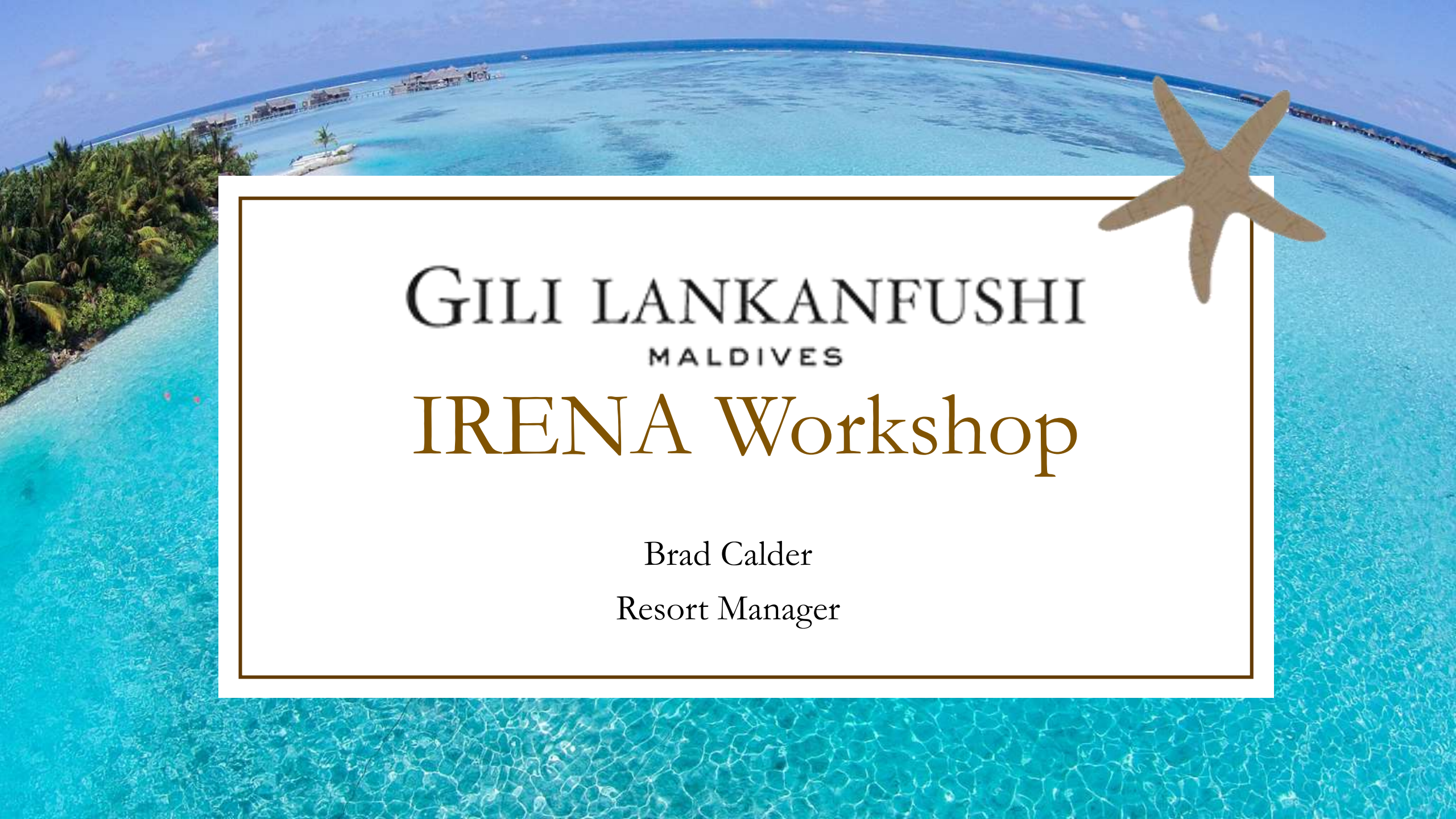


GILI LANKANFUSHI
MALDIVES

IRENA Workshop

Brad Calder

Resort Manager

About Gili Lankanfushi

Sustainable Tourism

EARTHCHECK
BRONZE BENCHMARKED
2015

Gili SEAS Policy

Environmental Initiatives

Gili Lankanfushi & Swimsol

Swimsol

First proposal visualization - 2013

Final system installed - 2015

In partnership with Swimsol since 2013

Specifications

Gili Lankanfushi's Solar Panel

Size: 15m x 15m

Number of photo voltaic panels: 112

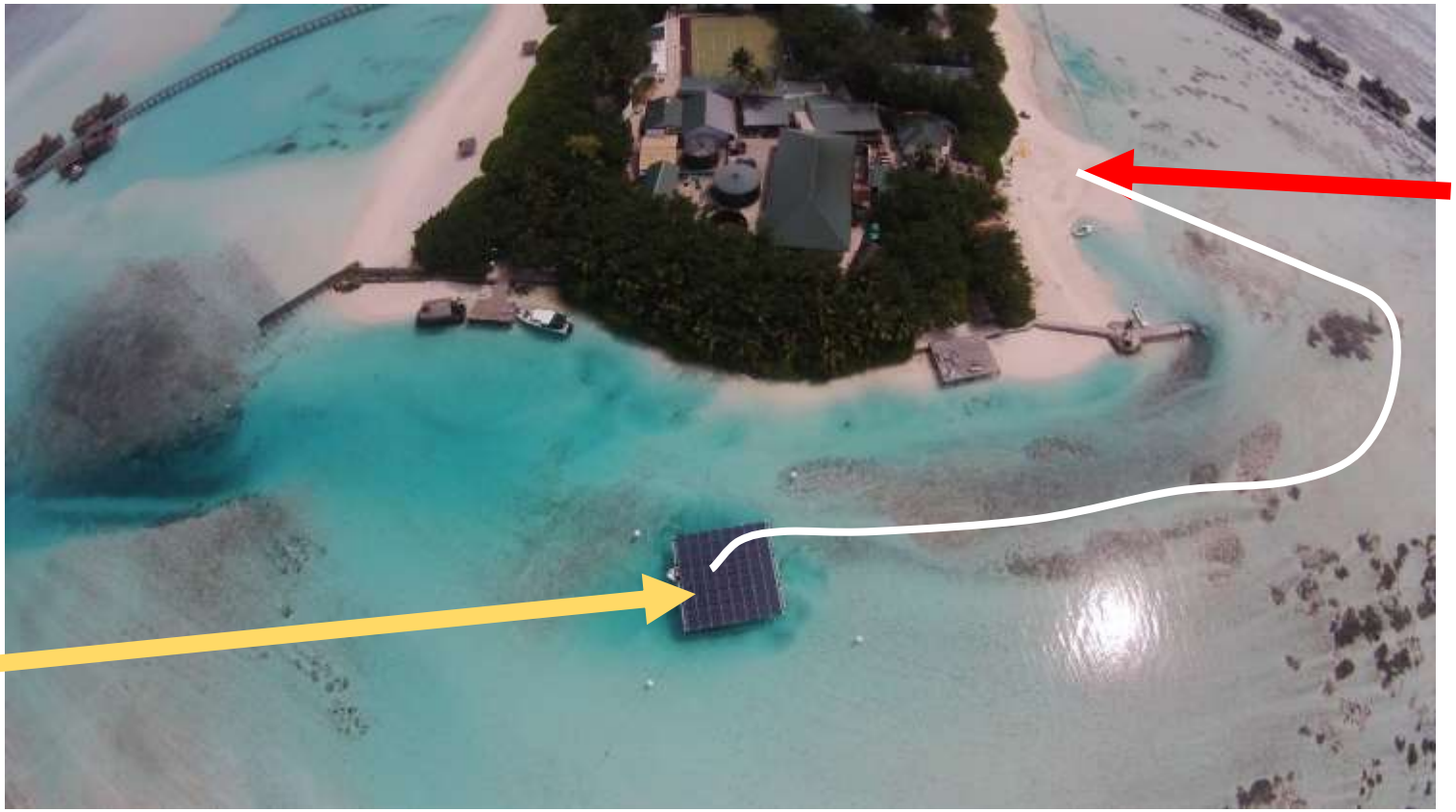
Nominal capacity: 28 Kilowatts

Annual production: ~44,800 KWh

CO_2 avoided: ~33.6 tons per annum

Withstands: 1.5m waves

Identifying the Site



Construction

Installation

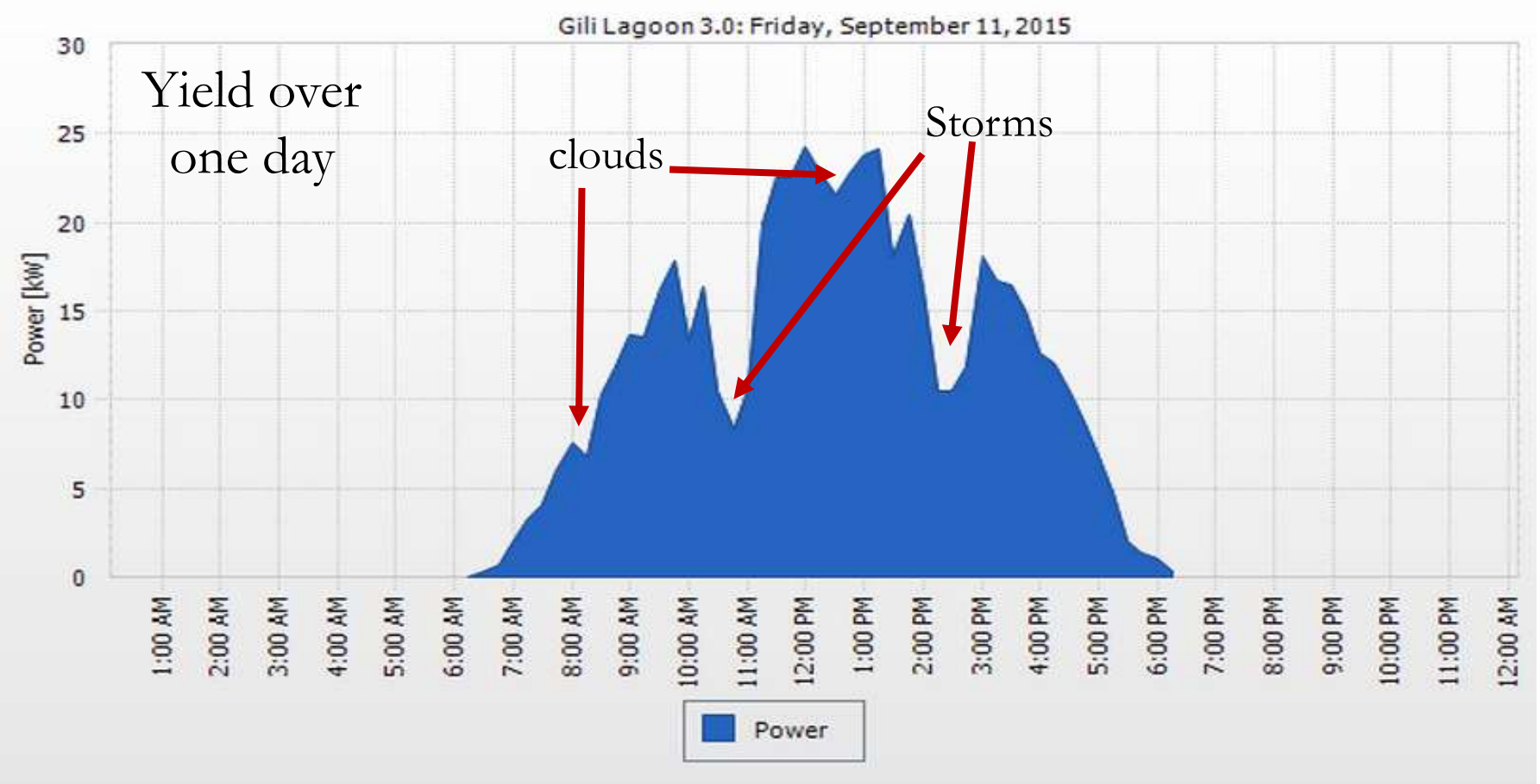
Construction

Installation

Installation

Installation

Output



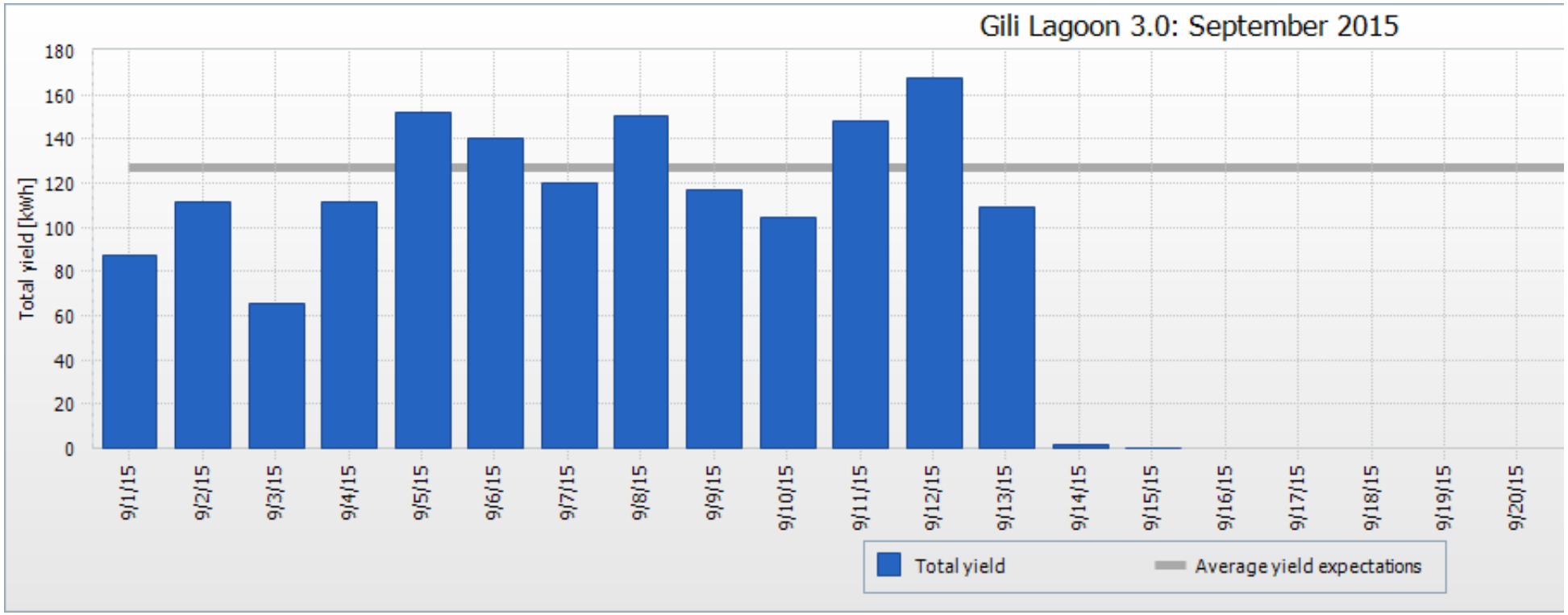
Average per day: **119KWh**

Output

Day by day for this month

Monthly yield of **1586KWh**

On sunny days **170kwh**

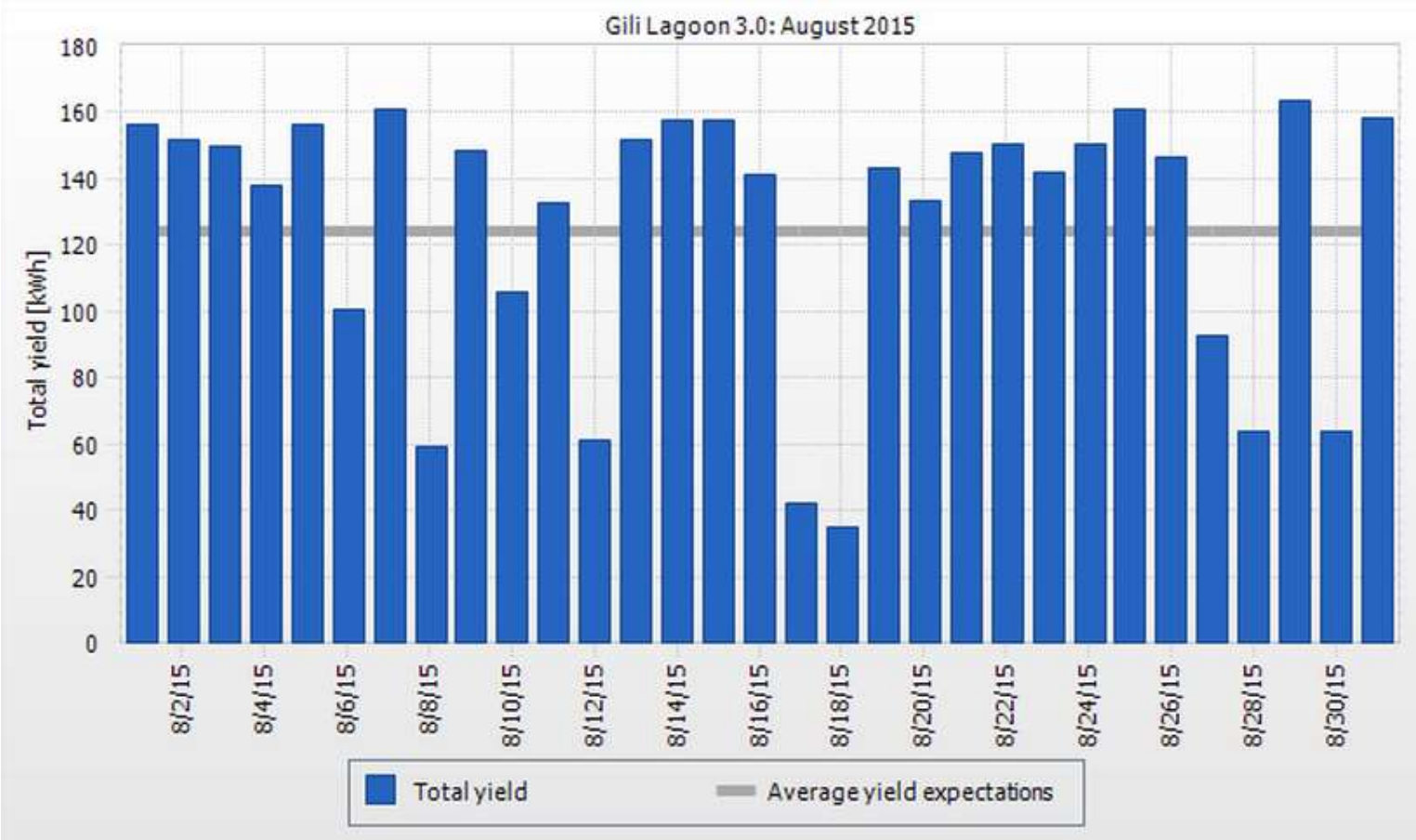


Output

Day by day for August

Monthly yield of **3922KWh**

Average monthly yield over 4 months of **3210 KWh**



Challenges

Contractual Challenges – There were issues initially in developing a contract because of the return on investment. These were overcome by creating a contract between the two parties whereby the Swimsol was deemed an independent electricity provider who was sanctioned to have their equipment stationed at our resort.

Current Technology Limitations – Solar Panels as a power source still have a huge potential to become more efficient to provide a greater amount of Kwh to meet the daily power needs of resort islands. Also, now even in small homes the storing of power collected in the day is able to be used at night thanks to new battery technology. With better battery technology it is our hope that maybe someday we could see this applied to resorts.

Future…

Planning to…

Build a 40KW roof system

Reduce our energy consumption following our waste, water an energy audit

Be able to turn off one generator during low occupancy