
2030 Long-Term Management Plan

Beyond ceramics, e**X**ceeding imagination

June 4th 2020

NGK SPARK PLUG CO., LTD.

President and COO Takeshi Kawai

1. A Review of "NITTOKU SHINKARON
-Evolution of NGK SPARK PLUG"
2. Ideal image: 2040 VISION of NGK SPARK PLUG
3. 2030 Long-Term Management Plan
The Strategy and Initiatives
 - ① Strategy and Overall Picture of
Long-Term Management Plan
 - ② Specific measures
 - ③ Summary
4. Reference materials

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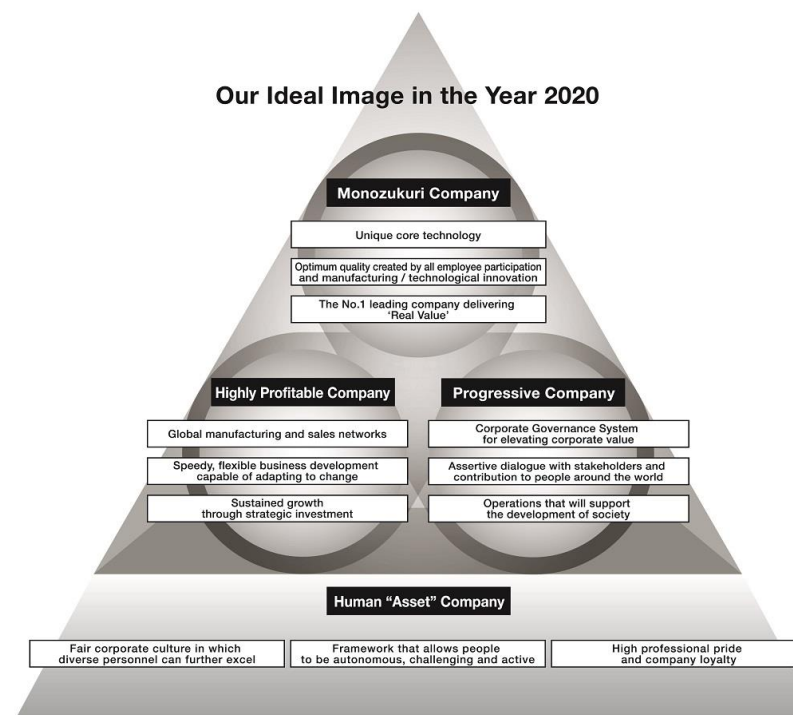
A Review of "NITTOKU SHINKARON"

We have been carrying out our goal of providing the real value.

Overview of Long Term Management Plan "NITTOKU SHINKARON"



Our Ideal Image in the Year 2020



A Review of "NITTOKU SHINKARON" –figures and progress

We have made a lot of progress in 10 years.

	FY 2010	FY 2018	FY 2019
Net Sales	269 Billions yen		425 Billions yen	426 Billions yen
Operating income	29 Billions yen		58 Billions yen	46 Billions yen
Operating margin	10.7%		13.7%	10.9%
Average of Past 5-year OP margin per year	7.7%		15.9%	14.5%

Points of evolution

Monozukuri Company

- Spark Plugs sales establishing of its top-brand status
- Top Share of Exhaust Gas Sensors Market

Progressive Company

- Active discussions and strengthening governance, including outside directors
- StrategicM&A, established a joint venture.

(WELLS, JAPAN MDM, NTK CERATEC, CAIRE, MORIMURA SOFC TECHNOLOGY)

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Highly Profitable Company

- Average operating margin of 5 years are 15%
- Increased overseas production ratio (30→40%)
- Start of RHQ and strengthen the Group

Human Asset Company

- Established the Nittoku Way, shares the values that all employees rely on and pass them on to the next generation

Progress of Medium-Term Management Plan

Strengthening of current business fields have been progressed as planned.

Creation of New businesses pillars is delayed.

Strengthening Current Businesses

- Selective and focused.
- Grow stronger as planned.

Establishing New Business Pillars

- Seedings of new business has progressed.
- Creation of new business pillars not yet achieved.

Establishing Strong Business Infrastructures

- Made & promoted Nittoku Way.
- Promoting awareness reform.
- ROIC Management is on a half way.

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2040 VISION: Change drastically beyond the current way

Delivering new value in the face of an ever-changing future.

To meet large-scale global environmental changes, we too must change.
Creating an organization comprised of passionate individuals working together
to face challenges head-on in order to better society.

We are transcending imagination with technology that transcends boundaries.

We are more than just ceramics and we are going in new directions.

 ***Beyond ceramics,
eXceeding imagination***

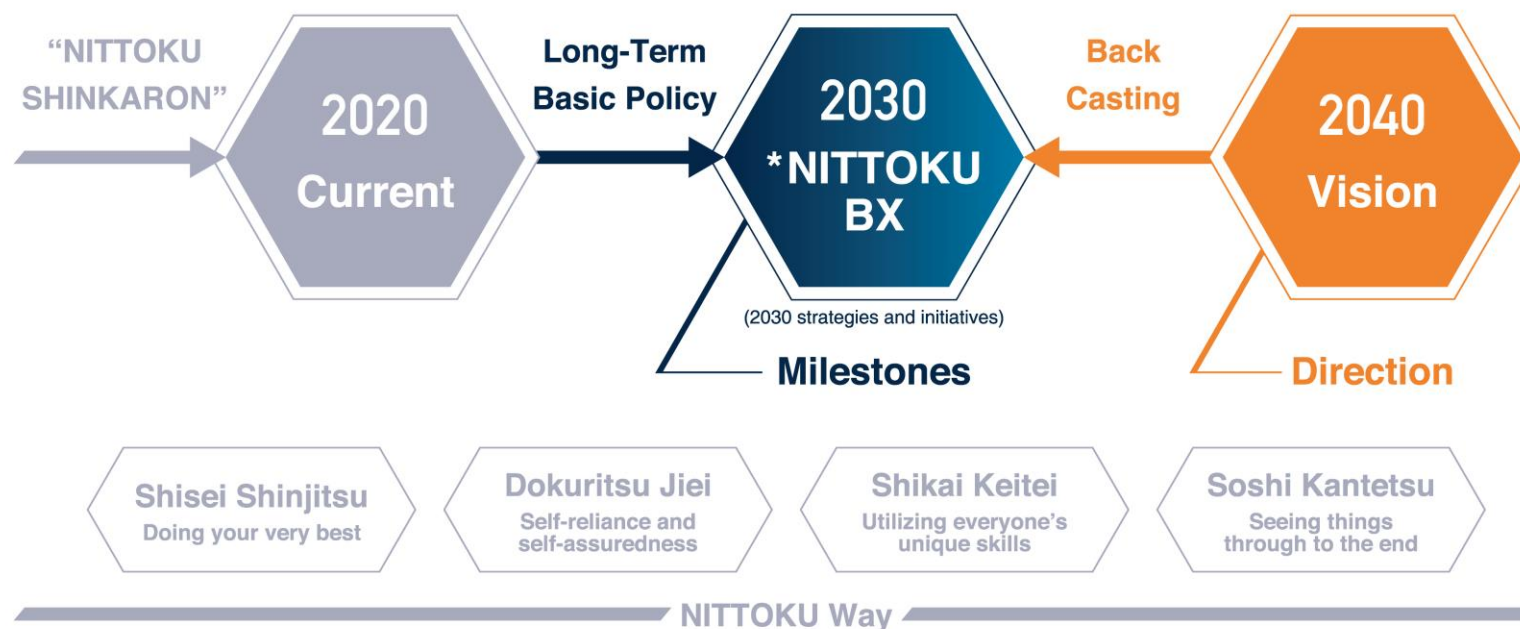
2040 Ideal image and 2030 Long-Term Management Plan

Direction = 2040 VISION

Milestone = 2030 Long-Term Management Plan “NITTOKU BX”

(2030 strategies and initiatives up to the year)

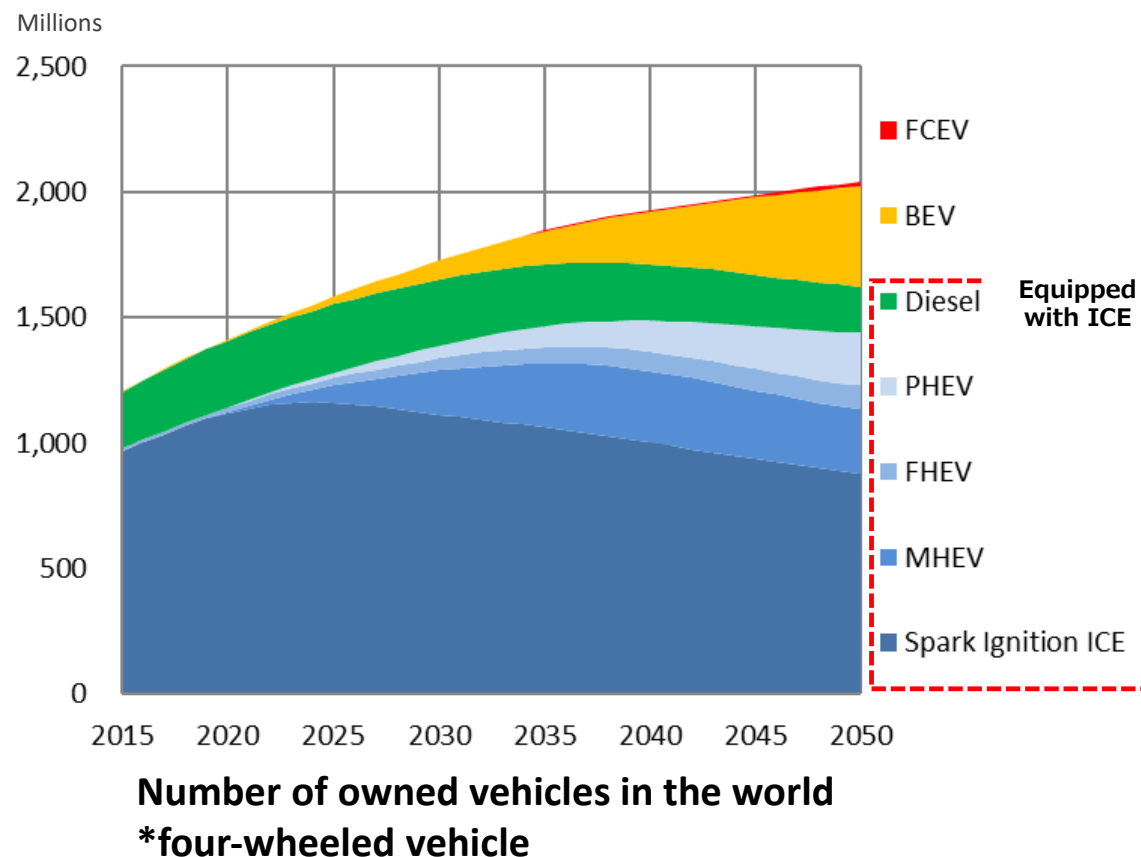
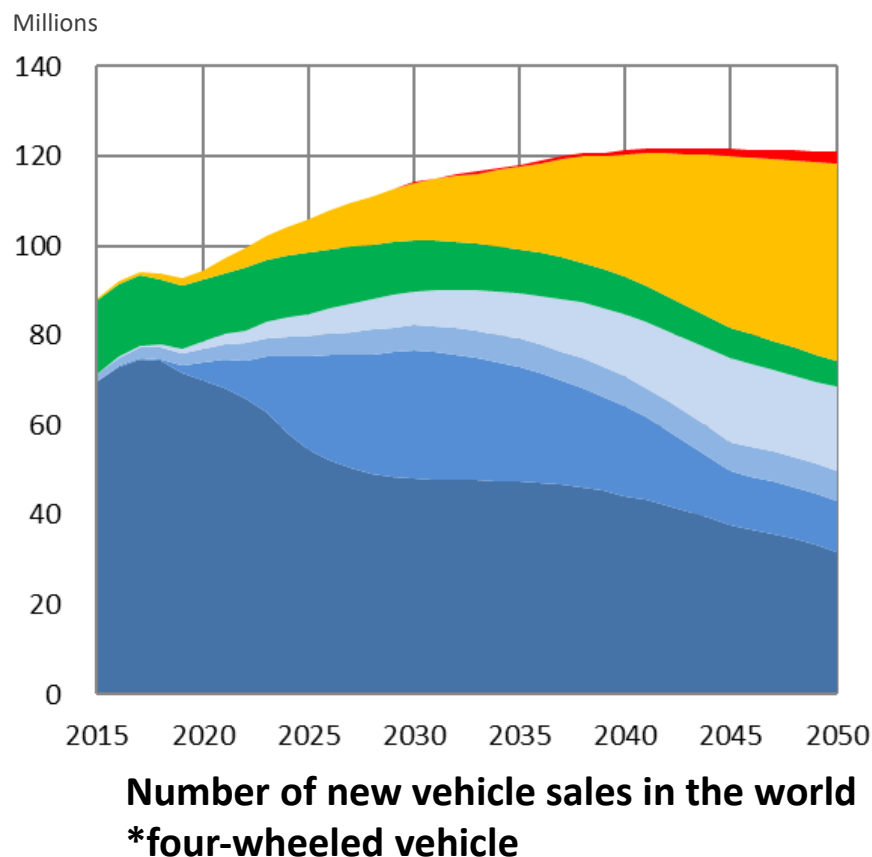
2030 Long-Term Management Plan



* NITTOKU BX : “Beyond ceramics, eXceeding imagination”

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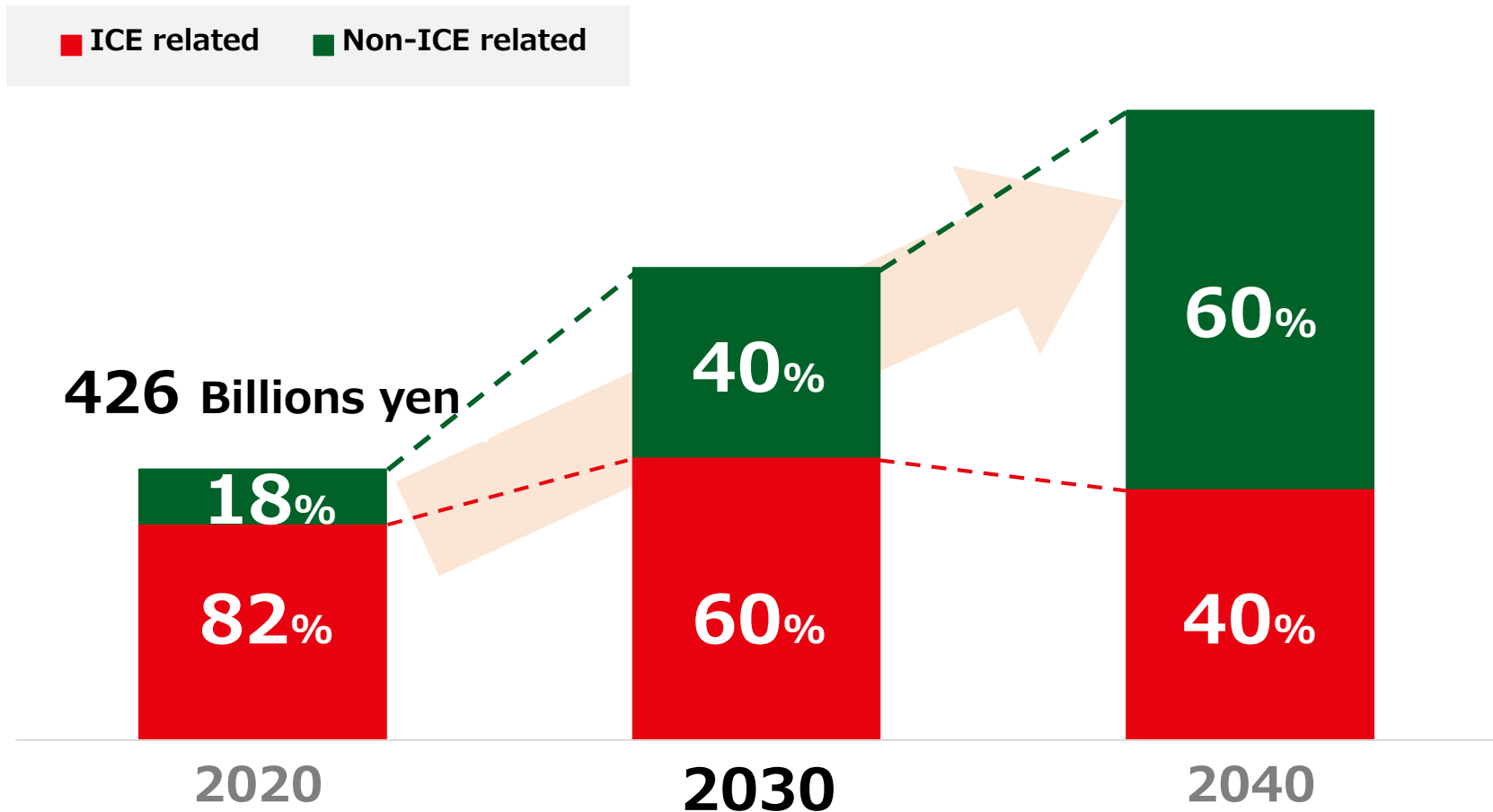
Internal combustion engines are expected to decline in the mid-2030s.



Source: based on IHS Automotive Market "Future of Mobility and Energy" and adding our forecast

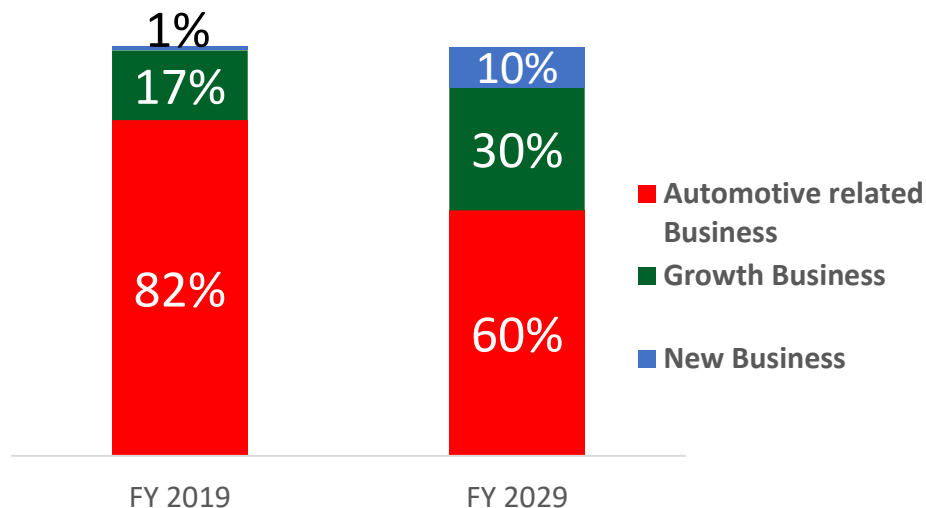
2030 Long-Term Management Plan: Business Portfolio

Realizing for “Business Portfolio Transformation” and “Stable growth” based on profits from the ICE related business



Financial Strategy

Sales portfolio



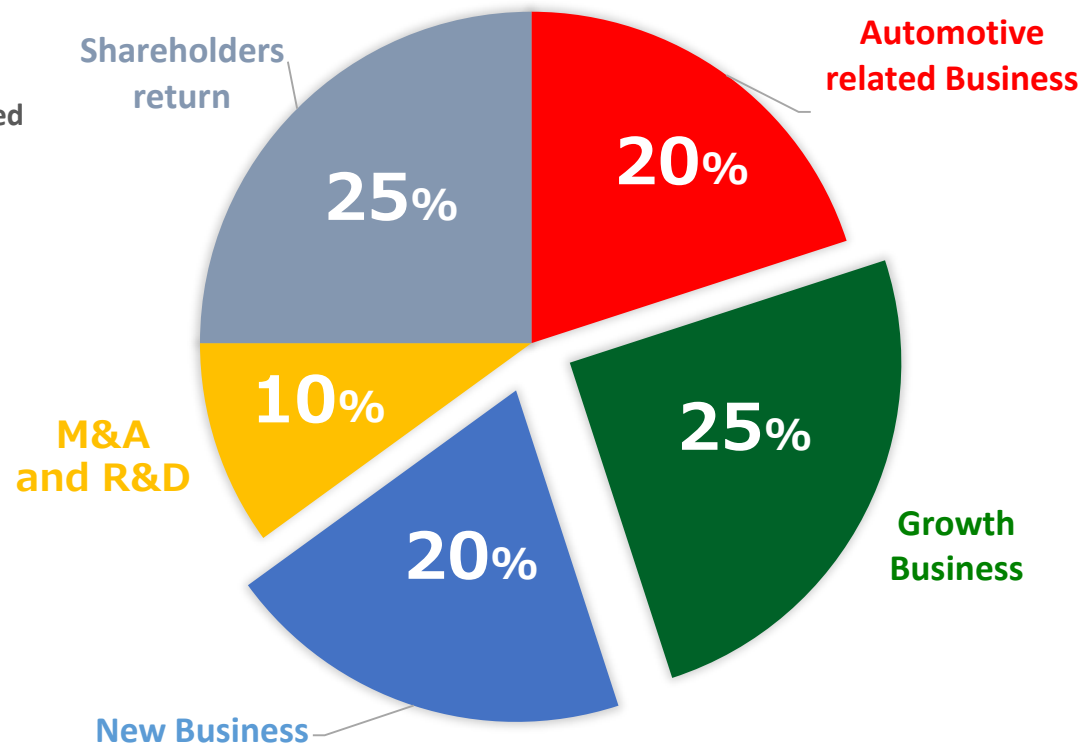
	FY 2019	FY 2029*
Operating margin	10.9 %	15 % or more
ROIC	6.2 %	10 % or more
ROE	7.7 %	12 % or more

*Target which was discussed before the COVID-19.

Secure profits while trying to change the portfolio.

Cash out from FY2020 to FY2029

(Cash flow basis)

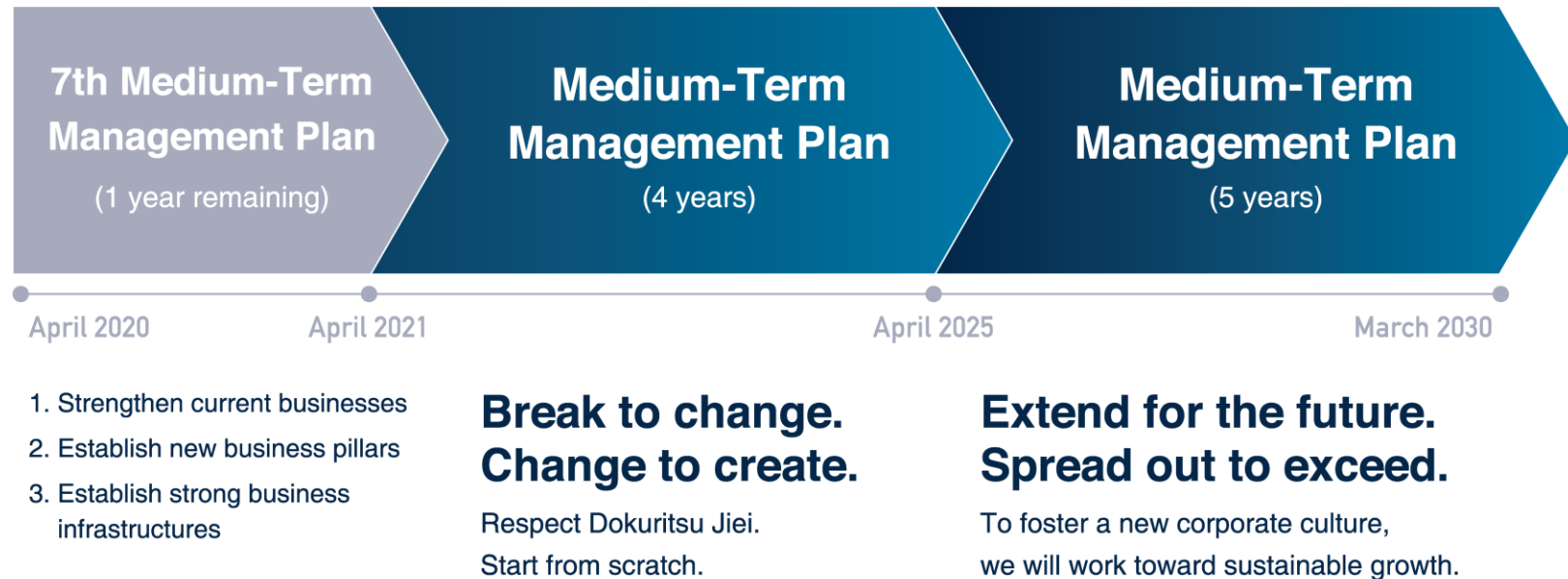


Actively allocate investment in new and growth businesses.

2030 Long-Term Management Plan and Mid-Term Plan



2030 Long-Term Management Plan - NITTOKU BX



Action Guidelines: Change with Will!!

We will become a company that coexists with the world and society with diverse human resources with Will.



Business fields to focus on

Our core competence to support sustainable growth in the future society



Something
New

Open
Innovation



Business fields to focus on: details

Environment & Energy

To an energy efficient and environmentally friendly society



- Using sensing technology improving industrial efficiency
- Stable supply of regenerated energy



Medical

To bring advanced medical care to people all over the world



- Applied ceramic materials to artificial bone
- Non-invasive diagnosis and treatment, provision of preventive equipment and services using ultrasound technology



Mobility

To a mobile society that is fun and convenient



- Providing maintenance services according to your lifestyle
- Improving electricity by ceramic components
- MaaS Providing services to fit special needs



Communication

A high-speed communication society where virtual and reality are connected



- Supporting high-speed communication, provision of infrastructure parts



For Realizing a Sustainable Society

We set KPIs for each item in order to realize a society that can coexist with all stakeholders.



Environment

- Responding to Climate Change
- Providing Environmentally Friendly Products



Society

- Development of Technology, Products, and Businesses for Contributing to the Resolution of Social Issues
- Global Human Resource Management



Governance

- Corporate Governance
- Risk Management
- Compliance
- Information Security



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Strategy: "Business Portfolio Transformation" for Growth

Management Innovation

- Small, Strong and Agile head office to support business portfolio transformation.
- Quick management decisions. DX to support it.

Clarification of Responsibilities and Authority

- Strong authority and strict responsibilities to promote portfolio transformation.
- Build an optimized structure and system for each business.

Willful Cultural Change

- Culture reform and strengthen group.



Automotive related Business: Super efficiency, the creation of cash

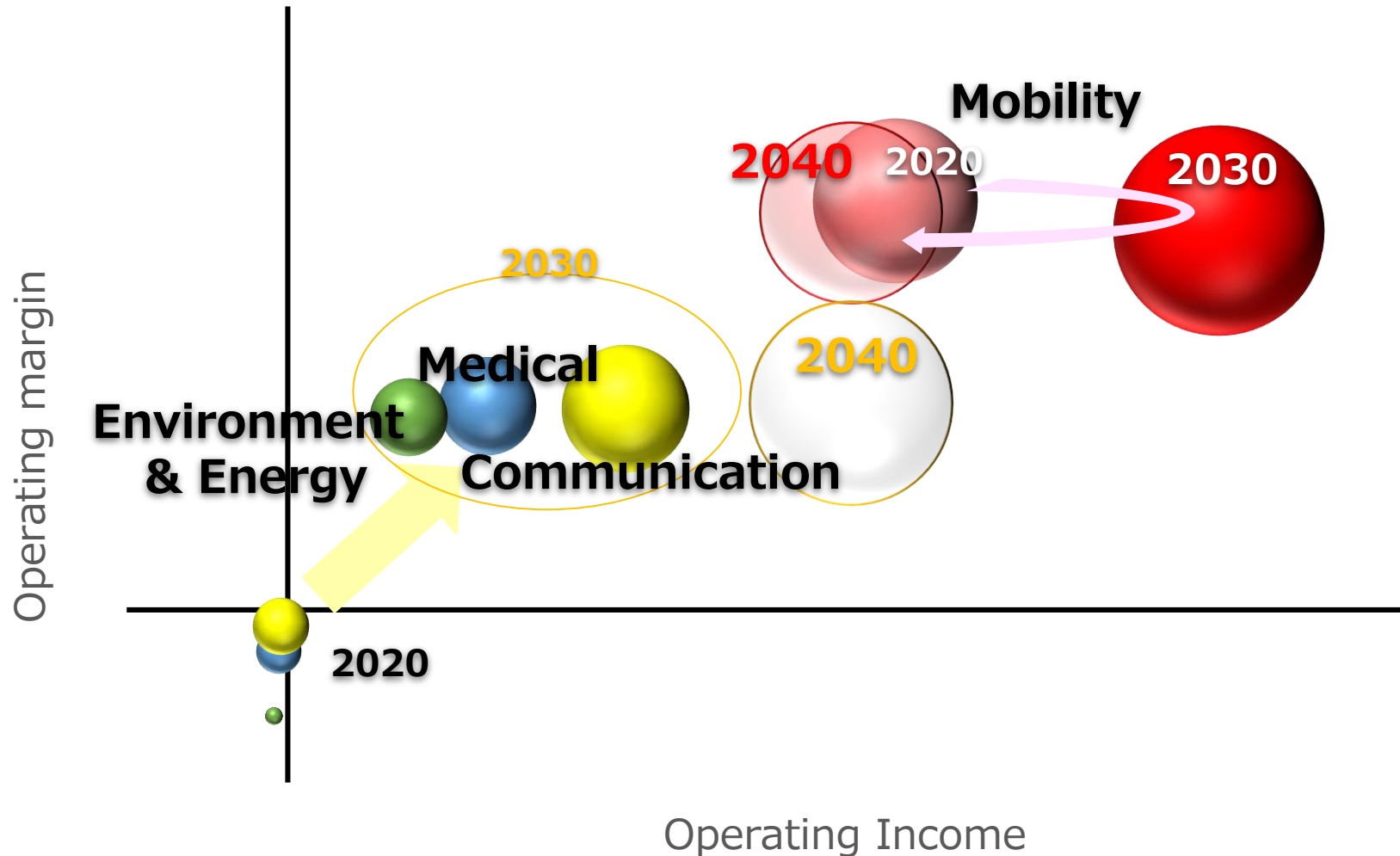
Growth Business: Drastic development beyond market growth

New Business: Selecting and choosing theme and commercializing cutting-edge themes

2030 Long-Term Management Plan: Sales and Portfolio

Grow each business into a “profit pillar”.

Bubble size : sales amounts



Management Innovation

Create a strong, small, and agile head office. Supporting to speed up management decisions, and business portfolio transformation.

As a tool to speed up, we have invested digital infrastructures.
Organically connecting, and producing the information necessary
for management decisions that were not seen before.



Global HR
data base



Cloud



Factory
Digitization



Connecting
to each base



Conference
System
Revamped



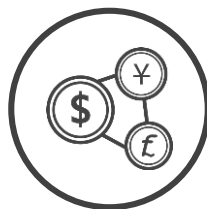
Inventory
data base



Logistic
System



Inventory
tracking



Accounting
System



Security
Strengthen



Clarification of Responsibilities and Authority

Active appointment of
external human resources

Purpose:

Recruiting people suitable for a field and position

Concrete measures:

Promotion of promotion of appointment to
key positions

Adapting Achievements,
Rewards & Evaluation
System to each business

Purpose:

Adapted compensation & evaluation system to each business
and secure excellent human resources.

Concrete measures:

Construction of the system that is suitable for each business

Change Division System to
Company System or
Holdings

Purpose:

Accelerating “Dokuritsu Jiei (take actions by oneself)”

Concrete measures:

Establishing organizational design, empowerment
according to business field

Company name change

Purpose:

“Break, to change” a statement of determination

Concrete measures:

Unification of Japanese and English Names
Rebuilding of a brand system, etc.

Willful Cultural Change

**Change the company, strengthen the group, and achieve
“Change beyond recognition”.**



**Change beyond
recognition**

■ Promotion of culture reform

- From the conservative culture to the progressive
- Pursuing of “IGNITE YOUR SPIRIT”
- Fostering common values and thinking optimal for all, not a partial.

■ Promotion of work style and life style reform

- Promoting work outside the company, including telecommuting
- Flexibility of working hours and multiple shifts
- Productivity improvement (30% improvement from FY2019)

■ Promoting Diversity

- Promoting Women or Foreign nationality or Career recruitment and increase Number of managers ratio:25% (headquarters)
- Active appointment of external human resources

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2030 Long-Term Management Plan (summary)

 ***Beyond ceramics,
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**Business Portfolio
Transformation**

















**Clarification of
Responsibilities and
Authority**

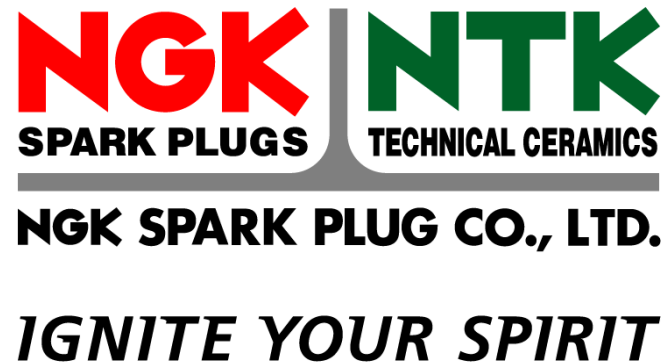
**Invest in
New Business**

“Change with Will”

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SDGs: Major Initiatives, Goals and Outputs

	Item	Contribution to SDGs	Major Initiatives	Goals and Outputs
Environment	Responding to Climate Change	  	Reduction of CO ₂ emissions	CO ₂ Emissions: 30% Reduction [compared to that of 2018](2030year)
	Providing Environmentally Friendly Products	  	Dissemination and expansion of environmentally friendly products	Sales ratio of precious metal plugs: not less than 50% Sales ratio of wide range oxygen sensor + NOx Sensor : not less than 50%
Society	Development of Technology, Products, and Businesses for Contributing to the Resolution of Social Issues	  	Development of fuel cells	CO ₂ Dissemination of high-efficiency distributed power supplies with a view to use free hydrogen
			Development of unleaded piezoelectric materials	Alternative promotion from lead piezoelectric materials
			Development of sensing IoT business	Improve business efficiency through automation, optimization, and generalization
	Global Human Resource Management	  	Promotion of employment of women, foreign nationals, and careers	Ratio of women, foreign nationals, and career recruits in managerial positions: 25%
			Examination of a New Personnel System	Improved results of employee satisfaction surveys
Governance	Corporate Governance	 	Increasing the ratio of female and foreign nationals to directors	Ratio of female directors and foreign nationals: not less than 30%
			Increasing the ratio of external directors	Ratio of external directors: not less than 1/3
	Risk Management	 	Business impact analysis (creation of risk maps) and responses	Disclosure of critical risk extraction process and countermeasures
	Compliance		Survey of employees' awareness and continuous education	Implementation of compliance questionnaires and disclosure of results
	Information Security	  	Incident response organization (CSIRT) maintenance and strengthening of the system	Strengthening activities by professional committees



FORWARD-LOOKING STATEMENTS

This presentation contains forward-looking statements concerning the future plans, strategies, beliefs and performance of NGK Spark Plug Co., Ltd. and its subsidiaries. These forward-looking statements are not historical facts. They are expectations, estimates, forecasts and projections based on information currently available to the Company and are subject to a number of risks, uncertainties and assumptions. As such, actual results may differ materially from those projected.