German National Academy of Sciences issues a critical statement on the use of bioenergy

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In a statement on the chances and limits of using bioenergy, the German National Academy of Sciences Leopoldina has come to the conclusion that in quantitative terms, bioenergy plays a minor role in the transition to renewable, sustainable energy sources in Germany at the present time and probably in the future. Bioenergy requires more surface area, is associated with higher greenhouse gas emissions and is more harmful to the environment than other renewable sources such as photovoltaic, solar thermal energy and wind energy. In addition, energy crops potentially compete with food crops. The report recommends finding strategies for saving energy and increasing energy efficiency.

The Leopoldina's statement "Bioenergy – Chances and Limits" was compiled by a working group of more than 20 expert scientists established in 2010. The report provides recommendations for using bioenergy, defined as energy obtained from burning of non-fossil plant biomass or biofuels derived primarily from biomass.

The statement also outlines under which conditions the utilization of bioenergy is appropriate and what kind of technologies are currently available or are being developed to convert biomass into biofuels such as bioethanol and biodiesel. In addition, it introduces various scientific approaches aimed at producing hydrogen from water in a sustainable and environmentally friendly manner.
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The statement extends earlier Leopoldina reports on the topic of energy: "Konzept für ein integriertes Energieforschungsprogramm für Deutschland", 2009 ("Concept for an Integrated Energy Research Programme for Germany, 2009") and "Energy- and research-policy recommendations following the events in Fukushima", 2011.

The report is available as a short version in German and English and as detailed English version, in which the statements are supported by scientific documentation.

Both versions can be accessed at: http://www.leopoldina.org/en/policy-advice/statements-and-recommendations/national-recommendations/

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