Project Development: Financing Renewable Energy

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October 19, 2015
SOLAR PROJECT FINANCE
DIRECT EQUITY

Specified amount of capital in a project invested by project sponsors in return for a share of the project’s future cash flows

SOLAR PROJECT FINANCE
TAX EQUITY

Tax benefits bartered for capital to build the solar project

- Federal government offers tax benefits on solar projects that are worth $0.56 per dollar of capital cost
- Volume of solar tax equity investors ($4.5 B in 2014) and number of tax equity investors (34) increasing steadily since the credit crunch
- Step-down of Investment Tax Credits – what happens to the 20% gap in the capital structure?
- Dominated by few – appeals to small number of large profitable institutions with large tax liabilities
- Expensive to structure and close – estimate transaction costs associated with tax equity arrangements to be $0.05 - $0.06 per Watt

Solar tax equity figures from Chadbourne Park, Project Finance NewsWire (September 2015); tax equity arrangement figures from NREL
Supplied by bank, which is lent against the expected future cash flow of the project, and secured only by project assets associated with the loan.

Project Debt Components:
- Construction Loans
- Equity Bridge Loans
- Term Loans

Non-Traditional Financing Structures and Instruments:
- Backleverage
- Mezzanine Debt
- …

IG Global reported 2015 1H that North America accounted for $64 B across 105 transactions (solar and wind accounted for majority of those transactions) out of approximately $160 B placed in debt globally for projects.