



HOW TO MAKE YOUR PV PROJECTS MORE COMPETITIVE

An EPC perspective

RAJISH VARGHESE
Business Development (Solar), ME Region

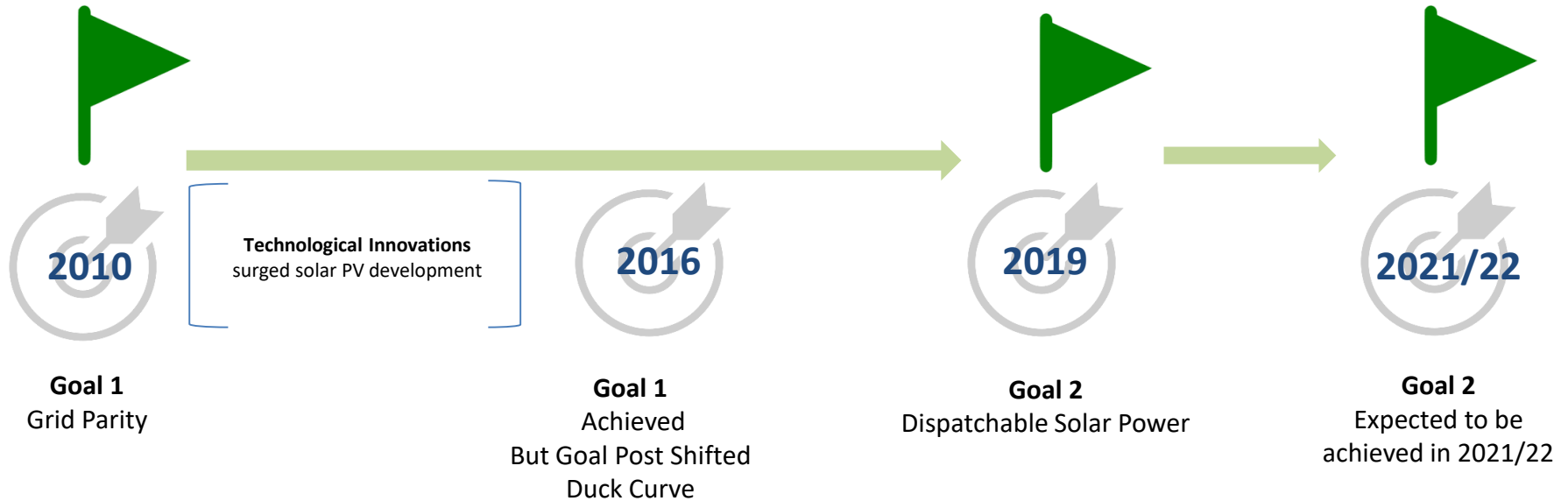


**RANKED WORLD'S #1
SOLAR EPC COMPANY**

Outside China by IHS Markit

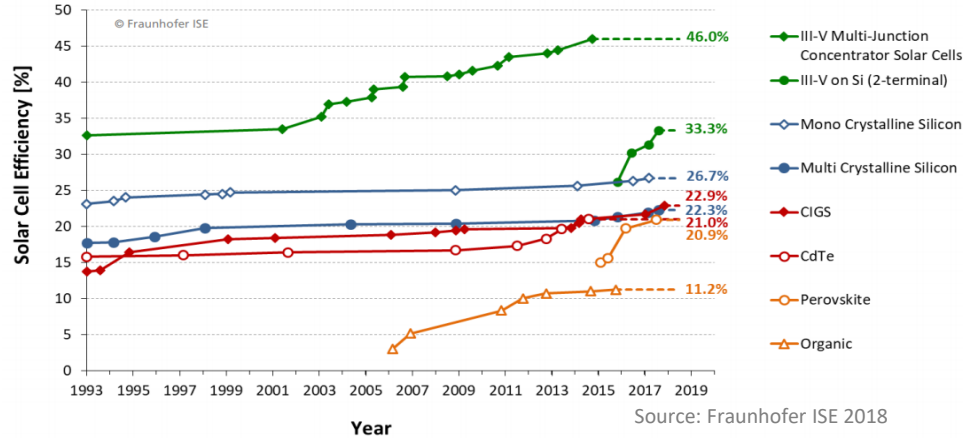
IHS ranking report for 2017 (Q1 2018)

JOURNEY

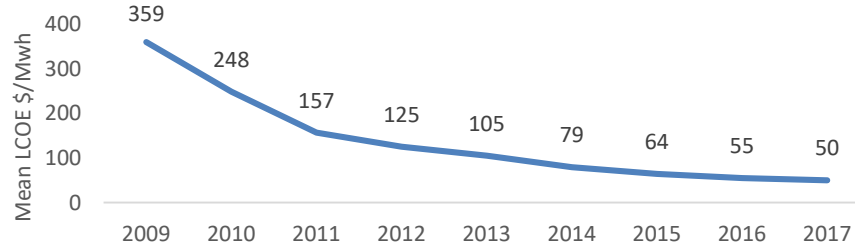


EVOLUTION OF SOLAR PV

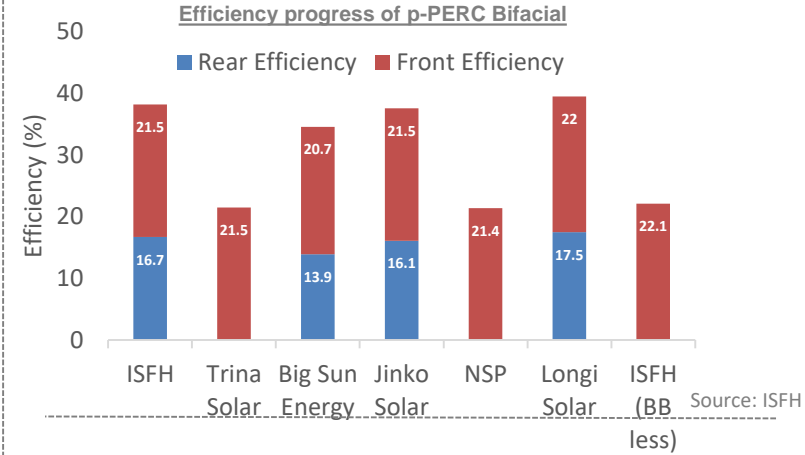
Module Efficiency



Reduction in Solar LCOE



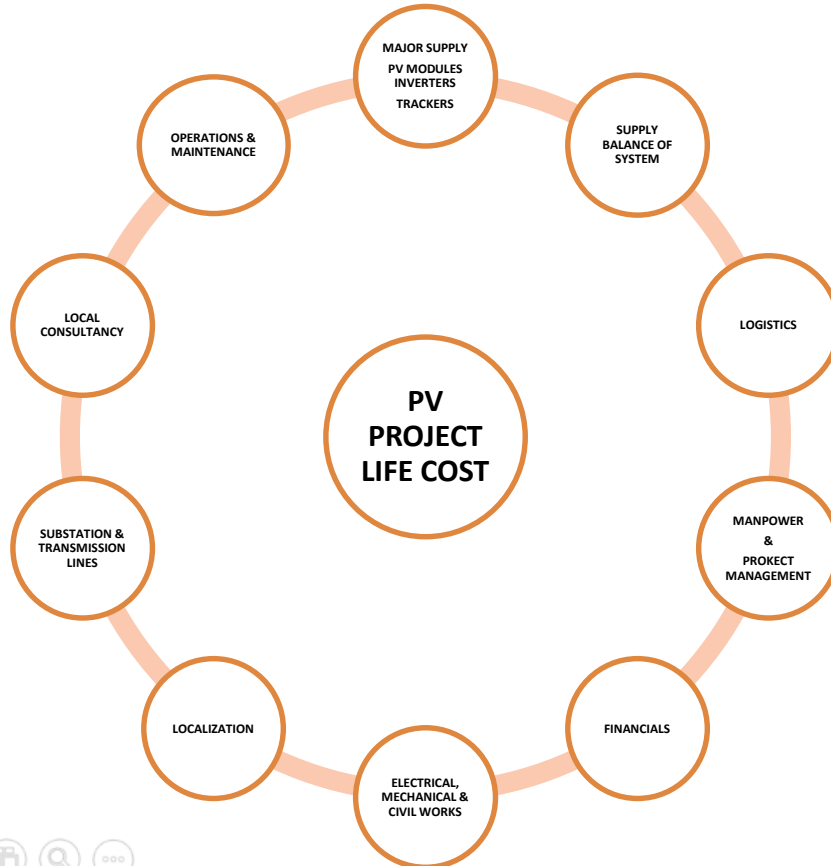
Bi-Facial Module - Efficiency



Other Innovations

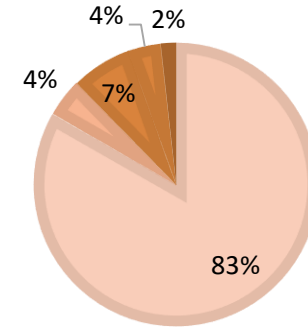
- Tracker due to Tech improvement and scale
- Inverter Size
- Low Cost Floating Platform
- Robotic Cleaning for Desert Conditions

KEY DRIVERS OF EPC COST



PV PLANT COST

Supply Installation Civil Works
Overheads Freight

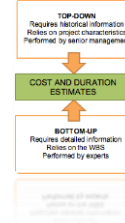


OPTIMIZING & CREATING A WINNING SOLUTION



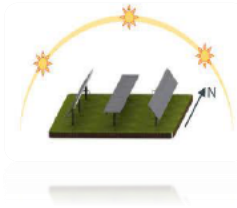
Project Cost Vs. LCOE

Incremental increase in Capex
against Higher Generation



Bottom Up approach

Clear understanding on the
Local Costing



Design optimization

Better Ground Coverage Ratio and
less BOS



Suppliers

Less cost of equipment,
timely delivery &
availability in desired
capacity



Manpower Management

Overhead Optimization: Right
number of people, right kind of
people at the right place, right
time, doing the right things



Taxation

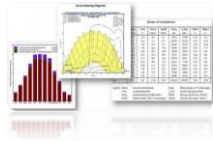
Optimized cost of
constructing PV plant

OPTIMIZING & CREATING A WINNING SOLUTION



Logistics

To minimize overall impact of additional time & cost



Performance of PV Plant

Better estimation of Generation & PR numbers



More accurate estimation of actual plant performance



Risk Assessment

Reduction in risks & risk mitigation cost



Inverter Sizing Vs Capacitor Bank

To meet grid reactive power compensation reqt., at lowest possible cost

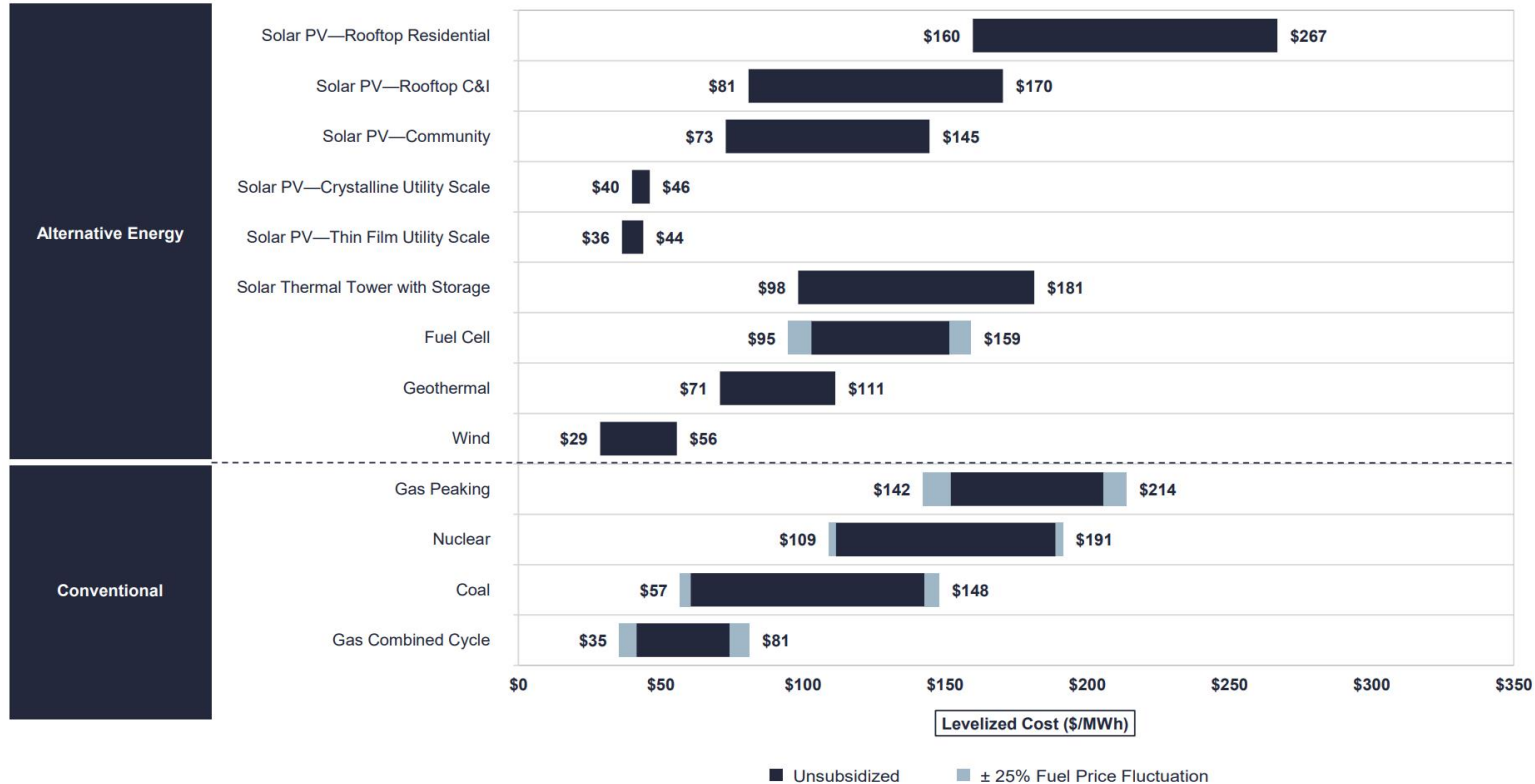


O&M

Better Generation
Less Plant downtime & Low Cost



LCOE COMPARISON BETWEEN SOLAR VS GAS VS COAL



Source: Lazard , Version 12



Thank You

You can reach us at

www.sterlingandwilson.com
solarinternational@sterlingwilson.com