



An Eco-Friendly Facility in Valencia

Gonzalo De Murga
Chief, Technology Infrastructure Support (TIS)

Agenda

1

Solar Farm: Facility Green Energy Generation

2

Winter. Eco-Friendly Cooling System or “Free Cooling” For Data Center

3

Summer Eco Friendly Pre-Cooling System: Enhancement of HVAC using Adiabatic precooling for air conditionnig systems

4

Ceeda Certification: Certification for Electrical Efficient Data Center

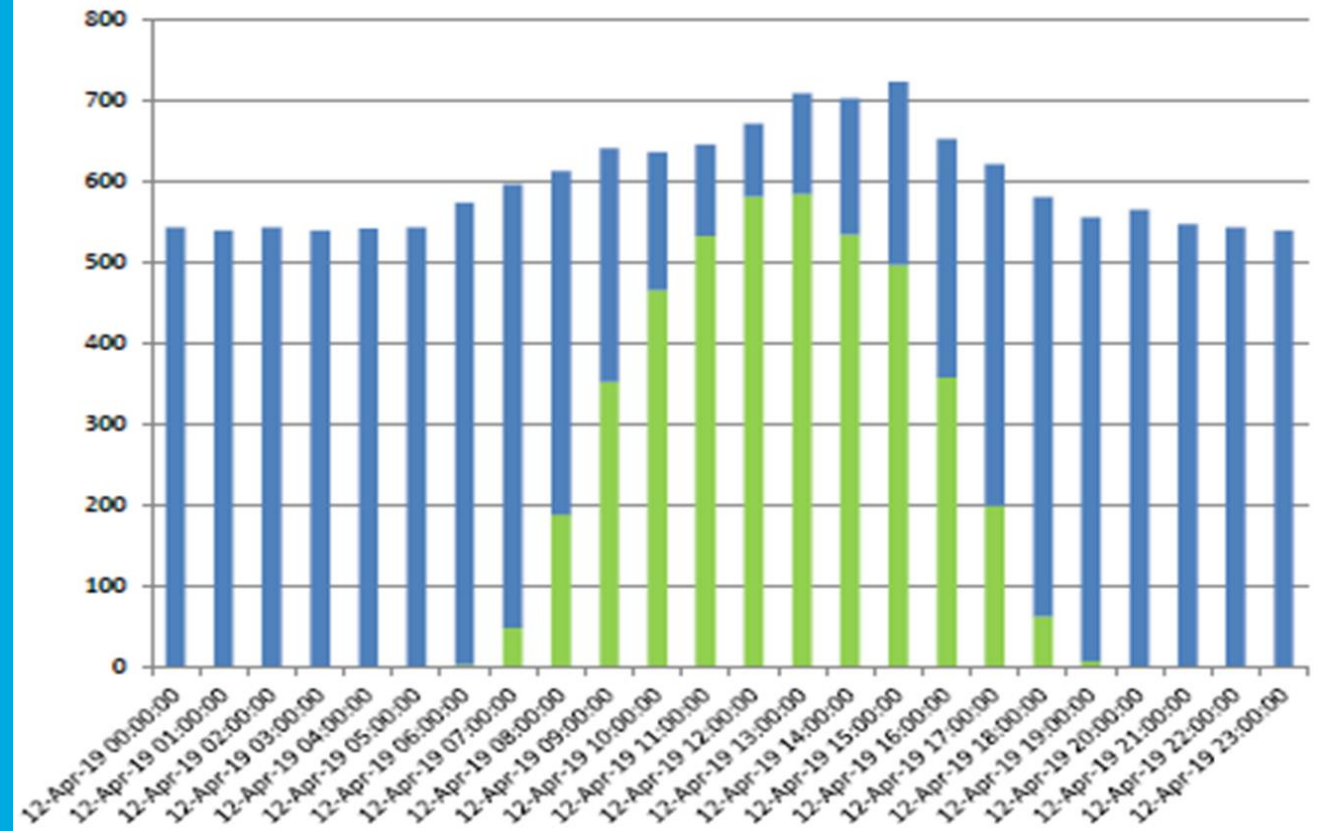


2.674 solar panels installed

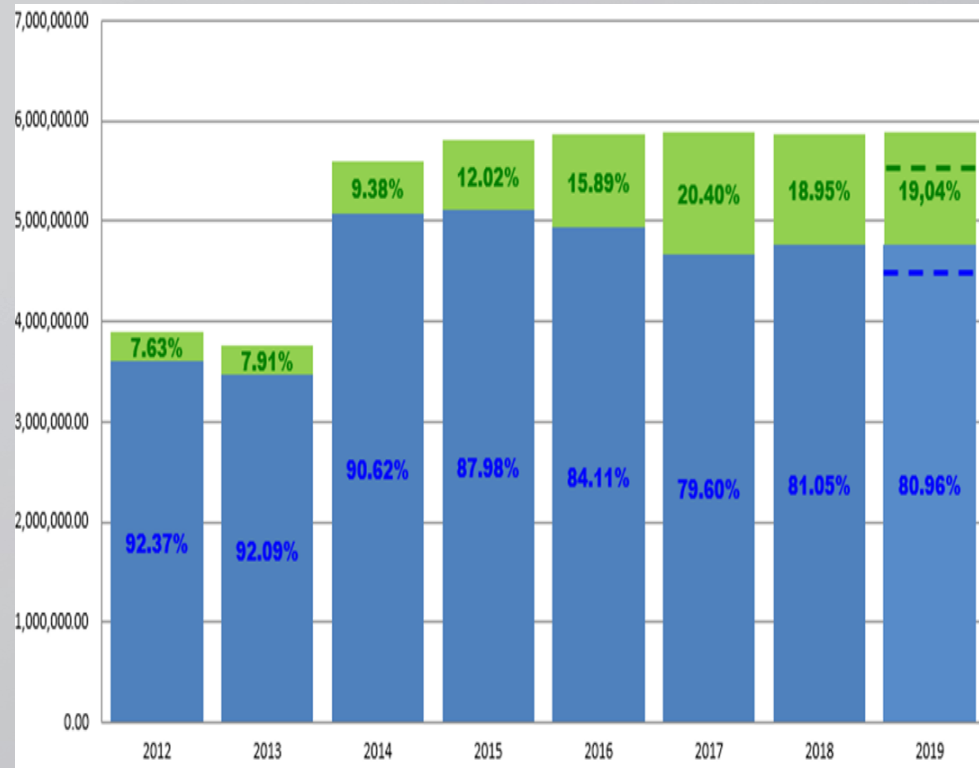
With 800 kW Peak generation capacity, the facility reaches 100% of solar power consumption at noon time quite often.

An average of 20% yearly power consumption comes from the sun. Daytime energy cost 30% more than nighttime energy due to industry and commerce high demand

Friday April 12,
2019



■ Solar energy supply (kWh)



■ Power Consumption from company (kWh)

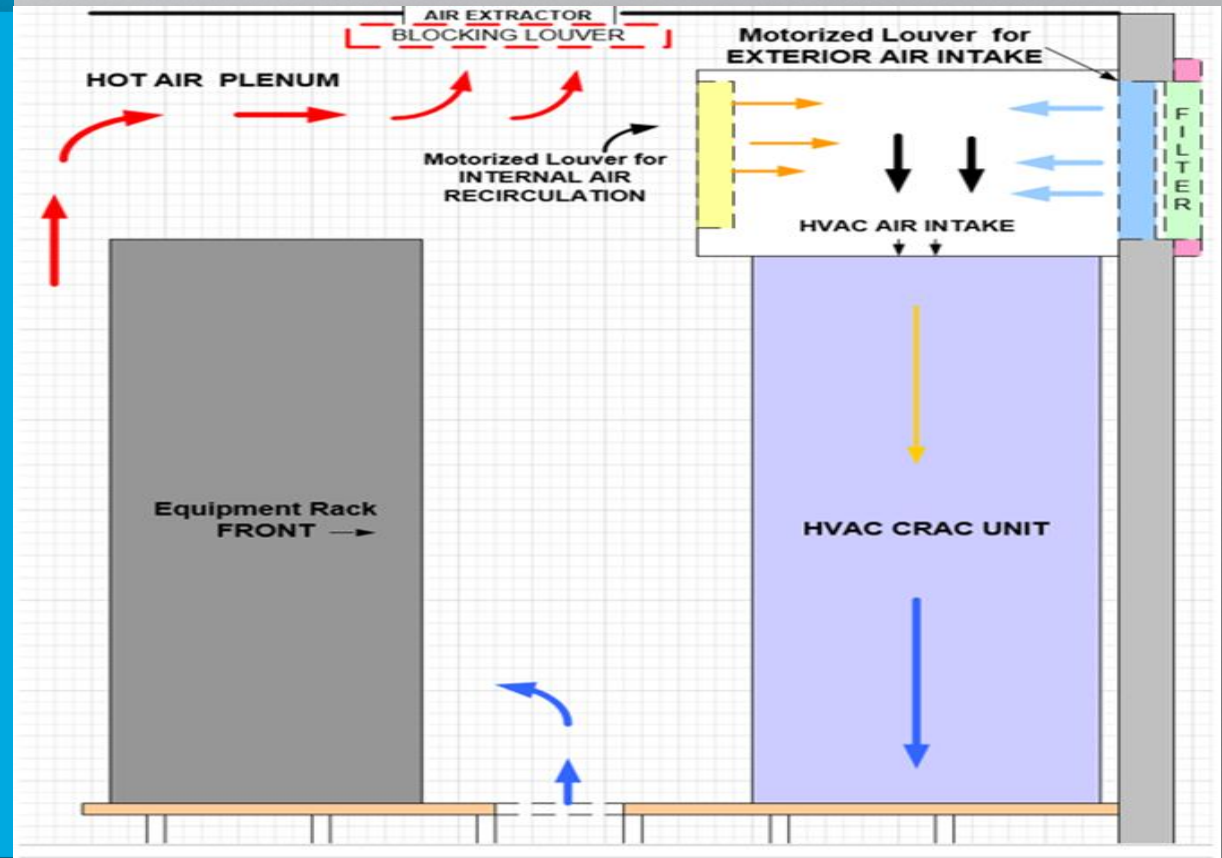
2012 – 2019 Solar Energy Production

Winter Eco-Friendly

Outdoor air should be below 21 degrees Celsius

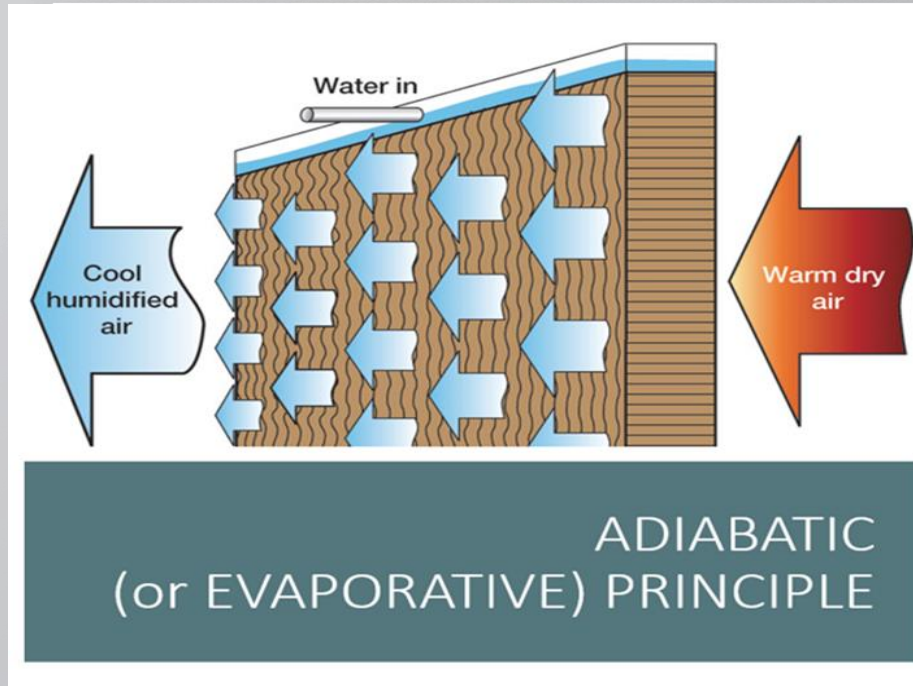
The facility achieved 3455 hours of “Free Cooling” in 2019

This save power, reduce maintenance and extend the life span of HVAC compressor



Free Cooling

Summer Eco-Friendly



Spraying water against the air cause evaporation.

Evaporation of liquids produce cooling effect same as when you get out from swimming pool and you feel the cool breeze.

Enhancement for Cooling System

**Adiabatic System will
enhance HVAC
Efficiency during hot
summer days, reducing
power consumption by
15%**





**Abiabatic pre-
cooling system
mesh for air
humidification**



THIS IS TO CERTIFY THAT
UNICTF-VALENCIA
—
ATTAINED
**CEEDA ENTERPRISE
GOLD**

The Certification of Energy Efficiency for Data Centers Award (CEEDA) Gold Level was awarded to UNICTF on:

**November 04,
2019**

CEEDA is a worldwide recognized audited evaluation and certification on energy efficiency, best practices and metrics especially designed for Data Centre Facilities



Thank
You!

The greenest kilo Watt of
ENERGY... Will be the one we
manage to **SAVE**

EFFICIENCY is the **KEY**

Gonzalo De Murga
Chief, Technology Infrastructure Support (TIS)

