
Challenges and Solutions for Project Financing

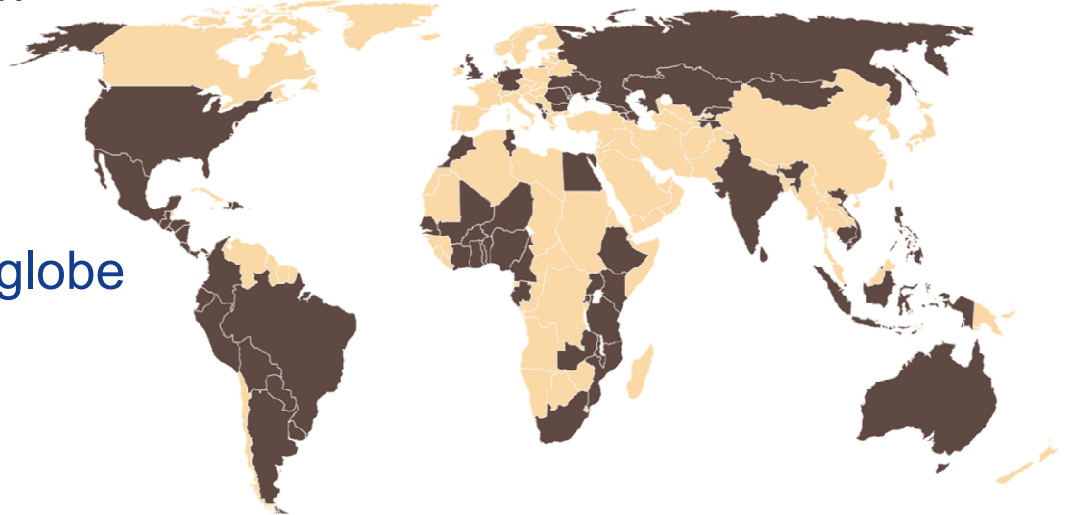
Mark Roesink, Oikocredit International

- Oikocredit International
- Renewable energy solutions for businesses
- Key risks and mitigants
- Obstacle of interest rates
- Corporate versus project finance
- Parties and agreements in project finance
- And when there is time left a few structures



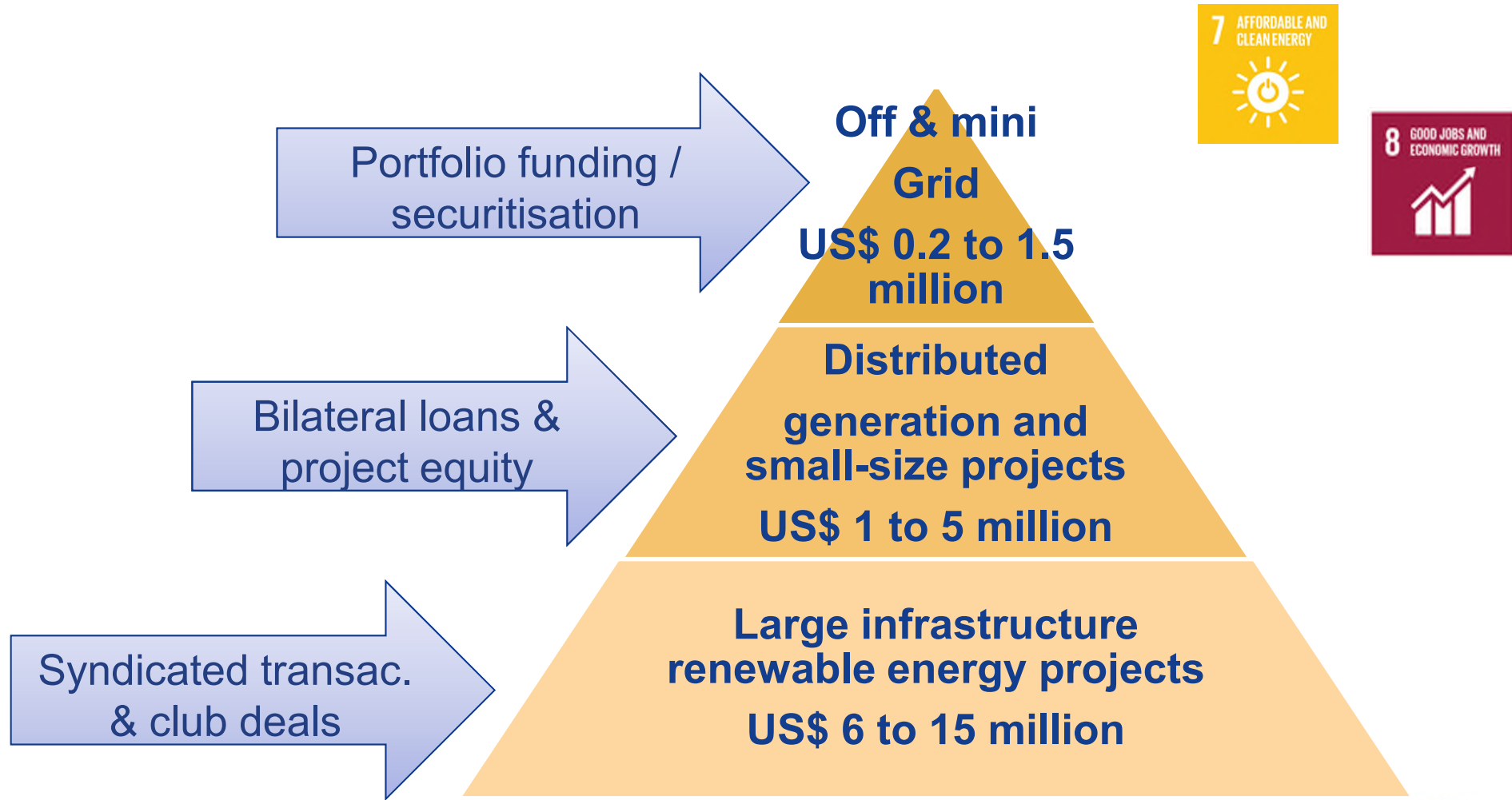
Oikocredit: who we are

- Pioneer in ethical investments
- Financial cooperative since 1975
- Balance sheet over € 1 billion
- 789 partners in 71 countries
- 284 staff in 31 countries
- 54,000 investors across the globe
- Investment Areas
 - Microfinance
 - Agriculture
 - Renewable Energy

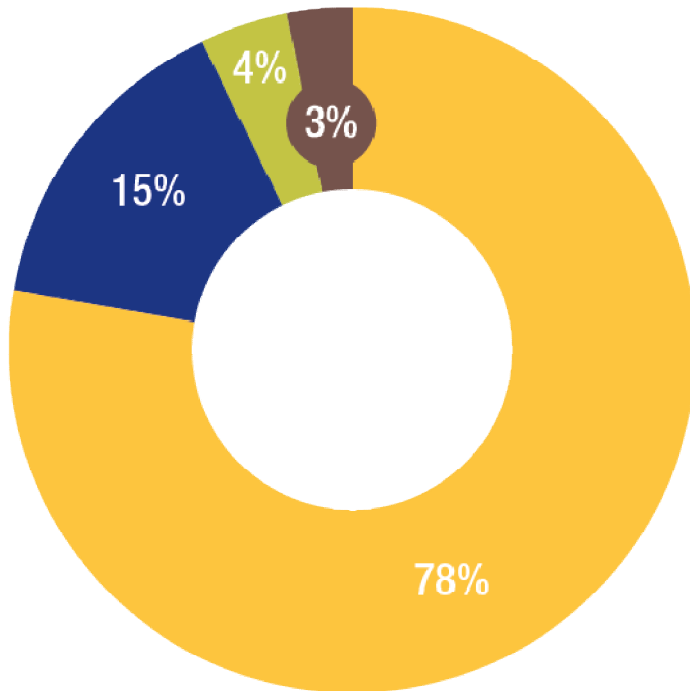


More on: www.oikocredit.coop

RE Market focus and instruments



Renewable Energy portfolio



■ Inclusive finance*

■ Renewable energy

■ Agriculture

■ Other

* including microfinance and SME finance

- ✓ **€66 M approved**
- ✓ **€42 M capital out**
- ✓ **26 projects**
 - 5 hydropower
 - 10 solar on-grid
 - 7 solar off-grid
 - 2 wind
 - 2 funds - mix

Renewable energy solutions for businesses

- **Reliability:** Dumsor (World Bank 2013 census:)

	Percentage of firms experiencing electrical outages	Number of electrical outages in a typical month	Duration of a typical power outage, in hours.	Average losses due to electrical outages, as percentage of total annual sales.	Percentage of firms owning or sharing a generator.	Average proportion of electricity from a generator (%)
<u>Ghana (2013)</u>	89.1	8.4	7.8	15.8	52.1	21.5

- **Affordability** (for industries 18 – 26 US cents per kWh)
- **Sustainability** (offsetting thermal plants and local diesel generation 30% emission reduction target, 10% RE 2020)

Key risks and mitigants

Risk	Mitigant
Non-payment	Incentives to pay (upfront payments, termination fee, etc.). Bundle projects in portfolio
Price	Margin PPA price / tariff / tail
Legal framework	Clear policy on rent / lease/ corporate PPAs / ownership
Technical	Quality control
Transaction costs	Standardisation / portfolio DD

Obstacle: interest rates: GHS versus USD

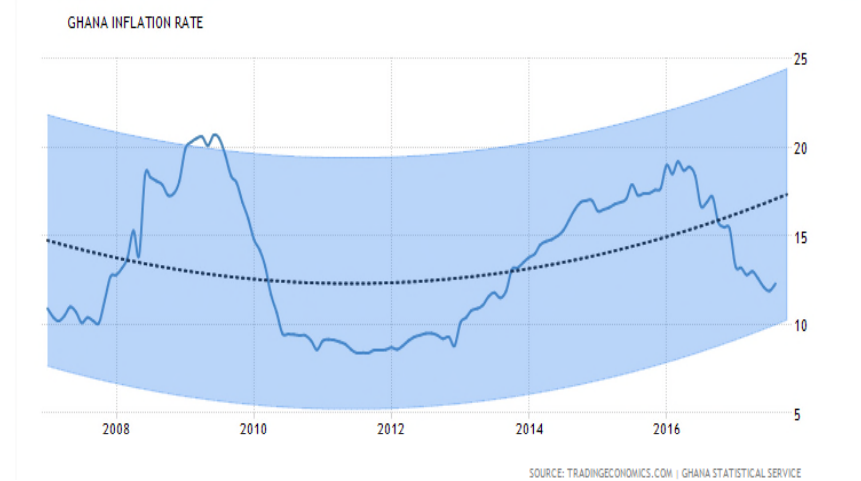
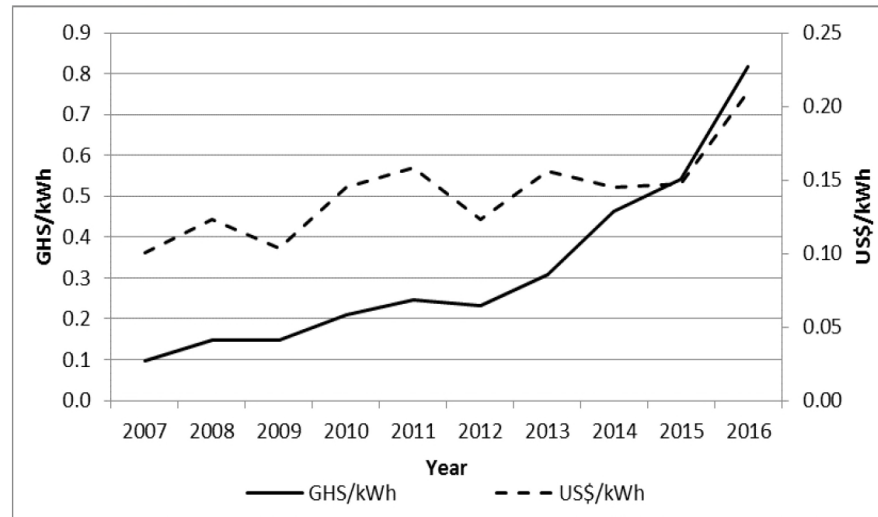


Figure 6.2: Trend in Average Electricity End User Tariff

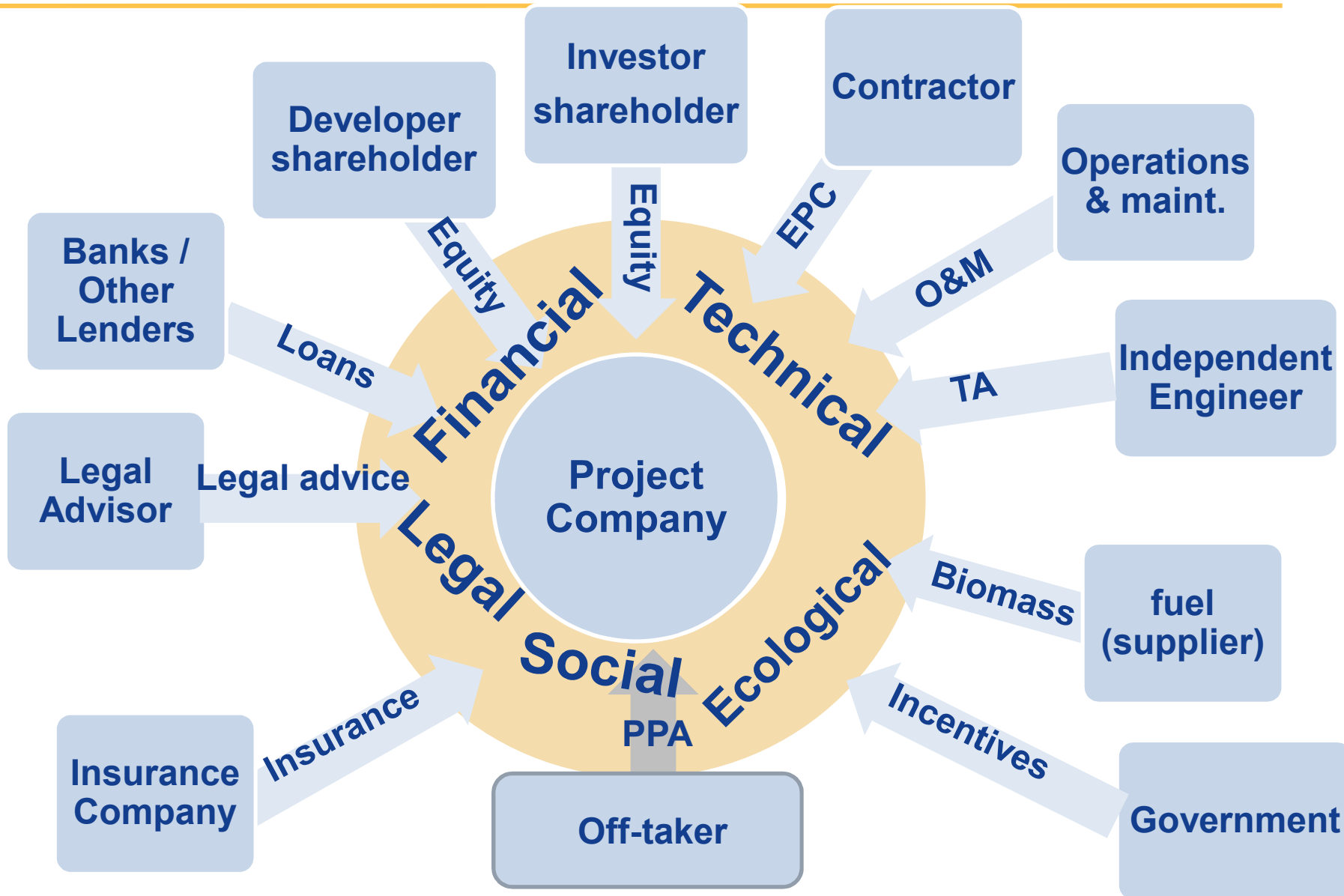


Source: National Energy; Statistics Energy Commission of Ghana

Corporate versus Project Finance

	Corporate Finance	Project Finance
Structure	Loan to company	Loan to SPV
Stage	Early or Expansion 0 – 5 MW / or 1 GW+	Growth 5 MW – 1 GW
Track record	Financial / commercial	Financial / project execution
Risk	Company (financial, commercial, guarantees)	Project (construction, operational, off-taker)
Gearing	30-70%	60-80%
Rates / costs	Variable high rates / (depending on risks)	Lower fixed rates / higher costs (depending on Risks)
Tenor	Short term < 3 years	Long term /< PPA
Collateral	Company assets / external guarantees	Project assets / Cash flows

Parties and agreements project finance



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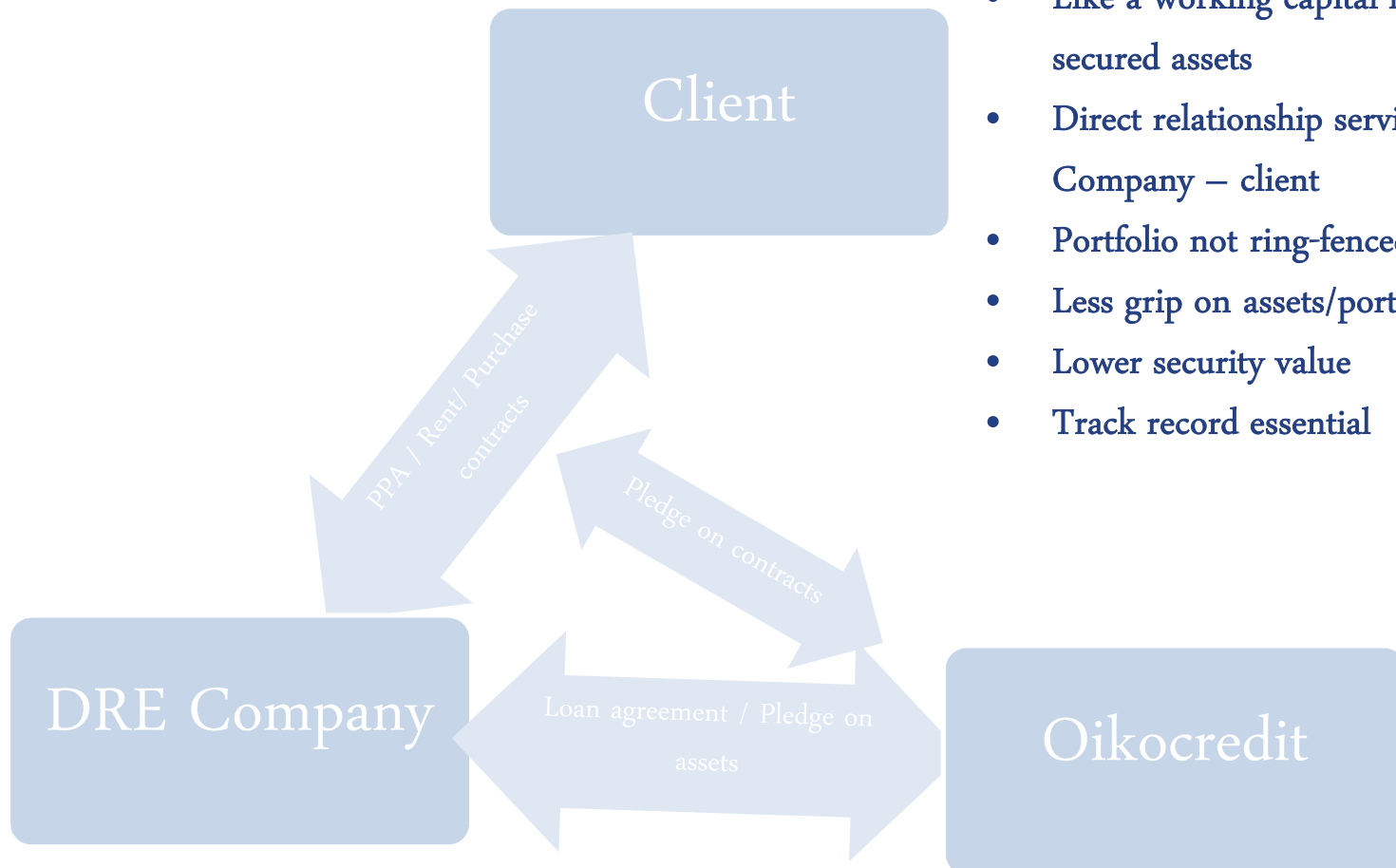
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Every investment involves risk, especially with regard to fluctuations in value and return. It should be noted that historical returns and financial market scenarios are no guarantee of future performance. Investments in foreign currencies involve the additional risk that the foreign currency might lose value against the investor's reference currency.

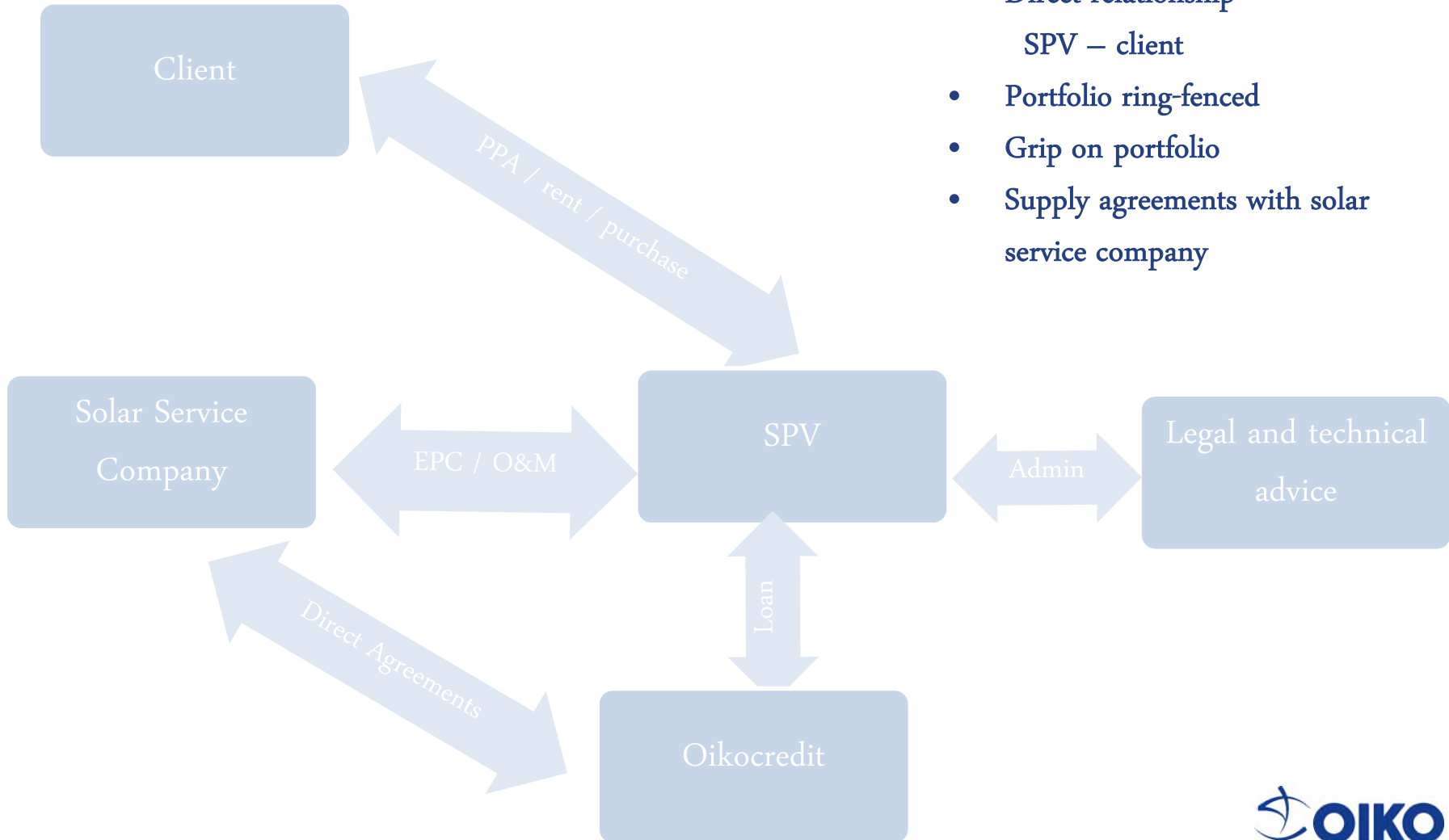
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Funding structure without SPV



- Like a working capital loan but secured assets
- Direct relationship service Company – client
- Portfolio not ring-fenced
- Less grip on assets/portfolio
- Lower security value
- Track record essential

Portfolio funding structure with SPV



- Direct relationship
SPV – client
- Portfolio ring-fenced
- Grip on portfolio
- Supply agreements with solar service company