

# Mulilo Sonnedix Prieska PV (PTY) LTD

## 75MW Solar PV Power Plant



Presented by:

**Mulilo Sonnedix Solar Enterprises (PTY) LTD**

**Warren Morse** (Director. MSc, BSc Engineering)

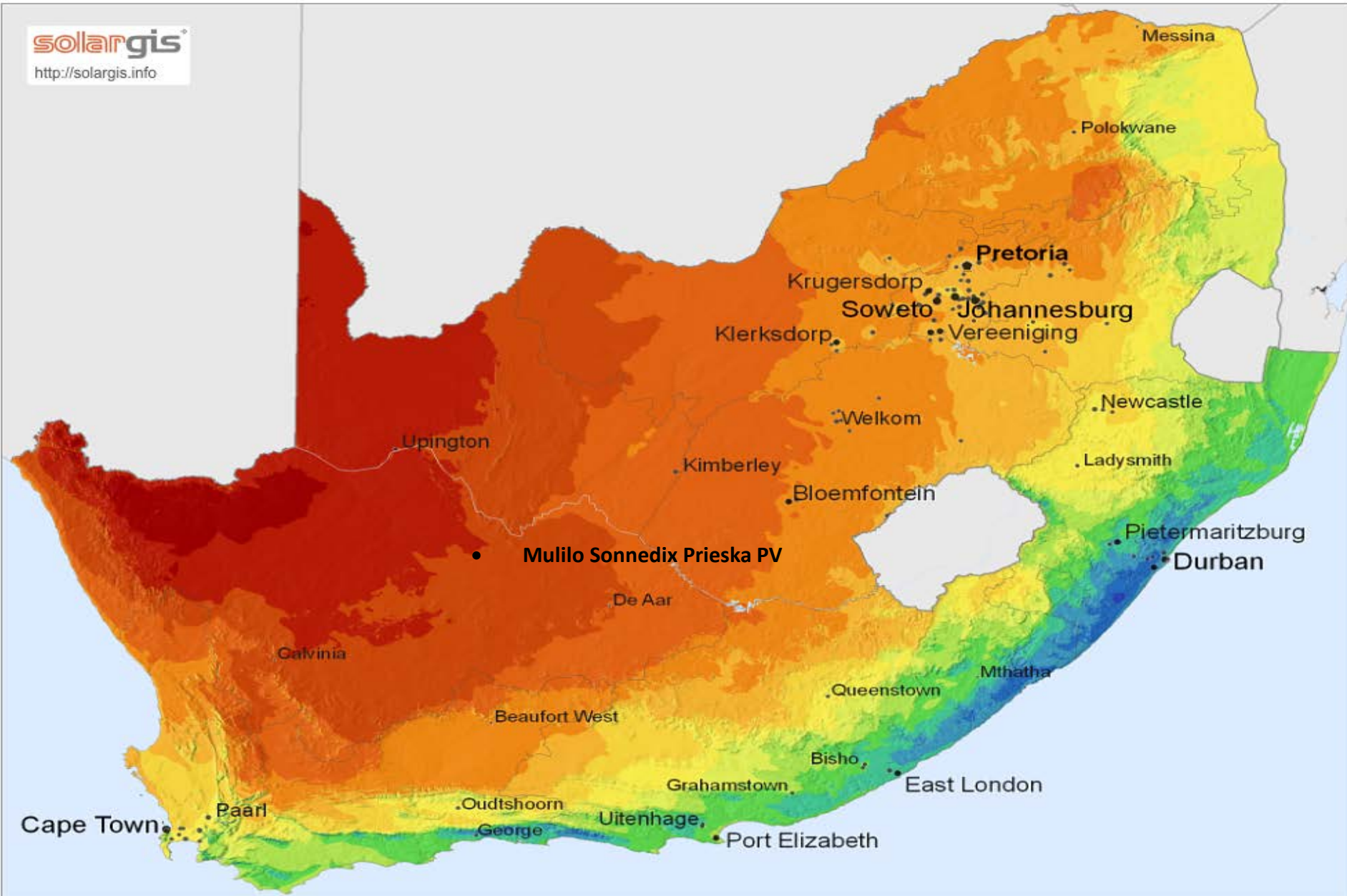


# Agenda:

- Project Information
- Shareholding Information
- Project Technical Information
- Financial Information
- Economic Development Information
- Anticipated CoDs
- Questions

# Project Information:

Project Name:	Mulilo Sonnedix Prieska PV
Project Company:	Mulilo Sonnedix Prieska PV (PTY) LTD
Project Size:	75MW AC (86.23MW dc) 140 hectares
Project Technology:	Solar PV, Standard Polysilicon, Fixed Axis
Property Details:	
• Farm Name	Hoekplaas 146
• Portion	RE of 146
• Extent	5012ha
• District	Prieska RD
• Province	Northern Cape

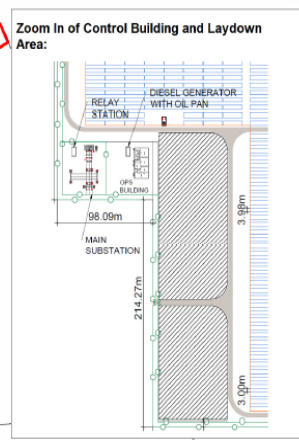
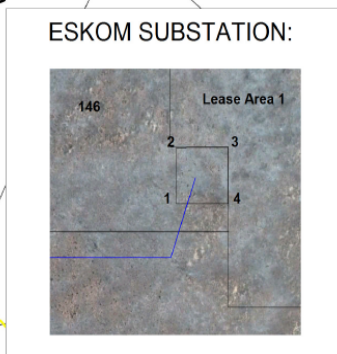
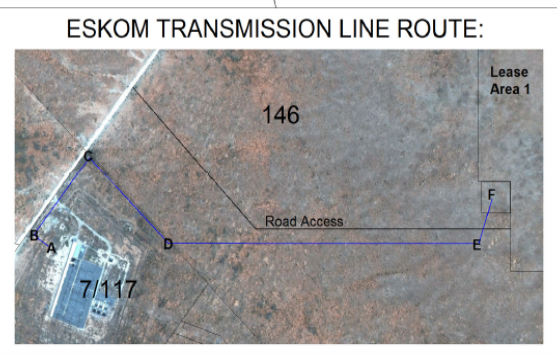
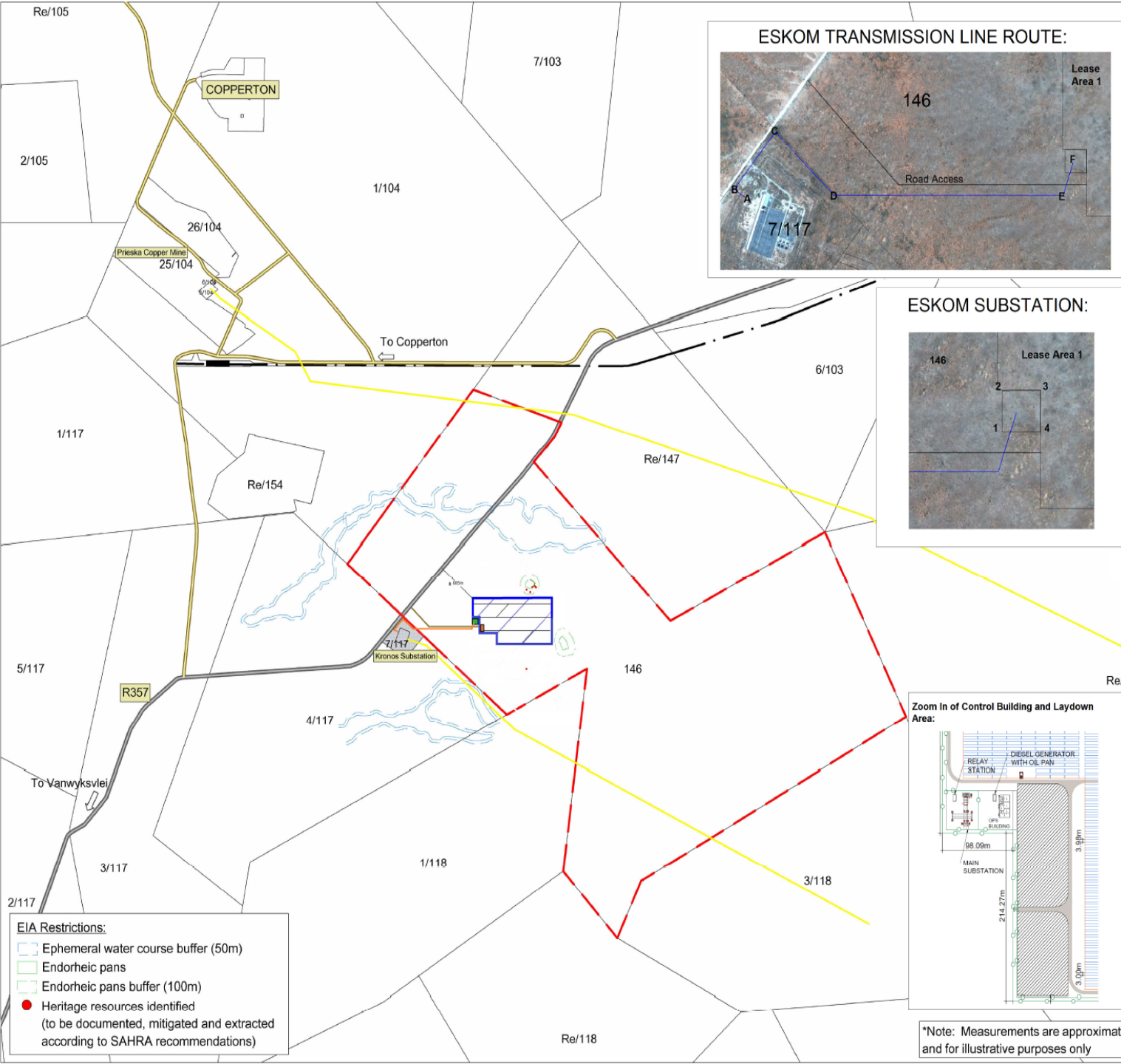


Average annual sum (4/2004 - 3/2010)



0 100 200 km





**MULILO SONNEDIX  
PRIESKA PV (PTY) LTD**

**75MW  
Solar Energy Facility**

The Farm Hoekplaas No. 146

**Layout Plan**

- Subject Property (± 5012,1974 ha)
- Kronos Substation
- R357 - Regional Road
- Local Roads (Tarred)
- Railwayline
- Ephemeral water course
- Existing Transmission Lines affecting the site (Servitudes)
- Facility:**
- Solar Energy Facility
- Distribution Substation
- Construction/Laydown Area
- Control Building
- Proposed Transmission Line
- Proposed Access Road

**Project Company:**  
Mulilo Sonnedix Prieska PV (PTY) LTD

**Project Name:**  
Mulilo Sonnedix Prieska PV



DATE: January 2014

PLAN NO: P100-05

SCALE: 1:50 000 (on A3)

ANNEXURE:

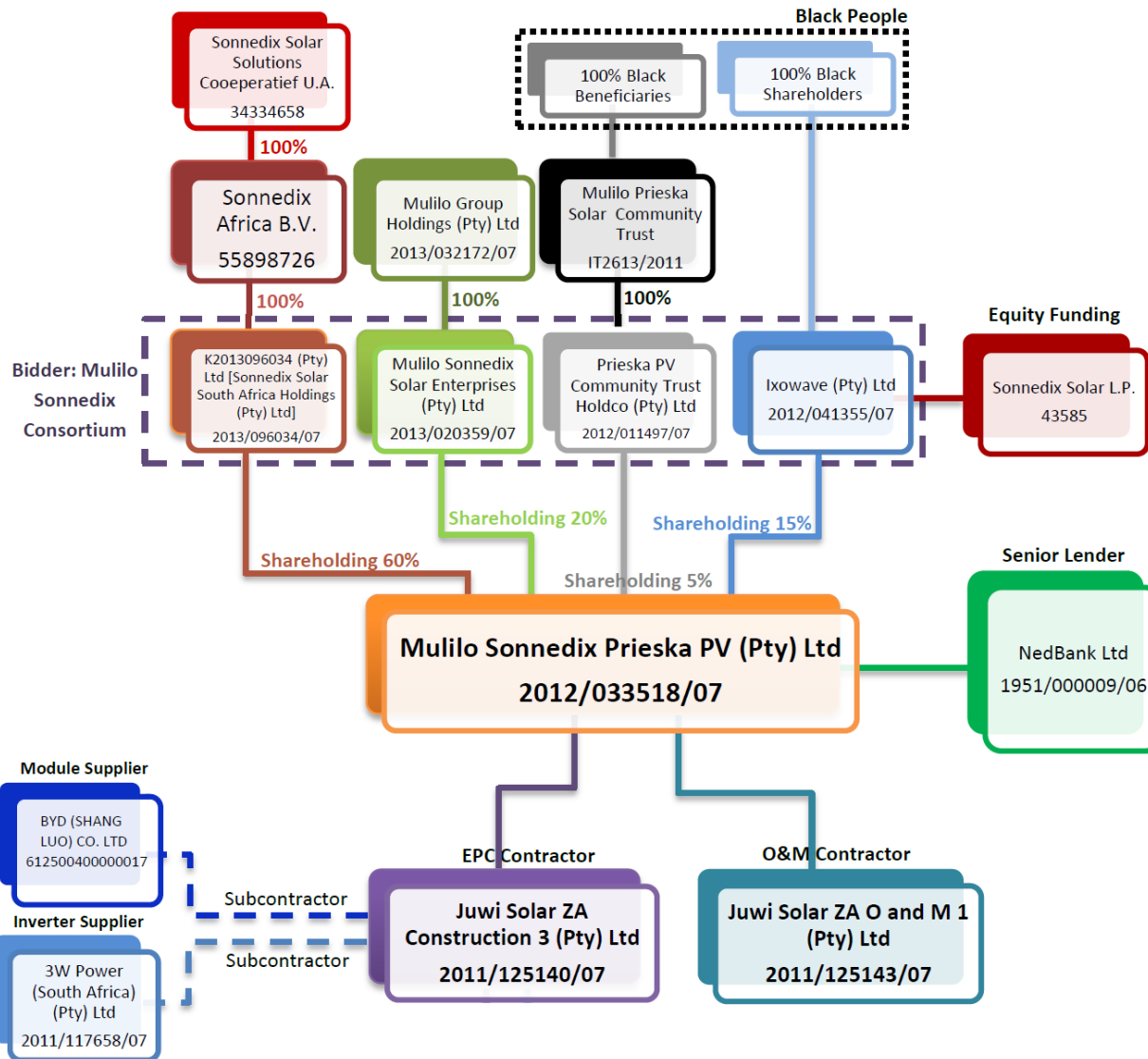
Compiled By:



- EIA Restrictions:**
- Ephemeral water course buffer (50m)
  - Endorheic pans
  - Endorheic pans buffer (100m)
  - Heritage resources identified (to be documented, mitigated and extracted according to SAHRA recommendations)

\*Note: Measurements are approximate and for illustrative purposes only

# Shareholder Information:



## Overview

- Sonnedix is an Independent Solar Power Producer (IPP) with a proven track record in delivering high performance cost competitive solar photovoltaic plants to the market.
- We own 28 solar power plants at various stages of maturity in key markets with control of 519MW of production capacity
- As of February 2014, Sonnedix has solar power plants in operation, under construction or documentation in 8 countries on 5 continents: Spain, Italy, France, Thailand, Japan, USA/Puerto Rico, Chile and South Africa.

## Key numbers

28

Solar power plants

519

MW of controlled capacity

101

MW of operating capacity

## Sustainability and social responsibility

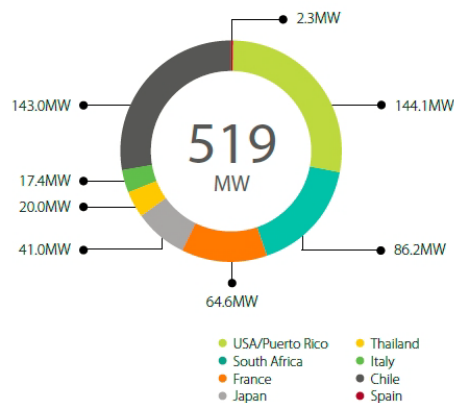
- Building a sustainable business with a long term focus is a critical component of our strategy. We believe that assuming responsibility for the environment and the communities we operate in is strongly linked to the Company's success.
- At our plants around the world we aim to create employment opportunities for the local communities during the construction period and beyond.

## Growth and Capacity

Operating capacity (MW)



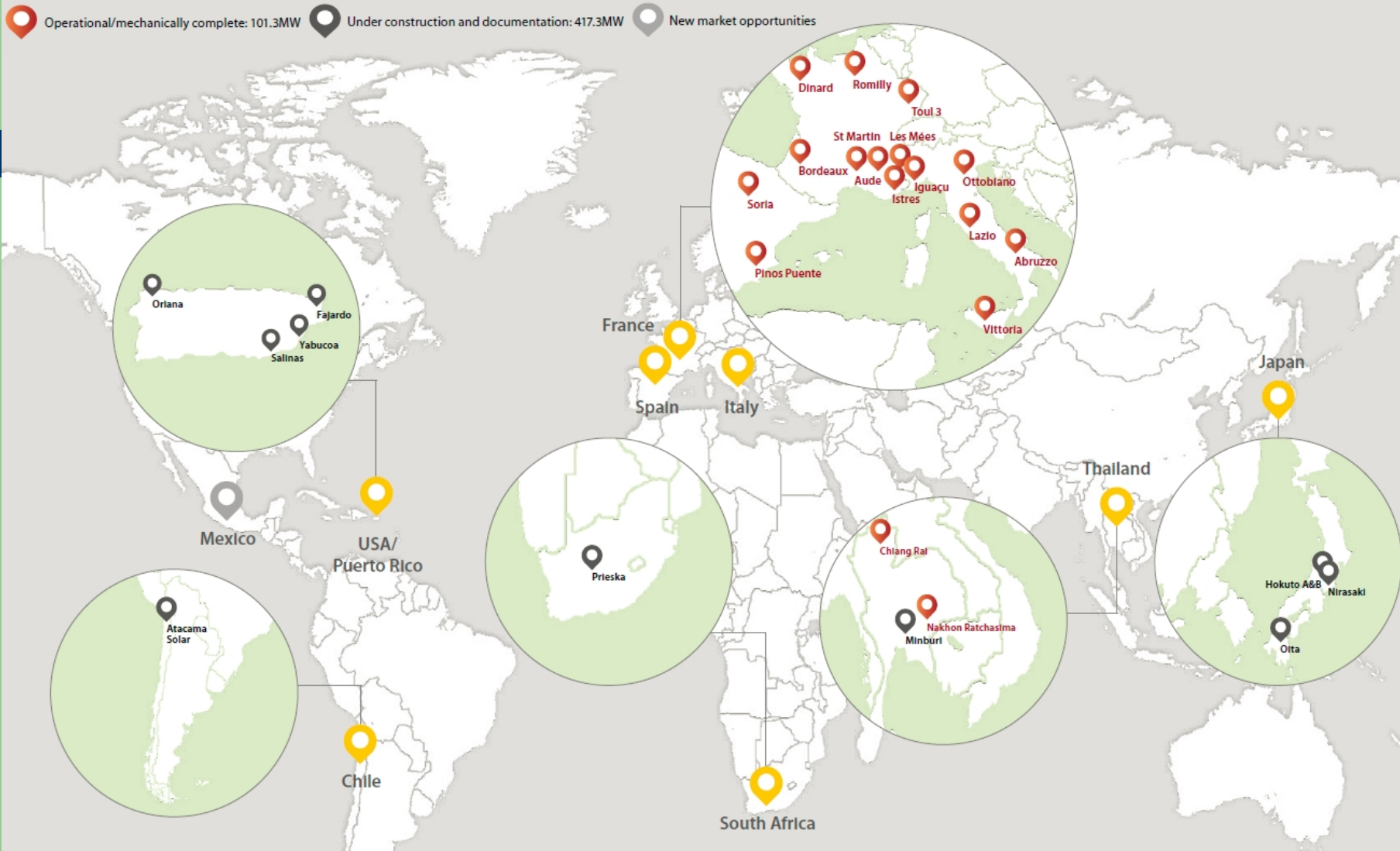
Controlled capacity (MW)



Istres PV plant, France, 23.5 MW

## Geographic Footprint

Sonnex expects to continue to grow rapidly, utilizing its management team's long experience and deep relationships in the solar PV industry to create opportunities to source, develop, and acquire new solar PV projects in current and new geographies.





# PROJECT PHOTOS



# Technical Information:

<b>Contracted Capacity [MW]</b>	75 MWac
<b>PV Module Type:</b>	Poly Crystalline 305Watt BYD P6C-36-DG
<b>Number of PV Modules:</b>	282,720
<b>Number of module strings (where a string constitutes a number of modules connected to a common inverter):</b>	10 modules per string 7,068 array units consisting of 4 strings
<b>Mounting Type (fixed, single axis tracking or double axis tracking)</b>	Fixed Axis manufactured and installed by Schletter
<b>PV inverter (manufacturer and model):</b>	AEG Protect PV.800
<b>Number of Inverters</b>	96
<b>Transformers ratings</b>	1600kVa & 800kVa
<b>Number of transformer</b>	48 x 1600kVA
<b>Planned voltage connection level:</b>	132 KV
<b>Planned connection point (i.e. the name of the substation or distribution line onto which the Project is intended to connect):</b>	Self Build up to the Eskom Kronos Substation. The Line and Prieska PV3 Substation handed back to Eskom, Point of connection is Prieska PV Substation on the HV side of the transformer.



# Financial Information:

The project debt is being provided by one tier 1 lender, on a debt/equity ration of 75/25.

## Debt (75%):

- |    |                 |      |
|----|-----------------|------|
| 1. | Nedbank Capital | 100% |
|----|-----------------|------|

## Equity (20%):

- |    |                                   |     |
|----|-----------------------------------|-----|
| 1. | Sonnedix Solar South Africa       | 60% |
| 2. | Prieska PV Community Trust        | 5%  |
| 3. | Ixowave                           | 15% |
| 4. | Mulilo Sonnedix Solar Enterprises | 20% |

**Equity Repartition**





# Financial Information:

## Preferred Bidders Round 3 REIPPP

### Solar Photovoltaic

Project Name	Contracted Capacity (MW)	Fully Indexed Price (R/MWh)	Partially Indexed Price (R/MWh)	Portion Indexed
Adams Solar PV 2	75	864.10	1239.30	20.00%
Tom Burke Solar Park	60	952.20	1329.80	20.00%
Mulilo Sonnedix Prieska PV	75	1100.00	1440.00	20.00%
Electra Capital	75	1069.00	1324.60	20.00%
Pulida Solar Park	75	992.20	1415.50	20.00%
Mulilo Prieska PV	75	985.00	1473.10	20.00%
Total	435			

# Economic Development Information:

- The Project has maximised the components of economic development in line with the guidelines of the DOE.
- Jobs created during construction and operation are high compared to the market, and the use of black, local labour has been optimised.
- The local content includes locally manufactured panels by BYD.
- Black ownership of 20% is held by a member that has related experience in this sector.
- Community ownership of 5% is as per the DOE target.
- Management control has been designed to give maximum benefit in line with the bid Guidelines.
- A number of enterprise opportunities have been identified and contributes total 1.1%

Socio economic development has been carefully considered by the consortium and has therefore committed unadjusted contributions of 4.7%.

# Economic Development Information:

## Preferred Bidders Round 3 REIPPP

### Solar Photovoltaic



Project Name	Contracted Capacity (MW)	Fully Indexed Price (R/MWh)	Partially Indexed Price (R/MWh)	Portion Indexed	ED Score
Adams Solar PV 2	75	864.10	1239.30	20.00%	12.58
Tom Burke Solar Park	60	952.20	1329.80	20.00%	13.68
Mulilo Sonnedix Prieska PV	75	1100.00	1440.00	20.00%	18.01
Electra Capital	75	1069.00	1324.60	20.00%	11.68
Pulida Solar Park	75	992.20	1415.50	20.00%	12.61
Mulilo Prieska PV	75	985.00	1473.10	20.00%	17.16
Total	435				

## Anticipated Commercial Operation Date:

The Mulilo Sonnedix Prieska PV project expects to achieve CoD by:

18<sup>th</sup> December 2015

This timeframe depends on the expected Eskom commissioning timeframe to be published in the Budget Quote by end of April 2014.



**Questions:**

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Thank you for your time.

Questions?