

Political Initiative to Hydrogen Energy Society

~ to seek partnership for global energy security ~



**Japan Liberal Democratic Party
Policy Study Group for Hydrogen Energy Society focusing on Fuel Cell Vehicle
Secretary General**

House of Representatives, National Diet of Japan

Mineyuki FUKUDA

December, 2015

Established the Liberal Democratic Party (LDP) Policy Study Group for Hydrogen Energy Society focusing on Fuel Cell Vehicle. Crystallized the authentic public-private partnership with robust political initiative.

LDP Policy Study Group for Hydrogen Energy Society (180 members)



Chairman	Yuriko Koike	Former Minister of Defense Former Minister of Environment Former Special Advisor to Prime Minister
Deputy Chairman	Taro Kono	Chairman, the National Public Safety Commission Minister of State for Disaster Management Minister of State for Regulatory Reform
Deputy Chairman	Kazunori Tanaka	Director-General, LDP International Bureau Former Vice Minister of Environment Former Vice Minister of Finance
Adviser	Akira Amari	Minister of State for Economic and Fiscal Policy Former Minister of Economy, Trade and Industry Former Chairman, LDP Policy Research Council
Secretary-General	Mineyuki Fukuda	Special Advisor to Minister of State for Economic and Fiscal Policy

- **Approx. 180 national Diet members are involved**
- **Policy consultation held once in two weeks**

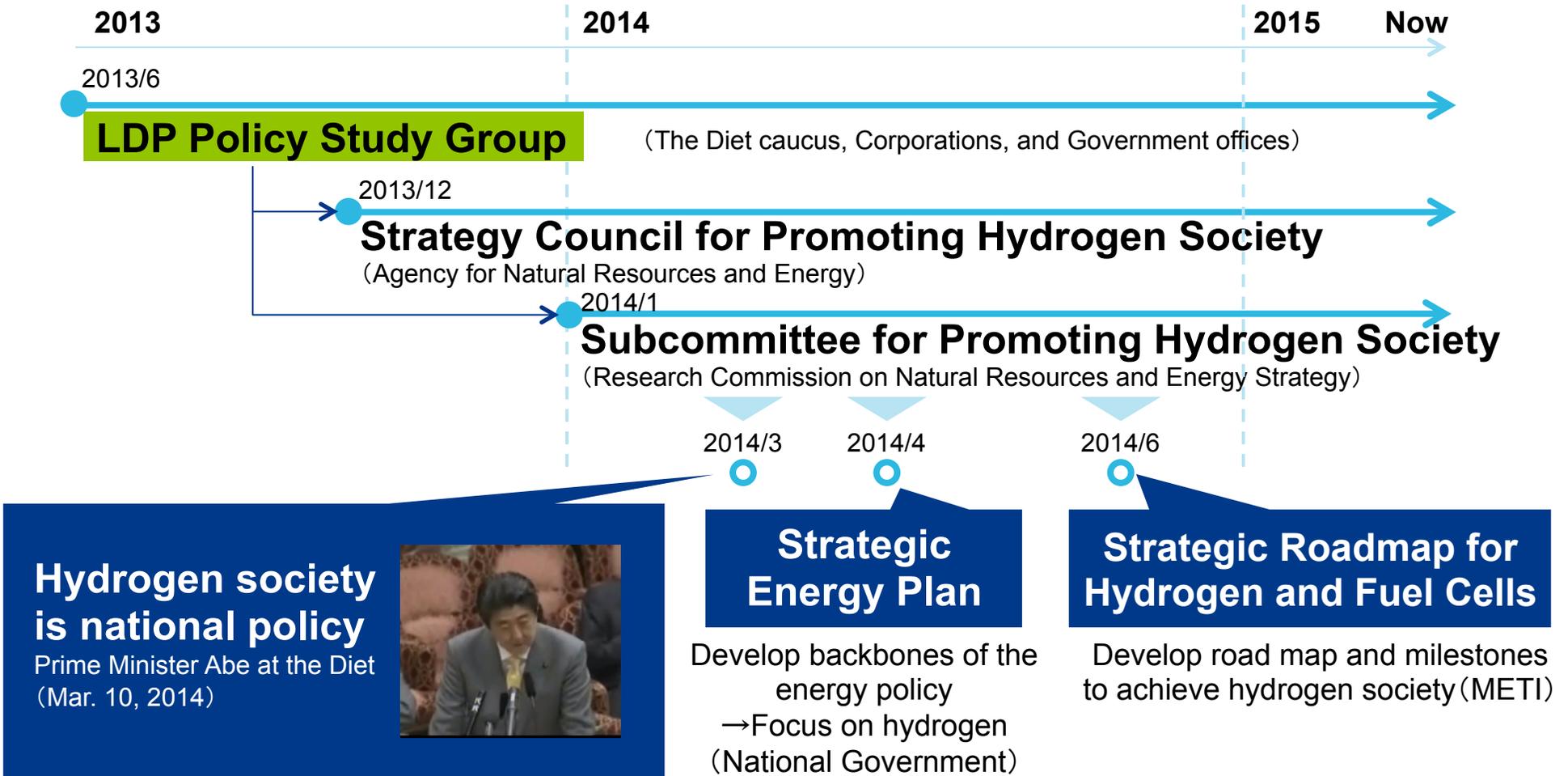
Private Sector (21 companies)

1. Toyota
 2. Air Liquide Japan
 3. Nissan
 4. Honda
 5. Hino
 6. JX Nippon Oil & Energy
 7. Iwatani
 8. Kawasaki Heavy Industry
 9. Hitachi
 10. Fuji Electric
 11. Toshiba
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Government

- Ministry of Economy, Trade and Industry (METI)
- Agency for Natural Resources and Energy
- Ministry of Land, Infrastructure, Transport and Tourism (MLIT)
- Ministry of Environment (MOE)
- Fire and Disaster Management Agency
- Cabinet Office
- Ministry of Education, Culture, Sports, Science and Technology (MEXT)

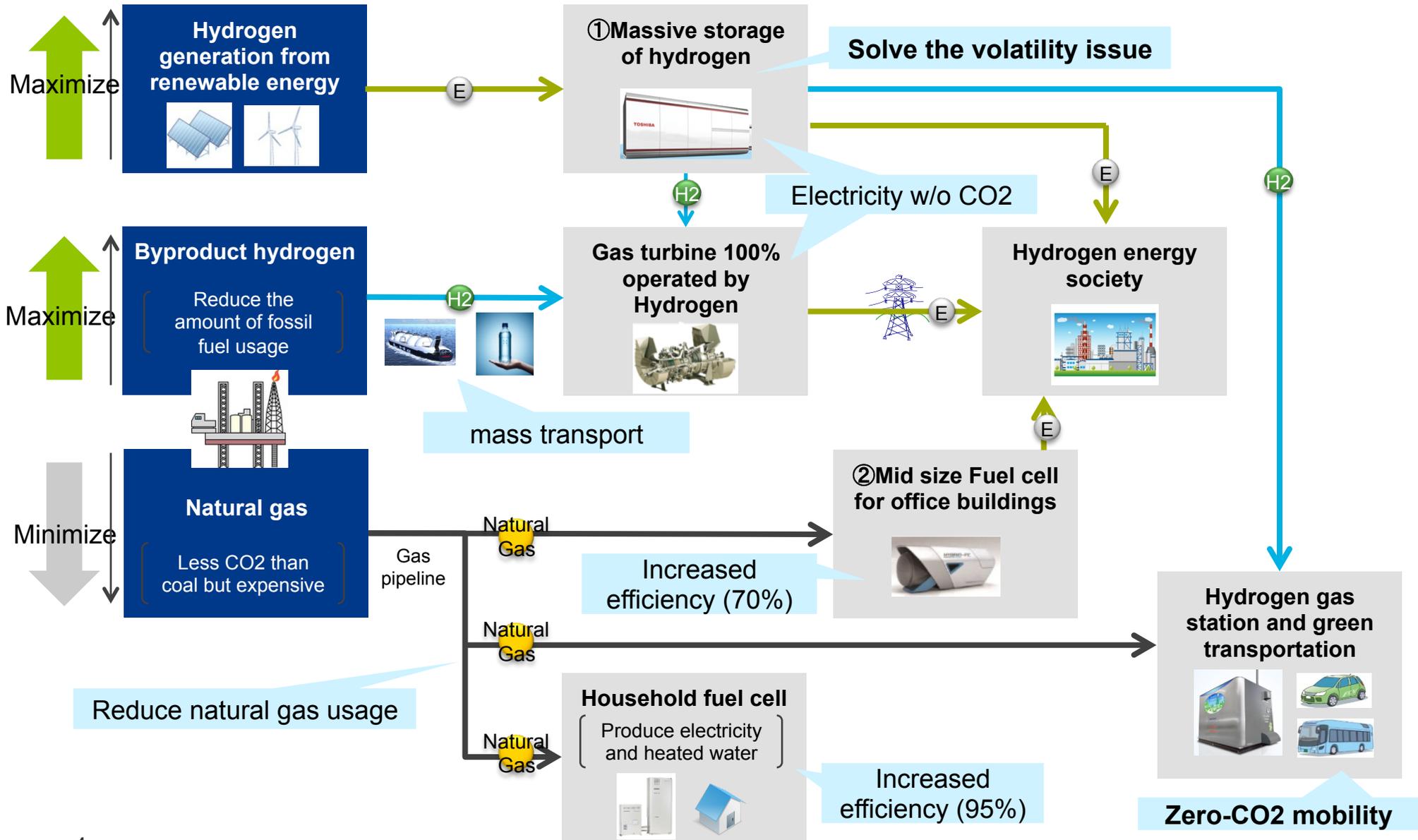
The Policy Study Group plays a critical role to achieve the hydrogen-focused Strategic Energy Plan, the Strategic Roadmap for Hydrogen and Fuel Cells as well as PM Abe's full support for hydrogen technologies.



Source: Satsuki Channel Special
 (<http://www.youtube.com/watch?v=tqrbe0t13jw>)

Best model to start:

Hydrogen application to the existing fossil fuel facilities to improve production efficiency as well as to reduce CO2 emission.



Hydrogen society model in Yokohama City

Phase 1

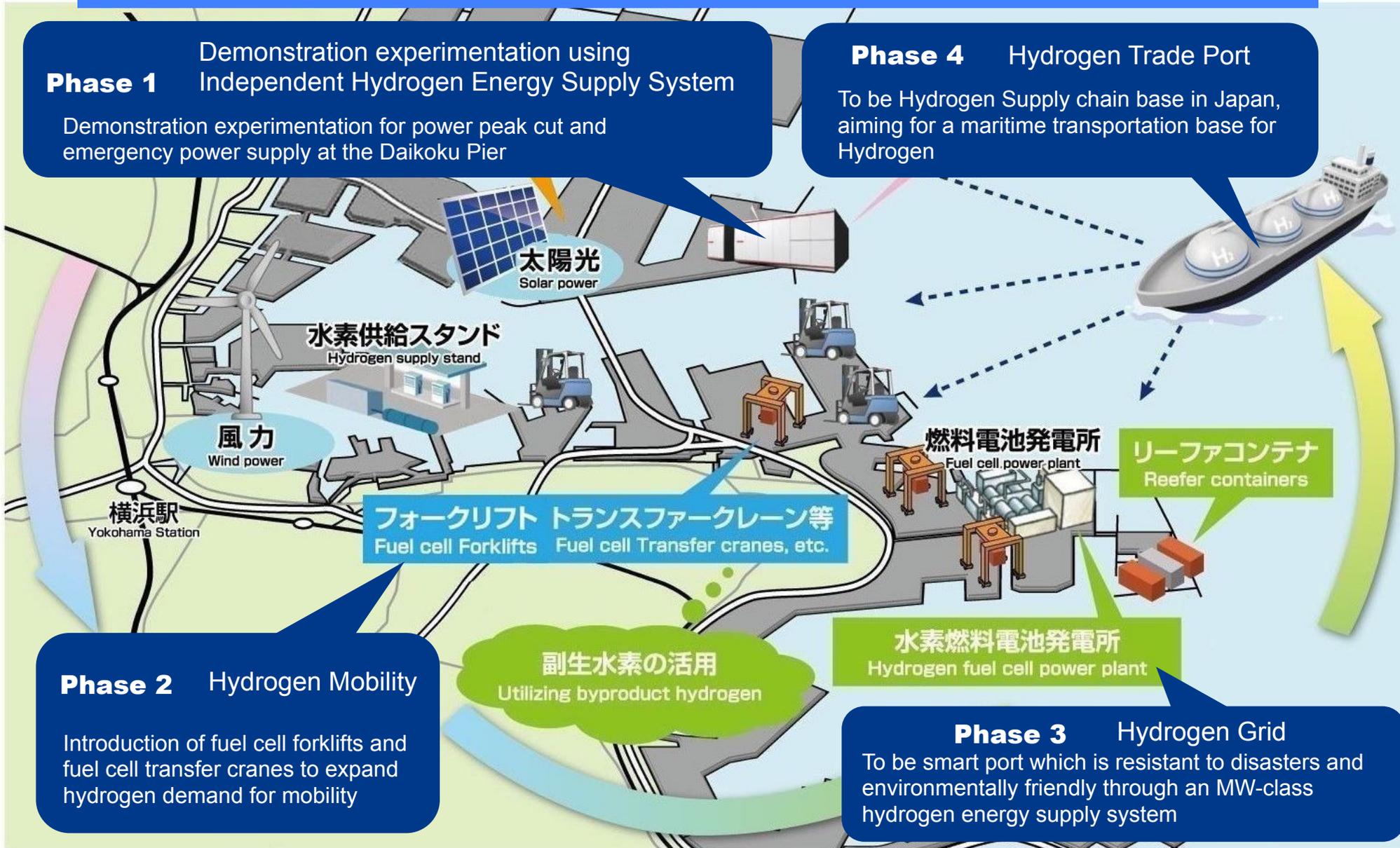
Demonstration experimentation using Independent Hydrogen Energy Supply System

Demonstration experimentation for power peak cut and emergency power supply at the Daikoku Pier

Phase 4

Hydrogen Trade Port

To be Hydrogen Supply chain base in Japan, aiming for a maritime transportation base for Hydrogen



Phase 2

Hydrogen Mobility

Introduction of fuel cell forklifts and fuel cell transfer cranes to expand hydrogen demand for mobility

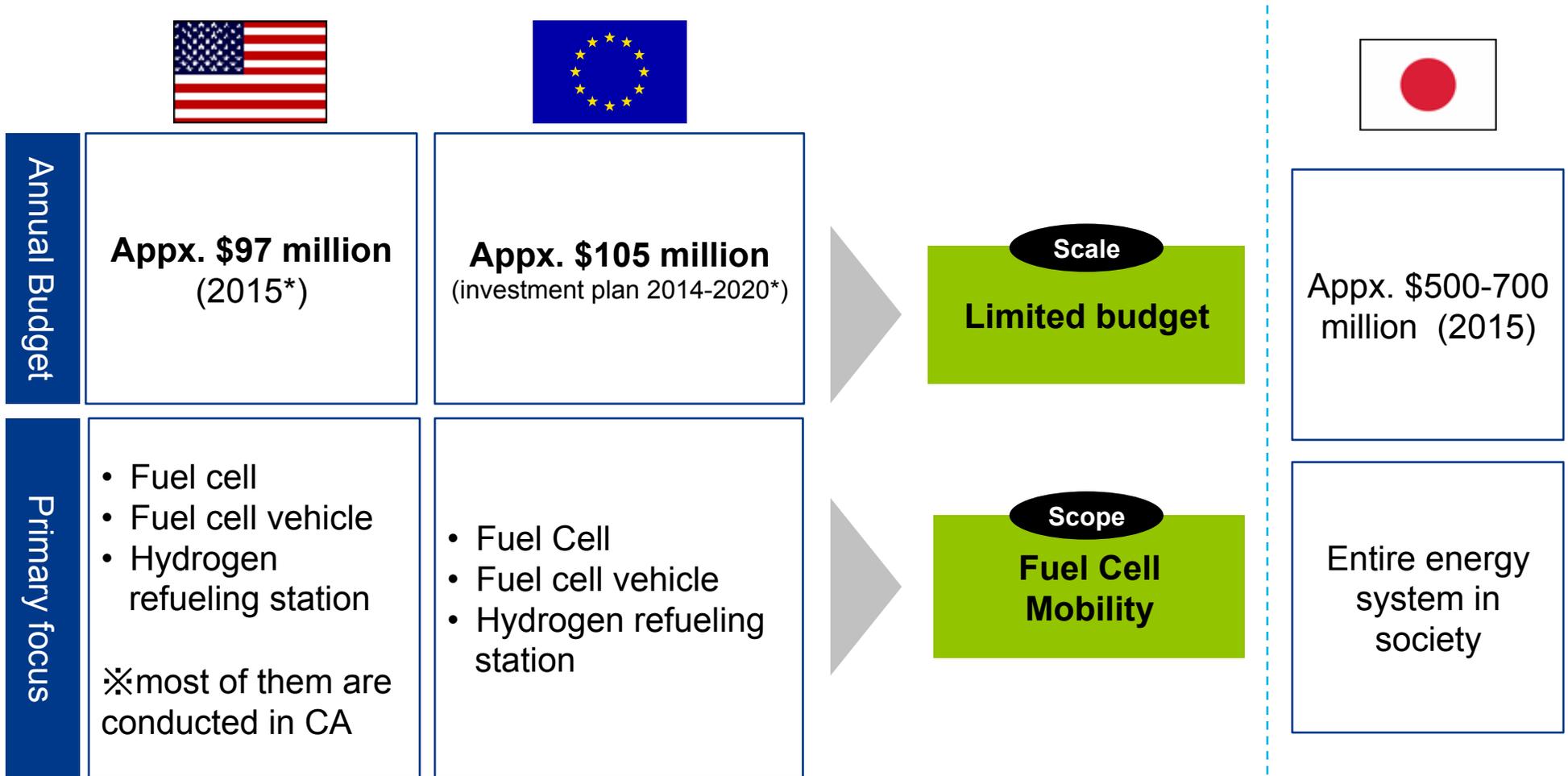
Phase 3

Hydrogen Grid

To be smart port which is resistant to disasters and environmentally friendly through an MW-class hydrogen energy supply system

Many countries have invested in hydrogen. However, the scale of investment is not sufficient as well as the scope is limited to hydrogen mobility.

Limitation of Scale and Scope



US Department of Energy (USA), National Hydrogen and Fuel Cell Technology Innovation Program (Germany)

There is no politics-driven initiative to exceed the level of existing approach mostly driven by government office and private sectors.

Results of Interviews and Research



Government officials
Business executives

There is no distinctive group of politicians who are proactively involved in hydrogen technology promotion.



Government officials

Government-level cooperation between NEDO (JPN) and NOW (GER) is critical. Difficult to identify the group of politician to lead the agenda.



Government official

Hydrogen and fuel cells were still too far off to be an immediate priority for funding.

Political initiative are hardly seen in the world. The efforts are limited to the scale of bureaucracy and private sector-driven approach.

Key proposal to IPHE Steering Committee

1. Establish an international political caucus to develop hydrogen industry

- All politicians with hydrogen business in their constituency gather to discuss innovative policy coordination for hydrogen promotion with out-of-the-box thinking.
- The politicians who attended the international caucus will organize their domestic chapter to promote hydrogen industry in each country and to accelerate technology innovation in hydrogen

2. Upgrade IPHE to policy consultation platform among politician, government officials and private business

- IPHE invites hydrogen business companies to participate and let them propose the necessity of deregulation as well as new rule
- IPHE provide the opportunity for private companies to display the state-of-art hydrogen technologies to policymakers gathered from all over the world.

3. Add another function to provide policy suggestion in hydrogen to COP

The following strategic purpose should be added to the current role of IPHE meetings held twice a year.

Summer: IPHE suggests what agenda should be discussed in COP

Winter: Report on the progress of CO2 reduction program using the specific hydrogen technology agreed in COP

In Japan, hydrogen technology expanded to health/beauty industry and food industry . Hydrogen possess a great potential to economic development in various industries.

Boom in hydrogen supplement



Condensed hydrogen water



Hydrogen tablet

Boom in hydrogen-powered cooking appliance

Hydrogen grill



Hydrogen oven



Hydrogen stove

