The Sustainable Development Goals and the Water and Energy Related Indicators

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Agenda 2030 Sustainable Development Goals

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2030 Agenda for Sustainable Development Vision

"*A world where we reaffirm our commitments regarding the human right to **safe drinking water and sanitation** and where there is improved hygiene; and where food is sufficient, safe, affordable and nutritious. A world where human habitats are safe, resilient and sustainable and where there is **universal access to affordable, reliable and sustainable energy**."*

*"**interlinkages and integrated** nature of the Sustainable Development Goals are of crucial importance in ensuring that the purpose of the new agenda is realized"*

United Nations, Transforming Our World: The 2030 Agenda For Sustainable Development
Outcome Document of the United Nations Summit for the Adoption of the Post-2015 Development Agenda September 2015

2030 Agenda for Sustainable Development SDGs Vision

2030 Agenda for Sustainable Development SDGs

SDG6 Clean Water and Sanitation

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SDG 6 Clean Water and Sanitation: Targets and Means of Implementation

SDG 6: Ensure availability & sustainable management of water & sanitation for all

Targets:

- **6.1** By 2030, achieve universal & equitable access to safe & affordable drinking water for all
- **6.2** By 2030, achieve access to adequate & equitable sanitation & hygiene for all & end open defecation, paying special attention to the needs of women & girls & those in vulnerable situations
- **6.3** By 2030, improve water quality by reducing pollution, eliminating dumping & minimizing release of hazardous chemicals & materials, halving the proportion of untreated wastewater & substantially increasing recycling & safe reuse globally
- **6.4** By 2030, substantially **increase water-use efficiency** across all sectors & ensure sustainable withdrawals & supply of freshwater to address water scarcity & substantially reduce the number of people suffering from water scarcity
- **6.5** By 2030, implement IWRM at all levels, including through transboundary cooperation as appropriate
- **6.6** By 2020, protect & restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers & lakes

Means of Implementation:

- **6.a** By 2030, expand international cooperation & capacity-building support to developing countries in water- & sanitation-related activities & programmes, including water harvesting, desalination, **water efficiency**, wastewater treatment, recycling & reuse technologies
- **6.b** Support & strengthen the participation of local communities in improving water & sanitation management

Target 6.4
Indicator 6.4.1

SDG 6: Ensure availability & sustainable management of water & sanitation for all

Target:

- **6.4** By 2030, substantially **increase water-use efficiency** across all sectors & ensure sustainable withdrawals & supply of freshwater to address water scarcity & substantially reduce the number of people suffering from water scarcity

Indicator 6.4.1: Change in water use efficiency over time

- Output from a given economic activity (Gross Value added), per volume of net water withdrawn by the economic activity [USD/m^3]
- This indicator includes water use by various economic activities:
  - Agriculture (excluding the portion generated by rain-fed agriculture), forestry & fishing
  - Mining & quarrying, manufacturing, constructions & **energy**, and
  - Water collection, treatment & supply (looking at distribution efficiency & capturing network leakages).
- By assessing changes over time, the sectoral values can be aggregated into one.
- This indicator cab be used to highlight sectors where water-use efficiency is lagging behind that of other sectors.
- Regional differences in climate & water availability must be considered in the interpretation of the indicator, in particular, in relation to agriculture.
- Detailed method of computation can be found at: http://www.unwater.org/fileadmin/user_upload/unwater_new/docs/Metadata%20for%206%204%201_v2016-08-25.pdf

SDG7 Affordable and Clean Energy

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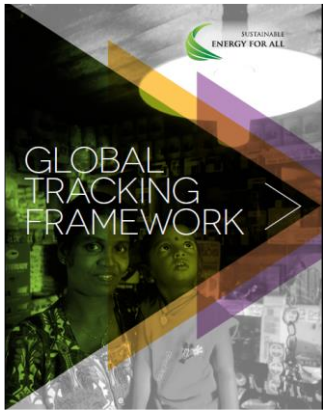
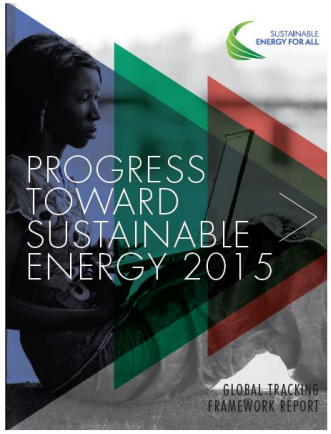
The UN Secretary “Sustainable Energy for All (SE4All)” Initiative





- SE4All launched at the opening of the General Assembly in September 2011.
- Catalysed action around 3 objectives to be achieved by 2030:
  - Ensuring universal access to modern energy services
  - **Doubling the global rate of improvement in energy efficiency**
  - Doubling the share of renewable energy in the global energy mix
- Global Tracking Framework (GTF) established baseline energy data (GTF 2013) & provides regular bi-annual updates (GTF 2015)
- GTF 2015
  - During 2010-2012, energy intensity fell more than 1.7% a year, considerably more than the annual rate during 1990-2010,
  - Still slower than the SE4All objective of an annual 2.6% drop in energy intensity between 2010 and 2030

SDG 7 Affordable and Clean Energy: Targets and Means of Implementation

SDG 7: Ensure access to affordable, reliable, sustainable & modern energy for all

Targets:

- **7.1** By 2030, ensure universal access to affordable, reliable & modern energy services
- **7.2** By 2030, increase substantially the share of renewable energy in the global energy mix
- **7.3** By 2030, **double the global rate of improvement in energy efficiency**

Means of Implementation:

- **7.a** By 2030, enhance international cooperation to facilitate access to clean energy research & technology, including renewable energy, **energy efficiency** & advanced & cleaner fossil-fuel technology, & promote investment in energy infrastructure & clean energy technology

- **7.b** By 2030, expand infrastructure & upgrade technology for supplying modern & sustainable energy services for all in developing countries, in particular least developed countries, small island developing States & landlocked developing countries, in accordance with their respective programmes of support

Target 7.3
Indicator 7.3.1

SDG 7: Ensure access to affordable, reliable, sustainable & modern energy for all

Target:

- **7.3** By 2030, **double the global rate of improvement in energy efficiency**

Indicator 7.3.1: Energy intensity measured in terms of primary energy and GDP

- **Energy intensity** is used as a proxy for energy efficiency
- Energy intensity is an indication of how much energy is used to produce one unit of economic output
- Primary energy intensity = total primary energy supply / GDP
- Total primary energy supply = production + net imports – international marine and aviation bunkers +/- stock changes
- GDP measured in constant terms at purchasing power parity (PPP)
- Primary Energy intensity can be affected by a number of factors (e.g., climate, structure of the economy) that are not necessarily linked to pure efficiency.

Agenda 2030: An Integrated Approach

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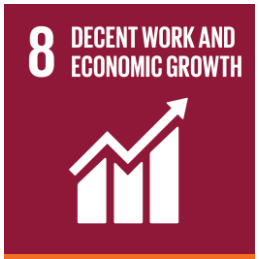
Water in the Sustainable Development Agenda 2030

Preliminary Core Linkages with SDG6

Energy in the Sustainable Development Agenda 2030

Preliminary Core Linkages with SDG7

Explicit Efficiency Targets - selected



8.4	**Improve progressively**, through 2030, **global resource efficiency** in consumption & production & endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption & Production, with developed countries taking the lead

9.4	By 2030, upgrade infrastructure & retrofit industries to make them sustainable, with **increased resource-use efficiency** & greater adoption of clean & environmentally sound technologies & industrial processes, with all countries taking action in accordance with their respective capabilities

11.B	By 2020, substantially increase the number of cities & human settlements adopting & implementing integrated policies & plans towards inclusion, **resource efficiency**, mitigation & adaptation to climate change, resilience to disasters, & develop & implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels

12.2	By 2030, achieve the sustainable management & **efficient use of natural resources**

Key Messages

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Key Messages

- The 2030 Agenda advances an integrated approach to sustainable development
- Dedicated goals and targets for water and energy with indicators for monitoring implementation
- Dedicated indicators for energy and water efficiency with **interlinkages** with other targets
- **Dialogue** is crucial among the various water-energy partners
- The level of **coordination and collaboration** between the water and energy sectors **in all stages** of planning and implementation must be increased to achieve targets

Thank you

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