

# Kumamoto Semiconductor Industry Promotion Vision

## Background and challenges in developing vision

- ◆ Digitalization in the wake of the new coronavirus and expanding digital services drive demand for semiconductors
- ◆ Growing need for domestic manufacturing from an economic security perspective
- ◆ Growing movement to achieve the SDGs

**Further promotion of the semiconductor industry and other industries in Kumamoto Prefecture by TSMC's entry into the prefecture, and to realize the economic growth of the prefecture as a whole**

### ◆ Issues to be addressed for further growth of the semiconductor industry in the prefecture ◆

Concerns about competitiveness, infrastructure and others needed for stable production of the semiconductors

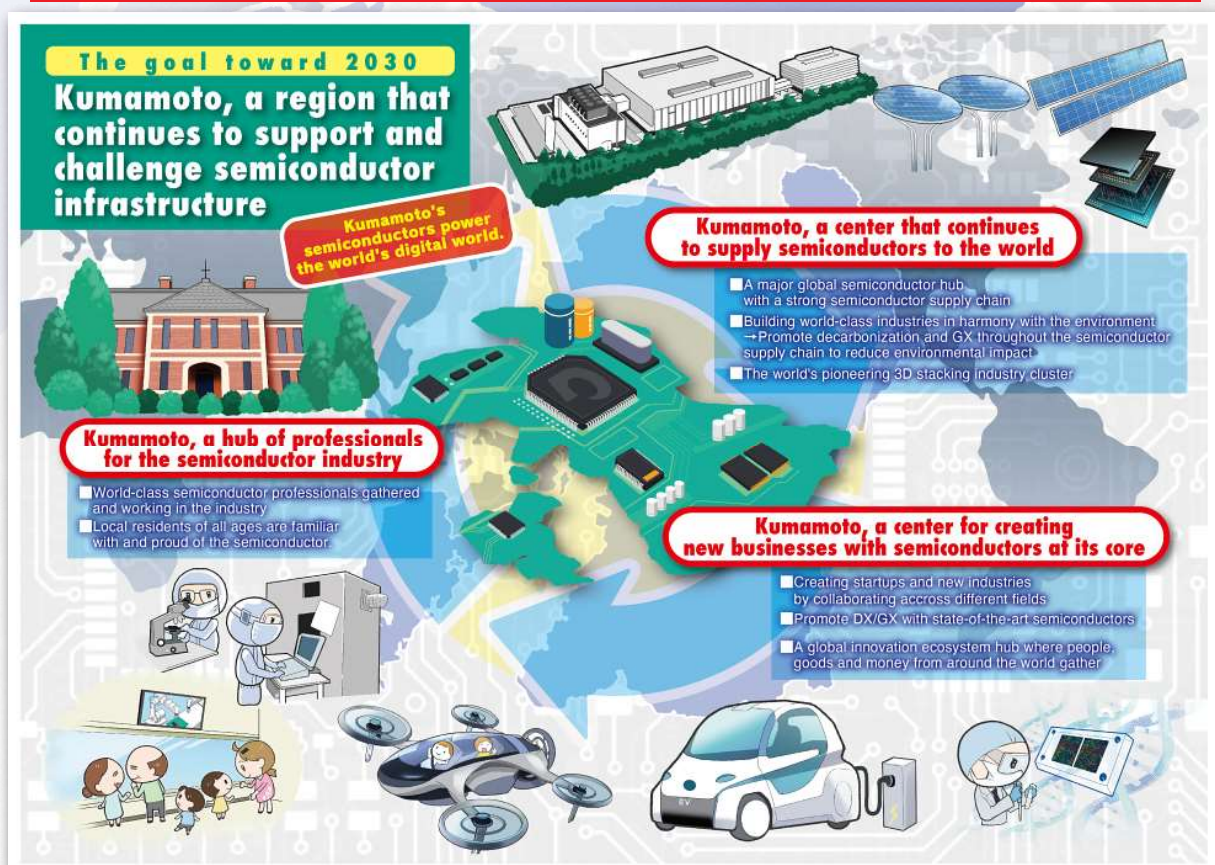
Current and future professionals and human resource shortage in the semiconductor industry

Lack of opportunities for collaboration among multiple stakeholders, including academia and industry

**The goal toward 2030**

**Kumamoto, a region that continues to support and challenge semiconductor infrastructure**

- ① Kumamoto, a center that continues to supply semiconductors to the world
- ② Kumamoto, a hub of professionals for the semiconductor industry
- ③ Kumamoto, a center for creating new businesses with semiconductors at its core



## Three strategies and initiatives

Strategy

1

### Semiconductor supply chain resilience

Kumamoto prefecture government aims to further enhance its competitiveness of its front-end process and semiconductor manufacturing equipment, and to build a robust supply chain that is seamlessly linked from "upstream" materials and design to "downstream" back-end processes.

In addition, Kumamoto prefecture government will promote research and development of innovative cutting-edge technologies to strengthen the international competitiveness of Japan's semiconductor supply chain in the mid to long term.

Strategy

2

### Ensuring a stable semiconductor professionals and human resource development

Kumamoto prefecture government works to develop and accumulate global human resources with broad knowledge of semiconductors and the digital domain, who can play an active role in various industrial fields, and to promote DX, including local SMEs.

Strategy

3

### Building a semiconductor innovation ecosystem

With cooperation and collaboration with diversified user companies, Kumamoto prefecture government will build an innovation ecosystem that creates a chain of new business creation by collaborating with various fields, such as the biotechnology and life science industries, based on the technologies and resources accumulated in semiconductor-related industries.

## What does this vision mean for our policies?

Based on "Basic Policies for the Creation of a New Kumamoto" formulated in March 2021, this vision is a plan for a specific industry sector in "Kumamoto Industrial Growth Vision", which is a guideline for the overall industrial policy of the prefecture and indicates the direction of future semiconductor-related industrial measures in Kumamoto.

## Period for the plan

The period is ten years from FY2023 to FY2032.

Necessary reviews will be conducted intermittently, even within the planning period, according to changes in the social environment and status of initiatives.

## Progress management and promotion structure

In order to effectively promote policies based on the three strategies in the "Kumamoto Semiconductor Industry Promotion Vision," Kumamoto prefecture government will work in close cooperation with industry, universities, educational and research institutions, support organizations, the financial community, and the central government. Kumamoto prefecture government will also evaluate the progress made in realizing our vision.

## Setting targets

Set targets to evaluate progress on the vision and priority initiatives and to clarify the direction of actions to be taken based on that evaluation.

Indicator	Target Level	At present
<b>Production value of semiconductor-related industries</b>	JPY 1,931.5 billion in 2032 (USD 262,162.5 billion)	JPY 829 billion in 2019 (USD 112,520.2 billion)
<b>Number of new semiconductor-related companies (cumulative)</b>	130 (FY2032)	13 *Average of the last 10 years
<b>Number of employees in semiconductor related industries</b>	25,490 (2032)	21,275 (2019)
<b>Number of graduates from universities, technical colleges, and high schools in the prefecture employed by semiconductor-related companies</b>	More than 255 *To be revised upward in the future based on each institution's progress	171 (FY 2021)
<b>Number of semiconductor-related startups created and moved (cumulative)</b>	10 startups (FY2032)	— (FY2021)
<b>Number of business meetings with overseas semiconductor companies at venues provided by the prefecture and related organizations (cumulative)</b>	2,500 (FY2032)	54 (FY2021)

USD 1 = JPY 135.73 (12:00 on March 6th 2023)