

PTT & 7-11 improve insulation with Thermal Barrier Paint

Success story: Bangkok, Thailand, January 2010



Photo: PTT gas station office's rooftop and 7-11 convenience store's rooftop are now painted and cool.

Planet Supra Thermal Barrier Paint reduces building heat load at PTT gas station office and 7-11 store.

Petroleum Authority of Thailand (PTT) manages gas stations and 7-11 convenience stores located on the same premises throughout the country. Standalone buildings with no shade, they require constant air-conditioning which is costly. A pilot station was chosen in Bangkok to test Planet Supra's cost-saving benefits. Both buildings' rooftops were painted on January 22nd. The PTT station office's rooftop is made of metal sheet and air gap with no insulation. The 7-11 store's rooftop is made of metal sheet insulated with PU foam and air gap. Both building's heat load dropped sharply after applying Planet Supra.

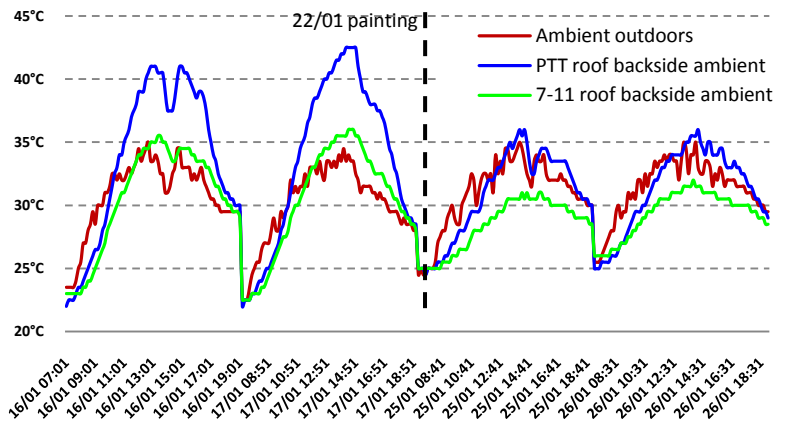


0.4 Ton of carbon are offset per year by this project, for 10 years

Maximum temperatures before / after painting

7am to 7pm	Outdoors ambient	Temp. delta with ambient outdoors			
		Roof backside PTT	Roof backside 7-11		
18-Jan	33.0°C	67.5°C	34.0°C	+34.5°C	+1.0°C
19-Jan	34.0°C	66.5°C	34.5°C	+32.5°C	+0.5°C
20-Jan	34.0°C	69.0°C	33.5°C	+35.0°C	-0.5°C
21-Jan	32.5°C	73.0°C	32.5°C	+40.5°C	+0.0°C
22-Jan	Painting 2 coats of Planet Supra				
23-Jan	33.5°C	40.0°C	29.0°C	+6.5°C	-4.5°C
24-Jan	33.0°C	38.5°C	28.0°C	+5.5°C	-5.0°C
25-Jan	35.0°C	42.0°C	30.0°C	+7.0°C	-5.0°C
26-Jan	35.0°C	42.5°C	31.5°C	+7.5°C	-3.5°C

Temperatures in roof backside air gap plummet with Planet Supra



Thermal Barrier Paint data sheet:

- ✓ makes buildings instantly energy-efficient
- ✓ high performance as per JIS R 3106:1998⁽¹⁾



- ✓ certified solution to reduce CO₂ emissions
- ✓ 10 years lifespan at full performance
- ✓ applicable directly on most surfaces
- ✓ non-inflammable, mold-free, crack-free
- ✓ water-based, VOC-free, 100% eco-friendly
- ✓ infinite number of colors available
- ✓ self-cleaning effect

(1) Japanese Industrial Standard

Daily average temperature trends, showing positive impact of Planet Supra: after painting, difference in °C with ambient outdoors is minimal.

