



Intelligent Communities, Broadband and Technology Innovation: Alternatives to Energy Consumption

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Former President, IBM Canada

IBM commitment began 35 years ago



1992

IBM becomes charter member of Energy Star program

2005



2006



IBMers "jam" on innovations for a better planet, and IBM invests \$20M

40%

reduction in IBM's total worldwide CO2 emissions attributable solely to its energy conservation efforts between 1990 and 2005.

1990

- * Big Green Innovations
- * Intelligent Utility Network

1971

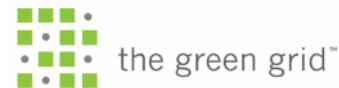
IBM formally establishes a Corporate policy on Environmental Affairs



1996

In remarks at a White House briefing on climate change, Vice President Gore applauded IBM's new PFC emissions reduction goal.

"These developments send a strong message: A healthy environment and a healthy economy go hand in hand," the Vice President said. "Through technology and innovation, we can turn this challenge into a huge opportunity for business and for America. And the sooner we act, the easier it will be."



Collaborating to solve problems

Pervasive Computing circa 2000

Networked
Home



Mobile
e-business



SmartCard



Networked
Vehicle

"A billion people interacting with a million e-businesses
with a trillion intelligent devices interconnected ..."

L.V. Gerstner

Wired to Work: Net Generation People / Businesses

- Flexibility
- Increased productivity
- Increased morale
- Work / life balance
- Attraction / retention
- Job retraining
- Life-long learning
- Global opportunity
- Impact to the environment



Where we are at today: The new normal

- More than 1/3 of IBM's global workforce either works at home or is mobile
- In the US alone, IBM's work at home program conserved:
 - more than 8 million gallons of fuel
 - avoided more than 68,000 tons of CO2 emissions
- IBM ranked 15th on the 2006 list of Fortune 500 companies: US EPA's Best Workplace for Commuters Program



Things IBM is doing

- **Flexible work arrangements**
 - Work-at-home
 - Mobile / telecommuter
- **Global workforce**
 - Conference calls / Web conferencing / Podcasts
- **Online education / training -- eLearning**
- **Instant messaging**
- **ThinkPlace**
- **Social networking**
- **Global online collaboration ... Jams**

InnovationJam

- 150,000 participants in 104 countries
- 46,000 ideas contributed
- \$100M investment over two years to bring 10 ideas to reality
 1. Smart Healthcare Payment Systems
 2. Simplified Business Engines
 3. Real-time translation Services
 4. Intelligent Utility Networks
 5. 3D Internet
 6. “Digital Me”
 7. Branchless Banking for the Masses
 8. Integrated Mass Transit Information System
 9. Electronic Health Record System
 10. “Big Green” Innovations



*IBM's clients, business partners and family members collaborated on how emerging technologies could create new solutions to **business and societal opportunities** that create **innovation that matters**.*

Why Intelligent Energy?

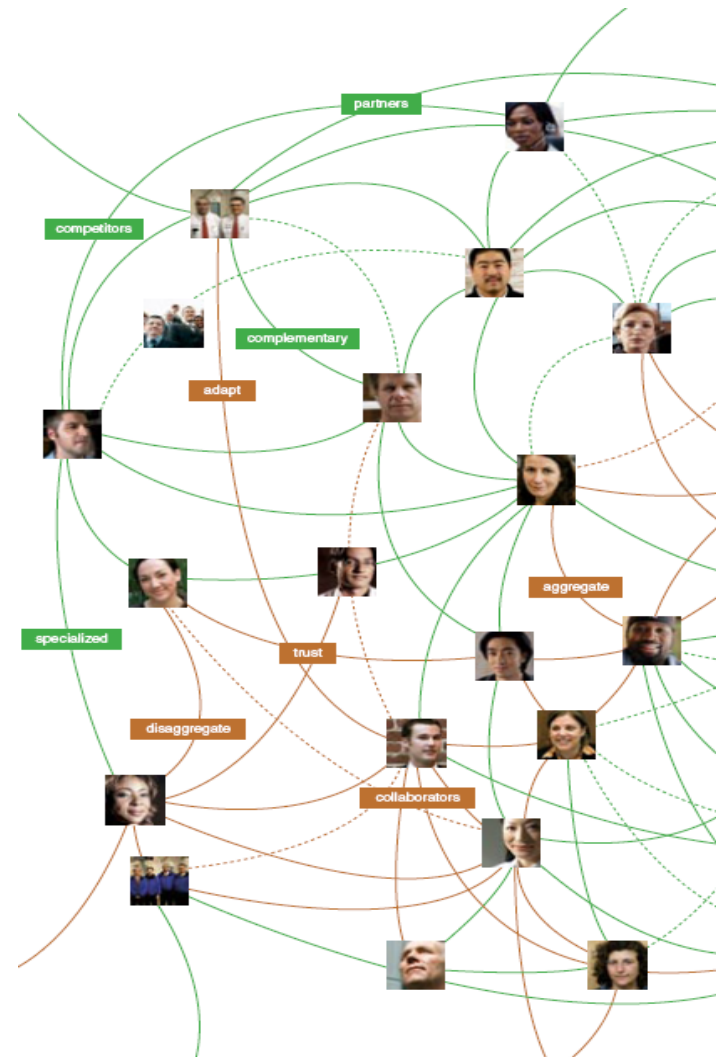
Intelligent Utility Network: an information grid as important as the power grid itself

- A holistic approach to energy and climate that integrates business and technology to overcome challenges through collaborative innovation.
- New business models based on innovation and transformation to manage energy sources, supply, assets, demand, quality, reliability and impact on climate change.
- No single entity can solve energy and climate challenges. It requires coordination between energy providers, government, business and consumers.



Web 2.0: The Participatory Web

- The web has evolved to facilitate individual participation with blogs, MySpace, Facebook, etc. **(social networking)**
- **Blogs** – one of the most highly touted features of Web 2.0
 - Exponential growth driving web participation today
 - Estimate: a new blog is created every second
- **Wikis** – online collaborative environment
 - Leverages the “wisdom of crowds”
- **Second Life** – online virtual world
 - Explore, meet others, socialize, participate in individual and group activities and create and trade items and services from one another ,
 - Way to include remote employees in meetings / conversations



What we need to do

- More than working at home ... it's about being flexible, competitive and part of a global community
- No single entity can solve energy and climate challenges. It requires coordination between energy providers, government, business and consumers
- Increased access to broadband and advanced technology ... is making global collaboration and social networking a reality
- Everyone needs to engage ... not just business or government ... everyone

