

WHAT SHOULD BE THE ALTERNATIVE ENERGY MIX SUPPLY FOR THAILAND IN THE NEXT THREE DECADES

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Abstract

Thailand has been ranked one of the fastest-growing energy consumption in Asia, with an average rate of 12% in the past ten years. The reason for such growth is the sheer volume increased in commercial energy consumption now is about 1.1 MMBOED, of this amount, oil products accounted for 62%, natural gas 22%, coal 13%, and hydroelectric power 3%. Roughly 60% of consumption is being imported, mostly as crude oil, and the rest as coal and electricity. The energy demand, which is estimated to increase at 9%, 7%, 5%, 4%, 3%, and 2% in the next six five-years intervals, will rise to 2.8 MMBOED in 2010, and 4.4 MMBOED in 2025, someone might doubt this energy mix supply will last until 2025. The global oil production will rise to about 80 million BOPD in 2005 and will peak at 90 million BOPD in 2010 and declined to an end in 2040. It also projects that OPEC's role in supplying demand will simultaneously grow to over 50% of output beyond 2005. The constrain in supplying will effect the price of oil, consequently create alternative energy sources such as shale oil, tar oil, coal petroleum, clean coal, nuclear, and renewable energy technologies.

The natural gas, the environmental cleaner energy source, will be imported from neighboring countries, LNG will be imported from middle east. Low sulfur coal will be imported to serve the demand. These supplies will be probably not sufficient until 2025, some new sources of energy such as nuclear power, more hydropower, clean coal, and some renewable fuels might join the list. The conservation and environmental awareness policy will also effect the alternative energy mix supply in the future.