

## TECHNICAL DIRECTORY

Building - 2.15		
Industry classification Building	<b>High-efficiency Gas Fired Air Conditioning System</b>	Energy Source electricity
Technology Classification Operation		Practical Use
Outline	Using gas as main heat source, such gas air-conditioning equipment as gas absorption chiller-heater and gas heat pump air-conditioner consume less electricity than electrical air-conditioning equipment, enabling a reduction in peak-time electricity use in summer.	
Principle & Mechanism	<p>There are three types of gas air-conditioning equipment available according to purpose of use and size of area to be air-conditioned: gas absorption chiller-heater, gas heat pump air-conditioner (GHP) and home air-conditioning system. They need only one heat-source unit for cooling and heating.</p> <p>The gas absorption chiller-heater is a completely CFC-free, earth-friendly system. It supplies both cold and hot water using one heat-source unit.</p> <p>The gas heat pump air-conditioner uses a gas engine to drive a compressor for heat pump operation. Waste heat generated from the gas engine is also used for heating.</p>	
Description	<div style="text-align: center;"> <h3>Mechanism of Gas Air-conditioning Equipment</h3> </div> <div style="text-align: center; margin-top: 20px;"> </div>	
Energy Saving effect		
Example Sites Osaka Nanko Branch Office, IBM Japan, Ltd.	References Global Environment Centre Foundation	Inquiry Ministry of the Environment, Japan.