Cathy Pickering
Smarter Planet Leader, North East Europe, IBM

Sustainable Cities

•http://news.bbc.co.uk/1/hi/world/europe/8526217.stm

The Reality of Global Integration

The world is connected

ECONOMICALLY

SOCIALLY

TECHNICALLY

A series of shocks

- Climate change
- Energy geopolitics
- Global supply chains
- Terrorism
- Financial crisis
- Population

Engaging with the y generation – climate is decadal and impacts new generations

The y generation cares about sustainability

Need to share resources across a growing global population
Will work differently
Crowd sourcing
Move to Cities
Sustainable Transport and Energy
New standards for built environment
NGOs and citizens more influential

kewbridgeecovillage.wordpress.com/

Risk exists at macro and micro scale

Water Scarcity

Food

Shelter

Energy

Health

•http://img.thesun.co.uk/multimedia/archive/00574/hurricane-Ike-main-_574601a.jpg

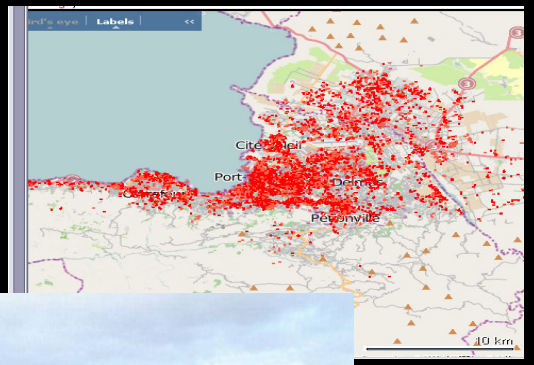
Linking observations to provide help in Disaster Management and prevention

International Charter for Space and Major Disasters

50% Flood Activations

Collaboration between

ESA
World Bank
Academia
Re-Insurance
NGOs
Governments



www.virtualdisasterviewer.com/vdv/index.php?selectedEventId=7

Raising awareness and encouraging behavioral change

Collaborative Initiatives can

Move the climate change debate into government policy

Establish reporting recognising uncertainty

Provide pro-active guidance to save life and reduce damage

Work with WMO and Environment Agencies to improve planning policy and improve defences

Encourage open exchange of data

Facilitate collaboration of Academia, Government Agencies, Citizens, NGOs

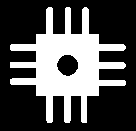
“Fair Trade policy”

Courtesy of Prof Fang, Beijing Normal University

The Digital and Physical Infrastructures of the World are Converging

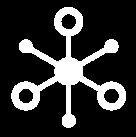
Computational power is being put into things we wouldn't recognize as computers. Indeed, almost anything — any person, any object, any process or any service, for any organization, large or small — can become digitally aware and networked.

Infusion of Academic Research into all aspects of cities reflecting the way the world works



Earth Observation to predict and validate flooding, wind storms, earth quakes and ash

INSTRUMENTED



Combining business, academic, government and NGO data can facilitate understanding

INTERCONNECTED

Develop collaborative **citizen** focused policy exchanges

INTELLIGENT

The World is Getting Smarter

Smarter Transportation

Smarter Education

Smarter Food Systems

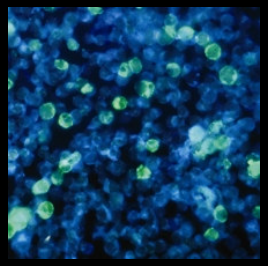
Smarter Healthcare

Smarter Energy

Smarter Retail

Smarter Countries

Smarter Government Services



Smarter Water

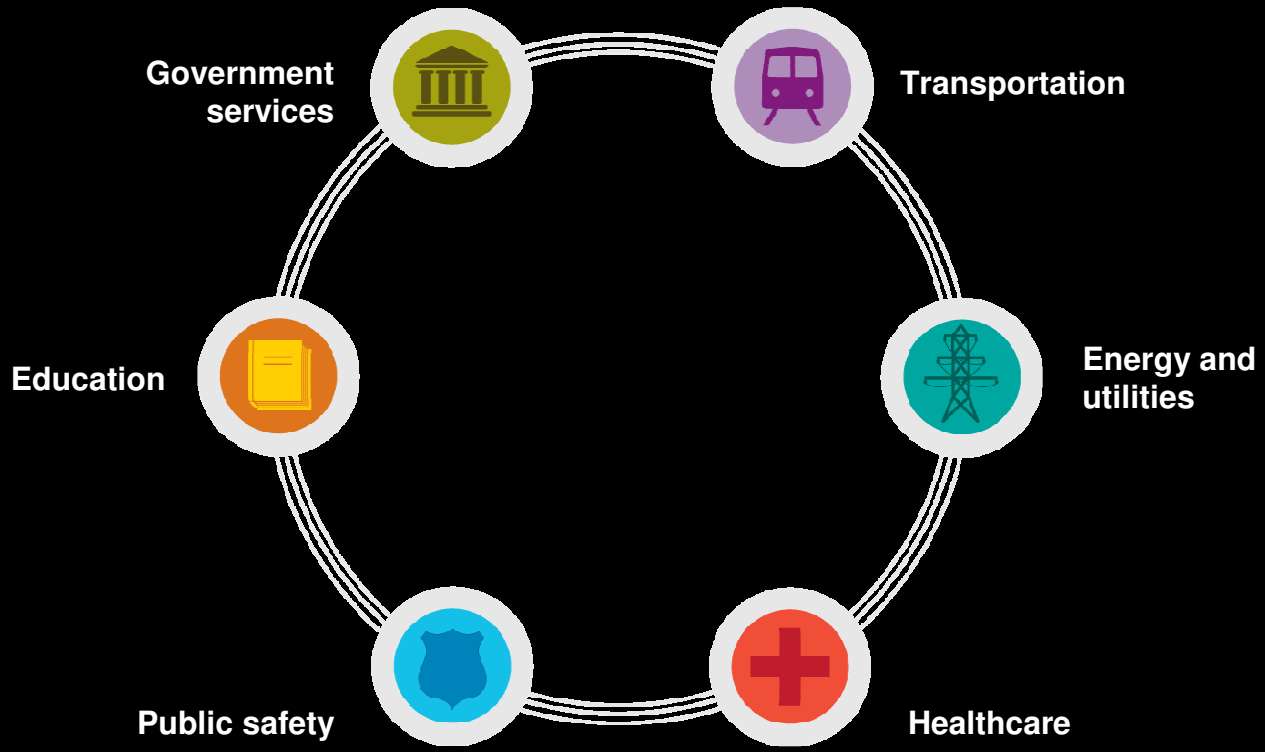
Smarter Public Safety

Smarter Regions

Smarter Cities

The City: A System of Systems

The city is a microcosm of the major challenges and opportunities facing the planet today—intensified and accelerated. Here, all man-made systems come together and interact with one another.

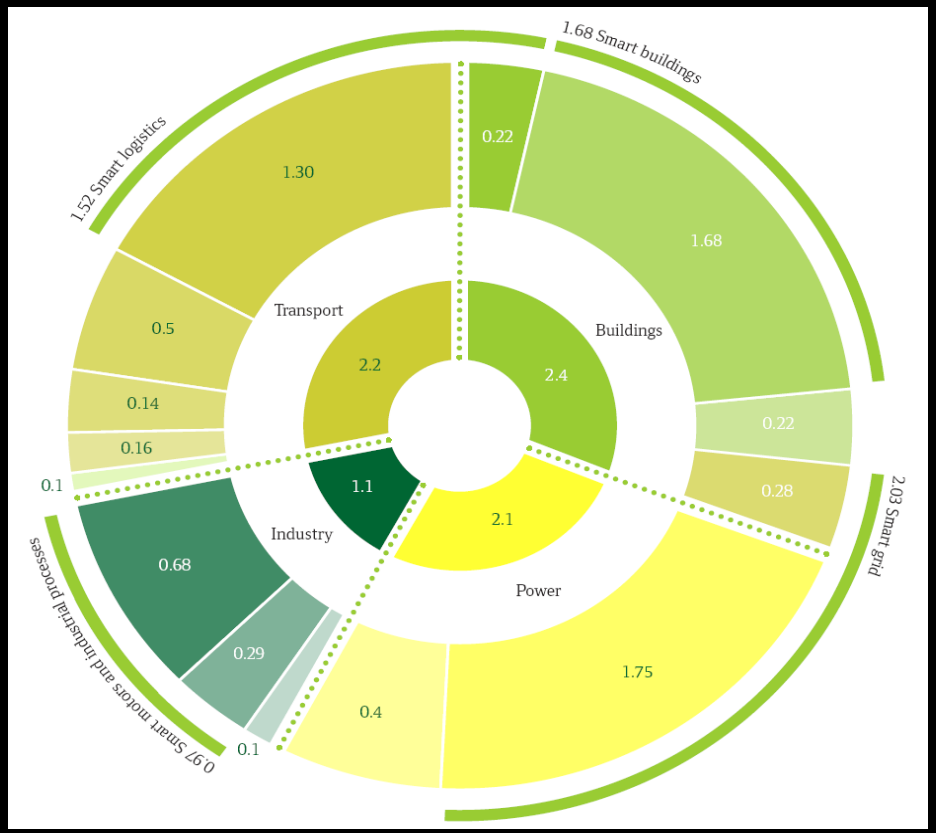


Smarter Buildings can help tackle climate change

Information and Communications Technology (ICT)
can significantly improve energy efficiency and reduce GHG emissions, driving potentially $1 Trillion in energy savings per year by 2020 and 7.8 Gigatons CO_2e abatement

Smart Logistics: $442B/year

Smart Industrial Automation: $107B/year



Smart Buildings: $341B/year

Smart Grids: $125B/year

Source: The Climate Group, "Smart 2020: Enabling the Low Carbon Economy in the Information Age." 2008

The New Leadership Requirements for 21st Century Insurers

I. COLLABORATION

II. STANDARDS

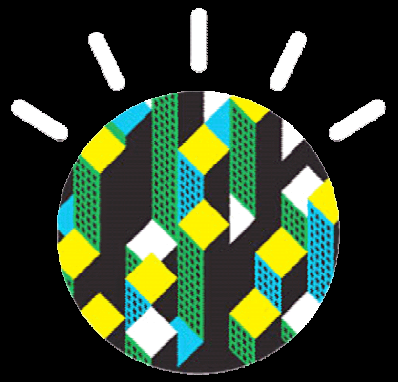
III. OPENNESS AND INNOVATION

3 Questions for the workshop

Are we
COLLABORATING
effectively?

Are we asking the right questions to provide the
Services
citizens and governments expect of us?.

How do we
ADAPT
to the challenges of the 21st Century?



What can we DO?