IBM Institute for Business Value

The emergence of the eco-efficient economy

The IBM Eco-efficiency Jam 2010: Key messages from a global online discussion on eco-efficiency[1]

Overview

In early 2010, IBM brought together leaders from various businesses, institutions and geographies to determine the actions to build a sustainable future.

The consensus: eco-efficiency will be the biggest economic "game changer" for organizations over the next 20 years. To get there will require stakeholders – public, private, institutional and others – to collaboratively address the key drivers, challenges and opportunities of the emerging eco-efficient economy.

What practical actions can be taken today and in the near future to create a more eco-efficient and sustainable economy?

To answer this question, IBM brought together for the first global Eco-efficiency Jam 1,600 business executives, government officials, non-governmental organization (NGO) leaders, journalists, analysts and environmental experts from more than 60 countries. Discussion focused on the primary drivers, opportunities and challenges associated with an eco-efficient economy.

Three core conclusions emerged from the collaborative discussion:

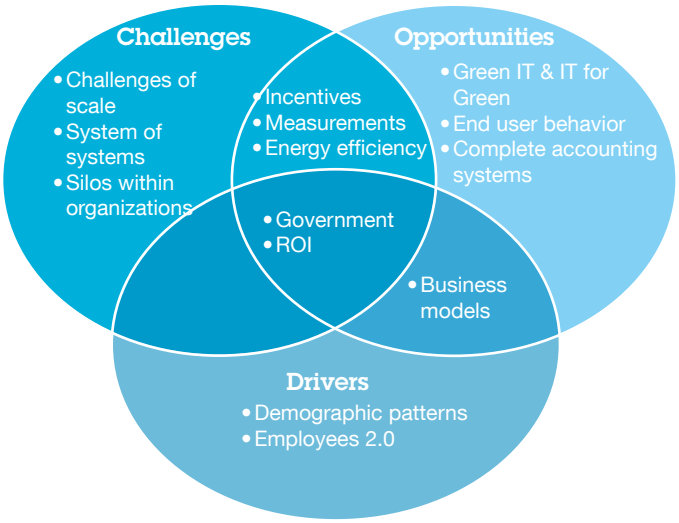
- Eco-efficiency is poised to become the biggest economic game-changer for organizations over the next 20 years.
- Direct and collaborative action from a range of stakeholders will be needed to address the challenges and opportunities posed by eco-efficiency.
- There is a strong imperative for stakeholders to advance the eco-efficient economy.

The emerging eco-efficient economy

Jam participants clearly asserted the need for a fully self-sustaining economic system, which would be supported by new sources of revenues, generate new demand and create new markets for eco-efficiency.

Jam discussions also revealed a number of key stakeholders with important roles in driving forward eco-efficiency, including government and policymakers, public and private enterprises, NGOs, investors, consumers and employees. Two in particular – government and policymakers, and public and private enterprises – have key roles to play. They must not only lead by example, but also drive eco-friendly regulatory and policy initiatives and foster economic and urban stability. Additionally, they will need to introduce new incentives to promote eco-efficiency and engage with enterprises and NGOs in developing frameworks for measuring, benchmarking and communicating environmental impact information.

To create a self-sustaining, eco-efficient economy, stakeholders will need to act on a large and broad set of drivers, challenges and opportunities, including 14 "themes" Jam participants noted as central to eco-efficiency (see Figure).



Source: IBM Institute for Business Value analysis of Jam outputs.

Figure: **The challenges, opportunities and drivers of an eco-efficient economy.**

Key Contacts

Green Infrastructure:

Adrienne Hunter
ahunter@us.ibm.com

Sustainable Solutions:

Steve Cole,
stevecol@us.ibm.com

Intelligent Systems:

Michael Maloney
maloney2@us.ibm.com

Authors

Susanne Dirks
susanne_dirks@ie.ibm.com

Dr. Constantin Gurdgiev
gurdgiev@ie.ibm.com

Best practice recommendations from the Jam

1) Leverage innovation to deliver "green" infrastructures that are highly efficient and overlay the physical infrastructure with digital intelligence
2) Implement sustainable solutions that promote resource efficiency and reduce the environmental and social impact of operations
3) Embrace intelligent systems that use open standards to provide near realtime information for better management of the infrastructure, water quantities, or, even, entire transportation systems.

An imperative to act now

Jam participants expressed a strong view that the next 20 years will be the age of the eco-efficient economy. Stakeholders must act now and decisively to advance the eco-efficient economy agenda. Consistent with this belief, the majority of Jam participants expect eco-efficient investment to accelerate over the next two-to-three years. Those who understand and embrace this will find they have deepened their engagement with their stakeholders, employees and customers.

How can IBM help?

- **Green Infrastructure:** Benchmark against industry best practices and recommend steps to make your IT more eco-efficient.
- **Sustainable Solutions:** Identify and reduce inefficiencies related to carbon, water, energy and waste throughout your organization's operations and processes.
- **Intelligent Systems:** Gather, synthesize and apply information at the macro level to change the way entire industries operate.

To request a full version of this paper, e-mail us at iibv@us.ibm.com

IBM Global Services
Route 100
Somers, NY 10589
U.S.A.

Produced in the United States of America
April 2010

Reference

1 Eco-efficiency is broadly defined as the delivery of competitively priced goods and services that satisfy human needs – while progressively reducing the environmental impact and resource intensity of goods and services throughout their lifecycle (see "Terms." Factor 10 Institute. http://www.factor10-institute.org/terms.html)

GBE03300-USEN-00