

# Fusion Energy Innovation Strategy

---



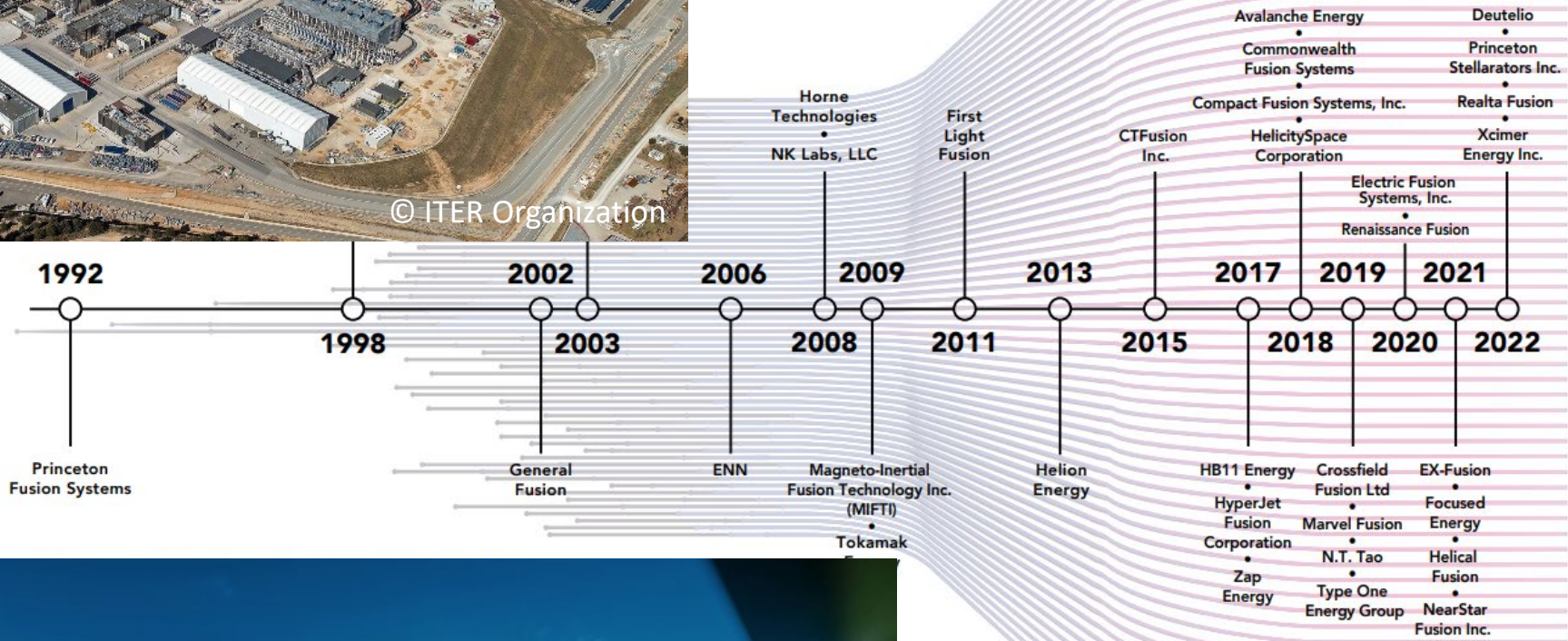
**Yuya TAKAHASHI**

**Deputy Director,  
Secretariat of Science, Technology and Innovation Policy  
Cabinet Office, JAPAN**





# WHY STRATEGY? -background-



The global fusion industry in 2022  
(Fusion Industry Association)

# WHAT STRATEGY? -Toward Commercialisation-

## UK

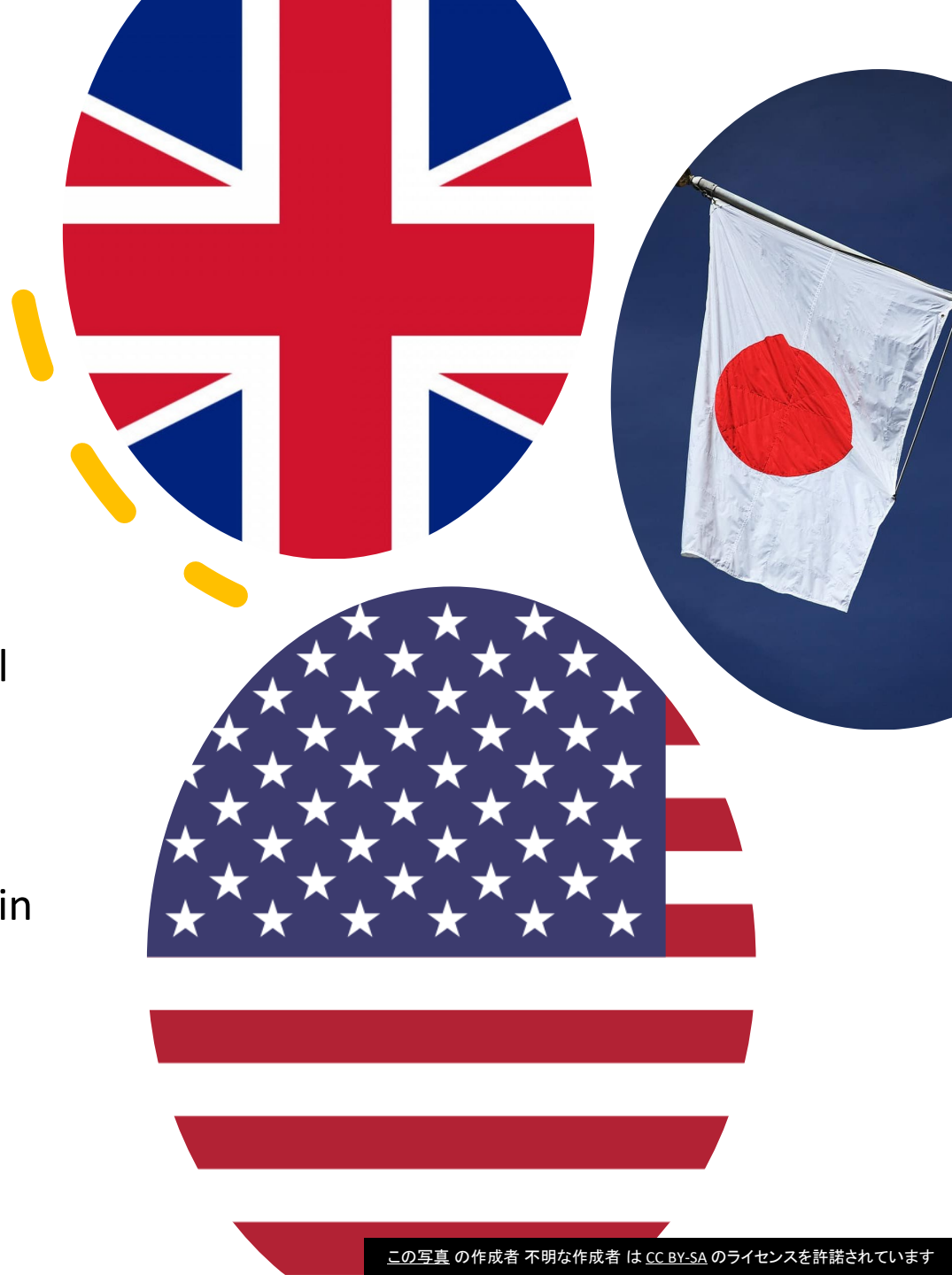
- Towards fusion energy: the UK fusion strategy (2021)

## U.S.

- A Bold Decadal Vision for Commercial Fusion Energy (2022)

## JAPAN

- Excellent technologies & talents obtain through ITER project etc.
- Missing a Compass to guide companies, academia and the government





# The National Strategy

## VISION

**Toward realization of fusion energy,  
-the world's next generation energy-  
"Commercialization of fusion energy"  
by Seizing the winning market edge with  
technological superiority**

## APPROACH

A multifaceted approach

- The current approach (ITER to JA-DEMO==> Commercial Use)
- New approach (commercialization)

## BASIC CONCEPTS

- Developing the Fusion Industry
- Developing Fusion Technology
- Framework for promoting the Strategy

## Decision Body of Strategy

The Integrated Innovation Strategy Promotion Council (Members: Chief Cabinet Secretary and all the other Ministers)

# Developing the Fusion Industry

## Visualization

- Early realization of JA-DEMO
- Clarification of targets with technology, market opportunity maps

## Connections

- Establishment of Fusion Industry Council of Japan

## Fostering

- Launch a new program to support Startups  
(About \$50M/5years. Open call for applications this summer.)
- Discussion on safety regulations through Agile Nations Fusion Energy WG
- Formulation of basic ideas on ensuring safety based on inherent safety of fusion energy

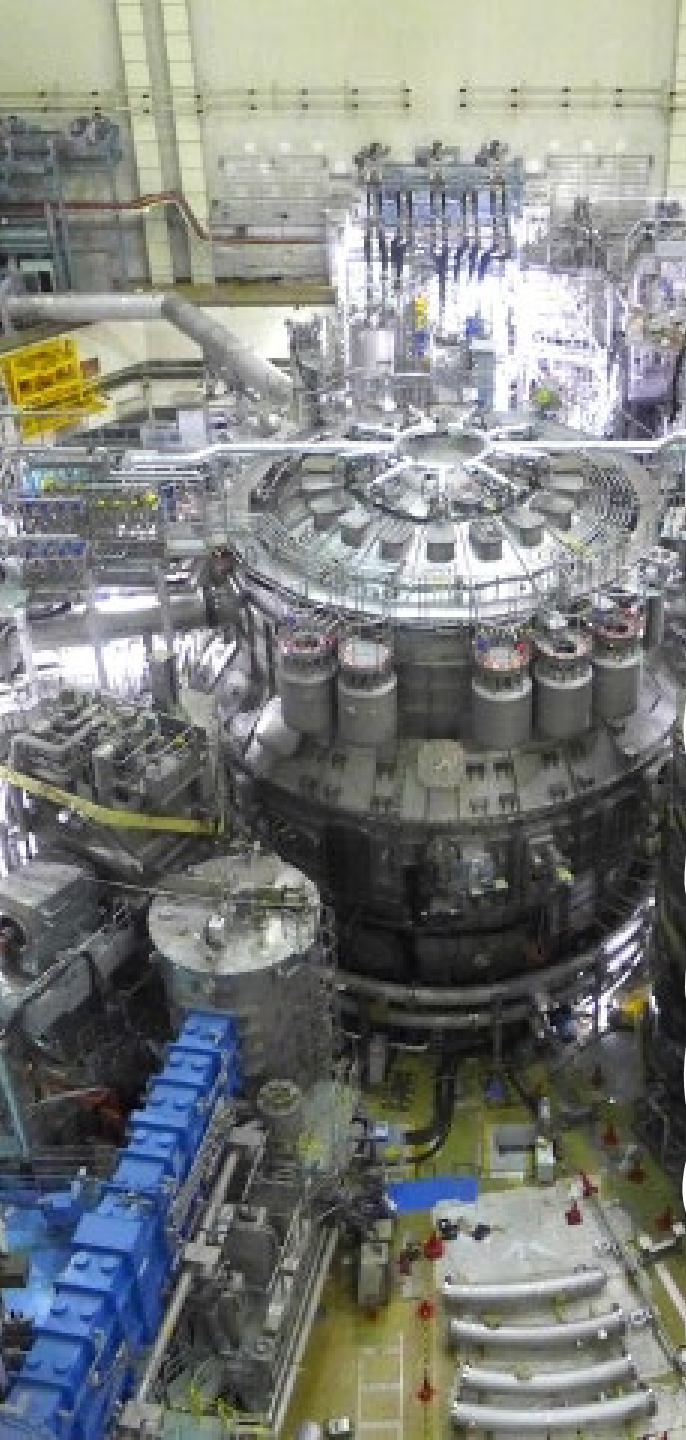
# Developing Fusion Technology

## Accelerating the Current Approach

- Launch a new program to accelerate R&D of JA-DEMO
- Acquisition of key technologies through ITER Project/BA Activity

## New Approach; “Diversity”

- Launch a new program to cover enabling technologies that will dramatically improve economy and performance. Promote International joint research and foster young researchers.
- Promotion of Action Plan for JA-DEMO development by incorporating new technologies



# Promoting the Strategy

## Research to Innovation

- Establish Fusion Technology Innovation Hub in QST



## Human Resource

- Create Fusion Energy Educational Programs

## Public Acceptance

- Conducting outreach activities to deepen understanding of citizens

# Thank you for listening

## Documents

- Fusion Energy Innovation Strategy

[https://www8.cao.go.jp/cstp/fusion/230426\\_strategy.pdf](https://www8.cao.go.jp/cstp/fusion/230426_strategy.pdf)

- Overview of Fusion Energy Innovation Strategy

[https://www8.cao.go.jp/cstp/fusion/230426\\_overview.pdf](https://www8.cao.go.jp/cstp/fusion/230426_overview.pdf)

## Contact Info.

+81-3-6734-4163

ytakahashi@mext.go.jp