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MEET

Onera SYSTEMS

HYBRID Power Solutions

REN PROJECTS

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Quality Certificates

DET NORSKE VERITAS

MANAGEMENT SYSTEM CERTIFICATE

Certificate No. 58550-2009-AQ-EGY-RvA

This is to certify that

MIDDLE EAST ENGINEERING & TELECOMMUNICATIONS (S.A.E.)

at

Plot 71, Sixth Industrial Zone, 12573 Sixth of October, EGYPT

has been found to conform to the Quality Management System Standard:

ISO 9001:2008

This certificate is valid concerning all activities related to:

DESIGN, MANUFACTURE, INSPECTION, SUPPLY, PROJECT MANAGEMENT, DOCUMENTATION, INSTALLATION AND COMMISSIONING OF SOLAR SYSTEM, POWER SUPPLY SYSTEM AND CIVIL WORKS & STEEL STRUCTURES AND ENCLOSURES

SUPPLY AND INSTALLATION OF BATTERIES, OBSTRUCTION LIGHTS AND PASSIVE COOLING SHELTERS

Initial Certification date: 14 April 2003

This Certificate is valid until: 14 April 2012

The audit has been performed under the supervision of: Sherif Mekkawy, *Lead Auditor*

Place and date: Chennai, 19 October 2009

for the Accredited Unit: DET NORSKE VERITAS CERTIFICATION B.V., THE NETHERLANDS

Bhupalam Ajit, *Management Representative*

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.

DET NORSKE VERITAS CERTIFICATION B.V. Zwolseweg 1, 2994 LB Barendrecht, The Netherlands, TEL: +31 10 2922 688 - www.dnv.com / www.dnv.nl

ISO 9001

DET NORSKE VERITAS

MANAGEMENT SYSTEM CERTIFICATE

Certificate No. 58551-2009-AE-EGY-RvA

This is to certify that

MIDDLE EAST ENGINEERING & TELECOMMUNICATIONS (S.A.E.)

at

Plot 71, Sixth Industrial Zone, 12573 Sixth of October, EGYPT

has been found to conform to the Environmental Management System Standard:

ISO 14001:2004

This certificate is valid concerning all activities related to:

DESIGN, MANUFACTURE, INSPECTION, SUPPLY, PROJECT MANAGEMENT, DOCUMENTATION, INSTALLATION AND COMMISSIONING OF SOLAR SYSTEM, POWER SUPPLY SYSTEM AND CIVIL WORKS & STEEL STRUCTURES AND ENCLOSURES

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ISO 14001

DET NORSKE VERITAS

MANAGEMENT SYSTEM CERTIFICATE

Certificate No. 58552-2009-HSO-EGY-DNV

This is to certify that

MIDDLE EAST ENGINEERING & TELECOMMUNICATIONS (S.A.E.)

at

Plot 71, Sixth Industrial Zone, 12573 Sixth of October, EGYPT

has been found to conform to the Occupational Health and Safety Management System Standard:

OHSAS 18001:2007

This certificate is valid concerning all activities related to:

DESIGN, MANUFACTURE, INSPECTION, SUPPLY, PROJECT MANAGEMENT, DOCUMENTATION, INSTALLATION AND COMMISSIONING OF SOLAR SYSTEM, POWER SUPPLY SYSTEM AND CIVIL WORKS & STEEL STRUCTURES AND ENCLOSURES

SUPPLY AND INSTALLATION OF BATTERIES, OBSTRUCTION LIGHTS AND PASSIVE COOLING SHELTERS

Initial Certification date: 4 August 2006

This Certificate is valid until: 4 August 2012

The audit has been performed under the supervision of: Sherif Mekkawy, *Lead Auditor*

Place and date: Chennai, 19 October 2009

for the CertifyingUnit: DNV CERTIFICATION SERVICES, REGION INDIA

Bhupalam Ajit, *Management Representative*

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.

DNV AS CERTIFICATION SERVICES, EMGEEN CHAMBERS, 10, C.S.T. ROAD, VIDYANAGARI, KALINA, SANTACRUZ (E), MUMBAI - 400 098

OHSAS 18001

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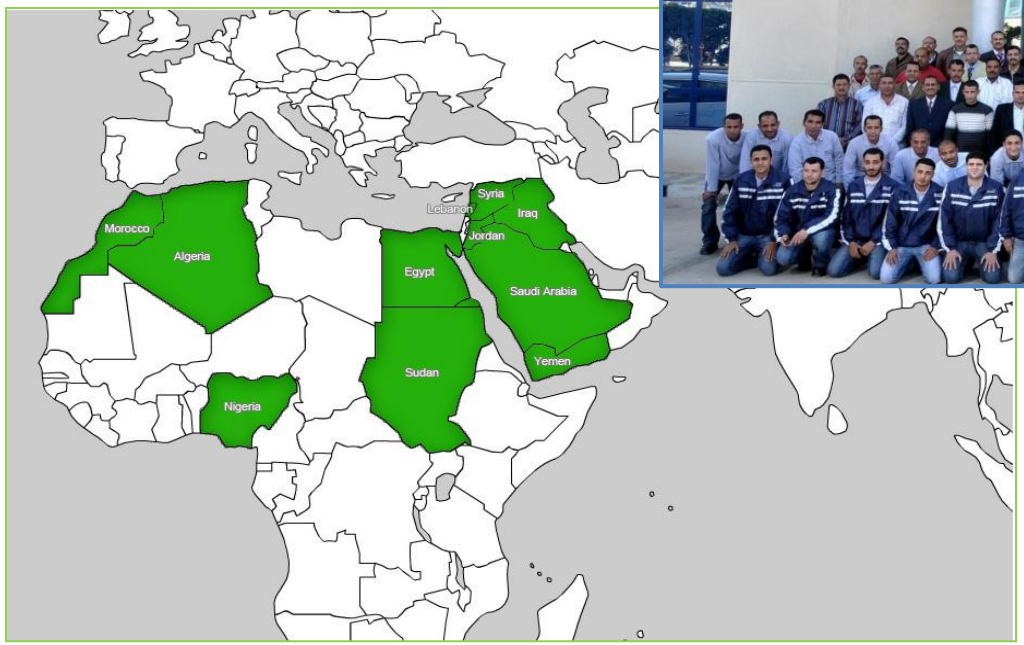
Our Activities

- Solar PV Systems
- Wind Systems
- Fuel Cells



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Key Customers

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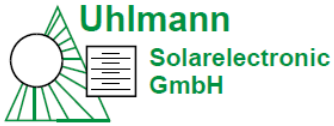
Business Partners

FAA Lighting



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Solar PV Technologies

Mono
Eff. > 17%
Expensive
Material & Process

Poly
Eff. 16 - 17%
Expensive
Material & Process

Thin file
Eff. < 10 %
cheapest
Material & Process

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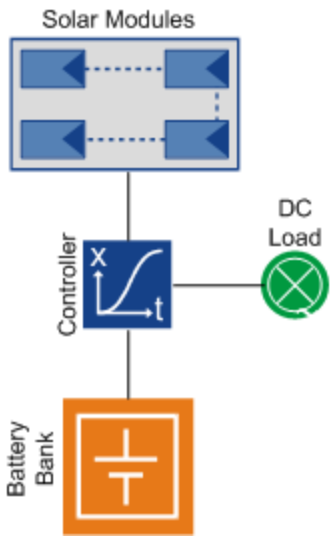
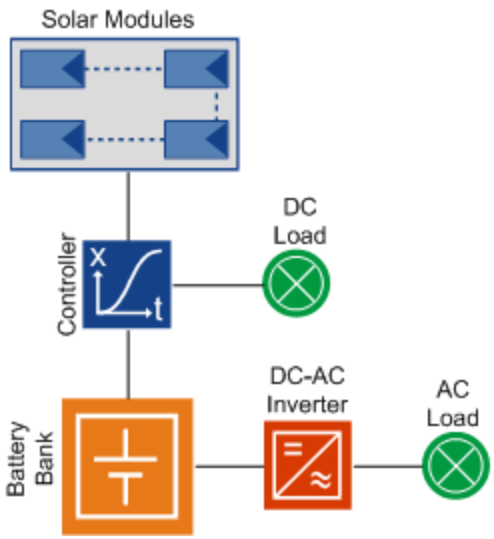
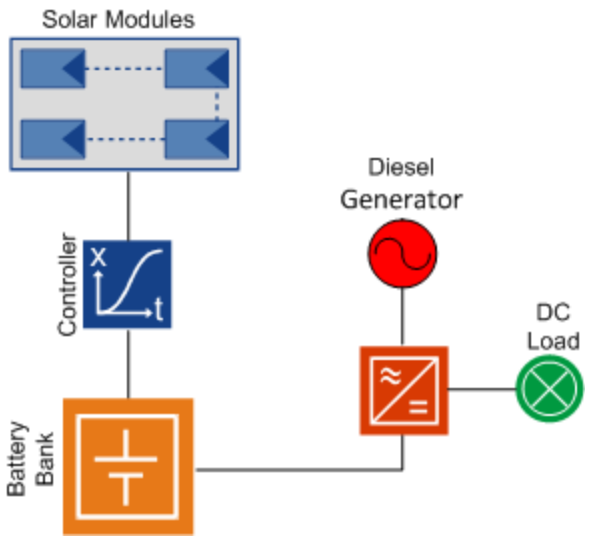
Solar Applications
Off Grid (Stand Alone)



Off Grid DC



Off Grid AC



Off Grid Hybrid

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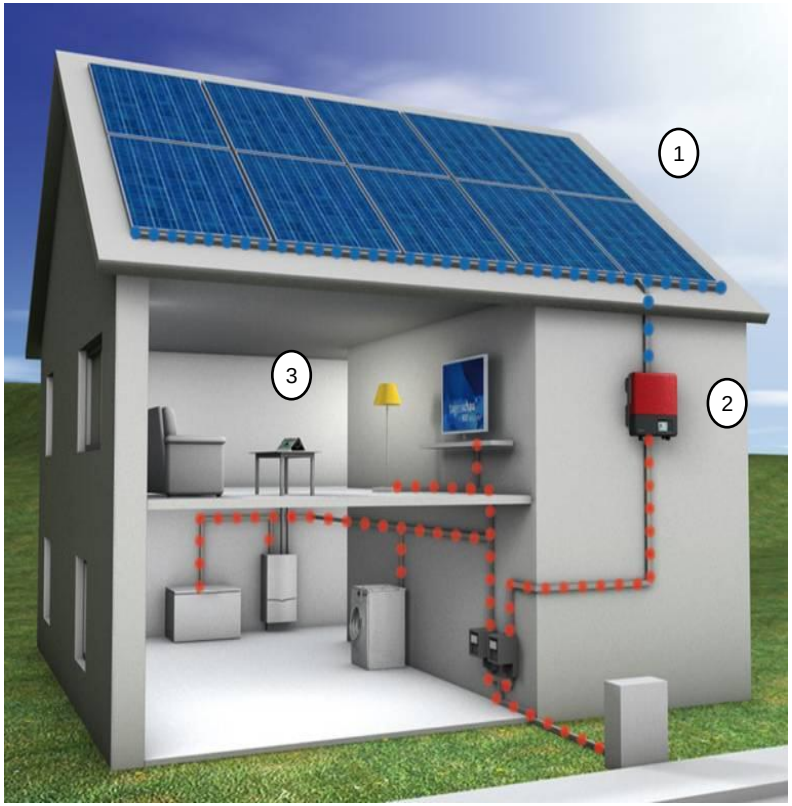
Solar Applications
Grid Connected (ON Grid)



Direct current (DC) **Solar inverter** Alternating current (AC)

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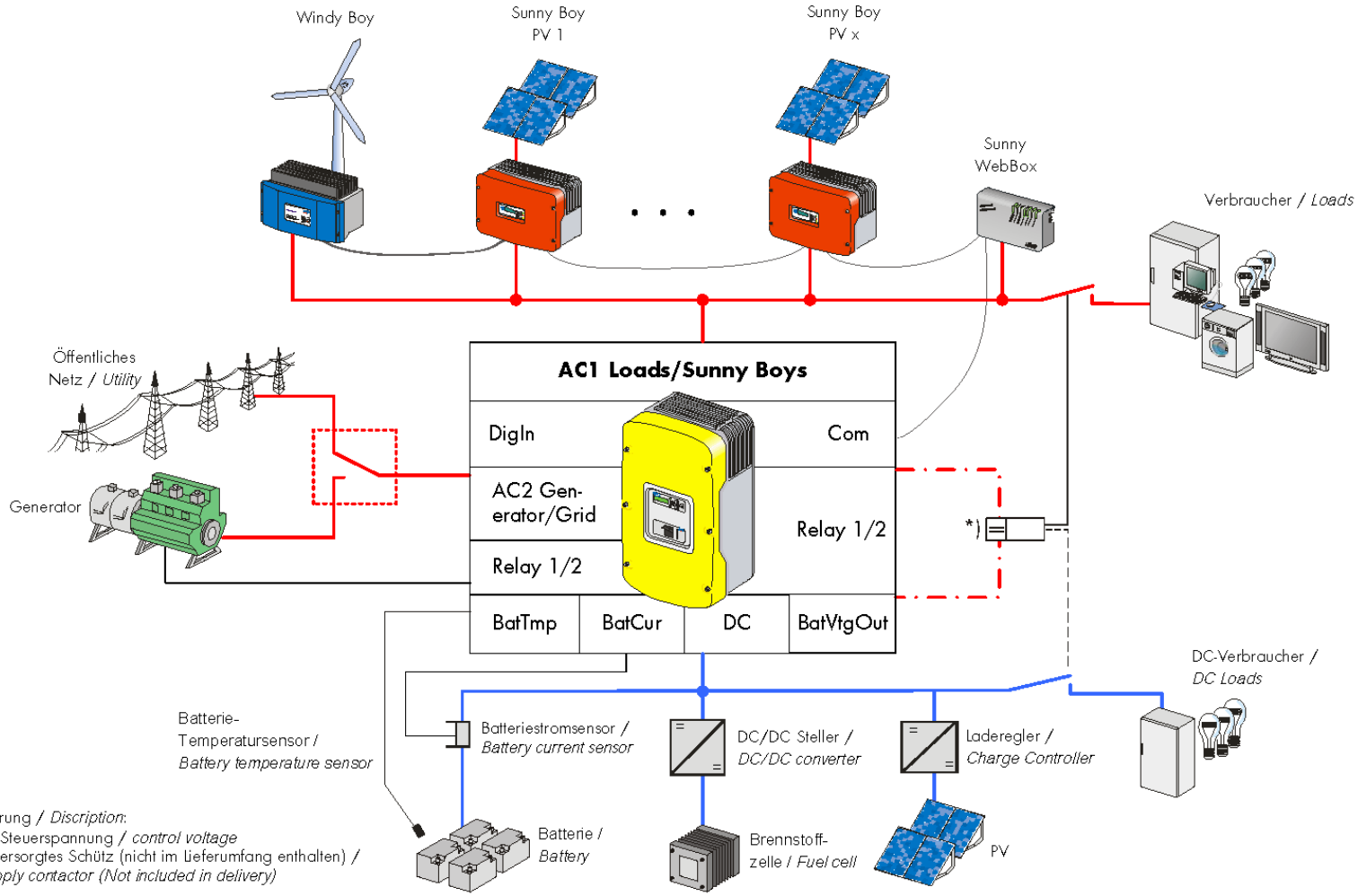
Solar Applications
Grid Connected (ON Grid) - Backup



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Solar PV Projects

Telecom Sites

Utility (Jordan)

Street Lighting

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Solar PV Projects

Highways Ambulances (Egypt)

Bedouins Settlement (South Sinai, Egypt)

Water Pumping (Egypt)

Water Desalination (South Sinai, Egypt)

Solar PV Projects

Fiber Optics Solar Power (KSA)

Solar Passive Cooling Shelter

Health Care (Western Desert Egypt)

Highways Traffic Signs (Egypt)

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Solar PV Projects

Hybrid Solar Wind Systems

Grid Connected With Backup

GSM (Morocco)

Home Systems

Standard Solar PV Systems

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Standard Solar PV Systems

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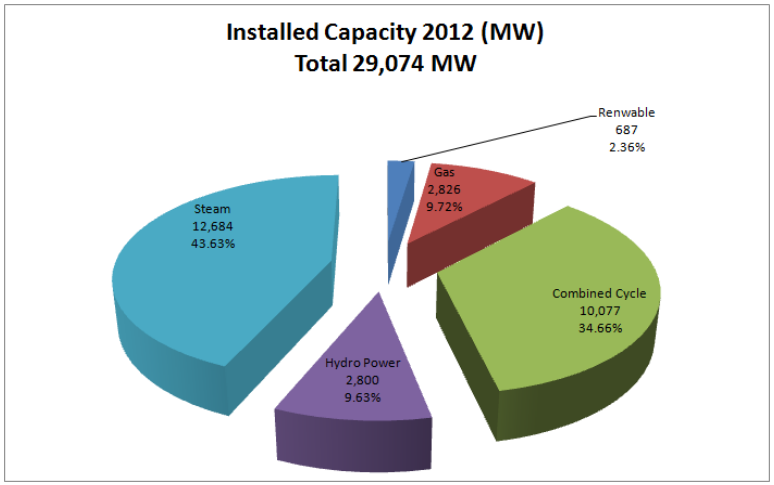
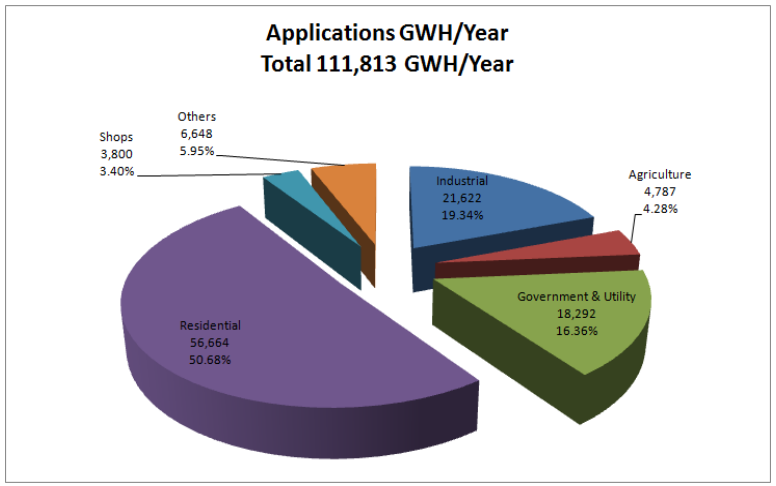
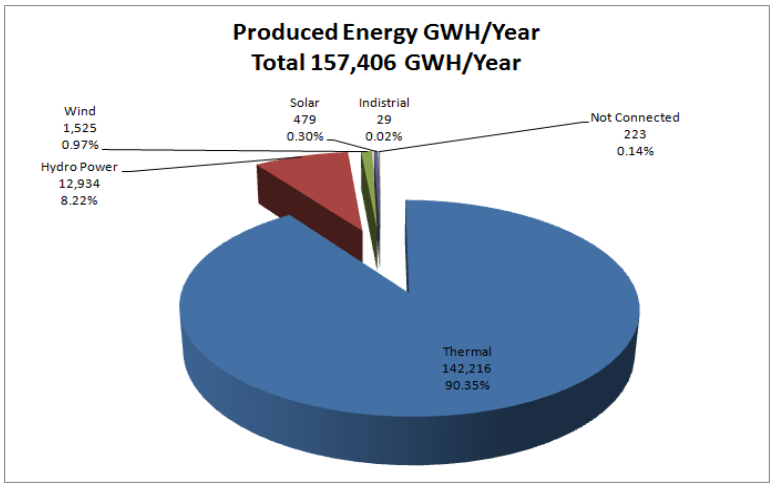
Standard Solar PV Systems

Present Status

- Total Installed 29,074 MW
- RE: 687 MW (2.36%)
- Total Energy: 157,406 GHW/Year
- RE: 2,004 GWH/Year (1.27%)







Source: EEHC Annual Report 2011-2012

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Egypt Plan 2020

Target

- 37,000 GW 2020
- 20% Renewable 7,400 MW
- Present 687 MW (Mainly Wind)
- Add Hydro 2,800 MW. Total Renewable 3,487 MW
- Remaining 3,913 MW
- More than 5 Times within only 6 Years

Achievable

- NO
- Large Projects
- NO FIT
- Small Vs Large Plants
- Remote Communities
- Solar Plan <1%
- PV Any where

Sustainable Development

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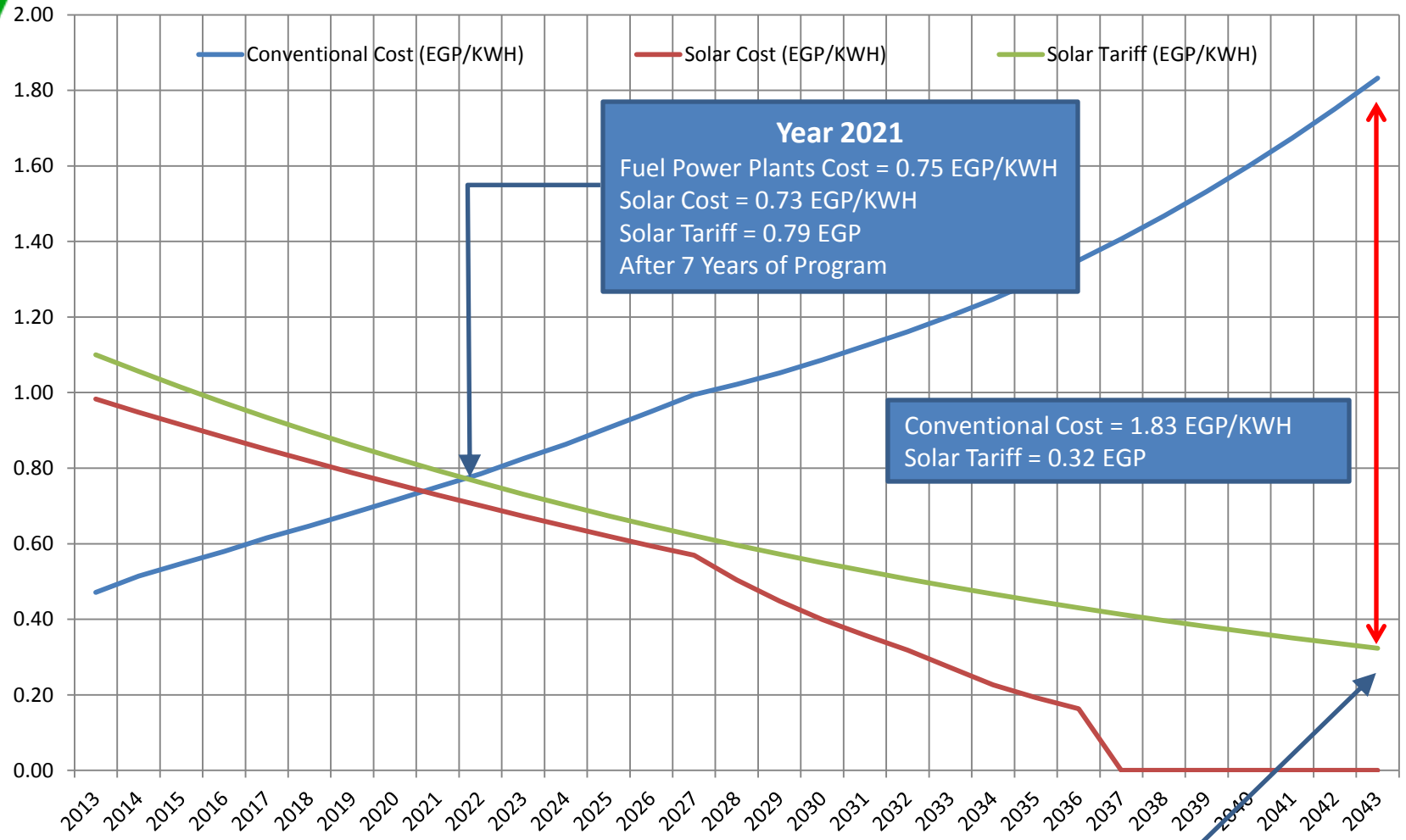
Fuel Power Plants Vs Solar PV



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Government Roll

Legislation & Incentives	• FIT • Lease for Lands in Case of Green Fields • Customs & Tax Exemption on Grid Sales
Quality & Specs Control	• Implementing International Standard • Grid Complied Systems
Time & strategy	• Yearly required Production • Penalties for delaying • Large Systems Vs Small Systems or Both
Rural Areas	• Saving considerable cost of extending high-voltage power lines and other infrastructure • Localized Renewable Systems

Private Sector Roll

Manufacturers

- Investment in Industry Not Assembly
- Knowledge & Technology Transfer
- Training
- Creation of R&D Professional Functions
- Establishing Specialized Technical School With New Educational Programs
- Renewable Energy Awareness Programs

System Integrators & Installers

- Investment in HR & Training
- R&D for Systems & Applications
- Provide Power Saving Techniques
- Developing Cost Efficient Systems
- Enhancing Customer Load Shifting

Private Sector Roll

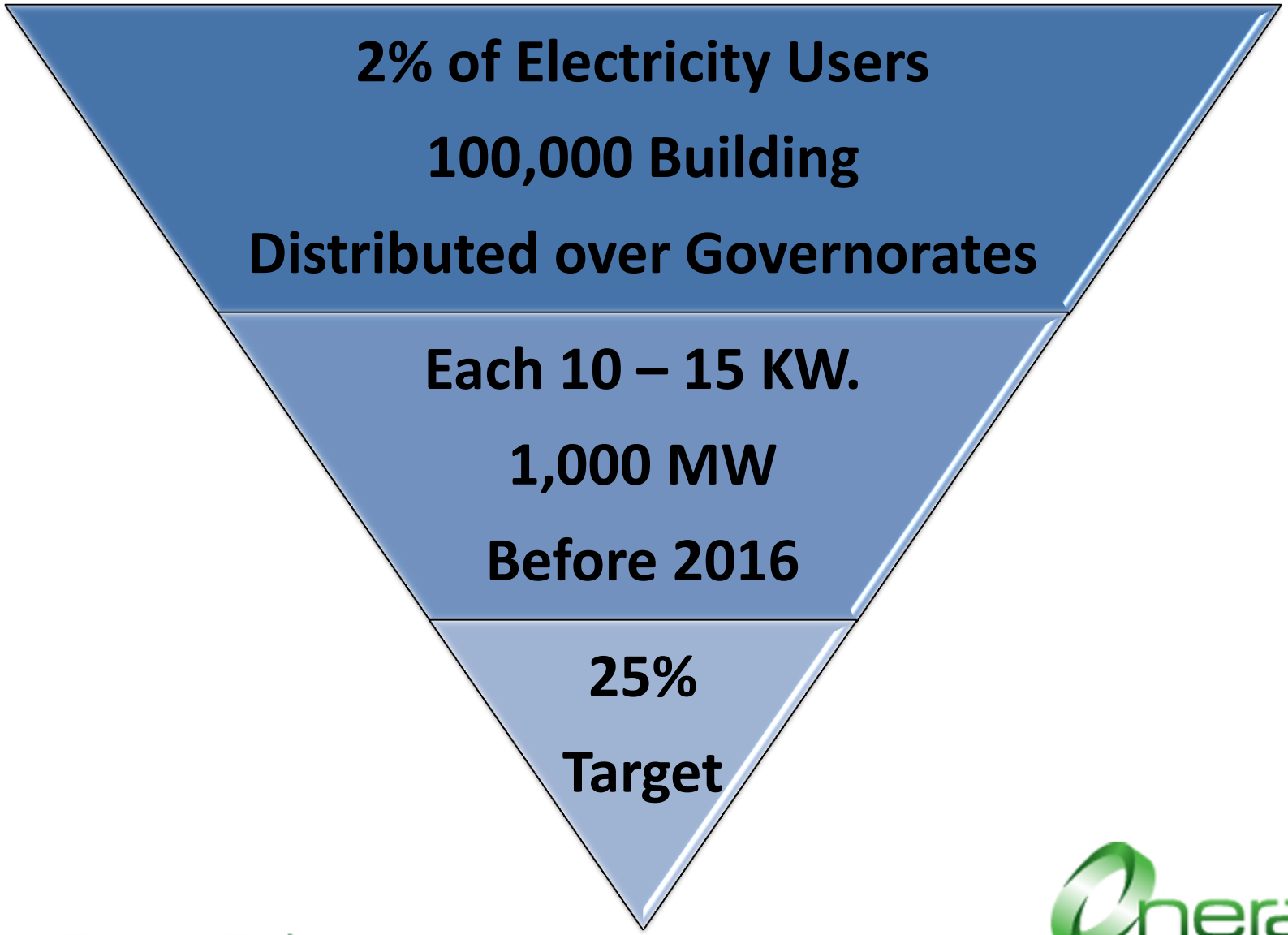
Individual Investors

- Contribution by Investment in Systems
- Power Saving & Load Shifting

Corporate Investors

- Availability of Fund Packages by Banks & Fund Institutes
- Allocation of Funds
- Technical and Financial Feasibility Studies
- Contribution in the Renewable Awareness Programs by the manufactures
- Training

Suggested Action Plan



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"YOUR GATEWAY
TO GREENER ENERGY"

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Thank you