

Management Policy

Eric Johnson CEO

March 26, 2021

Contents

- Summary
- Target profit for FY’24 (Fiscal year March 2025)
- Strategies and Measures to achieve the targets
- Resilient infrastructure

Scope of the presentation

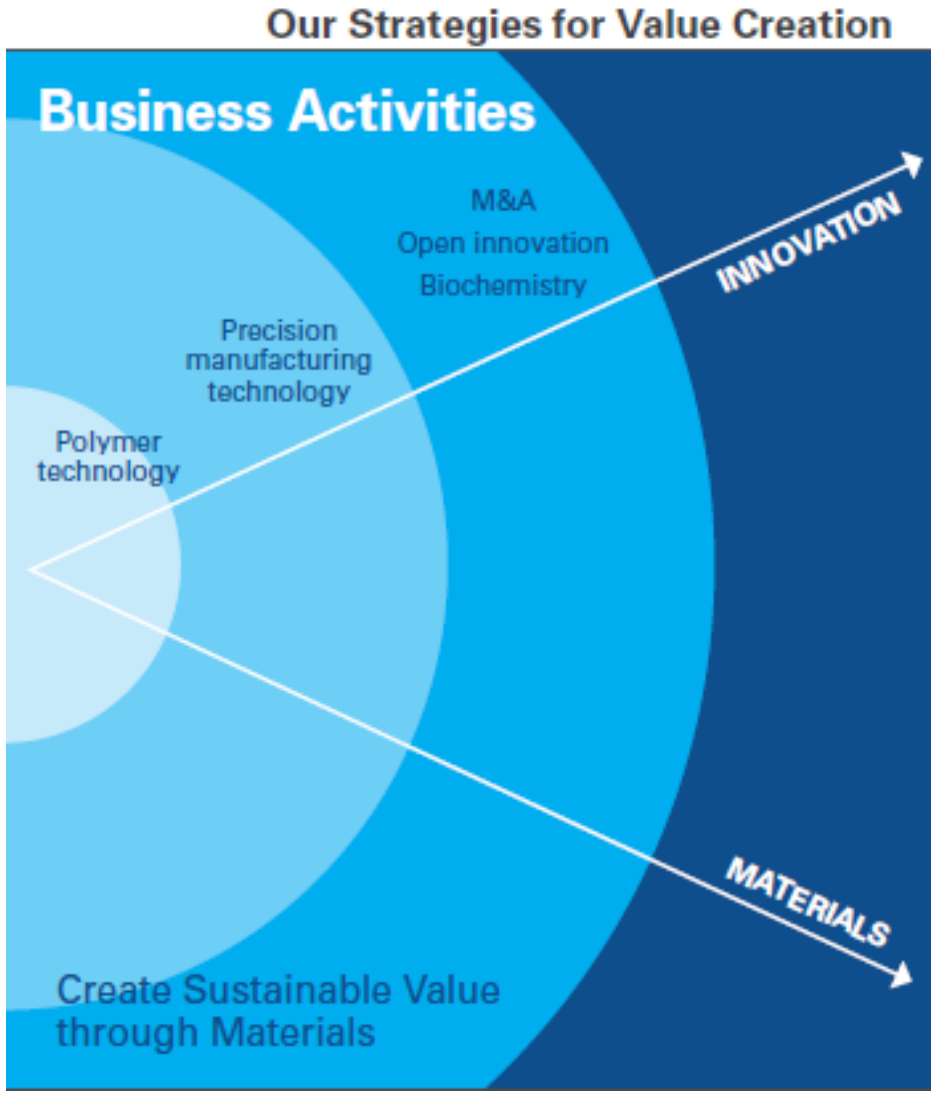
●Focus of this Management Policy

- Mid term company-wide management vision and goal.
- Business strategies and numerical targets for Digital Solutions and Life Sciences business, as the core of our business portfolio.
- Petrochemical businesses (Elastomers and Plastics) are not included in the scope of the presentation. This is because we are currently considering business structural reforms and are not at the stage of presenting the medium- to long-term as of today.

●Structural reform of Petrochemical businesses

- Considering the future business environment, it is necessary to carry out structural reform without limitations.
- We will focus structural reforms on Elastomers initially given relative stability, ROIC, and cash flow generation of Plastics.
- Measures for profitability improvement include the ERP (early retirement incentive program) announced on March 8, cost reduction including rationalization of raw material and distribution costs, spread improvement by optimization of selling prices. In addition, we have started considering the reorganization of business and product mix.
- These are not short-term measures but measures necessary to maintain medium- to long-term business sustainability.
- We will announce any significant progress as soon as it occurs.

Corporate Mission *Materials Innovation*



- Continue to deliver unparalleled technology to solve social issue and to enrich society.

  Technological development and the development of JSR are synonymous. Because JSR pursued more advanced technology, it branched out into new fields, and the Group grew in scale from the past.

- Maximizing the value of our investments and market position by delivering exceptional quality and customer support.

- Aiming to achieve sustainable growth and become truly global company by developing organizational resilience and sustainability.

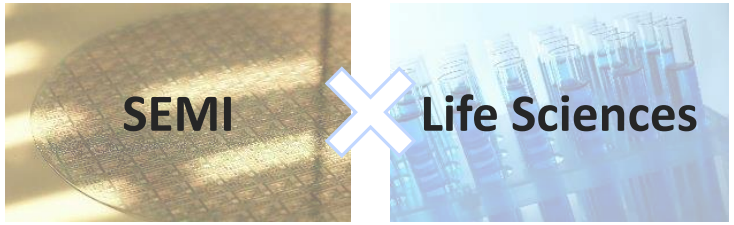
  In a fast-changing world full of unprecedented uncertainties, to develop organizational resilience and sustainability is more important than ever in carrying forward our business activities and increasing corporate value.

Summary of management policy

Vision	• Create value for all stakeholders through **sustainable** growth • Strengthen the **resilient** business structure by responding to changes in the environment

Business Portfolio

Digital Solutions (especially **SEMI**) and **Life Sciences** as the center of our business portfolio



Business Target

ROE

more than **10**%

Core OP

Exceed Prior Peak

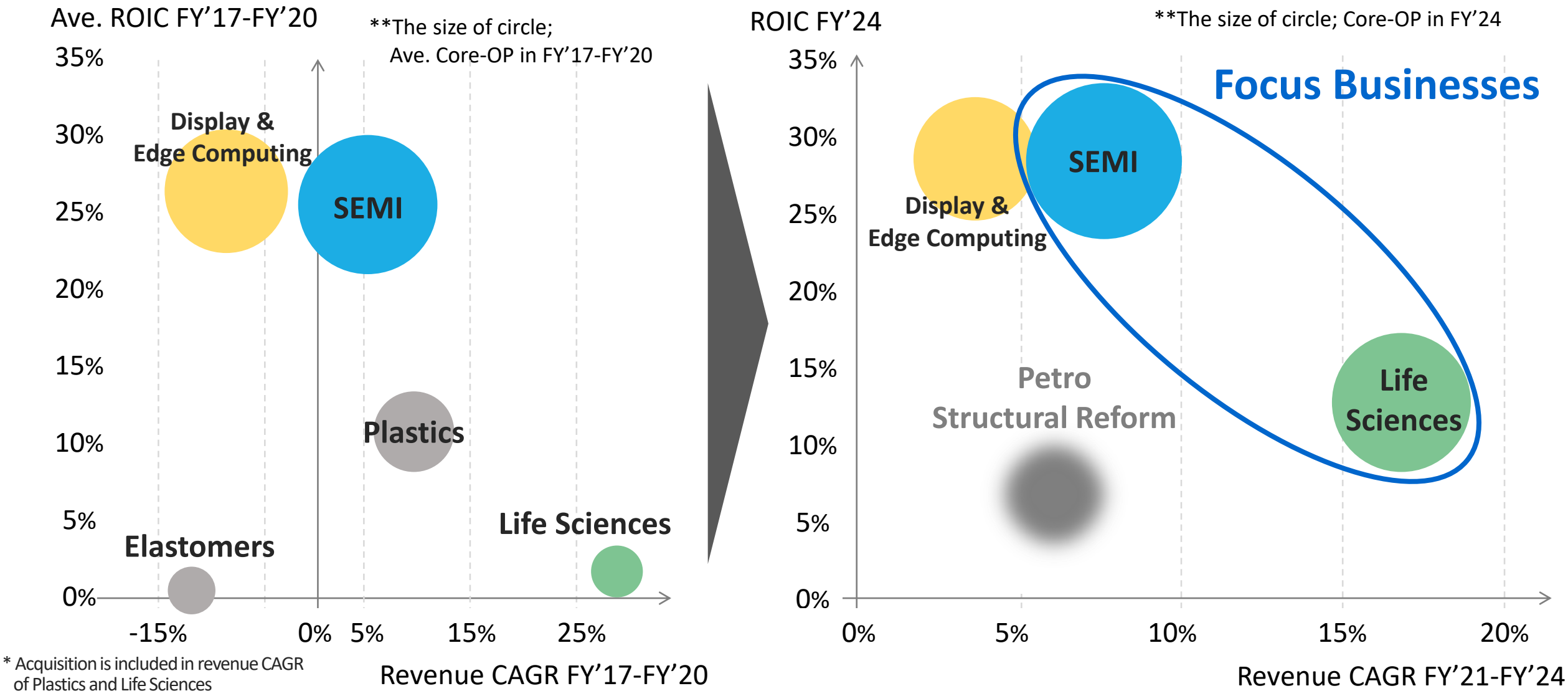
more than 600 Oku-yen
Digital Solutions &Life Sciences

Structure

Resilient infrastructure

Innovation
Digitalization
ESG commitment
Employee engagement

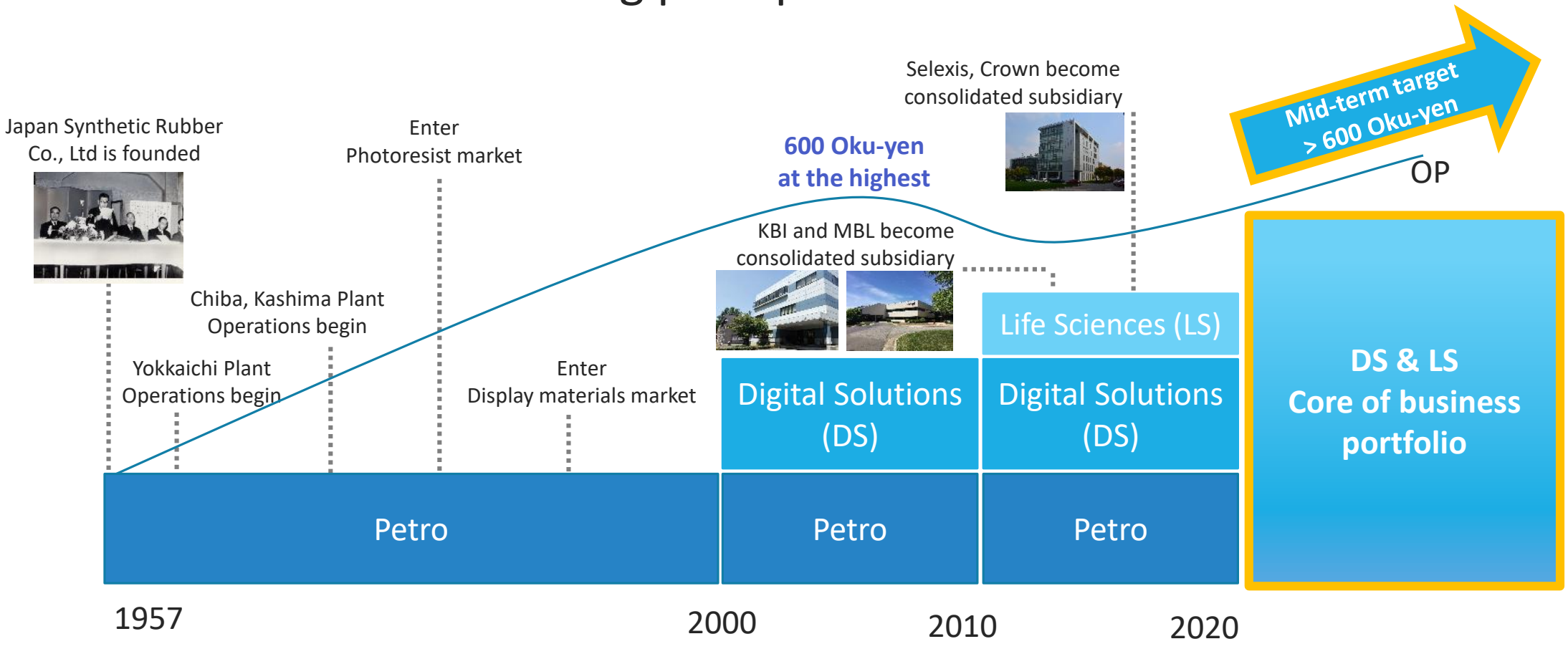
Business portfolio



* Acquisition is included in revenue CAGR of Plastics and Life Sciences

Business transformation

Focus on DS and LS to drive sustainable growth and new record high OP, exceeding prior peak set in FY2007



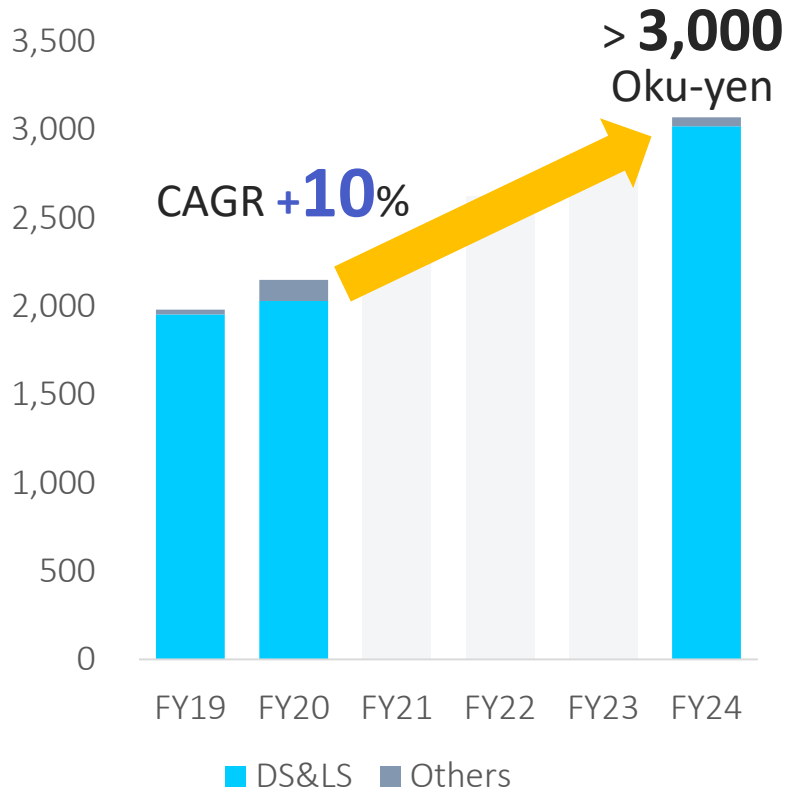
Target profit for FY’24

Target：revenue and profit

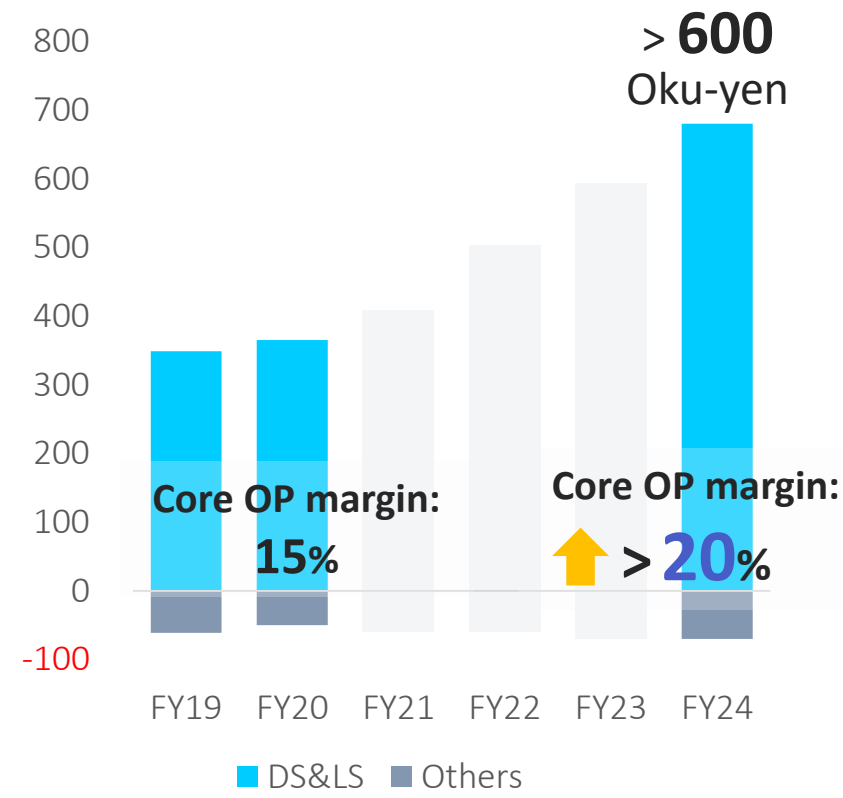
DS&LS: Revenue > 3,000 Oku-yen, New Record High Core OP

New core business portfolio to exceed prior peak profit

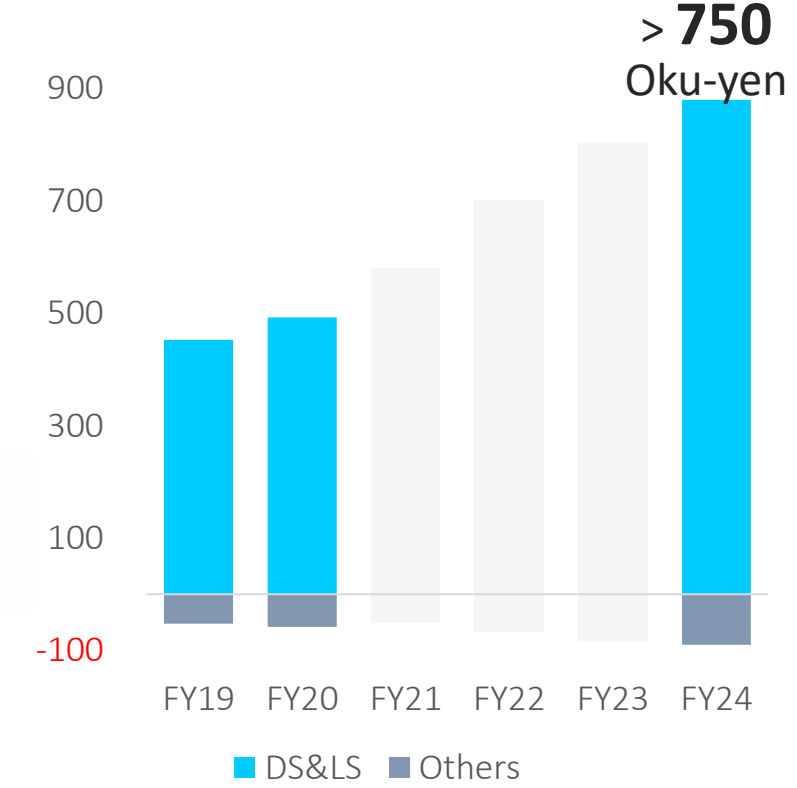
Revenue (Oku-yen)



Core OP (Oku-yen)



EBITDA (Oku-yen)

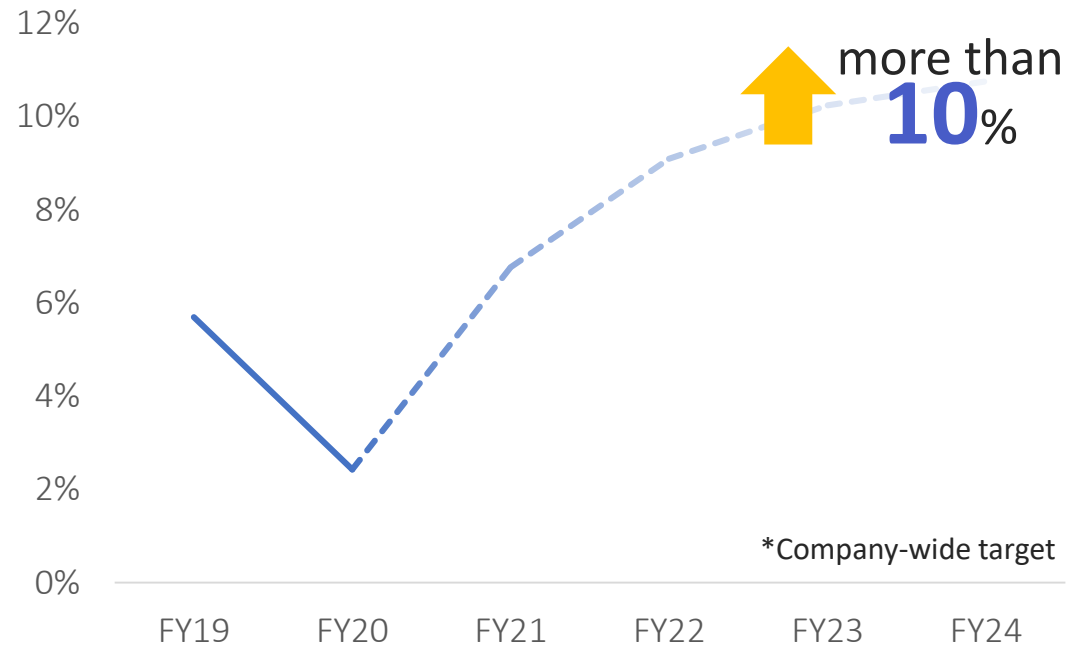


*CAGR: FY'20 projection vs FY'24 plan **Others：Next generation etc.

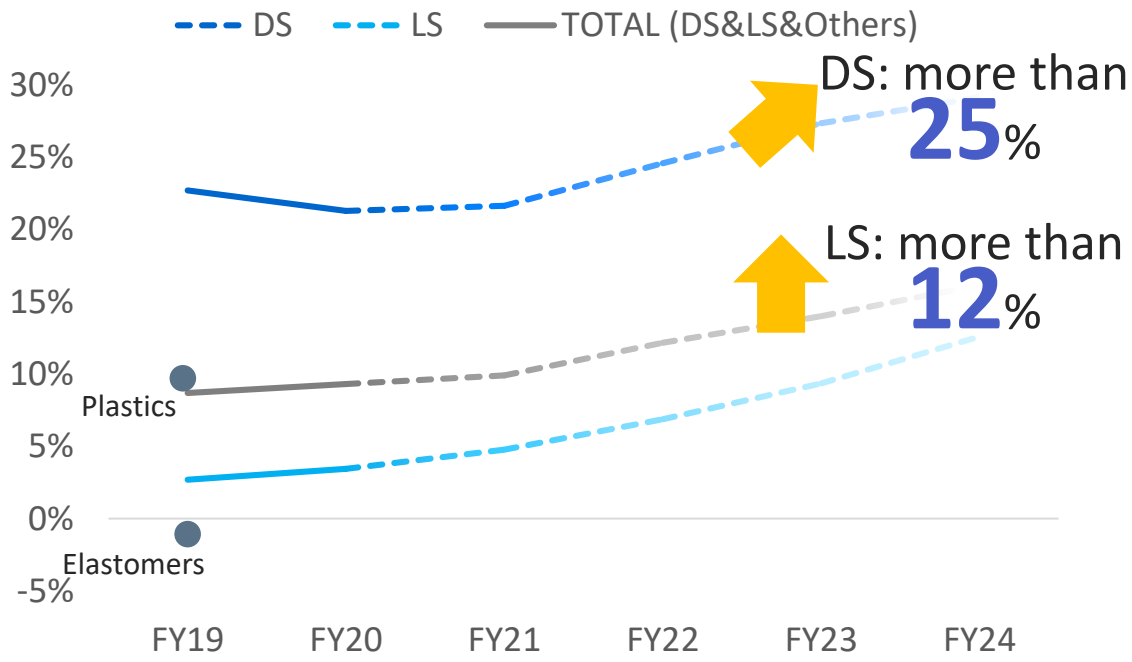
Target：Capital return

ROE: More than 10%
Maximize ROIC for each business segment

ROE



ROIC



*LS: Investment capital includes goodwill

Capital allocation

Sources	Operating CF Structural reform Leverage		Uses	CAPEX, M&A Shareholder return

		FY'17-FY'20 Pro.	FY'21-FY'24 Plan	
Sources	Operating CF	1,900 Oku-yen	2,000 Oku-yen	DS and LS
	Debt	1,000 Oku-yen	xxxx Oku-yen	Leverage considering D/E balance
	Others	-	+α Oku-yen	CF from Petro's structural reforms
Uses	Growth: CAPEX	1,660 Oku-yen *ELA 720 Oku-yen	1,000 Oku-yen	1st priority Focus on SEMI and LS
	Growth: M&A	600 Oku-yen	zzzz Oku-yen	
	Shareholder: Share Buyback Dividend	650 Oku-yen total return ratio: 68%	700 Oku-yen	50% shareholder return as a guideline

Strategies and measures to achieve the targets

-DIGITAL SOLUTIONS

-LIFE SCIENCES

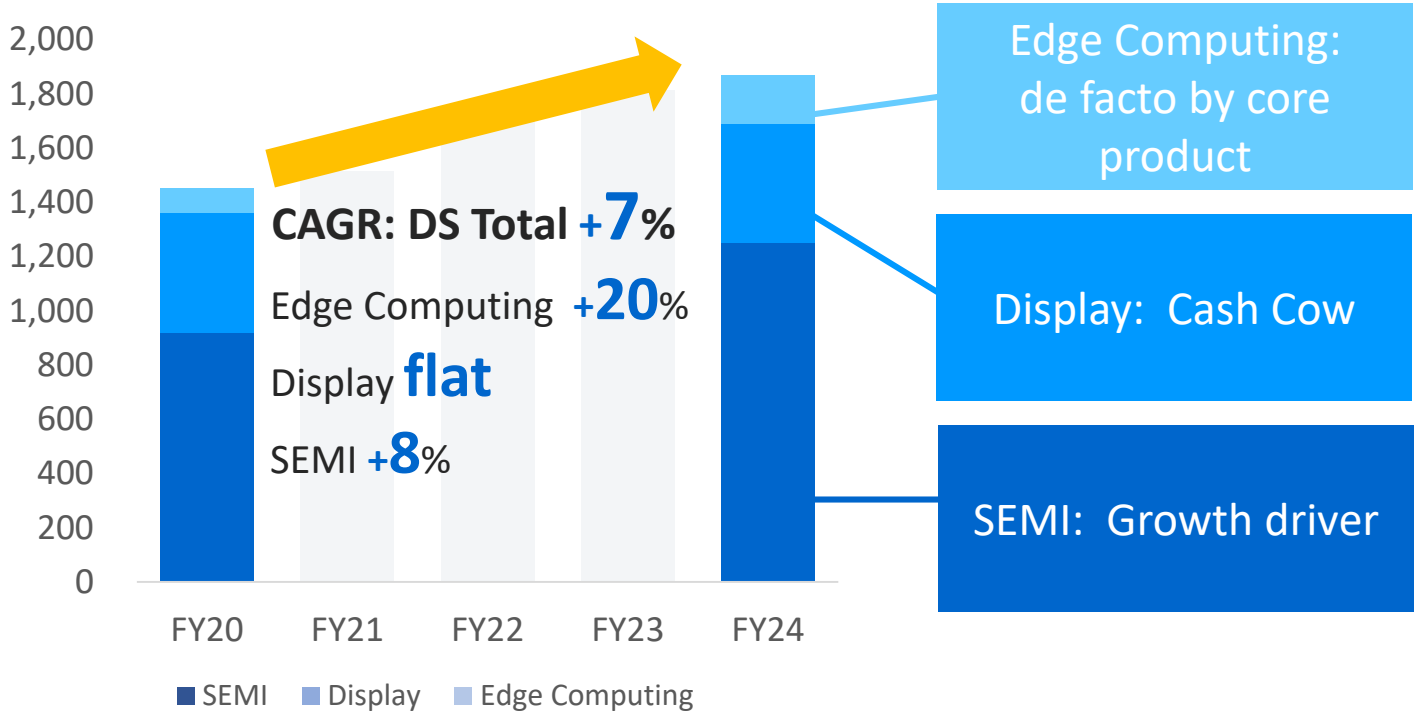
Digital Solutions × Life Sciences

	Digital Solutions **Revenue Double the market growth** **Core OP margin: maintain strong margin** (≥23%)	Life Sciences **Revenue CAGR +20%, Core OP margin:20%**
Market	**Size** Total photoresist market $2Bn (Semiconductor $430Bn) **Trend** ・Steady growth ・Technological innovation advances	**Size** Total CDMO market $6Bn (Biologics $350Bn) **Trend** ・High growth ・Precision medicine fields expand
Social Value	・Realize a smart society (AI,IOT) ・Achieve miniaturization and high performance with less power	・Enhance efficiency of pharmaceutical development ・Realize personalized medicine tailored to each patient
Strength and Strategy	High market share in advanced materials (e.g. ArF 30%, Alignment film 50%) Concentration of resources on **SEMI** **Scale and fields expansion** including M&A	Capability to support very complex biological drugs Business expansion through customer pipelines Creation of **unique added-value**

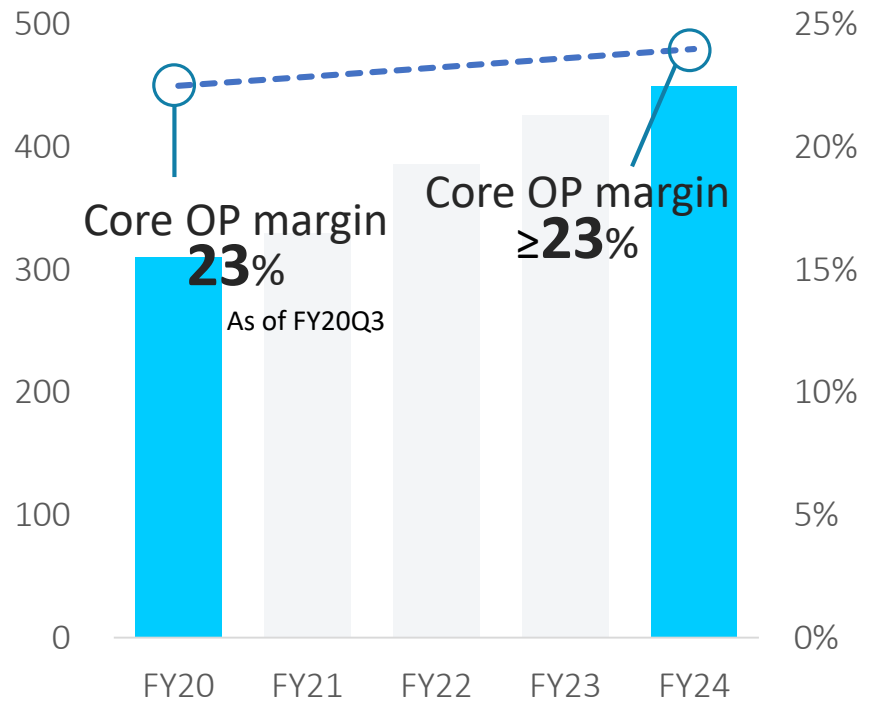
Digital Solutions

- Evolve the One-on-One business model by focusing resources on SEMI.
  Pursue the scale of SEMI by expanding customer, products and regional portfolio.
- In the Display and Edge Computing, we will ensure profit growth through selection and concentration, while also launching new items and preparing for next generation businesses.

Revenue (Oku-yen)



Core OP (Oku-yen)



Digital Solutions：SEMI market



Demand gets stronger

Applications

PC, Smartphone, Server, Car etc.

Digitalization

Electronics and Information tech. industry > $3,000 Bn

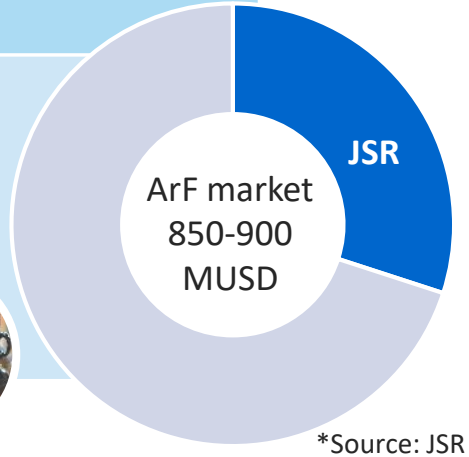
Other materials Electronic component

Semiconductor ・・・・・ IDM Foundry Fabless

Other materials Silicon wafer Masks

SEMI Materials Photoresist, CMP, Cleans etc.

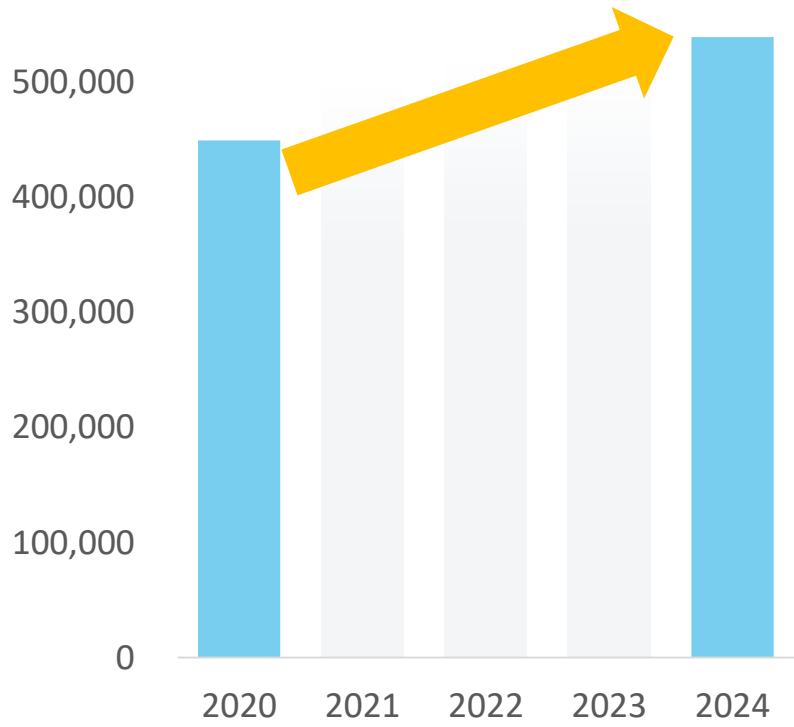




*Source: JSR estimated

Opportunity gets stronger

Semiconductor Market (MUSD)



Device shrinkage

Complexity of process

Social value as an essential industry

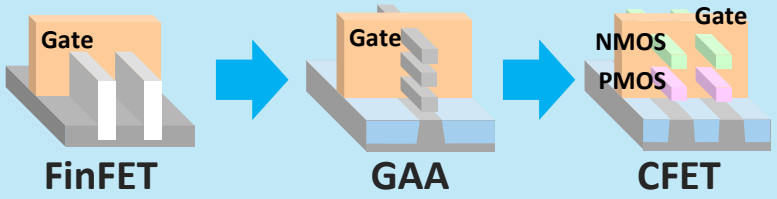
*Source: OMDIA Semiconductor Silicon Demand Forecast Tool Q3'20

Digital Solutions：SEMI focus

More Moore : Enable Scaling with Transistor Technology

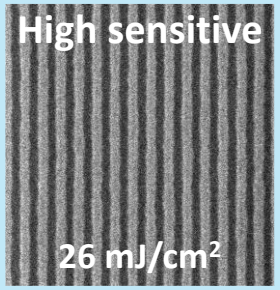
Beyond 3nm Device Architecture

~3nm → Beyond 2nm



Photoresist

- EUV Photoresist

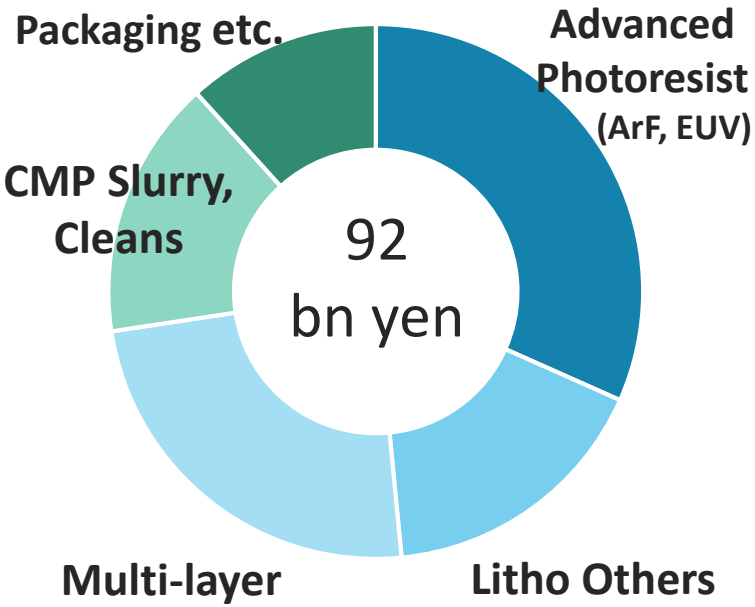


Spin-on Hard Mask

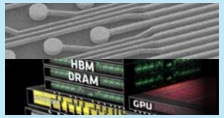
- Spin-on Organic
- Spin-on Inorganic



FY'20 Product Mix (Revenue)



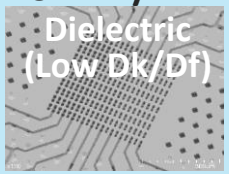
More than Moore : 3D Packaging



3D Integrated Circuit

Dielectric Material

- Low Df/Dk



Thick Photoresist

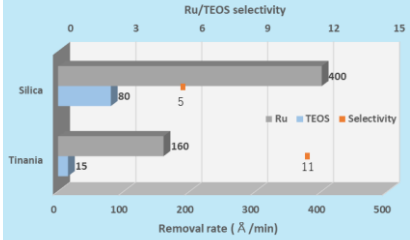
- Plating PR

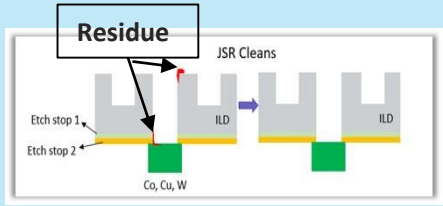


Metal Interconnects : CMP & Cleans

Cu → Non-Cu Metal Interconnects

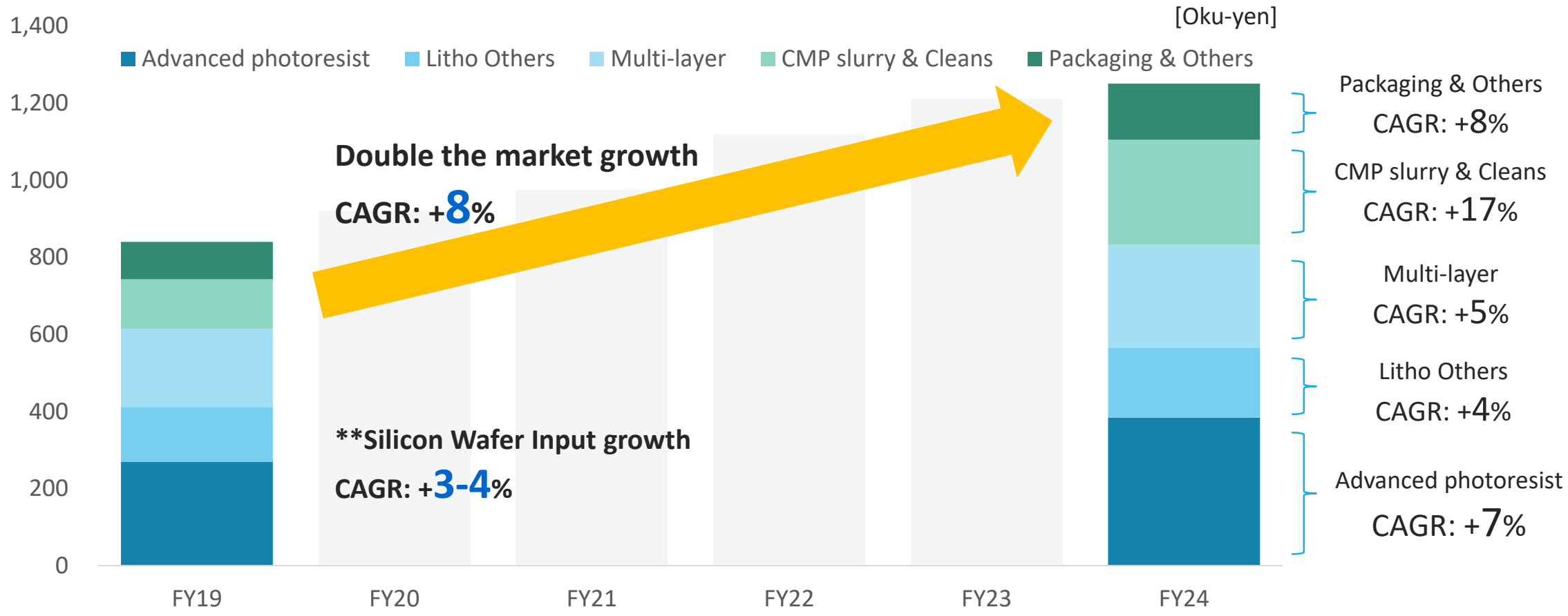
- CMP Slurry（Ru）
- Post Etch Cleans





Digital Solutions：SEMI projection

- SEMI market is expected to grow steadily while related technologies advance.
- Double the sales growth of the market by keeping a high market share in ArF and Multi-layer sales expansion and start of full-scale demand of EUV and expansion of Cleans, CMP slurry and Packaging materials.



Digital Solutions：SEMI global strategy

We aim to be a global SEMI materials company that continuously contribute to customer value
We invest in technology, quality and capacity



Europe

:: Belgium RD/Manufacturing/Sales
EUV Resist Manufacturing & Qualification Center

Asia

:: Japan RD/Manufacturing/Sales
:: Taiwan RD/Sales
:: China & Korea Sales



The United States

:: California RD/Manufacturing/Sales
:: Oregon New Plant for Cleans

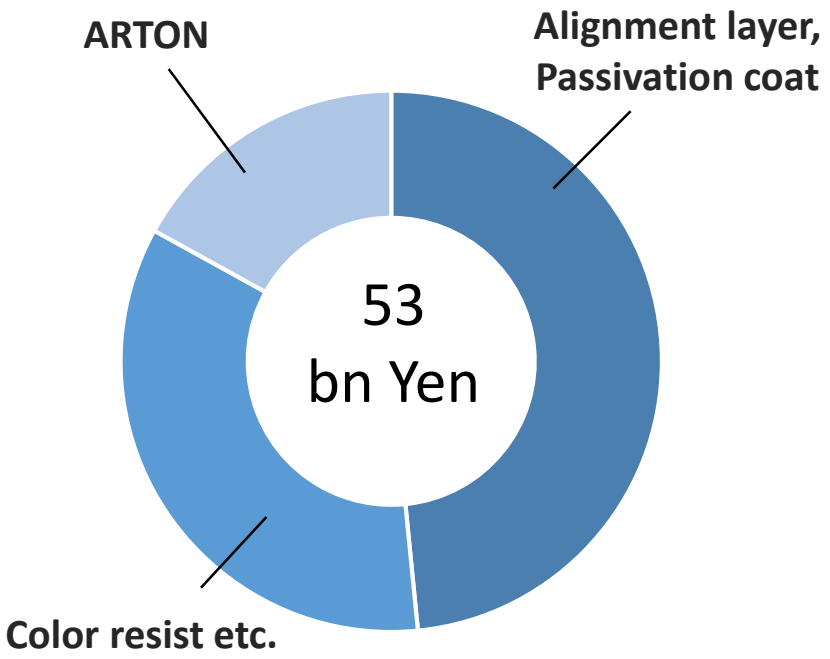


New Capacity
～FY'24
EUV, ArF etc.
(Plan)

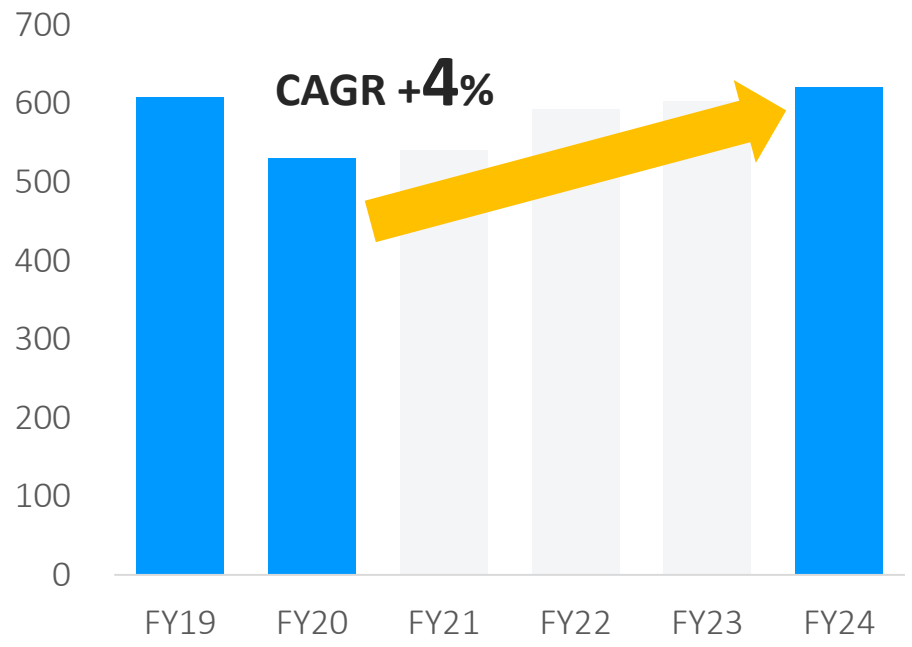
Digital Solutions：Display and Edge Computing

- Maximize the cash flow of the LCD business through business reorganization, selection and concentration.
- Capture the growth of next-generation display devices.
- Capture new demand in the fields of high-speed communication, transmission and sensing to expand the top line and create new businesses. Accelerate growth of ARTON NIR (Infrared cut filter) in high end smart phone cameras.

FY'20 Product Mix (Revenue)



Revenue (Oku-yen)



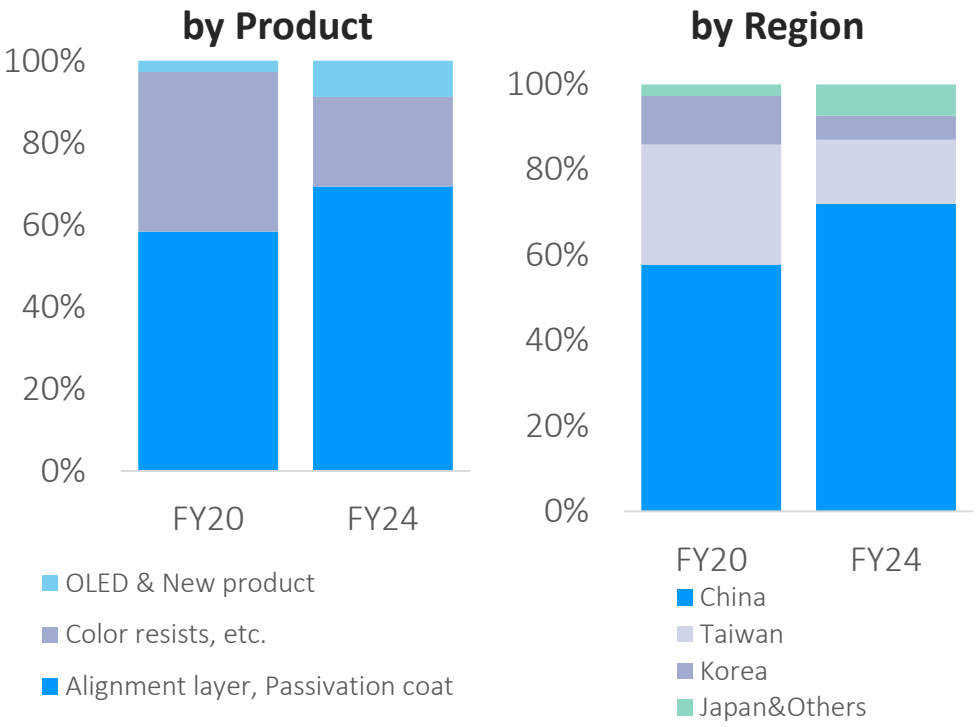
Display
- Maximize cash flow through selection and concentration

Edge Computing
- Accelerate sales growth of ARTON

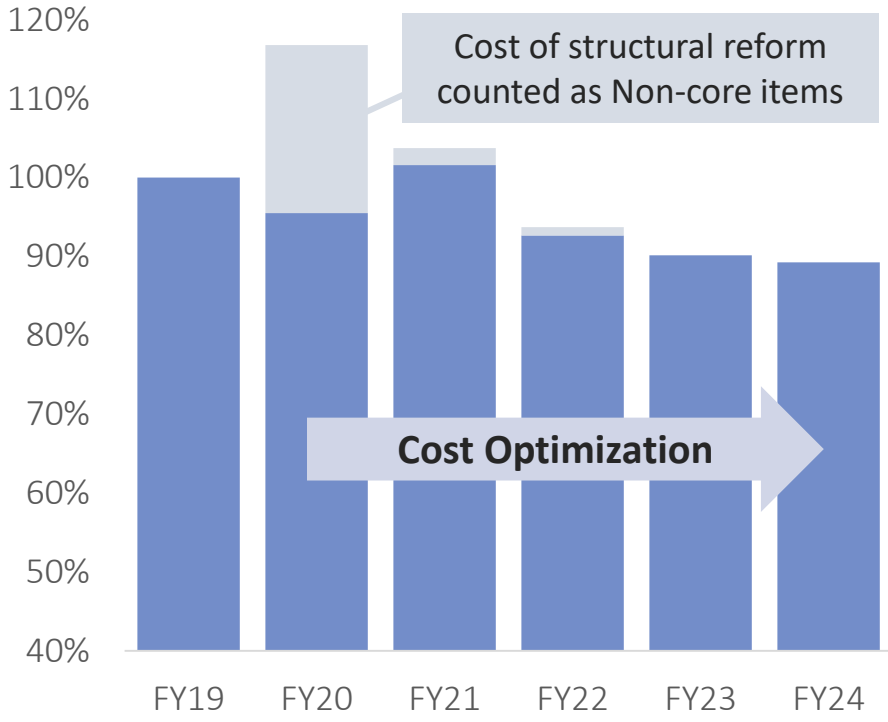
Digital Solutions：Display projection

- By executing biz. reorganization in response to changes in the market and competitive environment, we will focus on growing Chinese market and competitive products, and work on growth areas such as low-temperature package, OLED materials and IOT materials.
- Establish a business structure as cash cow with high ROIC in a sustainable manner.

Revenue composition



Fixed Cost (Oku-yen) *FY'19=100%



*transition of Direct fixed cost

Strengthen product and region concentration

Optimize cost structure

Cash cow
Aiming for gradual profit growth

Life Sciences：Market

Demand gets stronger

Opportunity gets stronger

Biopharmaceuticals and Diagnostics

Our Customers

Bio Pharma

Virtual Biotech

Academia

Our business

Materials

Purification media

Diagnostic kit

Diagnostic beads

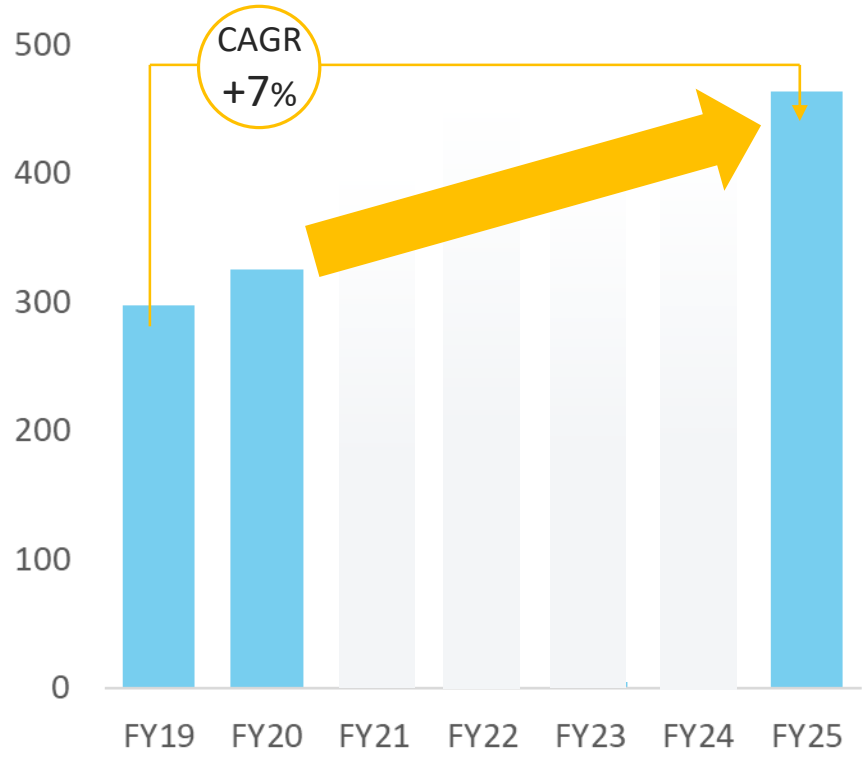


Contract services

CRO/CDO/CMO



Biopharmaceutical Market (Bn USD)



Aging society

Personalized medicine

Efficiency improvement of drug development

* JSR estimated

Life Sciences：JSR's Life Sciences business fields

Discovery
Search and creation of new substances
Screening of candidate substances

Preclinical
Confirm effectiveness, quality stability, and safety of candidate substances using cells and animals

Clinical trial
Confirm of drug safety and efficacy in humans
Phase1～Phase3

Approval Launch

CRO
CrownBio
CONNECTING SCIENCE TO PATIENTS

Contract Research
Advanced screening & analysis services
Increase drug discovery success
Efficient drug development, faster and lower cost

CDMO
Development and Contract Manufacturing of biopharmaceuticals
SELEXIS®
KBI BIOPHARMA

Purification media
Amsphere™ A3

IVD
MBL
Diagnostic and test



Faster & lower cost
Personalized medicine
Aging society

Support processes from drug discovery to manufacturing of biopharmaceuticals
Development of diagnostic agent technology to confirm effectiveness in advance

Life Sciences：Business model of JSR's CDMO

Our Manufacturing Capabilities

Service

SELEXIS®

KBI BIOPHARMA

Cell Line Development

Process, Analytical, & Formulation Development

Cell culture/ Microbial formulation

Materials

Amsphere™ A3

Down Stream Process Materials

- **Technology oriented service**

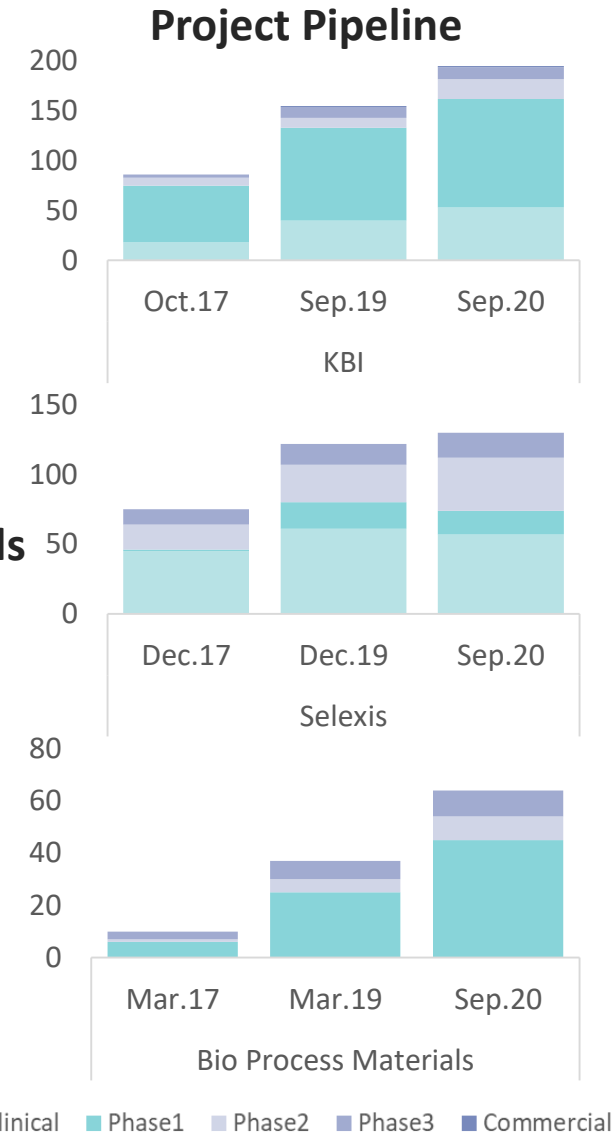
  Focus on "D" of CDMO
  Support difficult to develop molecules, especially, bispecific & Fc-fusion molecules on the mammalian side.

- **Middle to small size fields**

  Focus on personalized / precision medicine fields
  Flexible and agile analytical and manufacturing services.

- **Fine chemical leveraged**

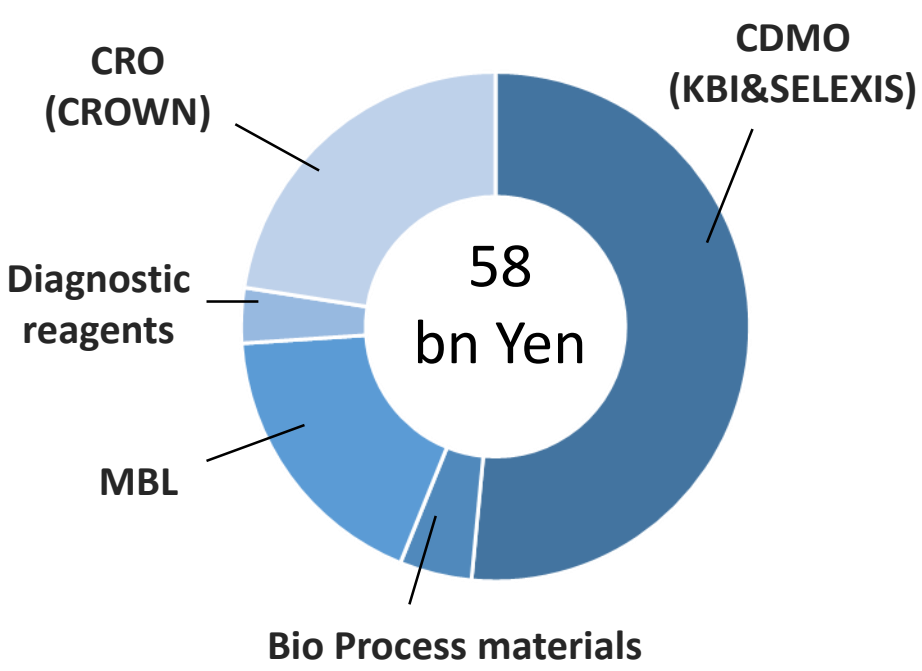
  High quality management from nano level experiences from SEMI
  Our own purification material (A3)
  Science from Material informatics



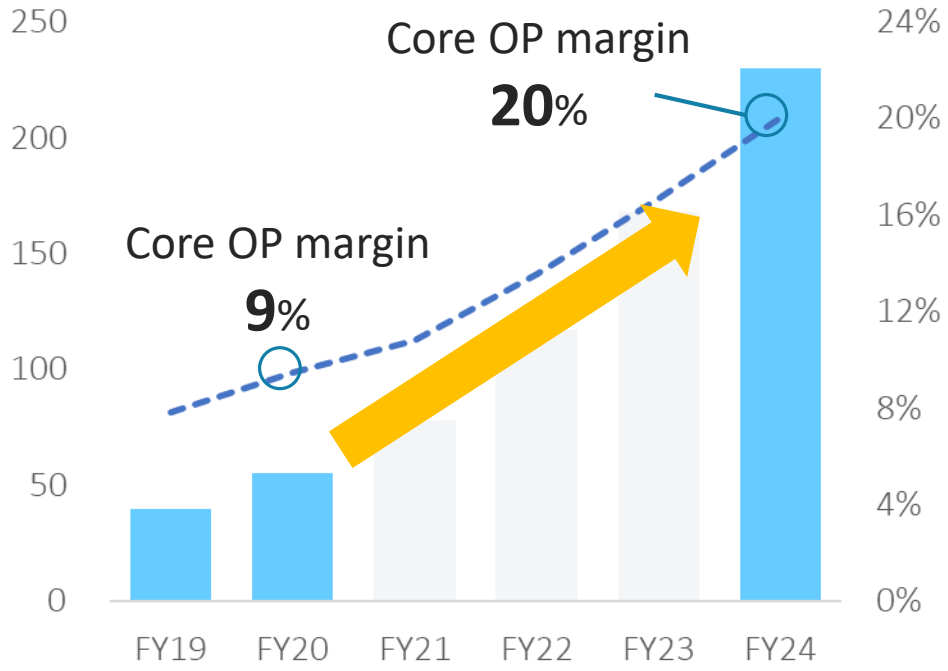
Life Sciences：Projection

- Grow revenue to more than 1,000 Oku-yen at a higher growth rate than the market and achieve more than 20% ROS.
- To achieve and further exceed the target, we will accelerate the creation of strategic link among Life Sciences groups along with executing the strategy for each group company.

FY20 Product Mix (Revenue)



Core OP (Oku-yen)



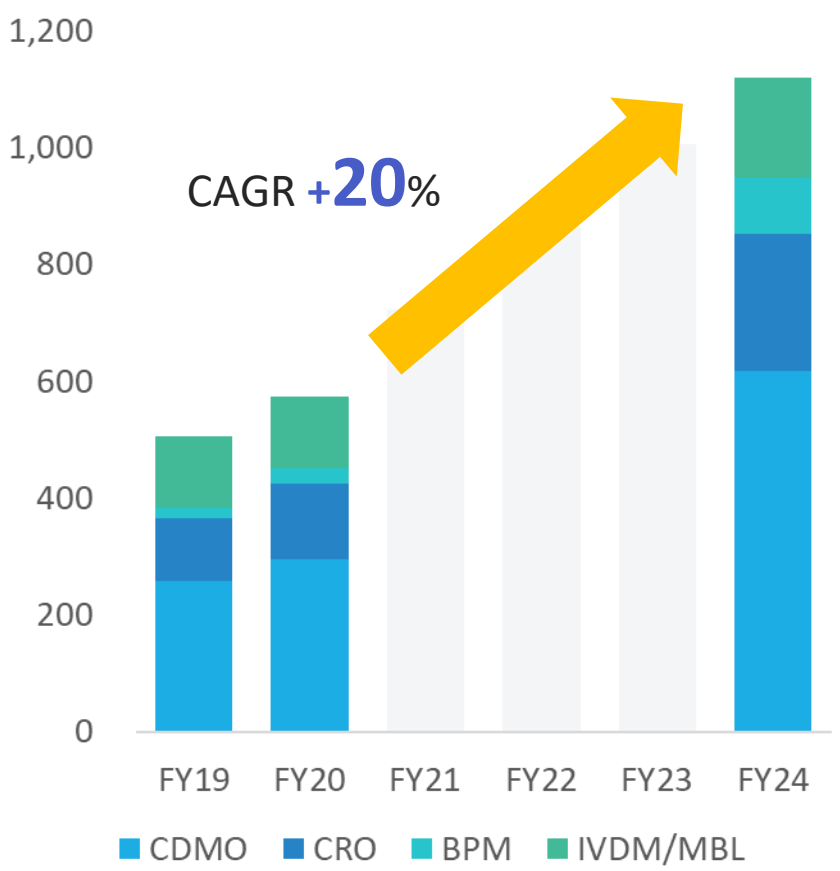
CDMO and CRO drive the high topline growth at 20% CAGR

Achieve more than 1,000 Oku-yen sales and 20% OP margin

Aiming for after FY24, strengthen the strategic link among LS groups

Life Sciences：Growth scenario for each sub-segment

Revenue (Oku-yen)



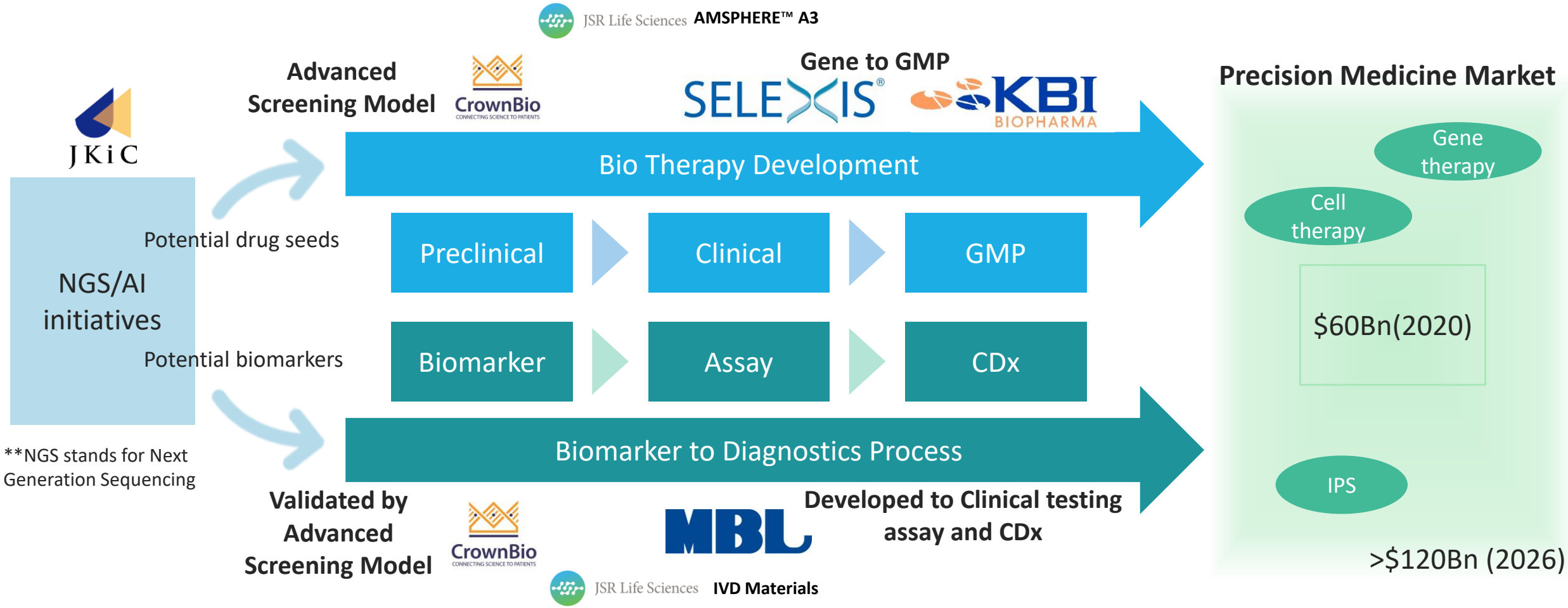
*BPM stands for Bioprocess Materials, i.e. AMSPHERE™ A3
*IVDM stands for In Vitro Diagnostic Materials

Growth Scenario

- **CDMO** Clinical and manufacturing expansions continuously drive higher growth toward FY24, including a new Geneva site and a NC site (multi-year contract with a customer)
- **CRO** In addition to the past high growth which came from oncology services with unique broad PDx model, Crown will continuously develop competitive screening models and expand sales of organoid models.
- **BPM** We expect high volume due to our pipeline for late clinical stages in addition to the commercial opportunities that are lining up for the coming years.
- **IVDM/IVD (MBL)** Accelerate shift to China and enhance CDx success.

Life Sciences：Vision

- Unique Positioning： Support “Bio Therapy development“ , “ Biomarker to Dx” and “End to End”.
- Strategic link among JLS group and next generation R&D activities will realize continuous growth beyond FY‘24 .



Resilient infrastructure

- 5 FOUNDATIONS
- INNOVATIVE CULTURE
- DIGITALIZATION
- ESG TARGET
- EMPLOYEES' ENGAGEMENT

Value Creation through 5 Foundations

Mission — **Materials Innovation**

Vision — We will sustainably deliver innovation

Threaten our mission

Disruptive forces / opportunity

Overcome by vision

5 Foundations

Innovative culture
- Promote open innovation opportunities
- Engineers capability up

Digitalization
- Enhance our business' efficiency
- Architect a digital platform

Sustainability
- Enhance value for all stakeholders

Globalization
- To establish the global infrastructure

Operational Excellence
- Update target-setting process
- Reinforce progress review system

Feedback Loop
Improve corporate brand

Goals

Profit → **Improve customer value**

Improve social value → **Improve value to employees**

Financial Value ⇆ Non-financial Value

Innovative culture

Open Innovation

JKiC — Medical



JSR-KEIO University Medical and Chemical Innovation Center

JSR BiRD — Incubation

JSR Bioscience and informatics R&D center



- ✓ Biochemistry laboratory for intestinal bacteria
- ✓ Japan's largest gnotobiotic facility
- ✓ Omics Analysis Platform
- ✓ Open Innovation Lab

*plan to begin operation in July 2021,Kawasaki

Digitalization

Transform JSR into an industry leading, digitally-driven company through putting digital into our business. We use our data to enhance business efficiency, improve customer and employee experiences, and create value to stakeholders.

RD Technology and Digital Transformation



Revolutionize R&D methodology, thereby promoting the development of innovative materials and digital transformation. Significant reinforcement of JSR's main product groups is expected, along with promotion of continuous fulfillment of our pipeline to create new businesses.

Materials ·Informatics Promotion	Innovative Materials Development	CURIE * JSR・Utokyo Collaborative creation base	Omics Solution
Utilizing materials informatics and theoretical science to embody novel methods for material development.	Develop materials with advanced functions and characteristics in scope to create new businesses and promotion of continuous fulfillment of our new business pipeline.	Understanding the logics of JSR product development which has profound studies and experiences, targeting dramatic of performance to create differentiated product development.	Provide commercialization of microbiome related drugs, breakthrough therapy and new value in drug discovery support by comprehensive analysis of biological information.

*JSR-UTokyo Collaboration Hub, CURIE

JSR Business Contribution to SDGs

Corporate Activity

-Business activity : Advancement in each business impacts of outcome

- Contribution to quality of life and happiness
- Contribution to a healthy and long-living society
- Contribution to preservation of the global environment

JSR Business Field

- Digital Solutions
- Life Sciences
- Advanced Technology
- Elastomers/Plastics

Contribution to the customer's SDGs



Environment



:: CO2 emission :: Circular economy :: Sustainable, resource-efficient supply chain

Better Society



:: Safe work place :: Good work condition :: Innovation and digitalization

Intelligent Lifestyle



:: Expand green business :: Healthy life :: Mobility

Improving ESG Issues

Corporate Activity	-Management foundation : Advancement throughout the Group/ Social/Environment/ Governance		
	Environment	**Social**	**Governance**
Mid-term plan focusing theme (Materiality)	:: Environmental Impact reduction 	:: Diversity and Inclusion :: Work style innovation 	::Corporate Governance ::Compliance
Mid-term plan activity	Set KPI target and measures for (ex) :: Reduce CO2 emission :: Promote reuse/recycle :: Reduce waste	Set KPI target and measures for (ex) :: Employee engagement improvement :: Rebuild Corp HR system :: Re-define HQ functions/roles	::Risk Management
Key word	Green Factory	Lively Employees and Happy Work Place	

Improving ESG Issues

We, JSR Group, aim and challenge for the GHG emission net zero by 2050.

We, JSR group, build the resilient organization in order to correspond various conditions by utilizing the TCFD scenario analytics.

Improving Employee engagement

JSR Sustainability Vision: Employees

JSR embraces diversity and inclusion. We aim to enable all employees to reach their full potential.
We will evolve to ensure we meet the changing needs of our employees.
We will aim to strengthen competitiveness of our employees and organizations through maximizing employees' engagement.

JSR is changing to the Global company.

	2010	2020
Global Employees	5,212	9,050
Affiliated Companies	34	75
Business Regions	9	16

- ✓ Opportunity to listen to the all employee's voice and opinion.
- ✓ To identify issues and countermeasures among employees who have different back ground.

Maximize the Engagement and improve the corporate value by proceeding the actions.

Summary

Create value for all stakeholders through sustainable growth
Strengthen the resilient business structure by responding to changes in the environment

Digital Solutions × **Life Sciences**

Establish Core Business

- **ROE double digit**
- **Exceed Prior Peak**
- **Structural reforms**

Improve Capital Efficiency

- **-Innovation/Digitalization**
- **-ESG commitment**
- **-Employee engagement**

Resilient Infrastructure

Enhancement of Corporate Value

With chemistry, we can.

* The forecasts, future plans and strategies made in this document contain a variety of uncertain factors, since it has been prepared based on judgments from currently available information. Actual business results may differ from those projected, depending on factors such as the economic status of the market surrounding the company.