USG NATIONAL STANDARDS STRATEGY FOR CRITICAL AND EMERGING TECHNOLOGY (CET)

May 23, 2023

DYNAMIC GLOBAL LANDSCAPE OF STANDARDS DEVELOPMENT

- The future of U.S. innovation, competition, and national security is at risk
- The U.S. must uphold the integrity of international standards in coordination with likeminded partners and allies
- A clear vision is needed to sustain engagement in global standards-setting

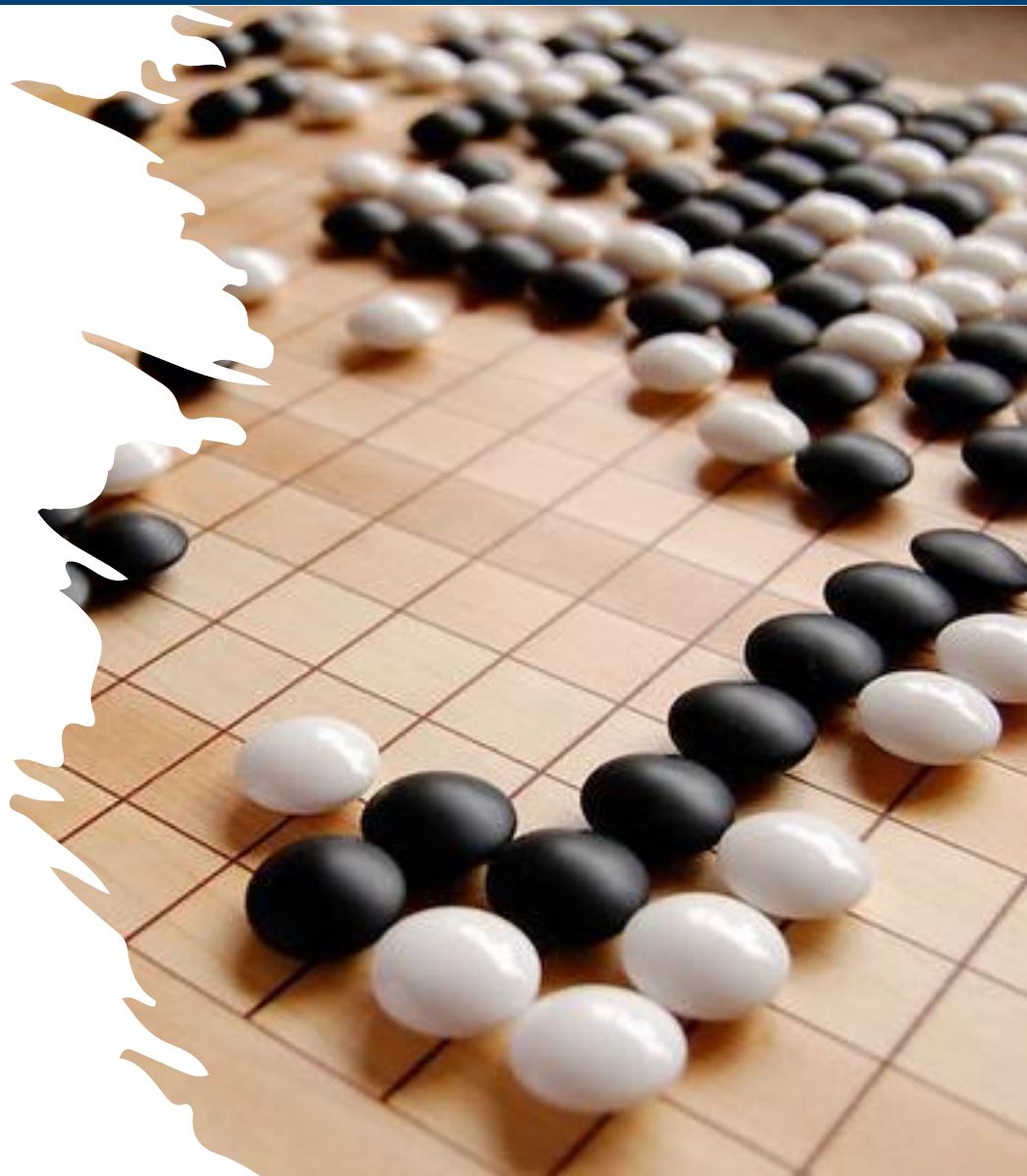
STANDARDS LEADERSHIP

NIST leads execution of the U.S. government's National Standards Strategy for Critical and Emerging Technology and the development of federal standards policy to ensure continued U.S. global economy competitiveness and technology leadership.

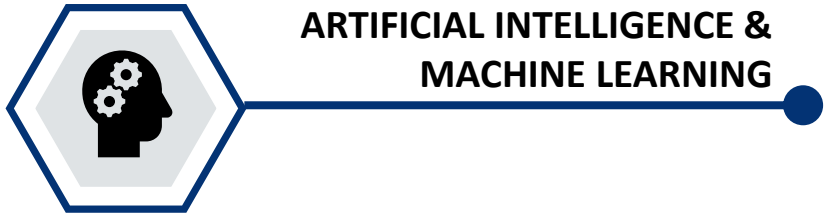
OUR PATH FORWARD

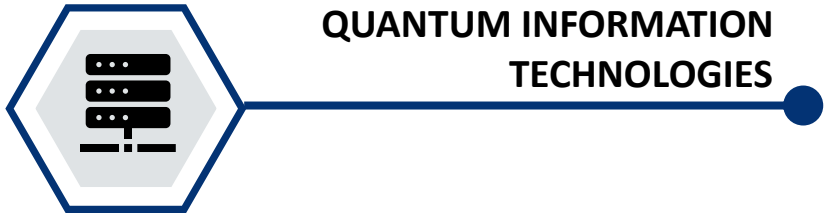
The U.S. requires a **strategic** approach built around a sustained commitment to the private sector led international standards development processes:

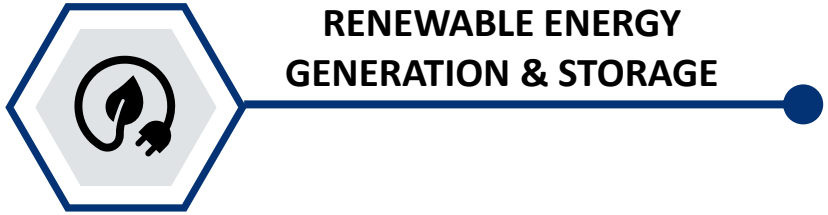
- **Enhanced investment in R&D –** a critical component of successfully influencing international standards
- **Expanded collaborations** between allied governments, industry, and academia to ensure their engagement and participation in technical standards
- Creative approaches to **growing engagement and broadening participation** in standards development



CRITICAL AND EMERGING TECHNOLOGIES







SPECIFIC CET APPLICATIONS

Automated & Connected Infrastructure

Smart cities, Internet of Things, and other novel applications

Automated & Connected Transportation

Autonomous vehicles, unmanned aircraft systems, automated subway systems, smart cities, internet-of-things, and other possible applications

Critical Mineral Supply Chains

Cross-cutting issues that are critical to enabling the development and deployment of emerging technologies and data security

Biobanking

Involves the collection, storage, and use of biological samples from individuals

Electric Vehicles (EVs)

Standards to integrate EVs with the electrical grid

Cybersecurity & Privacy

Cross-cutting issues that are critical to enabling the development and deployment of emerging technologies and data security

USG NATIONAL STANDARDS STRATEGY FOR CRITICAL AND EMERGING TECHNOLOGY

- Objective 1: Investment
- Objective 2: Participation
- Objective 3: Workforce
- Objective 4: Integrity & Inclusivity

LINES OF EFFORT

Greater Investment in Pre-Standardization Research

- Increase R&D funding for CETs
- Support development of standards that address risk, security, and resilience

Participation in Standards Development

- Remove and prevent barriers to private sector participation
- Improve communication between public and private sector
- Enhance USG representation and influence in international standards governance and leadership.

Workforce Development

- Educate and empower the new standards workforce.

Ensuring Integrity in Standards Development

- Deepen standards cooperation with partners and allies
- Facilitate broad representation in standards development.

NIST'S ROLE IN STRATEGY IMPLEMENTATION

NIST will provide a point of entry to implementation of the USG National Standards Strategy for Critical and Emerging Technology.

- Support communication and coordination information through **standards.gov**
- Engage with the stakeholder community including standards development organizations, consortia and industry groups through listening sessions
- Work through federal advisory committees and establish a NIST VCAT Subcommittee on how to broaden participation in standards development
- Share case studies and lessons-learned on standards development best practices

We're Listening.

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