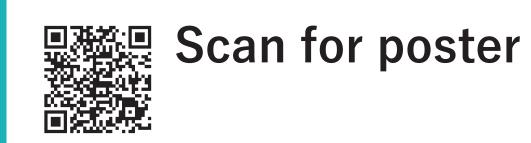
**Global Research and Development** Center for Business by Quantum- Al technology (G-QuAT) (AIST)





Comprehensive

Industrial Support

in Quantum Technology

**AIST** As one of Japan's largest research institutions, AIST tackles social issues and strengthens industrial competitiveness through creation and social implementation of research results. Under the Industrial Competitiveness Enhancement Act, it is the only national research institute that can utilize its facilities and equipment not only for research and development but also for business creation.

G-QuAT Established within AIST in July 2023, with the themes of "business development" and "global," it supports the industrialization of quantum technology in collaboration with domestic and international companies and research institutions. It is highly anticipated by domestic and global companies and startups.

# G-QUAT Strategic Activities

Linkage with Government

#### **Global Collaboration** Collaboration with global stakeholders

Social

Security

by leveraging Japan's strengths (a win-win relationship)

#### Platform/ Testbed

Quantum Classical Computational Resources for Use Case Creation Accelerating and supporting next-generation QC development



#### Intelligence Function

Collection and analysis of Information e.g. Government strategies, industry trends in the world, press releases, articles, intellectual property and investment status, etc.

#### Incubation/ Collaboration

Provide a place for various stakeholders to gather and create opportunities for collaboration



Ecosystem (Outcome)

Global

Startup

Creation

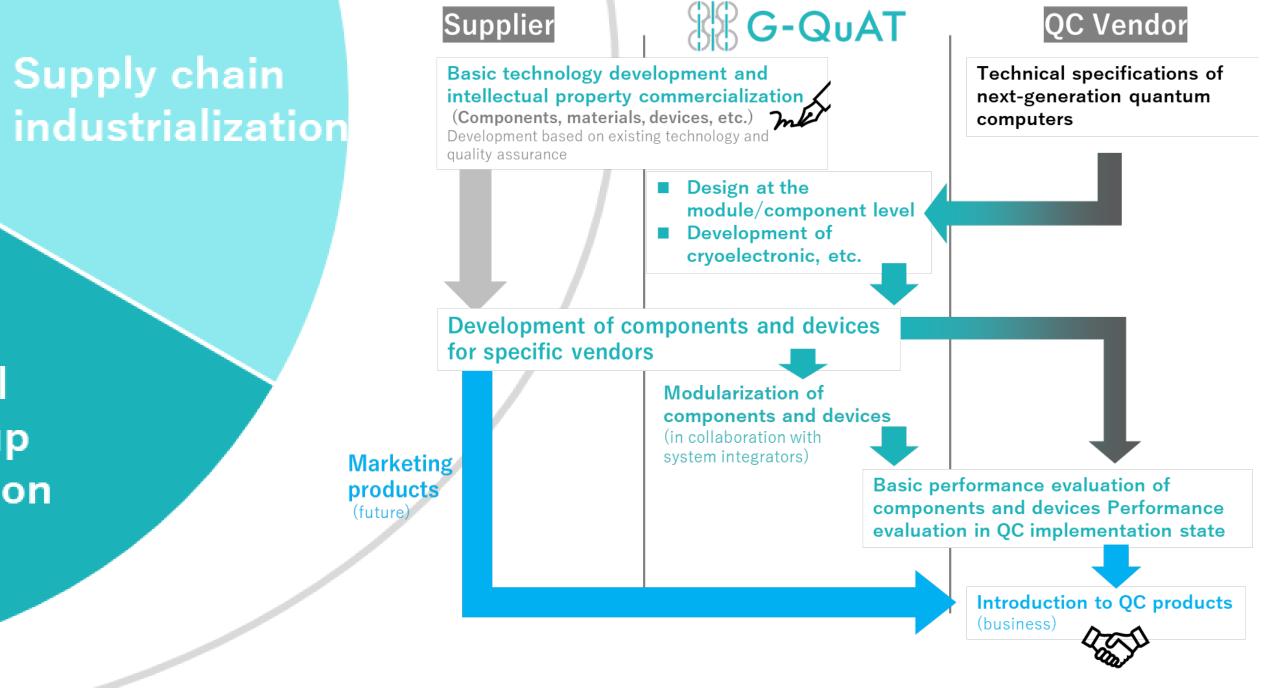
Global Market Creation

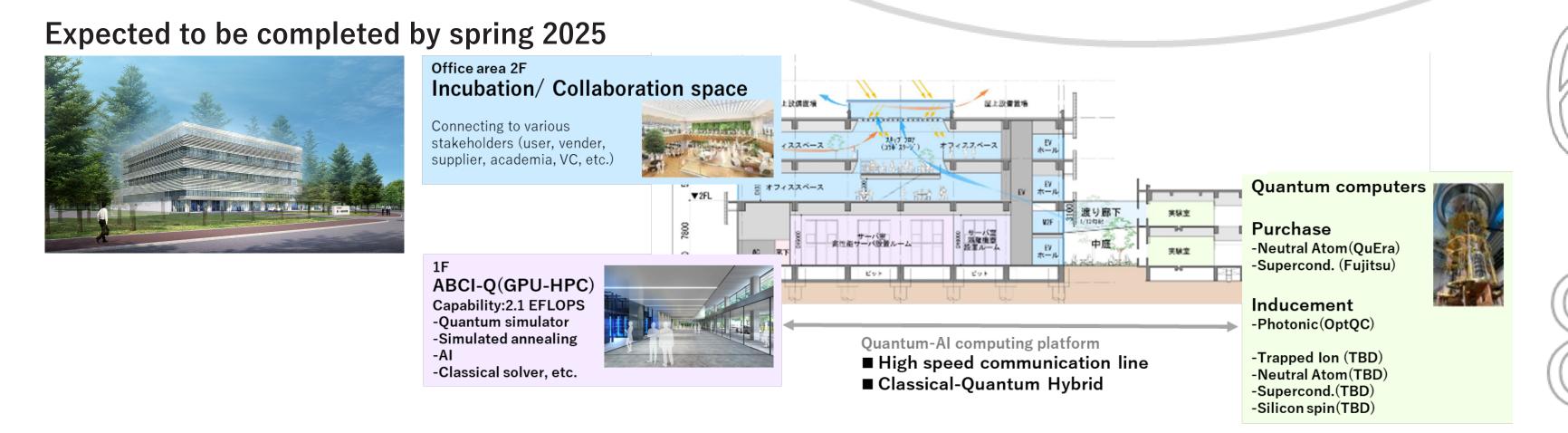
#### Strategy

Role as an implementation tool for government strategies\*, policies and program \*e.g.; Vision of Quantum Future Society Future Society to be Realized through Quantum Technology and Strategies for Its Realization

## Supply Chain Creation

Joint development of components, etc. for next- generation machines





### **IP**/ Standardization

Supporting standardization and securing intellectual property for quantum related technologies

## **Competitive Environment**

Provide infrastructure (e.g. facilities, space, investment environment to stakeholders to induce market competition)

## **G-QuAT Platforms**

Industrial Use-case Creation & Quantum-HPC

**Computing Platform** 

- ■ABCI-Q (NVIDIA H100 x 2020 units) & QCs
- Use of various computing resources

Feedback on hardware Problem Quantum-Al Hybrid Applications Benchmark Tool **Quantum Hardware System &** Industry-level Supply Chain Creation

Testing service and standardization

for next generation QC



Low Temperature Superconducting/RF/ **Electrical Parts** ghly Functional Cabl Materials/Parts **Manufacturers** Manufacturers Manufacturers

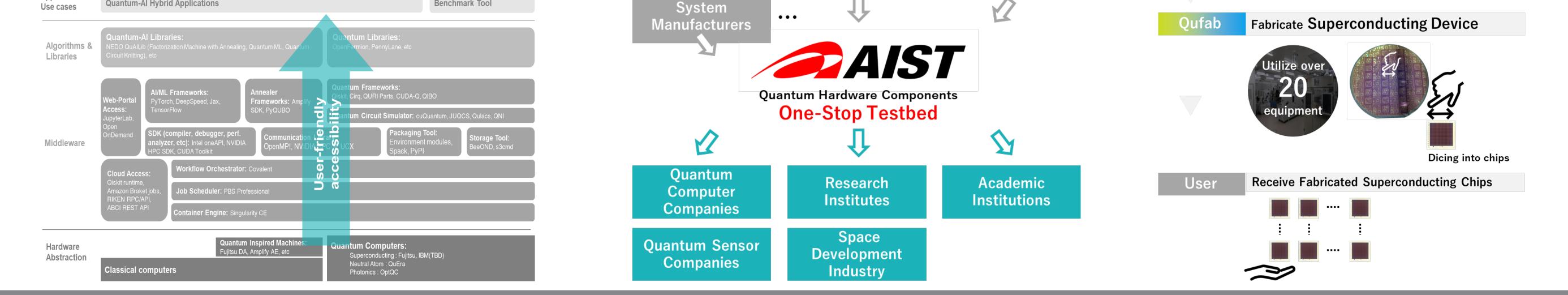
**Fabrication Technologies for** Large-Scale QC

Design and fabrication service





Submit Superconducting Circuit Design





Global Research and Development Center for Business by Quantum-AI Technology (G-QuAT), AIST

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Create the Future, Collaborate Together

PAIST



**Development Center for Business** by Quantum-AI Technology