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WOOD WASTE POWER PLANT PROJECT DEVELOPMENT IN SINGAPORE

CASE STUDY/INSIGHT

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Singapore is a small nation with a surface area of just 54 square kilometres. Within this small area, is there any possibility to develop and implement biomass/cogeneration power plants? The answer is YES! Singapore proved it by successfully installing and operating two biomass cogeneration power plants. The fuel supply for these power plants mainly come from the tree trimmings as the country has the effective tree trimming scheme to maintain the tree cover. These tree trimming wastes are collected and transported to the biomass power plant sites and burnt to generate electricity.

These power plants were connected to the nearby grid to export the generated electricity to the national grid. During COGEN 3 program, two such power plants were built in Singapore. Both of them were given project development support throughout their implementation periods. After the installation also, the projects were monitored for a period of consecutive three days by noting down the performance data for every 30 minutes. The performance evaluation showed that the operating efficiencies of these power plants were higher than the industry standards.