

Agenda Scatec Solar's Capital Markets Update 2018

Accelerating growth	Raymond Carlsen, CEO	09:30 - 09:50
Execution of current project portfolio	Pål Helsing, EVP	09:50 - 10:10
Market perspectives and our approach	Terje Pilskog, EVP	10:10 - 10:40
Break		
Our project pipeline	Terje Pilskog, EVP	11:00 - 11:30
Financials and funding	Mikkel Tørud, CFO	11:30 - 11:50
Concluding remarks	Raymond Carlsen, CEO	11:50 - 12:00
Q&A		Ends around 12:20



Speakers

Raymond Carlsen, CEO

Mr. Carlsen joined Scatec Solar in 2009 from Aker ASA, where he was responsible for the development of the company's portfolio of energy related businesses. He has more than 30 years of industrial experience from management positions.



Pål Helsing, EVP Solutions Mr. Helsing joined the Company in 2015 from the role as President of Kongsberg Oil and Gas Technologies AS and a member of the Kongsberg Group Executive Management Team. Before that, he held several executive positions within Aker Solutions.



Terje Pilskog, EVP Project Development & Project Finance Mr. Pilskog joined Scatec Solar in 2012 from the position as SVP of REC Systems and Business Development in Germany. Prior to REC, he was Associated Partner at the management consulting company McKinsey & Co.



Mikkel Tørud, CFO

Mr. Tørud joined Scatec Solar in 2014 from the position as SVP Investor Relations and Business Development and member of Group Management in REC. Prior to REC he was commercial advisor in BP and management consultant in PA Consulting Group.







Accelerating growth

Raymond Carlsen, CEO



Scatec Solar – a leading emerging market player

Develops, builds, owns and operates utility-scale solar power plants





We deliver on our strategy and targets

Delivering on our promises

- 1.5 GW by end 2018
- Average 15 % gross D&C margin
- Average equity IRR of 15 %
- Solid track-record and continued self-funding capacity

Reaching 1.5 GW capacity by end 2018



Annual shareholder return +35% since listing

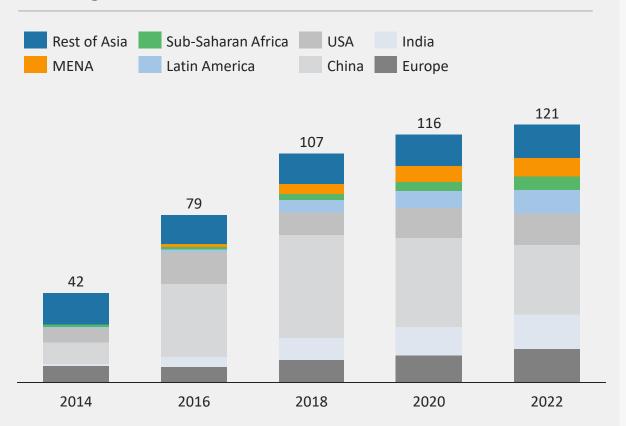




Strong market growth

- 2018 global demand of 107 GW and China accounts for 50%
- Emerging markets representing a growing share of the total market
- Scatec Solar is active in most significant emerging markets except China and India

Annual global solar PV demand forecast - GW



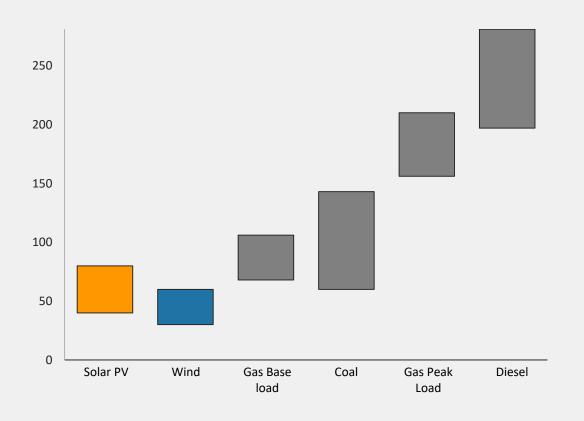


Source: GTM Research 7

Solar is one of the most competitive sources of energy

- The levelized cost of solar has come down 75% since 2010 – industry scale and technology
- Solar is now the lowest cost source of energy across the sun-rich regions globally
- Storage and hybrid solutions are expected to become increasingly important for demand
- New business propositions are emerging when solar is cost competitive with base load

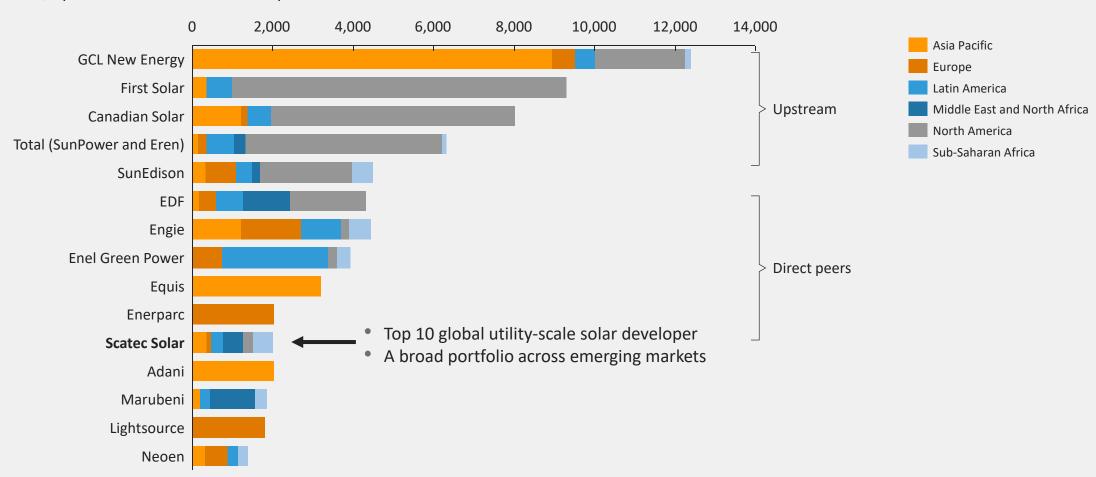
Cost of alternative energy sources (LCOE, USD/MWh)





We have advanced into a top 10 global independent solar PV developer

MW, operational and under development





Source: GTM Research

Our success is based on our integrated business model combined with a strong entrepreneurial culture







Business model



People

- Fully integrated
- Structuring and financing
- Financial discipline
- Partnerships

- Agile and lean
- Entrepreneurial culture
- Passionate and empowered people
- Strong talent bench

Predictable

Working Together

Driving results

Change makers



The integrated business model captures the full project value

Residual **Project development & construction:** value Provides access to attractive project pipeline Cost of Generates D&C margins that can be capital reinvested as equity in projects Optimize performance NPV power 0&M margin Long term asset ownership: Generates steady long term cash flows Construction margin • Eliminates 'friction losses' • Active asset management to enhance Development margin value of portfolio



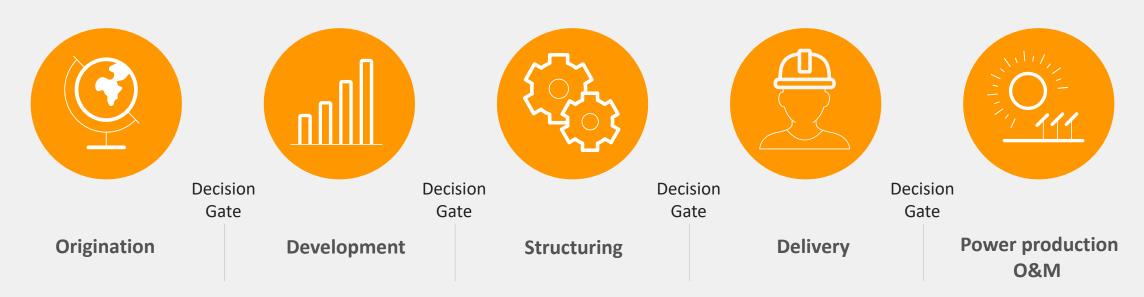
Total

value

The integrated business model is supported by our operating system

- Ensures consistency in way of working and scalability through all phases
- Secures learning and feedback to improve quality of decision making

Our project phases and decision gates





Sustainability to mitigate risk and create stakeholder value

Sustainability is an integrated part of our business

- Manage and mitigate risk
- Identify and manage the impact of our operations
- IFC Performance Standards and the Equator Principles

Further professionalizing our sustainability work

- Integration of environmental and social work streams
- Implementation of Global Reporting Standards (GRI)
- Improvements based on lessons learned





Accelerating growth



Increase installed capacity to above 3.5 GW by end 2021



Effective execution of current project portfolio

- Complete 1.1 GW under construction as planned
- Further refine EPC approach and reduce cost



Secure growth in priority regions

- Maintain a large project pipeline
- Establish deeper market understanding in selected markets



Broaden commercial and technology scope

- Enter Industrial and Commercial segments in selected markets
- New business propositions to include hybrids, storage and other technologies

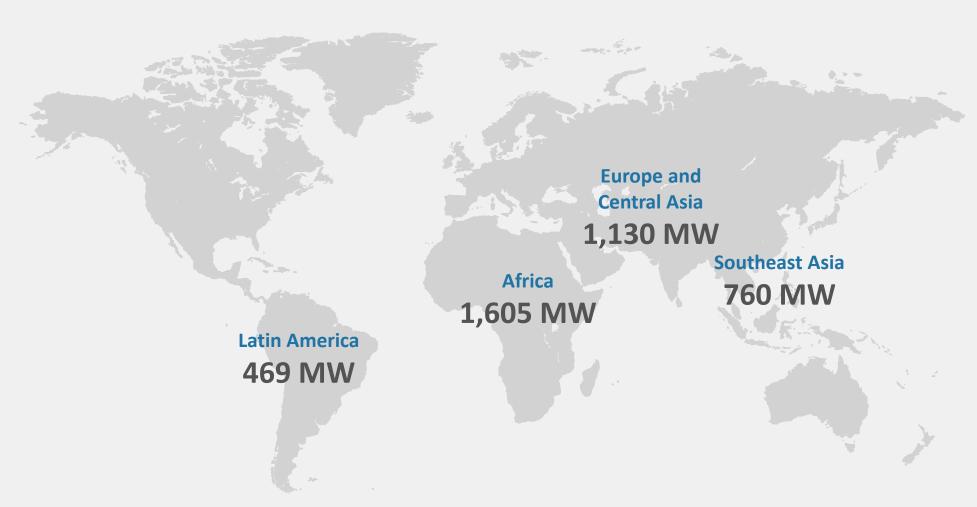


Optimise financing and asset portfolio to enhance value

- Debt refinancing and selective asset rotation
- Implement financing structures for new business propositions



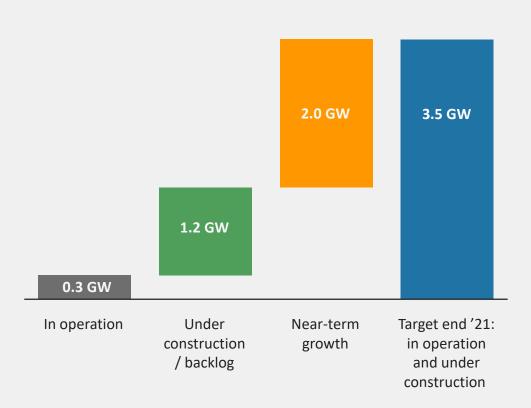
Developing 4.0 GW of project pipeline across emerging markets





Installed capacity above 3.5 GW by end of 2021

We will more than double installed capacity



Targets and guidance



D&C contribution of NOK 2.0 – 2.5 billion

Annual cash flow from operating solar plants of NOK 750 – 850 million



D&C gross margin; 12-15%

Equity IRR on power plant investments; 15%



Continued strong focus on HSSE and sustainability throughout all project phases





Execution of current project portfolio

Pål Helsing, EVP



Our project execution model is scalable and flexible ...

In-house core competence and local in-sourced capabilities

Central organizations in Norway and South Africa





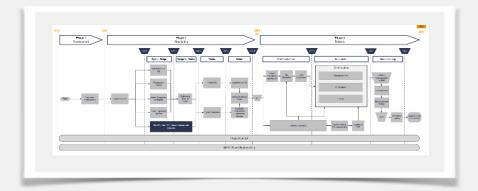
- Core competence
- Ensure experience transfer and ability to drive continuous improvement across projects

Local organization at project location



- Local language and culture
- Knowledge of local authorities and business environment

One operating system for all projects



- Operating system compatible with ISO 9001
- Quality control and review at pre-defined gates
- Includes «lessens learned», standard tools and templates
- Continuous focus on HSSE from start to end



... and we work closely with our suppliers to drive down costs

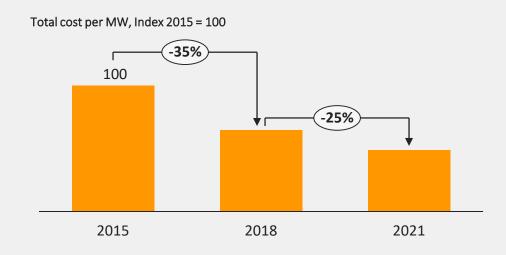
Long term relationships with Tier 1 suppliers

- Enhances predictable in project planning
- Collaborate to improve efficiency and cost
- Shared cost and technology roadmaps



Scatec Solar's cost and technology roadmap

- Continued scale and technology improvements
- Supplier development to reduce contingencies and margins
- Scale benefits and learning by repeat business in same market





A benefit of our value chain integration – agility in practice!

Recent project example – early adaption of technology

Benefits by changing from monofacial to bifacial panel technology

- Increasing yield up to 15%
- Lower total capex by reduced installed capacity
- Increased return to project sponsors

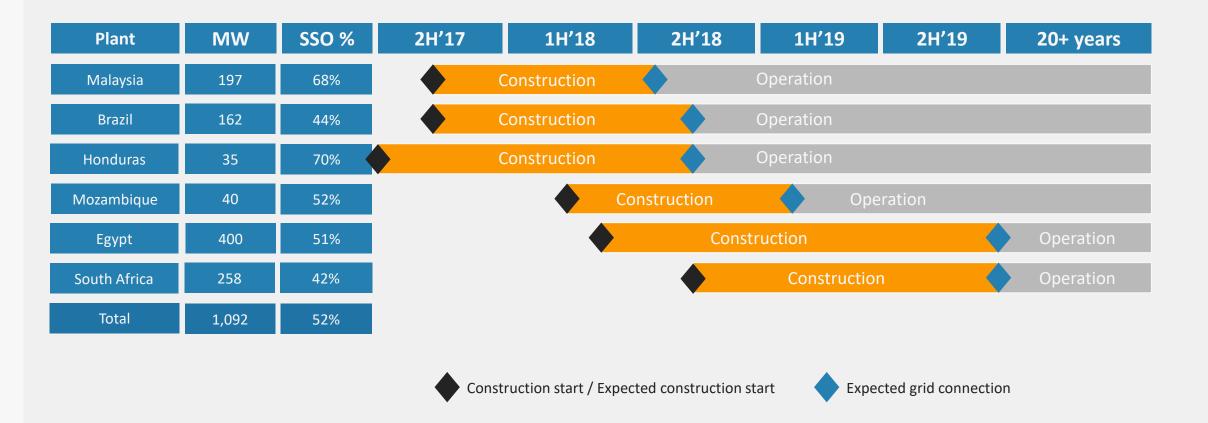
Benefits of Scatec Solar's integrated model

- Leveraging value chain to create additional value
- De-risking new technology
- Moving faster on new opportunities





1.1 GW under construction – a NOK 8.5 billion programme





Construction well under way in Malaysia and Brazil

Quantum, Malaysia – 197 MW / grid connection 2H'18



Apodi, Brazil – 162 MW / grid connection 2H'18





Construction ramping up in Honduras and Mozambique

Los Prados, Honduras – 35 MW / grid connection 2H'18



Mocuba, Mozambique – 40 MW / grid connection 1H'19





Construction start in Egypt this week – South Africa in 2H 2018





Upington, South Africa – 258 MW / grid connection 2H'19





On track to deliver the 1.1 GW under construction ... and ready for more!







Market perspectives and our project development approach

Terje Pilskog, EVP

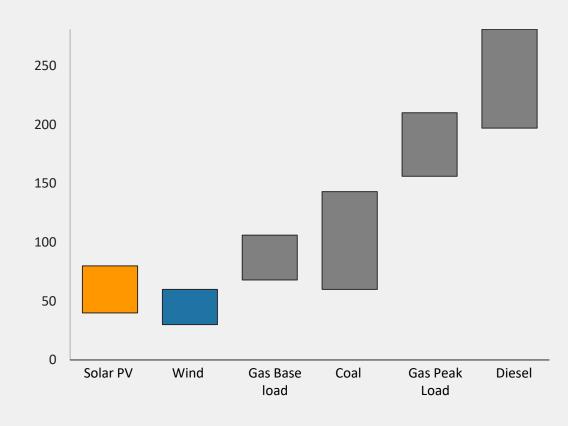


Utility scale solar is costs competitive with traditional base load energy sources

Capex for utility scale fixed-axis PV system

3,5 3,24 3,0 2,5 0,2 2,0 1,5 1,5 1,80 1,49 1,14 0,93 0,84 1,0 0,78 0,72 0,5 0,0 2010 2012 2014 2016 2018 2020 2022 2024

Cost of alternative energy sources (LCOE, USD/MWh)





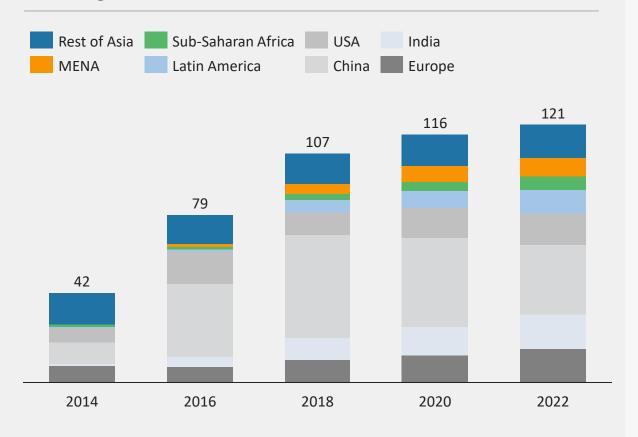
Source: BNEF Q1 2018

Demand for solar is growing significantly across emerging markets

Multiple governmental drivers for solar PV demand

Time-tomarket Climate treaty Cost of & national energy action plans Main drivers **Employment** Energy and economic security growth More foreign investments

Annual global solar PV demand forecast - GW



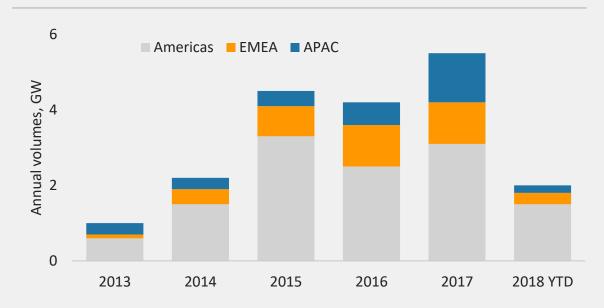
Source: GTM Research 28

Corporate and industrials players notice the value of solar

Rationale for direct sourcing of solar energy

- Energy costs reduction
- Reliable power supply and predictable cost
- Corporate commitments to sustainability and climate change (e.g. RE100)
- External financing support
- Developers proposing and realizing projects

Significant growth in renewable corporate PPA's





RE100 is a collaborative, global initiative uniting more than 100 influential business committed to 100% renewable electricity, working to massively increase demand for - and delivery of - renewable energy



Demand for storage will grow significantly as battery prices continue to fall

- Cost of batteries is expected to drop at least 50% the next 4-5 years
- Will enable offering of broader energy solutions
- Expected to drive demand for hybrid technology solutions

Market forecast for batteries and storage

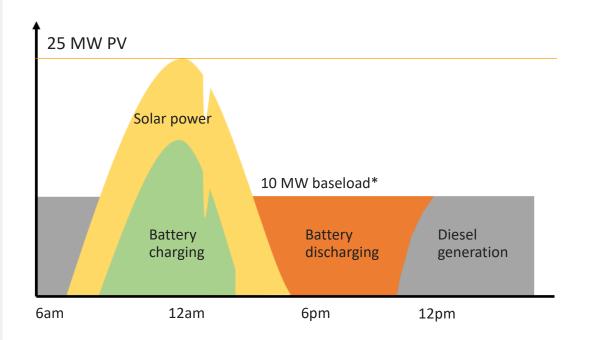


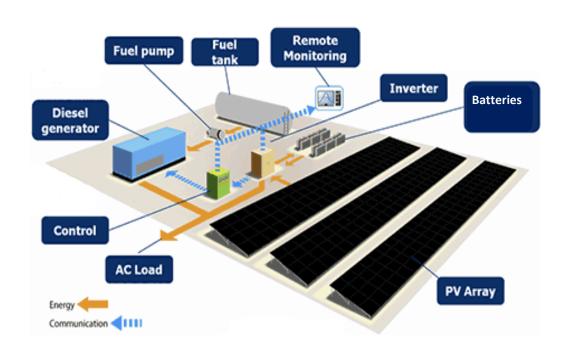


Hybrid plants is expected to become a mainstream solution in emerging markets

Illustrative example

Hybrid plant with 65 % solarization and constant base load of 10 MW – average per day





The solar profile will often better match the actual consumption, i.e less diesel generation and higher solar penetration

PV and battery portion can be increased in existing systems as prices continue to drop



The energy solution offered depends on customer need

PV in % of total power consumption	Fuel Saving 20-30%	Mixed Power Generation 40-50%	24/7 Solar Power 80-90%
Customer need:	Saving fuel costs	Unstable grid / power solution and inefficient generator utilization	Remote locations with difficult fuel supply
Storage solution:	None	Small battery mainly for power supply stabilization	3-4 x standard PV capacity and large scale battery
Indicative capex:	1 USD/W	1.5-2 USD/W	5-6 USD/W
LCOE @ 10 year payback:	USDc 8-10/kWh	USDc 10-20/kWh	USDc 30-40/kWh

System solutions will evolve over time with equipment cost reductions and commercialization



«Solarization» of fossil fuel generators represents a large market potential

Drivers of «solarization»

Fossil fuel generators represent costly power supply

- Deployed in areas with poor grid and few alternative power sources
- High electricity costs depending on fuel, logistics and engine efficiency
 - HFO and large diesel plants: > USD 120/MWh
 - Smaller diesel gensets: > USD 150/MWh

Solar power is cleaner and at lower cost

- More reliable power supply, especially if combined with storage
- Reduced volatility and logistics

Switching concerns can be mitigated

- Significant costs savings
- Structure projects to offer PV as opex
- Storage to manage short term fluctuations

Market potential

- 500 GW of installed diesel and heavy fuel oil power generator sets above 10 MW globally
- >500 GW of diesel generators in Africa, but mostly small scale







As technology and markets evolve - broader energy solutions will be in demand



Public PPAs

Key market characteristics

- PPAs with state owned utilities
- FiT schemes, bi-lateral or tenders
- Backed by government legislation and/or sovereign guarantees
- Non-recourse project finance

Scatec Solar's position

- Main business segment
- Strong track record
- Significant project pipeline

Corporate PPAs

- PPAs with industrial, commercial or institutional customers
- Typical 10-15 year tenor
- Fixed price, may include variable elements
- Financing depends on off-taker credit
- Opportunities emerging fast
- Strong presence in key markets
- Public PPA track record important

Broader Energy Solutions

- Both public or corporate customers
- Hybrid solutions for energy up to 24/7
- Tenor following customer business cycle
- Off-grid or on-grid solutions

- Moderate growth due to project size and technology maturity
- Building capabilities to capture growth

Delivering more complex energy solutions require market insight, technology capabilities and commercial agility



Our project development approach

Focus growth in priority markets

Broaden technology & commercial scope

Organize around priority markets

Originate through partnerships

Manage development risk

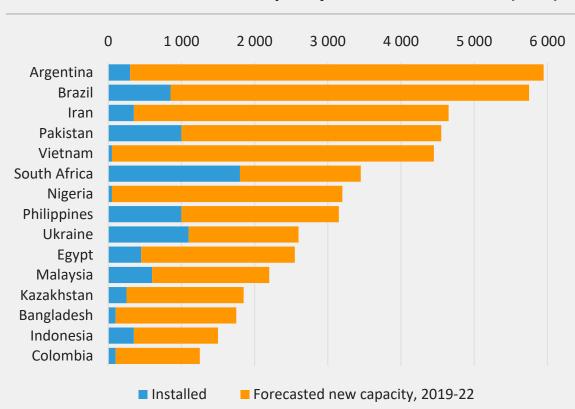
- Target scalable utility IPP business
- Focus on markets with a growth potential
- Target larger industrial and commercial customers
- Broaden offering to include hybrids, storage and other technologies
- Locate in-house teams in key markets
- Build deeper market understanding and a large pipeline
- Source projects from a wide network of partners globally
- Work with local developers with presence on the ground

- Maintain discipline on development spending
- Ensure close dialogue with authorities
- Seek development grants and share costs with partners



Prioritize high-growth markets

Installed and forecasted PV capacity in selected markets (MW)



- Select emerging markets are expected to install large volume of solar over the next years
- Focus on larger emerging markets or regions and build scalable and concentrated portfolios
- Avoid smaller isolated tenders
- Maintain flexible approach to capture opportunities also outside main priority areas



Source: GTM, Enerdata, OECD

Offer broader energy solutions and target corporate players

Corporate (investment grade) bankable PPA

Private PPA C&I market (capex to opex)

Product & project market C&I

Various residential offerings

- Captive, large, long-term power consumers
- Interest in securing PPAs on competitive prices
- Large consumers of power across different industries
- Customers seek energy cost efficiencies
- Mining, cement, industrial, materials, agricultural, etc.
- Smaller projects for typically specific applications (water treatment plants, irrigation, desalination)
- Standardized products, or leased out long-term

Our approach:

- Build on current business model and geographical presence
- Develop competence in the areas of storage and hybrid integration
- Focus on larger corporate PPAs and storage
- Opportunistically pursue smaller projects fitting into scalable platforms



Regional approach to develop new opportunities





Partnership-based project origination

Development Partnerships











Large regional partners

- Access to opportunities
- Size and credibility
- Financing
- Access to authorities

Local partners

- Early development
- Land and permitting
- Understanding local conditions

Financing Partnerships









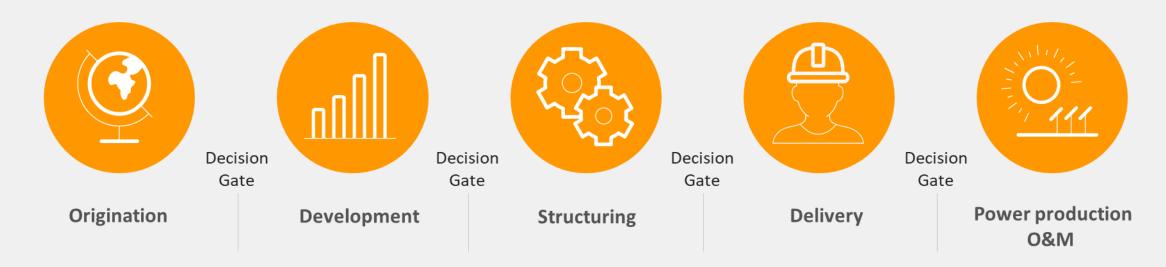








Our operating system is designed to manage development risk



- Broad and cross-functional evaluation of project at each decision gate
- Work with development partners with experience from local business environments
- Ensure close dialogue with authorities and involve development banks early for project due diligence
- Seeking development grants and partnerships to reduce overall exposure

Maintain agility to move fast and be prepared for changes under way



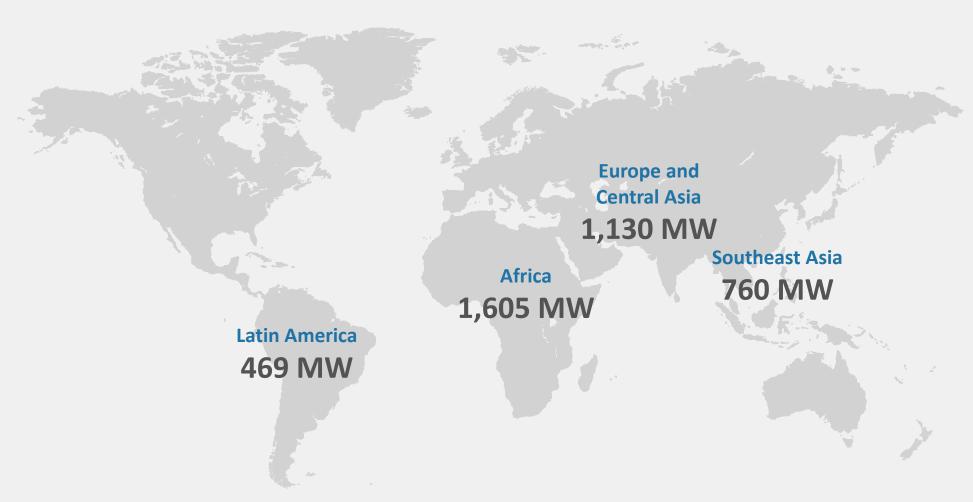


Our project pipeline

Terje Pilskog, EVP



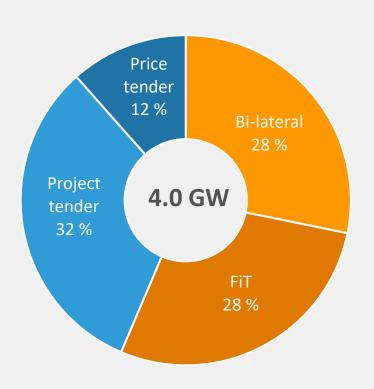
Developing 4.0 GW of project pipeline across emerging markets





Pipeline is developed based on different types of procurement situations

Scatec Solar's pipeline split by procurement type



- Many emerging markets have either bi-lateral or Feedin-Tariff (FiT) opportunities
- Many tenders require development of own project sites, permits and financing ('project tender')
- We seek to maintain flexible approach to capture opportunities also outside main priority areas



Latin America

Regional highlights

- Several GW markets, e.g., Mexico, Chile, Brazil and Argentina
 - Mostly based on tenders
- Deregulation of energy markets
 - Opportunities for corporate PPAs across region
- Strong partnerships
 - E.g. Kroma and Equinor in Brazil
- Other opportunities in Central America

Pipeline in Latin America

Brazil	147
Argentina	200
Honduras*	18
Other	104
Total, MW	469







Brazil – 147 MW under development

Macro environment

- Economy is recovering with economic reforms
- GDP growth at 2%, improvement of fiscal balance and stabilized inflation has improved investor confidence

Solar in Brazil

- Currently about 1 GW installed capacity 2 GW expected by end of 2018
- 5 rounds of tenders held over the last 4 years, further tenders expected in coming years
- Attractive local financing
- Emerging market for Corporate PPAs

Scatec Solar projects in Brazil

- 62 MW Corporate PPA
- Industrial 15-20 year PPA awarded to Scatec Solar & partners
 85 MW project from last tender round
- Negotiating project acquisition, may add corporate PPAs
 Sites for large scale solar under long-term development





Argentina – 200 MW under development

Macro environment

- Since election of Macri in 2015, GDP growth and international financial markets have returned
- Recent interventions and initiated IMF discussions
- The off-taker (CAMMESA) has not, even during financial crises, defaulted on energy payments

Solar in Argentina

- In 2016, Argentina implemented a law that mandates a 20% contribution from renewables by 2025
- In 2017 the RenovAR auction program was launched two auctions held - contracting more than 1.5 GW of Solar
- Next Solar auction planned second half of 2018

Scatec Solar projects in Argentina

200 MW – two projects under negotiation;

- A project with 20 year PPA from RenovAR
- A project with 15 year PPA with an industrial group





Europe and Central Asia

Regional highlights

- Several GW markets with FiT, some moving towards tenders
- Ukraine and Kazakhstan key priority while continue to build longer term positions
- Development in Pakistan continues
- Strong local partners in priority countries

Pipeline in Europe and Central Asia

Ukraine	400
Kazakhstan	400
Pakistan	150
Other	180
Total, MW	1,130





Ukraine – 400 MW under development

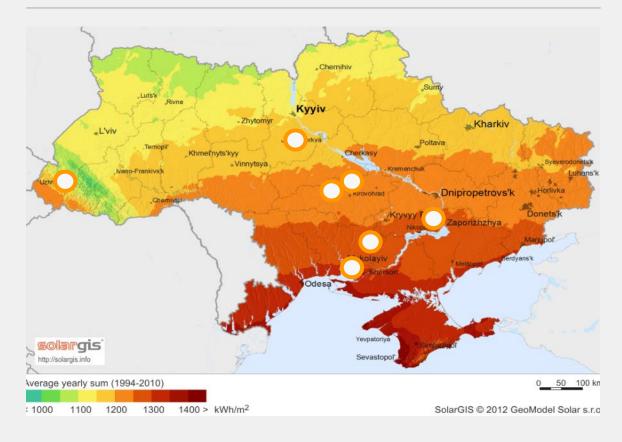
Macro environment

- Economic growth turning positive after conflict with Russia
- Ukraine committed to integrate with the EU energy system with ongoing electricity market reforms
- Aiming to change energy mix replace nuclear reactors and reduce supply of Russian gas – 11% renewables by 2020

Solar in Ukraine

- FiT of 15 €cents/kWh until 2030 for renewable energy embedded in law and backed by international community
- Financing from DFIs with EBRD as main lead arranger

Scatec Solar projects in Ukraine





Africa

Regional highlights

- Strong market fundamentals with growing populations, strong insolation, energy gap and high electricity prices
- Electricity demand expected to outgrow rest of the world
- Fragmented markets, with both large and smaller markets mostly due to grid situation
- A growing opportunity space for corporate PPAs and hybrid solutions in many markets
- Other includes projects in 10 countries across Africa

Pipeline in Africa

South Africa	602
Egypt	200
Nigeria	100
Kenya	48
Mali*	33
Other	622
Total, MW	1,605



^{*} Backlog



South Africa – 600 MW under development

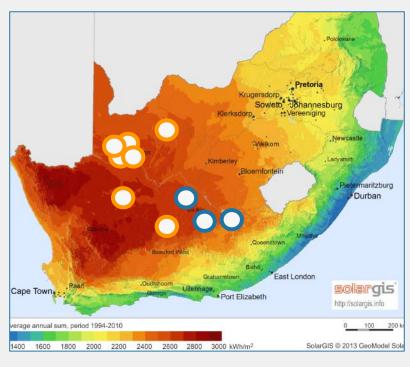
Macro environment

- With the change in President earlier in 2018, economic growth outlook has improved significantly
- Interest rates and the currency has stabilized and the commitment to the REIPPP programme is confirmed

Solar in South Africa

- Integrated Resource Plan to be issued later in 2018, expected to include a significant portion of renewables
- Further market deregulation expected to allow direct electricity procurement for corporate and industrial consumers

Scatec Solar projects in South Africa



- 430 MW in pipeline bid in tender Round 4c
- 170 MW of sites secured for future tenders or corporate PPAs



Malakal – Our first hybrid contract

Customer

- Humanitarian hub in South Sudan, operated by an UN entity*
- Customer challenge: High energy costs based on airborne fuel
- Partner with low credit risk and large energy need
- Potential for additional projects with the UN

Project Offering

- Hybrid solution, delivering 24/7 solar power
- Capex pay-back of system within 2.5 years
- 3-year financial lease with option to extend
- Project initially developed by Kube Energy (owned 25% by SSO)











South East Asia

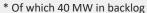
Regional highlights

- Large population and growing demand for electricity
- Market models: FiTs, bilateral PPAs and tenders
- Huge potential for solarization and hybrids based on fuel oil power generation
- Prioritized near-term opportunities in Malaysia, Vietnam and Bangladesh
- Other opportunities include Myanmar and Indonesia

Pipeline in South East Asia

Malaysia*	170
Bangladesh	320
Vietnam	200
Other	70
Total, MW	760







Bangladesh – 320 MW under development

Macro environment

- Stable economic growth of 6-8 % during recent years
- 20% of the population without access to electricity
- Current generation capacity of 16 GW needs to double by 2030 to sustain economic growth of ~7% p.a.

Solar in Bangladesh

- Target of 10% renewable energy by 2020, i.e. adding 3.1 GW by 2021
- Solar PV identified as a core part of the RE commitment
- Bilateral tariff negotiations based on a bankable PPA
- Financing available from several DFIs with current exposure to the Bangladesh energy sector

Scatec Solar pipeline projects in Bangladesh

- 60 MW project at final approval stage by Prime Minister
- Another 60 MW submitted for proposal to the Government
- MoU with Bangladesh Economic Zone (BEZA) for 200 400 MW





A solid pipeline is supporting our ambition to accelerate growth

- Total pipeline of 4.0 GW with robust project economics
- Origination continues across all regions with long term potential
- New customer segments and business propositions to include hybrids, storage and other technologies







Financials and funding

Mikkel Tørud, CFO



Our principles for investments and financing stay firm

Transactional and operational control

- SSO the lead developer and investor

D&C margins

- key contribution to equity positions

Working capital

- managed through project structuring

Moderate debt at group level

- reflecting debt capacity of long term cash flows

Dividends

- 50% of free cash flow from operating power plants





In our business model value is created across several business segments

A typical 100 MW solar power plant (USDm)*

D&C margin financing parts of SSO's project equity

20-25 years cash flows from power production and O&M





Stable project cash flows based on PPAs - allowing for a non-recourse debt structure

Managing financial risk



- Tariffs fixed for 20-25 years
- Take or pay all volume produced



- PPAs with state owned utilities with government guarantees
- Financing partners with strong government relations
- Political Risk insurance or equivalent in selected markets



 Project finance debt with fixed interest of 10 years or more from grid connection



- Structuring of project debt in same currency as power sales revenues
- Inflation adjusted tariffs in PPA

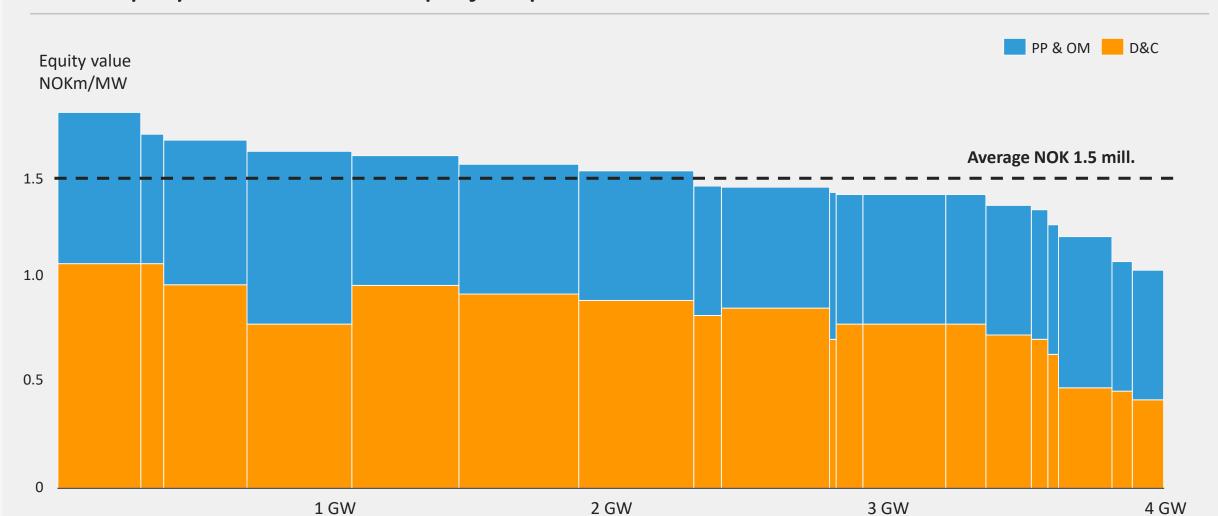


Value of project pipeline: NOK 1.5 million per MW

	1.1 GW under construction	4.0 GW in backlog and pipeline
Key assumptions and targets		
Capex (USD/Watt)	1.2 – 1.4	0.8 – 1.1
Tariff (USDcent/kWh)	6 – 12	4 – 8
Average equity IRR	15%	15%
Development & Construction gross margin	15%	12% - 15%
Equity value – average NOKm per MW:		
Power Production and O&M (NOKm)	1.1	0.7
Development & Construction (NOKm)	1.0	0.8
Total (NOKm)	2.1	1.5



Solid equity value across our project portfolio





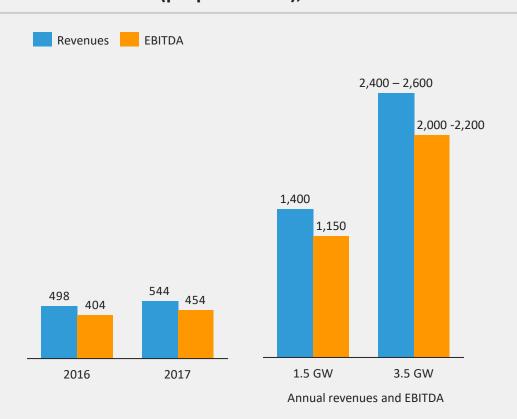
New investments generate significant value from D&C and power production

	In operation	New capacity for 1.5 GW	New capacity for 3.5 GW	Total
Capacity (MW), 100%	322	1,183	2,000	3,500
Capex (NOKm), 100%	5,100	12,900	14,000 – 17,000	32,000 – 35,000
Key figures - SSO proportionate:				
SSO's economic interest	46%	57%	50% – 70%	50% – 70%
SSO's equity investments (NOKm)	800	1,850	2,000 – 2,500	4,600 – 5,200
Development & Construction CF to equity (NOKm)		950 – 1,050	1,000 – 1,500	2,000 – 2,500
Annual cash flow to equity Power P. & O&M (NOKm)	170	260 – 310	300 – 400	750 – 850
Average equity value per MW (NOKm)		2.1	1.5	1.7

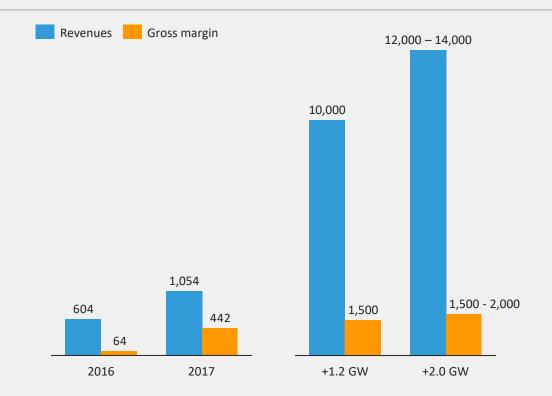


Our business plan will lift the financial results significantly

Power Production (proportionate), NOKm



Development & Construction (proportionate), NOKm





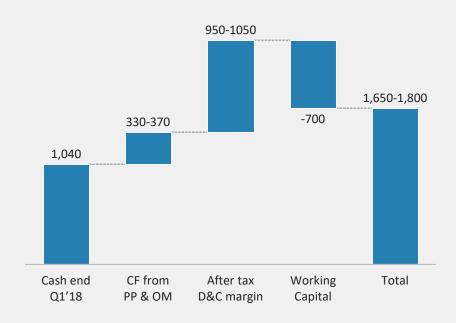
Fully funded to reach 1.5 GW in operation by end of 2019

Scatec Solar is funded for investments in projects to reach 1.5 GW the next 18 months

Uses (NOKm) Sources (NOKm)

Investments in 1.2 GW to reach 1.5 GW:

	NOKm
Capex	12,900
- Project debt	9,650
- Project equity	3,250
- Partners equity (43%)	1,400
- SSO equity (57%)	1,850
SSO remaining equity	850





Capturing further value through portfolio optimisation

	Debt refinancing	Asset rotation
Drivers:	 Debt margin declines as markets mature 	 Secondary market for renewable assets are maturing
	 Cash reserves reduced as power plants 'prove' performance 	 Potentially attractive pricing as long term capital seeks yield
Scatec Solar objectives:	 Re-finance debt in South Africa - process re-initiated 	 Selective sell downs of assets as portfolio grows beyond 1.5 GW
	 Seek further re-financing of project level debt as portfolio grows 	 Proceeds to be re-invested in further growth
Sensitivities:	• 100 bps reduced cost of equity = 0.2 N	
	• 100 bps reduced cost of debt = 0.2 NO	Km/MW NOKm/MW





Concluding remarks

CEO Raymond Carlsen



Accelerating growth





Effective execution of current project portfolio



Secure growth in priority regions



Broaden commercial and technology scope



Optimise financing and asset portfolio to enhance value



Installed capacity above 3.5 GW by end of 2021

We will more than double installed capacity

2.0 GW 3.5 GW 1.2 GW 0.3 GW Target end '21: In operation Under Near-term in operation construction growth / backlog and under construction

Targets and guidance











Q&A

