MEXICAN ELECTRICAL SYSTEM: CURRENT SITUATION AND PROSPECTIVE

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México is one of the ten largest oil producers in the world but in the last years due to natural production declines since 2005, energy dependence has grown with increasing gas and fuel oil imports and decreasing oil exports. Total electricity generation is strongly based on fossil fuels (69%), the non-fossil fuels used are sources such as hydroelectric, nuclear, wind, photovoltaic and inclusive biomass. The energy production from these sources have been increasing in contribution to the electric energy generation system, they have achieved 31% of the total energy generation [¹]. Most of the OCDE countries have set targets for renewables in their energy plans [²], the Mexican government, as a OCDE member, has also launched an ambitious energy reform to modernize the energy system and to reduce emissions of the greenhouse gases (GHG), avoiding global warming increase but maintaining the energy production levels high enough to satisfy the consumption of the country and its development and it also has as the main objective, the increment of energy production from renewable technologies. The objective of this study is to analyze the evolution of the Mexican electricity system in the long term, under scenarios where the energy production are obtained mainly with renewable energy sources and evaluated up to the year 2050. Prospective of the development of the electric Mexican sector is to look up and analyzed in the long term the energy production considering renewable energies sources and technologies under the energy environmental policies suggested by the called National Climate Change Strategy (NCCS). Besides the reduction of the CO₂ emissions, the usage of renewable technologies to
the energy production could bring a number of benefits, social, economic, political and of course environmental [2].

References:
