

Grand Design 100 Medium-Term Management Plan

We launched the medium-term management plan Grand Design 100 in 2006 as a roadmap for the 12 years to our centennial in 2017. The plan comprises four three-year phases. Two thousand sixteen was the second year of the concluding phase of Grand Design 100.

— GD100 Vision and Basic Policy —



By Our Centenary in 2017

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

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

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

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

*Targets as established in 2006. Subsequent developments in the business environment have obliged us to extend the time horizon for attaining the targets to 2020 and beyond.

Grand Design 100 Phase IV 2015–2017

● Theme:

All for Growth

Focusing our energy on growth

We are working in Phase IV 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 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 initially aimed 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 an operating profit margin of 10.4% by 2017. Our latest projections for 2017 suggest, however, that we will fall short of those targets.



● Basic Approach in Phase IV

Maximize Customer Value and Expand Our Global Scope to Remain a Leader in the Tire and Rubber Industry for Another 100 Years

Channel all our activity company-wide into maximizing customer satisfaction

Offer distinctive, Yokohama-like products

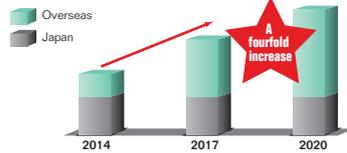
Undertake vigorous investment based on a strong financial position

Tire Strategy

Allocate More Resources to Winning Business with Automakers

In appealing to automakers, we will deploy world-class fuel-saving technology to serve the automakers' needs and to thus win more technological approvals and more vehicle fitments worldwide. Our targets are to increase our annual unit deliveries to automakers overseas fourfold by 2020, compared with 2014.

Eyeing Growth in Overseas Factory Fitments



High-profile factory fitments
ADVAN Sport V105

Strengthen Our Presence in Our Principal Markets

Our partnership agreement with the English Premier League's Chelsea Football Club and our vigorous activity in motor sports raise our profile in the world's largest tire markets—China, Europe, and North America—and in tire markets where we have an especially strong position, such as Japan and Russia. We are also strengthening our presence in priority markets through expanded production capacity. 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 75 million tires by 2018 year-end, from 68 million at 2014 year-end.



Visual advertising featuring Chelsea FC

Expand Business in Commercial Tires

Two recent acquisitions have fortified our business in commercial tires: the July 2016 acquisition of Alliance Tire Group B.V., which specializes in manufacturing and marketing off-highway tires, and the March 2017 acquisition of Aichi Tire Industry Co., Ltd., which manufactures and markets tires for forklifts and other industrial machinery. Meanwhile, our truck and bus tire plant in Mississippi, opened in 2015, has expanded our local production in a principal market.



Off-highway tires for agricultural machinery

Multiple Business (diversified products) Strategy

Expand Business Globally in Automotive Components

We are building production and sales networks to serve automakers worldwide. And we will apply high-value-added technologies to automotive hoses and sealants.



Automotive hoses

Build on Our 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. In marine products, we have begun the full-scale marketing of marine hoses produced at our Italian plant under the Yokohama Sealflex brand. And we have begun producing pneumatic marine fenders at our marine products plant in Indonesia.



Marine hoses

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 increased with the 2015 start-up of a plant we built in China. In conveyor belts, we will incorporate leading-edge technology to appeal to customers with advances in durability and in energy-saving performance.



Conveyor belts

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 for the fast-growing smartphone sector.



Hard coatings (such as for blocking blue light)

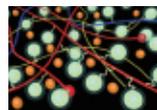


Fuel cell business (artist's rendering of hydrogen station)

Technology Strategy

Open a New Phase for Yokohama Technology

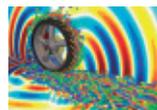
We will apply our advanced recycling technologies to improve resource efficiency. And we will develop materials and technologies for minimizing environmental impact through molecular engineering.



Computer rendering of molecular structure

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 augmented our tire-development capabilities by supplementing our development centers in Japan, China, and Thailand with a new US center in September 2016.



Simulation of fluid acoustics around a tire

Lay a Next-Generation Technological Foundation

Joint R&D with other companies and organizations will speed our work in developing next-generation technologies.

Common Strategy for All Operations

In Phase IV, we are tapping 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 adopt the International Financial Reporting Standards (IFRS) in 2017.

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.

Seven Priorities

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

Message from Newly Named President Masataka Yamaishi

Positioning Yokohama to Keep Growing even through Times of Adverse Business Conditions



I became the president of Yokohama on March 30, 2017. The timing of my appointment, coinciding with our company's centennial, heightens the attendant sense of responsibility. I am keenly aware of the role expected of me in positioning Yokohama for continued growth in its second century.

Masataka Yamaishi

President

Fifty-four years old

Yamaishi's duties before being named president included heading the MD Promotion Department, the Secretariat Department, Yokohama Europe GmbH, the Corporate Planning Department, and the Tire Business Planning Division. Most recently, he has headed our Tire Business and, in a continuing position, the Corporate Planning Division. In the Corporate Planning Division, Yamaishi was instrumental in drafting our medium-term management plan, Grand Design 100.

Our 2016 Performance

We posted a decline of 5.3% in net sales in 2016, to ¥596.2 billion; a decline of 22.4% in operating income, to ¥42.3 billion; and a decline of 48.3% in profit attributable to owners of parent, to ¥18.8 billion. Those declines reflected adverse business conditions, including an overall weakening of demand, the appreciation of the yen, and escalating price competition. The adverse conditions more than offset our continuing progress in fortifying our corporate vitality with appealing new products, with stepped-up marketing, and with cost reductions.

Grand Design 100

We have entered the final year of the fourth and culminating three-year phase (2015 to 2017) of our medium-term management plan, Grand Design 100. The Grand Design 100 Phase IV priorities for our tire operations call for allocating more resources to winning business with automakers worldwide, strengthening our presence in principal markets, and expanding business in commercial tires. In our MB segment, we are working in Phase IV to expand business globally in automotive components, to build on our market leadership in marine products, to strengthen our position in the mining and construction sectors worldwide, and to foster growth in new ventures based on original technologies. We are tackling initiatives throughout our operations to fulfill fiscal projections for the year that we announced in February 2017: net sales of ¥660.0 billion, operating income of ¥47.5 billion, and profit attributable to owners of parent of ¥30.0 billion.

Growth in Original Equipment and in China

We marked important progress in 2016 in addressing our Grand Design 100 emphasis on winning business with automakers worldwide. Our business growth in the original equipment sector was especially robust in the huge Chinese market. Automakers there contend with increasingly stringent fuel-economy regulations, and that has stimulated demand for our fuel-saving tires. Chinese consumers place a great deal of confidence in the original equipment tires on their vehicles, so our expanding business with automakers in China bodes well for our business in the replacement market there.

We took a step toward fortifying our original equipment business in March 2016 by dissolving our joint venture with Continental AG. That joint venture was a marketing platform for serving Japanese and Korean automakers with tires under both companies' brands. We will focus hereafter on serving automakers everywhere with tires under our own brand. That will include stepping up our marketing to US and European automakers.

Yokohama is one of the world's few tire manufacturers capable of meeting automakers' demanding criteria for original equipment purchasing. Our superior technological attainment has earned business with leading automakers worldwide. All of Japan's principal automakers install our tires as factory equipment. We have also earned fitments on models from several other automakers, including high-profile fitments on premium, high-performance models. And our tire offerings are attracting interest from a broadening spectrum of automakers. We aim to increase our unit shipments to automakers fourfold by 2020, compared with 2014. And we are pursuing a long-term goal of winning a 10% share of the original equipment market worldwide.



Visual advertising features Chelsea FC

Benefits from the Chelsea Partnership Agreement

We are undertaking several initiatives in connection with the Grand Design 100 emphasis on strengthening our presence in our principal markets. Highlighting those initiatives is our partnership agreement with a standout in the English Premier League, the Chelsea Football Club (Chelsea FC). That agreement, which took effect in July 2015, raises our profile in the world at large. It has already generated a visible contribution to our marketing effort in Europe, in Asian nations, and elsewhere.

We accompany our rising market profile with optimized global production for serving demand in the world's largest markets, North America, Europe, and China, and in two large markets where we assert special strengths, Japan and Russia. Our plans call for expanding our annual production capacity to 75 million tires by the end of 2018. We cultivate and serve demand, meanwhile, through a growing global network of marketing channels. Those channels center on the Yokohama Club Network of affiliated tire dealers.

A Fortified Presence in Commercial Tires through Acquisitions

Important initiatives are also addressing our third Grand Design 100 emphasis in tires: expanding business in commercial tires. Those tires are technologically demanding and therefore enable us to assert a compelling edge over low-cost competitors based in emerging nations. Our initiatives in commercial tires have included two recent acquisitions.

We acquired Alliance Tire Group, a company that specializes in manufacturing and marketing off-highway tires, in July 2016, and Aichi Tire Industry, which manufactures and markets tires for forklifts and other industrial machinery, in March 2017. Those acquisitions have secured for us a new presence in tires for agricultural and forestry machinery and the largest share of Japan's market for forklift tires. They have increased the weighting of commercial tires in our tire sales portfolio to 32%, from 20% before the acquisitions. Alliance Tire Group, especially, brings to our organization its historical momentum of high profitability and steady growth.

Joining hands with Alliance Tire Group and with Aichi Tire Industry offers diverse possibilities for generating synergies. A good example is a new line of cost-competitive passenger car tires that we launched in May 2017 in Europe under the Alliance name. Alliance Tire Group enjoys excellent name recognition in Europe, and our new brand gives us a vehicle for coping with low-cost competitors in Europe without compromising the Yokohama brand.

Automotive and Marine Emphases in the MB Segment

We are reexamining our broad-ranging MB product portfolio and will focus resources on items that offer the best profitability and growth potential. That will include addressing our Grand Design 100 emphases on expanding business globally in automotive components and building on our market leadership in marine products. We underpin our presence in both of those product categories with production capabilities located near our principal markets.

Our production network comprises plants for high-pressure hoses, including automotive hoses, in six nations and plants for marine products in three nations. In 2016, we took several measures to strengthen network and to exercise its capacity more effectively. Those measures included increasing shipments of oil hoses for diesel turbochargers to a Japanese automaker from a Thai plant, consolidating two formerly separate production platforms for automotive components in Nagano Prefecture at a single plant, commencing full-scale marketing of Seaflex-brand marine hoses produced at our Italian plant, and inaugurating production of pneumatic marine fenders in Indonesia.



Sustainable Vitality in Our Second Century

A corporation is responsible for achieving lasting, profitable growth, even through times of adverse business conditions, and for fulfilling management's pledges to investors. My duties as president center on fostering the corporate vitality essential to fulfilling those responsibilities in Yokohama's second century.

Yokohama, in its first century, has built world-class capabilities in technological development. Those capabilities have spawned numerous breakthrough products, and I am determined to do my part in continuing to assert those capabilities in Yokohama-like breakthroughs.

The world tire industry comprises more than 200 manufacturers. Basic competence in manufacturing and product development is, in itself, insufficient to ensure lasting corporate viability. To achieve sustainable growth, we need to position Yokohama as a market presence whose name and brands convey a distinctive identity. I will focus on honing our world-class strengths in technology and product innovation with an eye to capturing the imagination of customers worldwide.

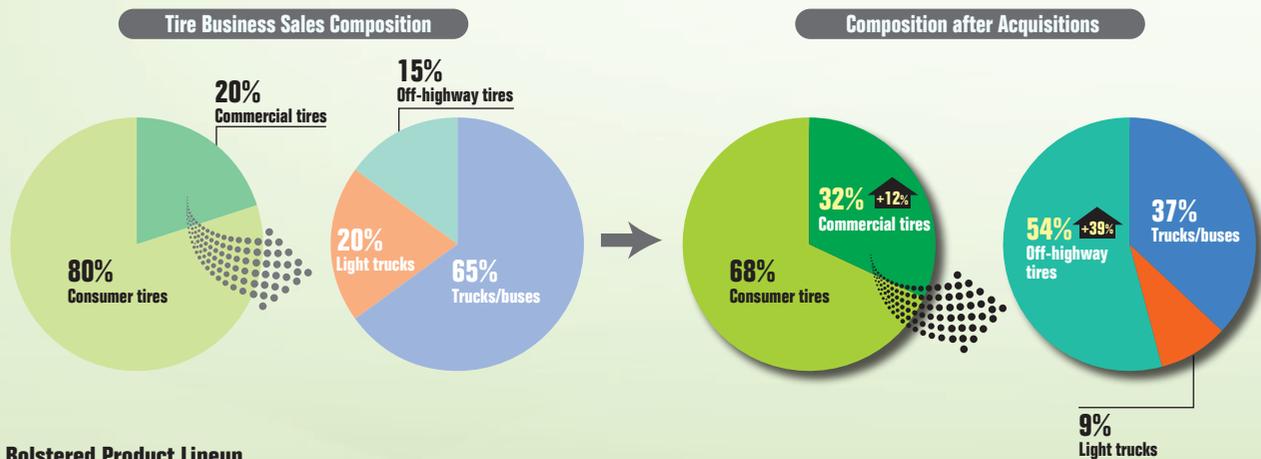
Pursuing Further Growth through Strengthened Business in Commercial Tires

Expanding business in commercial tires is a core emphasis in our tire-sector growth strategy in Phase IV of Grand Design 100. We addressed that emphasis with the July 2016 acquisition of Alliance Tire Group (ATG), which produces and markets off-highway tires, and with the

March 2017 acquisition of Aichi Tire Industry, which produces and markets tires for forklifts and other industrial machinery. Those acquisitions have bolstered our product offerings in commercial tires and have improved the consumer-commercial balance in our sales portfolio.

Improved Composition of Sales Portfolio

The acquisitions of Alliance Tire Group and Aichi Tire Industry have improved the balance between consumer tires and commercial tires in our sales portfolio to 7:3, from 8:2.



Bolstered Product Lineup

Acquiring Alliance Tire Group has secured a presence for us in tires for agricultural machinery and for forestry machinery.

Acquiring Aichi Tire Industry has broadened our presence in tires for industrial machinery.

Yokohama Rubber	ATG	Aichi Tire Industry
Truck & bus tires <ul style="list-style-type: none"> Tires for trucks/buses Tires for buses/tractors Tires for trailers/carriers Tank lorry tires Dumpster/mixer tires 	Agricultural machinery tires <ul style="list-style-type: none"> Agriculture machinery tires (Flotation tires for tractors, combines, harvesters) Tires for other small special-purpose machinery 	
Small truck tires <ul style="list-style-type: none"> Light commercial vehicle tires Light van tires Light truck/bus tires 	Forestry machinery tires <ul style="list-style-type: none"> Tires used on forestry equipment 	
Industrial machinery tires <ul style="list-style-type: none"> Off-The-Road (OTR) tires (Tires for dump trucks, graders, wheel loaders) Crane tires Tires for port-use vehicles, forklifts 	Industrial machinery tires <ul style="list-style-type: none"> Off-The-Road (OTR) tires Tires for port-use vehicles, forklifts Skid steer tires 	Industrial machinery tires <ul style="list-style-type: none"> Forklift tires <ul style="list-style-type: none"> Cushion tires (small to large) Small solid tires (urethane/rubber)

Fostering Synergies with Alliance Tire Group

A Foothold in the Growing Market for Agricultural Equipment

Alliance Tire Group's business centers on tires for agricultural machinery and for forestry machinery. The global market for tires in those categories is large, and demand in the agricultural sector, especially, is poised for sustained growth. Demand for foodstuffs will grow in step with population growth, and the global business information provider MarketLine projects that demand for agricultural machinery will grow at an average annual pace of 5.7% over the years from 2014 to 2019. That will spawn comparable growth in demand for agricultural tires.

Advanced Technology and Cost-competitive Production

The production resources at Alliance Tire Group comprise a plant in Israel and two plants in India. That company conducts product development and produces high-value-added tires in Israel. Its two production platforms in India provide cost-competitive, high-quality supply capacity for large-volume tires.

Attentive Customer Care

Alliance Tire Group has earned high regard among customers for its careful attention to their needs. It has developed products, for example, in response to customer requests for tires that do not damage farm field ridges and for tires that do not sink into the farm field soil. Customers frequently cite that kind of responsiveness as a reason for choosing Alliance Tire Group tires.



*Hikomitsu Noji
Vice Chairman and Member of the Board, Chairman of Alliance Tire Group*

Passenger Car Tires under the Alliance Brand in Europe

We have tapped Alliance Tire Group's excellent name recognition in Europe with a new line of cost-competitive passenger car tires. In May 2017, we launched the new line in Europe under the Alliance name, our first-ever second-brand offering. The Alliance tires enable us to compete at the lower end of the price spectrum without compromising the Yokohama-brand cachet.

