

Grand Design 100 Phase IV



Aiming for annual net sales of ¥770 billion in 2017 in the spirit of All for Growth

Yokohama Rubber entered the fourth and culminating phase of its medium-term management plan, Grand Design 100, in January 2015. Here is a summary of Phase IV.

About Grand Design 100

We launched Grand Design 100 in 2006 as a medium-term management plan for the 12 years to our corporate centennial in 2017. The plan sketches a vision for evoking “a distinctive global identity in building corporate value and in building a strong market presence by 2017.” Our original financial targets were to achieve annual net sales of ¥1 trillion and operating income of ¥100 billion by 2017 and thus achieve an operating profit margin of 10% by that year. Grand Design 100 comprises four three-year phases, and we completed Phase III in 2014. We are on track to attain the target for operating profit margin by 2017 but changes in the business environment have obliged us to extend the time horizon for attaining the targets for net sales and operating income.

Summary of Phase III

Our theme for Phase III of Grand Design 100 (2012–2014) was Robust and Responsive Growth, and we deployed growth strategies in the spirit of that theme for our tire operations and our Multiple Business (diversified products) operations. As a result, our annual tire production capacity increased to about 68 million tires at 2014 year-end, from 59 million at 2011 year-end. And vigorous measures for developing overseas business helped achieve renewed growth momentum in our Multiple Business operations. On the other hand, our sales growth in tires lagged the growth in production capacity worldwide. Our aggregate, three-year targets in Phase III were ¥1,800.0 billion for net sales, ¥150.0 billion for operating income, and 8.3% for operating profit margin. We exceeded the latter two targets with operating income of ¥165.4 billion and an operating profit margin of 9.3%, though our net sales of ¥1,786.6 billion were slightly below our target.

Phase IV Theme and Financial Targets

We will tackle Phase IV (2015–2017) in the spirit of All for Growth—Focusing Our Energy on Growth. In that spirit, we will work to resolve issues that have arisen during the first three phases, to culminate Grand Design 100 on a positive note, and to set the stage for new progress in our company’s second century. Our work in the first three phases of Grand Design 100 fostered growth momentum and growth potential in individual units and in our organization overall. In Phase IV, we will strive to consolidate that momentum and potential with an eye to attaining annual net sales of ¥770.0 billion, annual operating income of ¥80.0 billion, and operating profit margin of 10.4% by 2017.

Grand Design 100 Vision and Basic Policy

Evolve a distinctive global identity in building corporate value and in building a strong market presence

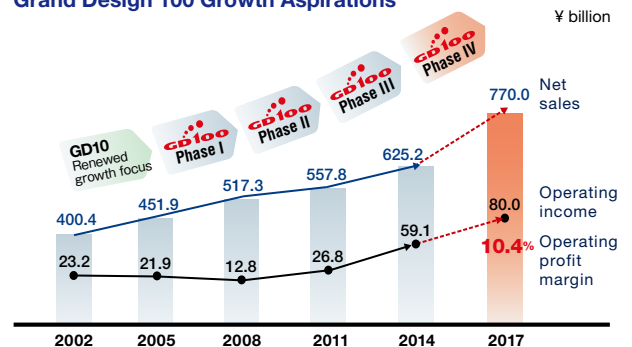
Long-Term Financial Targets (year to December 31, 2017)

Net sales	¥1 trillion
Operating income	¥100 billion
Operating profit margin	10%

Basic Policy

- Deliver the best products at competitive prices and on time
- Assert world-class strengths in technologies for protecting the environment
- Foster a customer-oriented corporate culture that honors rigorous standards of corporate ethics

Grand Design 100 Growth Aspirations



Phase III Three-Year Financial Results and Targets

	Targets	Results
Net sales	¥1,800.0 billion	¥1,786.6 billion
Operating income	¥150.0 billion	¥165.4 billion
Op. profit margin	8.3%	9.3%

Phase IV Theme

All for Growth
 Focusing our energy on growth

Phase IV Financial Targets for 2017

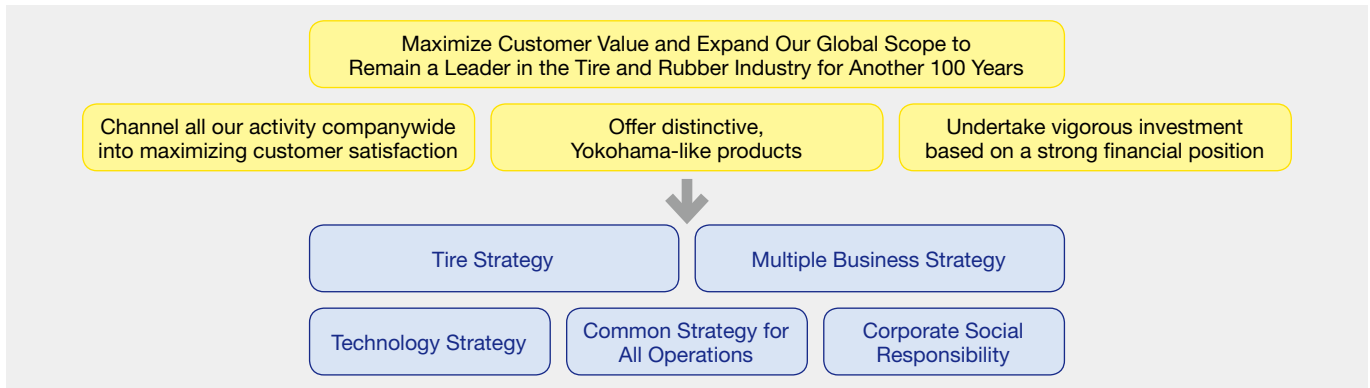
Net sales	¥770.0 billion	Net ROA	More than 5%
Operating income	¥80.0 billion	Net ROE	More than 12%
Op. profit margin	10.4%	D/E ratio	Less than 0.8

ROA: Return on total assets;
 ROE: return on equity;
 D/E: debt/equity

Phase IV Strategies



Basic Approach



Tire Strategy

Allocate More Resources to Winning Business with Automakers Worldwide

In appealing to automakers, we will strive to assert leadership in fuel-saving technology and in other technologies to serve the automakers' environmental, safety, and performance needs. We are counting on that effort to help us secure technological approvals from more automakers and to win fitments on more vehicles worldwide.

Our business in the original equipment sector has consisted mainly of deliveries to Japanese automakers, supplemented by fitments mainly on premium European and US vehicle models. Recently, we have broadened our original equipment business with the start of deliveries to Changan Automobile, one of the Chinese Big Five automakers.

We are working to increase the overseas percentage of our original equipment business while expanding that business overall. Overseas deliveries accounted for about one-third of our business with automakers in 2014, and we aim to increase that share to more than half by 2017 and to around 70% by 2020.

Strengthen Our Presence in Our Principal Markets

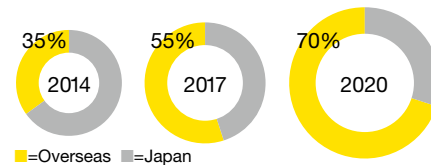
Authoritative projections place global tire demand in 2017 at 1,987 million tires. The largest markets are China, Europe, and North America and we are therefore working to expand our presence in all of those markets. We have an especially strong position, meanwhile, in the Japanese and Russian markets, and we are working to expand our presence further in those markets.

Our approach in our principal markets includes establishing and expanding local production capabilities, upgrading our distribution channels, and fortifying our marketing. We continue working to build strong global brands and to cultivate Yokohama aficionados worldwide.

We have earmarked ¥120.0 billion for investment in expanding tire production capacity during the three years of Phase IV. That investment will increase our annual production capacity to 89 million tires by 2020 year-end, from the 74 million planned for 2017 year-end and from 68 million at 2014 year-end. Most of the expansion will be to serve demand locally in our principal markets. And a lot of the new capacity will come on line after the completion of Phase IV.

Expansion projects are under way at our Philippine and Thai tire plants and at our Suzhou passenger car tire plant in China. And we are considering new plants and plant expansions in North America, Russia, Europe, and China.

Doubling the Overseas Share of Our OE Business



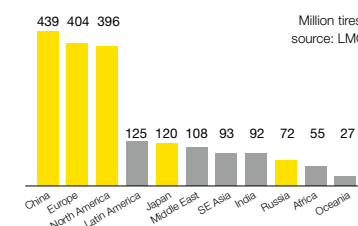
Examples of factory fitments

- Porsche
- Mercedes-Benz
- Audi
- Chrysler
- Jeep
- Lexus
- Changan



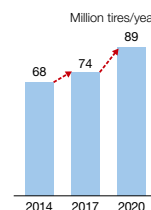
The ADVAN Sport V105, a popular tire for premium-car fitments

Projected global tire demand in 2017: 1,987 million tires



Global brand building to foster Yokohama aficionados

Our Production Capacity



New Plants and Plant Expansions

- Under consideration*
North America, Russia, Europe, China
- Plant expansion under way*
Philippines, Thailand, China (Suzhou)

Phase IV Strategies



Expand Business in Commercial Tires

The completion of our truck and bus tire plant in Mississippi in the latter half of 2015 will further localize our production in a principal market. In off-the-road tires, we are asserting a high-value-added presence in radial tires at the large end of the size spectrum. That includes developing 57-inch tires to supplement our 49- and 51-inch offerings.



Truck and bus tire plant under construction in Mississippi



Yokohama 51-inch radial tires on a dump truck

Multiple Business Strategy

Expand Business Globally in Automotive Components

We produce automotive hoses for air-conditioning and power steering systems and sealants for automotive windows and other applications at plants in Japan, China, Taiwan, Thailand, the United States, and Mexico. And we will broaden our interface with automakers further by expanding our production and sales networks in this product sector and by applying high-value-added technologies to automotive components.

Build on Market Leadership in Marine Products

Our strategy in marine products centers on fortifying our already-large global market share in pneumatic marine fenders and in marine hoses. With the start-up in the latter half of 2015 of a plant we are building in Indonesia, we will have three production platforms for marine hoses and two for pneumatic marine fenders.

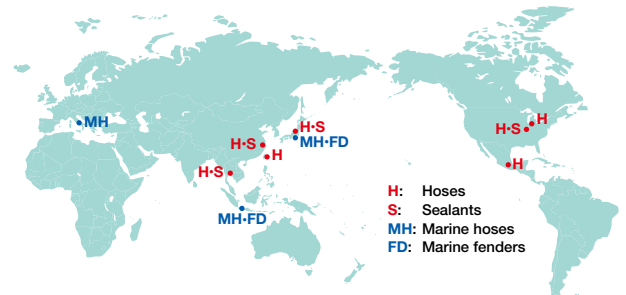
Strengthen Our Position in the Mining and Construction Sectors Worldwide

We will develop business worldwide in hydraulic hoses for construction equipment. Our supply capacity in hoses will increase with the 2015 start-up of a plant we are building in China. In conveyor belts, we will incorporate leading-edge technology to appeal to customers with advances in durability and in energy-saving performance.

Foster Growth in New Ventures Based on Original Technologies

We are fostering growth in new ventures, meanwhile, by deploying original technologies. That includes establishing a foothold in the fuel-cell vehicle sector with hoses for hydrogen stations and supplying hard coatings in the fast-growing smartphone sector.

Production Network for Automotive Hoses and Sealants and for Marine Products



From left: automotive hoses, automotive window sealants, marine hoses, marine fenders



Hydraulic hoses for construction equipment



A Yokohama conveyor belt in service at a mine



Fuel-cell business (shown: artist's rendering of a hydrogen station)



Hard coatings (shown: coating for blocking blue light)

Phase IV Strategies



Technology Strategy

Open a New Phase for Yokohama Technology

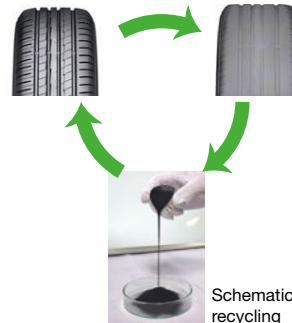
We will apply our advanced recycling technologies to improve resource efficiency. And we will develop new materials and technologies for minimizing environmental impact through molecular engineering.

Earn Customer Satisfaction with Yokohama Quality

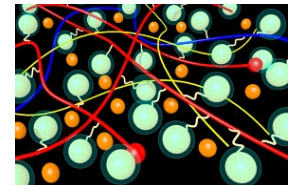
Unifying tire specifications at a high level at our plants worldwide will support increased flexibility in serving demand. And we will supplement our Japanese tire-development capabilities by expanding our development center in China and by building development centers in Thailand and the United States.

Lay a Next-Generation Technological Foundation

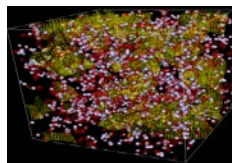
We will speed our work in developing next-generation technologies through joint R&D with other companies and organizations. And we will create next-generation Nanopower rubber through original strengths in materials technology and in advanced analysis and simulation.



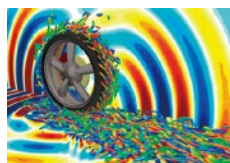
Schematic view of tire material recycling



Computer rendering of molecular structure



Multiscale simulation



Simulation of fluid acoustics around a tire

Tire Development and Evaluation Centers

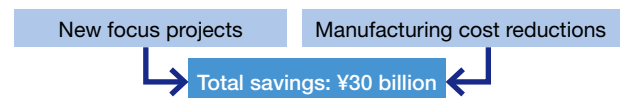


Common Strategy for All Operations

In Phase IV, we will tap external resources through stepped-up activity in corporate acquisitions and alliances. We will work to reduce costs by ¥30 billion during Phase IV through our *mudadori* cost-cutting activities, under way since 2006. In addition, we will continue working to foster human resources capable of functioning in a global context and will consider adopting the International Financial Reporting Standards (IFRS).

Aiming for ¥30 billion in cost savings in three years

An extension of the *mudadori* cost-cutting activities under way since 2006



Corporate Social Responsibility

We work to fulfill our corporate responsibility in accordance with our CSR Management Vision, issued in 2008, and with the basic policy of Grand Design 100. Our approach centers on seven priorities established in 2010 on the basis of the ISO 26000 seven core subjects.

Our Seven Priorities in Corporate Social Responsibility

Organizational governance	Human rights
Labor practices	Environment
Fair operating practices	Consumer issues
Community Involvement and development	

Examples of Measures for Reducing Environmental Impact



The BluEarth series of fuel-saving tires



Biodiversity-preservation activity in Thailand

Example of Measures for Interacting with the Community



Planting work in the earthquake-devastated community of Otsuchi-cho, in Iwate Prefecture