

# Developing solar in emerging markets

Pareto Conference

January 14, 2016

## Our values

- Predictable
- Driving results
- Change makers
- Working together



# Scatec Solar - an independent solar power producer

## **An independent solar power producer**

- SSO develops, builds and operates large scale solar plants
- Present in South Africa, Czech Republic, Rwanda, USA, Honduras and Jordan + global business development

## **Experienced and fast-growing**

- Project track record of close to 600 MW
- 383 MW in operation and 43 MW under construction
- Focus on growth in emerging solar markets
  - Project backlog and pipeline of ~1.6 GW
  - Additional project opportunities of ~2.3 GW

## **Integrated across the downstream value chain**

- Generating margins through all project stages
- Assets with strong and predictable long-term cash flows





# 383 MW / ~1.2 NOK billion annual revenues for 20 years

Linde, RSA, 40 MW



Czech Republic, 20 MW



Utah Red Hills, USA, 104 MW



Dreunberg, RSA, 75 MW



Kalkbult, RSA, 75 MW

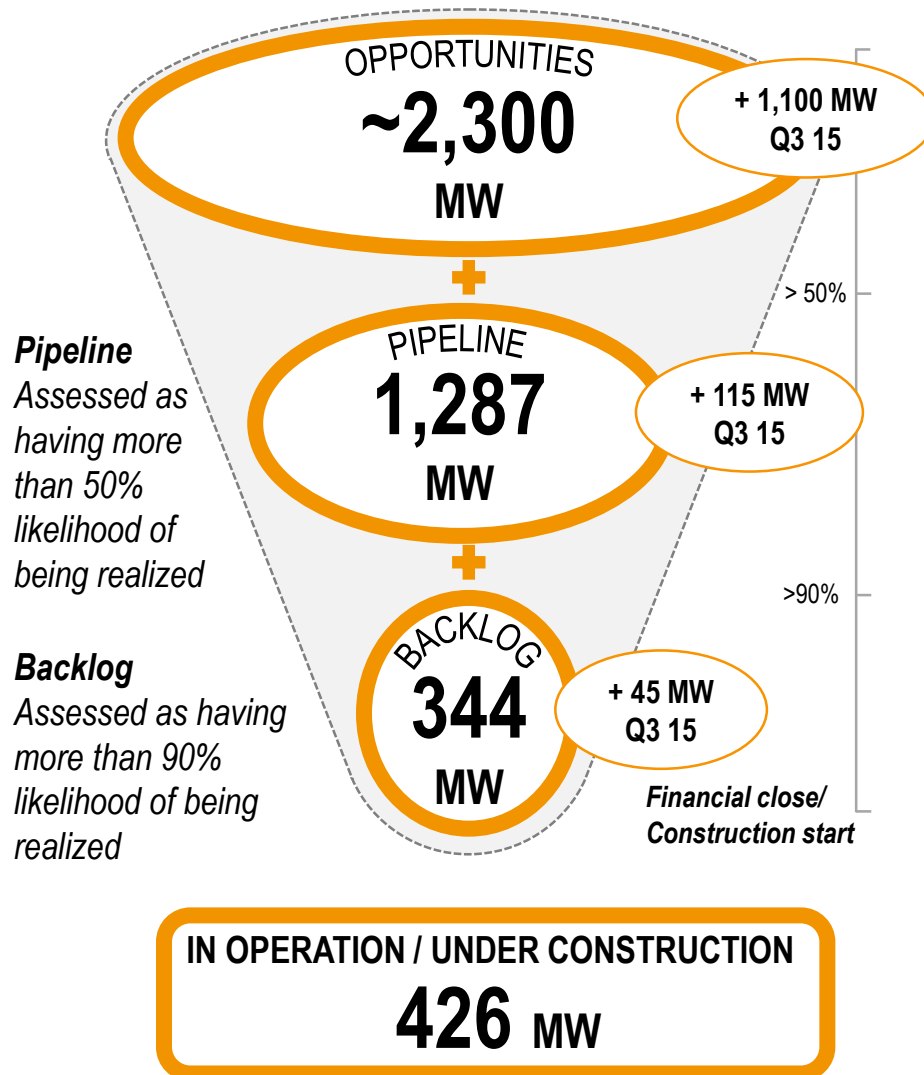


Agua Fria, Honduras, 60 MW





# A solid project funnel – basis for further growth



- Feasibility and business case verified

## Regions

Americas, Africa, MENA, Asia, Oceania

- Land secured
- Grid connection available
- Preliminary design completed
- PPA/FiT through tender or negotiations likely

## Regions

Americas, East and West Africa, South Africa, Egypt, Pakistan

- PPA signed / FiT secured
- Grid connection secured
- All main permits in place
- Project financing the only milestone outstanding

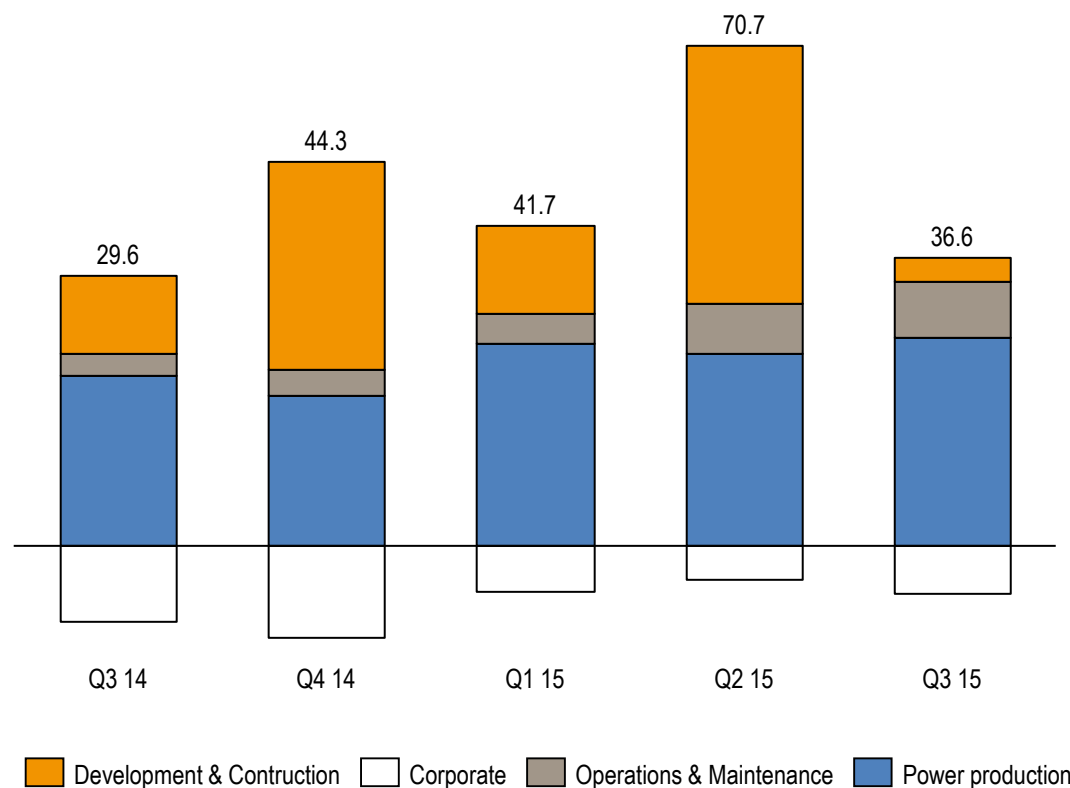
## Regions

South Africa, Mali, Honduras

# Cash generated from construction, ownership & ops.

## SSO proportionate share of cash flow to equity\*

- Cash generation grows steadily as new power plants are grid connected
- Project development and construction activities typically yields 15-20% gross margin
- D&C cash generation used to partly fund Scatec Solar's equity participation in the projects



(\*) Cash flow to equity is defined as EBITDA less normalised (i.e. average over each calendar year) loan and net interest repayments, less normalised income tax payments. The definition implies changes in net working capital and investing activities are excluded from the figure.

# The solar market opportunity is significant

## Annual new installed capacity per year



Renewables are poised to seize the crucial top spot in global power supply growth...

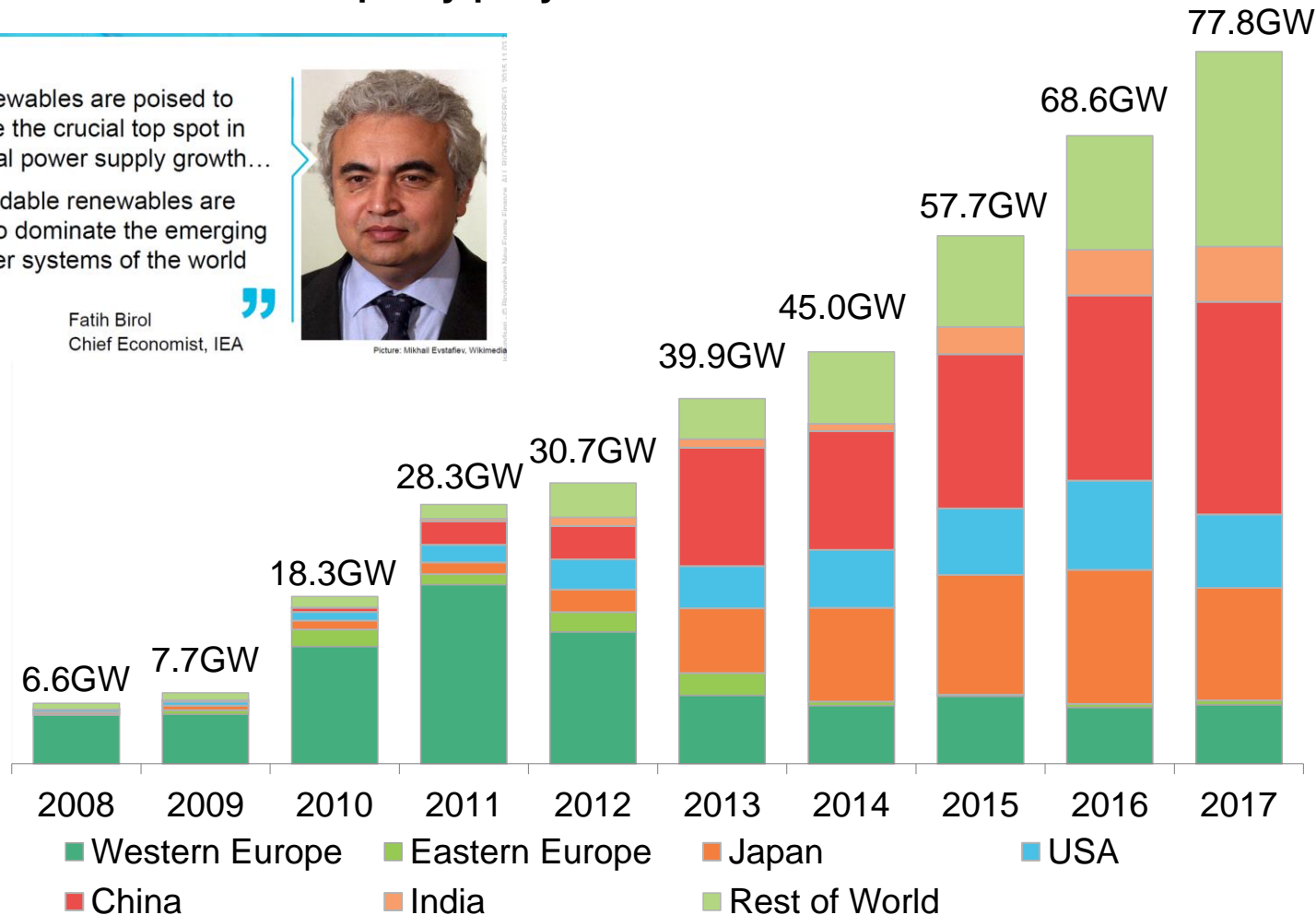
Affordable renewables are set to dominate the emerging power systems of the world



Fatih Birol  
Chief Economist, IEA



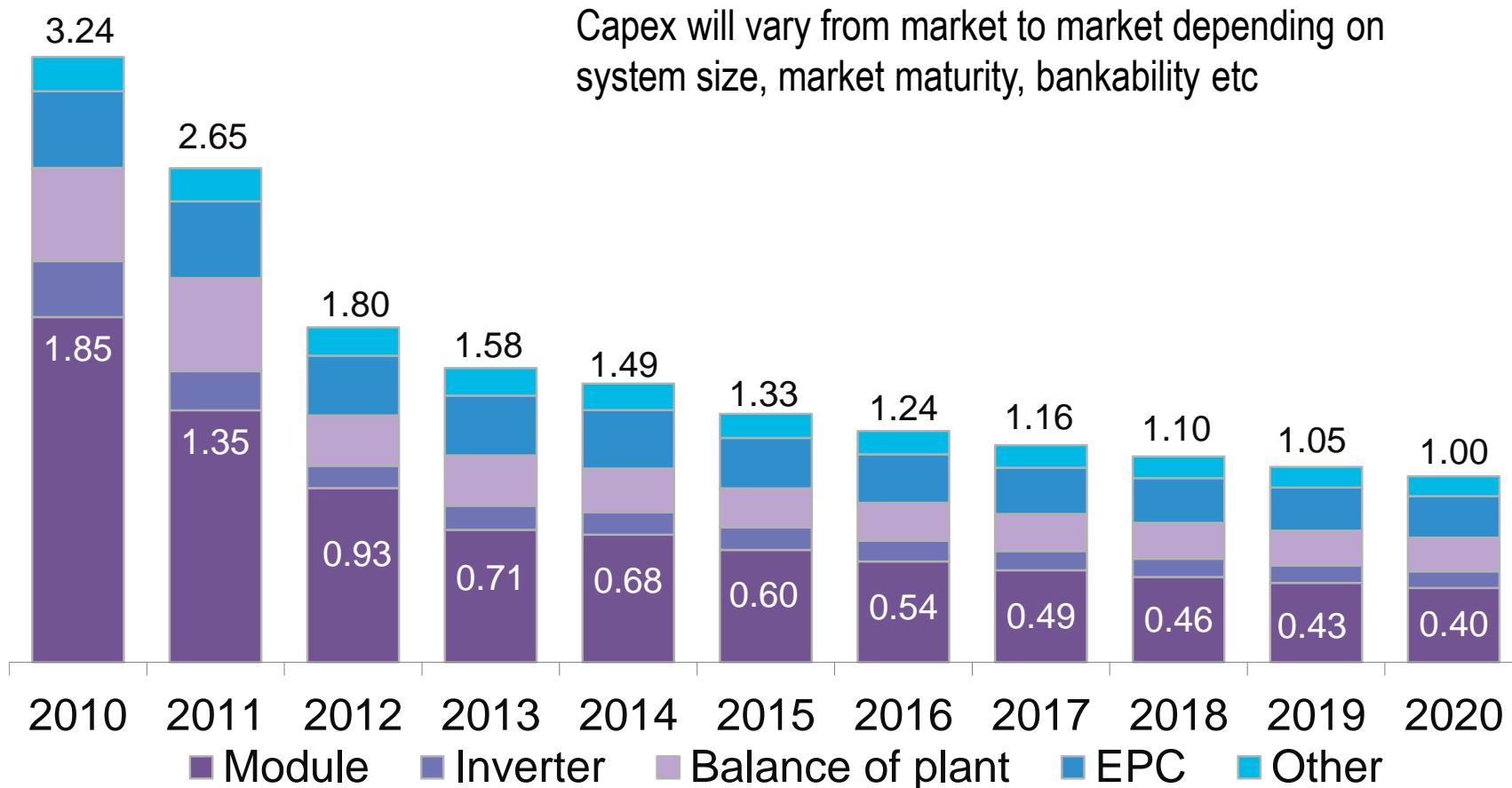
Picture: Mikhail Evstafiev, Wikimedia



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

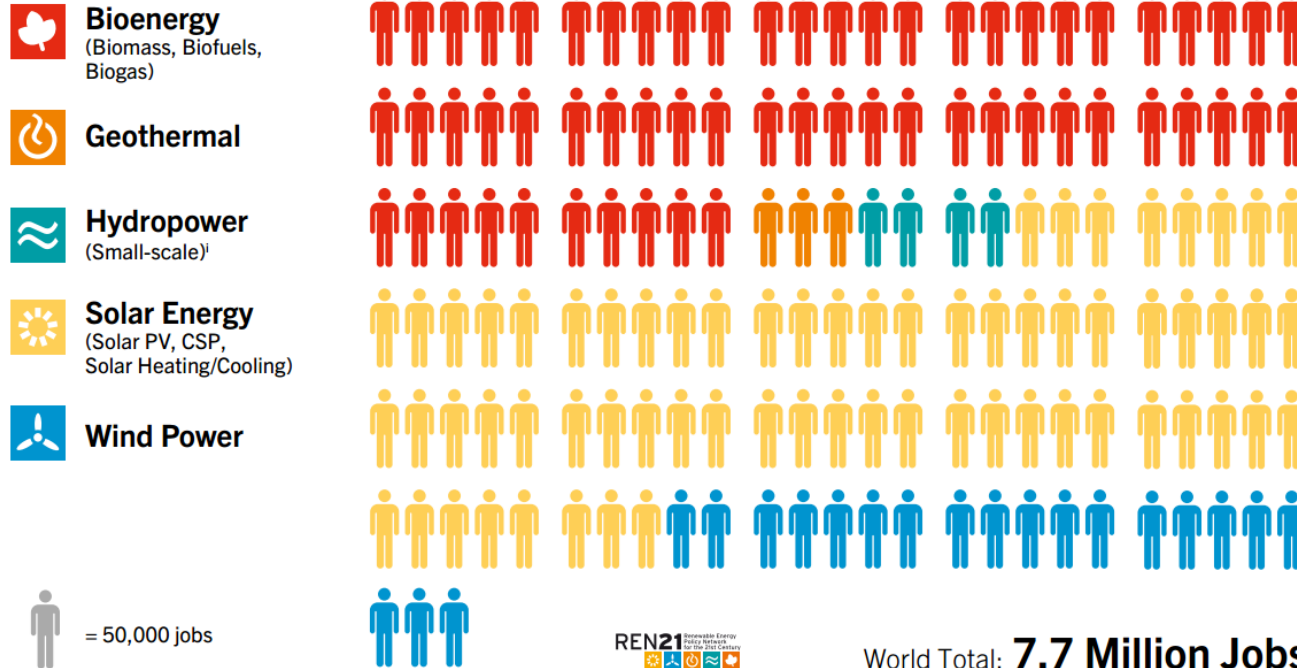
# Cost of solar continues to decline

Total system cost for a 1 MW, fixed tilt system (USD/Watt)



# ...and it creates jobs

## Jobs in Renewable Energy



World Total: **7.7 Million Jobs**

i - Employment information for large-scale hydropower not included.

**Job creation and local community development - a very important factor for policymakers in emerging markets when implementing renewables programs**



# Attractive opportunities in emerging solar markets

- Economic growth is restrained by lack of power supply – or by fuel dependent expensive power
- The power deficits are significant – and grid capacity available
- Excellent solar irradiation
- The IPP model is often established for infrastructure investments
- Public/private partnerships secures capex financing
  - private developers
  - multilateral development banks



# Scatec Solar - our recipe

## Key ingredients:

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



# Access to financing: Norfund, IFC and other partnerships

## Norfund partnership:

- Project development and investment partnerships in various regions
- Norfund and KLP is equity co-investors in South Africa, Rwanda and Honduras

## IFC partnership:

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

## Project finance partners

- IFC, GIEK, EksportKreditt, FMO, EBRD, Proparco, Cifi – multilateral development banks and institutions providing long term non-recourse project finance
- Standard Bank and partners providing project finance to plants in South Africa

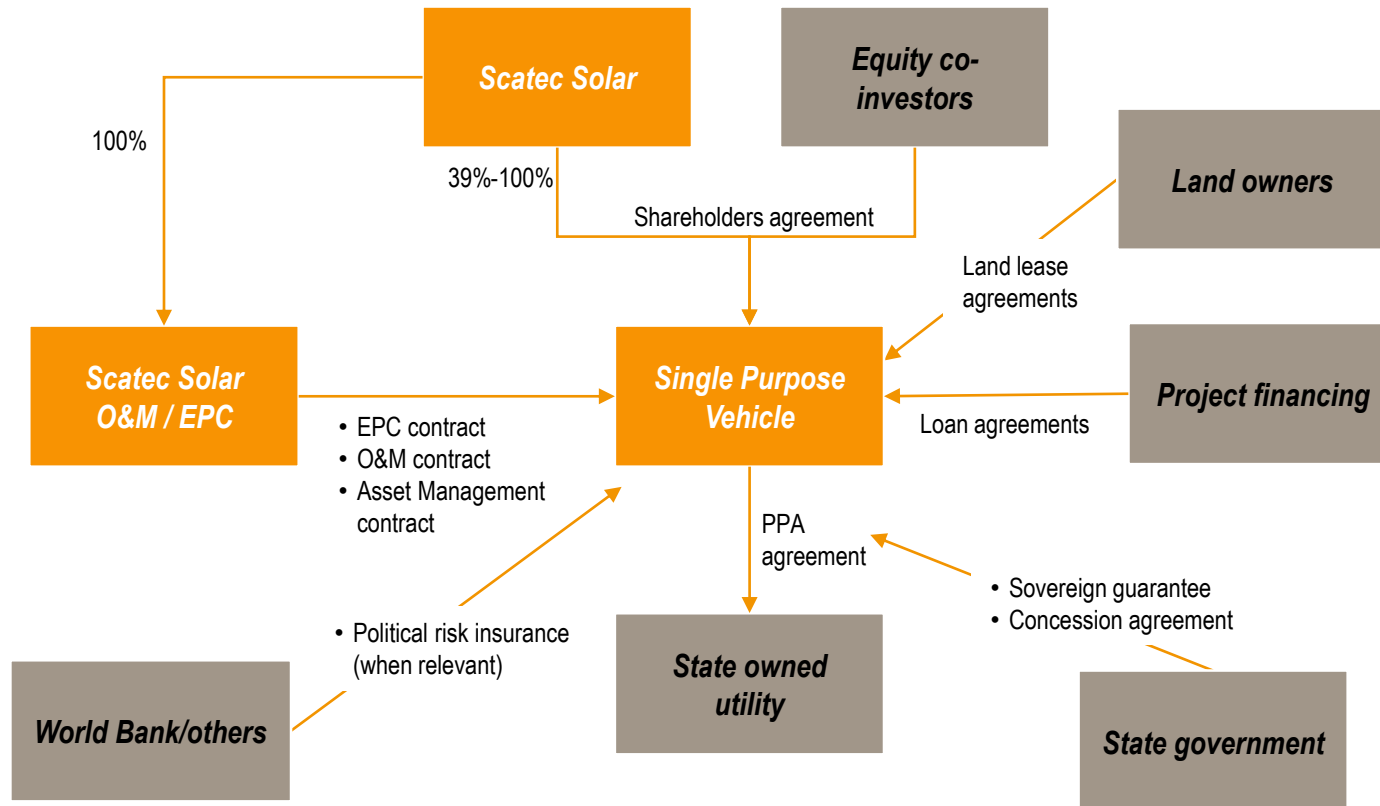
## Key benefits:

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



# Regulatory framework and legal set up

Simplified illustration of company structure and main contracts in place





# CSR and local economic development

- Economic development of rural areas is often a critical part of the renewables program
- Job creation is the most important factor – both directly through construction and operation jobs, and indirectly through local content targets
- Strong community relations critical to ensure successful execution
- In South Africa Economic Development commitments and strategy over 20 years are made as part of the bid documents
- For 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



# Scatec Solar is well positioned for the future

- Established diversified asset base with stable cash generation for the next 20 years
- Solid project pipeline for further growth over the coming years
- Track record and business model that enables execution in complex emerging solar markets
- Competitiveness of solar continues to improve and it will change the power market significantly



# Thank you

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