

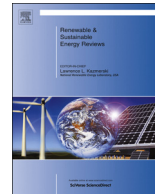


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Energy scenario and biofuel policies and targets in ASEAN countries



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ABSTRACT

Present energy situation of the world is unsustainable due to unequal geographical distribution of natural wealth as well as environmental, geopolitical and economical concerns. Ever increasing drift of energy consumption due to growth of population, transportation and luxurious lifestyle has motivated researchers to carry out research on biofuel as a sustainable alternative fuel for diesel engine. Biofuel such as biodiesel and ethanol, produced from renewable feedstock's, are the most appropriate alternative of petroleum fuels. Government of many countries has set a target to use biofuel in transportation and industrial sectors to reduce the fossil fuel demand in their countries. This report compiled the findings on global energy scenario, potential of biofuel as a renewable energy source, biofuel policy and target of some selected countries and the effect of mixed blends of biofuel and diesel on engine performance and emission parameters of a diesel engine. The study concluded that the energy consumption and CO₂ emissions in ASEAN countries increasing day by day. To reduce the energy consumption and harmful gasses emission to the environment, government of ASEAN countries have set target to use biofuel in diesel engines as biofuel-diesel blend have potential to reduce dependency on fossil fuel as well as the exhaust emissions of the engine.

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