

## 2 Review of Operations

### Progress of akebono New Frontier 30 - 2016

Akebono has established a midterm business plan, “akebono New Frontier 30 – 2016 (aNF30-2016)” ending in fiscal 2018. Goals of the midterm plan include ① rebuilding North American operations, ② establishing global networks based on product-based business units, and ③ expanding high performance brake business and recreating European operations. By achieving these goals, Akebono aims to return to a sound financial condition and facilitate sustainable growth.



#### aNF30-2016 Fundamental Strategies

Shift priority from achieving sales targets to sustainable growth

- ① Rebuilding North American operations
  - ② Establishing global networks based on product-based business units
  - ③ Expanding high performance brake business and recreating European operations
- Return to a sound financial condition

Targets (Billions of yen)

	aNF30-2016		
	FY2016 Actual	FY2017	FY2018
Net sales	266.1	250.6	255.0
Operating profit	4.2	8.0	10.0
Profit (loss) attributable to owners of parent	0.4	3.0	5.0
Equity ratio	12.4%	13.3%	16.6%
Net D/E ratio	4.1	4.0	2.9
Free cash flow	(1.7)	3.0	3.5

## 1 Rebuilding North American operations

Earnings have improved considerably as a result of measures to rebuild North American operations having an impact quicker than expected. Profitability is also in sight

from fiscal 2017 onward. Akebono aims to entrench a profitable structure by working to increase the efficiency and productivity of plant operations.

		Specific Initiatives	Results
Strategy 1	Fundamental organizational reforms	<b>Strengthening local management</b> <ul style="list-style-type: none"> <li>Appointed new CEO with turnaround track record and experienced CFO</li> <li>New plant managers at ABG, ABE and ABCS</li> <li>New Program Manager</li> </ul>	<ul style="list-style-type: none"> <li>Appointed CEO, CFO, Plant Managers, Project Manager, Division head of production and procurement</li> <li>Appointed Division head of HR and ABCS Plant Manager in February 2017</li> <li>Re-establishment of organizations through key persons in each division/departement/plant</li> <li>Improvement of working environment</li> </ul>
Strategy 2	Productivity improvement	<b>Reduction of manufacturing burden</b> <ul style="list-style-type: none"> <li>Certain programs transferred to other Akebono manufacturing locations</li> <li>Improvement activities implemented</li> <li>Kaizen and preventive maintenance implemented</li> </ul>	<ul style="list-style-type: none"> <li>Shifting partial production of brake pads to Japan and Thailand</li> <li>Reduction from 3 shifts, 7 days a week to 3 or 2 shifts, 6 days a week, with the exception of some production lines</li> </ul>
Strategy 3	Manufacturing capacity increase	<b>Introduction of new production lines</b> <ul style="list-style-type: none"> <li>New manufacturing equipment for aluminum calipers at ABCS</li> <li>Expanded manufacturing facilities for aftermarket friction materials at ABG</li> </ul>	<ul style="list-style-type: none"> <li>Start of operations in October 2016 at ABCS for further enhancement of production capabilities expected</li> <li>Full operations of additional manufacturing lines scheduled in February 2017 and around the end of 2017 at ABG</li> </ul>
Strategy 4	Optimization of sales and purchase prices	<b>Improvement of earnings structure</b> <ul style="list-style-type: none"> <li>Negotiations for optimization of sales and purchase pricing since early 2016</li> </ul>	<ul style="list-style-type: none"> <li>Achieved price optimization with major automotive companies and improvement in SCM expenses above original plans</li> </ul>

## 2 Establishing global networks based on product-based business units

To further deepen collaboration between our regional businesses in Japan, North America, Europe and Asia, and reinforce global competitiveness, Akebono has established five product-based business units (BU) responsible for sales, R&D, purchasing, production, and manufacturing

engineering functions. This will accelerate efforts to identify issues for each business unit and help construct mechanisms to address them. We aim to increase the profitability of individual products while rapidly establishing a global network.

### Increase profitability on a product basis leading to competitiveness on a global level

- Establish product-based business units responsible for sales, R&D, purchasing, production, manufacturing engineering and other functions
- Establish a global strategy through enhanced regional marketing functions
- Carry out a global product strategy based on the concept of standardization and topping\* (S+t)
- Further rationalization effects achieved through global purchasing activities

\*Topping: Enhancing our product features that are tailored specifically to local market needs.

Business Units (BU)	Start-up	Main Products	Strategy
<b>HP BU</b>	January 2016	HP (High Performance) disc brakes, brake pads	Increase market share through competitiveness in terms of performance and cost, mainly in Europe
<b>Foundation BU</b>	January 2016	Disc brakes, drum brakes and other mechanical parts	Sales increase and profitable growth by utilizing Akebono's manufacturing excellence among global locations
<b>Infrastructure and Mobility (AIMS) BU</b>	April 2016	Products for industrial machinery, rolling stock, and sensors	Increase competitiveness through innovation and technological fusion, resulting in sales increase
<b>Friction Material BU</b>	October 2016	Brake pads, lining and other friction materials	Increase competitiveness through Akebono's strengths in material knowledge and NVH* technologies
<b>Aftermarket BU</b>	October 2016	Aftermarket parts	Increase global profitability in emerging and niche markets

\*NVH: Noise, vibration and harshness, which are factors that undermine braking comfort


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#### 3 Expanding high performance brake business and recreating European operations

Progress is being made according to schedule in the high performance brake business. As a part of plans to create an integrated production structure in Europe, the transfer of

the high performance brake caliper business from ABCS is proceeding on schedule for completion during 2017.

	Basic policy	Akebono's strengths
R&D Strategy	Absolute commitment to differentiated products, light weight, high performance, enhanced design and high quality	<ul style="list-style-type: none"> <li>Realize both high performance and high quality by combining high performance brake technologies accumulated through F1 activity, superior NVH knowhow and cutting-edge manufacturing technology.</li> </ul>
Sales Strategy	Expand sales especially in Europe with high performance technologies gained through brake development for premium German automakers.	<ul style="list-style-type: none"> <li>Mass production of 6-pot opposed high performance brake calipers</li> <li>Developed and supply world's first mass production 10-pot opposed brake calipers</li> <li>Appeal of advanced technology</li> </ul> <p>➡ Aiming for annual production of one million units in 2018</p> <div>   </div> <div> <p>6-pot opposed aluminum monoblock brake caliper</p> <p>10-pot opposed aluminum monoblock brake caliper</p> </div>

#### > Return to a sound financial condition

Akebono is keen to make a financial recovery by firmly advancing the three pillars of aNF30-2016, namely 1) rebuilding North American operations, 2) establishing global networks based on product-based business units, and 3) expanding the high performance brake business and recreating European operations. In fiscal 2016, the first fiscal year of aNF30-2016, Akebono made progress in line with the plan, achieving its target for spending JPY14.9 billion on capital investments. The SG&A ratio for domestic

operations was 14% in the first fiscal year, compared with 14.5% in the previous fiscal year, against the 12% target. In fiscal 2016, Akebono spent JPY10.8 billion on development. The Company intends to invest JPY10 billion annually in development, while shifting the allocation of funds from application development to focus on more advanced development. Akebono will accelerate measures with the aim of achieving the targets of the midterm business plan as early as possible.

			FY2015 Actual		FY2016 Actual
Initiative 1	<b>Control Investment</b> Control CAPEX under ¥15 billion	CAPEX	¥ 18.6 billion	➡	¥ 14.9 billion <sup>*1</sup>
Initiative 2	<b>Reduce SG&amp;A<sup>*2</sup></b> Aim for SG&A ratio in Japan under 12%	SG&A ratio in Japan	14.5%	➡	14.0%
Initiative 3	<b>Prioritize R&amp;D costs</b> Shift priority from application R&D to advanced R&D Reduce R&D costs to ¥10.0 billion	R&D costs	¥ 11.7 billion	➡	¥ 10.8 billion

<sup>\*1</sup> Excluding re-purchase of leased assets of ¥3.8 billion in US

<sup>\*2</sup> Selling, general and administrative expenses