

# Concept of New Water Supply Vision

Succession of reliable water supply to the future  
alongside communities



The above illustrates the relationship among the keywords as a concept of New Water Supply Vision 【 Three viewpoints and the driving forces 】

# Concept

Water Supply Vision (Established in 2004, revised in 2008)  
【Concept】 Water supply system that strives to be a leading player in the world

■ Changing circumstances

## Countless problems

- Decline in population, water demand and income
- Need for risk management in unprecedented natural disasters
- Increasing demands for renewal of facilities
- Increasing risks in water quality of sources
- Decline of number of skilled engineers

■ Growing importance of collaboration, while sharing the principle

## Principle to be shared

Down-to-earth approach based on the local relationship that has been built by preceding efforts for 130 years

Succession of top-leading water supply to the next generation

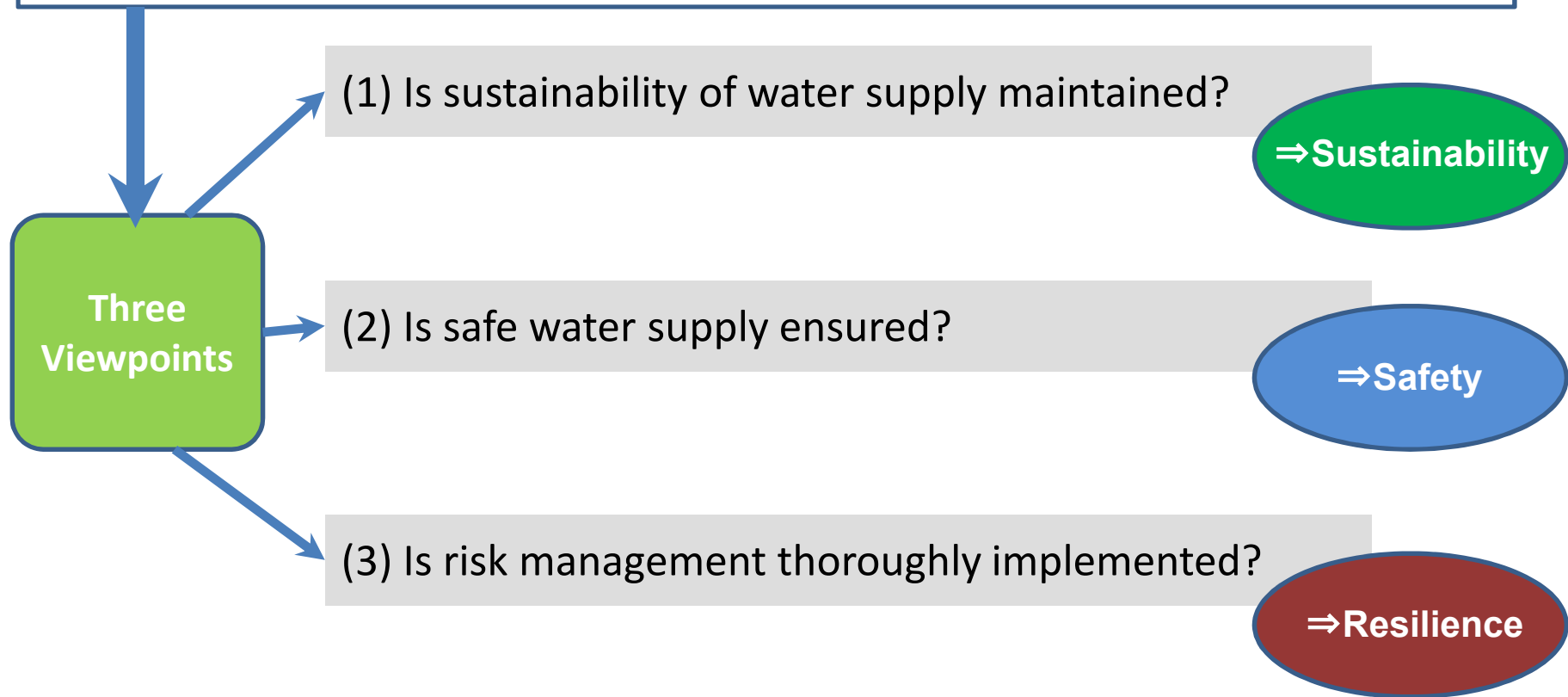
## New Water Supply Vision

(March 2013)

【Concept】 Succession of reliable water supply to the future alongside communities

## Current Condition and Task of Water Supply

- **Current condition** ... Overview of current water supply, including what have been expected and what have been achieved
- **Task** ... Recognition of issues that water supply is facing, including concerns and challenges to be solved



# Future Business Environment

## ● Changes in external factors

1. Decline in population
2. Decline in efficiency of facilities
3. Pollution of water sources
4. Destabilization of water resources

- Decrease in income due to decline in population and water demand※<sup>1</sup>
- Capacity of facility becoming excessive due to water demand decrease
- Change in water quality of sources※<sup>2</sup>
- Water resources being affected by unexpected precipitation patterns
- Disturbance of water treatment process caused by torrential rain

- ※<sup>1</sup> Japan's population is estimated to be 86 million in 2060, which corresponds to 70 percent of current population
- ※<sup>2</sup> Pollution of raw water with unrestricted chemical substances and chlorine resistant pathogens, population concentration in urban areas and pollutant discharge into water resource areas

## ● Changes in internal factors

1. Aging facilities
2. Difficulty in securing funds
3. Decrease in workers

- Aging facilities and pipelines constructed during the period of high economic growth
- Financial difficulty caused by income decrease
- Interruption of skill succession due to mass retirement of post-war baby boom generation and restructuring of organizations

# Goals of Water Supply

Water supply which is capable of sustainably supplying water that is appropriate in quality and amount to anyone, anywhere and anytime with reasonable costs by adapting to changes in the times and in the environment

[Safe system]

Safety

Everyone is served with water of good quality anywhere and anytime.

[Resilient system]

Resilience

Damage by natural and other disasters is minimized and quickly recovered.

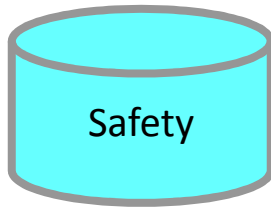
[Sustainable services]

Sustainability

Sound and Stable financial management is maintained despite decline in population and water demand.

These goals for the next 50 -100 years are clarified and shared by all the stakeholders.

## Direction of Actions (Safety)



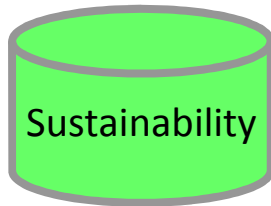
### Goals for the moment

- Maintaining continuous safe water supply in every water supply system in **partnership** with the stakeholders

### Direction of actions

- **Preserving** and securing good **water sources**
- Establishing water supply facilities **that fit the characteristics of sources**
- Assuring **thorough water quality management** in treatment processes
- Monitoring and preserving water quality **collaboratively at a water basin scale**
- Establishing **systems for the provision of information** of water quality
- Establishing **systems for the supervision** of small-scale water suppliers

# Direction of Actions (Sustainability)



## Goals for the moment

- Implementing **asset management** and establishing future renewal plan of facilities as well as financial projection
- Providing information to customers and reflecting their opinions to the management
- Structuring a system for stakeholders' collaboration

## Direction of actions

- (**Firm financial basis** for water supply)
  - Securing funding and human resources/Maintenance of aging facilities
- (**Environmental consideration**)
  - Water circulation/Reducing environmental load/Enhancing Energy efficiency and harnessing renewable energy
- (**International cooperation**)
  - Acting as a part of a global society

# Direction of Actions (Resilience)



## Goals for the moment

- Defining the most important water supply base in each service area and making pipelines, etc. serving the base earthquake-resistant
- Establishing a relationship of stakeholders which enables the above facilities to function properly in the case of disaster

## Direction of actions

- Strengthening facilities that enable necessary minimum water supply in case of catastrophic disaster
- Implementing emergency water supply and rehabilitation in collaboration with stakeholders
- Securing living water supply in case of emergency
- Establishing stable water supply systems in case of electricity deficiency



# Tactics

Approaches that demands “challenge” and “collaboration” by stakeholders

## 1 Internal approaches

- I. Refinement of facilities
- II. Asset management
- III. Development of human resources and improvement of organizational capability
- IV. Risk management
- V. Environmental consideration

## 2 Collaborative approaches

- I. Communication with citizens
- II. Business integration and partnership
- III. Public-private partnership
- IV. Research and development
- V. International cooperation
- VI. Preservation of water sources

## 3 Approaches that demands new ideas

- I. Optimized water rate system
- II. Measures for small-scale water supply systems
- III. Measures for water supply systems for private use
- IV. Diverse methods of water supply



## Driving forces

Attitude of  
“Challenge”

“Collaboration”  
among stakeholders

# Roles of Stakeholders

【 Realization of goals by collaboration 】

Goals of water supply

