



RENEWABLE ENERGY SOLUTIONS
FOR THE MEDITERRANEAN



*Ministero degli Affari Esteri
e della Cooperazione Internazionale*



Best practices for connecting public sector and investors in emerging RE markets



Valentino Rossi

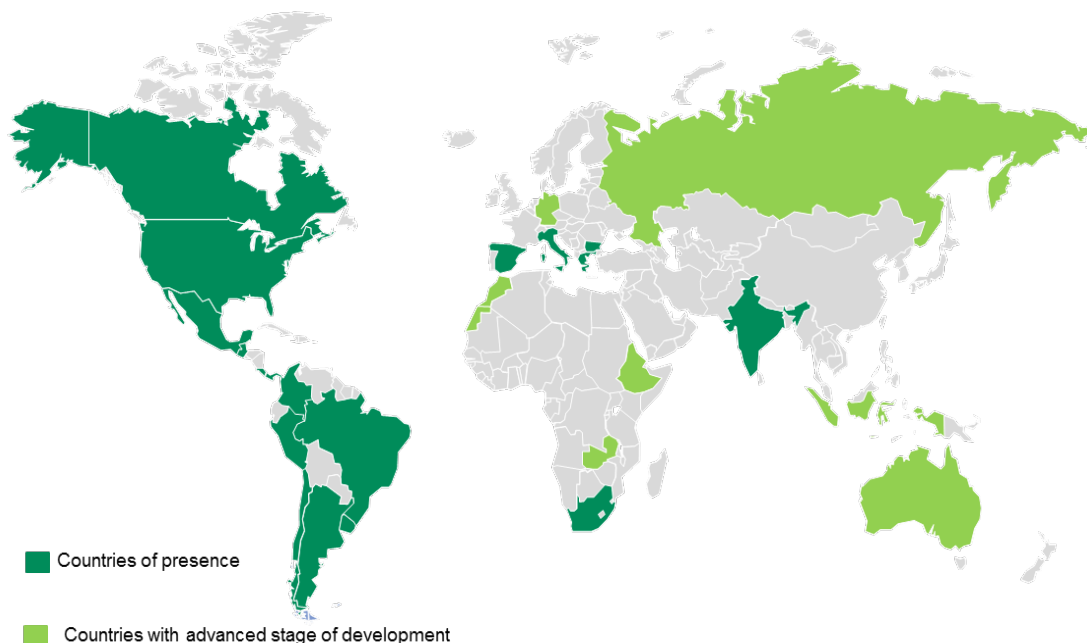
Head of Business Development Enel Green Power S.p.A.





Il ruolo delle energie rinnovabili: opportunità di crescita globale ed investimenti nelle economie emergenti

*Ministero degli Affari Esteri e della Cooperazione Internazionale
Roma, 11 maggio 2018*

- ***Enel Green Power overview***
- ***RES Market overview***
- ***How to attract investors through tender programs***
- ***Successful auction programs in emerging countries: Africa***

Positioning and key figures



				
Consolidated capacity (GW)	7.4	2.3	27.8	0.8
Managed capacity (GW)	1.8	0.4	0.3	0.1

Key figures	2017	Managed
Capacity (GW)	38.3	40.9
Production (TWh)	81.8	89.1

Key financials (€bn)	2017
EBITDA	4.1
Opex	1.4
Maintenance capex	0.3
Growth capex	3.6

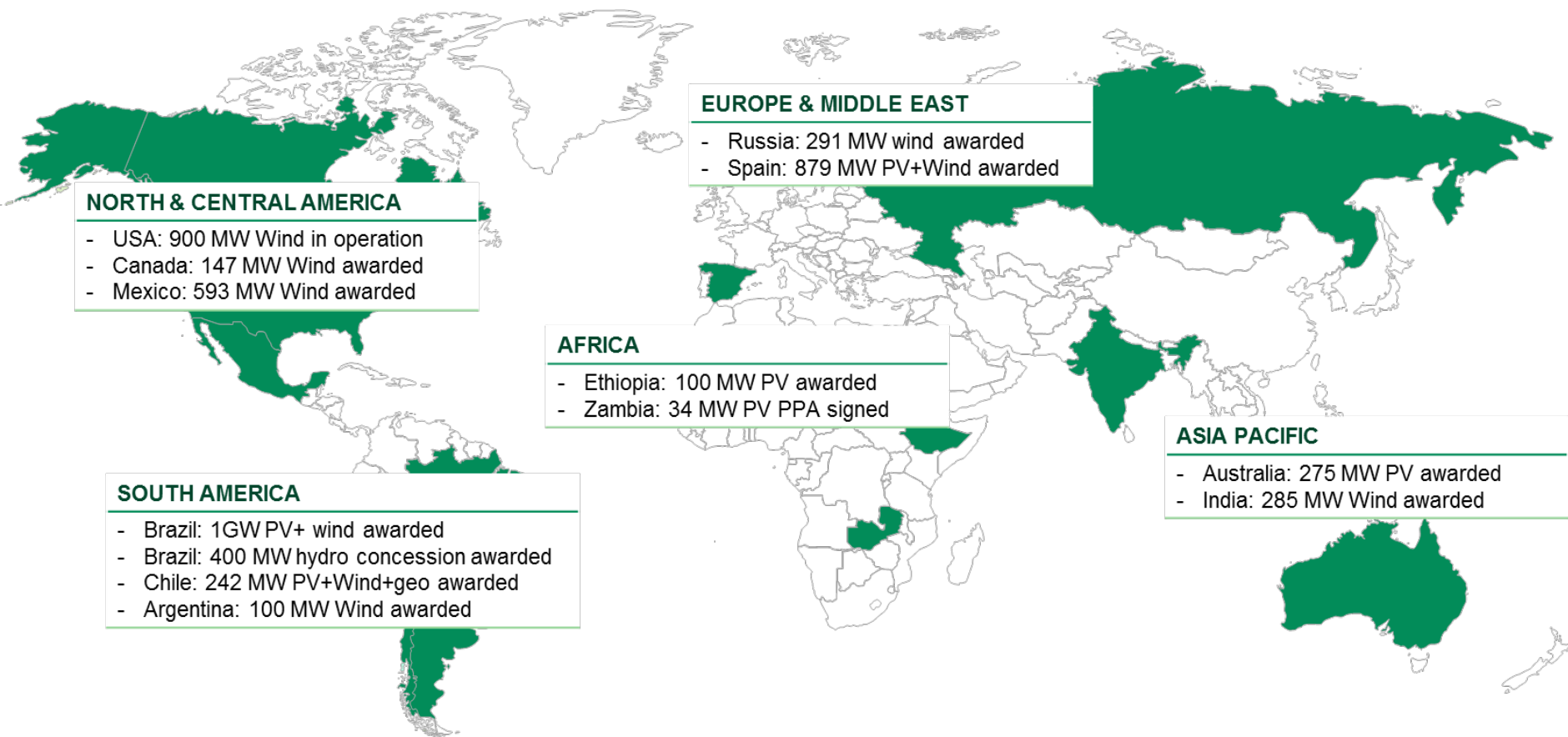
Geo Hydro Wind Solar






Leadership position supported by very strong track record₃

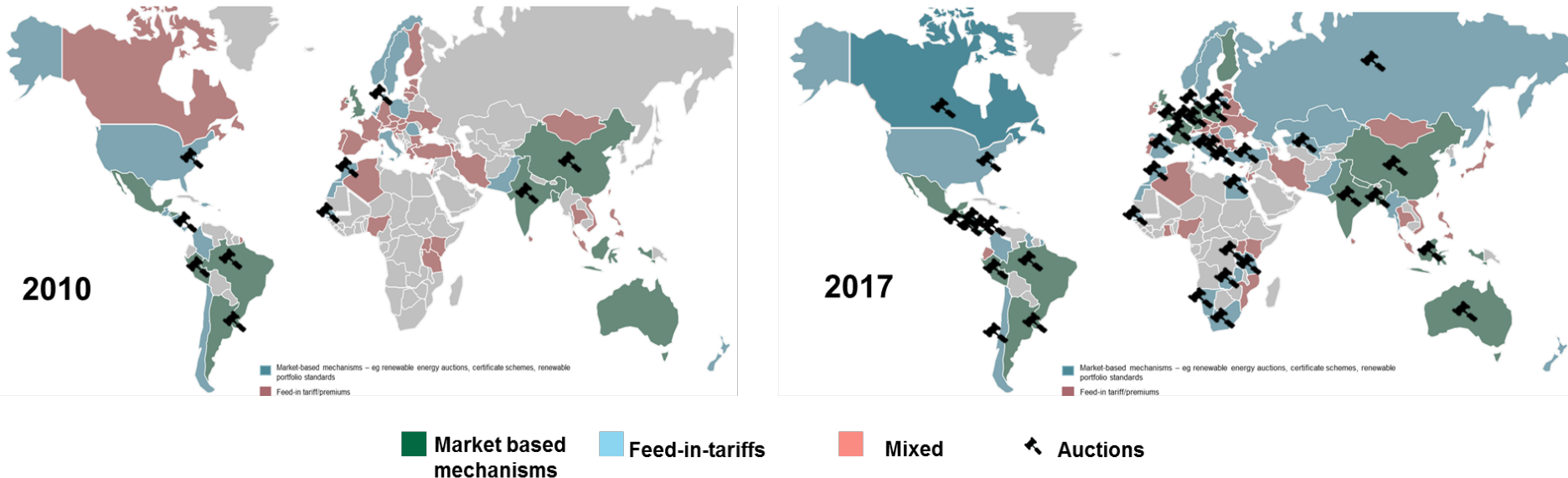
Recent achievements



5GW awarded/contracted in 2017

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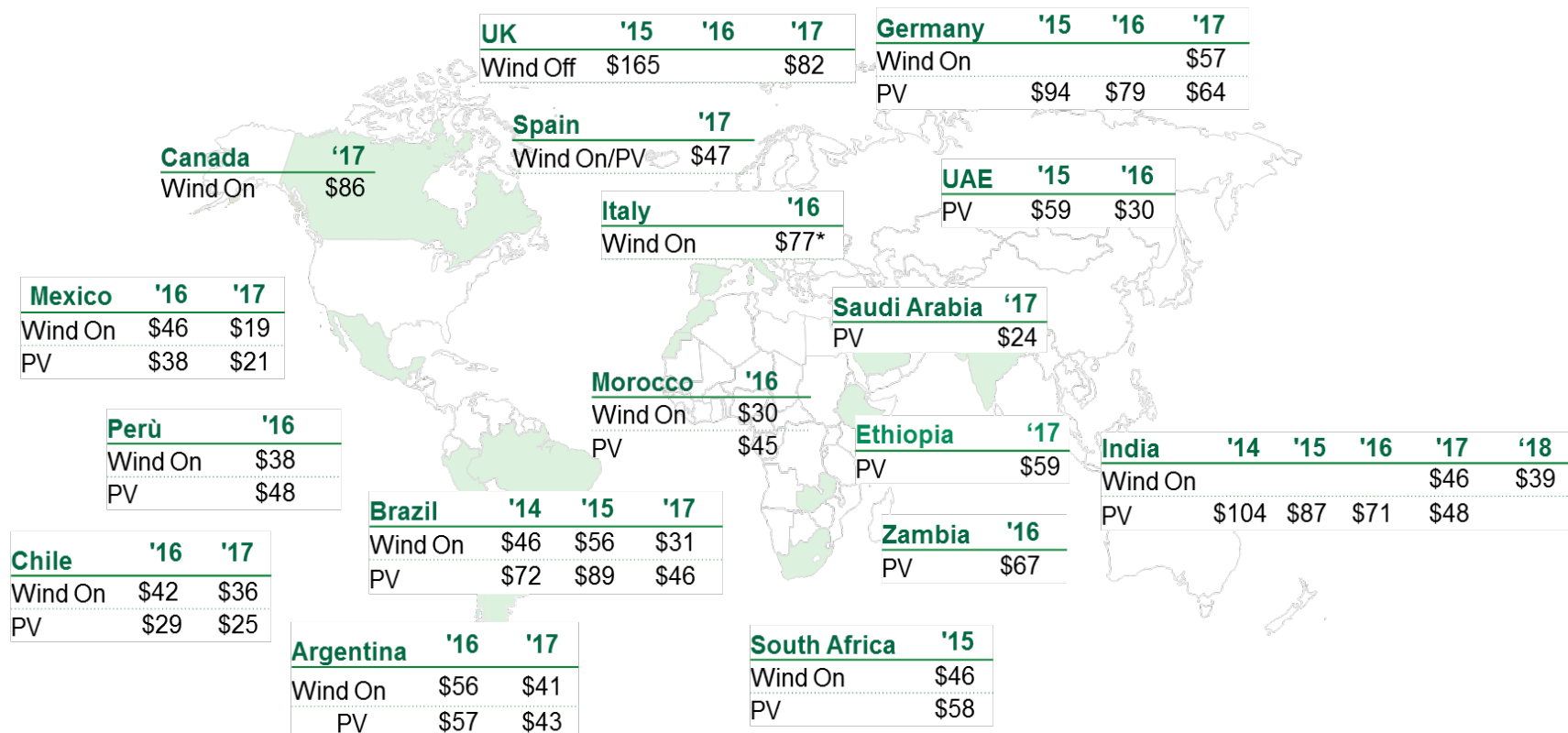
From tariffs to competitive mechanisms



Feed in tariffs have initially boosted a critical mass of RES investments.
Due to the recent success of competitive market-based mechanisms, RES costs have dropped.
The bulk of subsidy programs is expected to cease to operate from 2020

Source: Bloomberg New Energy Finance

Auctions are spreading worldwide



Source: BNEF – as of Feb 2018

*Wind Onshore Italy 66€/MWh with 1,2 fx rate, Wind Offshore '17 UK 64 GDP/MWh

Increasing pressure on awarding bids

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Key successful factors for a competitive tender and main advantages

A

National renewable energy expansion program

B

Transparent and clear processes

C

Stringent technical and financial criteria

D

Bankability

E

Appropriate Local Content targets and rewards

1

Credibility and financial attractiveness

2

Flexibility

3

Competition

4

Social and Economic benefits

Competition must be stimulated

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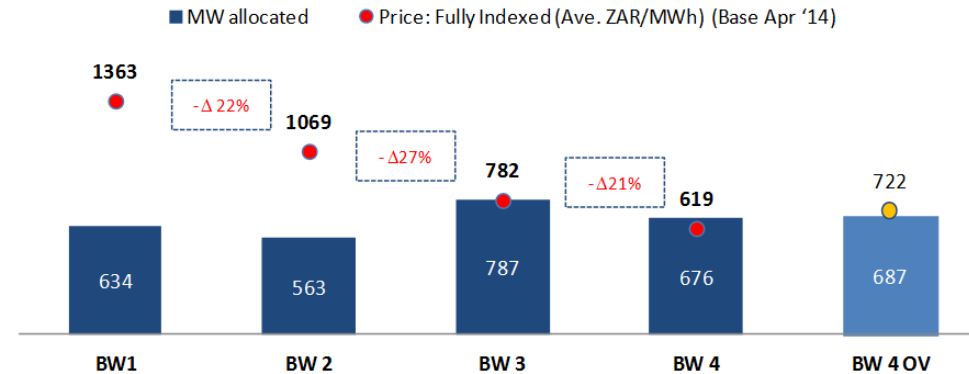
Technology	Round 1 Awarded Capacity (MW) Dec 2011	Round 2 Awarded capacity (MW) May 2012	Round 3 Awarded capacity (MW) Oct 2013	Round 3.5 Awarded capacity (MW) Oct 2013	Round 4 + Overalllocation Awarded capacity (MW) Apr-Jun 2015	Round 4.5
Wind	641	559	787		1362	N/A
Solar	627	417	435		815	N/A
Hydro		14			5	N/A
Solar CSP	150	50	200	200	N/A	N/A

* Round 4.5 not awarded yet. Source: South Africa Energy Department

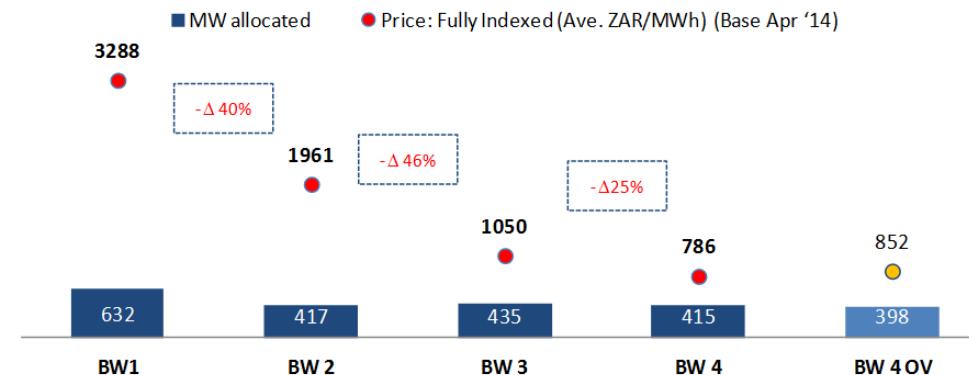
A long- term successful program...

South Africa

Wind BWs average tariff trend



PV BWs average tariff trend



... with a decreasing tariff trend

Scaling Solar

Program designed by the World Bank group to make it easier for African Governments to quickly procure solar power minimizing all financial transaction risks through

Transparent and competitive tendering process

Pre-set financing and insurance products

Legal and regulatory analysis

Technical and economic studies for the selection of the optimal size and location of the solar plants

A quick way to procure solar power

Score (Max = 100)	Criteria	
70	Price	
30^(*)	10	Technical Capability and Bidder's Experience
	5	Track Record of Module
	5	Track Record of Inverter
	5	Local Content in CAPEX (mandatory minimum threshold: 15% (0 points), max score (5 points) if >35%)
	5	Local Ownership (max score (5 points) if >10%)

and in 2018, moving toward
Scaling Solar to accelerate solar
PV growth in Ethiopia

Scaling Solar

* 21 points was the threshold to be a Technical Qualifying Bidder and qualify for the third stage of the evaluation process

In 2017, first PV tender rules based on RSA experience

Critical steps from Bid to COD

BID

1 to 2 Years

COD

Critical steps to COD

Full Permitting

Community Engagement

Commercial Close

Financial Close

Some tips

- ☐ Project agreements should be bankable and permits available at the time of bid submission
- ☐ Effective communication among banks, IPP and Institutions
- ☐ Dedicated working group for financial close
- ☐ Awareness and acceptance by all stakeholders
- ☐ Data room for banks due diligence ready far in advance
- ☐ Streamline processes for imported good clearance and new company establishment

A tender ends at COD, not at award



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Grazie per l'attenzione



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