
THE CARLYLE GROUP

GLOBAL ALTERNATIVE ASSET MANAGEMENT

Energy Mezzanine Opportunities Group

Mezzanine Financing for Geothermal Power

Daniel East

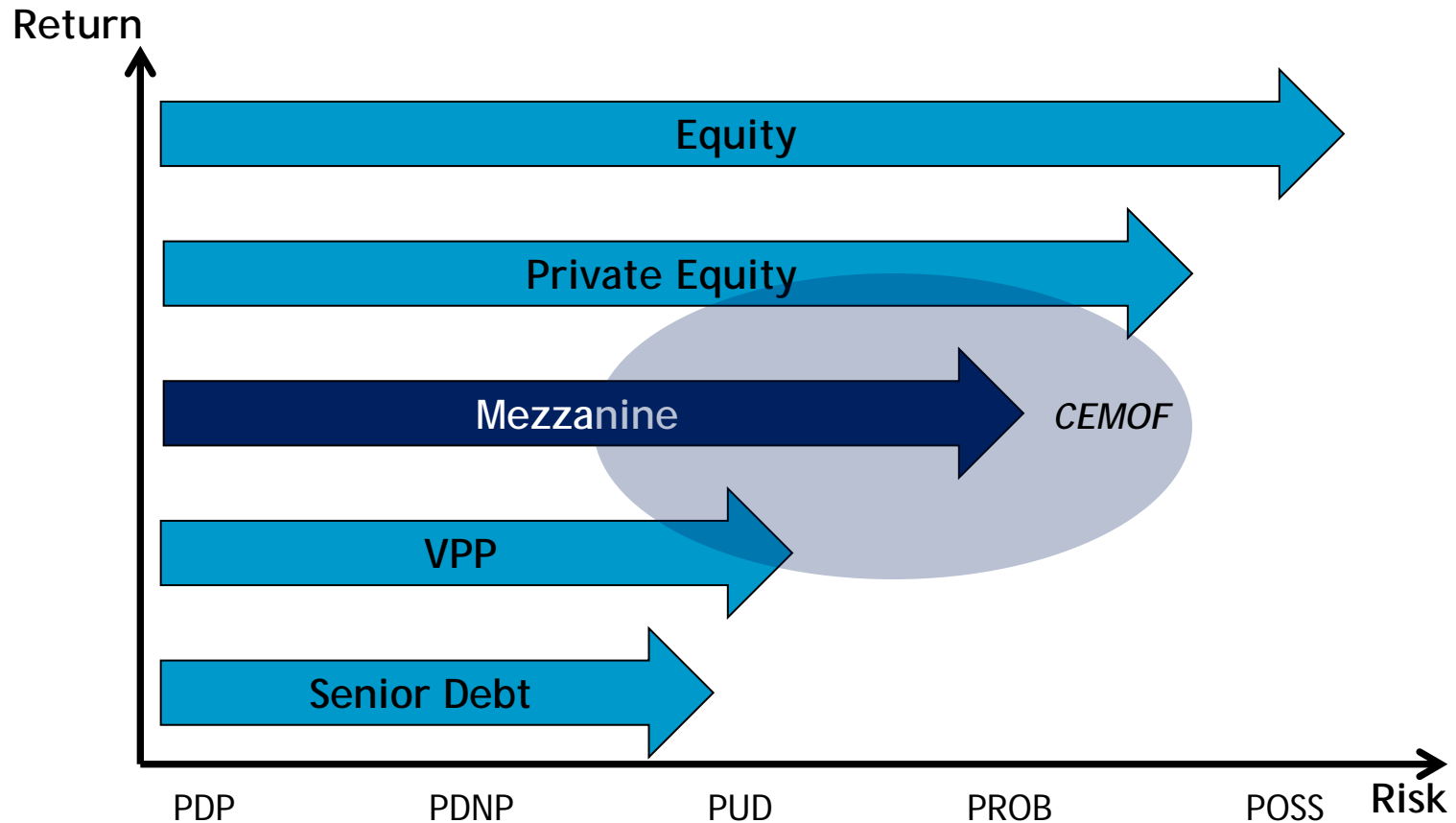
Vice President

March 13, 2012

Overview of Energy Mezzanine Opportunities Group

- We invest in projects and companies across the energy value chain, primarily in the US and Canada
 - Upstream oil and gas
 - Power generation (commercially proven technologies)
 - Energy-related infrastructure and processing assets
 - Mining and related natural resource assets
 - Oil field services
- Provider of capital for acquisitions, refinancings, and development and growth
- Investment process emphasizes flexible deal structures, rapid turnarounds, and straightforward negotiations
- Team headed by former Morgan Stanley Project & Structured Finance professionals who have spent their careers focused on investing in, and financing, energy projects
 - Full time reservoir engineer on staff

Risk & Return Profile



CEMOF seeks an attractive risk-adjusted returns from investments with substantial collateral

Comparative Analysis

Bank debt

- Management retains entirely all profits
- Total profit limited by funding constraints on the drilling program
 - Lower commodity price forecasts
 - Semiannual borrowing base redeterminations largely based on PDP

Private equity

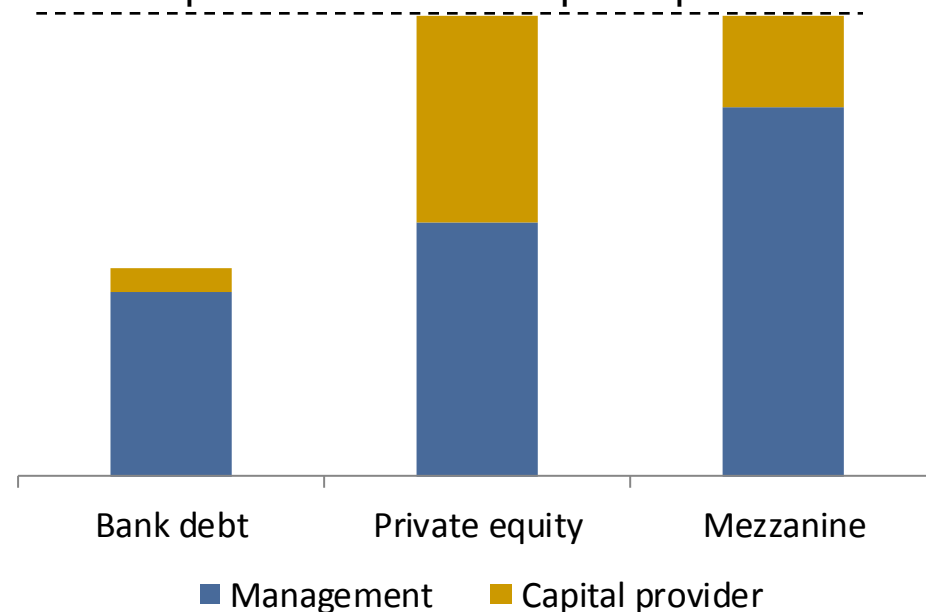
- Sufficient capital for development plan maximizes Company profit
- Management gives up significant portion of total profit to private equity investor

Mezzanine

- Sufficient capital for development plan maximizes Company profit
- Management retains control and receives a greater portion of the upside

Illustrative Company profit comparison

Potential profits from full development plan



Mezzanine capital allows management to achieve full development plan potential and retain more equity upside

Why Mezzanine?

➤ Flexible structure

- Combination of cash-pay and PIK coupons and equity kicker
- 1st lien, 2nd lien, subordinated, or preferred equity
- Bullet or amortization

➤ Always available

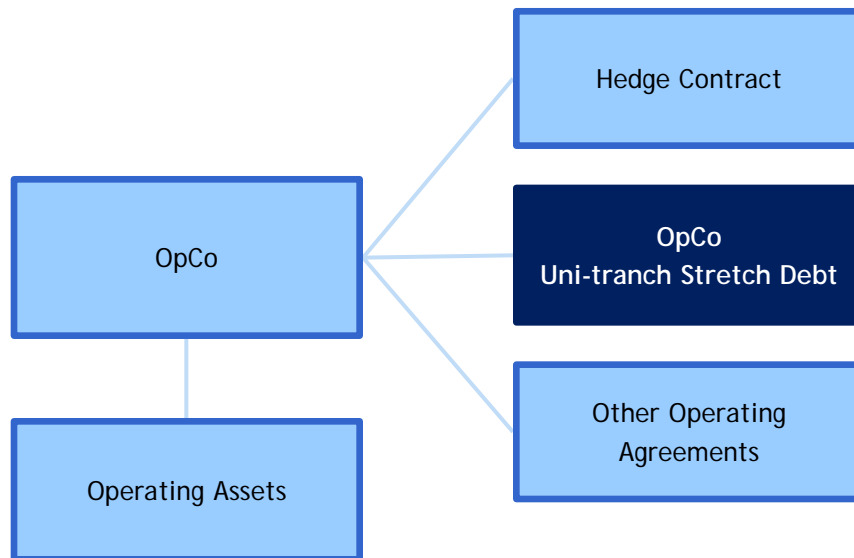
- Available when public debt markets are closed
- Available for all sizes including small companies which do not have an access to HY market

➤ Less dilutive

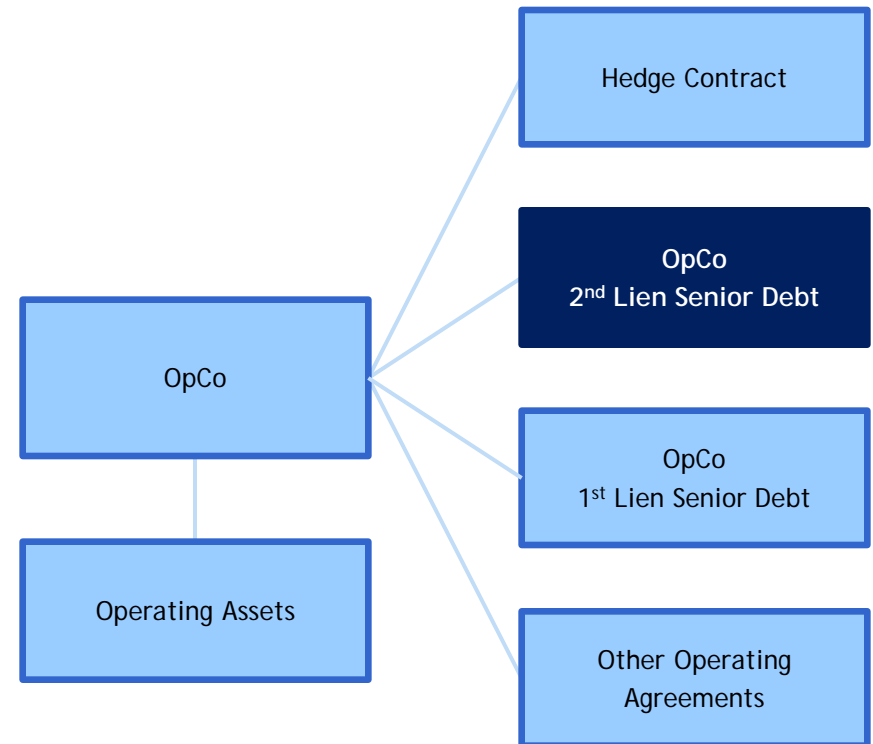
- Less dilutive than private equity
- Management in control of operations

Investment Structure Examples

Structure 1: 1st Lien Senior Secured Debt

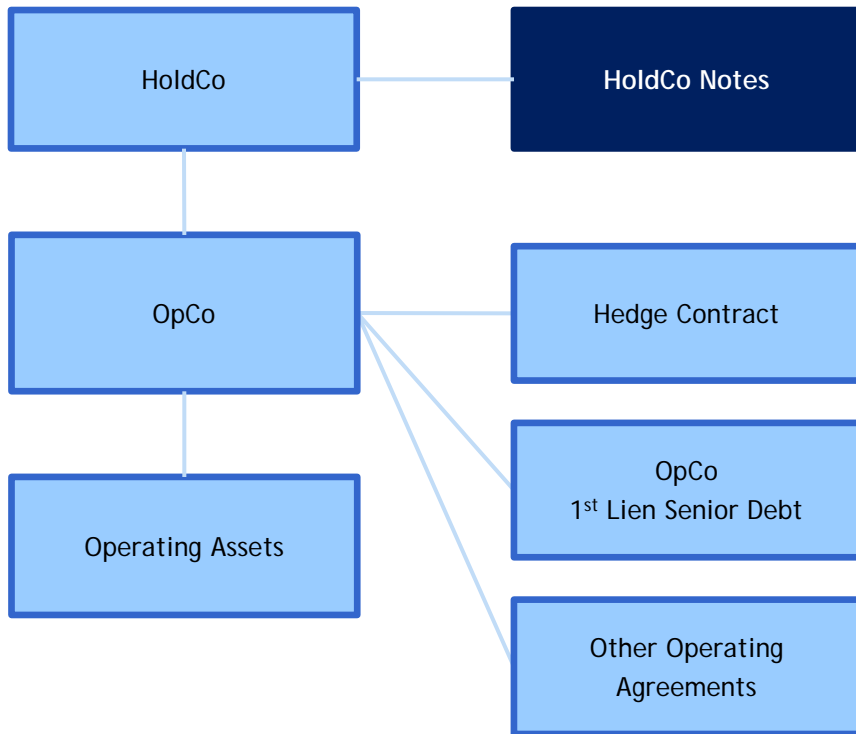


Structure 2: 2nd Lien Senior Secured Debt

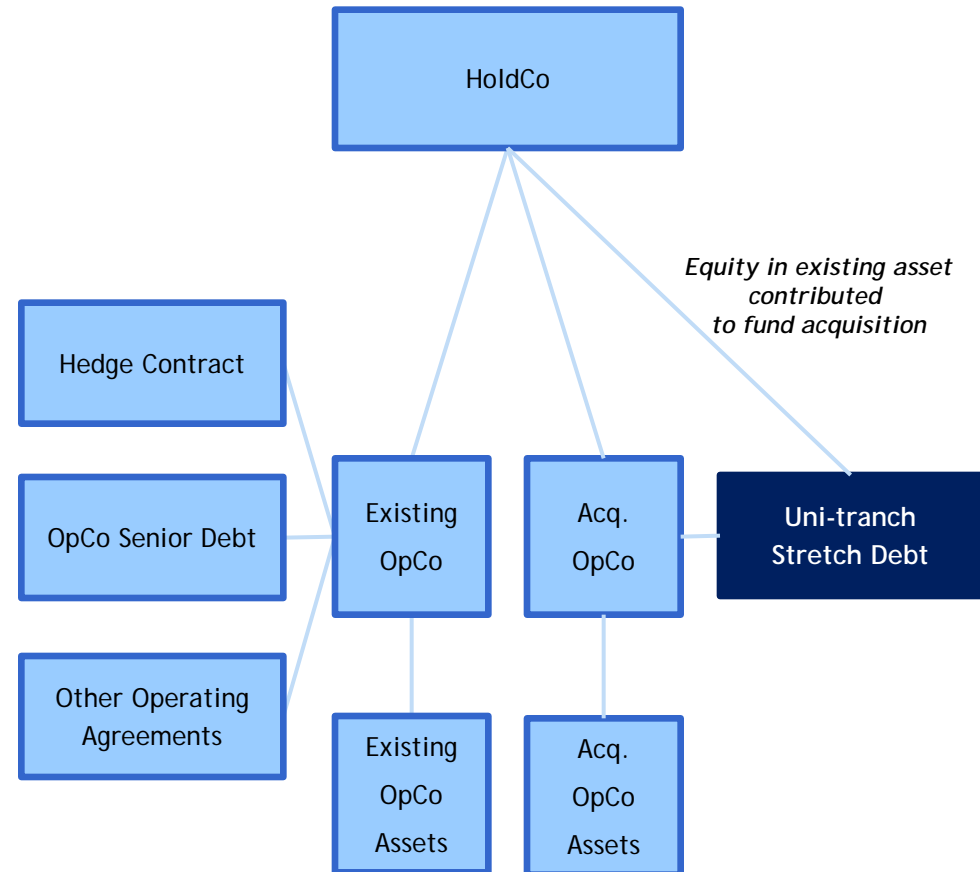


Investment Structure Examples (cont'd)

Structure 3: HoldCo Subordinated Debt



Structure 4: Acquisition Debt



Investment Profile

<i>Sector Focus</i>	Upstream, midstream, downstream
<i>Geographic Focus</i>	US and Canada
<i>Investment Size</i>	Target \$25 million to \$100+ million
<i>Investment Tenor</i>	2 - 6 years
<i>Return</i>	Combination of current cash pay, PIK and equity kickers (e.g. NPI, ORRI, warrants)

*We structure creative & flexible capital solutions
tailored for specific company needs*

Investment Approach

➤ To Get Started:

- Identify strong management teams with proven track records of value creation
- Provide capital for acquisitions, refinancings, and development and growth
- Incorporate financial structuring tailored to each opportunity
- Investment process emphasizes rapid turnarounds, streamlined execution and straightforward negotiations
- Provide an attractive alternative to equity capital for projects with cash flow visibility and development potential
- Allow equity holders to retain meaningful upside and control

Sector Interest - Geothermal

- Renewable resource
- Typically backed by long-term PPA
- US tax benefits
 - 1603 tax grant through 2013
 - 30% ITC/PTC for projects commencing construction in 2013
 - Accelerated depreciation
- Drilling resource similar to upstream oil & gas (Petroleum engineer on staff)
- Familiarity with the power space and underlying markets

Geothermal Project Life Cycle

		Risk Profile			
		Early Stage	Late Stage Development	Construction & Project Finance	Operations
Phase		<ul style="list-style-type: none"> • Site Identification & Lease Acquisition • Resource characterization / early-stage development • PPA transmission / interconnection • Environmental / permitting • Production well drilling 	<ul style="list-style-type: none"> • Completion of production well and injection well drilling • Well testing • Finalize EPC 	<ul style="list-style-type: none"> • EPC construction commences 	
	Financing	<ul style="list-style-type: none"> • Private Equity • Corporate Equity • Balance Sheet 	<ul style="list-style-type: none"> • Mezzanine Debt • Mezzanine Debt • Construction Loan • Cash Grant Bridge Loan 		

Early stage /exploratory risk may be challenging

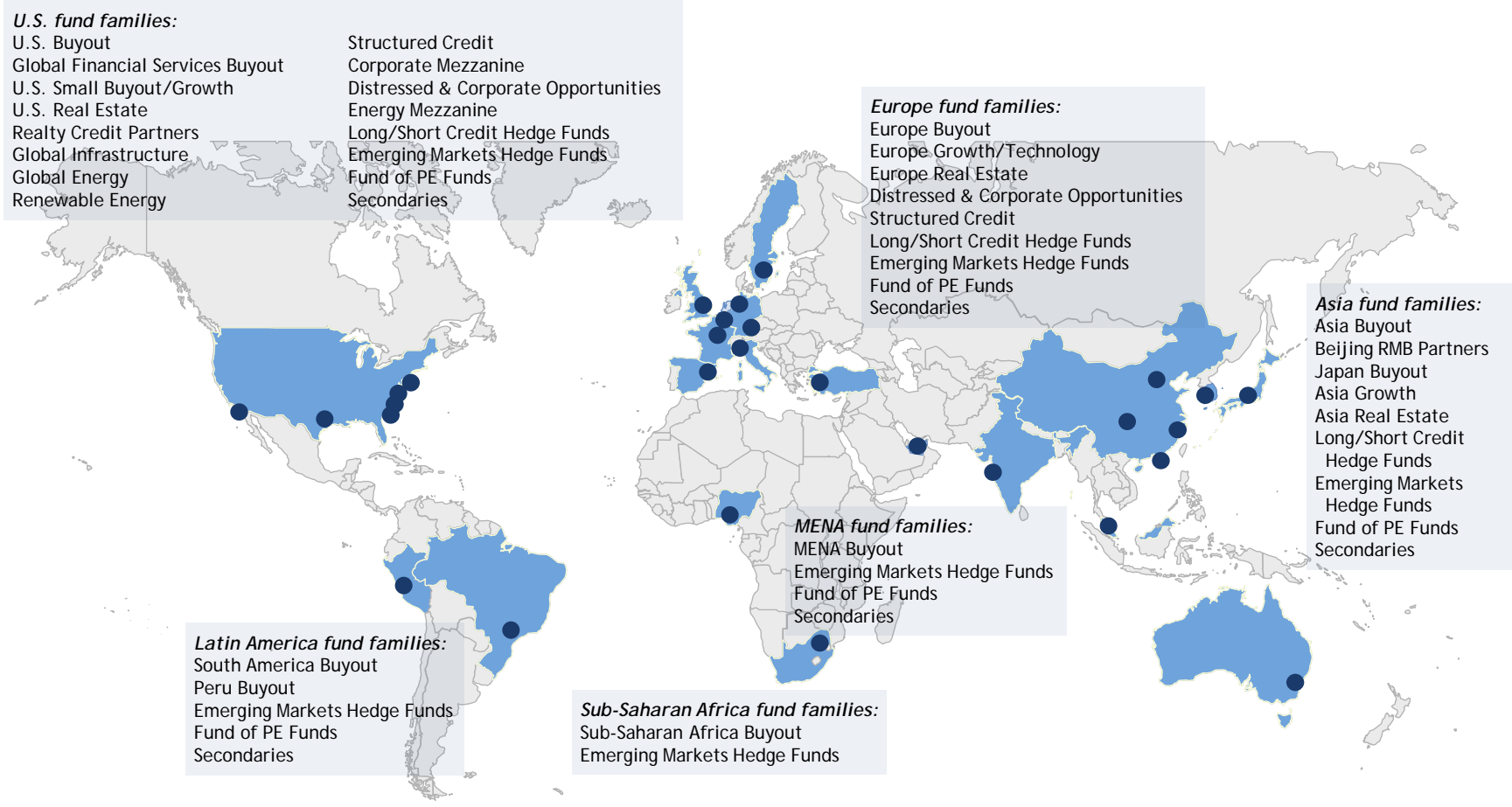
Welcome the opportunity to get quality projects through construction

Overview of The Carlyle Group

- Established in Washington, D.C. in 1987
- One of the world's largest and most diversified multi-product global alternative asset management firms:
 - \$157 billion in assets under management across 101 funds and 64 fund of funds vehicles
 - \$50 billion of cumulative equity invested in 439 Corporate Private Equity transactions
 - 31% Gross IRR on realized and partially realized Corporate Private Equity transactions
 - 2.6x gross equity returned on realized and partially realized Corporate Private Equity transactions
 - \$29 billion of cumulative equity invested in 594 Real Assets transactions
 - 28% Gross IRR on realized and partially realized Real Assets transactions
 - 2.0x gross equity returned on realized and partially realized Real Assets transactions
 - More than 1,300 employees in 32 offices in Africa, Asia, Australia, Europe, Japan, the Middle East, Latin America and North America
 - Large diversified investor base (more than 1,400 active carry fund investors from 75 countries)
 - Achieved results without what Carlyle believes are undue financial risks to investors, and without sacrificing quality controls or integrity

Broad Geographic Footprint, Well Positioned For Growth

More than 1,300 employees in 32 offices around the world



Note: As of September 30, 2012.