

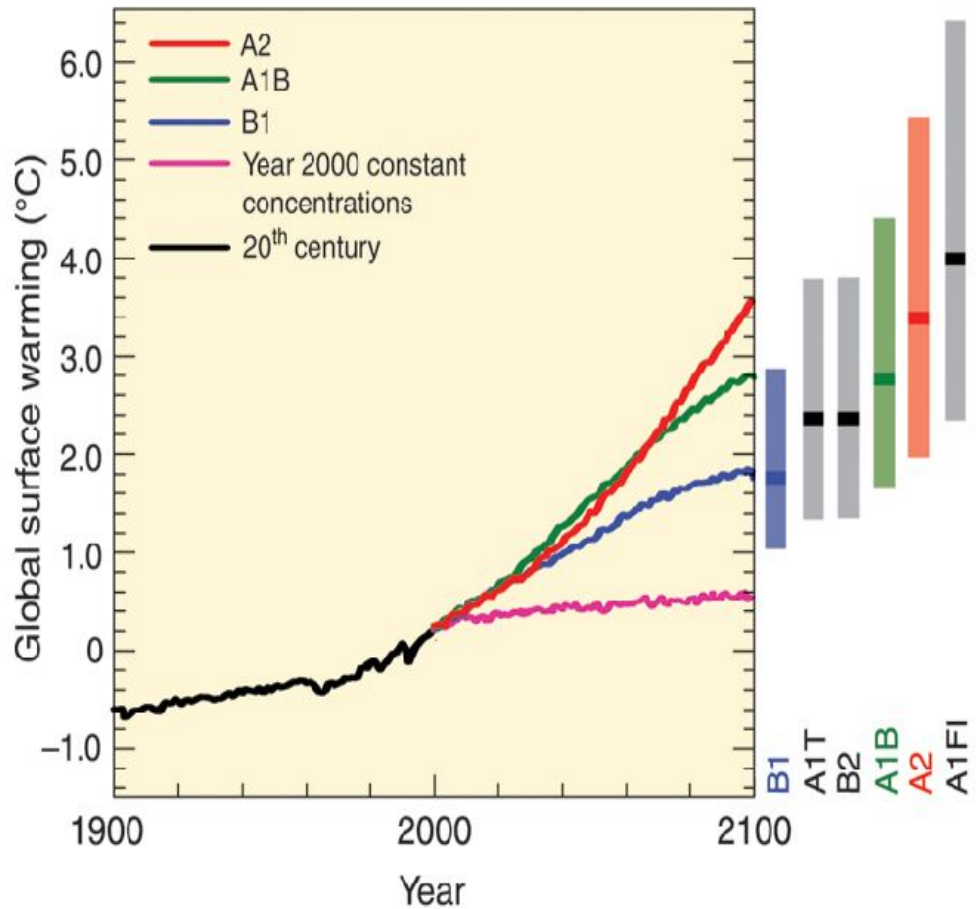
# **An ICT Company's Efforts to Create Corporate Social Value**

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FUJITSU LIMITED**

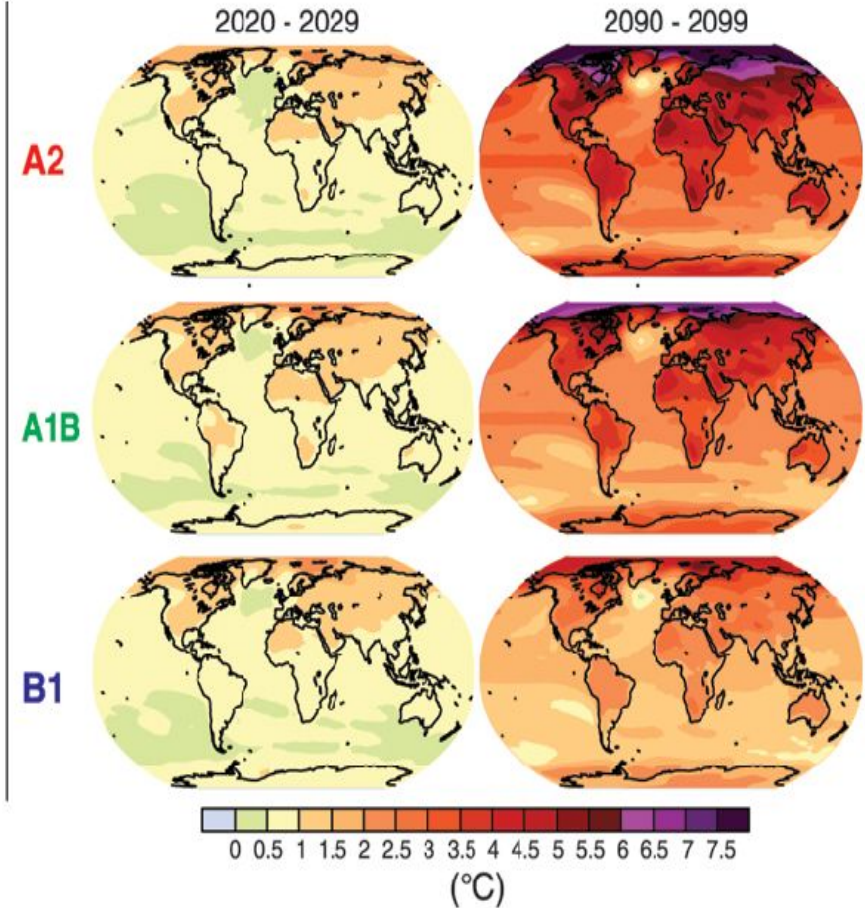
**15th April 2008**

# Global Warming by GHG



<Increase in ground temperature (comparison with 1980 to 1999)>

\*Increases in 2090 to 2099 based on 1980 to 1999



<Increase in annual average temperature in 21st century (comparison with 1980 to 1999)>

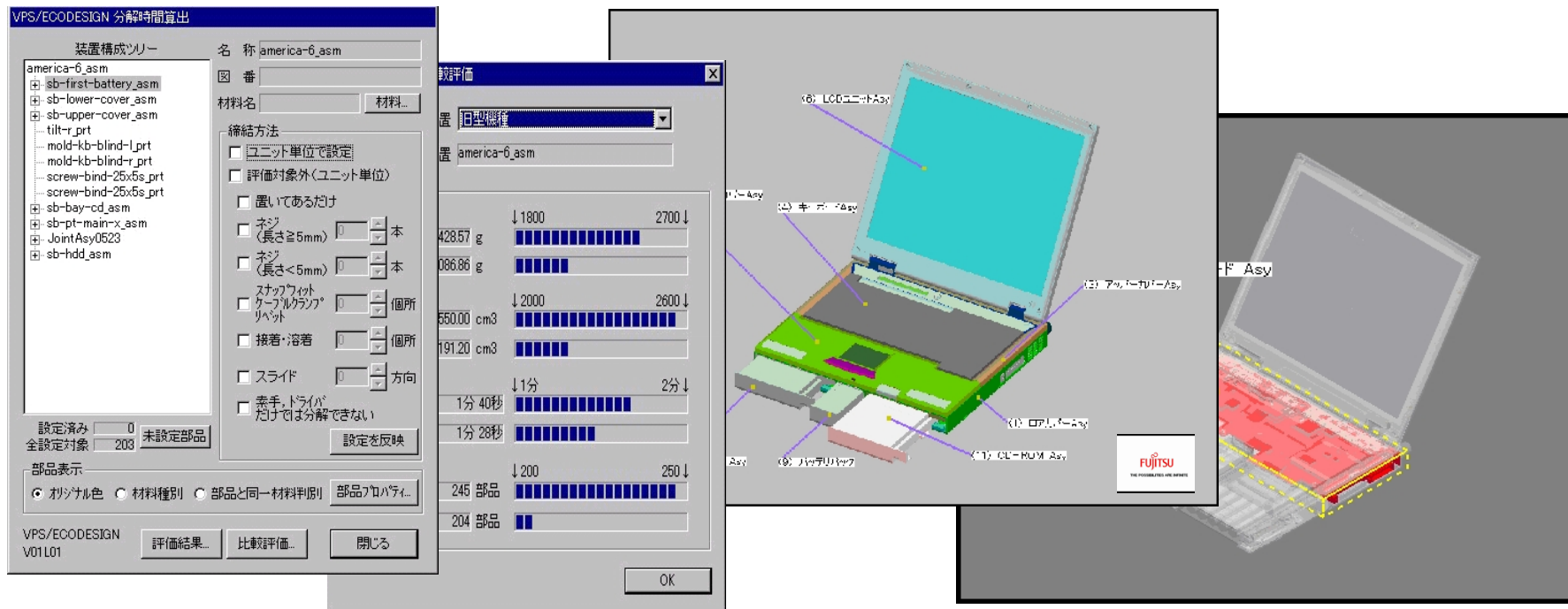
[Source: IPCC 4th evaluation report (Integrated report) (November 2007)]



- **Minimize Environmental Load on Business Operations**
- **Reduce Environmental Load “Of” ICT itself**
- **Reduce Environmental Load “By” ICT solutions**

## Environment-Conscious Efforts at Design Stage

- Manufacturing not making prototype
- Environmental load simulation
- Remote meeting sharing the blueprint
- Disassembly evaluation



## Use of VPS (Virtual Product Simulator)





**Labor saving / efficiency improvement**

**Downsizing**

**Reduction of paper**

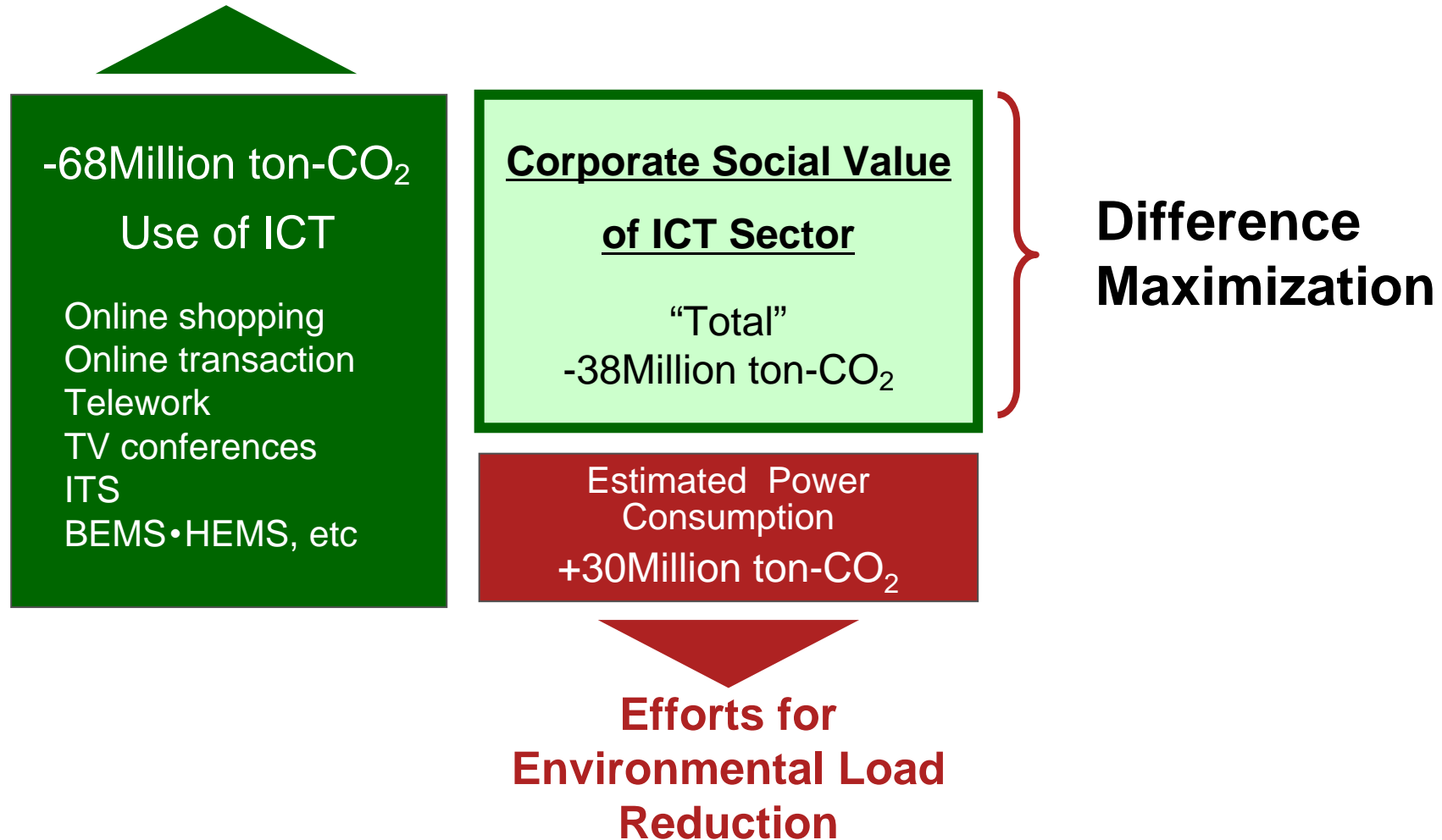
**Dematerialization**

**Transcendence of time and space**



**Further progress of ICT is necessary  
for energy saving and the low  
carbonization securing convenience.**

## Contributions



<CO<sub>2</sub> reduction by use of ICT in Japan, 2012>

[Source: MIC Japan]

Reduce Environmental Load  
**“Of”**  
ICT itself

Reduce Environmental Load  
**“By”**  
Promoting ICT solutions



**Provide Green ICT by concentrating  
Know-how & Technology  
of FUJICTSU Group**



## Green Policy Innovation

Reducing Social Environmental Load

For Customers

Fujitsu Green ICT

Solutions

Software/Services (Outsourcing, Consulting, etc)

ICT Infrastructure

Platforms, Network, Software  
Ubiquitous, Electronic Devices, Semi-Conductors

Research, Development, Design, Manufacturing,  
Procurement, Promotion, Recycle, etc.

Reducing Environmental Load  
"By" introducing  
ICT solutions

Reducing Environmental Load  
"Of" ICT itself

Green Know-How  
By Incorporated  
Practices



Reduce Environmental Load  
“Of” ICT itself

accum. **760K** ton-CO<sub>2</sub>

Reduce Environmental Load  
“By” ICT solutions

accum. **6.3M** ton-CO<sub>2</sub>

CO<sub>2</sub> Emission  
Reductions

**FY2007-2010 (4years)  
over 7 Million ton-CO<sub>2</sub>**

Note: This trial calculation is based on amount of Japanese market of FY2006.

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# Environmental Load Reduction “Of” ICT itself



## Development of Environmental Materials



Made from corn \*

\* Made from industrial corn



Application to housing of PC

## Equipment Design for Environment

- Reduced power consumption by 57%
- Reduced installation space into 1/8,
- Reduced number of cables into 1/3

By function integration and consolidation of the equipment



Network server  
IPCOM EX2000

## Environmental Conscious System Architecture

Reduced carbon emission by equipment integration and consolidation for IDC application



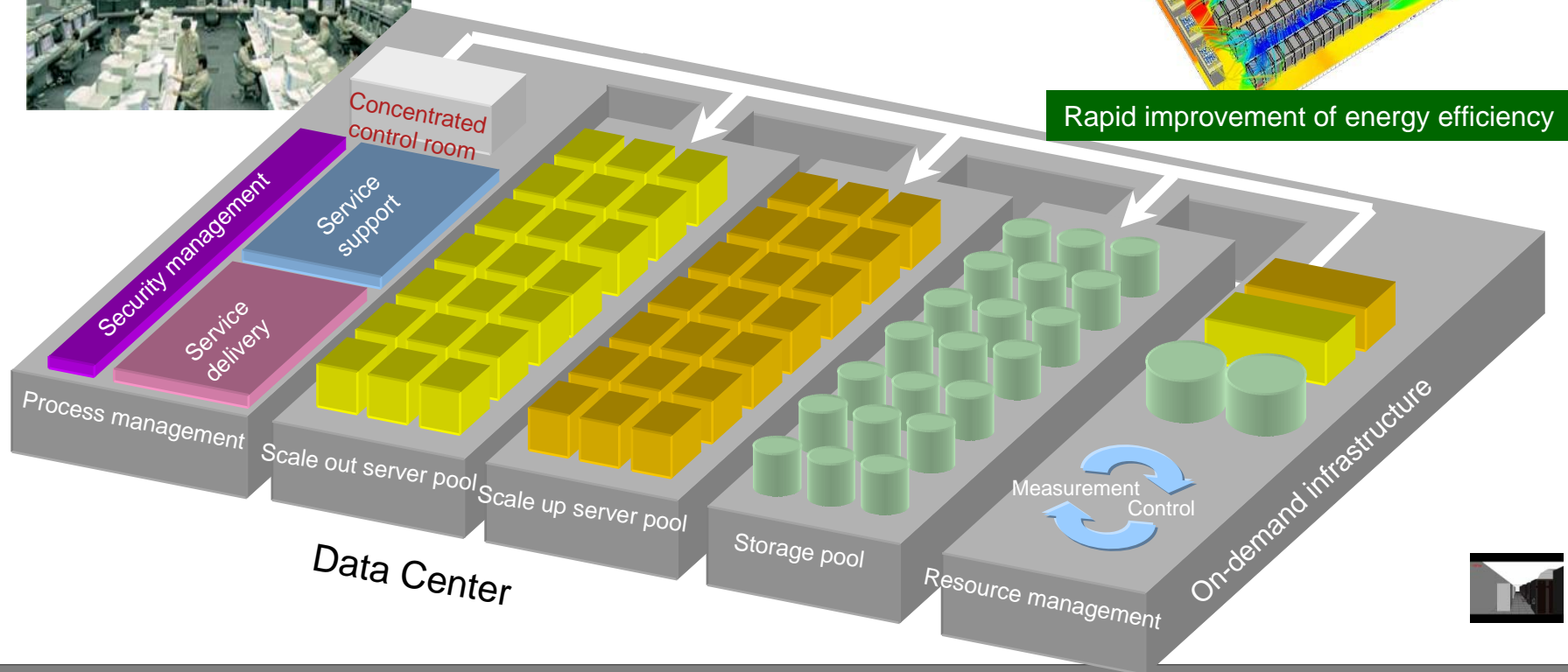
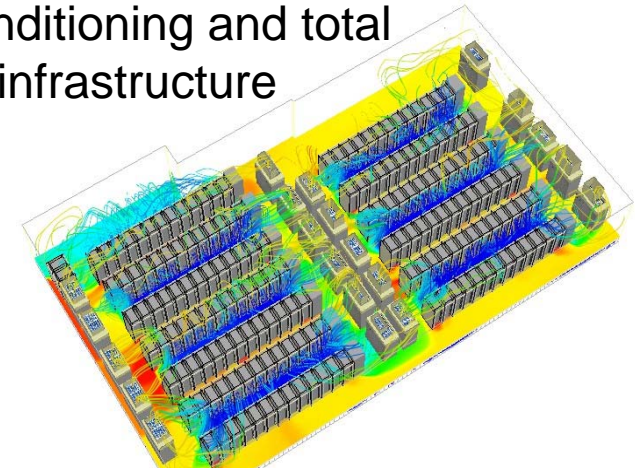
Blade Server  
BX Series

# Environmental Load Reduction “Of” ICT itself



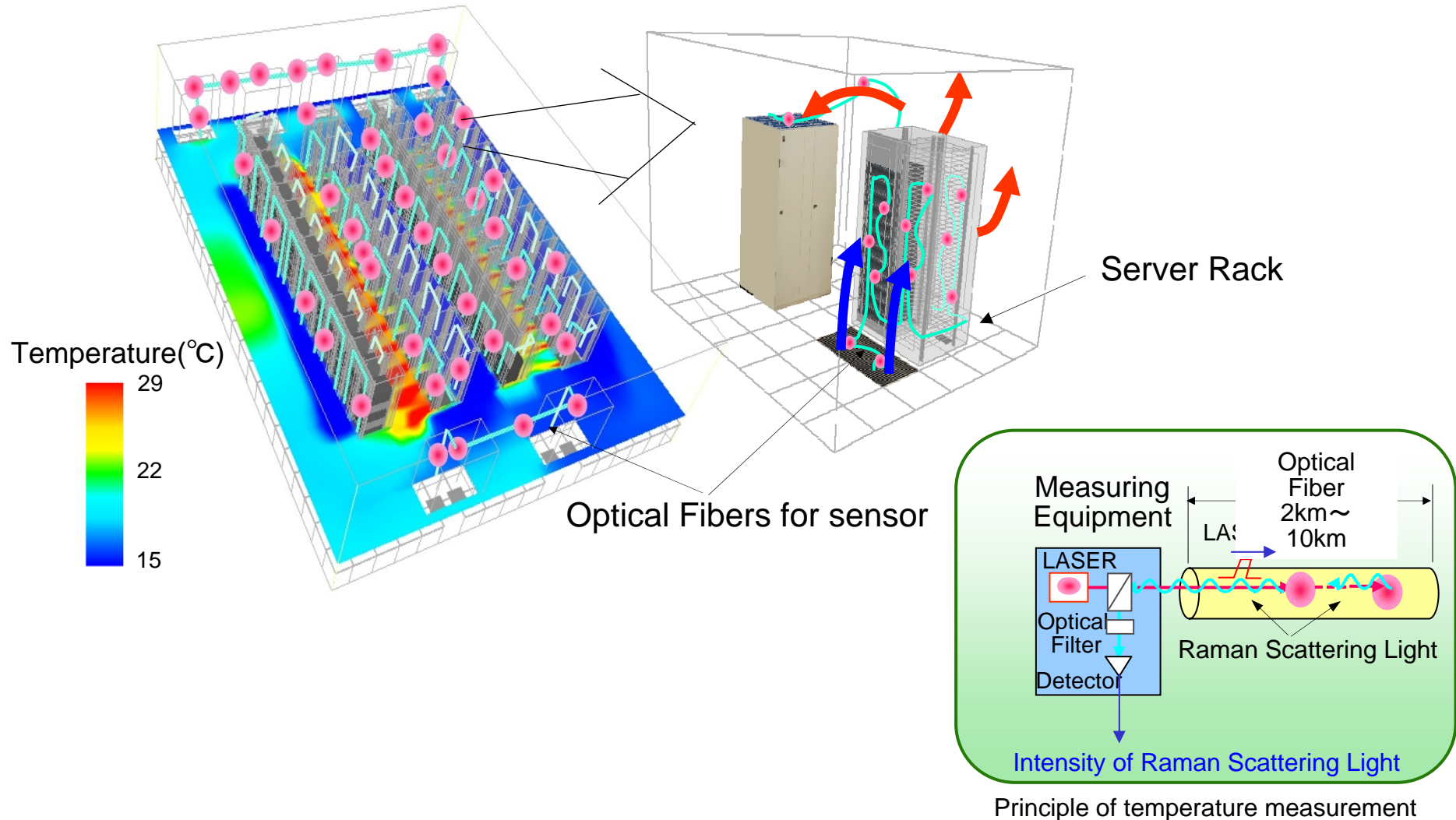
## Energy saving and optimization of data center

Efficiency improvement of facilities of building and air-conditioning and total solution of energy saving and optimization including ICT infrastructure



# Environmental Load Reduction “Of” ICT itself

## Optical Fiber-based Multi-Point Temperature Measurement Technology





# Carbon Reduction by “Green Policy Innovation”

Reduce Environmental Load  
“Of” ICT itself

accum. **760K** ton-CO<sub>2</sub>

Reduce Environmental Load  
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CO<sub>2</sub> Emission  
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## Effects by introducing ICT solutions

Increasing work efficiency, productivity and quality etc.



Environmental aspects

Electronic distribution of information

⇒ reduction of **energy** and **raw materials** related to products

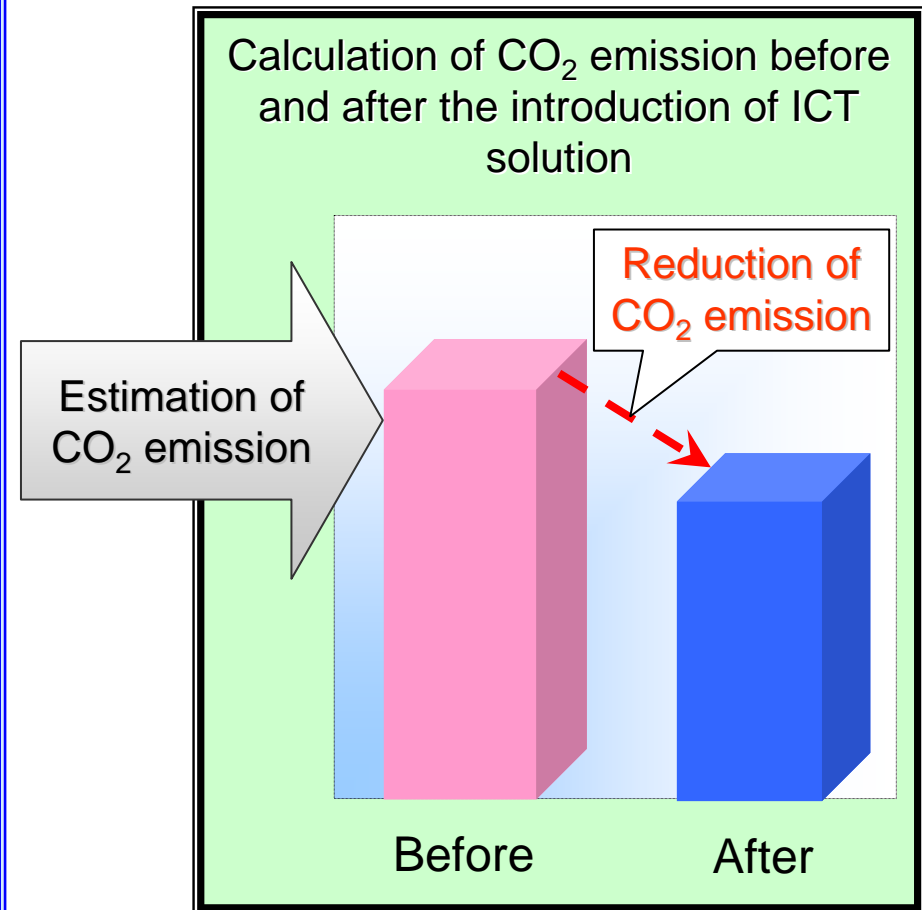
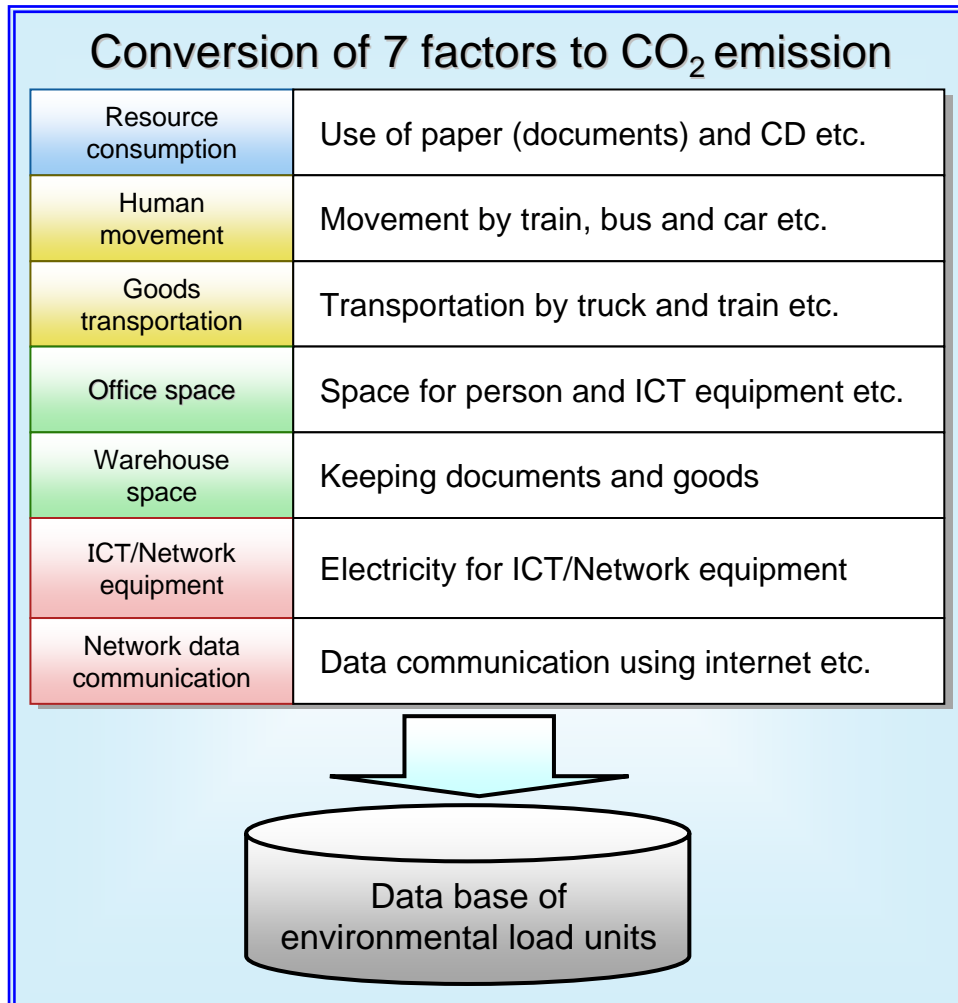
Elimination of human movement and goods transportation

⇒ reduction of **energy** related to transportation

Efficient use of space

⇒ reduction of **energy** related to offices and warehouses

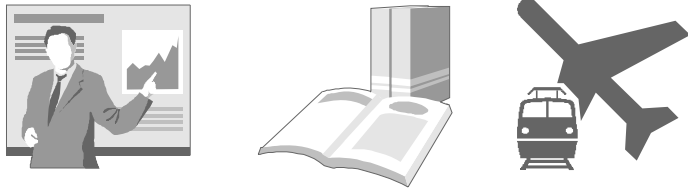
## Evaluation of *CO<sub>2</sub> emission* in *7 environmental factors* at *the operation stage* of an ICT solution



## “Internet Navigware”

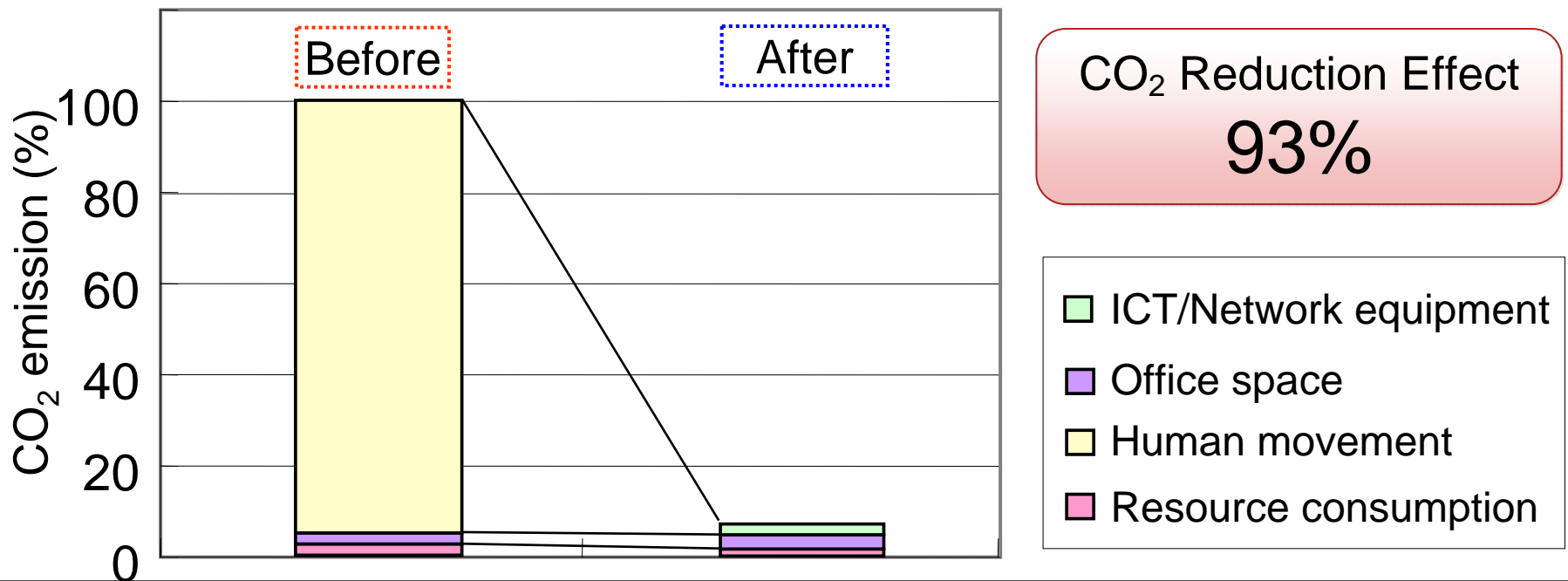
**Before**

- Movement to the training institute
- Training by lectures with textbooks



**After**

Trainees can study the training courses at their desk via internet.



CO<sub>2</sub> Reduction Effect  
**93%**

- ICT/Network equipment
- Office space
- Human movement
- Resource consumption

# A Ward office inside business information system

## “IP Knowledge”

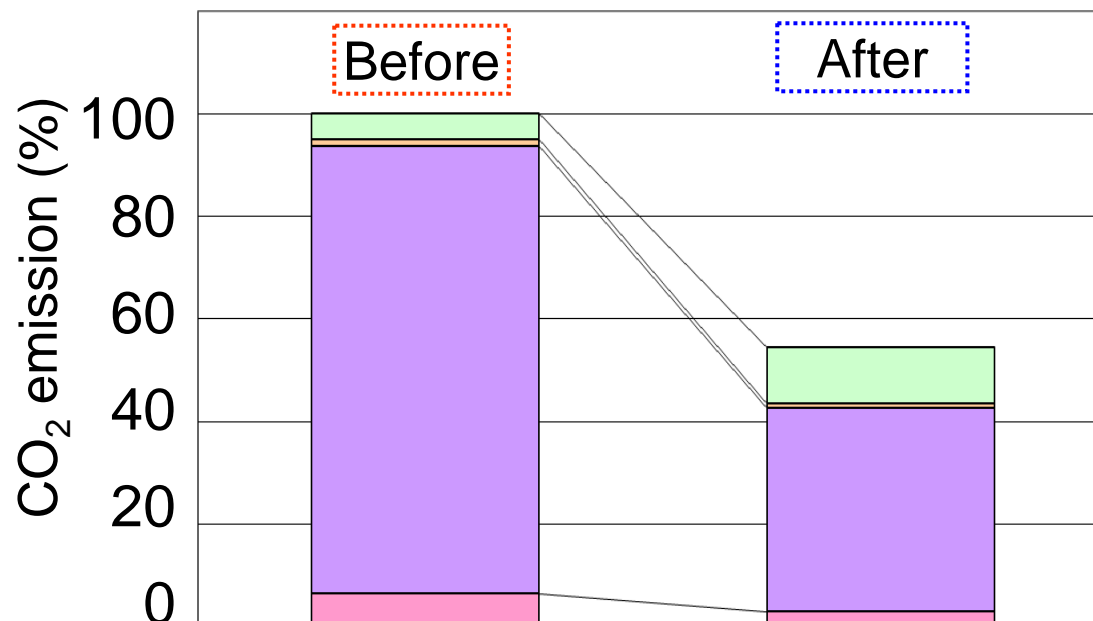
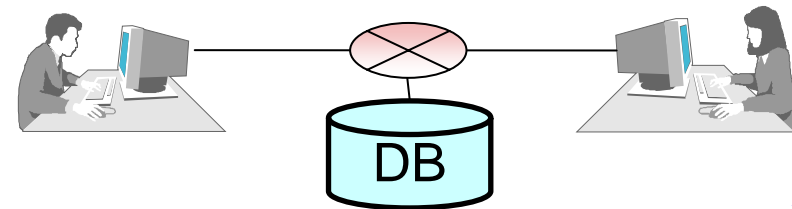
Before

All settlements processed with paper documents.



After

90% or more settlements are computerized.



CO<sub>2</sub> Reduction Effect  
**45%**

- ICT/Network equipment
- Warehouse space
- Office space
- Resource consumption

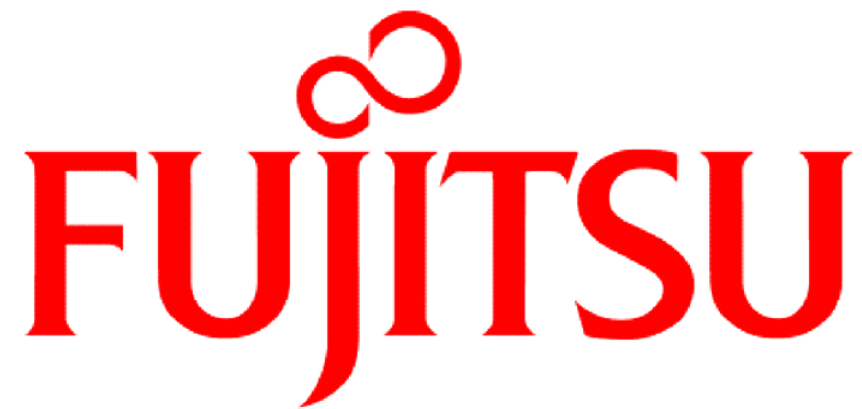


**Standardization of the analysis & evaluation method, etc. are important.**

- Building consensus about contribution of ICT to the whole of society
- Realizing the concept of CO<sub>2</sub> emissions credit through ICT

**Maximizing Corporate Social Value of ICT sector**

**A positive efforts of related organizations including ITU is requested.**



**FUJITSU**

**THE POSSIBILITIES ARE INFINITE**