



February 16, 2012

Board of Trustees  
Pennsylvania Public School Employees' Retirement System  
5 North 5<sup>th</sup> Street  
Harrisburg, PA 17101

Re: Carlyle Energy Mezzanine Opportunities Fund, L.P.

Dear Trustees:

The Carlyle Group (“Carlyle” or the “Firm”) is organizing its first energy mezzanine fund, Carlyle Energy Mezzanine Opportunities Fund, L.P. (the “Fund” or “CEMOF”). CEMOF is seeking \$750.0 million of total commitments to invest in mezzanine debt of energy and power projects and companies primarily located in the United States and Canada. The Fund’s core strategy is to pursue privately negotiated mezzanine debt investments. Additionally, the Fund will augment its strategy through opportunistic purchases of debt on the secondary market. CEMOF is targeting a 15-18% gross IRR return for investments. The eight person investment team is led by David Albert, formerly Managing Director and Global Head of Project and Structured Finance at Morgan Stanley. The General Partner will invest 5% of total commitments, up to \$50 million.

CEMOF will invest in mezzanine debt in energy and power projects and companies primarily in the United States and Canada. The Fund will augment its core strategy of privately negotiated investments by also seeking investments in dislocated secondary debt markets. The Fund expects to assemble an investment portfolio with a target gross IRR of 15-18%, of which 6% to 8% is expected to be generated in the form of current cash pay. The Fund’s target gross IRR is expected to be achieved through a mix of current cash pay, PIK interest and dividends, and capital appreciation realized through warrants, other equity-like participation and equity co-investments. The Fund intends to pursue investments typically ranging from \$25 to \$100 million and to hold investments typically from two to six years from initial investment. The Fund will invest primarily in the United States and Canada, but may invest up to one-third of the Fund’s total commitments in opportunities outside the United States and Canada. The Fund intends to invest opportunistically in privately negotiated transactions, but at any time it may have up to one-third of the Fund’s committed capital invested in secondary debt positions.

The Firm intends to invest in projects and companies whose equity ownership includes Independent Power Providers (“IPPs”), small Exploration and Production (“E&P”) companies, project developers, project management teams, dedicated energy private equity funds (e.g., ArcLight, Riverstone, Tenaska), generalist private equity funds and other strategic corporates. Traditional infrastructure funds are not expected to be sponsors of deals for the Fund.

Portfolio Advisors' recommendation is based upon the following analytical factors and is made within the context of PSERS' investment guidelines.

- Detailed due diligence, including interviews with industry peers, private equity professionals and CEOs of portfolio companies.
- Evaluation of the composition of the investment team, how they work together, compensation structure and other factors that help determine whether a group is likely to be able to replicate past successes as currently configured.
- Evaluation of the Fund's proposed investment strategy within the context of the current investment environment.
- The strategy proposed for the Fund is appropriate for the Private Equity Partnership component of the portfolio.

Based on the above, Portfolio Advisors recommends that PSERS commit to up to \$200 million of limited partnership interests in Carlyle Energy Mezzanine Opportunities Fund, L.P. Portfolio Advisors makes this recommendation considering the General Partner's qualifications and PSERS' overall investment guidelines.

This recommendation is given solely for the benefit of PSERS and cannot be relied upon by other investors considering an investment in the Fund, since their needs, objectives and circumstances may not be identical to those of PSERS. The scope of this recommendation is limited to the investment merits of the Fund. Portfolio Advisors does not provide legal or other non-investment-related advice.

Sincerely,

A handwritten signature in blue ink, appearing to be 'J. P. ...', is written over a light blue horizontal line.

Portfolio Advisors, LLC

## High Yield Fixed Income Allocation



# Carlyle Energy Mezzanine Opportunities Fund, L.P.

March 8, 2012

**James H. Grossman, Jr., CPA, CFA**  
Deputy Chief Investment Officer

See Page 7 for Disclaimer

# Carlyle Energy Mezzanine Opportunities Fund

## Overview of The Carlyle Group

- Founded in 1987
- One of world's largest alternative asset management firms
  - \$148 billion in AUM
  - 1,200 employees in 33 offices globally
  - Over 1,400 active carry fund investors from 72 countries

## Investment Team

- The Carlyle Energy Mezzanine Opportunities Fund (CEMOF) team has eight employees located in New York and Houston
- The CEMOF team includes 5 former Morgan Stanley employees
  - Long history of working together on commodity-hedged project financings
  - Team completed 19 deals and deployed \$2.4 billion in capital at Morgan Stanley
- The CEMOF team includes a petroleum engineer and power industry veteran
- Key employees include Mitch Petrick, David Albert, and Rahul Culas

# Carlyle Energy Mezzanine Opportunities Fund

## Investment Strategy/Fund Overview

- Pursue privately negotiated debt investments in energy and power projects and companies located primarily in the U.S. and Canada
  - Can invest up to 1/3 of the Fund's total commitments outside these geographies
- Investments will generally range from \$20 million to \$100 million
- Investments will typically have two to six year maturities
- Investments will be in independent power projects, small exploration and production companies, and other real asset based energy businesses
- The Fund Investment period will be four years from the final closing date, with recycling of principal during the investment period
- The Fund term will be ten years from the final closing date
- The Fund is targeting a 15% - 18% gross IRRs for investments
- Carlyle's commitment will be the lesser of 5% of the total commitments or \$50 million

# Carlyle Energy Mezzanine Opportunities Fund

## Market Opportunity

- Smaller energy projects and companies have few providers of sub \$100 million loans
  - Project banks, CLO investment vehicles, and other providers of capital have significantly reduced their investment activity since the financial crisis
  - Requires specialized lending team with energy industry and structuring expertise

## Key Investment Criteria

- Hard Assets
- Measured Leverage
- Senior Secured
- Strong Covenants
- Current Cash Pay
- Proven Technologies
- Experienced Management Teams
- Strong Sponsorship

# Carlyle Energy Mezzanine Opportunities Fund

## Investment Performance

- The team from Morgan Stanley invested \$2.4 billion in 19 principal energy financing transactions with yields ranging from 7% - 18%
- The gross multiple on invested capital on these investments ranged from 1.16x to 1.90x with no defaults at the time of their departure from Morgan Stanley
- The invested capital per deal ranged between \$25 million and \$644 million

## History with PSERS

- This will be the first fund for the CEMOF team
- PSERS has previously committed to the following Carlyle funds:
  - Carlyle Europe Real Estate Partners III-A, L.P.: \$261.4 mm
  - Carlyle Realty III, L.P.: \$141.0 mm
  - Carlyle Realty IV, L.P.: \$130.0 mm
  - Carlyle Realty V, L.P.: \$300.0 mm
  - Carlyle Realty VI, L.P.: \$200.0 mm

# Carlyle Energy Mezzanine Opportunities Fund

## PSERS Objective

- To earn low- to mid-teens net returns over the life of the Fund
- To broaden the high yield allocation into higher potential return opportunities

## Portfolio Use

- Staff recommends a commitment of \$200 million to the Carlyle Energy Mezzanine Opportunities Fund, L.P. and to include this investment in the High Yield fixed income allocation



# Carlyle Energy Mezzanine Opportunities Fund

## Other

- Relationships with Portfolio Advisors: None
- Placement Agents: None
- Political Contributions in PA: None
- Introduction Source: Tom Pease, former PSERS Board member

# Carlyle Energy Mezzanine Opportunities Fund

## Recommendation

Staff, together with Portfolio Advisors, LLC, recommends that the Board invest \$200 million plus reasonable normal investment expenses in the Carlyle Energy Mezzanine Opportunities Fund, L.P.

**DISCLAIMER:** This document was presented to the Public School Employees' Retirement Board at the public meeting at which the Board acted on the resolution to which the information relates. The sole purpose for posting the presentation information on this website is to enable the public to have access to documents that were utilized at a public meeting of the Public School Employees' Retirement Board, and no other purpose or use is intended.

## High Yield Fixed Income Allocation



# Carlyle Energy Mezzanine Opportunities Fund, L.P.

March 8, 2012

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