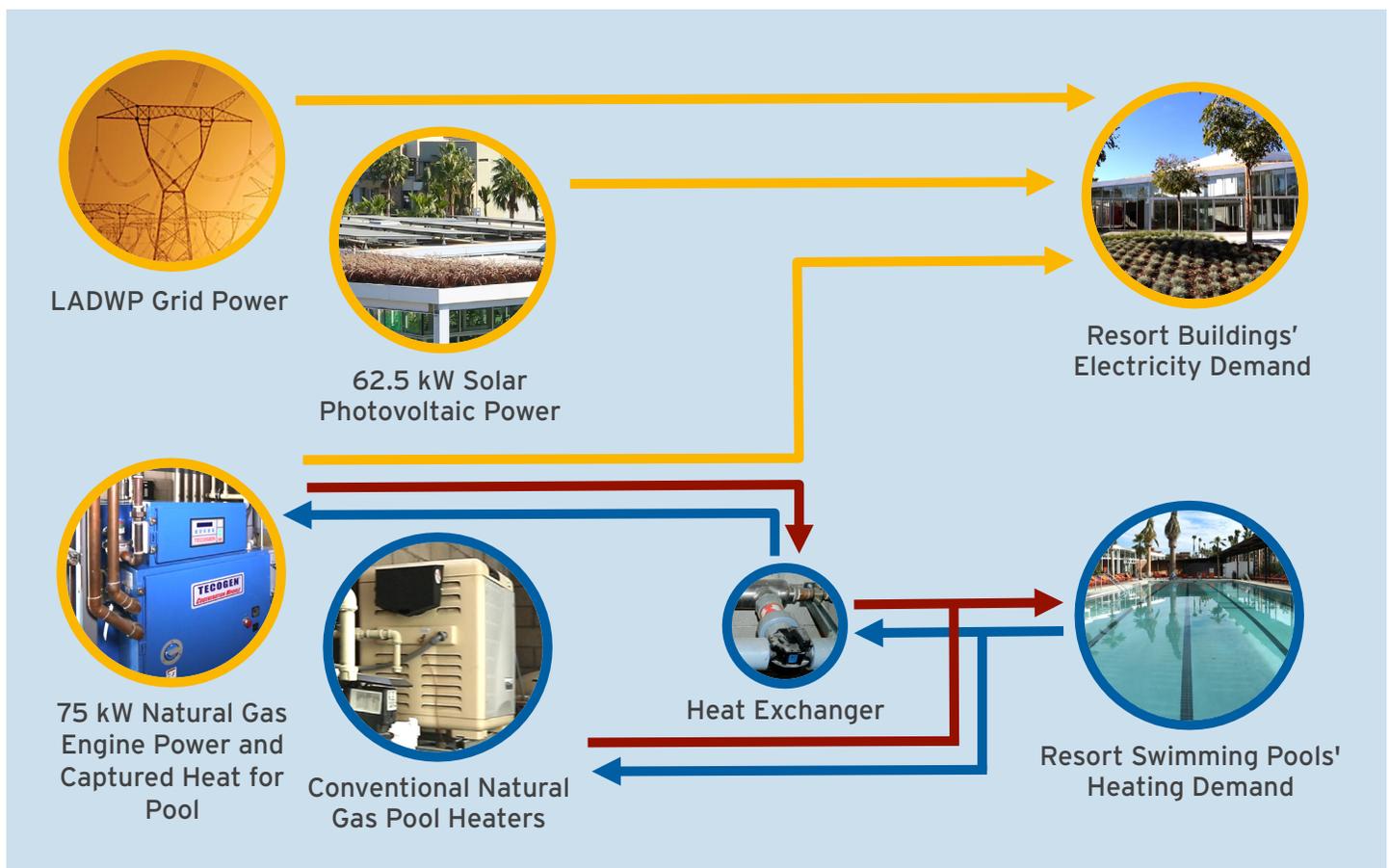


INNOVATION

# THE RESORT AT PLAYA VISTA

APPROACHING ZERO NET ENERGY WITH  
SUSTAINABLE DESIGN AND EMERGING TECHNOLOGY

## PHOTOVOLTAIC SOLAR POWER SYSTEM (PV) AND NATURAL GAS COMBINED HEAT AND POWER SYSTEM



## APPROACHING ZERO NET ENERGY

The Resort at Playa Vista is a 25,000-square-foot state-of-the-art community recreational facility providing complimentary services and healthy lifestyle programming for the residents of Playa Vista.

The facility contains a Junior Olympic swimming pool, a lounging pool, a wading pool, two spas, an outdoor fire pit, cabanas, a catering kitchen, a demonstration kitchen and general-purpose classroom space, as well as a two-level indoor/outdoor fitness center.

In keeping with the overall development philosophy of the Playa Vista community, The Resort was designed with sustainability and energy efficiency in mind. The facility's developer, Brookfield Residential, worked with the Los Angeles Department of Water and Power (LADWP) and SoCalGas® to install the latest in on-site power generation technology to meet most of the buildings' electricity demand.

The Resort serves as a model of how a mixed-fuel approach works efficiently and effectively to meet customer preferences and needs while helping to reach California's aspirational goal of Zero Net Energy (ZNE).

## SUSTAINABLE DESIGN

### Natural Ventilation/Passive Space Conditioning:

Taking advantage of the facility's proximity to the coast and the prevailing ocean breezes, The Resort utilizes sliding glass doors throughout the buildings that can be opened or closed as needed to help maintain comfortable temperatures and reduce the amount of auxiliary heating, cooling and forced-air ventilation needed.

### Pedestrian Accessibility:

Walkways connecting the various activity areas on both levels of the facility are designed into a "figure-of-eight" configuration that facilitates the easy and efficient movement of people throughout the Resort.

### Green Roofs:

Many of the rooftops and walkway tops are planted with vegetation that absorbs sunlight to help keep the buildings cool and filters rainwater to minimize storm water run-off from the site.

### Cool Roofs:

Rooftop areas that are not planted or supporting solar photovoltaic panels are painted white to reflect sunlight and help keep the facility cool.

## EMERGING TECHNOLOGY

### Photovoltaic Solar Power System (PV):

A 63 kilowatt photovoltaic solar power system with 251 rooftop panels generates on-site renewable energy that meets much of the buildings' electricity needs during the day. Electricity generated in excess of the facility's consumption at that time is delivered to the LADWP power grid through the net metering process.

### Natural Gas Combined Heat and Power System (CHP):

A 75 kilowatt natural gas-powered internal combustion engine generates electricity for the facility at night and on coastal cloudy days. The heat created by the engine is captured and processed through a shell-and-tube heat exchanger to help heat the swimming pools. Also called a cogeneration system because it generates both electric energy and heat energy, it reduces greenhouse gas emissions normally associated with electricity and hot water production.



### Water Conservation:

LADWP provides recycled water to The Resort for non-potable uses like watering in-ground plants. Drip irrigation is used for much of the rooftop plantings and landscaping and a smart irrigation controller enhances the efficiency of the system.

## BUILD FOR TOMORROW TODAY WITH NATURAL GAS

SoCalGas is supporting the development of Zero Net Energy Demonstration Projects that show how natural gas contributes to the energy efficiency of new homes and buildings that achieve high-performance standards while providing the comfort and economy preferred by customers.

SoCalGas plays a key role in the clean energy future that includes helping meet green housing and building standards like Zero Net Energy, Cal Green, Leadership in Energy & Environmental Design (LEED) and ENERGY STAR®.

For more information, visit [www.socalgas.com](http://www.socalgas.com), (Search "BUILDER SERVICES").



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