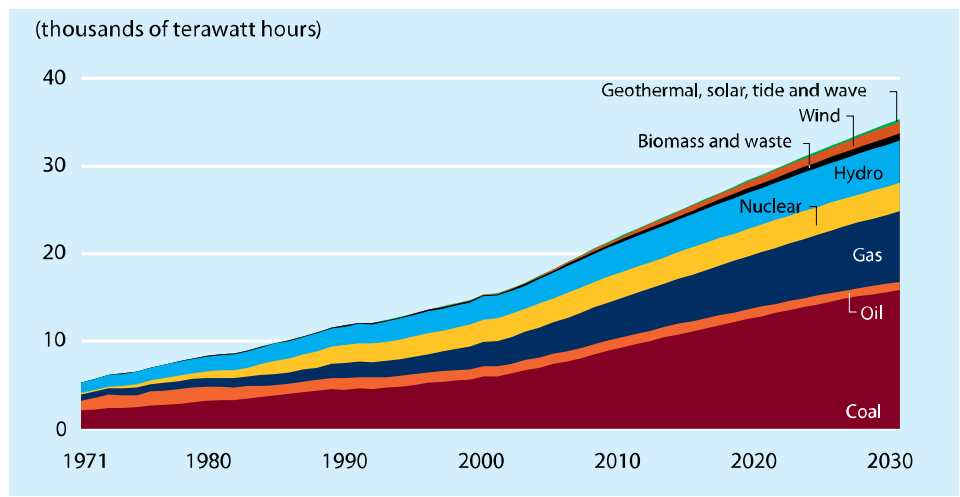


Indicator name	Electricity generation by energy source
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Prepared by	UNIDO
Example	WWDR3, Chapter 7, Figure 7.11 WWDR2, Chapter 9, Figure 9.1
Rationale	This indicator highlights the contribution of hydropower to electricity supplies over time as compared to other energy sources.
Position in DPSIR chain	State
Definition of indicator	The amount of electricity generated from different fuel or energy sources.
Underlying definitions and concepts	Electricity generation means the production of electricity by the various sources of energy, including hydrocarbon fuels (coal, oil, gas), nuclear power, hydropower, geothermal/solar/wind power (combined), and other combustible renewables plus waste.
Specification of determinants needed	Electricity generation by energy source, worldwide, in time series data, denominated in gigawatt-hours per year.
Computation	No computation required.
Unit(s) of expression	Gigawatt-hours (GWh) per year
Data sources, availability and quality	International Energy Association (IEA) Energy Statistics Good quality data, readily available
Scale of application	National
Geographical coverage	Global
Interpretation	Over time, figures on electricity generation by fuel show clearly the increasing roles of hydropower, gas generation, and nuclear power, as well as coal, which is still the major source of energy for electricity generation. Renewable technologies have recently begun to play a significant but small role, while electricity generation from oil has decreased. The comparison puts into perspective the essential role played by hydropower. By observing the evolution of hydropower in total electricity generation over 30 years, it may be possible to extrapolate in general terms the rate of growth, and match this to the hydropower capability of countries.
Linkage(s) to other indicators	None reported.
Alternative methods and definitions	Another indicator could be developed by calculating the electricity generated by hydropower as a proportion of total world electricity generation, over time. However, the existing graph has the advantage of showing at a glance the relative importance of all the different sources of energy.
Related indicator sets	World Development Indicators IEA Energy Statistics
Sources of further information	International Energy Association : IEA Data Services at http://data.iaea.org/ieastore/statslisting.asp (Accessed 02 March 2009) World Bank : World Development Indicators
Other institutions involved	UNEP, World Bank