

# Status of Solar in SADC



# TABLE OF CONTENTS

1. What is Renewables in Africa?
2. Solar Statistics
3. Key Markets
4. South Africa
5. Namibia
6. Other segments
7. Supporting regulatory frameworks
8. Conclusions

# 1- WHAT DRIVES US?

What I saw in 2008



My feelings: Shocked, Angry, Revolted

What I see in 2040



My feelings: Happy, Proud, Hopeful

The Mission: Bring (Back) Power to Africa

# WHAT IS RENEWABLES IN AFRICA (RIA)?

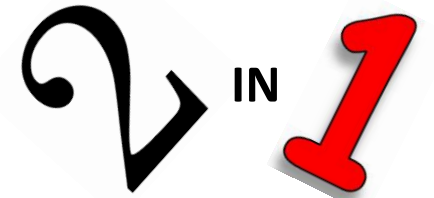
A Clean Energy Engineering Consultancy serving  
**Developers, Investors, Project Owners.**

- ✓ **Project Origination Services** to help clients identify right projects
- ✓ **Market insights & business intelligence** to support market entry or market growth.
- ✓ **Technical & strategic advice** to improve attractivity of projects .

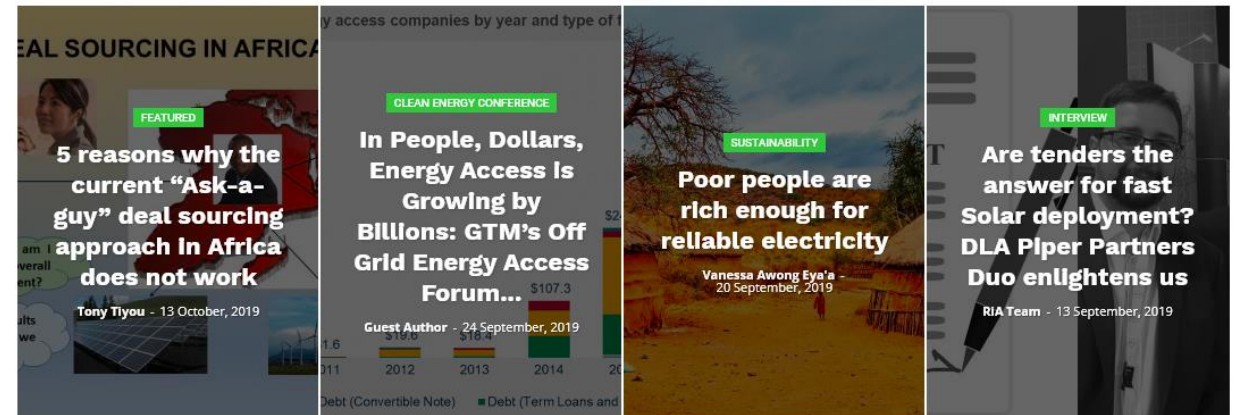
A Media platform, African Clean Energy Champion:

- ✓ **Promotion and awareness building** about Renewable Energy to businesses and general public.

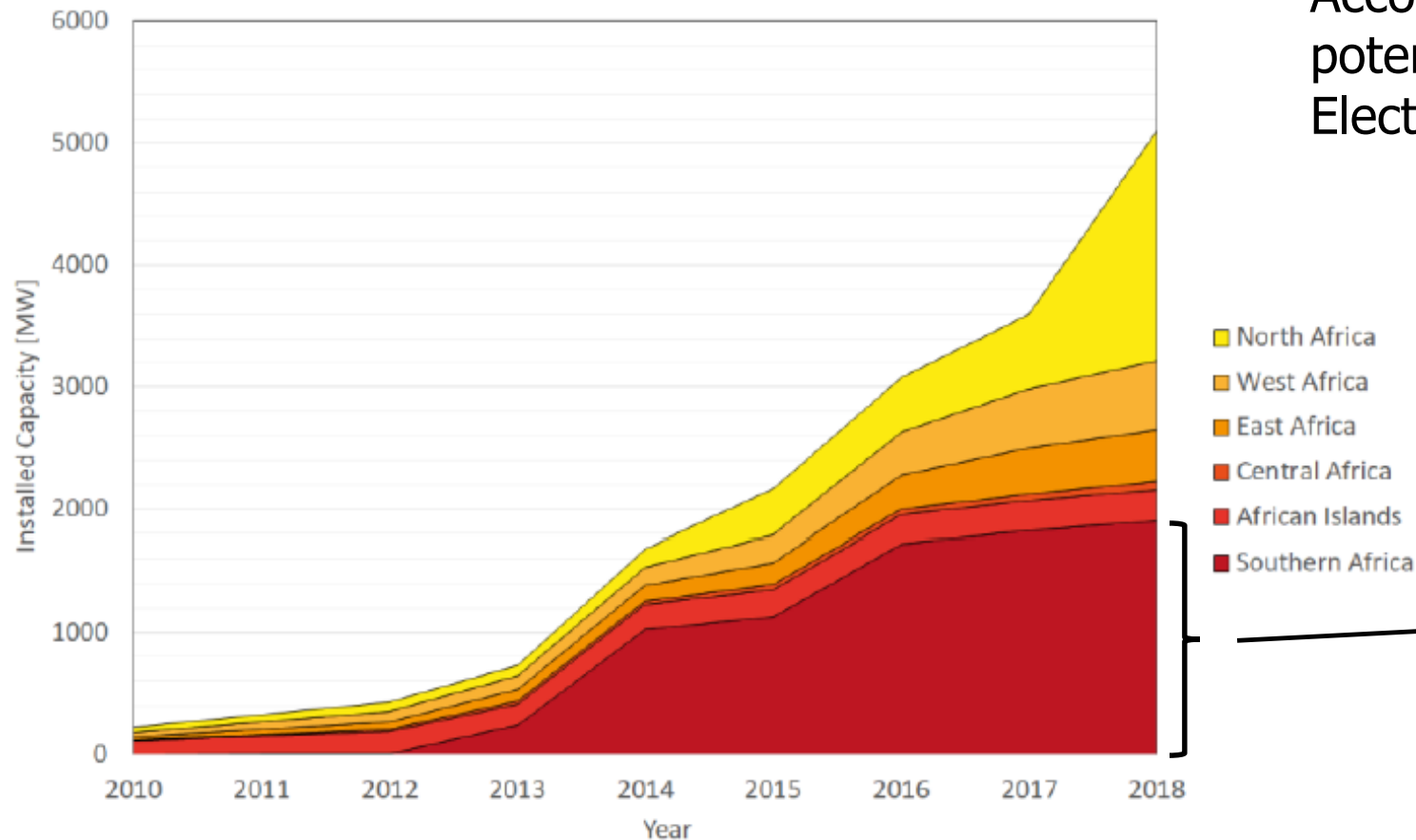
WE  RiA



HOME ABOUT ▾ SERVICES WORKSHOP UPCOMING EVENTS WIBA ▾ GET IN TOUCH



## 2- SOLAR STATISTICS (1/2)



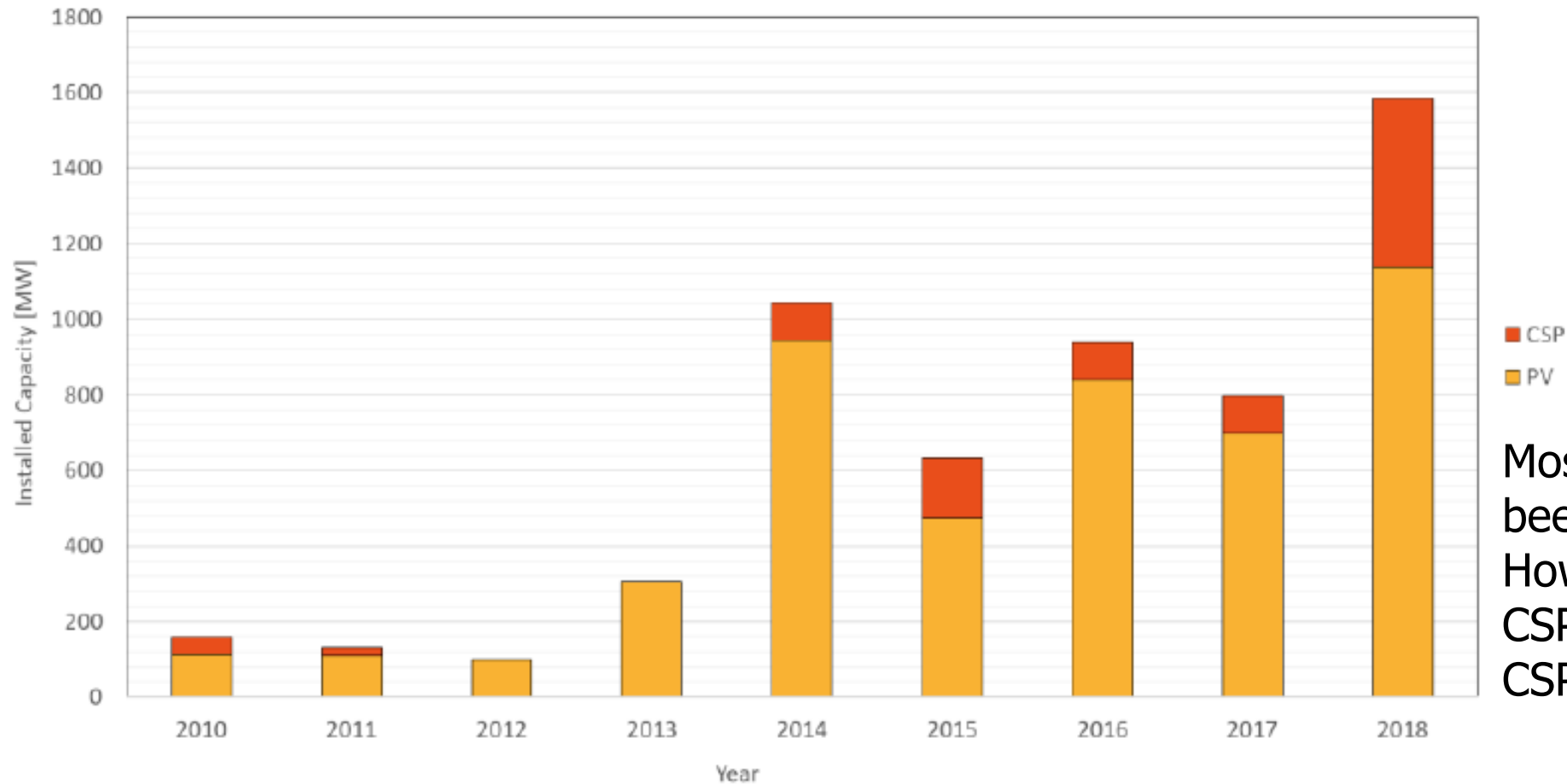
According to IRENA, SADC region has the potential to generate 20,000 TWh of Electricity per year.

= 33 x Africa Electricity Demand in 2012!!

SADC has built close to 2GW of Solar in only 6 years!!!!  
→ Impact of REIPPP in SA

Evolution of the total installed PV capacity per region in Africa. Source: Becquerel Institute et al.

## 2- SOLAR STATISTICS (2/2)



Most of the development has been Solar PV.

However Africa has 530 MW CSP in Morocco and 400 MW CSP in South Africa










Evolution of the yearly installed PV and CSP capacity in Africa. Source: Becquerel Institute et al.

# 3- KEY MARKETS

SA market represents **90%** of the solar installed capacity

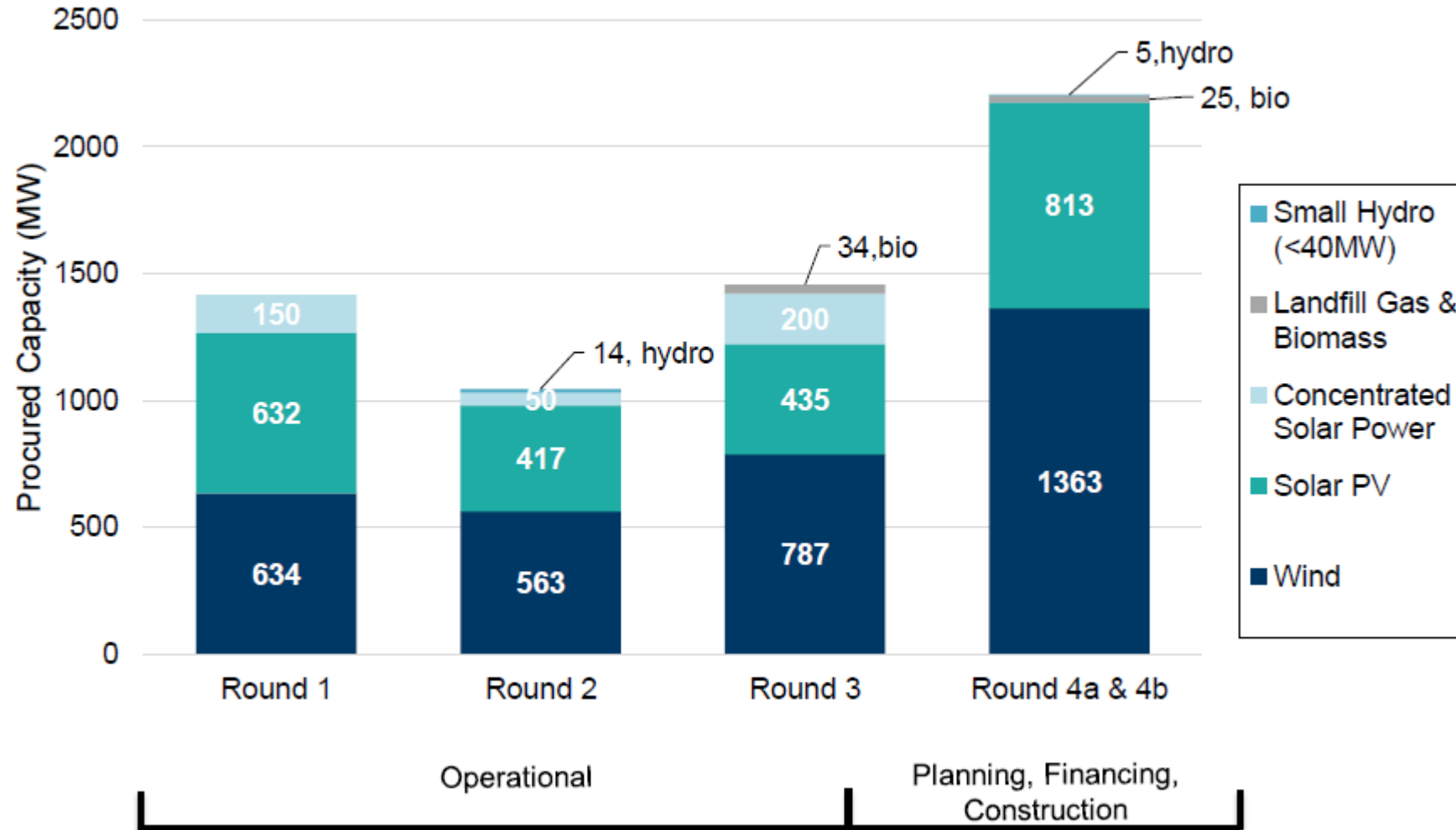
Countries	Renewables Target (MW)	RE Share of Electricity (%)	Target year	Operational (MW)	Not Operational (MW)
Malawi		7 22	2020 2030	0	80
Mozambique				0	40
Namibia		70	2030	36.5	57.5
Zambia	600		2019	0	89
Zimbabwe	300		2019	0	172
South Africa	8,000		2030	1733	1327
TOTAL				1769.5	1765.5

Solar capacity per countries (RiA)

South Africa		1,815 MW
Egypt		660 MW
Morocco		606 MW
Algeria		519 MW
Senegal		134 MW
Kenya		93 MW
Mauritania		86 MW
Namibia		79 MW
Ghana		64 MW

Total PV installed Capacity  
Top 9 of the African Countries  
(Becquerel)

# 4- SOUTH AFRICA (1/2)



## REIPPPP Record

6.4 GW of RE across 102 Projects in 8 years!!

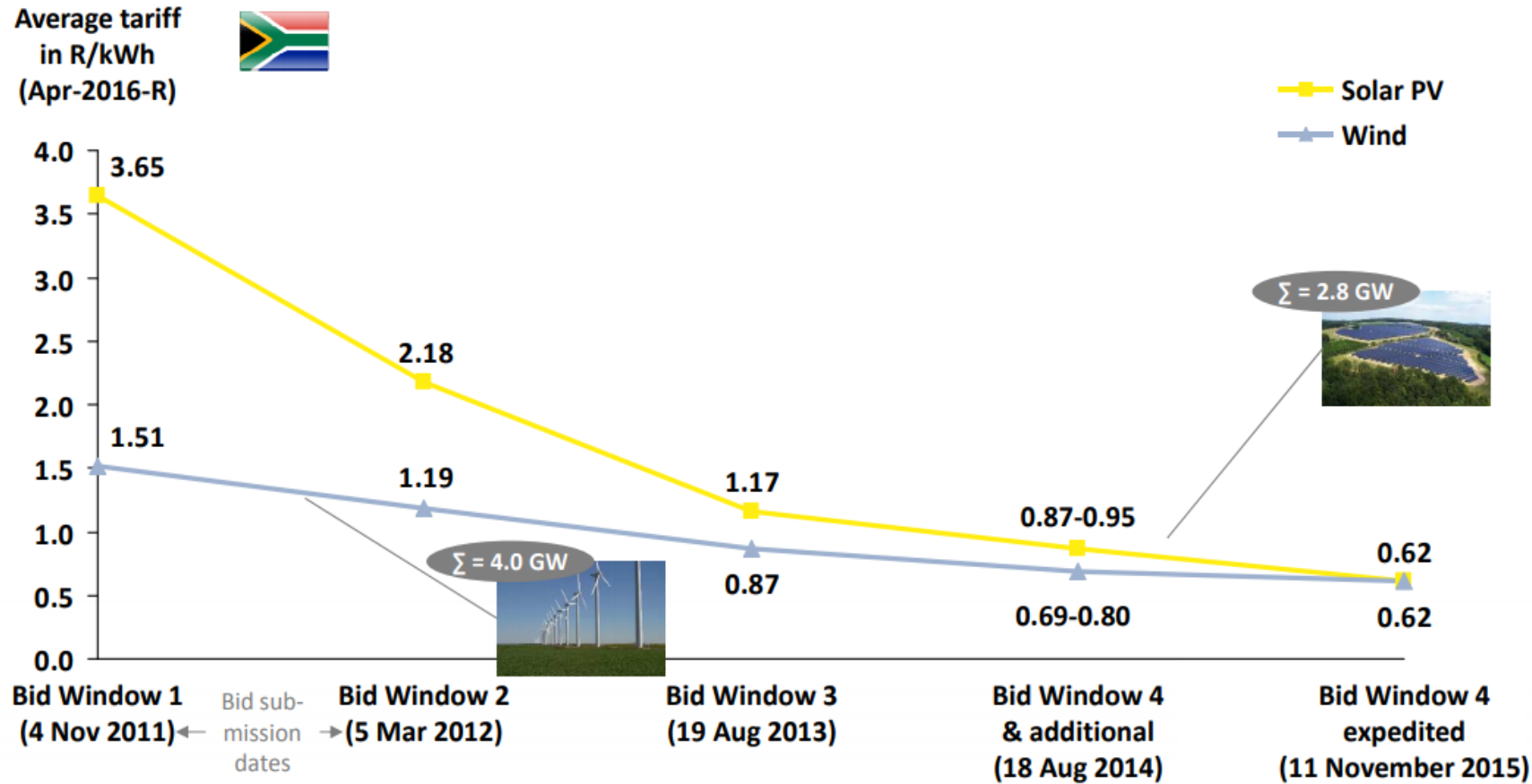
South Africa has about 1.5 GW of solar PV operational and about 1 GW in the pipeline.

In Apr 2018, Minister signed PPAs for 27 projects for windows 3.5 to 4.

New round 5 expected to be announced early next year.

REIPPPP: Procured capacities per bid windows. Source: Blue Horizon

# 4- SOUTH AFRICA (2/2)



Between Bid window 1 and bid window 2, prices have dropped sharply by more than 80%!!!

Local content policies have boosted local supply chain and manufacturing.

Cost of Solar and Wind Power Generation across REIPPP Programme in South Africa.

Source: CSIR

# 5- NAMIBIA

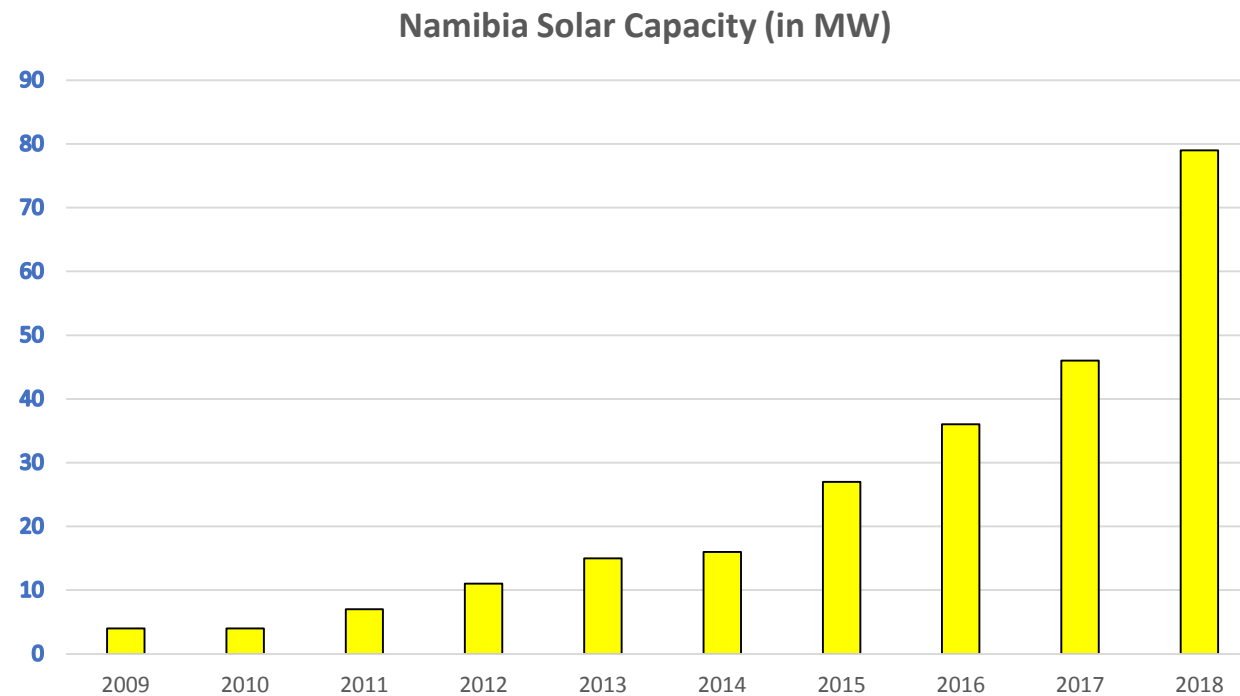
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Capacity (MW)	4	4	7	11	15	16	27	36	46	79

Namibia has one of best solar resources with 2,200kWh/m<sup>2</sup>/yr and minimum diffuse irradiation impact.

Namibia has **6-8hours** sunshine vs 3-4 hours in Central Europe

In less than a decade, Namibia solar power has been multiplied by 20.  
Solar is about 13% of the installed generation capacity.

Current tender in place to procure 20 MW of Solar PV



# 6- OTHER SEGMENTS

## Commercial & industrial



Mall of Africa in Johannesburg

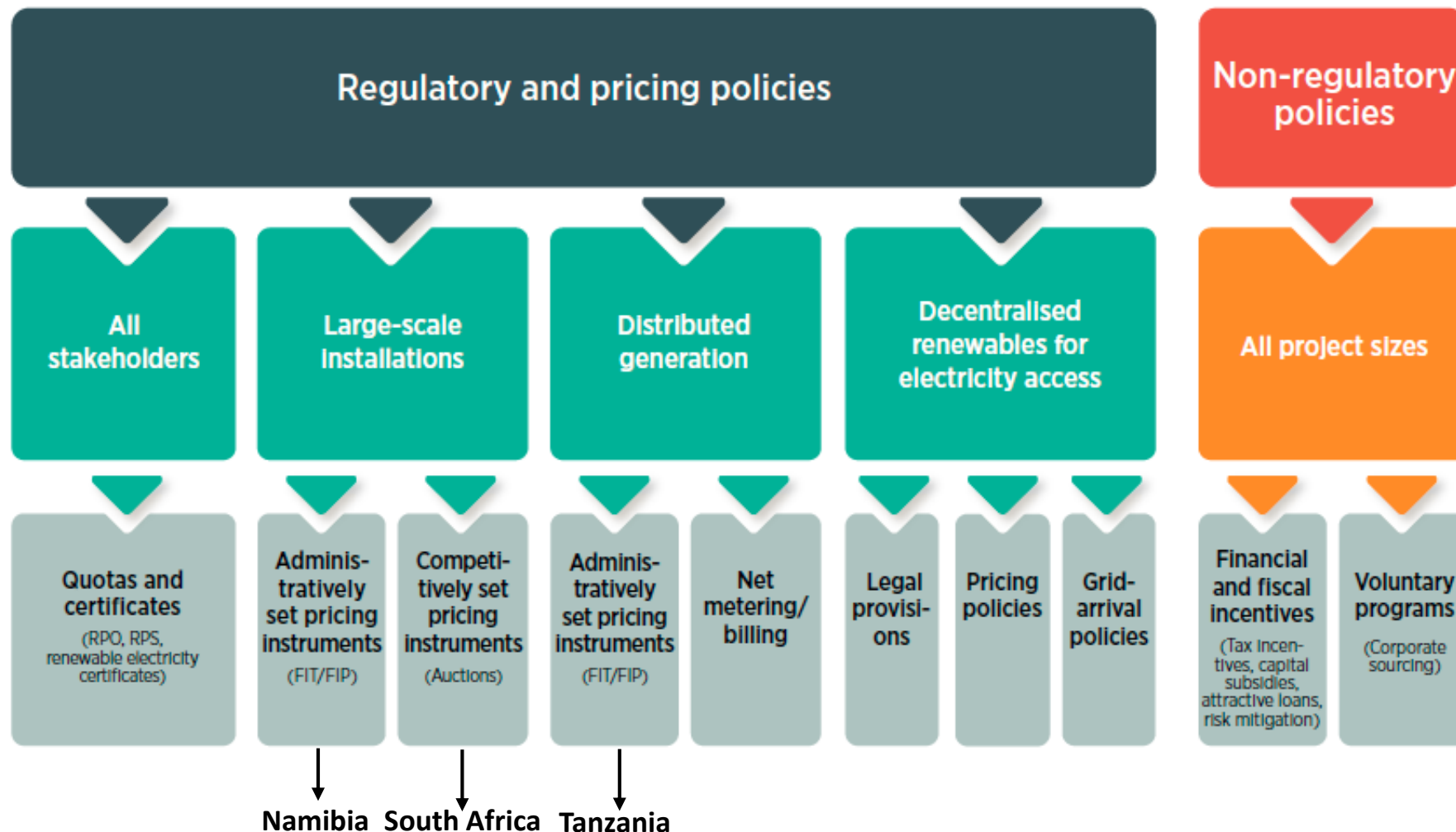
## Offgrid



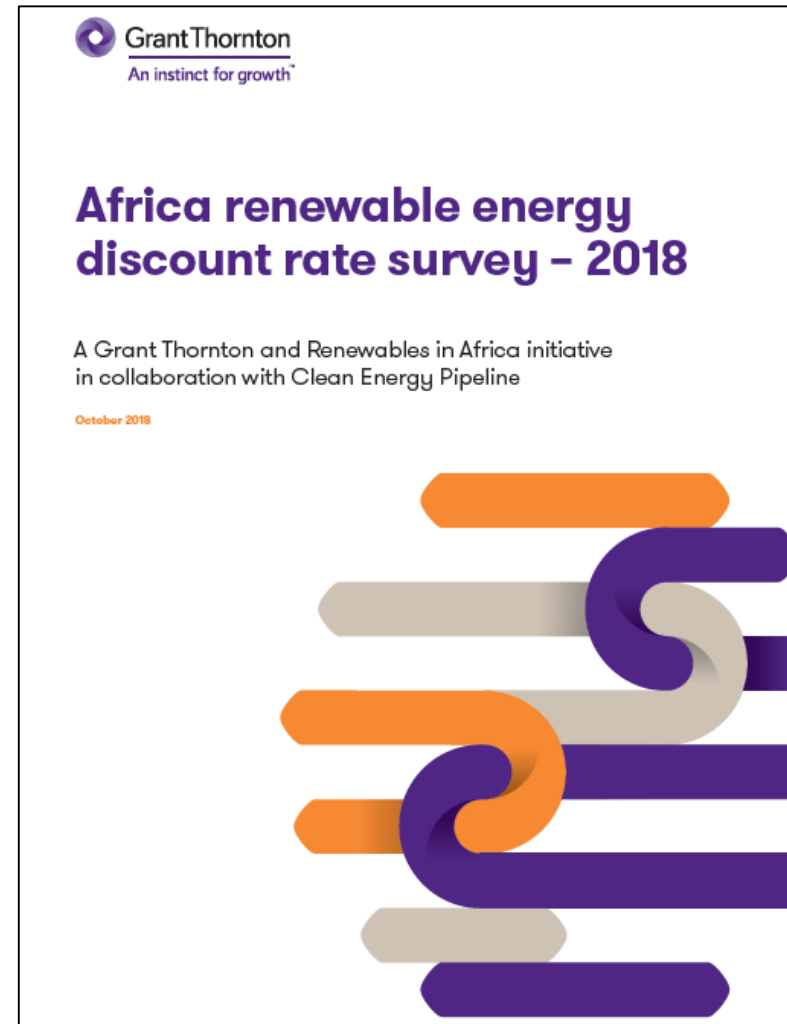
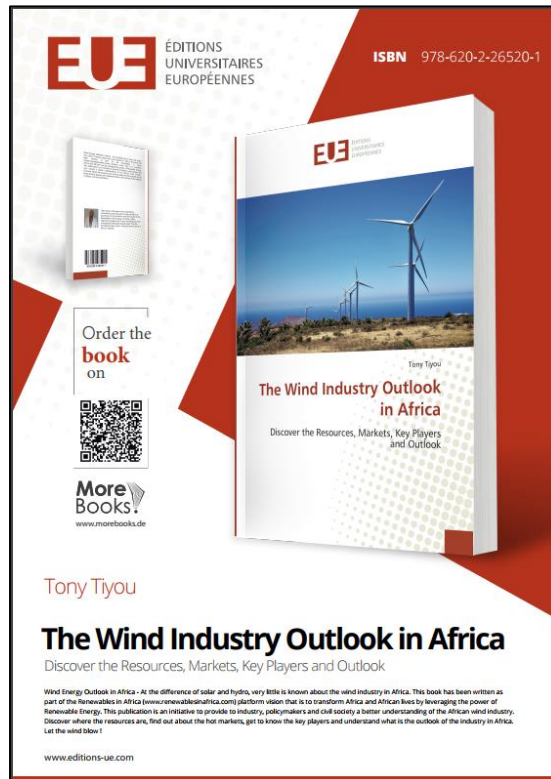
Mini Grid Project

# 7- SUPPORTING REGULATORY FRAMEWORKS

Like the rest of Africa, there is a wide variety of policies in power sector in Africa



# RIA PUBLICATIONS



Available from RiA platform

# NGUE PELO (THANK YOU) !!

Get in touch: [tony@renewablesinafrica.com](mailto:tony@renewablesinafrica.com)



**RenewablesInAfrica**



**@Renewablesafri**



**(+44).1277 231 552**

[www.renewablesinafrica.com](http://www.renewablesinafrica.com)