

Information and Communication Technology for Prosperity

Highlights

- The challenges of the 21st century are daunting: global economic growth per person led by emerging economies and a population that topped 7.3 billion in 2015 put great stress on Earth's ecosystems, even as the agenda of the Millennium Development Goals remains unfinished. So, the Sustainable Development Goals aim for change at the level of the planet, a veritable seismic shift.
- The revolution in information and communication technology (ICT) provides the most powerful tool yet. Properly deployed, directed, and extended, ICT can be a tool for common good and accelerate action on the global goals.
- “The clear and present danger of climate change means we cannot burn our way to prosperity. We already rely too heavily on fossil fuels. We need to find a new, sustainable path to the future we want. We need a clean industrial revolution,” said Ban Ki-moon, Secretary-General of the United Nations. ICT for prosperity can ensure access to affordable and clean energy; promote decent work and economic growth; advance industry, innovation, and infrastructure; and reduce inequalities.

THE 5 Ps

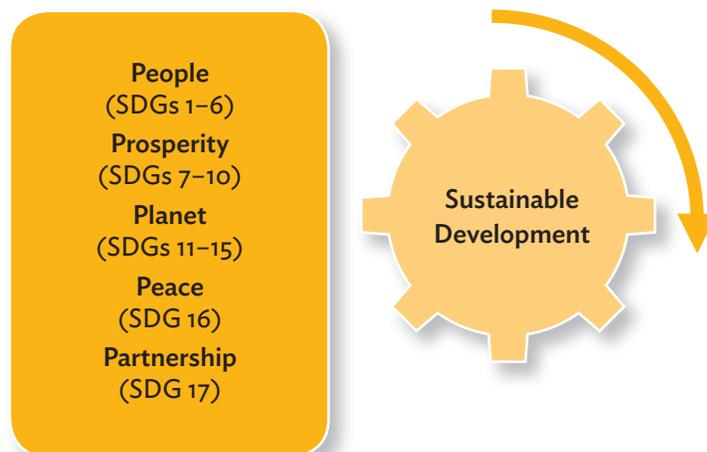
On 25–27 September 2015, the 193-member United Nations General Assembly adopted the 2030 Agenda for Sustainable Development, which will guide national actions and development cooperation over the next 15 years.¹ The 17 Sustainable Development Goals (SDGs) (and 169 targets) will stimulate action in five areas—the 5 Ps. Citing,

- **People.** [...] to end poverty and hunger, in all their forms and dimensions, and to ensure that all human beings can fulfil their potential in dignity and equality and in a healthy environment.
- **Prosperity.** [...] to ensure that all human beings can enjoy prosperous and fulfilling lives and that economic, social, and technological progress occurs in harmony with nature.
- **Planet.** [...] to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources, and taking urgent action on climate change, so that it can support the needs of the present and future generations.
- **Peace.** [...] to foster peaceful, just, and inclusive societies which are free from fear and violence. There can be no sustainable development without peace and no peace without sustainable development.
- **Partnership.** [...] to mobilize the means required to implement this Agenda through a revitalized Global Partnership for Sustainable Development, based on a spirit of strengthened global solidarity, focused in particular on the needs of the poorest and most vulnerable and with the participation of all countries, all stakeholders, and all people.

LIFE IN THE FAST LANE

Information and communication technology (ICT) are technologies that facilitate by electronic means the processing, transmission, and display of information: ever faster and

The 5 Ps



SDGs = Sustainable Development Goals.
Source: ADB.

cheaper, they condense or elide temporal and spatial distances. ICT has transformed the financial services, media, retail, and telecommunications sectors; through the globalization it simultaneously feeds on and accelerates, it is now reshaping societies, economies, and governments worldwide.

Because ICT can help achieve the global goals' aspirational, transformational, and universal objectives, four targets of the SDGs refer directly to it.² But, ICT can without doubt find direct and multiple applications across each SDG: it is an existing and already widely deployed set of technologies that can be mobilized to both boost and scale improvements; it ought to be a crucial enabler, particularly if it helps poorer countries leapfrog development milestones.

¹ United Nations. 2015. *Transforming Our World: the 2030 Agenda for Sustainable Development*. New York. sustainabledevelopment.un.org/post2015/transformingourworld

² The related goals are Goal 4: Quality Education; Goal 5: Gender Equality; Goal 9: Industry, Innovation, and Infrastructure; and Goal 17: Partnerships for the Goals. Implicitly, Goal 17 recognizes ICT as essential to the achievement of all SDGs and their associated targets.

"Prosperity is only an instrument to be used, not a deity to be worshipped." —Calvin Coolidge, former US president

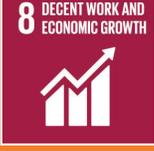
ICT FOR PROSPERITY

"The clear and present danger of climate change means we cannot burn our way to prosperity. We already rely too heavily on fossil fuels. We need to find a new, sustainable path to the future we want. We need a clean industrial revolution," said Ban Ki-moon. SDGs 7–10 see to prosperity: they mean to ensure access to affordable and clean energy; promote decent work and economic growth; advance industry, innovation, and infrastructure; and reduce inequalities. Athrough all related actions, ICT can quicken upscaling; cut deployment costs; augment awareness, inclusiveness, and engagement; stimulate connectivity, productivity, efficiency, and innovation; and raise quality.

Related Links

- ADB. 2016. *Ramping Up ADB's Role in Information and Communication Technology for Development—ICTD Team Work Plan, 2016–2017*. Manila.
- ADB. 2016. *Road to 2030: Information and Communication Technology in ADB's Corporate Strategy and Operations*. Manila. www.adb.org/projects/documents/helping-transform-asia-and-pacific-support-for-adb-new-corporate-strategy-jul-2016-dpta

ICT for Prosperity (SDGs 7–10)

 <p>7 AFFORDABLE AND CLEAN ENERGY</p>	<p>Goal 7: Ensure access to affordable, reliable, sustainable, and modern energy for all</p> <p>ICT can help improve energy efficiency and reduce emissions in many sectors of the economy. ICT and energy efficiency connect in two ways: "Greening through ICT" and "Greening of ICT." "Greening through ICT" means ICT-enabled solutions, e.g., smart buildings, smart grids, smart industrial processes, and smart logistics, can gear the world to a more energy-efficient future. In tandem, green technologies and processes can reduce global greenhouse gas emissions. ICT can also increase connectivity in rural and remote areas through the deployment of low-cost, low-power solutions for off-grid mobile base stations. The "Greening of ICT" signifies it must become environmentally sound and less carbon-intensive.</p>
 <p>8 DECENT WORK AND ECONOMIC GROWTH</p>	<p>Goal 8: Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all</p> <p>ICT is transforming employment and the demand for both basic and more advanced ICT skills now cuts across all sectors. It is urgent to prioritize ICT in national youth employment and entrepreneurship strategies. Basic digital literacy is increasingly required even to find job listings and make job applications. New opportunities exist for young people with mid-level digital skills in areas such as offshore services, including information technology and business process outsourcing, crowdsourcing, and microwork.</p>
 <p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	<p>Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation</p> <p>Industrialization—notably, increases in productivity it leads to—is highly dependent on effective use of ICT. In the 21st century, global and local infrastructure—be it power networks, water supplies, transportation systems, or ICT infrastructure itself—can be controlled, managed, and optimized more equitably by ICT. Moreover, never has innovation been more dynamic than in the Age of Knowledge, which both accelerates and depends on open access and online collaboration.</p>
 <p>10 REDUCED INEQUALITIES</p>	<p>Goal 10: Reduce inequality within and among countries</p> <p>ICT clearly has potential to help reduce inequality, both within and between countries, but focus must be placed on developing human capacity and ensuring that people at the bottom of the pyramid have the skills necessary to manage their own development. Else, ICT—like any other development lever—may exacerbate existing digital divides. The challenge is to implement policies that ensure more equal access and use of ICT. ICT clearly has potential for reducing inequality when it is used to help bring information and knowledge to disadvantaged segments of society—including women and girls as well as those with disabilities.</p>

ICT = information and communication technology, SDGs = Sustainable Development Goals.

Notes: ICT heightens efficiency, enlarges scale, reduces risks, and informs decision making. This table illustrates applications of "ICT for Prosperity" to promote further discussion and research.

Source: Adapted from 2016. International Telecommunication Union. www.itu.int/



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