

## **Sustainable Development: A contradiction in terms?**

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The United Nations define sustainable development as meeting the needs of the present without compromising the ability of future generations to meet their own needs. From a historical perspective, human existence on planet earth ceased to be “sustainable” from the time we adopted agriculture. The situation has become ever more critical in more recent times: as the age of fossil fuels is coming to an end, now more than ever there is the need for more efficient and sustainable renewable energy technologies. In parallel, we have to address the increasing scarcity of numerous elements that are at the core of modern technologies. Here I attempt to give an overview of recent developments in solar technologies and strategies to address sustainability. Emphasis is placed on replacing rare elements where possible, recycling and developing processes that are not energy intensive.