

# From Science to Implementation: Strengthening the Science Policy Interface (SPI) to Integrate Climate Change, Resilience, and the SDGs

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# Global Agreements related to Sustainability



PARIS2015  
UN CLIMATE CHANGE CONFERENCE  
COP21·CMP11

Paris Agreement  
(UNFCCC)

SUSTAINABLE DEVELOPMENT GOALS



2030 Agenda  
and SDGs



Convention on  
Biological Diversity

Aichi Biodiversity  
Targets & Post-  
2020 Biodiversity  
Framework (CBD)

Need to take  
**integrated  
actions** towards  
new sustainable  
society

Need to be  
**implemented  
locally**

# Role of Science for Achieving SDGs

## Role of Science

## 2030 Agenda Process

Identify “**what we should do**”  
“Normative”  
e.g. Planetary Boundary



Identify “**what we can do**”  
“Action-oriented”  
e.g. **Regional CES**  
(Circulating and Ecological Sphere)

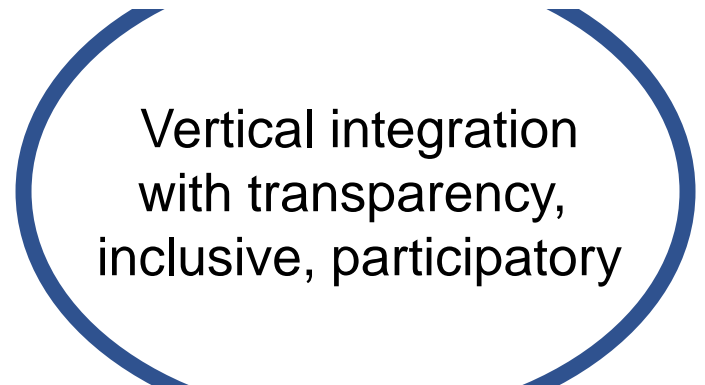


**VLR Lab**

Ecosystem  
to create  
solutions with  
collective actions

Follow-up and Review

- Thematic review
- Goals review
- Voluntary National Review



**Voluntary “Local” Review**

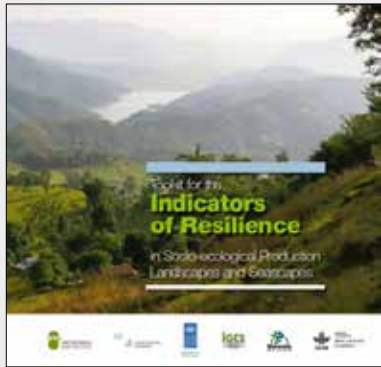
Cities, SMEs.....

# The Satoyama Initiative

- u Promotes “**landscape and seascape approaches**” to biodiversity conservation and sustainable use:  
**Socio-Ecological Production Landscapes and Seascapes (SEPLS)**
  - u Support **biodiversity** while providing humans with **goods and services** needed for their well-being.
  - u **Mutual benefits** between people and nature.
  - u **Dynamic mosaics** of habitats and land uses.
  - u Deeply linked to **local culture and knowledge**.



# Indicators of Resilience in SEPLS



- u IPSI Collaborative Activity (developed by UNU, IGES, Bioversity International, UNDP)
- u Assessing multiple aspects of SEPLS using 20 indicators in five categories
- u Self assessment results by stakeholders interpreted by external party (agency)

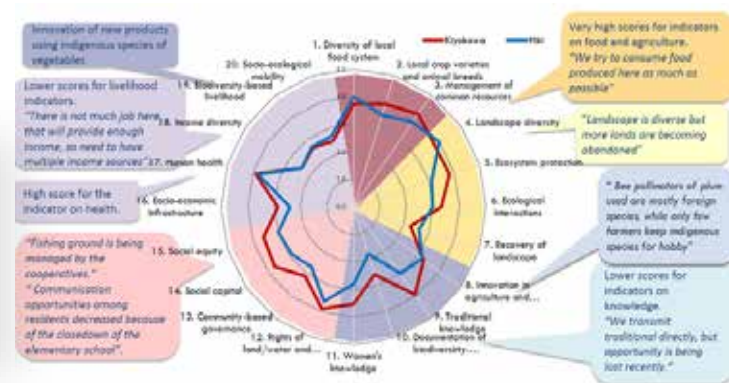
## SEPLS RESILIENCE INDICATORS (Five categories and SDGs)

<p>[Environmental]</p> <p>1. Landscape/Seascape biodiversity &amp; ecosystem protection</p> <p>2. Biodiversity (incl. agro-diversity)</p>	
<p>[Social]</p> <p>3. Knowledge &amp; innovation</p> <p>4. Governance &amp; social equity</p>	
<p>[Economic]</p> <p>5. Livelihoods &amp; wellbeing</p>	

- u Indicators relate to all 17 SDGs
- u Promote partnerships between local communities and external partners to act toward **strengthening resilience** through participating in assessments
- u Establish process for **monitoring and evaluation**



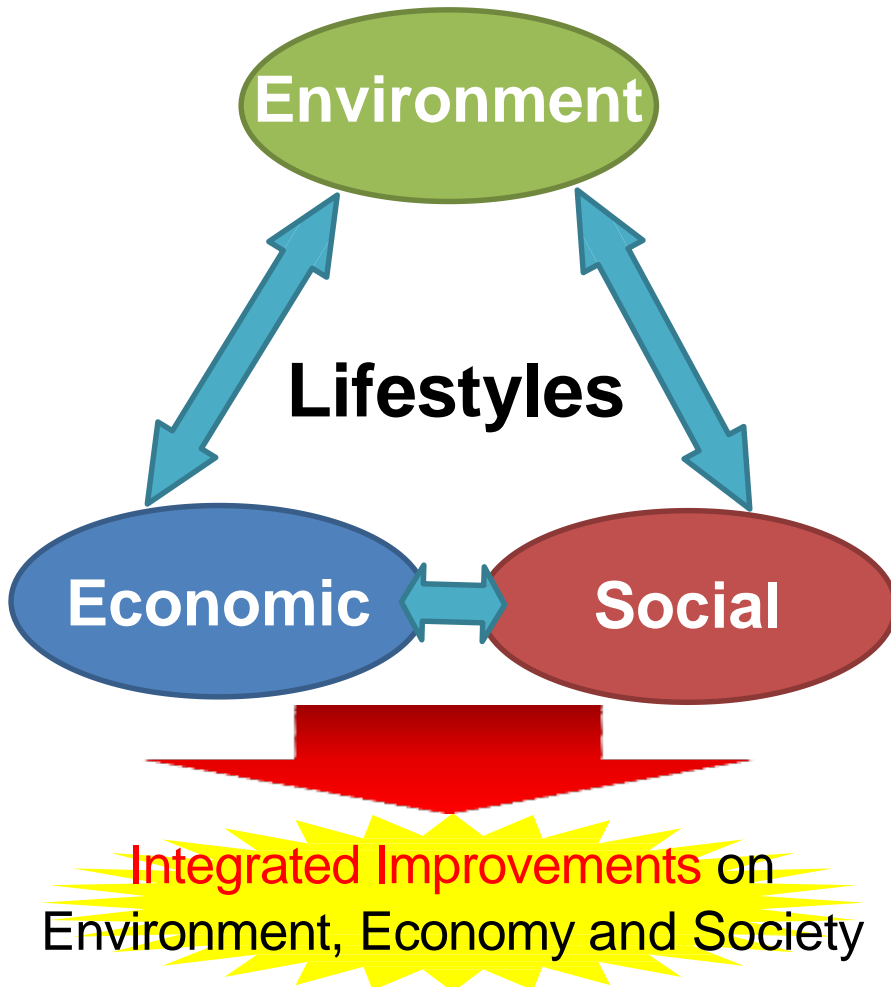
SEPLS Resilience Indicators Workshops in Namibia (Left), Bhutan (Center) and Japan (Right)



Responses of Kiyokawa Town and Hiki Town, Japan

# Japan's 5th Basic Environment Plan

## Challenges Facing Japan



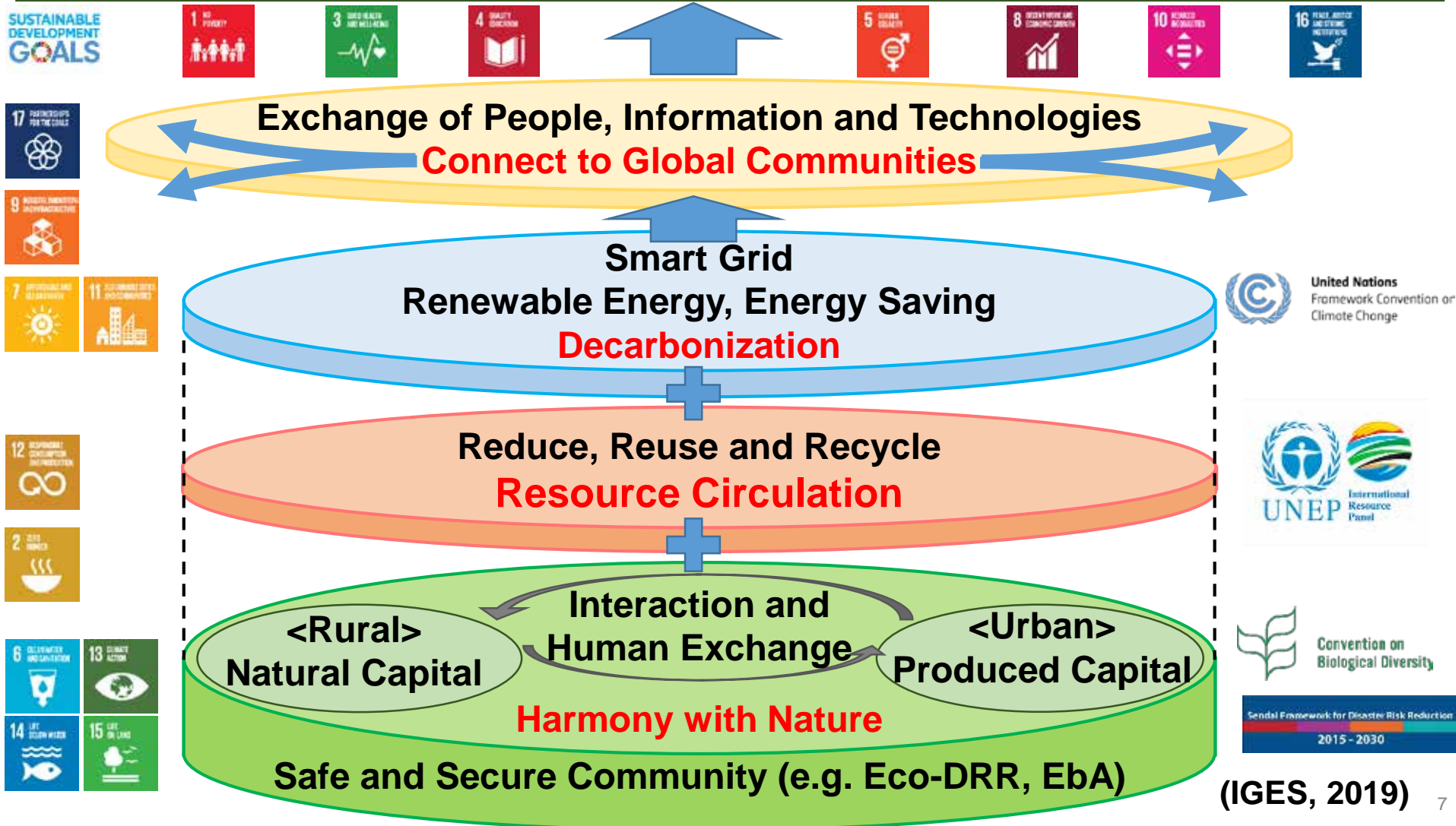
Source: Ministry of the Environment, Japan

## Basic Approach

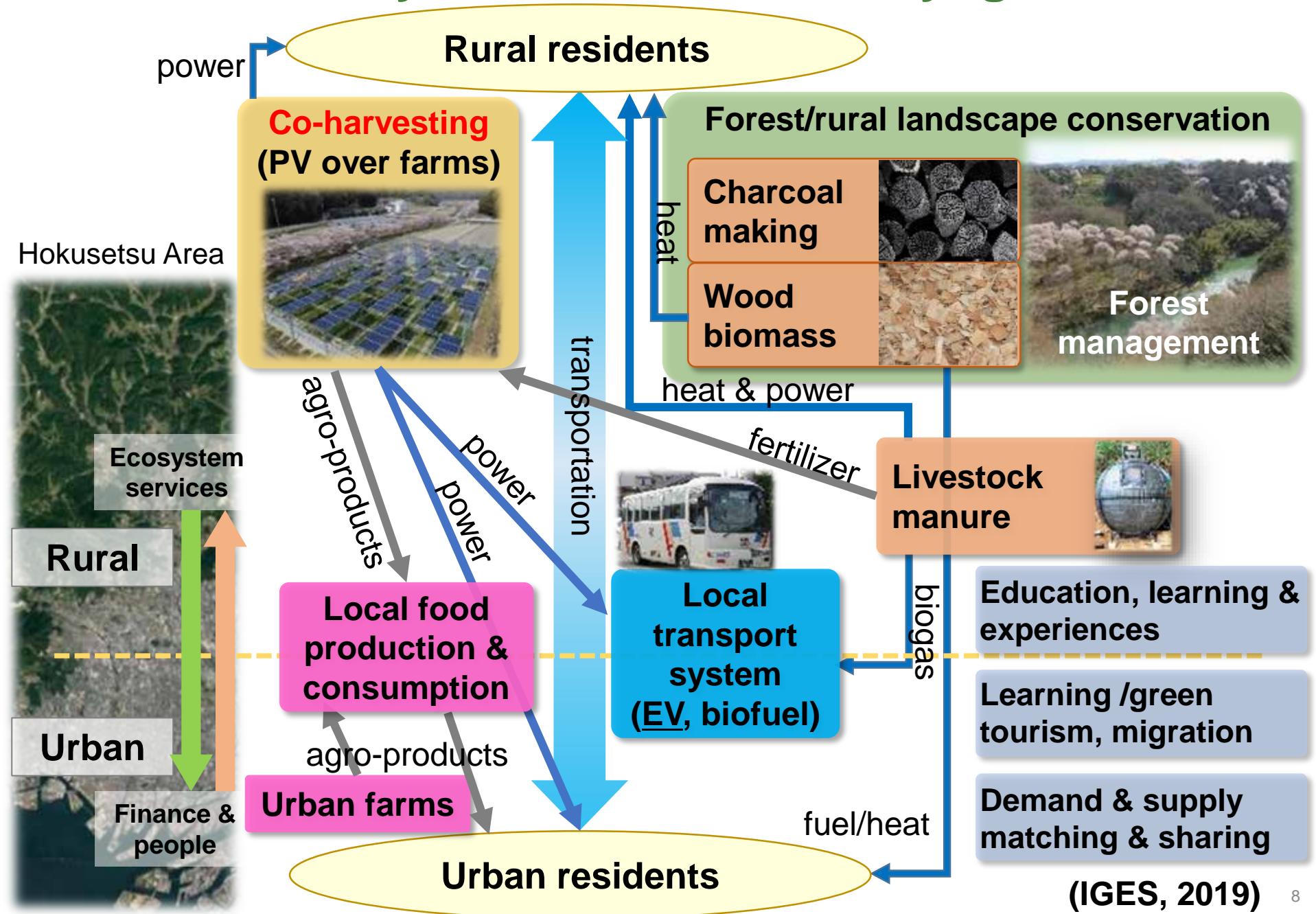
- Utilizing the concepts of SDGs, realizing the **Integrated Improvements on Environment, Economy and Society**.
- Innovation of lifestyles** towards environmentally-friendly, healthy and high quality life.
- Maximize the sustainable use of regional/local resources** for improvements in economic and social activities.
- Promoting **Partnerships** with a wide range of stakeholders.

# Regional/Local Circulating and Ecological Sphere (CES)

Integration of environmental, economic and social dimensions  
 Integrated response to declining and aging population, Local revitalization  
**CES to achieve *integrated solution* for those local issues**

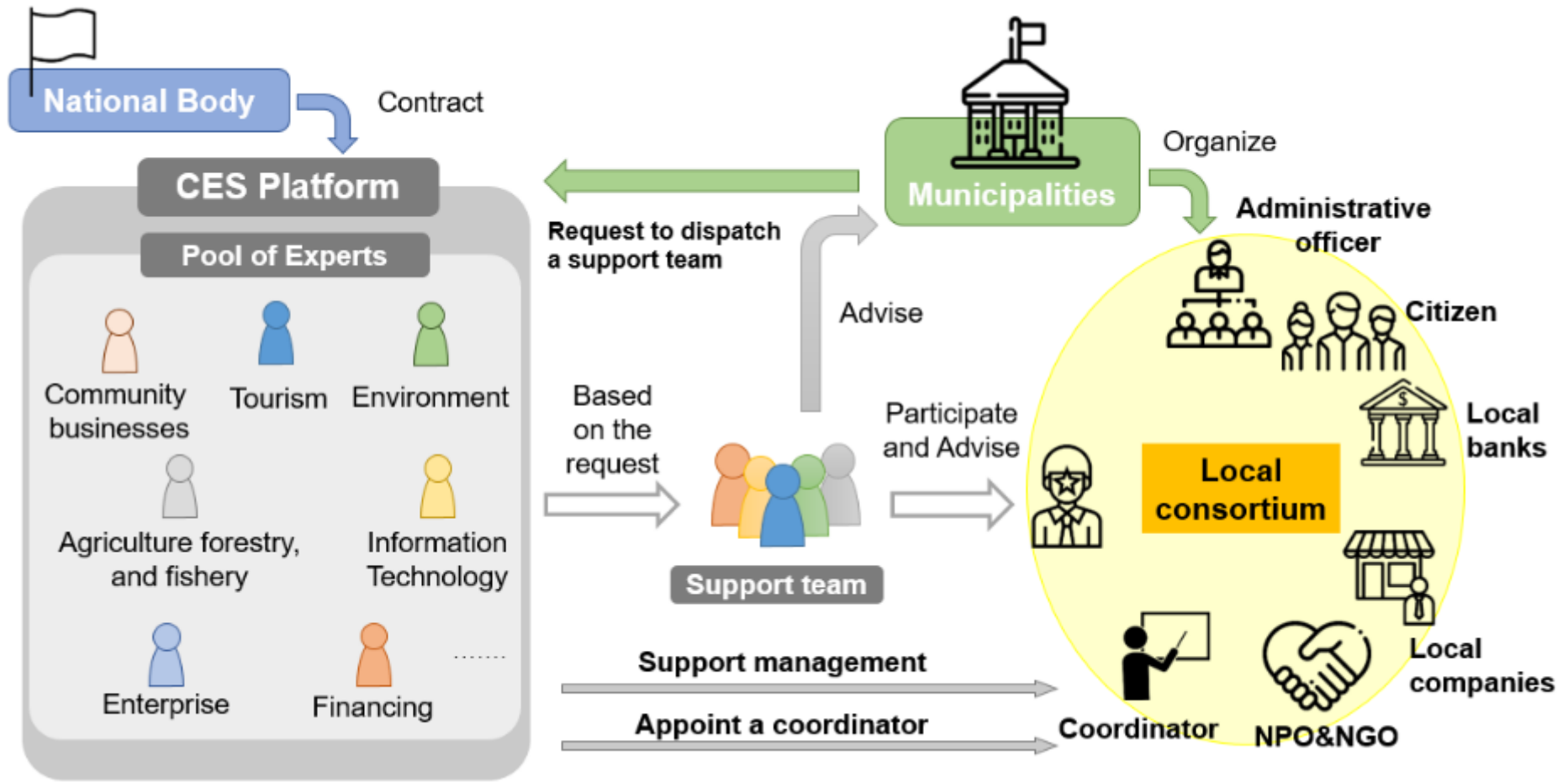


# Hokusetsu Satoyama CES Model in Hyogo Prefecture





# Existing Platform Project toward CES

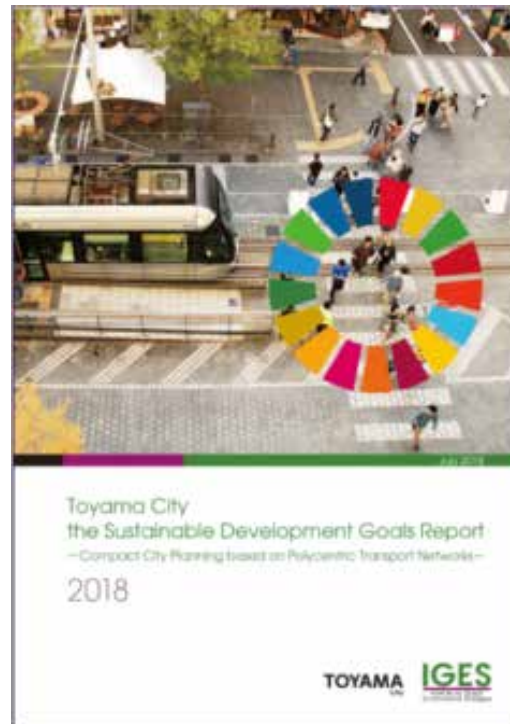


# Voluntary Local Review (VLR)

VLRs have the potential to inform the drafting of future Regional/ Local CES strategies.



Shimokawa Town, Hokkaido



Toyama City, Toyama



Kitakyushu City, Fukuoka

**Conducting VLRs can provide a space for self-assessment, policy integration, accountability and peer-learning.**