

RENEWABLE ENERGY: STATE OF NEW JERSEY

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ABSTRACT

In this paper we look at the energy composition of State of New Jersey and the role of renewable energy, specifically solar and wind energy. We examine the current policy of State of New Jersey with respect to renewable energy through its energy master plan and further analyze incentives provided by the State to promote renewable energy. Furthermore, this paper points to the obstacles such as changes in administration policy which leads to uncertainty in investment in renewable energy and consequently can prevent a smooth transition toward its path to 100% clean energy for New Jersey by 2050.

Keywords: Energy policy, Green energy, Investment uncertainty, New Jersey energy Master Plan, Regulatory policy stability, Renewable energy, Solar energy, Wind energy.

1. INTRODUCTION:

Renewable energy is energy that comes from sources which are not exhaustible. This includes wind, sun, biomass, wave, and earth's own internal heat. Until recently human have been using fossil fuels with no attention to its environmental impact of it but with consequences of climate change more and more countries have started to consider renewable energy as viable source of energy.

Expecting the world demand for energy to triple by the end of the century, finding sufficient supplies of clean energy has become a challenging issue that needs to be addressed by the U.S. and other leading economies in the world. Part of the growing demand for energy comes from projected increase in population with most of this growth comes from emerging economies such as China and India. Increase in population and economic growth in emerging economies and developing worlds, has led to an explosive demand for energy and caused significant negative environmental impacts.

This increase in demand for fossil fuel particularly in emerging economics and developing countries could result in rise in emissions with serious public health and environmental effects. Political and civil unrests in parts of the world has made dependency on foreign oil even more risky.

Furthermore, the massive earthquake in Japan and its impact on nuclear power plants has reduced the desire for nuclear energy as a replacement for fossil fuels. Instability in oil producing countries, environmental effects and growing population has made dependency on fossil fuel too risky and requires improvements in energy efficiency and use of renewable energy as a complement to conventional sources of energy.

Even though efficiency is an important factor to produce more with less energy in the short-run, we need long-term solution that requires to find other sources of energy to satisfy our energy needs with less environmental footprint than traditional energy sources. The International Energy Agency (IEA) has considered the current energy trend unsustainable and urged us to set in motion an energy policy that can lead to a sustainable future.

Renewable energy looks like to be the energy source of the 21st century but it cannot expect to become a serious challenge for the fossil fuels, which its price ignores its negative externality, unless governmental policies such as subsidy make it a more realistic competition to the traditional source of energy.