



Client: Ministry of Housing
Riyadh, Saudi Arabia

Project Details: A Falkonair F1 Solar Thermal Collector was installed on a 5-ton Gree air conditioning unit in September 21.

Prior to the installation, the system was closely monitored around the clock for fifteen days, collecting detailed data on kWh consumption from the 23rd of August, till the 06th of September.

The post data readings showed that the Falkonair F1 Solar Thermal Collector surpassed energy saving expectations. The post installation data revealed savings of **26%**.



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PRE-INSTALLATION ENERGY AUDIT

During the pre-installation energy audit phase, the energy usage of the air conditioning unit was assessed. We experienced some issues with tampering of the thermostat by office staff. Considering the tampering issue, we ignored the reading for that day when the thermostat setting was changed. During this period, the average consumption of this unit was approximately 115 kWh/day.





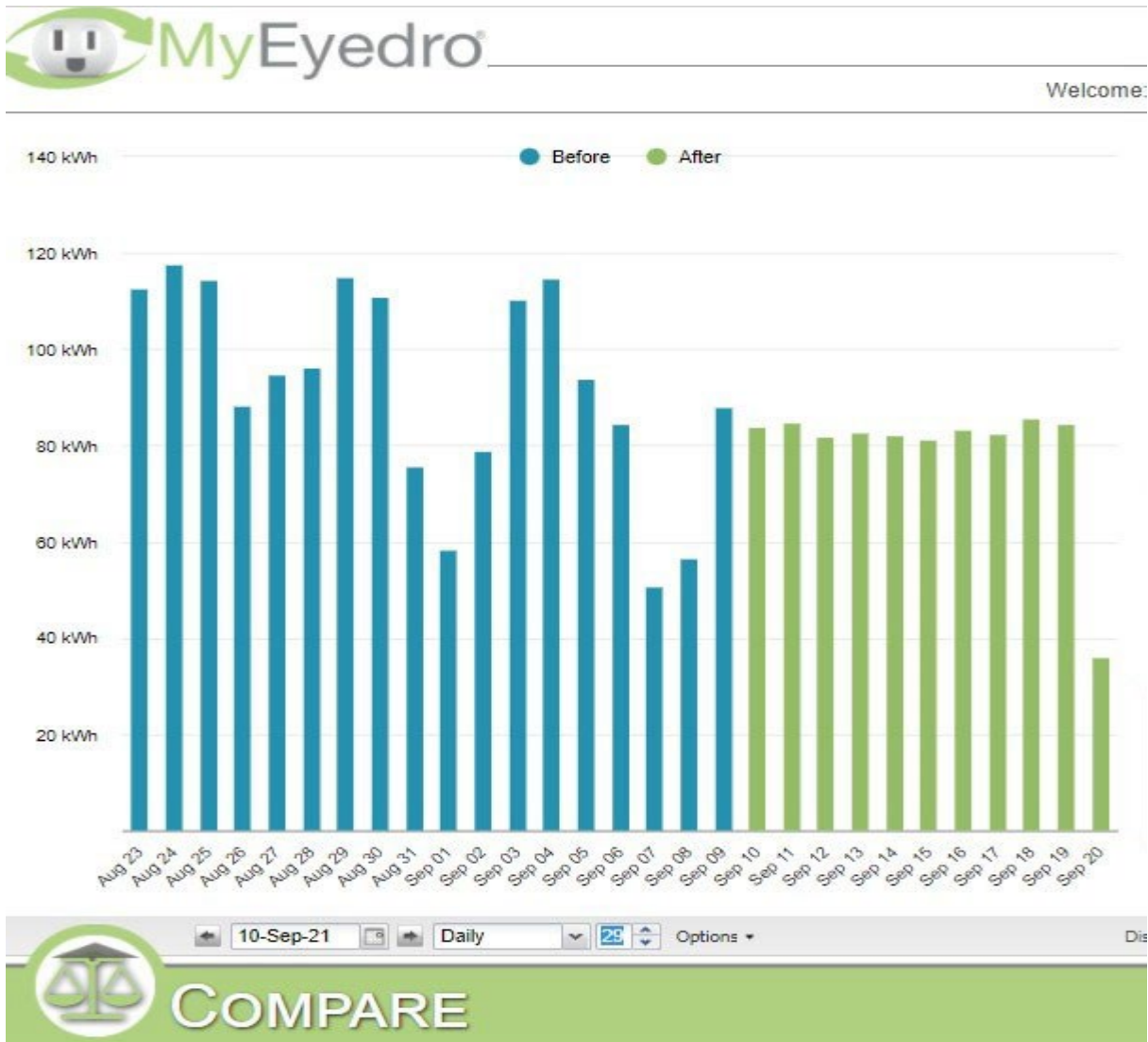
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POST-INSTALLATION ENERGY AUDIT

During the post-installation energy audit phase, the energy usage of the system was assessed. During this period, the average consumption of this unit was approximately 85 kWh/day





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Pre-Installation consumption

Average daily	115 kWh
Estimated annual consumption	41,975 kWh
Approx. annual running cost	SAR 13,432 (\$3,581)

Post-Installation consumption

Average daily	85 kWh
Estimated annual consumption	31,025 kWh
Approx. annual running cost	SAR 9,928 (\$2,647)

OVERALL SAVINGS	26%
CASH SAVINGS	SAR 3,504 (\$934)
CONSUMPTION SAVINGS	10,950 kWh

Live reading was based on 24-hour operation of system @ 18°C thermostat setpoint.

Report was prepared by:

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