

Major Energy Business Opportunities in the United Kingdom

Dr Piers Willson UK Trade & Investment September 2013





UK Trade & Investment

- UKTI is the Government organisation that helps UK based companies succeed in international markets and supports overseas companies to bring high-quality investment to the UK.
- UKTI has staff in over 100 markets across the world working locally to support overseas investors enter the UK market.
- 84 Indian companies placed a direct investment in the UK last year. India is the third largest investor in the UK (ahead of China)
- Here today are Sushil Rana and Shruti Sharma, who are based at the UK High Commission in Delhi



THE UK: A SPRINGBOARD FOR GLOBAL GROWTH

The UK offers an exceptionally attractive environment for business growth:

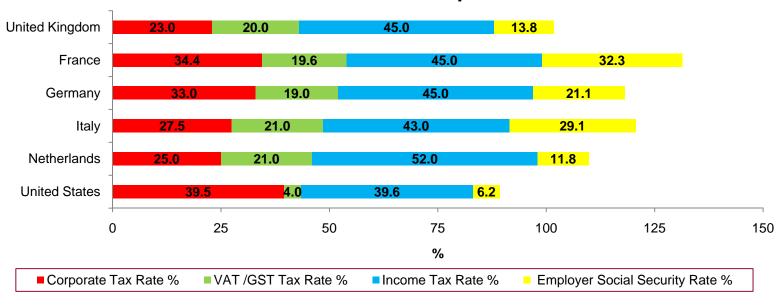
Business environment: appropriate levels of regulation, strong IP protection and a flexible labour force

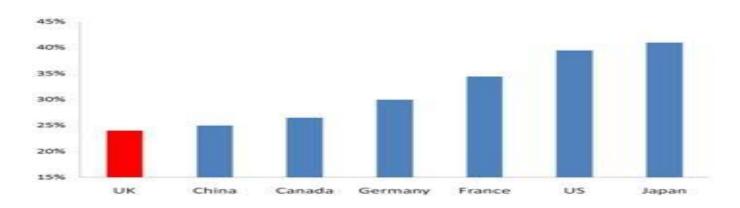
Creativity and innovation: world-class talent and R&D excellence

UK Trade & Investment

United Kingdom: A Low Tax Environment

International Tax Comparison





Ease of Doing Business

Annually the World Bank ranks the ease of doing business globally based on 10 areas:

Starting a business

Dealing with construction permits

Getting Electricity

Registering Property

Getting Credit

Protecting investors

Paying taxes

Trading across borders

Enforcing contracts

Resolving insolvency

Country	Ease of Doing Business Rank, 2013		
UK	7		
Ireland	15		
Germany	20		
Netherlands	31		
France	34		
Spain	44		
Italy	73		

Source: Doing Business 2013, The World Bank, International Finance Corporation

The UK Market for Energy



Drivers of Business Opportunities in Energy in the UK



Keep the lights on



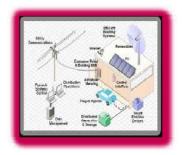
Reduce greenhouse gas emissions and meet obligations



Keep the cost low



Ensure diversity and security of supply



Renew the Grid in a 'Smarter' way



UK Electricity Market Reform

Ensuring Capacity

- UK could run out of power
 - Standby provision
 - Storage solutions
- Contracts to be let from 2014 for 2018



Subsidising Delivery of low carbon power

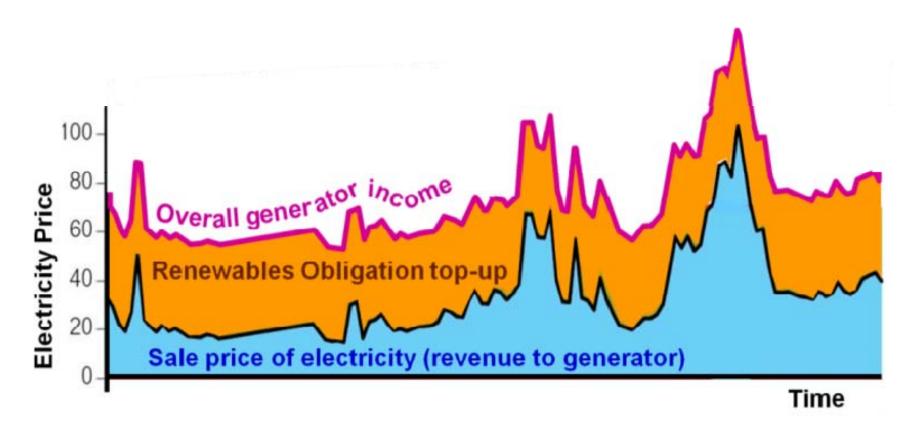
From uncertainty to certainty





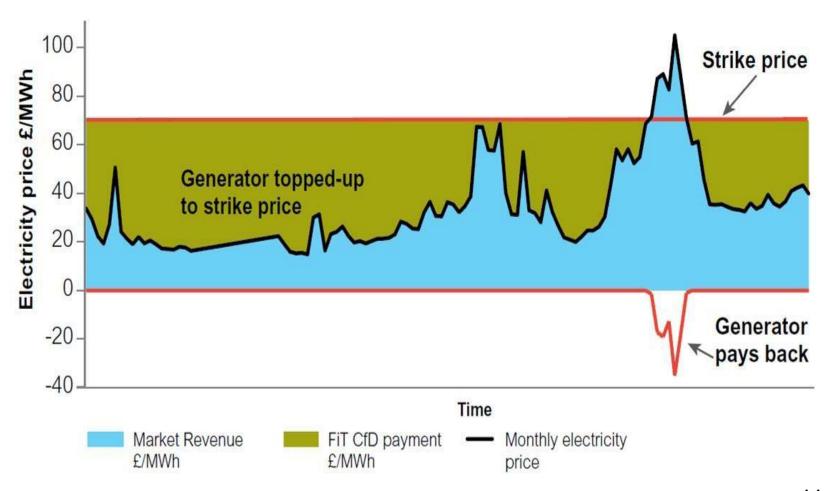
How does the subsidy work?

Renewable Obligation



10

Contract for Difference strike Price



11



Contract for Difference: Sample Proposed Strike Prices

	INR per MW					
Year	2014/15	2015/16	2016/17	2017/18	2018/19	
Onshore Wind	10,100	10,100	10,100	9,600	9,600	
Offshore wind	15,700	15,700	15,200	14,200	13,700	
Solar (over 5MW)	12,700	12,700	12,200	11,700	11,200	
Marine Energy	30,900	30,900	30,900	30,900	30,900	
Coal-Biomass Conversion	11,200	11,200	11,200	11,200	11,200	
Advanced Conversion Technologies (Waste)	15,700	15,700	15,200	14,200	13,700	





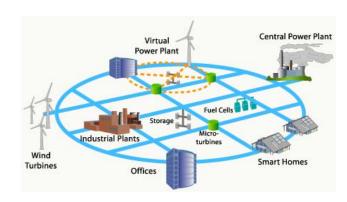




INR 20 Lakh Crore opportunity







Two Case Studies:

Solar

Offshore Wind

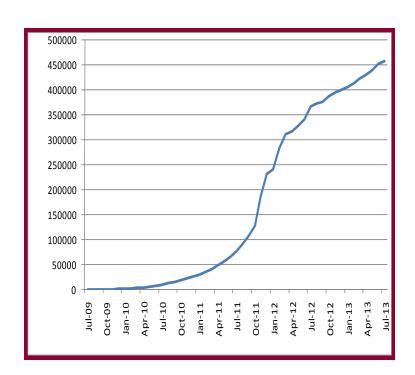


UK Solar PV – The UK Market

- The UK currently has installed capacity of 2.5GW
- UK Government target of 22GW by 2020
- 2012: UK was fastest growing large scale solar market (>5MW)
- Proposed strike price for large solar = 12,600INR/MW
- Domestic Solar: 450,000
 Installations since April 2010



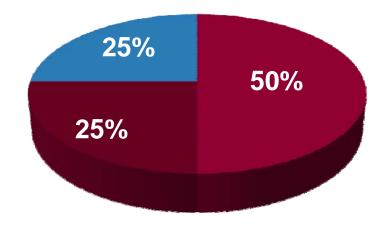
UK Domestic installations





UK Solar PV – Opportunities for Indian Companies

Estimated Market Breakdown 2020



■ Domestic ■ Community ■ Utility

Opportunities for:

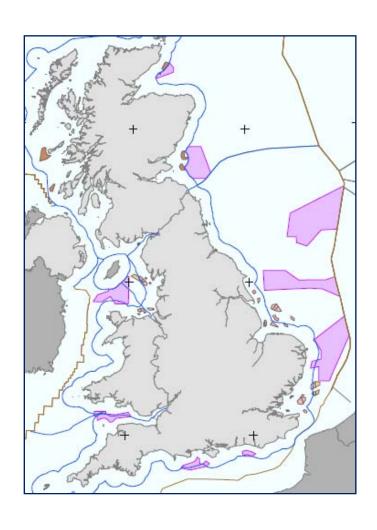
- Sales, final assembly and distribution
- **EPC** contractors for community and utility scale
- 4 of top ten owners are foreign owned
- 70% of EPC contractors are foreign-owned



Offshore Wind



UK World Leader in Offshore Wind



>UK leads the world in offshore wind:

In operation: 3.3 GW

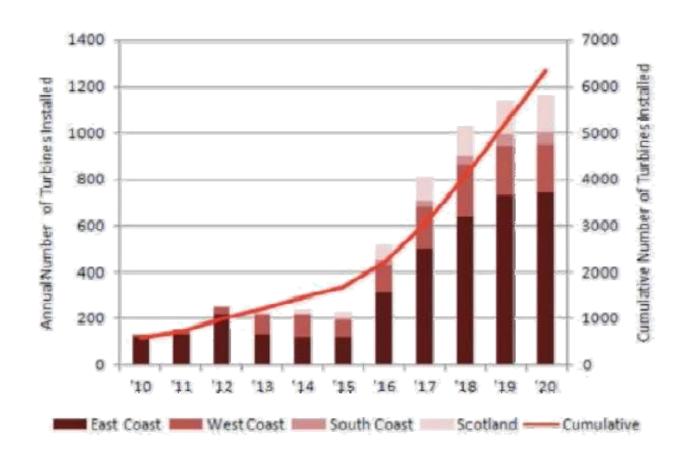
Under construction: 2.1 GW

Installed by 2020: 8-16GW

 Ambition to reduce cost to around 10,000INR per MW by 2020

Total Potential 39GW

A Projection: Offshore Wind Turbine Installation to 2020





Offshore Wind Supply Chain Opportunities

- Foundations
- Towers
- Castings and Forgings
- Blades
- Cables
- Sub-stations
- Installation and Commissioning



Specialised Support for Investment

- 10 major locations ideally suited as offshore wind hubs in the UK
- Close to Round Three Areas
- Enhanced infrastructure, portside land, skilled local workforce and local supply chain capabilities

Teesside / Tees Valley

The Humber

Tyneside

Great Yarmouth & Lowestoft

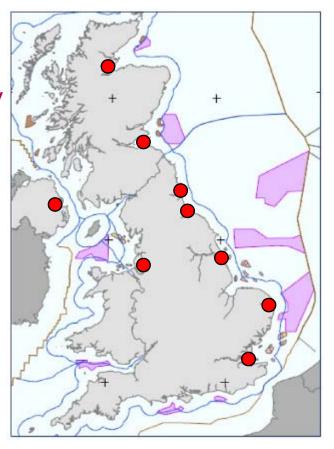
Liverpool

Belfast

Edinburgh

Inverness

Sheerness







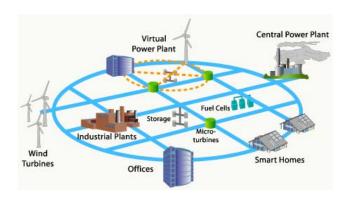




INR 20 Lakh Crore opportunity







Services for inward investors

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