

Hitting targets

Key projects which Roche Singapore Technical Operations (RSTO) carried out from 2016 to 2018. Overall, RSTO achieved close to 10 MWh of net energy reduction across the three years.

PROJECT NAME	DESCRIPTION OF PROJECT	ENERGY SAVINGS ACHIEVED	SYSTEM LEVEL	FACILITY LEVEL
Boiler Insulation Paint	Insulation coating on boiler to minimise heat lost to surrounding	5 TJ/year	5.4%	4.3%
Heat Recovery Wheel	Recover wasted cool energy to pre-cool incoming fresh air for AHU	75 MWh/year	2.2%	0.2%
B1 Hot WFI Sanitisation*	Reduction in hot sanitisation frequency which reduces the need for second chiller's operation	462 MWh/year	18.5%	1.1%
K6 Phase 1A‡	Replacement of HCFC chillers to more environmentally friendly refrigerant and optimising the energy consumption through design	1160 MWh/year	8.0%	3.0%

* Project is completed in September 2018 and only partial energy savings is captured in the net energy reduction from 2016-2018

‡ Project is completed in December 2018 and has not been captured in the net energy reduction from 2016-2018