

Green
Standards
Week
2013



Telefonica

The Power of ICT for Sustainable Smart Cities

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Environment

Energy

Water

Food

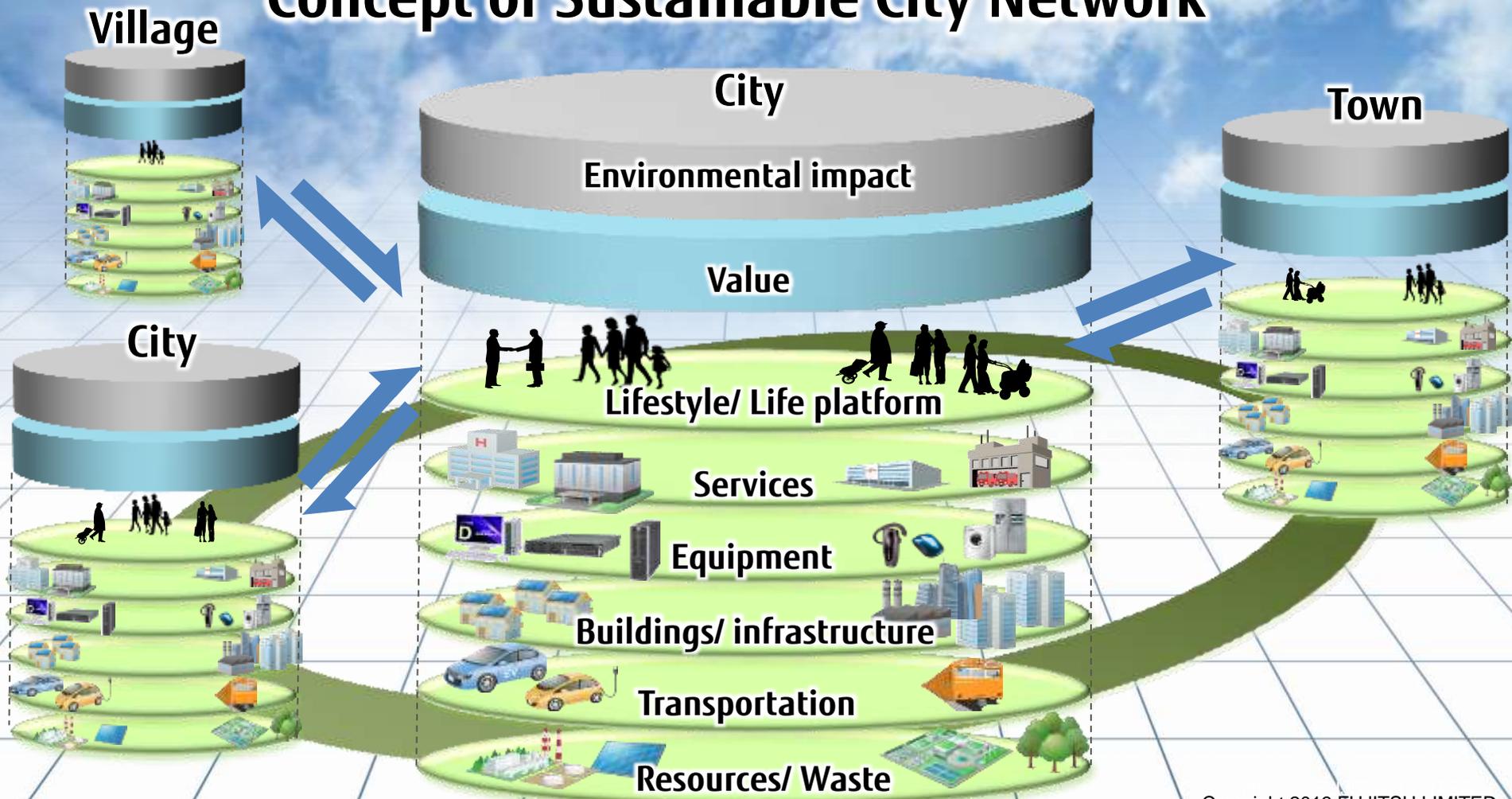
Safety

Security

Healthcare

Transportation

Concept of Sustainable City Network



Transportation – leverage massive volumes of data

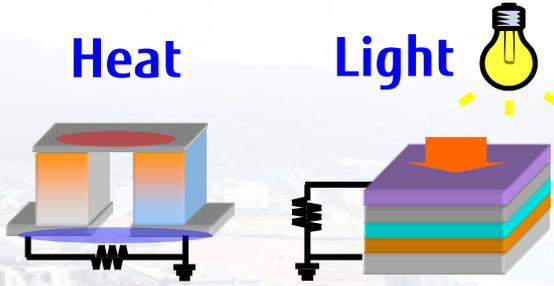
- Reduce traffic jam and energy consumption of vehicles
- Analyze real-time data and provide optimal evacuation route

Commercial-Info
Road Blocked-Info
Construction-Info
Weather-Info
Hazard Area
Traffic Info

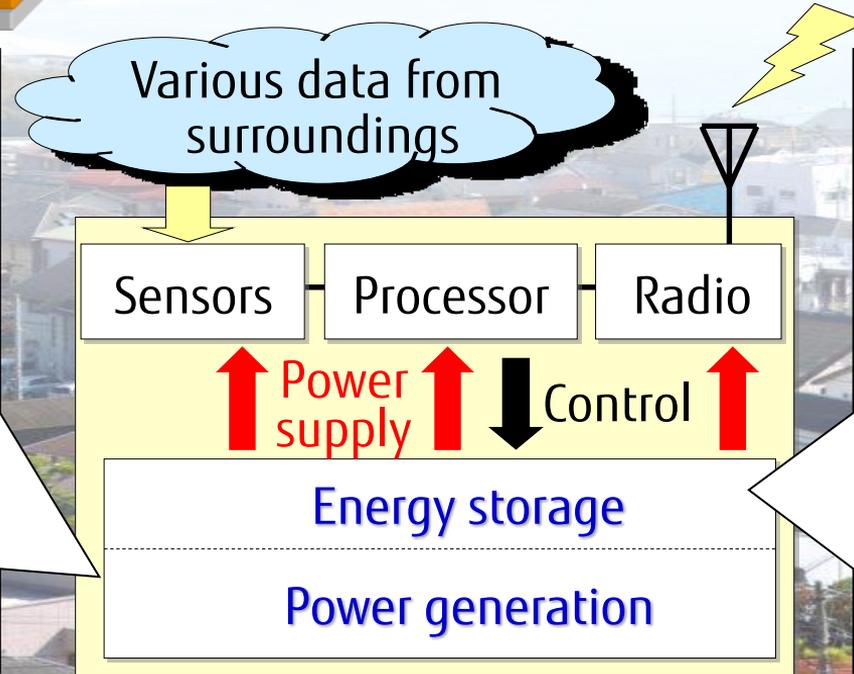
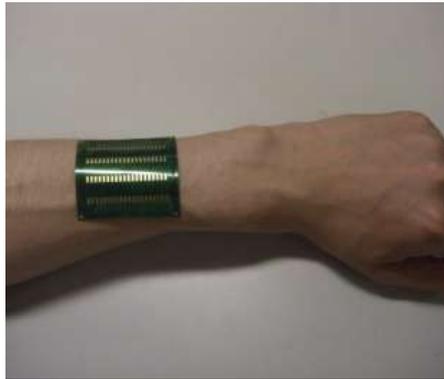
The screenshot shows a software interface for traffic information. At the top, there is a menu bar with 'File', 'Edit', 'View', and 'Help'. The main area is a map of Chiyoda-ku, Tokyo, with roads color-coded by traffic speed. A 'Displayed information' panel on the right shows two time slots: '3 / 11 / 2011 13 : 00' and '3 / 12 / 2011 12 : 45'. Below this, there are checkboxes for 'Road traffic information' and 'Map', both of which are checked. A 'Color legend' panel on the right shows three color-coded speed ranges: red for '0 ~ 9 Km/h', orange for '10 ~ 19 Km/h', and blue for '20 ~ Km/h'. At the bottom, there is a playback control bar with a play button, a pause button, and a stop button. The text 'Chiyoda-ku, Tokyo 03/11/2011 14:15' is displayed in the bottom right corner of the interface.

Energy – energy harvesting technology for M2M

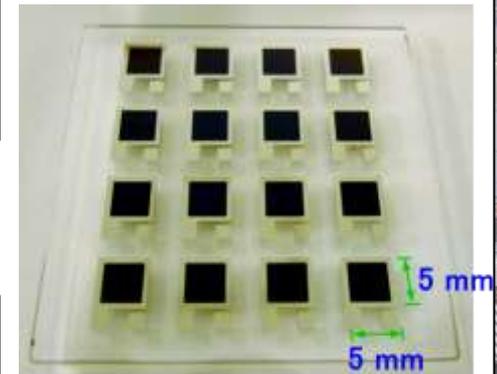
- Build autonomous wireless sensor system
- Monitoring of facilities or infrastructure in the city



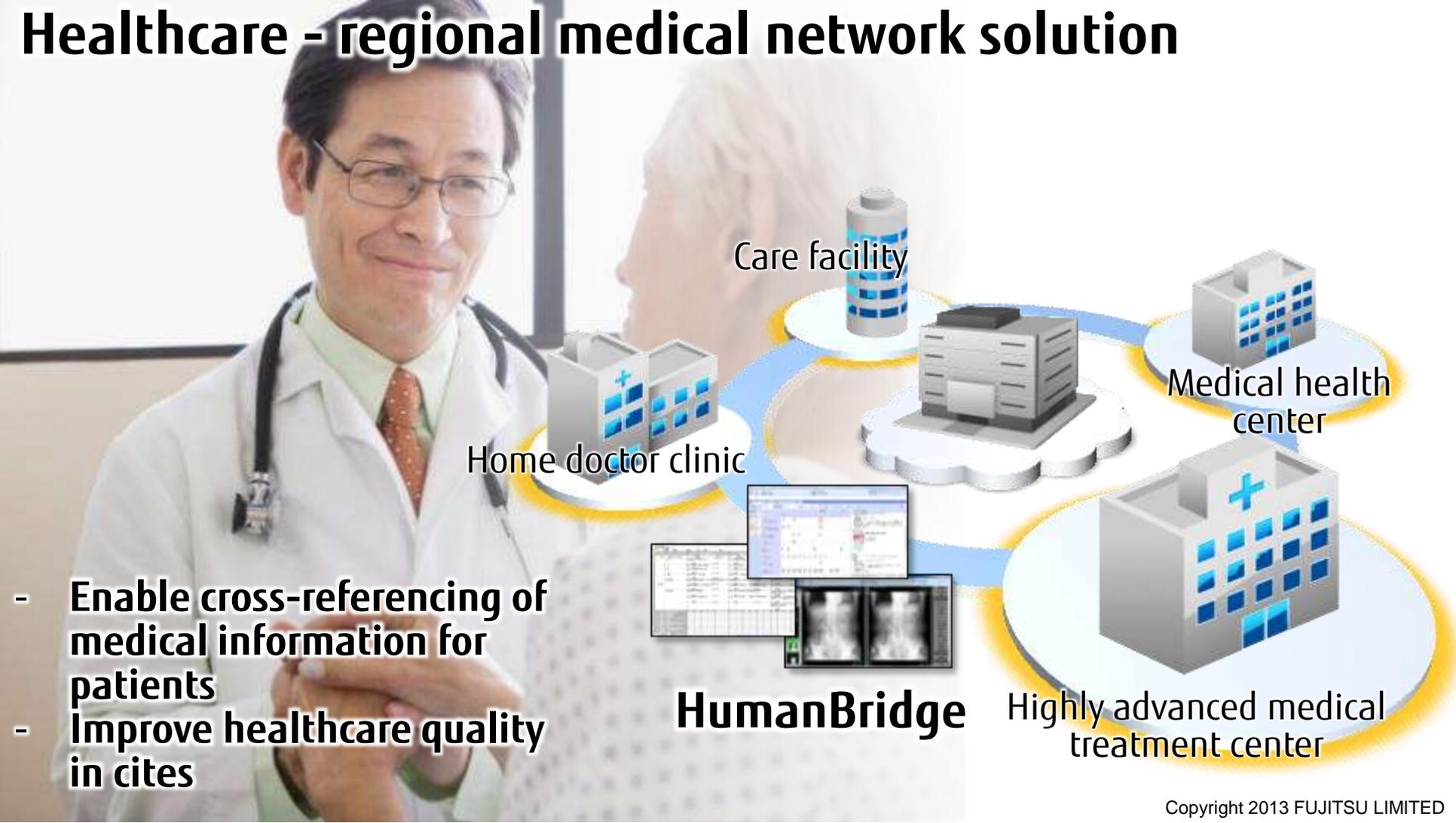
Heat and Light Hybrid Generating Devices



All Solid-State Rechargeable Battery Devices



Healthcare - regional medical network solution



Care facility

Home doctor clinic

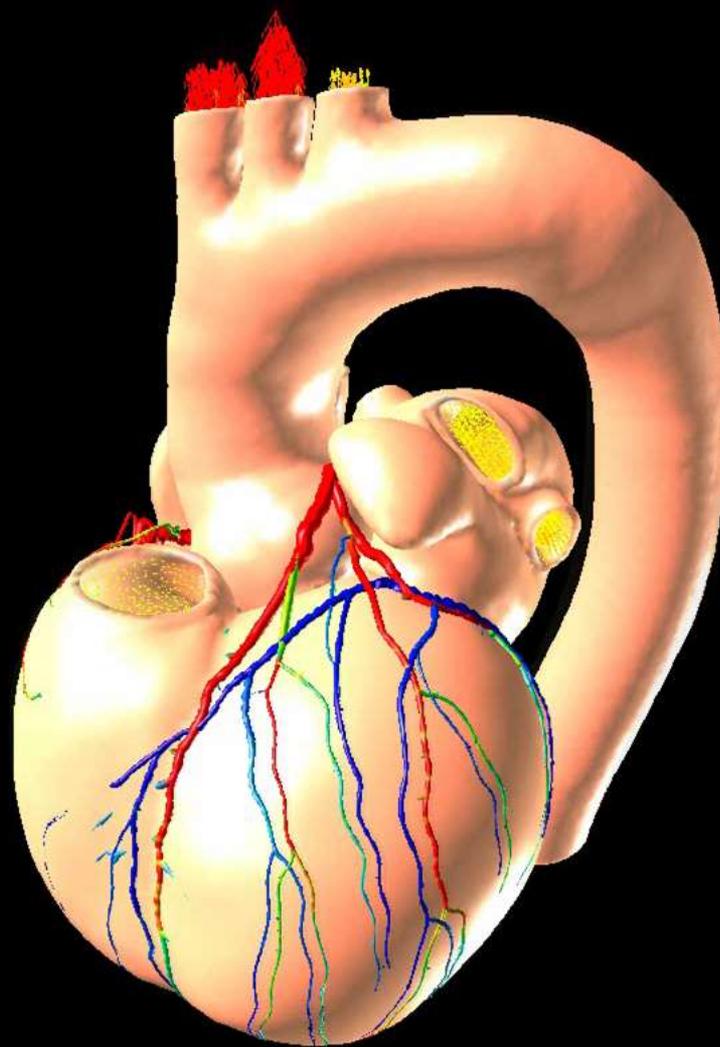
Medical health center

Highly advanced medical treatment center

HumanBridge

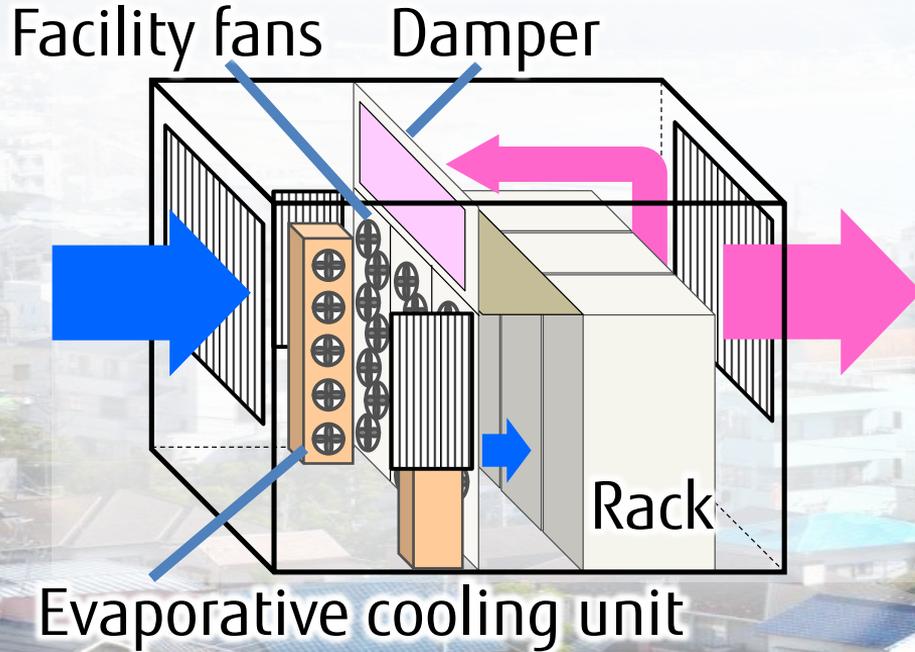
- Enable cross-referencing of medical information for patients
- Improve healthcare quality in cites

Supercomputing - heart simulator



Collaborative research
with Profs. Hisada and
Sugiura at Univ. of Tokyo

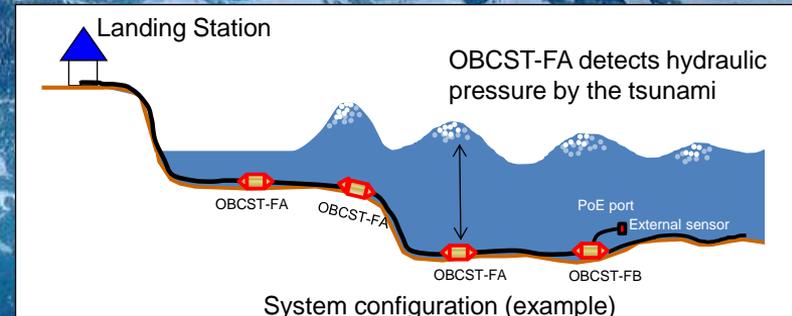
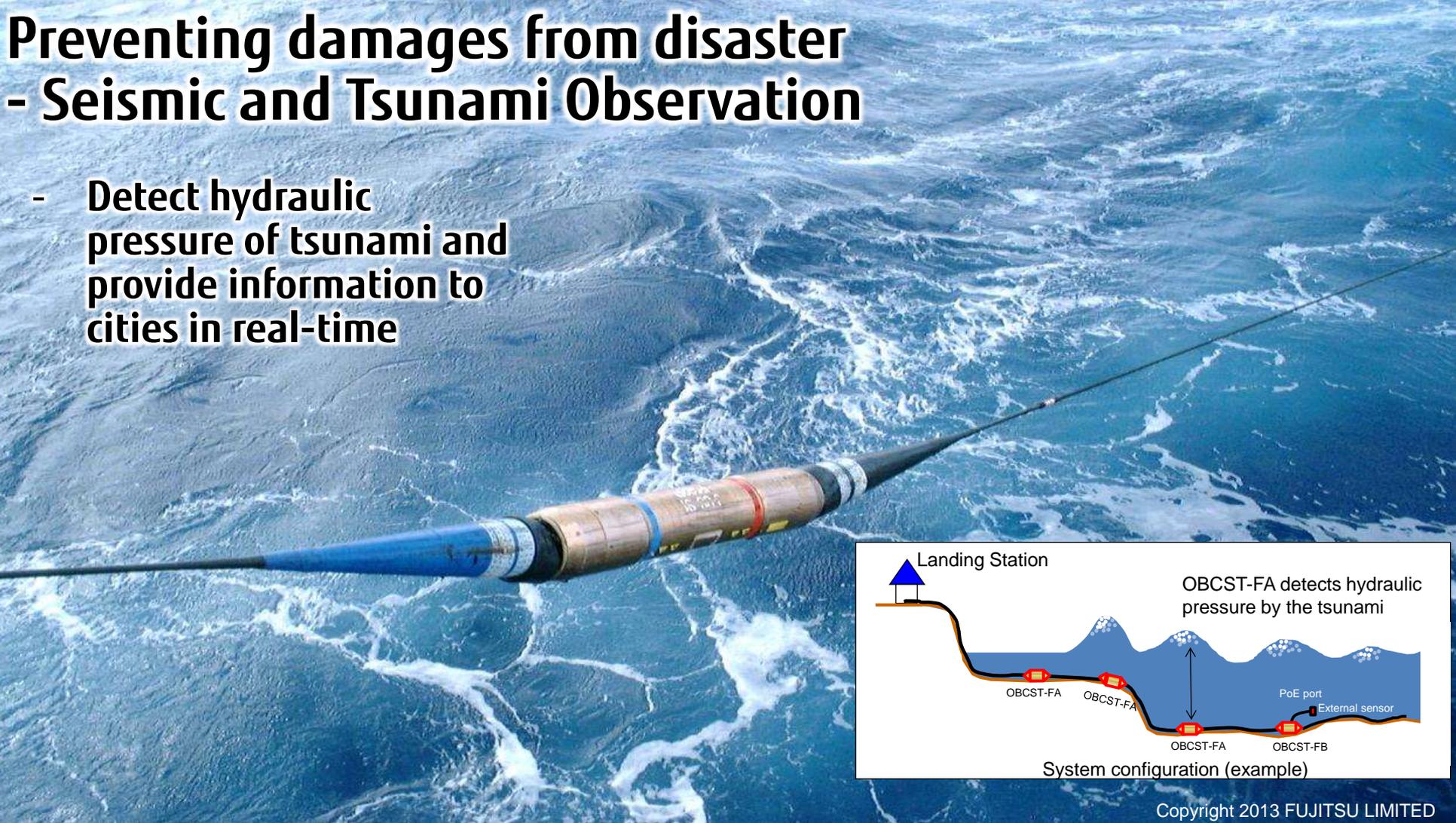
Safety – Compact Container Data Center



- Ensure resilient information processing by decentralization
- Eco-friendly operation

Preventing damages from disaster - Seismic and Tsunami Observation

- Detect hydraulic pressure of tsunami and provide information to cities in real-time



ICT brings the capability to overview the environmental and human activities globally and to provide interface linking to human specific experience, intuition and sense of public spirit.

- 1. Computer simulation which predicts near future phenomena instantly by analyzing overviewed information.**
- 2. Quick decision on the simulated results by experts based on their empirical knowledge.**
- 3. Disclosing the decision, taking actions, and adaptation to minimize impact from the event.**

The Power of ICT

1. The Power to Shape the Future

Solving difficult global challenges and social issues through computing

2. The Power to provide Equal opportunities to All People

Develop user-friendly terminals and interfaces, along with frameworks for promoting ICT implementation in developing countries

3. The Power to Support Safe and Secure Living

Ensure stable operation of social ICT infrastructure and cyber security



**shaping tomorrow with you
for sustainability and beyond ...**