

PROJECT OVERVIEW | MILITARY BARRACKS WATER HEATING

OBJECTIVES

- Offset **dormitory & laundry hot water needs**
- Provide **scalable, 24/7 water heating**
- Maximize **heating across seasons**

SPECIFICATIONS

- Location:** North Chicago, IL, USA
- Year:** 2019
- Demand:** Barracks & laundry hot water
- Size:** 1,300 SunDrum modules
- Power:** 1.0 MW thermal + 2.8 MW electrical

SOLUTION SUMMARY

SunDrum Solar nested **1,300 SunDrum Collectors** behind an existing **7,000 PV-panel array** to provide **over 4,000 therms per month of water heating capacity** for a large military barracks. The integrated heat pump provided **strong performance in both winter and summer months**, significantly reducing steam use across six dormitory hot water systems and a central laundry facility.

WHY SUNDRUM SOLAR?

SunDrum Systems combine **photovoltaic (PV), solar thermal, and heat pump technology** to meet electrical and thermal demand simultaneously.

WHAT IS SUNDRUM SOLAR?

The **award-winning, patented SunDrum Collector** mounts behind PV panels to supercharge any solar system. Collectors cool the panels (improving performance) and capture usable thermal energy. Heat pump integration supports a wide range of heating and cooling applications.

HOW SUNDRUM SOLUTIONS DIFFER

More solar power captured

3x more power per panel than PV

More useful heat

Space & water heating, up to 160°F

Better financial returns

Faster payback than PV or solar thermal

Made in the U.S.A.

Predictable timelines, increased rebates



All-season

Thermal energy generation



65,000 therms

Annual energy output

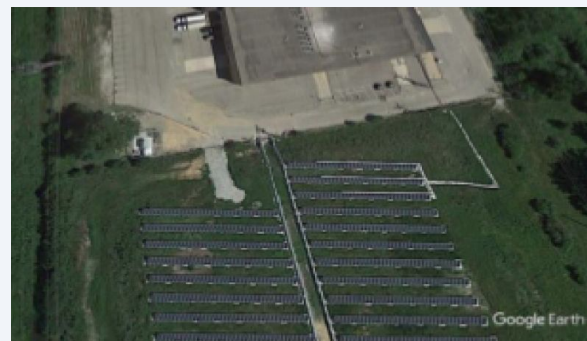


1,045 tonne CO2e

Annual emissions reduction



Dormitory Arrays



Landfill Array (Laundry)

