

Developing solar in emerging markets

Swedbank Conference

March 17, 2016

Our values

- Predictable
- Driving results
- Change makers
- Working together



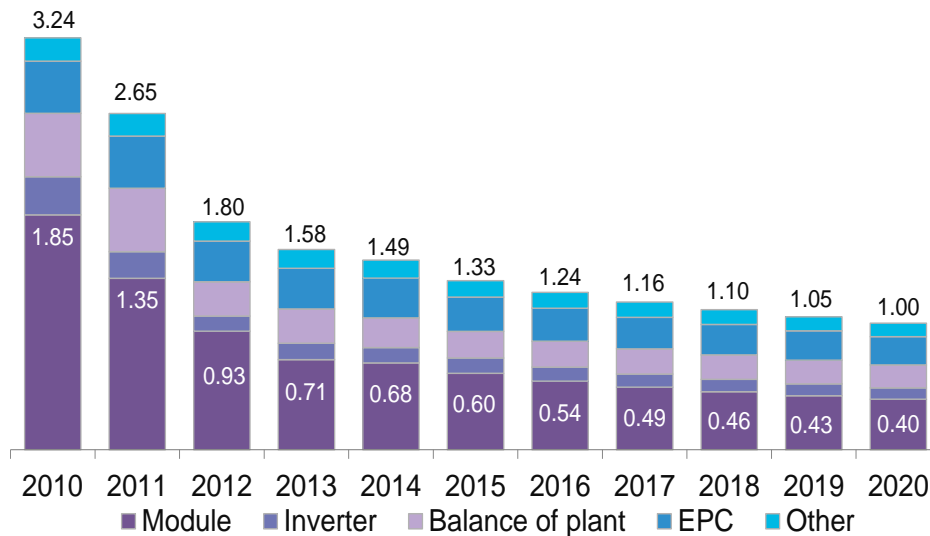
South Africa: Solar is now cheaper than coal



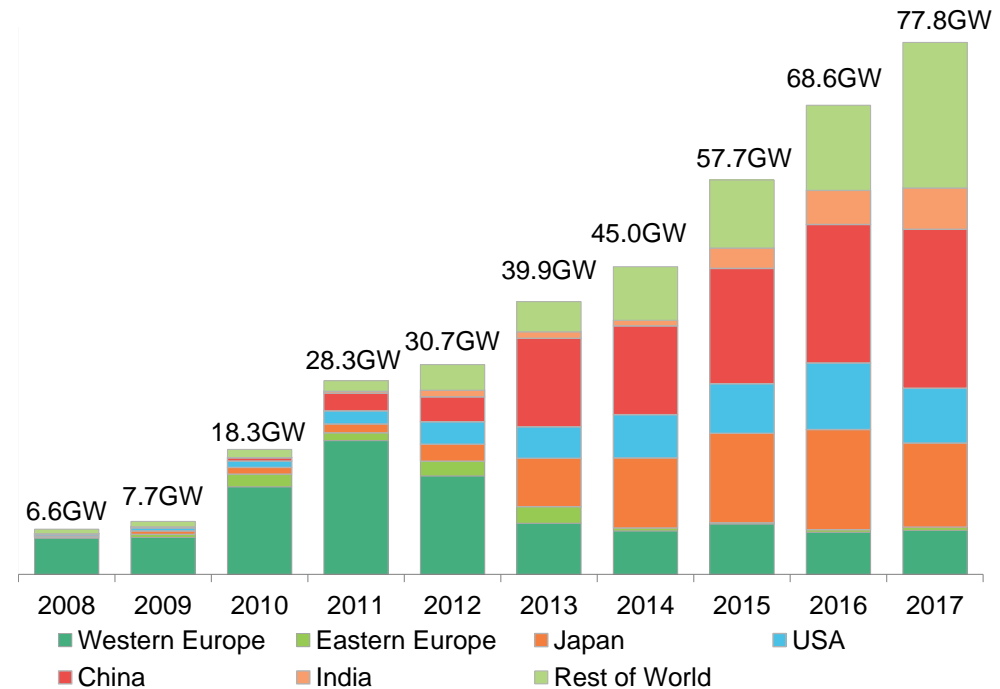
The 40 MW Linde plant in South Africa

Rapid price decline boosts volume growth

Total system cost - 1 MW (USD/Watt)*



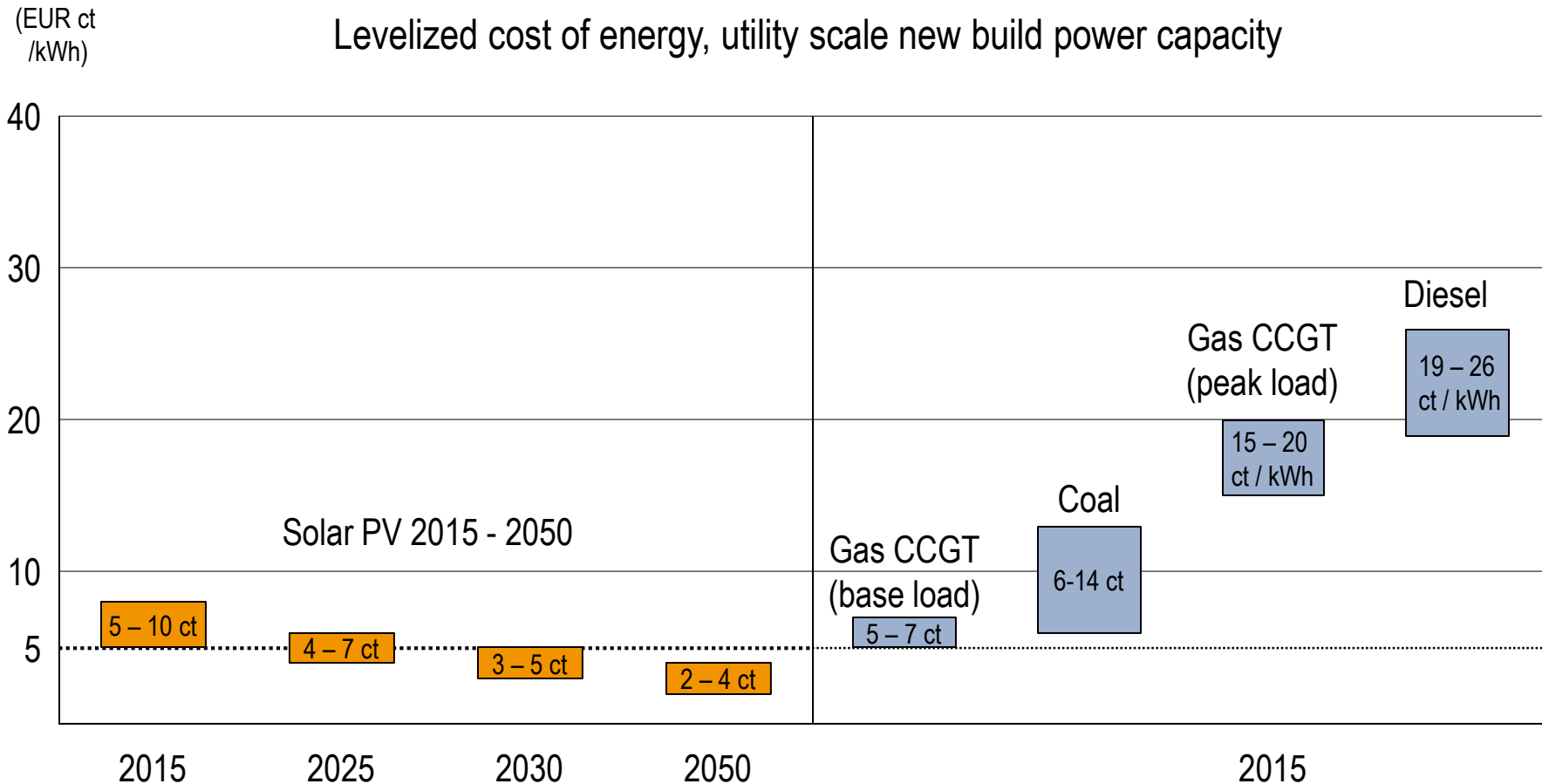
Annual new installed capacity per year



(*) Capex will vary from market to market depending on system size, market maturity, bankability etc

Source: Bloomberg New Energy Finance, Q4 2015 PV market outlook

Solar – a very competitive source of electricity



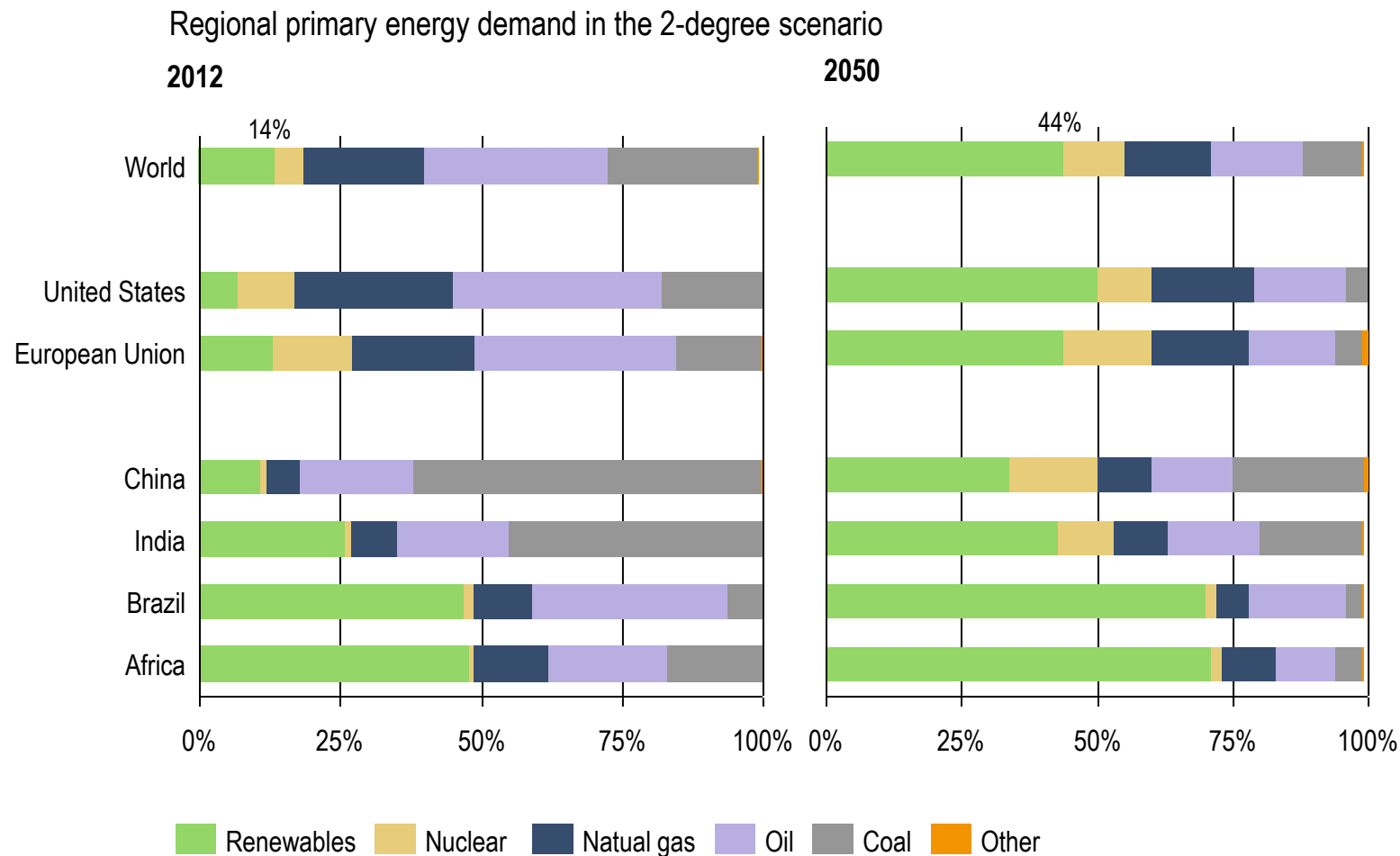
Source: Fraunhofer / Agora Energiwende 2015*

Source: Lazard Capital, Scatec Solar analysis

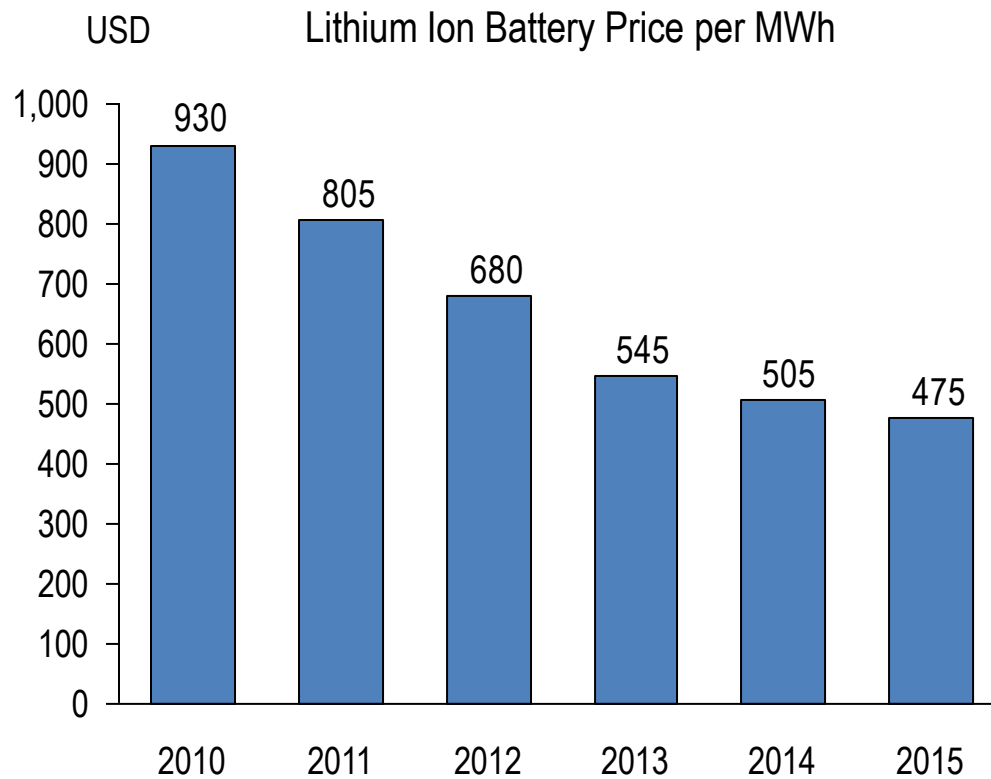
* Real values in EUR 2014, bandwidth represents different scenarios of market, technology and cost development. PV plant locations between south of Germany (1,190 kWh/kWp/year and South of Spain (1,680 kWh/kWp/y) US\$/watt)

Significant market growth ahead

Disruptive growth within PV, wind and storage required to meet
IEAs 2 degree scenario achievable



Technology is key – battery cost is dropping



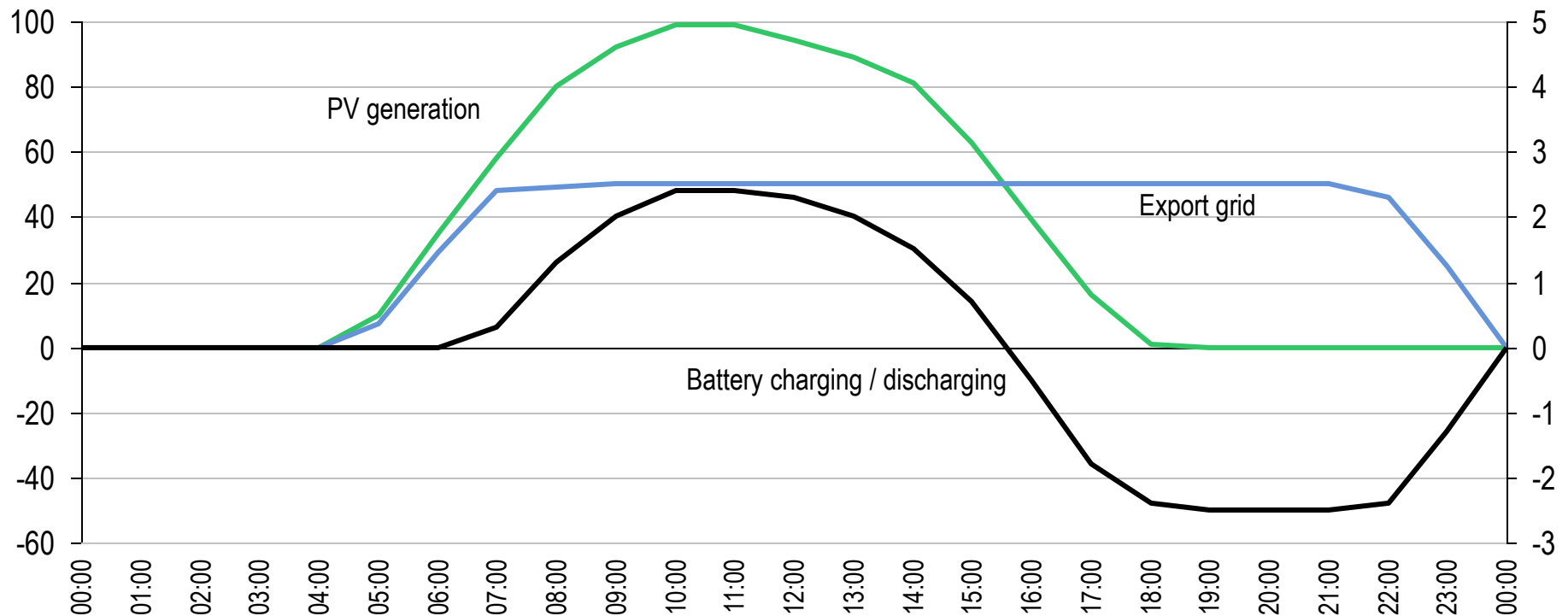
Source: Pike Research



Storage will increase the market for large-scale PV

Export / generation capacity (% of installed MWp)

Energy stored (hours)



Source: Bloomberg New Energy Finance

FT March 16: 90 % of new electricity was renewable

FINANCIAL TIMES

March 16

Climate change

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Climate battle bears early fruit as global energy emissions stall

YESTERDAY by: **Pilita Clark**, Environment Correspondent

Carbon pollution levels stayed flat for the second year in a row last year new data show, even though the global economy kept growing, in a sign that efforts to tackle climate change may be bearing fruit faster than thought.

A surge in renewable power around the world was the main reason energy-related emissions stalled, the International Energy Agency has found, reflecting rising levels of clean power investment that last year reached a record \$328.9bn globally.

Over 90 per cent of new electricity generated last year came from renewable sources, the highest level seen since 1974, with half the growth coming from wind farms alone, according to the Paris-based monitoring organisation.

“This is unprecedented. This is huge,” Fatih Birol, IEA executive director, told the Financial Times. “This affects not only climate change but also fuel mix expectations globally.”

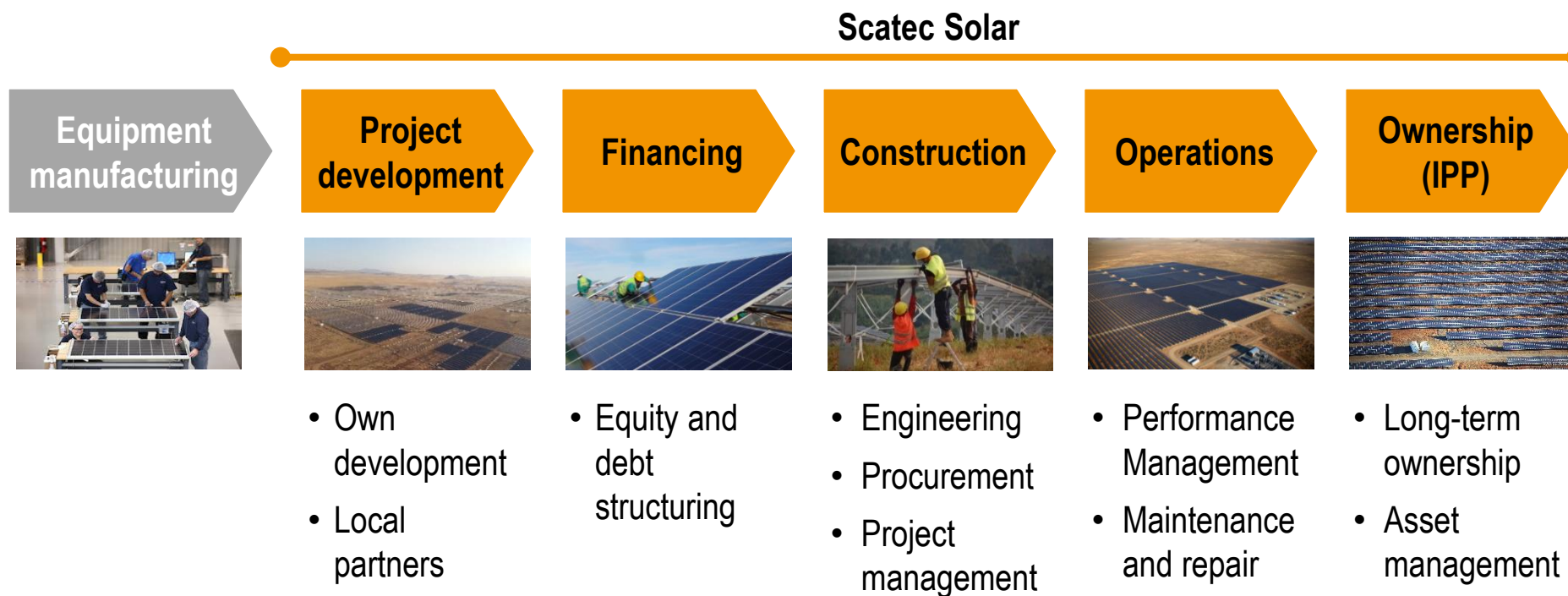
Scatec Solar – a leading player in utility scale PV



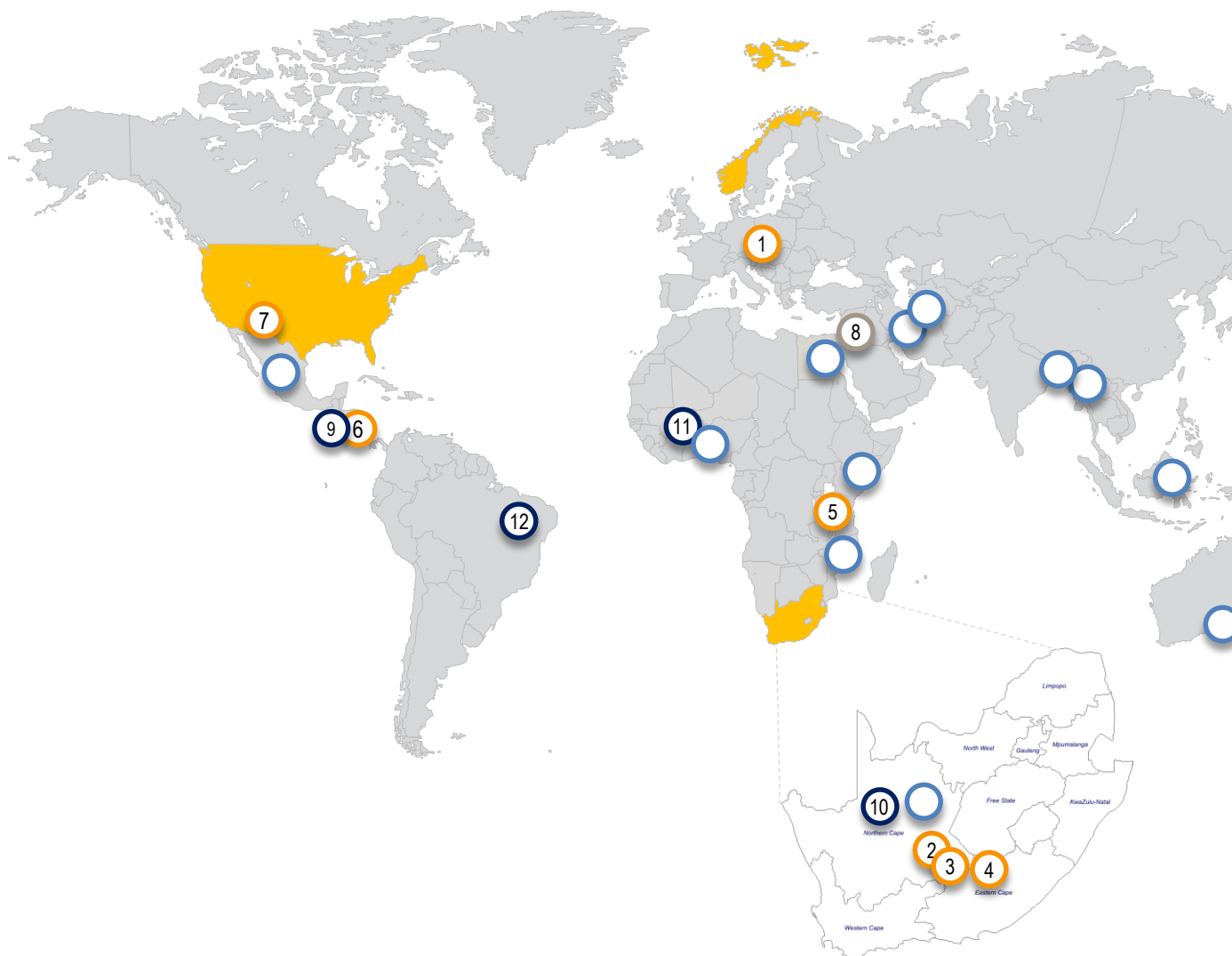
The 75 MW Dreunberg plant in South Africa

An Integrated Independent Power Producer

Scatec Solar Develops, Builds, Owns & Operates Solar Plants for 20 Years



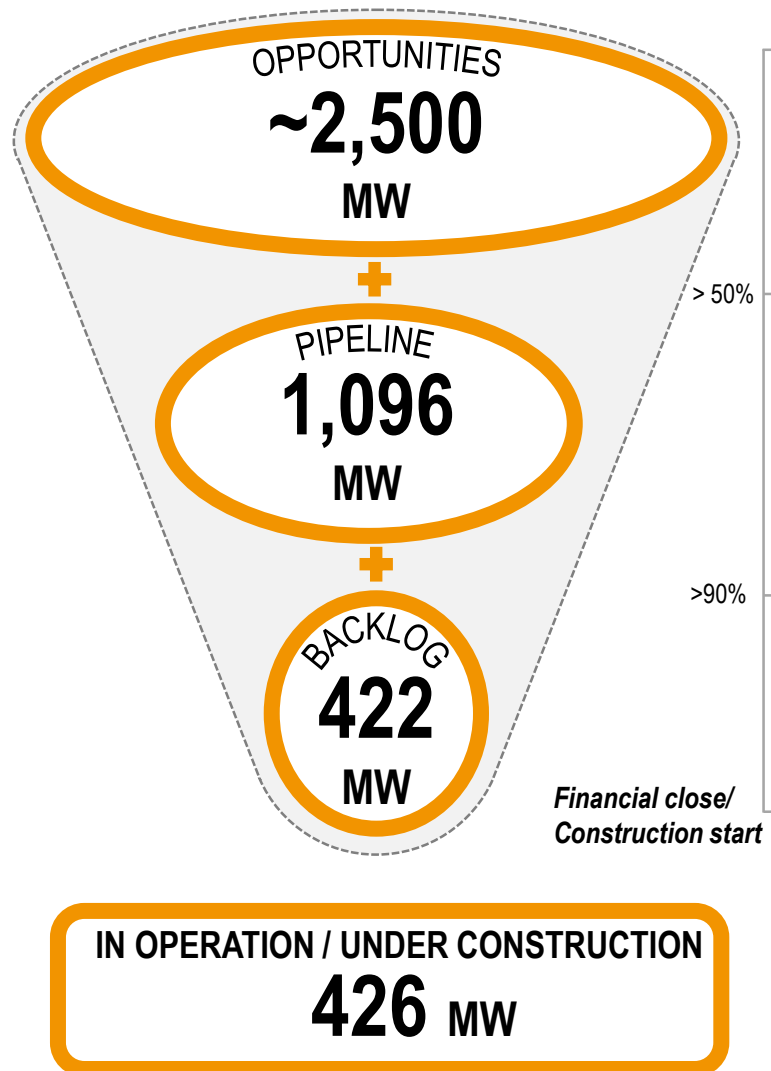
A growing and diversified asset portfolio



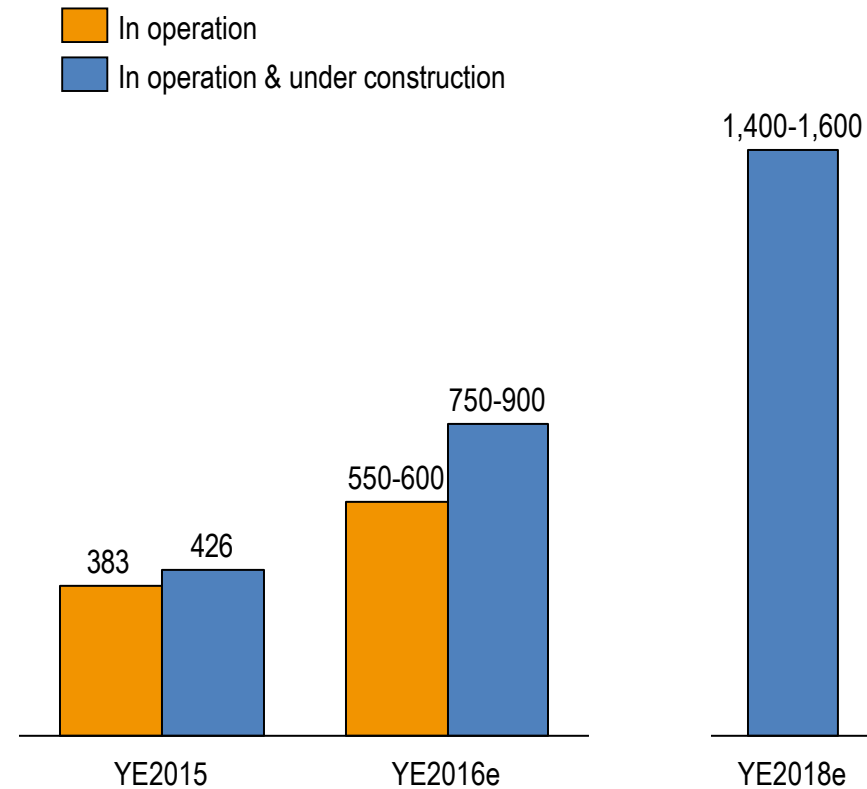
In operation		
Czech Republic	1	20 MW
Kalkbult, RSA	2	75 MW
Linde, RSA	3	40 MW
Dreunberg, RSA	4	75 MW
ASYV, Rwanda	5	9 MW
Agua Fria, Honduras	6	60 MW
Utah Red Hills, USA	7	104 MW
Total		383 MW
Under construction		
Jordan	8	43 MW
Projects in backlog*		
Los Prados, Honduras	9	53 MW
Upington, RSA	10	258 MW
Segou, Mali	11	33 MW
Serato & Sorbral, Brazil	12	78 MW
Total		422 MW
Pipeline & opportunities		3.6 GW

(*) Projects with secured tariff and/or off take agreements

A solid project funnel – basis for further growth



MW in production and under construction



Our holistic approach is the recipe for success

Key ingredients:

- Market understanding and screening
- Access to financing
- Partnerships
- Regulatory framework and legal set up
- Project development and execution
- Operation and asset management
- Corporate Social Responsibility
- Security

*Kalkbult, 75 MW
South Africa*



*ASYV project, 8.5 MW
Rwanda*



Strong partners – provides capital and mitigates risk

Norfund partnership:

- Project development and investment partnership
- Norfund & KLP - equity co-investors in key markets

IFC partnership:

- Project development and investment partner in selected countries in West Africa and Asia

Project finance partners

- Multilateral development banks and institutions providing long term non-recourse project finance
- Standard Bank and partners providing project finance to plants in South Africa

Key benefits:

- Access to lower cost of capital
- Expanded network for project origination
- Risk mitigation – representing the Norwegian government, the World Bank and government partners



European Bank
for Reconstruction and Development



Strong community relations – vital for success

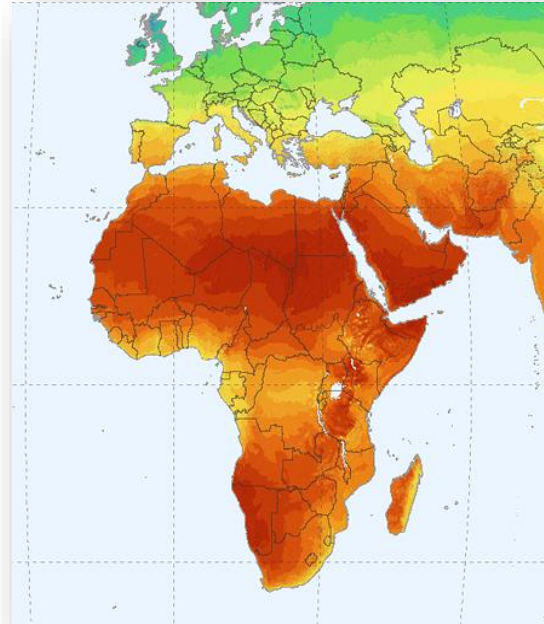
- Economic development – often a critical part of the renewables program
- Strong community relations key for successful execution
- Job creation is the most important factor – both directly through construction and operation jobs
- In South Africa Economic Development commitments over 20 years are made as part of the bid documents
- Existing Scatec Solar projects - total community contributions in South Africa totals NOK 1.2 billion over a 20 year period; a significant contribution to the scarcely populated regions
- Specialist advisors engaged to manage CSR and ED programs



Africa: Lack of power holds back economic growth

Key facts

- 54 countries and population 1.1 billion
- Sub-Saharan Africa GDP equals Netherlands, but includes 7 of the 10 fastest growing economies in the world
- Total power production in Sub-Saharan Africa (ex South Africa) equals Norway's power production
- 600 million people without power



COP21 in Paris: Also a leap forward for renewables?

- Climate Finance, e.g. the UN Green Climate Fund, can speed up deployment of renewables in developing countries
- Scatec Solar: Strategy and Programme for UN accreditation(CDM) of our solar power plants in developing countries
- Current Scatec Solar projects save more than 600 000 tons of CO2 per year, to reach more than 2 million in 2018
- Norwegian developers and finance institutions (e.g GIEK, Norfund) can play a vital role in accelerating renewable investments in the south; partnering with UNs Green Climate Fund
- Hydro and solar investments by Norwegian IPPs will open opportunities for Norwegian suppliers



Scatec Solar is well positioned for the future

- Diversified asset base with stable cash generation for the next 20-25 years
- Solid project pipeline for further growth over the coming years
- Track record and business model for complex emerging solar markets
- Emerging economies take advantage of lower renewables prices
- Lower oil and gas prices have limited impact on the appetite for renewables
- Market transformation opens up for new business offerings



Thank you



The 60 MW Agua Fria plant in Honduras