

## **Sustainable Development Goals (SDGs)**

The Sustainable Development Goals (SDGs), are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. <https://youtu.be/0XTBYMfZyrM>

The Sustainable Development Goals Report 2020 <https://unstats.un.org/sdgs/report/2020/The-Sustainable-Development-Goals-Report-2020.pdf>

ICTs (Information and Communication Technologies) can help accelerate progress towards every single one of the 17 United Nations Sustainable Development Goals (SDGs). <https://youtu.be/FR-YPmCNFxs>

Access to information and knowledge for sustainable development, through its online Sustainable Development Knowledge Platform and social media outlets. <https://sdgs.un.org/goals>

SDG Tracker is a free, open-access resource where users can track and explore global and country-level progress towards each of the 17 Sustainable Development Goals through interactive data visualizations <https://sdg-tracker.org/>

## ***Information and Communications Technology impact to the environment and climate crisis***

Global E-Waste and a Circular Economy Potential

<https://storymaps.arcgis.com/stories/16d82ffb5b824815a587e3a4079e2530?header%22>

Dr. Kees Baldé, an author of the Global E-waste Monitor, tells us why it is important to raise global awareness of e-waste. <https://youtu.be/nh1kf7blx60>

How critical is the global e-waste situation? [https://www.youtube.com/watch?v=K\\_IYNPpkm7o](https://www.youtube.com/watch?v=K_IYNPpkm7o)

### **Internet waste**

For the occasion, the WEEE Forum has partnered with the International Telecommunication Union in drafting a [report](#) covering the 'rarely considered' topic of Internet Waste (e-waste arising from Data Centres, 5G Connectivity infrastructure and the Internet of Things).

[Facts and figures about e-waste for International E-Waste Day 2020](#)

Our Digital Carbon Footprint: What's the Environmental Impact of the Online World?

<https://en.reset.org/knowledge/our-digital-carbon-footprint-whats-the-environmental-impact-online-world-12302019>

<https://en.reset.org/blog/just-how-green-video-conferencing-new-study-explores-environmental-impact-large-online-meetings>

<https://unemg.org/wp-content/uploads/2018/11/INF1.pdf>

SDG Targets 3.9, 8.3, 8.8, 11.6, 12.4 and 12.5 relate to the issues associated with e-waste.

Collects and improves worldwide e-waste statistics <https://globalewaste.org/map/>

Cloud computing could be producing hidden greenhouse gas emissions. There are millions of servers in data centres all over the world, all of which need electricity to run. Estimates vary but the most commonly cited figure suggests that amounts to around 200 TWh/yr, or around one percent of global electricity demand, and that this may grow to between 15-30% of electricity consumption in some countries by 2030.

Data centre energy is a major component of the environmental footprint of data centres, although there are several others such as manufacturing of equipment and water consumption for cooling. The use of renewables for electricity generation is growing in general, but most electricity is still generated by fossil fuels, all of which contributes to climate change.

A step towards a more circular narrative after the recent joint E-waste Coalition, World Economic Forum and World Business Council for Sustainable Development report on *A New Circular Vision for Electronics*. ([http://www3.weforum.org/docs/WEF\\_A\\_New\\_Circular\\_Vision\\_for\\_Electronics.pdf](http://www3.weforum.org/docs/WEF_A_New_Circular_Vision_for_Electronics.pdf))

### Main linkages with the Sustainable Development Goals



A focus on the environment impact – both positive and negative – of the vast amount of ICT equipment designed and implemented to mitigate the effects of climate change and to help us lead more energy efficient lives. Or the impact of ICTs growth and smart cities on the rise of e-waste, including the waste from telecommunications devices which is circling the world in space.

### ***How is Information and Communication Technologies achieving the Sustainable Development Goals***

ITU contributes to SDG 9 in particular—helping to build resilient infrastructure, promoting inclusive and sustainable industrialisation and fostering innovation. ICTs (Information and Communication Technologies) can help accelerate progress towards every single one of the 17 United Nations Sustainable Development Goals (SDGs). ITU for SDGs <https://youtu.be/FR-YPmCNFxs>

The Connect 2030 Agenda supports ITU's role in facilitating progress towards the achievement of the SDGs by 2030, ensuring that technology serves humanity and the planet. The Agenda aims to achieve five bold goals: Growth, Inclusiveness, Sustainability, Innovation and Partnerships. <https://youtu.be/mTy8eNSsoR4>

ICT serves as a support structure for all of the 17 Sustainable Development Goals (SDGs), helping bring about their advancement, especially in relation to the universal coverage of basic services. Thus, national policies should realize that the universal roll-out of ICT infrastructure and services within the public and private sector will better serve the SDGs.

Digital technologies could have a transformational impact on our ability to meet the 2030 Agenda. <https://youtu.be/EKqXKNiwP7w>

Researchers found that access to technology, such as computers, smartphones, and the Internet, has a strong positive correlation with 11 out of 17 of the United Nations' Sustainable Development Goals (SDGs):

- no poverty
- zero hunger
- good health and well-being
- quality education
- gender equality
- clean water and sanitation
- affordable and clean energy
- decent work and economic growth
- innovation and infrastructure
- sustainable communities
- justice and strong institutions

### **SDG 9: Industry, Innovation, and Infrastructure**

#### **Access to Internet**

SDG 9 aims to "significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020," and there is still progress to be made.

<https://sdgstoday.org/dataset-page/1613576140085x598487477858220560>

### **SDG 12: Ensure sustainable consumption and production patterns**

#### **Installed Renewable Energy Capacity**

Total installed renewable energy capacity in megawatts is featured on the map below.

[According to the 2020 Sustainable Development Goals Report](#), global material footprint is increasing faster than population growth and economic output. Improvements in resource efficiency in some countries are offset by increases in material intensity in others. Fossil fuel subsidies remain a serious concern. An unacceptably high proportion of food is lost along the supply chain. And waste, including additional medical waste generated during the pandemic, is mounting.

In 2019, The United Kingdom's total installed energy capacity from renewable energy sources was **46,733 megawatts**. <https://sdgstoday.org/dataset-page/1613577123270x983001656738516500>

#### *Information and Communication Technologies for achieving the Sustainable Development Goals*

Countries are increasingly looking to leverage ICTs to achieve the set of goals in review for HLPF 2019:

- Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- Goal 10. Reduce inequality within and among countries
- Goal 13. Take urgent action to combat climate change and its impacts
- Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

- Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development

Artificial Intelligence and Sustainable Development Main linkages with the Sustainable Development Goals

GOAL 17: Partnerships to achieve the Goals  
GOAL 16: Peace and Justice Strong Institutions  
GOAL 9: Industry, Innovation and Infrastructure  
GOAL 4: Quality Education

Design, build and operate sustainable data centers. Main linkages with the Sustainable Development Goals

Goal 7: Affordable and Clean Energy  
Goal 9: Industry Innovation and Infrastructure  
Goal 11: Sustainable Cities and Communities  
Goal 12: Responsible Consumption and Production

**Why a carbon free internet is within reach** <https://youtu.be/t8vyAZxnW4g>

How e-waste recycling is boosting digital employment <https://youtu.be/4ZcKwlyxoBA>

AI for SDGs <https://youtu.be/ND7pvShNdlg>

Opportunities for blockchain technology to sustainable development

**Building resilient and transparent supply chains**-SDG 9: *Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.* e.g As widely reported, COVID-19 has highlighted the challenges and vulnerabilities in global supply chains, increasing calls for transparency and traceability. Blockchain for supply chain use cases have reflected this variety.

**Creating stronger and more accountable public institutions.**-SDG 16: *Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels* .e.g The [Prosperity Collaborative](#), a coalition of several public- and private-sector actors, is examining how open source technologies including blockchain may have a role to play in public finance.

**Spurring responsible sourcing and consumption**-SDG 12: *Ensure sustainable consumption and production patterns.* e.g the use of blockchain for the ethical sourcing of minerals.

## Other resources & toolsets

What is World Summit on the Information Society(WSIS) - SDG Matrix?

This is a new tool developed by a number of United Nations agencies based on their expertise and mandate to map how ICTs may contribute to the implementation of the new SDGs. The Matrix serves as an easy reference for stakeholders engaged in shaping the future of both, the SDGs and the WSIS processes beyond 2015 and the 2030 Agenda for Sustainable Development.

ICTs are identified as targets in the SDGs for education, gender equality, infrastructure (universal and affordable access to the internet) and in the implementation goal as a cross cutting tool to be utilized for the achievement of all of the SDGs.

The mapping exercise draws direct linkages of the WSIS Action Lines with the proposed SDGs to continue strengthening the impact of Information and Communication Technologies (ICTs) for sustainable development <https://www.itu.int/net4/wsis/sdg/>

SDGs Today aims to provide a snapshot of the state of sustainable development around the world in real time <https://sdgstoday.org/dataset-hub>

You can also check the distribution of SDG Good Practices around the globe in [this data visualization dashboard](#).

<https://sdgessentials.org/why-the-world-needs-the-sdgs.html>

Database profiles give an overview of organizations and their reports, making sustainability information easily and freely accessible to everyone <https://database.globalreporting.org/>

The Energy Progress Report provides the international community with a global dashboard to register progress on the targets of Sustainable Development Goal 7 (SDG7) <https://trackingsdg7.esmap.org/results>

IEA's Sustainable Development Scenario (which maps a possible pathway to the attainment of Sustainable Development Goals most related to energy). <https://www.iea.org/reports/sdg7-data-and-projections/modern-renewables>

Digital technologies could have a transformational impact on our ability to meet the 2030 Agenda. <https://youtu.be/EKqXKNiwP7w>

SDG Digital Investment Framework <https://youtu.be/dl446CgAl8Q>

The Climate Clock shows two numbers. The first, in red, is a timer, counting down how long it will take, at current rates of emissions, to burn through our "carbon budget" — the amount of CO<sub>2</sub> that can still be released into the atmosphere while limiting global warming to 1.5°C above pre-industrial levels. This is our deadline, the time we have left to take decisive action to keep warming under the 1.5°C threshold. The second number, in green, is tracking the growing % of the world's energy currently supplied from renewable sources. This is our lifeline. Simply put, we need to get our lifeline to 100% before our deadline reaches 0. <https://climateclock.world/>

Tracking Global warming to date <https://climateclock.net/>