Demonstration Project Using the Heat-Recycle-System inside of Sewage Pipe

**Investigator**
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**Demo-field**
Ebie sewage treatment plant  (Osaka city)

**Outline of demonstration**
① Heat recycle functionality is added during sewage pipe rehabilitation.
② Recycled heat is used by heat pumps to air-condition (heat and cool) buildings and to heat water.
③ Joint research group verified cost reduction effect, energy saving effect and CO2 emission reduction effect by heat recycle system.

The temperature of sewage is higher than the outdoor temperature during the winter and lower than the outdoor temperature during the summer, allowing heat pumps to operate at a higher level of efficiency than if they used air.

Examples of using air conditioner on heating

Increasing proximity of demand areas and supply areas.