**Thermal Energy**

**(TE14)**



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| **Fact Sheet TE14: Optimize boilers systems by pressurizing make-up water tank** |
| **Overview** |
| *Objective* | Maximizing boiler’s efficiency and reducing the thermal energy used by optimizing losses of condensate return in the boiler. |
| *Action* | Pressurizing the return tank. |
| *Key Challenges* | Initial CAPEX |
| **Process** |
| *Complexity* | High – system’s calculations and implementation |
| *Equipment & Material*  | Pressure tank, tank hook up (relief valve, pressure regulator,…) |
| *Human Resources* | Engineers & technicians  |
| **Considerations** |
| *Regulatory Aspects* | None |
| *Economic*  | Moderate CAPEX, Low OPEX, Moderate savings – depends on every system/Hotel separately |
| *Advantages* | * Decreasing water’s consumption and monthly bill.
* Decreasing Natural gas / Diesel monthly bill.
 |
| *Disadvantages* | * System’s shutdown to install new equipment.
* Regular maintenance required
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| **Impacts** |
| *Environmental* | * Pollution reduction as a result to CO2 reduction.
* Reduction in water consumption
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| *Employment Opportunities* | Moderate – technical labors |