



BSR Conference 2010

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Green ICT: Reality or Virtual Reality?

Breakout Session Summary

November 5, 2010 | 10:30-11:30 a.m.

Speakers

- » **James Gowen**, Vice President, Supply Chain Operations and Chief Sustainability Officer, Verizon Services Operations
- » **Peter Madden**, Chief Executive, Forum for the Future
- » **Dunstan Allison Hope**, Managing Director, ICT Practice, BSR (moderator)

Highlights

- » The biggest buzzword is the smart grid, with a lot of excitement on how it can procure and manufacture energy. In New York, the energy is made upstate and is transmitted to New York City to run Manhattan buildings. Information and communications technology (ICT) intelligence is used to transmit that information and make the grid as smart as possible with real-time information.
- » The ICT sector is going to face an increase in greenhouse gas emissions (GHGs) because the industry as a whole is growing—and if ICT takes on the problems of society, its emissions will grow that much more.
- » A lot of electronic waste is ending up in developing countries, where they don't have proper safety and regulations. Change will happen as some of the raw materials and the precious metals in ICT become more valuable and scarce around the world. It then becomes a question about design, reuse, and infrastructure. Another change will come in getting the mechanisms back, creating a service relationship rather than a selling relationship to get the phone returned quickly for reuse.

Memorable Quotes

"The more people see stuff, and the more they interact, the more they want to consume and travel. We see what other people have, and we want that too. This huge splurge of data can lead to efficiency, but can also lead to more inefficiency." —Peter Madden, Forum for the Future

"Technology alone can be blind and go in unexpected directions, so you need to add the right public policies and changes in behavior to move in the right direction." —Peter Madden, Forum for the Future

"We haven't been at the forefront of where policy should be because the ICT industry has been a laggard when it comes to greening the world. It has been more consumer-facing. I am not a fan of government regulation. There is a role for government and there is a role for industry." —James Gowen, Verizon

Overview

Hope started the meeting by citing how the ICT industry accounts for 2 percent to 3 percent of CO₂ emissions, yet its products have the potential to significantly reduce emissions caused by other industries. ICT is thus seen as one solution to climate change.

Gowen discussed where Verizon sees the biggest contributions to green ICT solutions. As a global business operating in 150 countries with more than 200,000 employees, Verizon has a considerable environmental footprint with the third largest fleet in the United States. Verizon



envisions a solution to climate challenges in the broadband and IP areas, with a strategy focused on bringing the solutions to end users.

Madden took the opposite view and explained to the audience why he is a technological pessimist, and that he thinks it will actually make the environment worse. While he would be excited if ICT could de-materialize the world, he stated that it hasn't happened yet, and in fact, the world is consuming more. He cited two factors behind this rationale: displacement and rebound.

With displacement, environmental impacts are not fully mitigated, but transferred. For example, instead of heating offices with multitudes of workers, flexible work arrangements create a scenario where individuals are heating their entire homes throughout the course of the day. This solution may be positive for companies, but not for the planet.

Rebound is an issue of creating space through efficiency, but then something else comes along and fills it, which worsens the environmental problem. For example, if more road space is created because of more flexible workers, then more people rather than less will drive on those roads. Technological innovation that increases road space may be good for congestion, but not from an environmental point of view.

In response, Gowen explained the benefits of "smart homes" or "connected homes" and their ability to manage household energy use through technology. Air, water, and energy use can be regulated in the home throughout the day without manual interaction. Verizon operates 18 smart buildings in the United States, with smart technologies from ventilation to security to sensors.

Consumers and enterprises are becoming more intelligent and pushing Verizon toward its next product evolution. Gowen said that by the end of 2010, Verizon will have the first carbon-free handset. It is also working to produce accessories made from corn.

The panelists responded to questions about purchasing patterns, electronic waste, consumer trends, and more. For instance, customers aged 14 to 27, who are much more self-sufficient with technology, will cause a dynamic shift in consumption. Madden said that online purchases will grow, which is good for efficiency, but will be challenging in terms of sustainability. It could lead to an increase in consumption, which may then be limited by potential resource constraints (i.e., less cotton). The increased usage of devices that consolidate technologies for the home—such as smartphones, smart TVs—represent another technology and consumption shift. Lastly, a big shift is taking place in Europe, where legislation was passed to force phone companies to standardize phone chargers.

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