1,773	\$	1,713	\$	1,899
		Other assets	\$	47	\$	78	\$	56	\$	402	\$	457
ASSETS		TOTAL CURRENT ASSETS	\$	2,593	\$	6,694	\$	5,760	\$	5,337	\$	5,544
ASS	Current	Trade and other receivables	\$	34	\$	31	\$	30	\$	31	\$	31
		Plant and equipment	\$	504	\$	616	\$	734	\$	1,079	\$	1,068
	O L	Intangible assets	\$	2,188	\$	2,089	\$	2,572	\$	2,832	\$	2,933
	Non	TOTAL NON-CURRENT ASSETS	\$	2,726	\$	2,736	\$	3,336	\$	3,942	\$	4,032
		TOTAL ASSETS	\$	5,319	\$	9,430	\$	9,096	\$	9,279	\$	9,576
	Current	Trade and other payables	\$	738	\$	1,125	\$	985	\$	818	\$	1,321
		Interest bearing liabilities	\$	143	\$	163	\$	102	\$	142	\$	111
		Provisions	\$	98	\$	160	\$	179	\$	240	\$	210
LIABILITIES		TOTAL CURRENT LIABILITIES	\$	979	\$	1,448	\$	1,266	\$	1,200		1,642
3[[.	Current	Trade and other payables	9		-							
Ι¥Ι		Provisions							\$	56	\$	59
		Interest bearing liabilities	\$	211	\$	142	\$	133	\$	343	\$	321
	Non	TOTAL NON-CURRENT LIABILITIES	\$	211	\$	142	\$	133	\$	399	\$	380
		TOTAL LIABILITIES	\$	1,190	\$	1,590	\$	1,399	\$	1,599		2,022
		NET ASSETS	\$	4,129	\$	7,840	\$	7,697	\$	7,680	\$	7,554
EQUITY		Issued capital	\$	40,150	\$	43,115	\$	43,115	\$	43,115	\$	43,136
		Foreign currency reserves	-\$	269	-\$	194	-\$	252	-\$	220	-\$	218
	1	Other reserves	\$	672	\$	690	\$	708	\$	719	\$	725
E		Accumulated losses	-\$	36,424	-\$	35,771	-\$	35,874	-\$	35,934	-\$	36,089
		TOTAL EQUITY	\$	4,129	\$	7,840	\$	7,697	\$	7,680	\$	7,554
					<b></b>							

\$3 mill placement Aug '10

Asset value maintained



#### **Short Term Outlook**

- Continued growth in mining sales expected
  - Greater penetration in Hunter and Bowen
  - Additional focus on export opportunities.
- Mining contribution expected to grow essentially fixed cost business
- Commonwealth Grant and R&D Tax Credits supporting development activity.
- Production validation of Garbage Truck Brake well underway.
- Preparation for commercial production nearing completion.
- Additional working capital required to secure future potential.



# **Background on Funding Needs**

- August 2010 placement assumed continued funding from Brake Developments
- \$4 million committed in March 2008 in return for 10% royalty on truck brake
- April 2011 \$2 million Commercialisation Australia Grant awarded
  - requires > \$2 million of matching funds
  - Program expanded to include ABS brakes
- August 2011 Brake Development funding arrangement revised
  - Royalty cut to 6.25%
  - Obligation to contribute a further \$1.5 million waived
- June 11 to March 12 Internal funds allocated to support truck project
- Additional funding has gone into improving robustness of brake for extreme conditions
- FY 11 CA Grant funding \$377k
- YTD 12 CA Grant Funding \$632k
- Remaining Grant Funds available \$991k
- Company Eligible for 45% R&D Tax Credit of Eligible R&D ~ \$1m pa



#### **Use of Proceeds**

- \$2.5 million sought
  - \$1.0 million matching funding to support balance of \$2 million
    Commonwealth Grant
  - \$0.5 million supporting R&D truck brake
  - \$0.5 million additional R&D activity mining products Activity
  - \$0.5 million working capital to support Garbage Truck product launch



# **Legal Matters**

- A former Chairman of the Board of the Company (Roger Cowan) is seeking to recover \$300,000 from the Company which he alleges he loaned to the Company in 2003. The Company denies that monies were loaned by the Chairman and says that \$300,000 was paid to the Company in 2003 for the purchase of shares pursuant to the rights issue. The Company says that in April 2004 3,969,228 shares were issued to the former Chairman in consideration for the \$300,000.
- The matter is listed for hearing in the District Court of New South Wales for 3 days commencing 21 May 2012. The plaintiff is claiming repayment of the \$300,000 plus interest and legal costs.
- The Company is also defending a claim from a former underwriter alleging repayment of a \$140,000 loan dating back to 2003. This action was placed on the Inactive Cases List with the WA District Court on 19 October 2011.
- A case that is on the Inactive Case List for 6 continuous months is taken to have been dismissed for want of prosecution .We are not aware that plaintiff has sought to reactivate this case as of 19<sup>th</sup> April 2012 (the end of 6 month period).
- The Company believe both claims are without merit and is defending them vigorously.



### **Shareholders**

#### **Substantial Holders**

Directors and Management	16.3%
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(David Slack 14.4%) Richard Palmer and related parties 8.3%

Other top 20 holders 18.23%

Shares on issue 962,504,889

**Options** 

10.66 million Employees (exercise price 1.5c to 7.5c)

Other (exercise price 5.2c to 6.2c) 10.0 million



#### **Outlook**

- Mining sales are expected to grow but without diversification/new product areas are expected to level off in 3 to 5 years
- Australian market share could double over next 3 years (from 25% to 50%)
- Export growth will add to this revenue last quarter 33% of sales
- Mining export sales could equal Australian sales in medium to long term
- Available Garbage Truck Market North America, Europe and Australia is estimated at 35,000 to 40,000 trucks per annum.
- A 25% market share of garbage truck market would generate \$250 million p.a. of new brake sale plus additional ongoing spares and servicing revenues
- A successful market launch in Australia (800 truck p.a. market) size will be followed by a market launch in North America.



#### Conclusion

- ABT mining sales continue to grow and now generating good cash flows
- Truck brake developments in final stages
- Require sufficient funding to leverage Government funding and enter the Garbage Truck Brake Market that has an order of magnitude greater sales potential.





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