

review are used to propose a future research agenda for social science research on energy that is in line with identied knowledge gaps as well as critical policy needs and priorities. The review starts from a set of nearly 80,000 academic articles identied using systematic search procedures and terms aimed at



For instance, when planning the expansion of renewable energy such as solar and wind energy resources, comprehensive climate???energy metrics need to be applied for conducting cost???benefit



At present, the international energy situation is in a stage of new changes and adjustments [6, 7]. The basic trend of the global energy transition is to realize the transition of the fossil energy system into a low-carbon energy system, and finally enter the era of sustainable energy mainly based on renewable energy [8]. Therefore, many studies have analyzed the ???





A review of hybrid renewable energy systems in mini-grids for off-grid electrification in developing countries. Em?lia In?s Come Zebra, Henny J. van der Windt, Geraldo Nhumaio, Andr? P.C. Faaij. Article 111036 View PDF. Article preview.



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ADVERTISEMENT Renewable energy-powered semi-closed greenhouse for sustainable crop production using model predictive control and machine learning for energy



such as electric vehicles, rooftop solar energy, smart metering, and appliances. This review targets large-scale renewable energy infrastructure projects that involve collective decision-making rather than choices made by individual families or businesses. Aiming to achieve the proposed goals, we begin this report by describing our methodological





Smart grids are controlled power networks that provide several benefits such as expansion and effective management of renewable energy sources. The present review provides an elaborative discussion on smart technologies in terms of characteristics, energy storage systems, demand side management, communication technologies, grid security, and



Second, Nigeria's renewable energy sources include wind, solar, biomass, hydro, and geothermal. This study recommends that renewable energy sources be harnessed to meet the country's electricity shortfall, and effective policies should be implemented that can provide solutions to the country's socio????economic problems.



The pressing challenge of climate change necessitates a rapid transition from fossil fuel-based energy systems to renewable energy solutions. While significant progress has been made in the development and deployment of renewable technologies such as solar and wind energy, these standalone systems come with their own set of limitations.





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The transition to renewable energy sources is vital for meeting the problems posed by climate change and depleting fossil fuel stocks. A potential approach to improve the effectiveness, dependability, and sustainability of power production systems is renewable energy hybridization, which involves the combination of various renewable energy sources and ???



Energy derived from fossil fuels contributes significantly to global climate change, accounting for more than 75% of global greenhouse gas emissions and approximately 90% of all carbon dioxide emissions. Alternative energy from renewable sources must be utilized to decarbonize the energy sector. However, the adverse effects of climate change, such as ???





Among various renewable energy technologies, solar power generation is the most common and well-known technology and has been actively applied worldwide (Rezk et al., 2019; Iqbal et al., 2021). Other than solar energy systems, renewable energy resources like wind, geothermal, and biomass energy systems have been getting good attention and promising ???



The reason is that the same absolute amount of renewable energy yields a higher renewable energy share, if energy demand growth is diminished because of energy efficiency. As for energy intensity, the annual gain has jumped from an average of 1.3% between 1990 and 2010 to 2.2% for the period 2014???2016, whole falling to 1.7% in 2017 [12].



According to Jacobson et al. [1], hindering global warming from rising above 1.5 ?C will require reaching 80% zero-emissions energy by 2030 and 100% by 2050, and much of this should be achieved through the increased use of renewable energy. This, in turn, inspires a steadily growing literature on a range of questions concerning the geopolitical consequences ???





Current Sustainable/Renewable Energy Reports focuses on the latest advances in energy, offering expert reviews on current research on sustainable and renewable fuels, the transportation sector, the power sector, the environment, energy-water nexus, energy-food-agriculture; waste streams and urban planning. Articles cover a range of established and emerging opportunities ???



The review paper targets providing a state-of-the-art comprehensive review of the definition and research advancements achieved that will benefit upcoming researchers, policymakers, and global energy regulators as guidance towards focusing their industrial as well as academic focus towards renewable and sustainable energy development.



It is thus imperative to increase the production of green energy technologies, such as solar, wind, and biomass (Imteyaz and Tahir, 2019, Ou et al., 2018, Perlaviciute and Steg, 2014) stainable Renewable Energy (RE) comes with several other advantages, such as offering alternatives, thereby diversifying energy resources and helping to achieve energy security.





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The use of renewable energy resources, such as solar, wind, and biomass will not diminish their availability. Sunlight being a constant source of energy is used to meet the ever-increasing energy need. This review discusses the world's energy needs, renewable energy technologies for domestic use, and highlights public opinions on renewable energy. A ???



A Review of Renewable Energy Supply and Energy Efficiency Technologies . Shahrouz Abolhosseini . TEMEP, Seoul National University . Almas Heshmati Sogang University, J?nk?ping University and IZA J?rn Altmann TEMEP, Seoul National University Discussion Paper No. 8145 April 2014 IZA . P.O. Box 7240 .





Solar energy intermittent nature is addressed by the development of renewable energy storage techniques, although the conversion of solar energy into hydrogen is more dependable and economical [51]. Using solar energy to produce hydrogen from renewable energy without greenhouse gas emissions provides a realistic transition route to solar hydrogen.



Renewable and Sustainable Energy Reviews is a peer-reviewed scientific journal covering research on sustainable energy is published in 12 issues per year by Elsevier and the editor-in-chief is Aoife M. Foley (Queen's University Belfast). According to the Journal Citation Reports, the journal has a 2021 impact factor of 16.799. [1] The journal considers articles based on the ???