

# 12th Asia-Pacific Eco-Business Forum in Kawasaki

Session 1

## Global enterprise roles as a driving force to promote Eco-cities in Asia

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FUJITSU LIMITED

- Technical Computing Solutions Worldwide
- Experiences of Environment Management Project in Saudi Arabia
- Ongoing Activities for Eco-city in Indonesia with National Institute for Environment Studies (NIES)

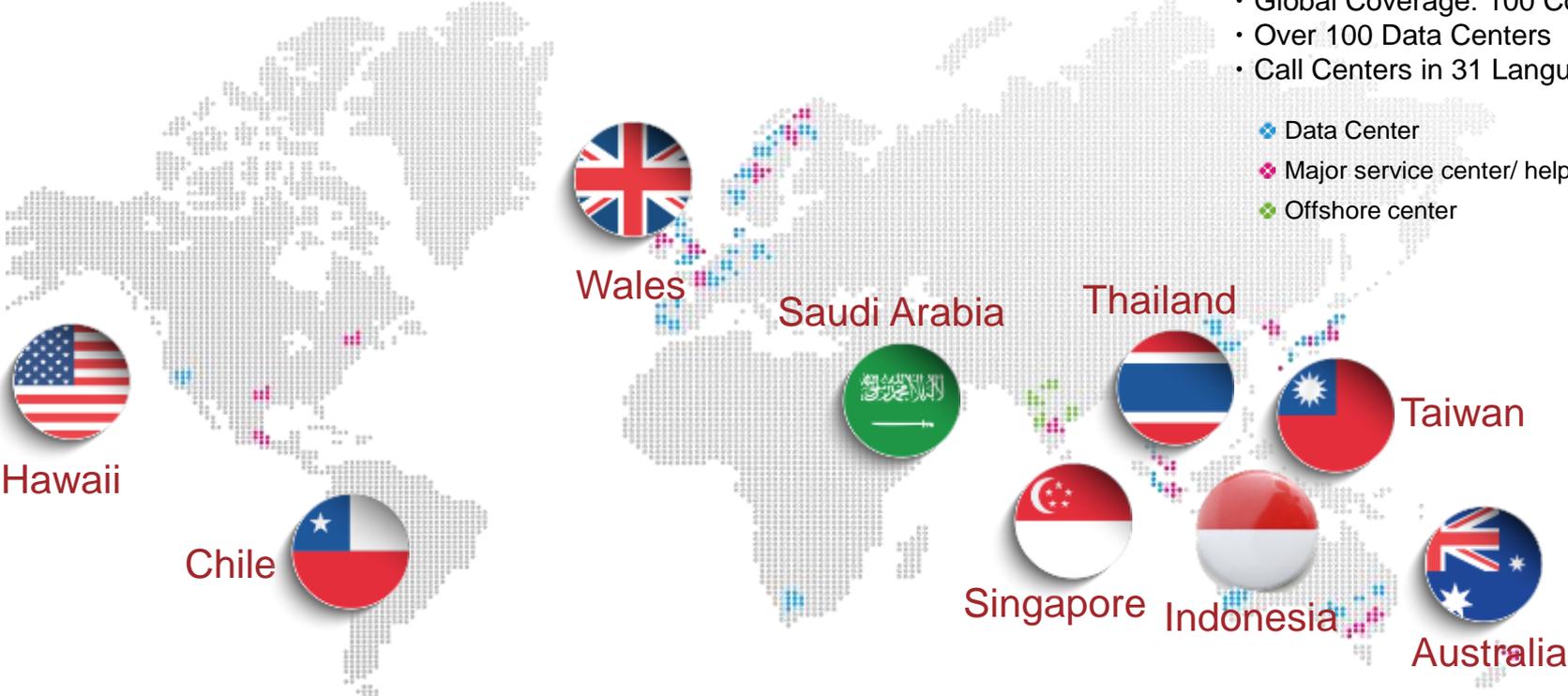
# Technical Computing Solutions Worldwide

# Solutions Offerings Worldwide



- Global Coverage: 100 Countries
- Over 100 Data Centers
- Call Centers in 31 Languages

- ◆ Data Center
- ◆ Major service center/ help desk
- ◆ Offshore center



<p><b>Hawaii</b></p> <p>National Astronomical Observatory of Japan "Subaru Project"</p>	<p><b>Chile</b></p> <p>ALMA "ALMA Project"</p>	<p><b>Wales</b></p> <p>HPC Wales "HPC Platform"</p>	<p><b>Saudi Arabia</b></p> <p>MODON "Environmental Monitoring system"</p>	<p><b>Indonesia</b></p> <p>NIES Energy Mgmt. System for a "Low-Carbon City"</p>
<p><b>Singapore</b></p> <p>A*STAR "HPC Platform"</p>	<p><b>Thailand</b></p> <p>Map Ta Phut Industrial Estate "Atmospheric Monitoring system"</p>	<p><b>Taiwan</b></p> <p>Central Weather Bureau "HPC Platform"</p>	<p><b>Australia</b></p> <p>Australia National Univ. "HPC platform"</p>	

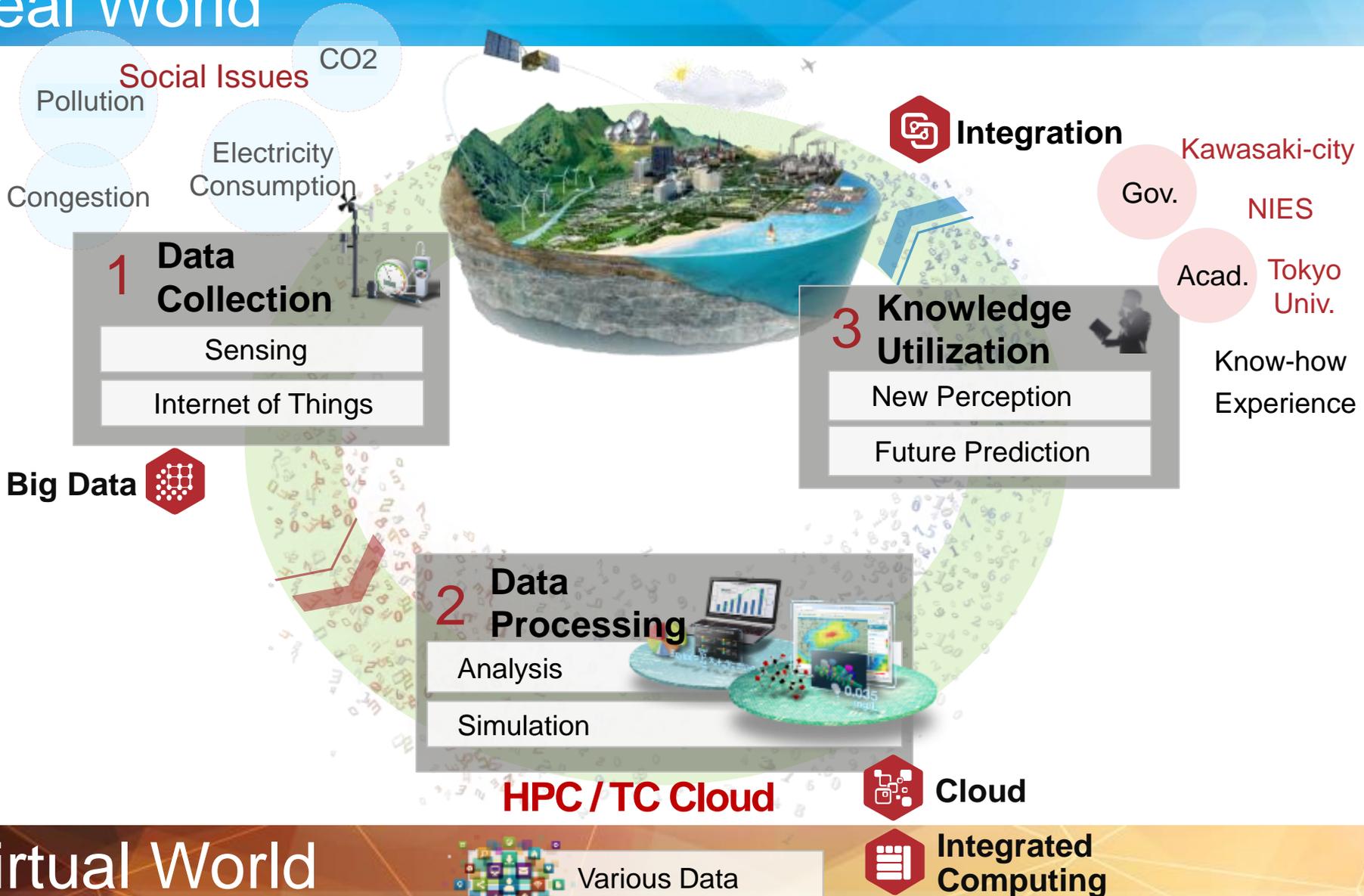
# Fields in Technical Computing



-  Supercomputing
-  High Performance Computing
-  Engineering
-  Meteorology
-  Astronomy
-  Space
-  Environment & Disaster Mitigation
-  New Initiatives

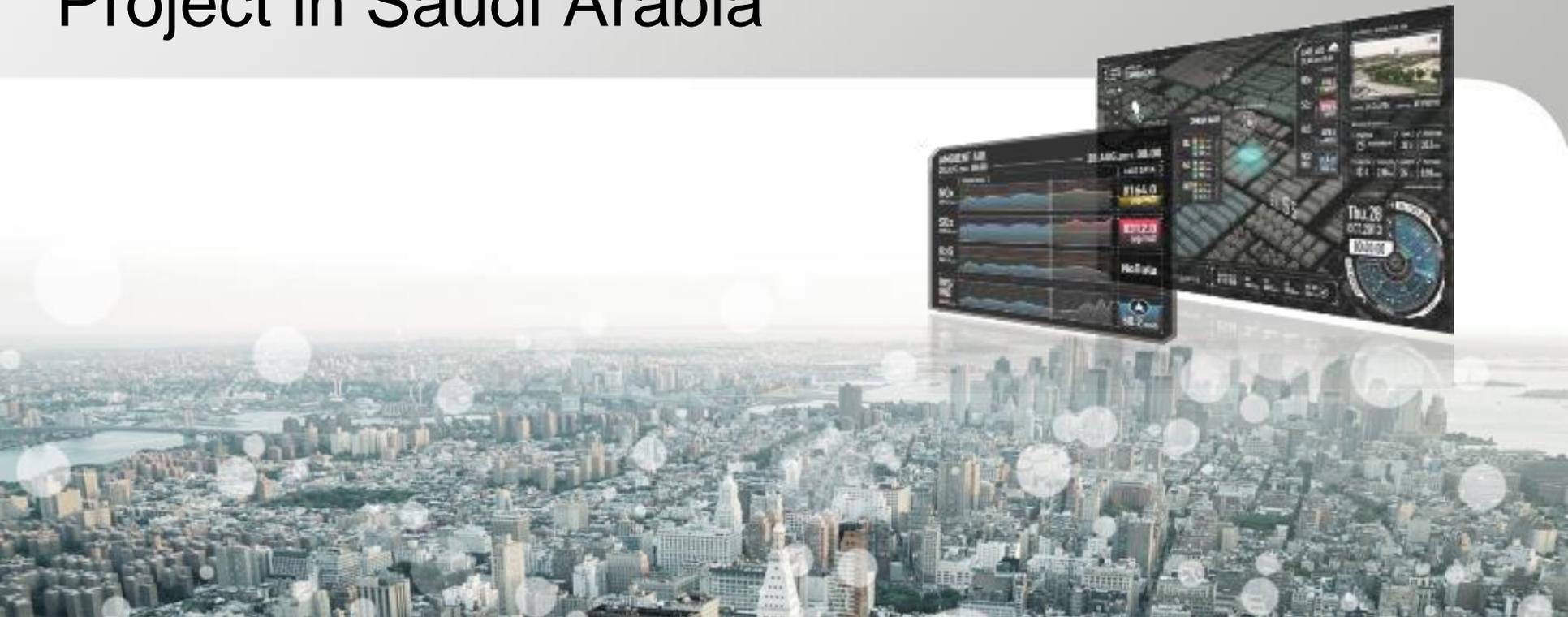
# Roles of Global Enterprise for Eco-city

## Real World



## Virtual World

# Experiences of Environment Management Project in Saudi Arabia



## Total environ management to protect and enhance the environment



## Eco Industrial City

To support and control sustainable growth for existing and new industries

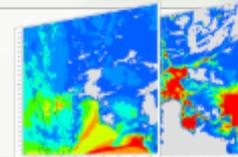
**1 Environ. Monitoring System**



**2 Environ. Mobile Communication**



**3 Environ. Modeling / Simulation**



**4 Environ. Data Analysis / Reporting**



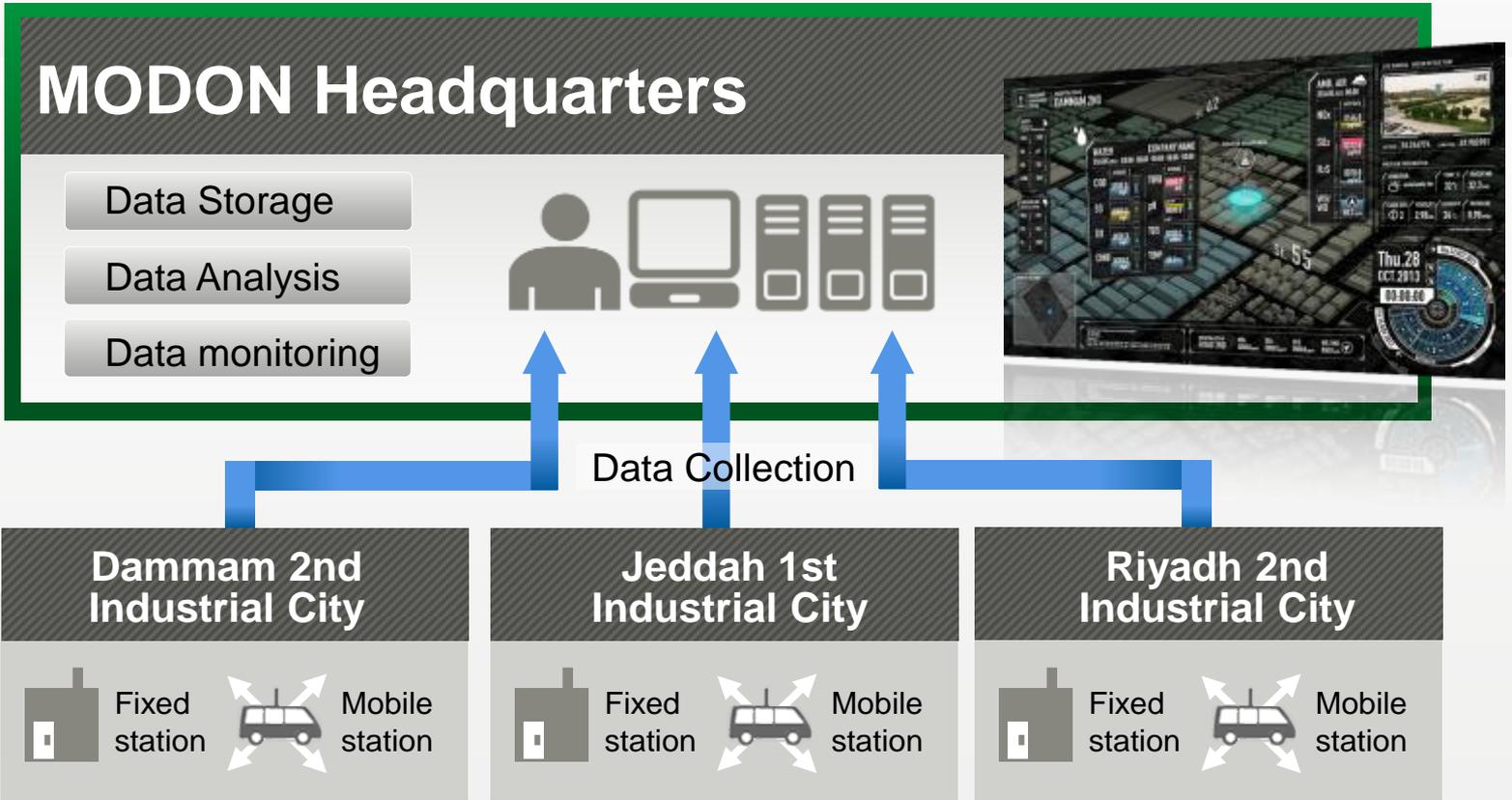
**5 Environ. Consultation**



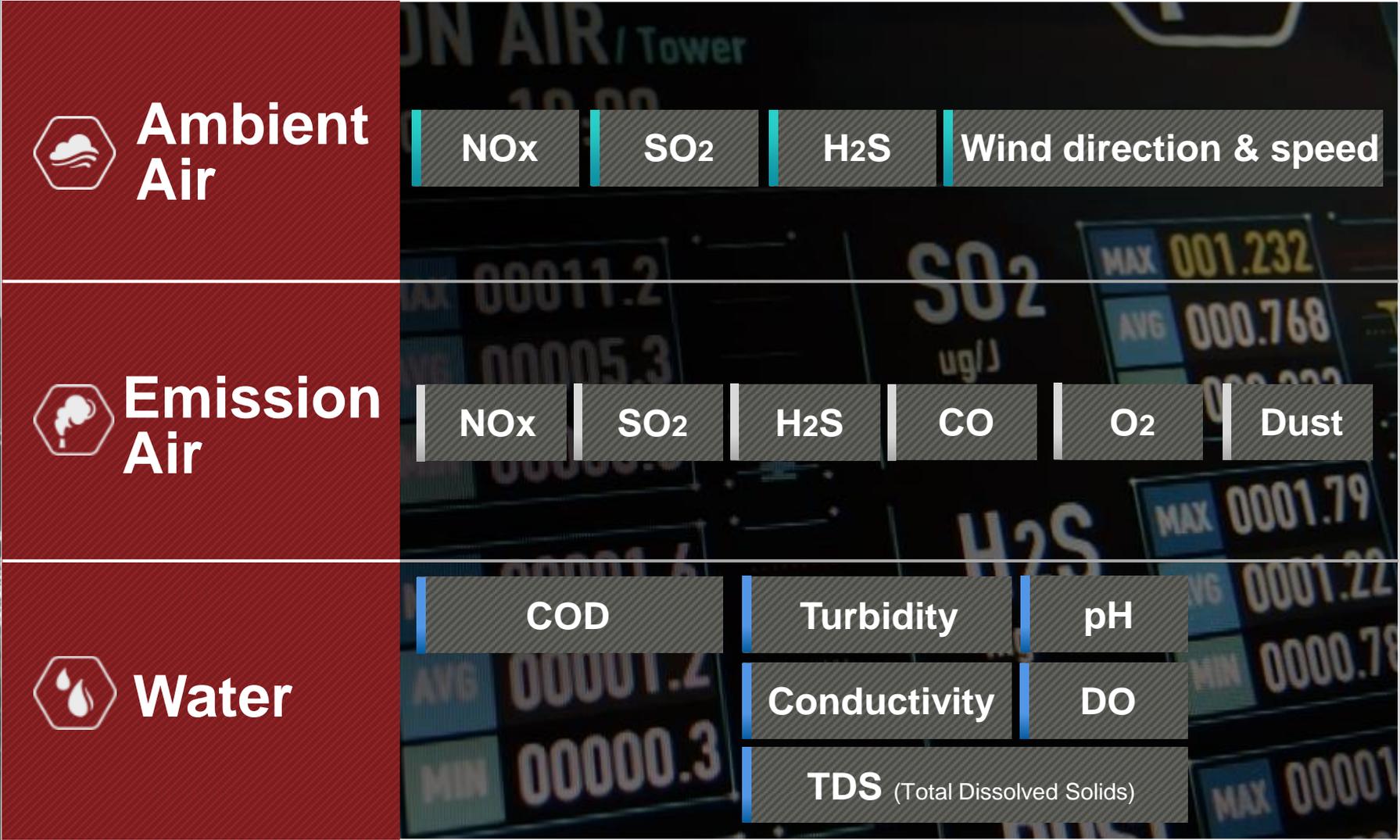
**6 Knowledge Transfer**



## Environmental Management System Overview



# Monitoring Properties





# MODON

Scientific Knowledge

Admin Practice



ICT

FUJITSU

Profs.

Kawasaki City

- Env. Research

- Env. Regulations
- Env. Admin.

Acad.



Ind.

Govt.

Team Japan



**International collaboration team  
has made up the system.**



## GREENAGES Core



PC

Monitoring application  
for the system administrators

## GREENAGES 3D Visualizer



Monitor

Integrated viewer  
for publication purposes

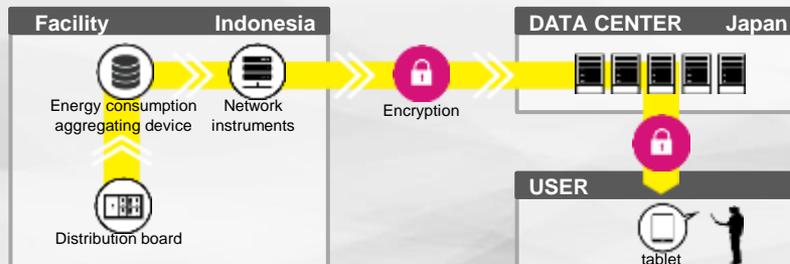
# Visualization for better understanding

# Ongoing Activities for Eco-city in Indonesia with NIES

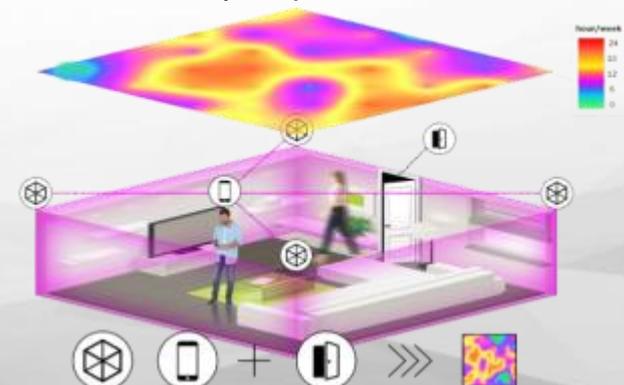
## Energy Monitoring Dashboard for Demand side Client: National Institute for Environmental Studies, Japan

- Energy use monitoring at various types of facilities in the city (commercial / housing)
- Human activity monitoring to improve energy efficiency
- Demand-side energy mgmt. for JCM\*

\*JCM...Joint Crediting Mechanism



Human Activity Map



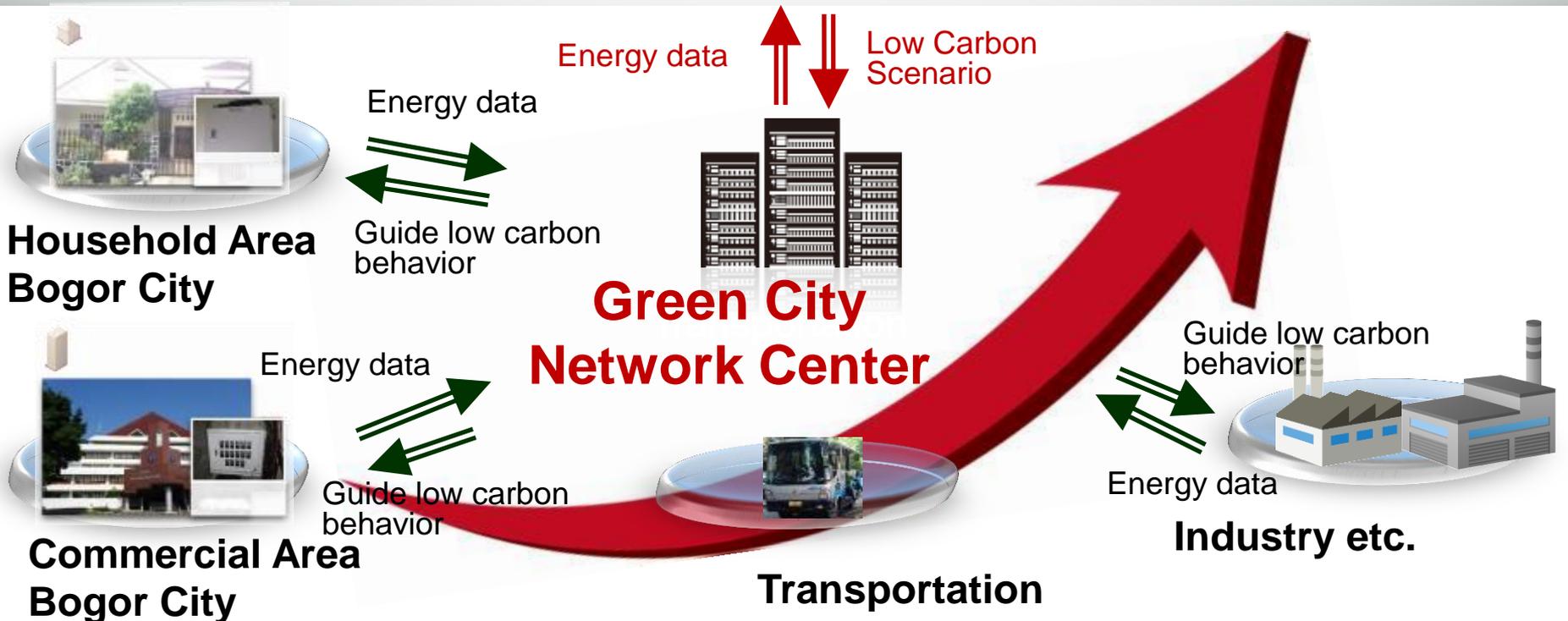
# Smart ICT network will promote and complement the synergetic network functions among multi stakeholders

1 Social Monitoring

2 Low Carbon Scenario

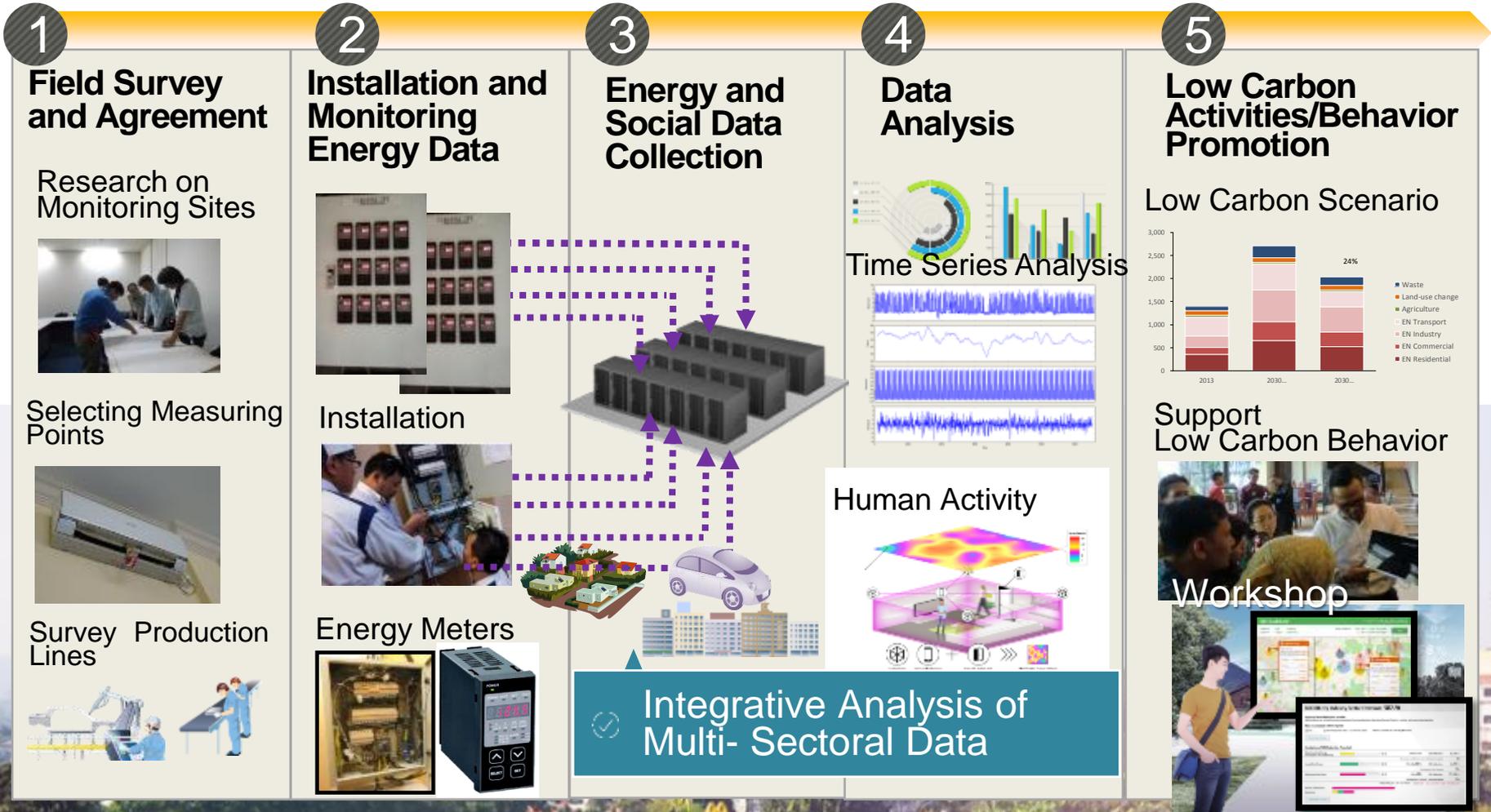
3 Co-Action for Future Green City

## Scientific and Feasible Solutions and Roadmaps toward Green and Low Carbon Future City of Bogor



# Our ongoing Roles for Eco-city

1. Visualization of electricity consumption.
2. Supporting demand side management of urban energy consumption for promoting a low carbon society.



We are realizing tomorrow's "ECOMFORTABLE CITY" with government-academia-industry collaboration through making state-of-the-art ICT infrastructures.

Services focused on Safety and Peace-of-Mind



**Smart Parking**



**Smart Surveillance**



**Biometric Security**

Effective data use and ICT infrastructure



**Environment & Energy Management**



**Emergency Management**



**Traffic Information Management**



**AI**



**Deep Learning**



In order to create new value from information, we offer:



**Data Fusion**



**Modeling**



**Simulation**



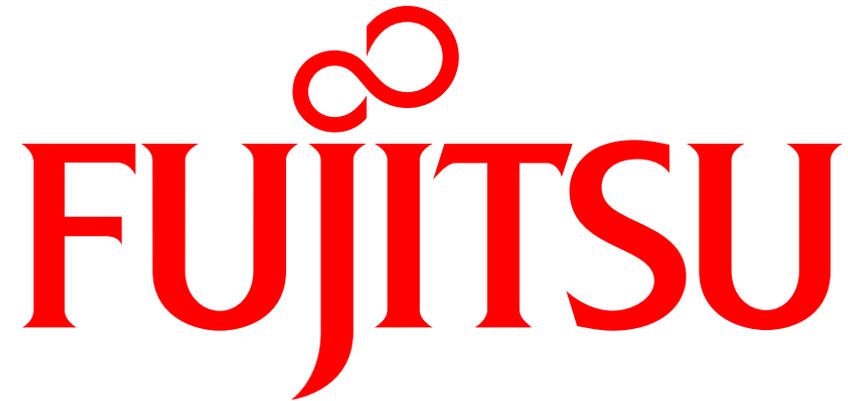
**Big Data**



**Cloud**



**HPC**



shaping tomorrow with you