

## **46ESS-81: Sri Lankan Gas Turbines and Technology Evolution**

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*The energy sector in Sri Lanka in the past decade has been dominated by hydropower occupying two thirds of country's total energy requirement. The remainder was divided among small to medium sized thermal oil, thermal coal and other renewable sources. Currently the power generated by hydropower and other renewable sources are consistently outperformed by the thermal oil and thermal coal power plants. The number of privately owned power plants has also increased in order to match the steady growth of the country's energy demand. To avert the supply and demand mismatch in the future two new 35MW Liquid Natural gas power plants have been proposed as well as the linkage of domestic and neighbouring India's national grid. This paper explores Sri Lanka's hydropower power plants in early years and the late introduction of coal and other types of power plants and their evolution. It also studies the newly proposed LNG power plants and their environmental impact.*