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#### Advanced plasma nano science and the regional requirement

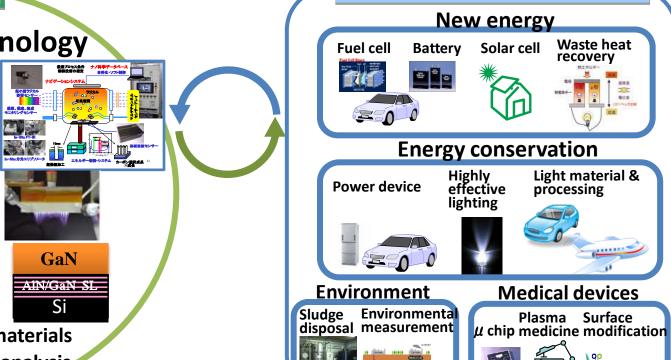
- Advanced plasma nano technology; One of the most important technologies for Tokai region to enhance the industrial competitiveness and to create new industries
- To develop this technology deeply, it is the most effective solution to form the system to accumulate the research resources.

Strategic acceleration to build a new global framework for advanced plasma nano science and technology

### **Core Technology**

# Plasma nano technology

- > Radical-controlled plasma nano technology
- > Atmospheric Pressure Plasma
- > Low Temperature Plasma
- > Solution Plasma
- **◆SAM** technology
- **◆** Epitaxial crystal growth
- **♦** Nanoparticles, Composite materials
- ◆ Nanoscale measurement & analysis



industrial application

Waste heat

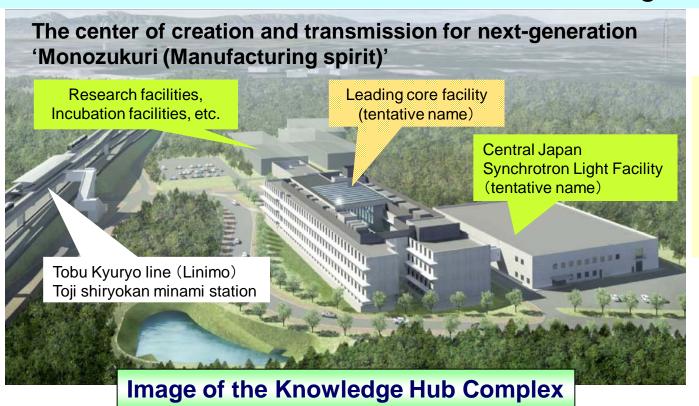
**Light material &** 

processing

**Medical devices** 

Plasma Surface

# Establishment of the "Knowledge Hub"



(Planned site)
Toyota city and Seto city,
Aichi Prefecture

(Area)

Total Area approx. 17 ha Flat land approx. 5.5 ha

- Leading core facility
  - In service by FY 2011
- Central Japan Synchrotron Light Facility (tentative name)
   In service by FY 2012

#### (Expectation)

- Incubation facilities
- research facilities (organizations)

- O Recognition in Japanese Government
- MEXT has recognized here as the base of regional cooperation of industry, academia, and other government agencies.
- JST subsidizes to construct a part of equipments for R&D in synchrotron radiation utilization facility.