

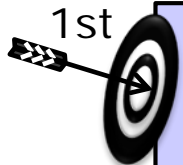
# HQ for Science and Technology to foster innovation

## - Council for Science, Technology and Innovation (CSTI) -



- *Promoting effective measures across ministries to create innovation beyond the borders of disciplines, ministries and sectors*

### Three Arrows of Reinforcement of the HQ



Improvement of the process for policy-making  
“S&T Budgeting Strategy Committee” and “Action Plans for  
S&T Priority Measures”

- *Prioritized area: “Energy”, “Next-generation infrastructures”, “Local resources”, “Health & Medical”*
- *Budget for FY2014: ¥335bil*



**SIP** (Cross-Ministerial **S**trategic **I**nnovation Promotion **P**rogram)

- **Budget for FY2016: ¥50bil**  
※Of this amount, 35 percent (¥17.5billion) was allocated to medical fields



ImPACT (Impulsing **PA**radigm **C**hange through disruptive  
Technologies)

- *Budget for FY2014-2018: ¥55bil*

# Cross-Ministerial Strategic Innovation Promotion Program (SIP)

## Features of the SIP

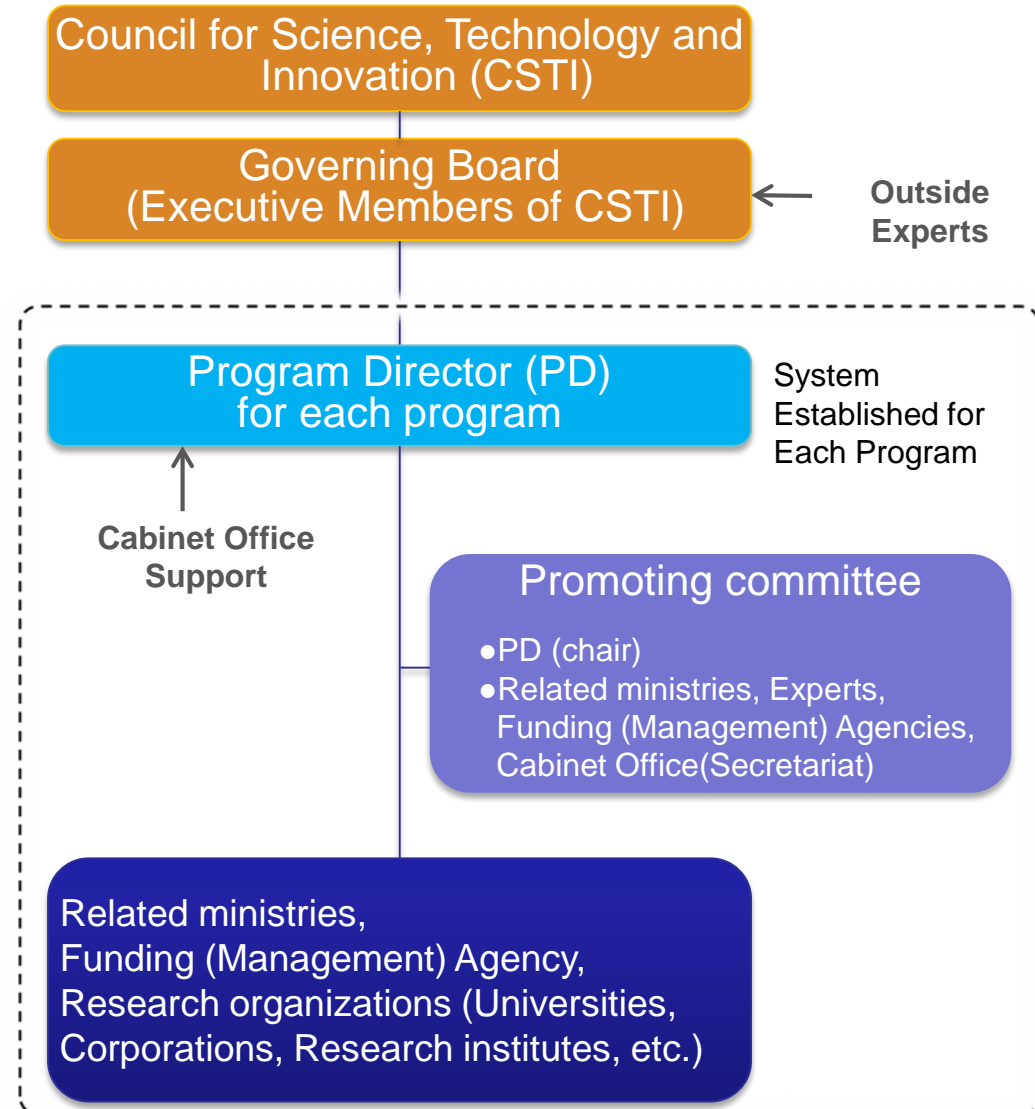
- **The Council for Science, Technology and Innovation(CSTI) selects projects that answer critical social needs and offer competitive advantage to Japanese industry and the economy.**
- **Cross-ministerial Initiatives.**
- **Promote focused, end-to-end research and development, from basic research to practical application and commercialization. Utilize results in regulations, systems, special wards, government procurement, etc.**
- **Intellectual property management system** facilitating strategic corporate use of research results.

# Cross-Ministerial Strategic Innovation Promotion Program (SIP)

## Implementation Structure

- **Select directors for each program (PD).**
- **PDs selected by invitation from among top-class leaders in industry and academy.**
- **Program directors break through ministerial silos, managing programs from a cross-ministerial perspective.**
- **Governing Board (Members: Executive members of the Council for Science, Technology and Innovation) to provide advice/ assessment.**

## < Governance structure >



# 11 Themes of SIP



## Innovative Combustion Technology

(Allocation: ¥1.90 billion)

**Masanori SUGIYAMA, Toyota Motor Corp.**

Improving fuel efficiency of automobile engines.



## Structural Materials for Innovation(SM'1)

(Allocation: ¥3.758 billion)

**Teruo KISHI, Univ. of Tokyo, NIMS**

Developing ultra-strong and -light materials such as magnesium-, titanium-alloys and carbon fibers



## Next-Generation Technology for Ocean Resources Exploration

(Allocation: ¥4.658billion)

**Tetsuro URABE, Univ. of Tokyo, JMEC**

Establishing technologies for efficiently exploring submarine hydrothermal polymetallic ore



## Infrastructure Maintenance, Renovation and Management

(Allocation: ¥3.156 billion)

**Yoza FUJINO, Yokohama National Univ.**

Developing low-cost operation & maintenance system and long life materials for infrastructures



## Cyber-Security for Critical Infrastructures

(Allocation: ¥2.55 billion)

**Atsuhiko GOTO, Institute of Information Security**

Development of technologies that monitor, analyze, and defend control and communication system as well as confirm integrity and authenticity of system components to protect critical infrastructures against cyber threats.



## Innovative Design/Manufacturing Technologies

(Allocation: ¥2.19 billion)

**Naoya SASAKI, Hitachi, Ltd.**

Establishing new styles of innovations arising from regions using new technologies such as Additive Manufacturing



## Next-Generation Power Electronics

(Allocation: ¥2.41 billion)

**Tatsuo OOMORI, Mitsubishi Electric Corp.**

Integrating new semiconductor materials into highly efficient power electronics system



## Energy Carriers

(Allocation: ¥3.49 billion)

**Shigeru MURAKI, Tokyo Gas Co. ,Ltd.**

Promoting R&D to contribute to the efficient and cost-effective technologies for utilizing hydrogen



## Automated Driving System

(Allocation: ¥2.713 billion)

**Seigo KUZUMAKI, Toyota Motor Corp.**

Developing new transportation system including technologies for avoidance accidents and alleviating congestion



## Enhancement of Societal Resiliency against Natural Disasters

(Allocation: ¥2.33 billion)

**Masayoshi NAKASHIMA, Kyoto Univ.**

Developing technologies for observation, forecast and prediction of natural disasters



## Technologies for Creating Next-Generation Agriculture, Forestry and Fisheries

(Allocation: ¥2.925 billion)

**Noboru NOGUCHI, Hokkaido Univ.**

Realizing evolutionary high-yield and high-profit models by utilization of advanced IT etc