

# 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 fifteen is the first 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

### 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

\*Targets as established in 2006. Yokohama is on track to attain the target for operating profit margin by 2017 but has extended the time horizon for attaining the targets for net sales and operating income.

## Grand Design 100 Phase IV

2015–2017

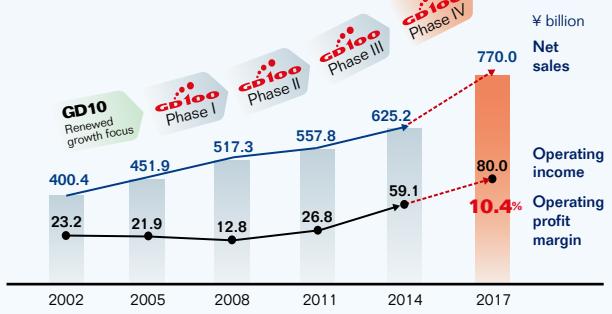
- Theme:

### All for Growth

Focusing our energy on growth

We will work 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 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.

### All for Growth



## ● 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 companywide into maximizing customer satisfaction

Offer distinctive, Yokohama-like products

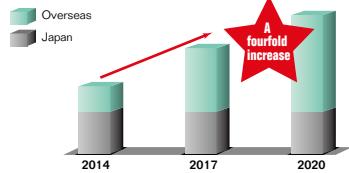
Undertake vigorous investment based on a strong financial position

#### 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 efforts will include working to double the overseas share of our original equipment (OE) business by 2020, compared with 2014.

##### Eyeing Growth in Overseas Factory Fitments

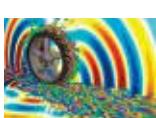
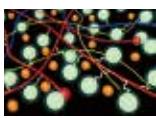
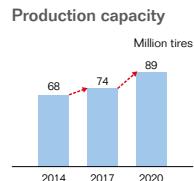


##### Strengthen Our Presence in Our Principal Markets

We will rely increasingly on local production to strengthen our presence in the world's largest markets—China, Europe, and North America—and in markets where we have an especially strong position, such as Japan and Russia. 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 in 2020, from the 74 million planned for 2017 and the 68 million at 2014 year-end.

##### Expand Business in Commercial Tires

The completion of our truck and bus tire plant in Mississippi in the latter half of 2015 further localizes 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. We are developing 57-inch tires to supplement our 49- and 51-inch offerings.



#### 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 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 2016 start-up of newly built plant in Indonesia, we will have three production platforms for marine hoses and two for pneumatic marine fenders.



*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 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

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 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).

#### 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	

A WORD FROM THE PRESIDENT



## Hikomitsu Noji

*President and Representative Member of the Board*

# Pursuing Yokohama-Like Growth

## Asserting Distinctive Leadership in Product Quality

Something that distinguishes Yokohama is the twofold capacity for offering world-class quality in tires while asserting distinctive personality in high-performance tire products. World-class quality is why Japanese, European, American, and Chinese automakers choose Yokohama tires for factory installation on high-end vehicle models. Distinctive personality is what sets the passenger-car tires of our ADVAN global flagship brand apart from their competitors on the racetrack and on premium-grade passenger cars.

World-class quality and distinctive high performance continue to earn fierce loyalty from Yokohama customers in our tire business. And those same qualities underpin our strengths in our Multiple Business operations, as in marine hoses, pneumatic marine fenders, and high-pressure hoses. Here is how we are building our growth strategy around uniquely Yokohama strengths.



*The ADVAN Sport V105, a fusion of superior driving performance and remarkable comfort. A showcase of Yokohama high performance. Automakers' choice on a growing range of sports cars and high-performance luxury models*

## Tackling Phase IV of Grand Design 100

As noted elsewhere, we entered the culminating Phase IV of our Grand Design 100 medium-term management plan in 2015. 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 Multiple Business operations, 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.

### Tires: allocating more resources to winning business with automakers worldwide

Our activity in allocating more resources to winning business with automakers worldwide is generating steady results. Only a handful of tire manufacturers possess the capabilities necessary to fulfill the requirements posed by automakers for factory fitments. In addition to our continuing progress in winning fitments on vehicle models produced in Japan, we won new fitments on several high-end passenger car models from European automakers in 2015. Our fuel-saving tires captured mounting interest, meanwhile, from Chinese automakers, who face escalating fuel-economy regulations.

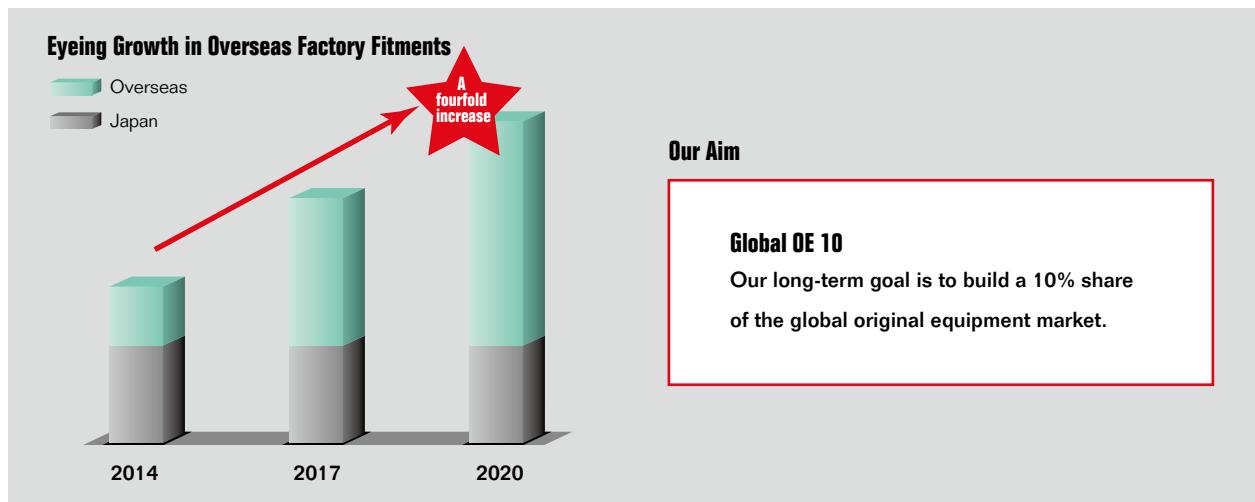
Factory fitments help ensure steady sales volume, and they contribute to replacement sales, as numerous car owners stay with the tire brand that came with their vehicle. They occasion technological advances, engender confidence in our products, and heighten our market visibility, which also contributes to replacement sales. We are therefore working systematically to expand our business in original equipment tires.

Our targets are to increase our annual unit deliveries to automakers overseas fourfold by 2020, compared with 2014, and to increase our global market

share in original equipment to 10%. We therefore continue working to cultivate new relationships with automakers while reinforcing our established relationships.

Trends in original equipment demand tend to portend trends in replacement demand three and four years down the line. Automakers are opting increasingly for large-rim-diameter tires. So we are expanding our production capacity for passenger car tires of rim sizes of 18 inches and larger. The additional production capacity will come on line at our Shinshiro Plant, in Japan by 2018.

Our expanded capabilities for serving automakers have diminished the need for our original equipment marketing joint venture with Continental AG, Yokohama Continental Tire Co., Ltd. We therefore agreed to dissolve the joint venture as of March 31, 2016. Established in 2002 to serve Japanese and Korean automakers, Yokohama Continental Tire supplemented our Yokohama-brand offerings with Continental-brand tires. We will focus hereafter on serving automakers everywhere with tires under our own brand.





A Chelsea FC touch for Yokohama advertising

## Tires: strengthening our presence in principal markets

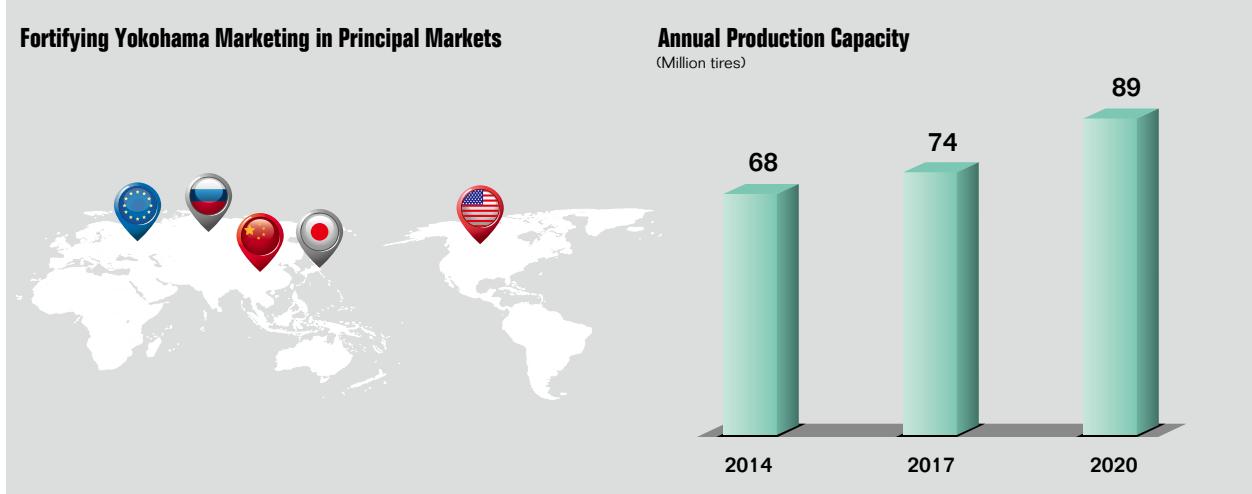
The markets that we regard as “principal” are the world’s largest tire markets—North America, Europe, and China—and two markets where we assert special strengths—Japan and Russia. Measures for strengthening our presence in our principal tire markets span marketing and manufacturing.

A marketing initiative of note is our partnership agreement with the Barclays Premier League champions, the Chelsea Football Club (Chelsea FC). That agreement took effect in July 2015 and covers five years. It places our name before the eyes of some 500 million Chelsea FC fans worldwide. And we build on the Chelsea FC relationship in advertising and promotions to strengthen our tires’ association with technological excellence and

superior driving performance and thereby expand our presence in our priority markets.

In manufacturing, Phase IV of our Grand Design 100 medium-term management plan provides for a hefty increase in our tire production capacity. We have earmarked ¥120 billion for investment in expanding tire production capacity during the three years of Phase IV and beyond. Our Phase IV target is to increase our annual production capacity to 74 million tires by 2017 year-end, compared with 68 million tires at 2014 year-end. And we aim to increase our production capacity to 89 million tires a year by the end of 2020. Plant-expansion projects for achieving those targets are under way in the Philippines, in China, and in Japan.

### Fortifying Yokohama Marketing in Principal Markets



## Tires: expanding business in commercial tires

Our business in commercial tires gained important momentum with the October 2015 opening of our truck and bus tire plant in Mississippi. That highly automated plant has a production capacity of one million tires a year, and its 200-hectare site offers ample room for future expansion as warranted.

North America is our second-largest market for truck and bus tires, after Japan. And our tires earn high marks for retreadability, which is especially important to North American customers. We have served the truck and bus sector in North America primarily with replacement tires, but we are stepping up our

approach to manufacturers of truck tractors and trailers and of buses.

Our commercial tire business gained further momentum after the end of the fiscal year. We announced in March 2016 our plans to acquire the Amsterdam-based Alliance Tire Group, a manufacturer of off-highway tires. That acquisition will bolster our global market presence notably in tires for agricultural and forestry machinery. We are especially excited about the prospects engendered by this acquisition in the agricultural sector, where tire demand is surging. See pages 12 and 13 of this report for additional information about the acquisition of the Alliance Tire Group.



Yokohama's new truck and bus tire plant in Mississippi



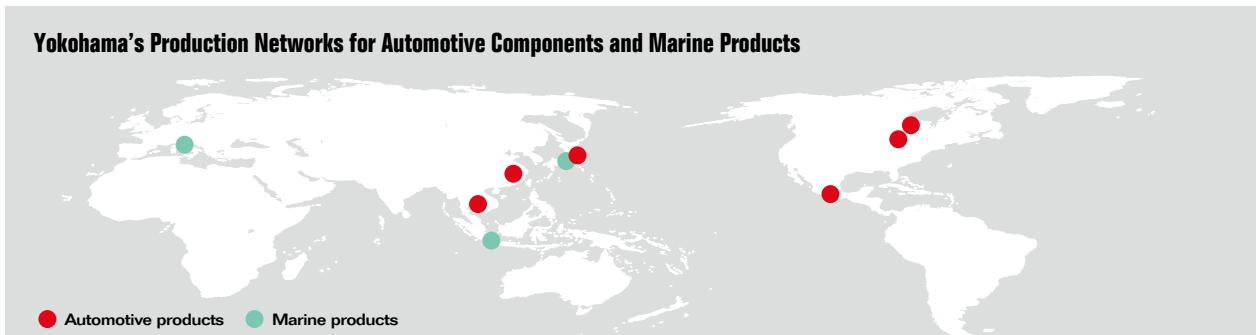
The opening of Yokohama Tire Manufacturing Mississippi, LLC (YTMM), in West Point, Mississippi, on October 5

## Multiple Business products: aiming for overseas growth

We aim to increase the overseas share of sales in our Multiple Business operations to 50% by as soon as 2020, from about 41% in 2015. Achieving that goal will depend chiefly on addressing the two strategic emphases of expanding business globally in automotive components and building on our market leadership in marine products. Our production network for automotive components comprises plants for automotive hoses in five nations—including a Mexican supplier added in January 2015—and plants for automotive sealants in four nations. In product development, we recently pioneered an advance in hoses for handling next-generation refrigerants in automotive air conditioners. Japanese automakers have begun using our new hoses in vehicle models for the European market,

and we have received inquiries about the hoses from European automakers. Yet another initiative in automotive components has broadened our business in oil hoses for diesel turbochargers. We have begun supplying those hoses to vehicle plants in Thailand.

Building on market leadership in marine products means leveraging our first- or second-largest global market shares in pneumatic marine fenders and marine hoses. We expanded our global footprint in marine hoses with the September 2014 acquisition of an Italian manufacturer of those products. And we will expand our footprint further with the 2016 startup of production of marine hoses and pneumatic marine fenders in Indonesia.



● Automotive products   ● Marine products

## Optimizing Our Human Resources Globally

Bringing a global perspective to hiring, training, and promoting is a mounting emphasis in human resources management at Yokohama. For the past seven years, select employees in Japan have received overseas assignments immediately on joining the company. That program has been extremely effective in fostering cross-cultural insight and understanding.

We are laying a foundation to support a robust and multinational interchange of managers among our operations worldwide. That includes upgrading our training programs and unifying our management systems.

## Bolstering Corporate Governance

Sound corporate governance and unfailing compliance with rigorous standards of corporate ethics are overriding priorities at Yokohama. In that spirit, we hold periodic conferences devoted to the themes of ethical compliance, global production, and environmental protection and attended by representatives of Yokohama Group companies worldwide. A core emphasis at the gatherings is on laying a foundation to support globally consistent performance in regard to the conference themes.

We are putting in place operational protocols, meanwhile, designed to prevent malfeasance. Our technology and marketing divisions are in the vanguard of implementing those protocols.

Independent perspectives on the Board of Directors are important in upgrading corporate governance. And we secured authorization at the March 2016 General Meeting of Shareholders to increase the number of independent members of our Board of Directors to three, from two.

My colleagues and I are committed to achieving the paramount Phase IV goal of Grand Design 100: "Maximize customer value and expand our global scope to remain a leader in the tire and rubber industry for another 100 years." I thank you for your attention to our progress in fulfilling that commitment.



*"Maximize customer value and  
expand our global scope to  
remain a leader in the tire and  
rubber industry for another  
100 years."*

# *Acquisition to Boost Momentum in Commercial Tires*

We announced on March 25, 2016, that we would acquire Alliance Tire Group, a manufacturer of off-highway tires. Alliance Tire Group companies manufacture tires at two plants in India and at one plant in Israel and market the tires worldwide.

The acquisition consists of purchasing all the outstanding shares of Alliance Tire Group B.V., the holding company of the Alliance Tire Group companies.

We will purchase the shares from the majority owner, the global investment company KKR, and from the minority owners. We expect to complete the requisite filings in connection with antitrust regulations in the United States and in other nations and to finalize the acquisition by July 1, 2016. The price of the Alliance Tire Group shares to be purchased is US\$1,179 million, subject to post-purchase adjustment.

## **Summary of Alliance Tire Group B.V.**

**Company name:**

Alliance Tire Group B.V.

**Head office:**

Prins Bernhardplein 200 (1097JB), Amsterdam,  
Netherlands

**Main business:**

Manufacture and sale of tires for agricultural, forestry,  
industrial, and construction machinery

**Production sites:**

Two plants in India (subsidiary) and one plant in Israel  
(subsidiary)

**Year established:**

November 17, 2006

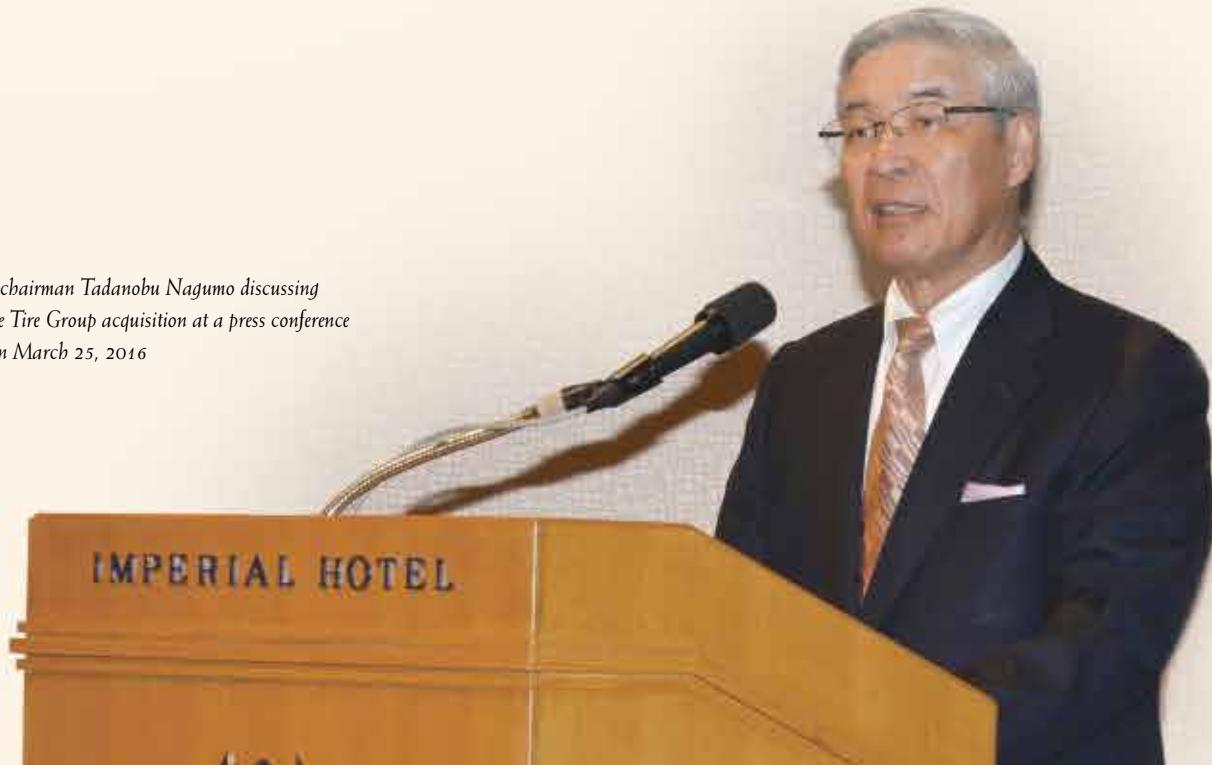
**Annual sales:**

US\$529 million (2015)

**Operating profit:**

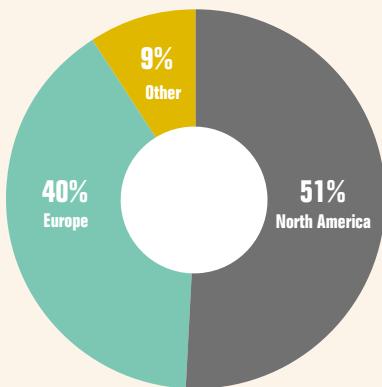
US\$95 million (2015)

*Yokohama chairman Tadanobu Nagumo discussing  
the Alliance Tire Group acquisition at a press conference  
in Tokyo on March 25, 2016*



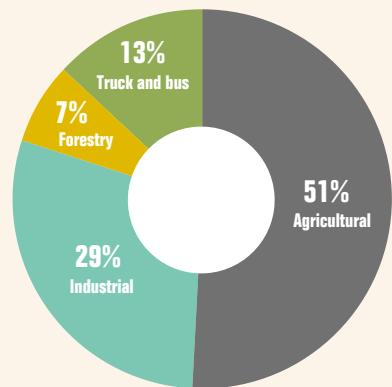
Expanding business in commercial tires is an emphasis in tire strategy in the ongoing Phase IV (2015–2017) of our medium-term management plan, Grand Design 100, and we are therefore stepping up our activity in developing and marketing ultralarge radial tires for mining and construction equipment. Alliance Tire Group specializes in manufacturing and marketing radial and bias tires for agricultural, forestry, industrial, and construction and mining machinery and it markets those tires in about 120 nations, focusing on Europe and North America.

#### Alliance Tire Group Sales by Region in 2015



The acquisition of Alliance Tire Group will expand our business in commercial tires and further the globalization of that business. Most notably, it will augment our line of commercial tires with a new presence in tires for agricultural equipment and forestry machinery. Demand for agricultural equipment tires is poised to increase as global population growth raises demand for foodstuffs and as the mechanization of agriculture broadens in an effort to raise productivity.

#### Alliance Tire Group Sales by Product Category in 2015



#### Alliance Tire Group's Principal Product Brands

Brand	 <b>ALLIANCE</b> ENGINEERED TO KEEP YOU AHEAD	 <b>GALAXY</b> APPLICATION SPECIFIC, PURPOSE BUILT.	 <b>PRIMEX</b> EXPERT FOR THE EXTREME
Features	<ul style="list-style-type: none"> <li>Well-established agricultural tire brand, launched in Israel in 1950</li> <li>More than 1,000 sizes</li> <li>Strong in Europe</li> </ul>	<ul style="list-style-type: none"> <li>Launched in 1970s, mainly for construction</li> <li>Strong in North America</li> </ul>	<ul style="list-style-type: none"> <li>Mainly for forestry and mining</li> <li>Strong in North America</li> </ul>
Applications	<ul style="list-style-type: none"> <li>Agricultural</li> <li>Forestry</li> <li>Industrial</li> <li>Construction</li> </ul>	<ul style="list-style-type: none"> <li>Construction</li> <li>Agricultural</li> <li>Industrial</li> </ul>	<ul style="list-style-type: none"> <li>Forestry</li> <li>Construction</li> <li>Industrial</li> </ul>