

جمعية الشرق الاوسط لصناعات الطاقة الشمسية Middle East Solar Industry Association

Middle East Solar Market: Risks & Rewards

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Solar PV Investment and Financing EMEA March 13, 2014

Agenda



- 1. Middle East power market
- 2. Factors driving solar
- 3. Upcoming projects
- 4. Three tips

Electricity demand: soaring





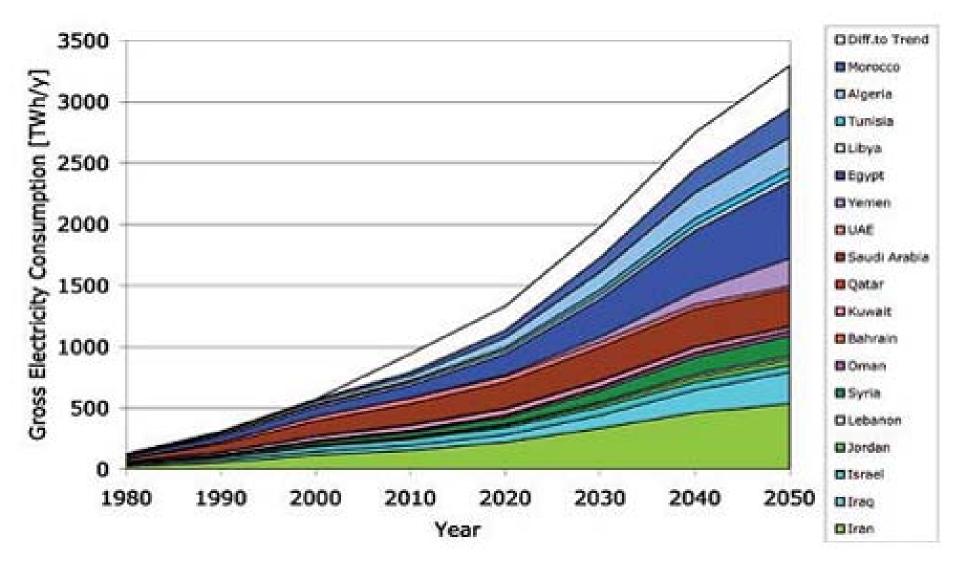






Electricity demand



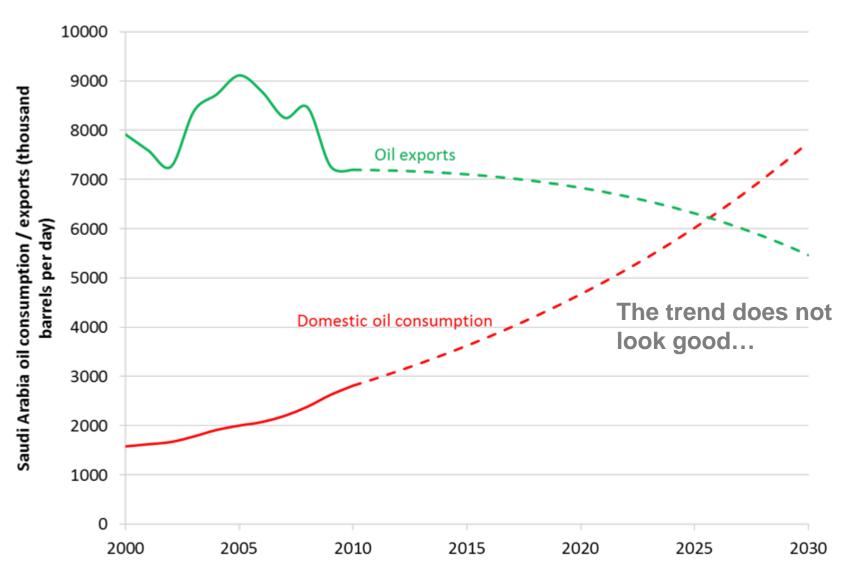




3 factors driving shift to renewables

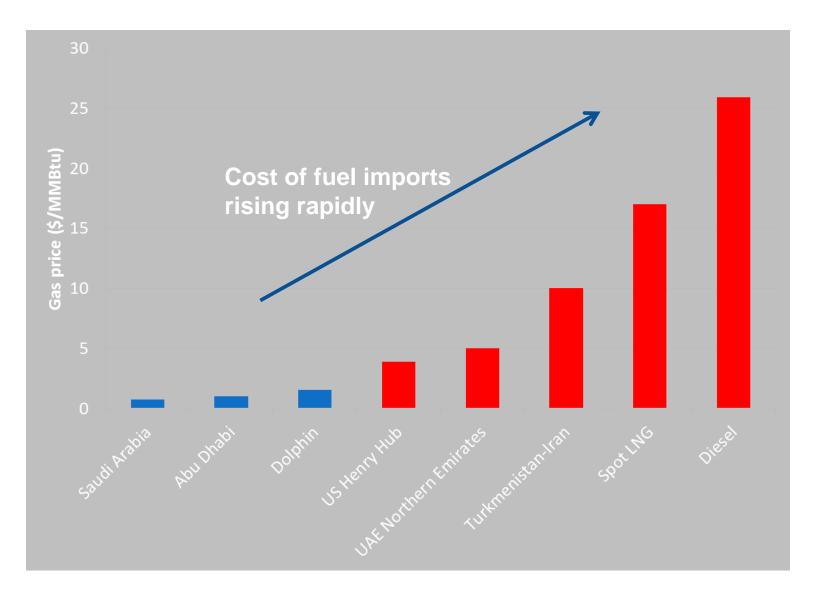
1. Pressure on reserves





2. Rising volumes/cost of imports





3. Social unrest



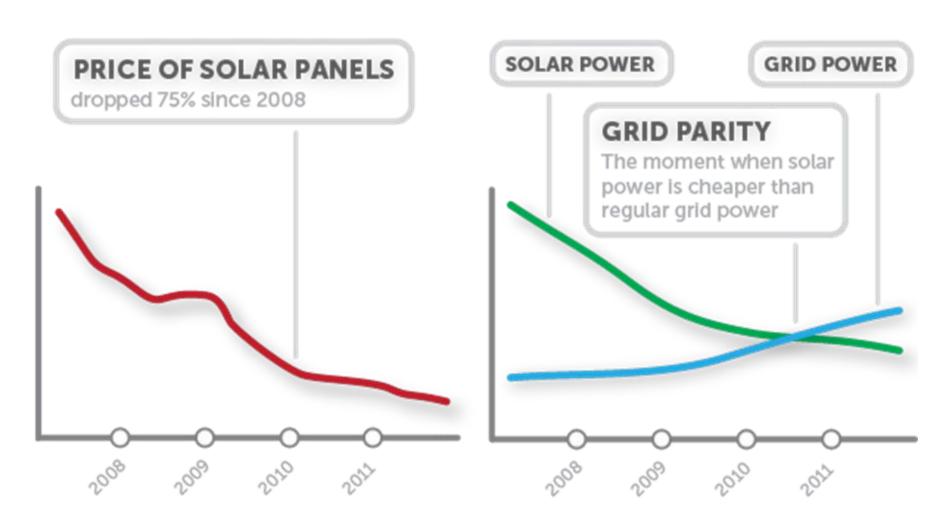




Why solar is attractive

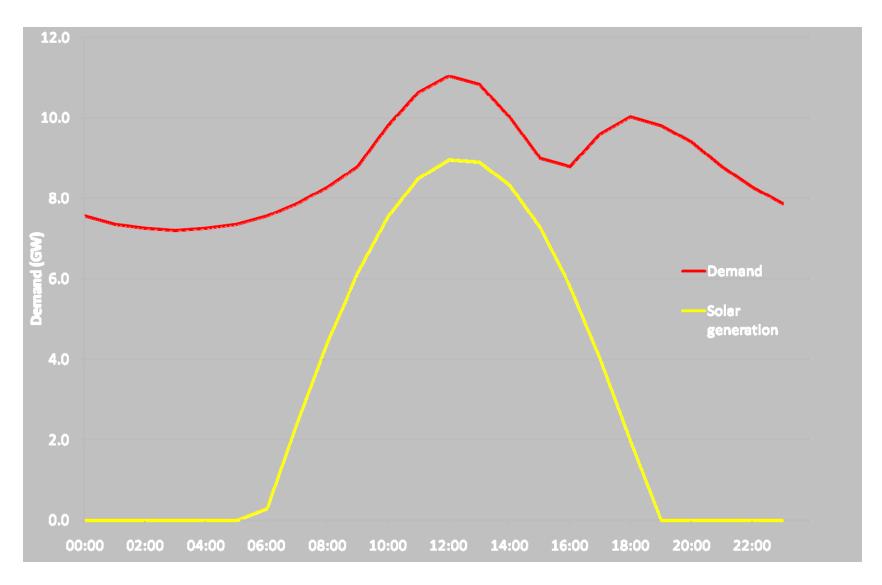
Improved economics





Synergies with power demand





Macro benefits



GDP contribution:

•100 MW of solar = \$ 600mn in GDP (10x more than fossil fuel)

Fuel savings:

Preserving oil & reducing imports

• Environmental benefits:

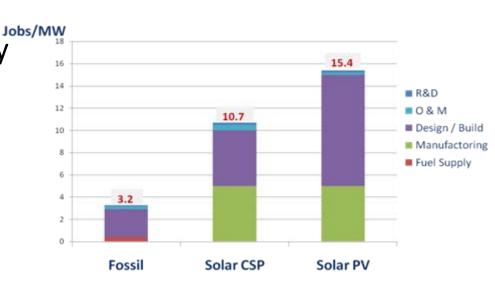
Cutting 2.5mbb/yr of diesel = 1 million tons of CO2

Jobs:

KSA: 1,000 jobs needed/day

Solar: 15 jobs/MW

• 40 GW = 600k jobs

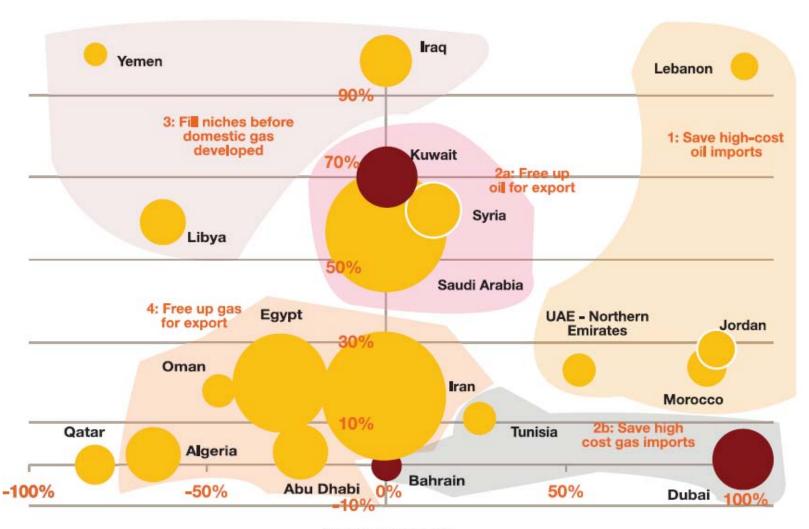




Key growth markets in the Middle East

Key markets for solar PV





Net gas imports

Dubai market



	Project	Status
First Solar.	Sh. Mohmamed bin Rashed Solar park (phase 1)	13MW solar PV plant commissioned by First Solar in Oct. 2013 on an EPC basis
المجلس الأعلم للطاقة Supreme Council of Energy	Sh. Mohmamed bin Rashed Solar park (phase 2)	100 MW PV to be launched in April 2014 on an IPP basis
هیئة کهرباء ومیاه دبی Dubai Electricity&Water Authority	Solar Rooftop Program	100MW residential/industrial micro projects to be launched in 2015

Target: 1,000MW by 2030

Jordan market



Background	4,000 MW of generation 2,660 MW of Peak demand (2011) 96% of demand met with imports	
Objectives	Diversify energy mix Address 5.5% annual demand growth 10% Renewable Energy by 2020 1,800 MWs – 1,200 MW Wind, 600 MW Solar	
Deployment model	Tendering of Projects (IPP model) Direct proposals by private sector New FIT enacted late 2012 Jordan origin bonus	
Current status	Renewable Energy and efficiency law published April 2012 22 Projects Pre-qualified for MoU (Mostly Solar – 470 MW) Phase 2 Solar IPP program launched (200MW)	

Target: 1,800MW by 2020

Saudi market





- 100% based on oil and gas
- No solar, no wind, no hydro
- Huge drain on reserves
- Consumption growing 8% yr/yr

Saudi market



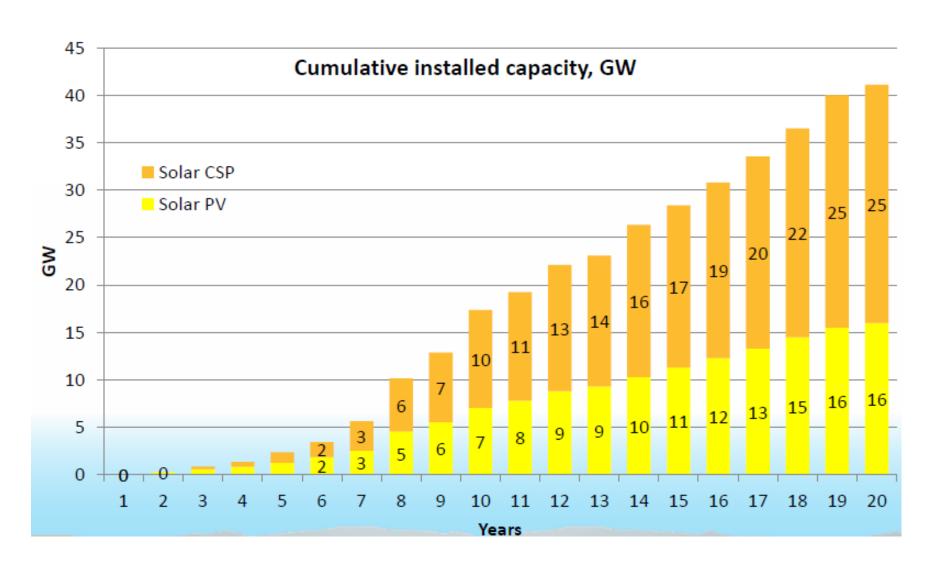


- Peak power demand to triple in the next 20 years to 121GW in 2032
- Royal Decree in April 2010: Diversified energy mix; K.A.CARE established
- Solar energy to supply 20% of the country's energy mix

Target: 41,000MW by

Saudi outlook





What is MESIA?



- 1. Largest solar association in MENA, est. in 2009
- 2. Provide a bridge between suppliers and project owners
- 3. Represent companies from the entire solar value chain

MESIA programs



- 1. Organize Breakfast Briefings & educational workshops
- 2. Initiate networking events
- 3. Support policy making through work with gov't
- 4. Implement pilot projects to test performance



Who is part of MESIA?



- 15 Founding Members
- 120+ Members
- 3,200 regional subscribers



























MESIA reports





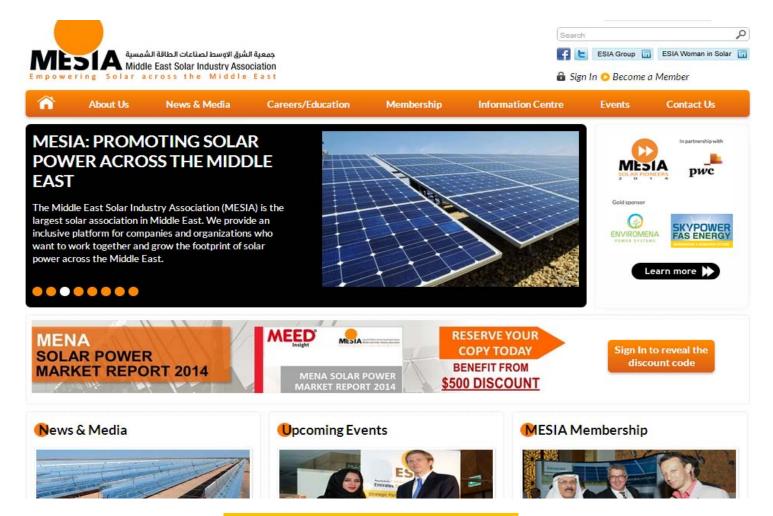






Thank you





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