

SUSTAINABLE DEVELOPMENT

technological aspects

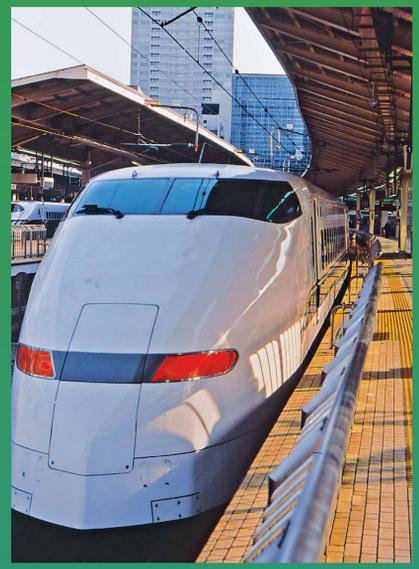
Another possible approach towards sustainable development is to use the potential of science and technology.

In fact, we can achieve much more than we do now just by the imitation of nature: Jet engines? Octopuses have been “using” them for millions of years.

Ultrasonic radar? Bats “possess” them.

Non-waste management? Waste does not exist in nature.

Whether we develop sustainably or not depends primarily on our ability to acquire energy.

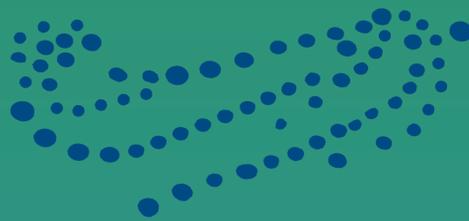


Shinkansen is the name of a high-speed rail-line in Japan. High-speed trains have gradually linked all major cities there. These trains run at a speed of 210–300 kilometres per hour. Japan is one of the countries which have been using high-speed trains for several decades now.

Did you know that...

Mexico City has an ambitious plan to build roof gardens on a large number of buildings. The solar radiation falling on Earth every hour could meet the yearly energy consumption of the whole humankind.

There is a visionary project that contemplates building thousands of hundred-megawatt solar power plants in a desert zone stretching from Saudi Arabia up to Morocco.



These vehicles are independent of petroleum resources. Human power is reliable. (China, 2005)



The legacy of the Egyptian civilization is symbolized by the pyramids of Giza. What will the Euro-American civilization leave to the “distant future”?



Nuclear power plant near Cape Town. (The Republic of South Africa)

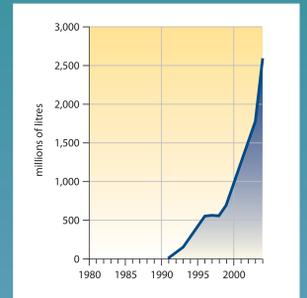
All that is necessary for the triumph of evil is that good men do nothing. ~ Edmund Burke



Solar panels on the roof of a mission station in Baie de Henne. (Haiti)



Construction of major waterworks is always controversial. The largest present-day waterworks is the Three Gorges Dam in China. Almost two million people were relocated during construction of this dam.

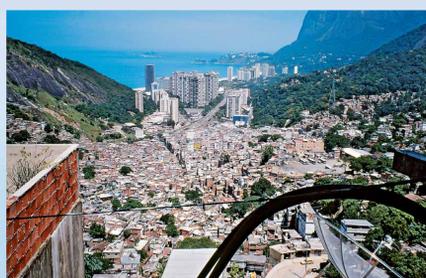


Global production of biodiesel between 1980 and 2004. (adapted from WorldWatch Institute, 2006)

Scientific and technological development is related above all to “production”, but the cause and the driving force of production is consumption. So the goal is not only to consume less, but also to consume sensibly and purposefully. To reduce the exploitation of natural resources we can, for instance, extend product lifetime, recycle products when their lifetime is over, or share products (e.g. cars or washing machines), which are used for only a few hours a day or week, with other people. By contrast the manufacturers today are not interested in the long and trouble-free operation of their products, or in their easy fixing, but they want you go soon and buy new ones.



Rio de Janeiro – a city of delightful beaches...



...but also of slums, crime, and child gangs.



Light pollution is a term designating an undesirable phenomenon of excessive or obtrusive artificial outdoor light. The main symptoms include glare, light trespass, over-illumination, and, last but not least, the excessive brightness of the sky at night, also known as skyglow. (Olomouc, Czech Republic)

