

## Overview of Recently Upgraded Absorption Chillers

We removed the absorption chillers and electric turbo chillers that started operation back in 1988 and installed the same type of high-efficiency absorption chillers that were introduced in 2010 and 2011.

With specific steam consumption of 3.59 kg per tonne of refrigeration, it is very efficient equipment, exceeding the efficiency of the absorption chillers removed by about 17%.

|   | Equipment after upgrading | Equipment before upgrading |
|---|---------------------------|----------------------------|
| Refrigeration capacity  | 3,000RT                   | 1,350RT                    |
| Number of installed units   | 2                         | 3                          |
| Total refrigeration capacity  | 6,000RT                   | 4,050RT                    |
| Steam consumption rate<br>(Percentage compared to Central Plant existing equipment) | 3.59kg/RT<br>(83%)        | 4.30kg/RT<br>(100%)        |
| Year installed  | 2015                      | 1988                       |



*New 3,000RT absorption chiller units installed at the Central Plant in June 2015*