

### SMART SOLAR

Renewable Energy Solutions מבית נתיבי רוח לישראל

### SmartSolar Israel



Established in 2009 in Israel as Windil ( wind lanes of Israel)



Based in north Israel -sea of galilee area



Over 20 years of combined experience in renewable energy project management and integration



We supply reliable solar systems comprised of the best equipment parts with good prices



"Hands on" knowledge - participation in all the project's phases



Company website: www.smartsolar.co.il



### Selected Projects

#### Solar Generator

- » Built as a transportable no- fuel less generator for the "midburn" festival in Israel may 2018
- » Mounted on a trailer, fully licensed
- » Total weight approx. 2.5 ton
- >>> Supplies approx. 20 KWh per day
- » Connects to any pickup truck Solar power everywhere you go





#### Solar Generator- Components



Battery – 500Ah 48V –traction batteries - manufactured by TAB (Poland)



Solar Panels – 15 units of 360W – manufactured by Hanwha Q-cells (Germany). Total 5.5KW



8KVA Inverter, manufactured by Victron Energy, Netherland



Custom built AC and DC circuit boards
Metal construction with hydraulic pistons

### Solar Generator-Components

Victron Energy system components

- ✓ Victron Quattro 8 KVA Inverter Charger
- ✓ Victron SmartSolar charge controllers with Bluetooth connection for local monitoring
- ✓ Includes CCGX monitoring unit connected to cloud for remote control and data monitoring
- ✓ AC input shore power\ generator power for back up



#### Solar Generator

Project timescale: 2 months

Project cost: **55,000\$ USD** 

The solar generator was deployed at midburn in the Negev desert working for 2 weeks without any need to use fuel generators or any AC shore power





### Grid tied Solar system in Ghana

- Smartsolar managed the project as EPC for client in Ghana
- Project was established for an agricultural business in Dwanyha Ghana, 40 KM north of Accra
- Solar plant is designed to power water pumps at an agricultural site inc. near by living facilities and agriculture school
- Plant will produce over 200,000 KWh per annum





### Grid tied Solar system in Ghana -Components



140KW solar system



Solar Panels - 412 solar PV modules of 340W each — Manufactured by Hanwha Q-cells



Aluminum mounting construction custom built for project



5X Solaredge 25KW grid-tied DC – AC inverters with optimizers (produced in Israel)

### Grid tied Solar system in Ghana









PROJECT COST:

175,000\$ USD

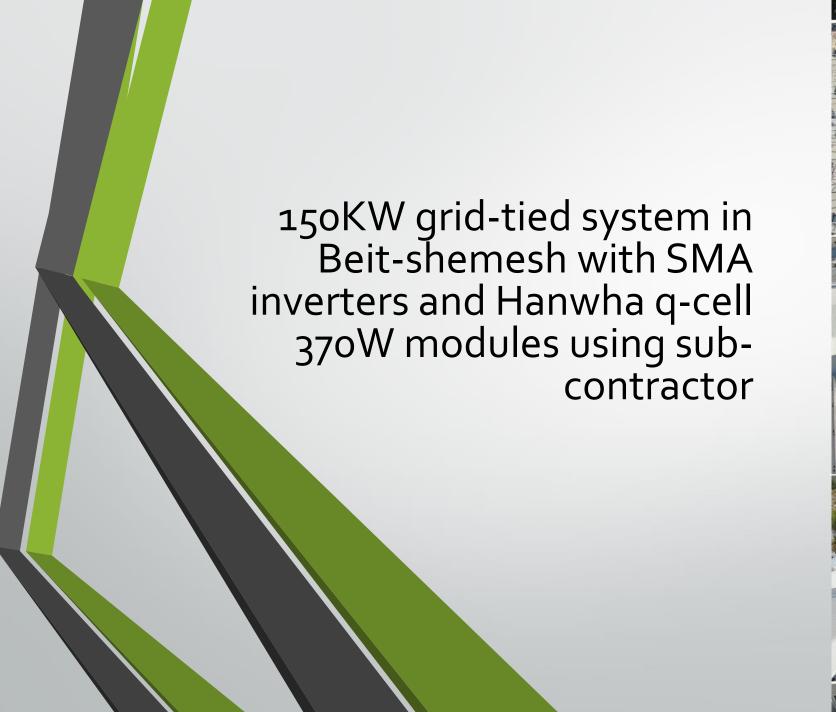
(NOT INC. SHIPPING COSTS
FROM ISRAEL)



PROJECT TIMESCALE:

5 MONTHS.

DUE TO BE COMPLETED AND
FULLY WORKING BY
THE END OF NOV. 2018





42KW system in Rosh-pina grid- connected with Solaredge — installed by an in-house team







## Off-Grid project for a small factory in Jerusalem Area - Israel











24 PV panels of 325W Hanwha Q-cells

3X Schneider 8KW inverters (connected as 3 phase) 9 meter tower including foundations

1000A 48V deep cycle batteries Grid connected for back up

# Off-Grid project for a small factory in Jerusalem Area - Israel

Project timescale: 3 Months

Project cost: **85,000\$ USD** 

System working since 2016 minimizing grid use



### Solar Street Lighting

- Smartsolar connected hundreds of streetlights in Israel and Africa
- Various models and capacity for all needs
- Projects include Ghana airport, Municipalities in Israel and more
- Solar streetlights reduce installation and operation costs segnificantly



