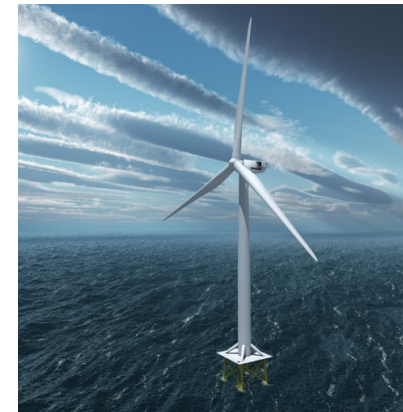


# ***Political Initiative to Hydrogen Energy Society***

**~ 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)



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

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

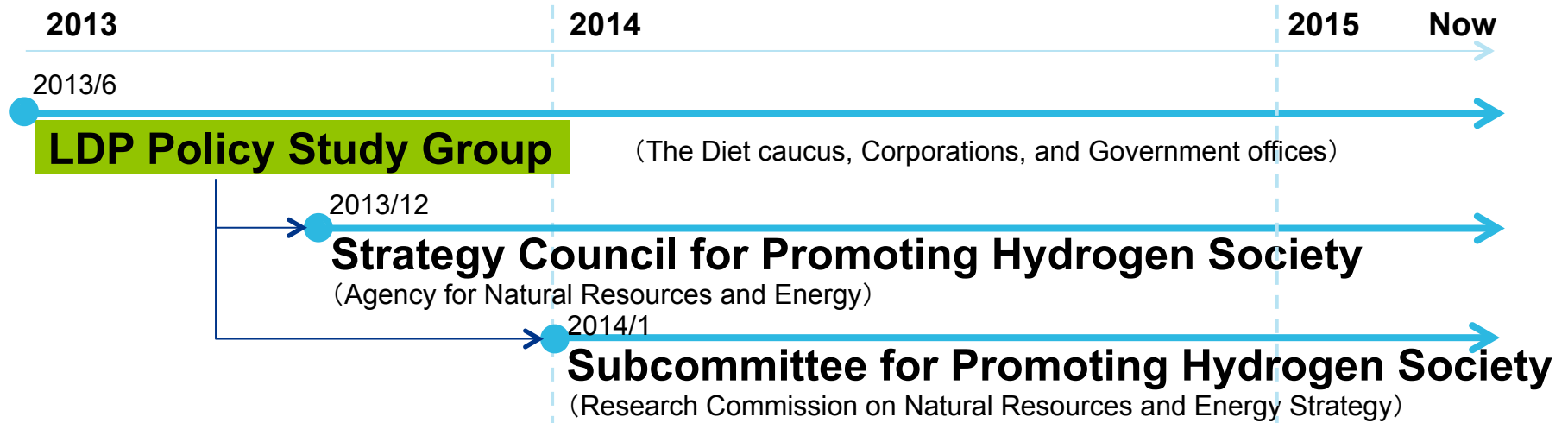
## Private Sector (21 companies)

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
- ⋮

## 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.



2014/3

2014/4

2014/6

## Hydrogen society is national policy

Prime Minister Abe at the Diet (Mar. 10, 2014)



## Strategic Energy Plan

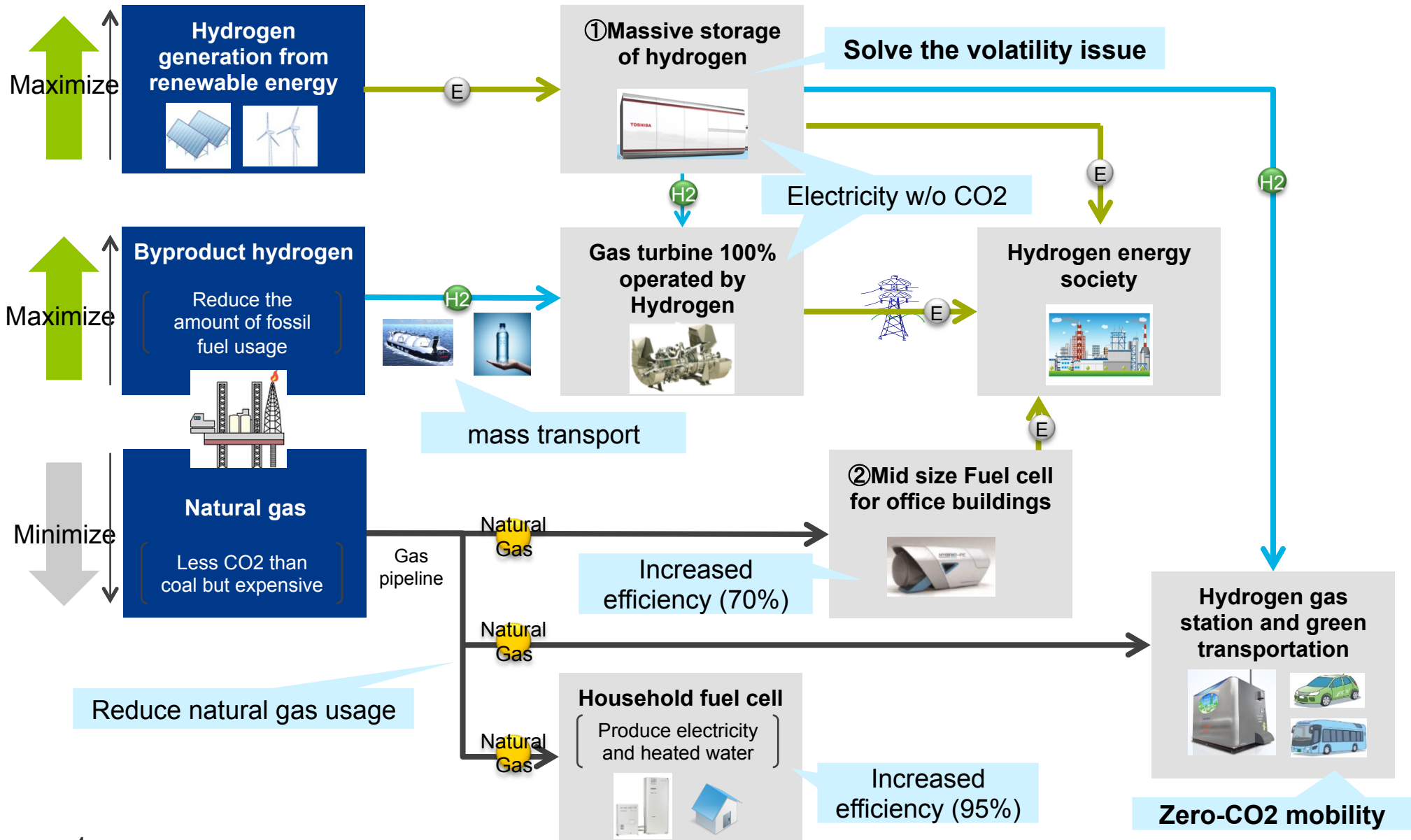
Develop backbones of the energy policy  
→ Focus on hydrogen (National Government)

## Strategic Roadmap for Hydrogen and Fuel Cells

Develop road map and milestones to achieve hydrogen society (METI)

# 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

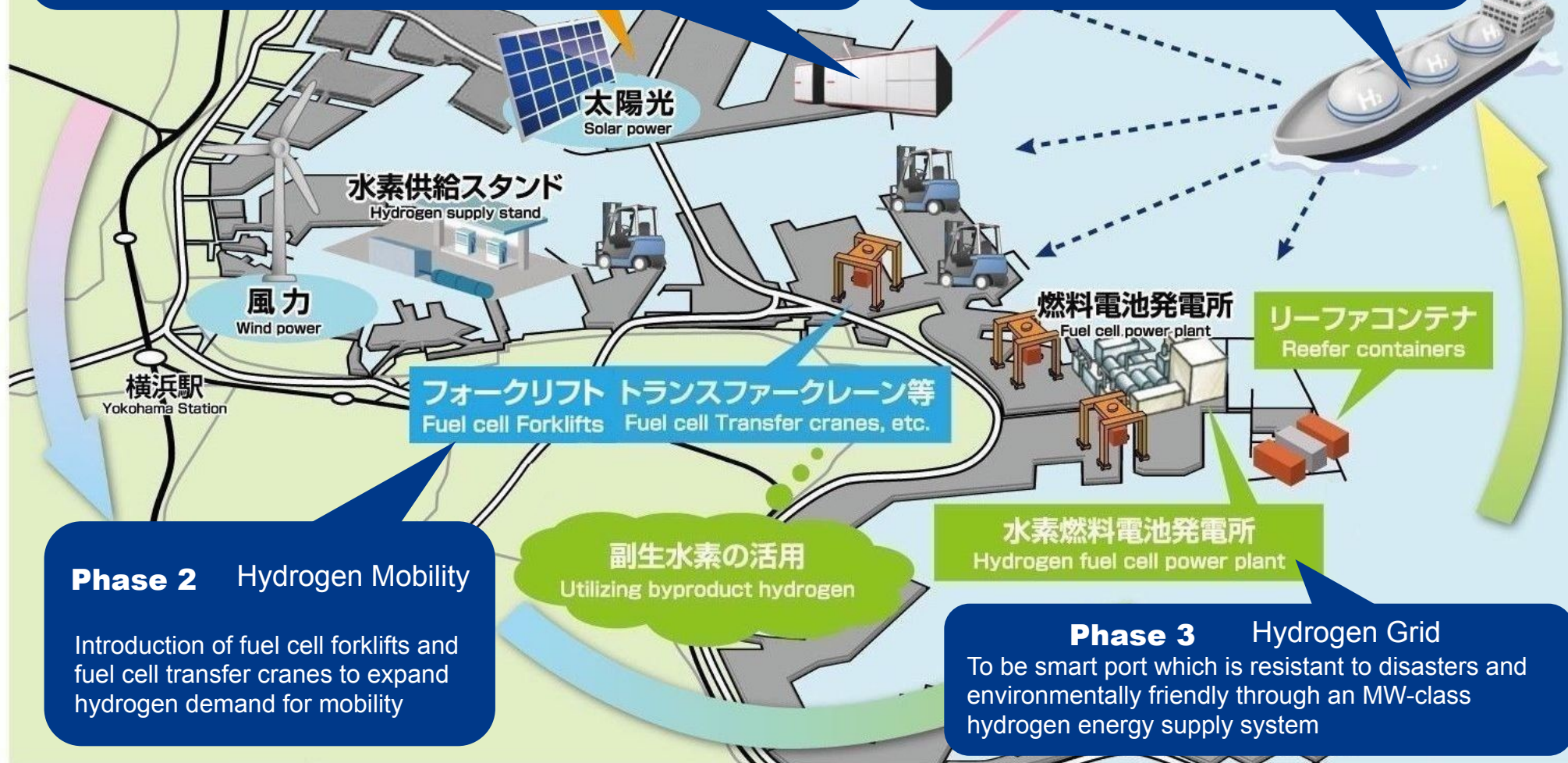
Demonstration experimentation using Independent Hydrogen Energy Supply System

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

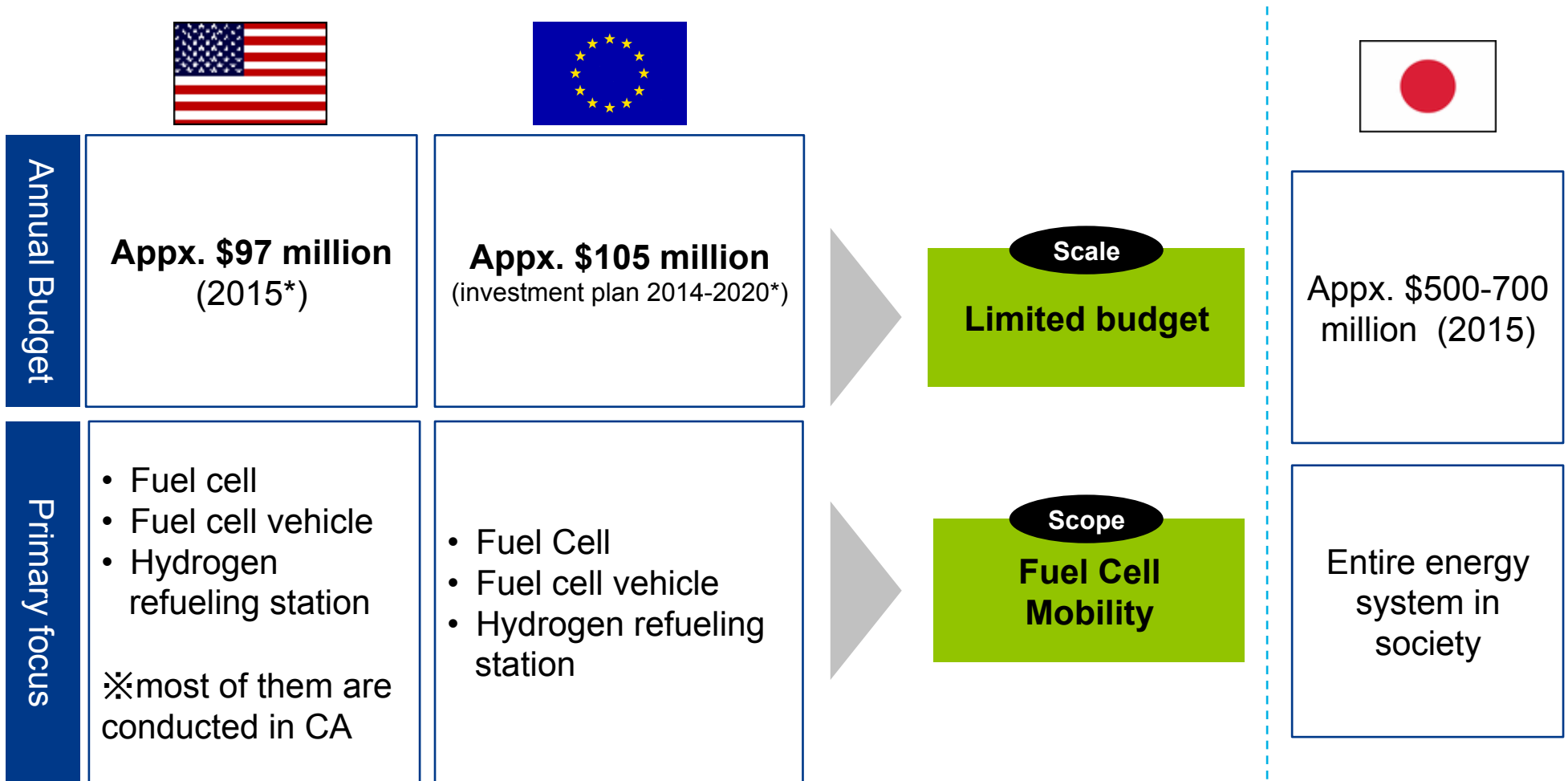
## Phase 3

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