

Medium-Term Business Plan

"Global Kawasaki"—The Next Exciting Stage



KAWASAKI HEAVY INDUSTRIES, LTD.

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Overview of **4** 21 (FY2000-FY2006)



Selectivity and Concentration





| | FY1999 | FY2000 | FY2001 | FY2002 | FY2003 | FY2004 | FY2005 | FY2006 (Forecast) |
|----------------------------------|---------|---------|---------|---------|---------|---------|---------|----------------------|
| ROIC* | (1.7%) | (0.8%) | 4.3% | 4.6% | 3.1% | 4.8% | 5.1% | 8.0% |
| Net sales | 1,149.6 | 1,060.4 | 1,144.5 | 1,239.5 | 1,160.2 | 1,241.5 | 1,322.4 | 1,390.0 |
| Operating income | 1.2 | 4.4 | 31.3 | 30.5 | 22.2 | 24.7 | 41.7 | 54.0 |
| Income before tax | (22.7) | (18.4) | 15.9 | 17.2 | 11.2 | 20.5 | 23.3 | 40.0 |
| Debt-to- equity ratio | 278% | 304% | 293% | 245% | 210% | 176% | 135% | |
| Interest- bearing debt | 486.3 | 499.1 | 491.2 | 428.2 | 399.5 | 353.9 | 319.8 | |
| Total shareholders' equity | 174.9 | 164.0 | 167.7 | 174.5 | 190.1 | 201.4 | 237.5 | |

*ROIC (return on invested capital) = Earnings before interest and taxes(EBIT) ÷ Invested capital

Positioning of New Medium-Term Business Plan



- •Position Global K as a medium-term business plan that will guide efforts during the next five years, with a view to achieving progress in the next decade.
- •Under K21, we intensively restructured and stabilized management. The Global K initiative will drive us to a new growth stage.



Corporate Vision



KHI aims to become a leading global enterprise that enriches lifestyles and helps safeguard the environment through its core businesses, which encompass land, sea and air transportation systems, and the energy and environmental engineering sectors.



Basic Objectives I Kawasaki Stronger Non-Price Selectivity and "Quality Followed by Quantity" Concentration Competitiveness Become a highly profitable, globally recognized enterprise Implement ongoing reforms to establish a sustainable growth cycle Achieve steady growth in keeping with the "Global Kawasaki" vision (3) Build a solid Kawasaki brand by leveraging customer trust (4) Reinforce CSR organization to <u>enhance "Corporate Quality"</u>

Business Domains



| | Main Business Domains | | | | | | | | |
|--|-----------------------------|---------------------------------------|------------------------------|------------------|---------|--|--|--|--|
| | Transportation equipment | Energy & Environmental Engineering | Industrial infrastructure | Leisure vehicles | Defense | | | | |
| Rolling Stock | | | | | | | | | |
| Aerospace | | | | | | | | | |
| Gas Turbines & Machinery | | | | | | | | | |
| Consumer Products & Machinery | | | | | | | | | |
| Energy & Environmental Engineering | | | | | | | | | |
| Industrial Robots | | | | | | | | | |
| Shipbuilding | | | | | | | | | |
| Industrial Hydraulic Products | | | | | | | | | |

• Consumer Products & Machinery: Motorcycles, all-terrain vehicles, utility vehicles, personal watercraft and general-purpose gasoline engines

• Energy & Environmental Engineering: Plant, environmental and steel structure operations, and cultivating energy-conserving and environmental protection businesses



| | 10 Years in the Future | |
|--|---|------------------------|
| Rolling Stock | A world-class maker of rolling stock systems that draws on top technologies and quality | sses |
| Aerospace | A leader in Japan's aerospace industry, with solid competitiveness internationally in aircraft manufacturing | busine |
| Gas Turbines & Machinery | An engine manufacturer with world-class technologies in the transportation equipment and energy fields | r Core |
| Consumer Products & Machinery | A leisure vehicle and engine manufacturer with a top brand recognized for high quality and high performance | Four |
| Energy & Environmental Engineering | A global leader in energy and environmental engineering with a reputation built on superb proprietary technologies | Developing business |
| Industrial Robots | A world-leading industrial robot manufacturer with a reputation built on key and systems technologies for high-performance and multifunctional robots | ient es |
| Shipbuilding | A shipbuilder with world-class profitability that draws on advanced technologies and Chinese production sites to withstand market swings | -suffici sinesse |
| Industrial Hydraulic Products | One of the world's top five hydraulic equipment makers, with outstanding technologies and product quality | Self- bu: |



Selectivity and Concentration: Four Core Businesses, a Developing Business and Self-sufficient Businesses



| | Core Businesses | Developing Businesses | Businesses with Stable Earnings | Businesses Requiring Structural Realignment |
|--|---|---|---|--|
| | •Drivers of sustainable growth •Expand earnings through aggressive investments | Strengthen competitiveness through aggressive investments | Achieve consistent returns | |
| Rolling Stock | Overseas markets | [Rail systems] [Gigacell-powered LRVs] | Domestic market | |
| Aerospace | Military and commercial aircraft | [Application of P-X/C-X in commercial aviation] Commercial helicopters | Guidance systems | |
| Gas Turbines & Machinery | Commercial aircraft engines | Gas turbine generating facilities [Gas engines] | Military engines (for aircraft and ships) Land and ship steam turbines, aerodynamics | Determine business policies centered on |
| Consumer Products & Machinery | Motorcycles for developed countries | Motorcycles for developing nations | General−purpose gasoline engines | businesses |
| Energy & Environmental Engineering | | [Gigacell] [Biomass generation] [Treating noxious substances] LNG tanks Energy and environmental facilities | Industrial plants | |
| Industrial Robots | | Robots | | |
| Shipbuilding | Merchant vessels (manufactured in China) | | Submarines and merchant vessels (Kobe and Sakaide) | |
| Industrial Hydraulic Products | For construction machinery | | Industrial and ship machinery | |

Notes: [] = New businesses

Gigacell: Nickel-metal hydride battery LRV: Light rail vehicle

P-X: Next-generation maritime patrol aircraft C-X: Next-generation transport aircraft

Selectivity and Concentration: Businesses Requiring Structural Realignment



Businesses requiring structural realignment (including public works-related businesses)



• Strategic value for KHI Group

 Medium-term earnings outlook in light of market climate and competitiveness



Quantitative Targets

| Strengthen profitability Reinforce financial position | Improve ROIC (in Increase ratio of sales | vestment efficiency) income before tax to |
|--|---|--|
| FY2010 Targets | | |
| ROIC*: 149 Income before tax margin: 5.89 | Net sales: Operating inco Income before | ¥1,560 billion me: ¥100 billion tax: ¥90 billion |

Debt-to-equity ratio**: 100% or less
 Equity ratio: 30% or more

Shareholder returns

Gradually increase dividends in line with improved profitability (Consolidated payout ratio of 30%, a basic medium-term goal)

* ROIC (return on invested capital) = Earnings before interest and taxes (EBIT) \div Invested capital

** Debt-to-equity ratio = Interest-bearing debt \div Total shareholders' equity

Quantitative Targets (Progress)

Forex

FY2005

¥108.3/U.S.\$

FY2006

¥110/U.S.\$

FY2008

¥105/U.S.\$

¥105/U.S.\$





Actuarial differences stemming from a change in accounting for retirement benefits and severance costs (approx. ¥13 billion annually) will be completely amortized in FY2009.



 Invest ¥13 billion more annually than the average annual cost base for the past three years, which was ¥27 billion

③ Personnel plan

- Hire 5,000 people over five years, or 1,000 annually
- Increase employee numbers to 31,000 at FY2010 year-end, from 29,000, at FY2005 year-end

Resource Allocation Plan 1: Capital Investment



| | Priority Areas | | | | | | |
|---|---|--|--|--|--|--|--|
| Rolling Stock | Set up and strengthen production structure at Hyogo Plant, including new production systems and bogie and new coating lines | | | | | | |
| Aerospace | Bolster production capacity for Boeing 787 and other private aviation products | | | | | | |
| Gas Turbines & Machinery | Increase production for TRENT 1000 and other commercial aviation engines and industrial gas turbines | | | | | | |
| Consumer Products & Machinery | Boost capacity and productivity at Akashi Works; strengthen Asian production structure | | | | | | |
| Industrial Robots, Shipbuilding and Industrial Hydraulic Products | Shore up production structure in keeping with rising demand | | | | | | |

(Billions of Yen)

Kawasaki

Resource Allocation Plan 2: R&D Investment



| Priority Areas | | | | | | |
|---------------------------------------|---|--|--|--|--|--|
| Rolling Stock | High-speed trains, bogies, LRVs and systems integration technologies | | | | | |
| Aerospace | Commercial versions of $P-X/C-X$, low-cost processing and assembly technologies, and composite materials processing technologies | | | | | |
| Gas Turbines & Machinery | Industrial gas turbines with greater efficiency and reduced nitrous oxide (NOx) emissions, aircraft engine peripherals and large, high-efficiency gas engines | | | | | |
| Consumer Products & Machinery | New model development, advanced production technologies and next-generation power units | | | | | |
| Energy & Environmental Engineering | Gigacell, water treatment, and biomass and hydrogen infrastructure | | | | | |
| Headquarters | Advanced basic technologies and new businesses | | | | | |

Resource Allocation Plan 3: Personnel



(Number of Employees)

Hiring domestically and abroad

- Intensive, regularly scheduled effort to secure new graduates and ongoing efforts to hire people in mid-career
- To secure engineers needed for business development and seek out people in mid-career, thereby ensuring competitiveness
- Increase global employment
- Training and deployment domestically and abroad
- Enhance capabilities of middle managers, thereby strengthening organizational and supervisory skills
- Foster technological capabilities and other skills to maintain and improve site operations

I-K Kawasaki

Priority Initiatives

I K Kawasaki





Technological Development capabilities

- Reinforce basic and elemental technologies
- Enhance systems integration capabilities and electronics and control technologies
- Broaden applications for new materials

Technology: a key source of earnings

Production Technology capabilities

- Deploy top technologies throughout the Group
- Develop advanced production technologies

Intellectual Asset strategies

- Ensure development yields profits
- Protect technologies







Priority Initiatives 5 and 6



(5) Strengthen Group Management Capabilities

- Adopt internal company system and independent company management (strive for optimization of the Company's individual parts)
 - Strive for efficiency and flexibility
 - Clarify management responsibilities
- Create a smaller, stronger and more agile headquarters (encourage optimization of the whole)
 - Reinforce Companywide strategy development and Group management/ oversight functions
 - Promote cross-business activities that complement internal company system

Selectively reinforce operations of subsidiaries and affiliates

6 Promote CSR

- Strengthen internal control systems and compliance
- Increase management transparency

Manage risk

Endorse environment-friendly business management

Vision

Become one of the world's top manufacturers of rolling stock systems through worldclass technologies and quality, including in high-speed rail offerings

Basic strategies

Japan

- Develop and supply an array of rolling stock as Japan's leading comprehensive manufacturer in this field
- Accelerate response to demand for mass production of the *Shinkansen* ("bullet train")

Overseas

- Generate high profits in North America thanks to optimal production structure at three sites in Japan and the United States
- In China, establish a scheme to secure long-term earnings
- Penetrate new Indian and European markets

Technologies

- Reinforce world-class, high-speed rolling stock and bogie technologies and develop environment-friendly LRVs
- Create systems integration capabilities to handle turnkey orders

Quantitative Targets

Kawasaki



Aerospace

Vision

Become a global aircraft manufacturer

- •A leader in Japan's aerospace industry
- •An aircraft manufacturer with solid international competitiveness in terms of quality, price and delivery speed

Basic strategies

Defense

- Develop and secure prime contracts for mass production of P-X/C-X
- Modernize offerings and secure prime contracts for derivative and successor models
- Propose defense systems that respond to new threats and diverse situations, and cultivate new businesses

Commercial aircraft

- Increase production of Boeing 777 and other existing projects and enhance profitability
- Develop, manufacture and eventually expand production of Boeing 787
- Focus on becoming a fixed wing aircraft maker (modify P-X/C-X for commercial use)

Quantitative Targets

Kawasaki



Gas Turbines & Machinery

Vision

Draw on world-class power plant technologies in the energy and transportation fields to cultivate global operations

Basic strategies

Energy

- Develop high-efficiency products and new models and step up investments to cultivate foreign markets
- Build a business structure that ensures stable earnings from after-sales services
- Maintain market share and expand earnings from backup gas turbine-driven generating facilities
- Expand energy generation business by launching large-scale, high-efficiency gas engines

Transportation equipment

- In the commercial aircraft business, complete development and begin mass production of new TRENT 1000 engine, and raise participatory share in new model projects with the aim of becoming an essential partner in international joint development work
- In the defense sector, capitalize on opportunities as a prime contractor for new models to secure sales and expand business
- Continue to develop and launch next-generation marine propulsion machinery/systems
- Reinforce manufacturing basics and increase competitiveness of core hardware

Quantitative Targets

Kawasaki



New High-Efficiency Models under Development

Energy

• M7A-03 gas turbine engine

This is based on the M7A–02, which has a solid track record in cogeneration, and will feature improved generating efficiency—thanks to state–of–the–art dynamics and thermal analysis technology and high–temperature materials—and reduced CO_2 emissions.

• High-efficiency, low NOx engine

We have developed an 8MW gas engine that delivers power generation efficiency of 48% with NOx emissions of an environment-friendly 100ppm—both world-class. (The engine is scheduled for launch in FY2007.)

Transportation equipment

• TRENT 1000 jet engine

We have an 8.5% share in a project to develop and manufacture the Rolls-Royce TRENT 1000 engine for Boeing 787, which greatly improves fuel consumption and reduces CO_2 and NOx emissions. We are in charge of the internal compressor module.

Consumer Products & Machinery, Industrial Robots EKAwasaki

Vision

Consumer Products & Machinery

Evolve as a manufacturer of leisure vehicles and engines with a top-level brand in high-quality, highperformance market segments

Industrial Robots

A world-leading industrial robot manufacturer with a reputation built on key and systems technologies for high-performance and multifunctional robots

Basic strategies

Consumer Products & Machinery

Further reinforce Kawasaki's brand image as a provider of high-performance, high-quality products

Business strategy

Focus on motorcycles for economically developed countries/areas to broaden the scale and enhance the earnings of this core business

Performance strategies

- Strengthen R&D in North America, Asia (Thailand) and other markets to build a global development structure
- Strengthen production and sourcing in Asia to create a low-cost manufacturing and procurement structure

Industrial Robots

- Focus management resources in the core car assembly-line robot and clean conveyor robot businesses
- Strengthen our production structure, including by constructing new plants
- Solidify our sales and service structures in the BRIC economies (Brazil, Russia, India and China)



Vision

Harness our proprietary technologies in clean energy and environmental facilities in Japan and abroad to become a top engineering enterprise with advanced planning and proposal capabilities

Basic strategies

Clean energy

- Establish full turnkey capabilities in LNG facilities and expand siting and construction businesses in Japan and—through collaboration with overseas makers and engineering firms—overseas
- Develop new products and businesses that incorporate key technologies for conserving energy and other resources

Environmental facilities

- Promote development of proprietary technologies with a medium- to long-term perspective (advanced stoker, bio-treatment and water treatment technologies)
- Expand maintenance businesses to establish stable earnings structure

Quantitative Targets

I Kawasaki



Gigacell and Plasma Enhanced Melter (PEM) for Asbestos Treatment

Promote the use of natural energy through power storage technologies

- Develop nickel-metal hydride Gigacell batteries
 - ⇒Small, light, safe and reusable (making it easy to generate large volumes of power)
 - ⇒Enables high-speed charging and discharging
- Gigacell resolves the problem of output instability with such clean energy sources as wind and solar power
- Propose a Gigacell-based system that optimizes electricity and heating operations in areas that can accommodate large power load fluctuations (planned)

Complete proving tests for melting system that renders asbestos harmless

- Accomplish this by heating the asbestos to more than 1,500°C in a PEM to break down and melt the material
- Advantages: Reduces asbestos to between 1/10 and 1/20 of its original volume. This allows it to be handled as general industrial waste, thereby lowering treatment costs and prolonging the useful life of disposal sites. Also, gas emissions are significantly lower than with combustion treatment
- Commercialize PEMs, from decentralized units handling 2–3 metric tons of asbestos daily to large facilities treating 30 metric tons daily (planned)

Vision

Become one of the world's most profitable shipbuilders and increase resistance to market fluctuations by drawing on world-class gas carrier technologies and cost-competitive Chinese shipyards

Basic strategies

- With Sakaide Works functioning as a mother plant for overseas business development, maintain an optimal operational scale and high profits, largely through continuous construction of LNG carriers
- Kobe Works will pursue stable operations and profits from the production and repair of submarines and ongoing manufacturing of midsize merchant vessels
- Chinese joint venture NACKS will expand construction capacity to boost scale and profitability Note: NACKS is Nantong Cosco KHI Ship Engineering Co., Ltd. (Nantong, Jiangsu Province, China)

Quantitative Targets





Phase Two Expansion at NACKS (Increase from one to two docks)

- Total investment of 2 billion yuan (approx. ¥28 billion)
- Investment to fund 500m x 80m construction dock, two 800-metric ton cranes, an outfitting basin, and interior, assembly and coating shops, etc.
- Work on expansion scheduled for completion in spring 2008
- Increased construction capacity: Approx. 1,500,000 deadweight tons (DWT)

(suitable for 5 very large crude carriers (VLCCs)/year)





Vision

A top maker of hydraulic products that draws on its hydraulics technologies to satisfy customers worldwide with its technologies, services and quality

Basic strategies

- Strengthen global operating structure, which encompasses bases in Japan, the United States, Europe, China and Korea
- Secure overwhelming share of the global market for products for power shovel manufacturers
- Expand KPM's main plant with the aim of transforming it into a global hub with world-leading, state-of-the-art technological and mass production capabilities
- Promote the development of integrated electrical and hydraulic technologies

Note: KPM is Kawasaki Precision Machinery Ltd.

Quantitative Targets

Kawasaki



Expansion of KPM's Main Plant

Respond to growing demand for hydraulic equipment used in construction machinery

- Total investment: Approx. ¥2 billion
- Completion: Scheduled for June 2007
- Production capacity: 50% increase in key parts (hydraulic pump cylinders) in terms of volume



Segment Sales, Operating Income and Operating Margin

(Billions of Yen)

| | Segment sales | | | | | Operating income and Operating margin | | | | | | |
|---|--------------------|----------------------|---------|---------|------------|---------------------------------------|--------------|----------------|------|------|-------|------|
| | FY2005 (Actual) | FY2006 (Forecast) | FY2008 | FY2010 | FY2 (Ac | 2005 tual) | FY2 (Fore | 2006 ecast) | FY2 | .008 | FY2 | 010 |
| Rolling Stock | 168.3 | 175.0 | 160.0 | 190.0 | 8.8 | 5.2% | 10.0 | 5.7% | 9.0 | 5.6% | 12.0 | 6.3% |
| Aerospace | 218.5 | 270.0 | 180.0 | 220.0 | 9.7 | 4.4% | 10.0 | 3.7% | 8.0 | 4.4% | 15.0 | 6.8% |
| Gas Turbines & Machinery | 161.4 | 175.0 | 200.0 | 240.0 | 6.8 | 4.2% | 7.5 | 4.3% | 9.0 | 4.5% | 12.0 | 5.0% |
| Consumer Products & Machinery, Industrial Robots | 366.9 | 390.0 | 400.0 | 460.0 | 19.9 | 5.4% | 21.0 | 5.4% | 19.0 | 4.8% | 32.0 | 7.0% |
| Energy & Environmental Engineering | 164.5 | 125.0 | 130.0 | 150.0 | (8.5) | (5.2%) | 1.0 | 0.8% | 5.0 | 3.8% | 9.0 | 6.0% |
| Shipbuilding | 109.6 | 115.0 | 120.0 | 150.0 | (1.7) | (1.6%) | (2.0) | (1.7%) | 5.0 | 4.2% | 8.0 | 5.3% |
| Industrial Hydraulic Products | 46.8 | 60.0 | 65.0 | 70.0 | 4.2 | 9.0% | 5.0 | 8.6% | 6.0 | 9.0% | 7.0 | 9.9% |
| | | | | | | | | | | | | |
| Total | 1,322.4 | 1,390.0 | 1,350.0 | 1,560.0 | 41.7 | 3.2% | 54.0 | 3.9% | 65.0 | 4.8% | 100.0 | 6.4% |

Segment ROIC



| | | | | (%) | | | | | |
|--|--------------------|----------------------|--------|--------|--|--|--|--|--|
| | Segment ROIC | | | | | | | | |
| | FY2005 (Actual) | FY2006 (Forecast) | FY2008 | FY2010 | | | | | |
| Rolling Stock | 13.3% | 15.6% | 14.0% | 15.0% | | | | | |
| Aerospace | 7.9% | 5.6% | 5.0% | 12.0% | | | | | |
| Gas Turbines & Machinery | 7.2% | 9.0% | 9.0% | 13.0% | | | | | |
| Consumer Products & Machinery, Industrial Robots | 13.3% | 18.0% | 15.0% | 22.0% | | | | | |
| Energy & Environmental Engineering | (22.7%) | 4.7% | 13.0% | 21.0% | | | | | |
| Shipbuilding | 3.1% | (7.6%) | 24.0% | 35.0% | | | | | |
| Industrial Hydraulic Products | 34.1% | 29.3% | 29.0% | 32.0% | | | | | |
| | | | | | | | | | |
| Total | 5.1% | 8.0% | 10.0% | 14.0% | | | | | |

Cautionary Statement

The performance outlook and forecasts stated in these materials were prepared by Kawasaki Heavy Industries, Ltd. (hereinafter, KHI), based on the circumstances as of the release date, and include potential risks and uncertain factors that relate to economic conditions, foreign currency exchange rates, tax rules, regulations and other factors. Accordingly, please note that the actual operating results, financial position and business deployment of KHI may sometimes differ considerably from the descriptions in the present projections.