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Abstract

The current environmental context dictates to reduce the pollutant emissions by improving thermal efficiency of the energy production units. The authors present some studies of cogeneration applications using gas turbines and thermal engines. The on-going research concerns a detailed study of thermodynamic modelling cycles with energy recovery. These combined cycles with gas turbine and ICE can generate a potential increase of about 10% of the energy efficiency. They will generate a technological complexity and the over-charge must be estimated. At last, the authors insist on the necessary synergy between gas turbines and thermal engines.