

SUSTAINABLE RENEWABLE ENERGY PRODUCTION

Definition

The production of renewable energy in line with the principles of sustainability.

Economic sustainability encompasses the price of renewable energy production at sustainable levels, and efficient processes characterized by lower process requirements, capital and operating costs.

Social sustainability concerns social acceptance, energy democratization, and equality access to energy.

Environmental sustainability includes an assessment of the full environmental footprint of the renewable energy production (e.g., Life Cycle Assessment; Environment Impact Assessment). It also addresses land use requirements and whether renewable energy production is in competition with food production, habitats and biodiversity, or water supply and quality.

Cultural sustainability should conform to local cultural values and not adversely impact on cultural landscapes and heritage.

Related terms

Life Cycle Analysis, Environmental Impact Assessment, Social Impact Assessment

Keywords

Sustainable development



Figure 28 Sustainable Renewable Energy Production. (Photo & Montage: Pia Otte 2016)

Source

Evans A., Strezov V., Evans T.J. 2009: Assessment of sustainability indicators for renewable energy technologies. *Renewable and Sustainable Energy Reviews*, 19: 1082–1088.

Botelho A., Pinto L. M., Lourenço-Gomes L., Valente M., Sousa S. 2016: Social sustainability of renewable energy sources in electricity production: An application of the contingent valuation method. *Sustainable Cities and Society*, 26: 429–437.

Translations	
Bosnia and Herzegovina Održiva proizvodnja energije iz obnovljivih izvora	Italian Produzione energetica sostenibile da fonti rinnovabili
Bulgarian Устойчиво производство на възобновяема енергия	Islandic Sjálfbær vinnsla endurnýjanlegrar orku
Croatian Održiva proizvodnja energije obnovljivim izvorima	Latvian Ilgtspējīgas atjaunīgās enerģijas ražošana
Czech Udržitelná výroba obnovitelné energie	Lithuanian Tvari atsinaujinančios energijos gamyba
Danish Bæredygtig vedvarende energiproduktion	Montenegrin Održiva proizvodnja iz obnovljivih izvora energije
Dutch Duurzame hernieuwbare energieproductie	Polish Zrównoważona produkcja energii ze źródła odnawialnych
Esperanto Daŭrigebla (ekvilibra) produktado de renovigebla energio	Portuguese Produção sustentável de energia renovável, Produção sustentada de energia a partir de fontes renováveis
Estonian Jätkusuutlik taastuva energia tootmine	Romanian Producerea durabilă de energie regenerabilă
Finish Kestävä uusiutuvan energian tuotanto	Russian Производство возобновляемой энергии
French Production durable d'énergie renouvelable	Slovenian Trajnostna proizvodnja energije iz obnovljivih virov
German Nachhaltige Produktion Erneuerbarer Energien	Serbian Одржива производња енергије из обновљивих извора
Greek Βιώσιμη παραγωγή ενέργειας από ανανεώσιμες πηγές	Spanish Producción de energías renovables sostenible
Hebrew מתקנות אנרגיות של מקיים ייצור	Swedish Hållbar produktion av förnybar energi
Hungarian Fenntartható megújulóenergia-termelés	