

## Information and Communications Technologies Can Fast-Track Solutions to Global Warming and Social Issues While Driving Economic Growth, Finds Study by GeSI and Accenture

SMARTer2030 shows potential to enable a 20 percent reduction in global CO<sub>2e</sub> emissions by 2030, 1.6 billion more people enrolled in e-healthcare and over \$11 trillion in new revenues and cost savings

**BRUSSELS:** June 9, 2015 – Information and communications technologies (ICT) could bring far-ranging levels of sustainable prosperity and opportunity to all corners of the world within the next 15 years, according to research published this week by the Global e-Sustainability Initiative (GeSI) and Accenture (NYSE: ACN).

The report, [SMARTer2030](#), shows that as smart phones, networked sensors, smart grids and other ICT devices become faster, cheaper and more available globally, they have the potential to deliver profound environmental, economic and social benefits. These include a 20 percent reduction of global carbon emissions by 2030, over \$11 trillion dollars in new economic benefits, the ability to extend e-healthcare to an additional 1.6 billion more people worldwide, and an estimated 30% increase in agriculture yields.

“Our findings show an ICT-enabled world by 2030 that is cleaner, healthier and more prosperous with greater opportunities for individuals everywhere,” said Luis Neves, chairman of GeSI.

Major findings of the study include:

- **ICT can enable a 20 percent reduction of global CO<sub>2e</sub> emissions by 2030, holding emissions at 2015 levels.** Besides the environmental benefits, this dramatic shift also means that policy or business leaders would no longer be forced to make tradeoffs between economic prosperity and environmental protection.
- **ICT emissions as a percentage of global emissions—and in absolute quantities—will decrease over time.** The *SMARTer2030* report shows the ICT emissions “footprint” is expected to decrease to 1.97 percent of global emissions by 2030 compared to 2.3 percent forecast by 2020.
- **ICT offers significant environmental benefits in addition to reducing carbon emissions.** The most substantial benefits identified by this study include: increasing agricultural crop yields by 30 percent, saving 25 billion barrels of oil per year and saving 300 trillion liters of water per year.

- **An assessment of eight sectors of the global economy—energy, food, manufacturing, health, building, work/business, learning, mobility/logistics—shows that ICT could generate over \$11 trillion in economic benefits per year by 2030, the equivalent of China’s annual GDP in 2015.**
- **ICT will connect 2.5 billion additional people to the “knowledge economy” by 2030, giving 1.6 billion more people access to healthcare and a half-billion more people access to e-learning tools.**
- **Worldwide growth of the digital economy continues to accelerate, providing the scale necessary to drive greater connectivity and new, disruptive business models.** And, as opposed to the old production-line economy, individuals are firmly in the center of this process.

“The ICT industry offers tremendous benefits: more resource and cost-efficient businesses that are less harmful to the environment, improvements in services with significant societal benefits and new sources of economic growth,” said Neves.

“This new study is based on in-depth modeling, unprecedented in its range, into the potential for ICT to disrupt business as usual and radically reshape the way we live, as well as reducing the impact that continued economic growth has on our environment. ICT can help break the link between economic development and resource depletion, with emissions savings close to 10 times those generated by the ICT sector itself.”

“The SMARTer2030 report comes six months before the crucial United Nations climate change conference in Paris in 2015,” said UNFCCC Executive Secretary Christiana Figueres. “The long term outcome of the new agreement requires a peaking of global emissions in ten years’ time and a dramatic bending of the emissions curve thereafter. This report underlines the pivotal role of ICT in assisting to achieve these aims.”

ICT-enabled services could also generate US\$6 trillion in ICT-enabled annual revenue opportunities and US\$5 trillion in annual savings from lower consumption of energy, fuel and other resources, according to the report.

*SMARTer2030* follows GeSI’s 2012 report, *SMARTer2020*, which calculated reduced greenhouse gas emissions and energy consumption. In addition to identifying the business benefits of technology enabled sustainable business models, the new report goes further by pointing to three important changes accelerating ICT’s potential to drive these benefits:

- ICT now puts the user at the center of solutions, empowering individuals with services from patient-centric e-health to flexible, on-demand learning.

- As the number of connected devices is expected to grow to 100 billion by 2030<sup>1</sup>, the potential to drive societal and environmental value grows significantly.
- ICT is enabling new and profitable disruptive business models that are separating growth from carbon and resource intensity.

Peter Lacy, managing director of Accenture Strategy, said: “This US\$11 trillion opportunity shows that digital can improve the financial and business case for investing in socially and environmentally responsible products and services. Not only are new technologies easily available, but they are able to directly improve the quality of people’s lives. And they are now able to do so at massive scale, enabling sustainable business models to become mainstream and a source of competitiveness and growth.”

SMARTer2030 identifies three key stakeholder groups and recommends actions they could prioritise for a more sustainable, profitable future:

- Policy makers should create the right policy environment. In particular, setting national CO<sub>2</sub> targets, recognizing the critical role of ICT, creating investment incentives to connect the unconnected with new infrastructure and ensuring a stable and balanced regulatory approach to ICT.
- Businesses should recognize the growth and innovation opportunities enabled by ICT that make sustainable investments viable.
- Consumers should be encouraged to adopt technology solutions that promote resource efficiency, such as those typified by the sharing economy.

Visit [smarter2030.gesi.org](http://smarter2030.gesi.org) for more information.

### **Notes to editors**

The SMARTer2030 report follows the publication in 2012 of SMARTer2020. SMARTer2030 examines the economic, social and environmental opportunities created by the innovative use of ICT in eight sectors: food, energy, health, education, manufacturing, mobility and logistics, work and business, and housing. The Global e-Sustainability Initiative (GeSI) commissioned Accenture Strategy to perform this study. The supporting analysis was conducted by [Accenture Strategy](#) with the assistance of industry experts, including GeSI member companies.

### **About GeSI (Global e-Sustainability Initiative)**

The [Global e-Sustainability Initiative \(GeSI\)](#) is a strategic partnership of Information and Communication Technology (ICT) companies and organizations committed to creating and

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<sup>1</sup> International Energy Agency, More Data Less Energy, 2014

promoting technologies and practices to foster economic, environmental and social sustainability. Formed in 2001, GeSI's vision is a sustainable world through responsible, ICT-enabled transformation. GeSI fosters global and open co-operation, informs the public of its members' activities to improve their sustainability performance, and promotes innovative technologies for sustainable development.

GeSI's membership includes over 30 of the world's leading ICT companies; the organization also collaborates with a range of international stakeholders committed to ICT sustainability objectives. These partnerships include the United Nations Environment Program (UNEP), the United Nations Framework Convention on Climate Change (UNFCCC), the International Telecommunications Union (ITU), and the World Business Council for Sustainable Development (WBCSD). Such collaborations help shape GeSI's global vision on evolution of the ICT sector, and how it can best meet the challenges of sustainable development. For more information, see [www.gesi.org](http://www.gesi.org).

### **About Accenture**

Accenture is a global management consulting, technology services and outsourcing company, with more than 323,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US\$30.0 billion for the fiscal year ended Aug. 31, 2014. Its home page is [www.accenture.com](http://www.accenture.com).

Accenture Strategy operates at the intersection of business and technology. We bring together our capabilities in business, technology, operations and function strategy to help our clients envision and execute industry-specific strategies that support enterprise wide transformation. Our focus on issues related to digital disruption, competitiveness, global operating models, talent and leadership help drive both efficiencies and growth. For more information, follow @AccentureStrat or visit [www.accenture.com/strategy](http://www.accenture.com/strategy).

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