



TCW Energy & Infrastructure Group European Clean Energy Fund

Financing Clean Energy with an Equity Investment Fund

February 21, 2008 United Nations Economic Commission for Europe Geneva, Switzerland

# **Contents**

- TCW Overview
- TCW Energy & Infrastructure Group
- European Clean Energy Fund
- Case Studies
- Questions and Answers

- Established in 1971 in Los Angeles, California
- Approximately \$147.2 billion under management or committed to management as of December 31, 2007
- Over 1,400 institutional and private clients
- TCW Staff of over 650 individuals, including 385 professionals
- The TCW Group, Inc. (TCW) is an indirect subsidiary of Société Générale, S.A., and a member of the Société Générale Asset Management (SGAM) division
- Global Presence: Combined with SGAM, TCW offers strategies which invest in major world equity and fixed income markets
- Offices:



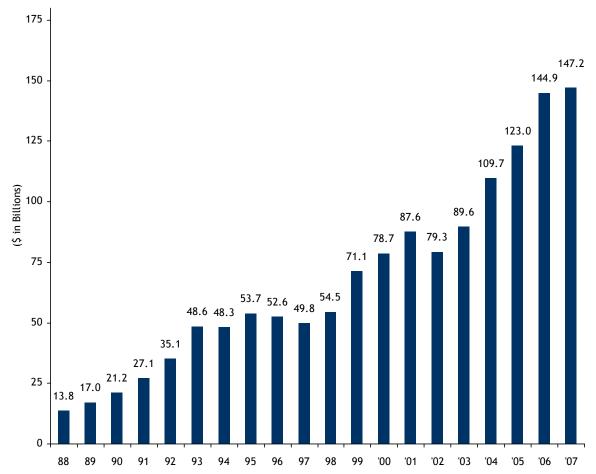
 SG Asset Management Paris London Tokyo Singapore Sydney



# **TCW Assets Under Management**

or Committed to Management as of December 31, 2007

#### **TCW Historical Asset Growth**



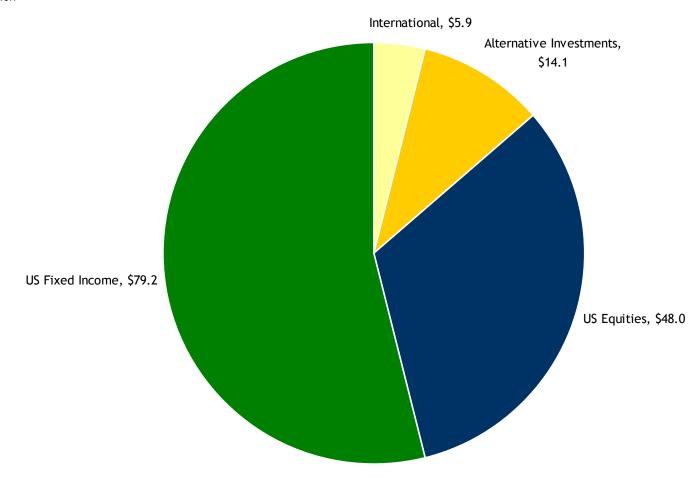
- More than 30 years of steady growth
- Stability in assets, personnel and product mix
- Solid long-term performance
- Style consistency across all strategies
- Extensive risk-management processes
- TCW Fitch/AMR rating of AA+

# **TCW Assets Under Management**

or Committed to Management as of December 31, 2007

#### **Total Assets**

\$147.2 Billion





#### Who We Are

TCW Energy and Infrastructure Group has the longest continuous track record of any institutional manager in energy globally

- 26-year track record focused solely on companies or projects in energy or energy-related infrastructure
- 15 funds representing \$9.6 billion of capital
- More than 200 portfolio investments to date in 27 countries on six continents
- Global platform with offices in Los Angeles, Houston, New York, Sydney and London

#### What We Do

The Energy investment strategy is to:

- Provide mezzanine debt and private equity to energy projects and companies on a global basis with an emphasis on OECD countries.
- Target one-off, negotiated private transactions with small- and mid-cap energy companies and projects secured by hard assets

# **Energy Value Chain**

#### Active throughout the entire energy value chain on a global basis

Upstream Infrastructure Midstream Gas to Liquids Transportation Gas to Electrons

Reserve-based Development, Production Payments, Forwards Oil Sales



Production Platforms, Drill Ships, FPSOs, Drilling Rigs



LNG, Bio-fuels, Synfuels, Ethanol Processed Gas (methanol, fertilizer, DME)



LNG Regasification Terminals, Gas Sales, Pipelines, Gas Storage



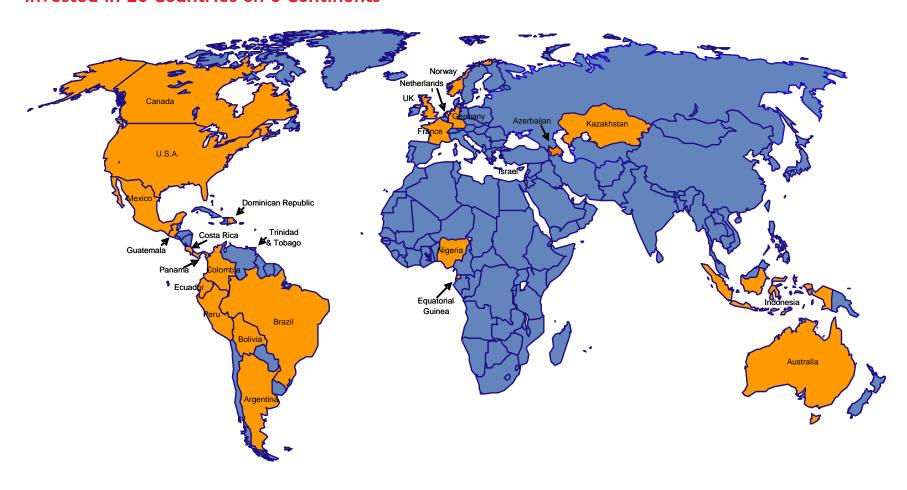
Gas and Coal Fired Power Plants, Electricity Transmission & Distribution



Renewable Energy

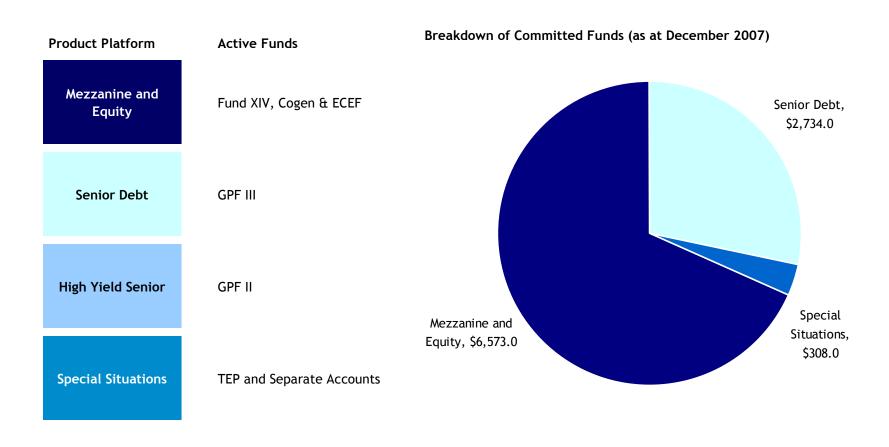


#### **Invested in 26 Countries on 6 Continents**



## **EIG Product Platform**

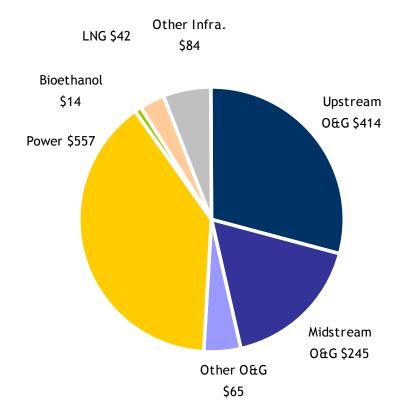
### Broad offering of capital to industry, offering senior debt through to equity



# EIG Investment Breakdown - FYE 2007 \$1.42 Billion

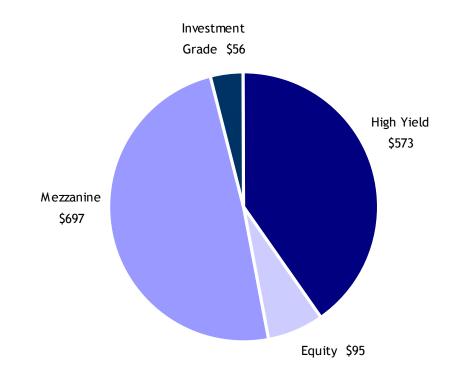
#### **Investments By Sub-Sector**

As at Dec 2007, In \$ Millions



### **Investments By Ranking**

As at Dec, In \$ Millions



# **European Clean Energy Fund - Overview**

- Purpose: Invest in clean energy projects and companies across Europe
- Size: €354 million
- First closing: Q2/2006
- Investment period: 4 years
- Life: 10 years
- Investment type: Mezzanine and Equity
- Regional focus: Western, Central and Eastern Europe
- Investment range: €10-50 million
- Currency: primarily Euro; other European currencies
- Leverage: No
- Collateral: Yes
- Investors: European and North American institutional investors
- Legal structure: English Limited Partnership

## Renewable Energy

- Wind
- Solar
- Hydro-electric
- Biomass
- Geothermal

## **Energy Efficiency**

### **Natural Gas**

- Pipeline
- Storage
- Liquefied natural gas (LNG)
- Power generation
- Cogeneration
- Combined heat & power

## Waste-to-Energy

#### Clean Coal

# **ECEF** – **Investment Style**

#### Mezzanine

- Debt instrument
  - -Note
  - -Loan
- Current Income
  - -Cash
  - -Payment-In-Kind
- Self-amortizing/bullet
- Long tenors (up to 20 years)
- Equity kicker
  - -Warrants
  - -Cash flow participation
  - –Equity option
- Collateral/security

## **Equity**

- Minority Stake (preferred equity)
- Controlling Stake

# **ECEF – Target Investments**

### Strategic / Financial

- Strong sponsor and management
  - Industry experience
  - Track record
- Technology
  - Commercially proven
- Capitalization:
  - Adequate cash and contingent equity commitments
  - Conservative senior debt financing structure
- Predictable cash flow:
  - Long-term off-take / supply contracts
  - Protected margins
  - Managed merchant risk
- Collateral
  - Pledge of assets, contracts and insurance policies
  - Share / Accounts pledge
  - Intercreditor agmts.

### **Operations**

- Robust contractual framework
- Greenfield and operating assets
- Fully consented project (limited permitting risk in some cases)
- No (or limited) development risk
- Operating risk:
  - Experienced operator
  - Performance-based compensation
- Construction risk:
  - Turnkey, fixed-price contract
  - Experienced, creditworthy contractor
  - Performance guarantees, liquidated damages

#### Market

- Stable and reliable legal and regulatory framework
- Currency risk:
  - Same currency on revenue and expense side
  - Mismatch mitigation (hedging)
- Interest rate risk
  - Fixed rate
  - Interest rate swap

## **ECEF** – **Due Diligence**

- Comprehensive risk assessment, risk analysis and mitigation
  - Legal
  - Contractual
  - Regulatory
  - Technical (technology/construction/operations)
  - Industry/market/sector
  - Resources (wind/biomass/hydrology/molecules)
  - Commercial
  - Financial
  - Tax
- Documentation
  - English law for investment contracts (note/loan agreement, warrant purchase agreement)
  - Local law for security documents (mortgage, pledges, guarantees)



# **Case Study – Wind**

## **Investment Summary**

Issuer Breeze 3

Committed Investment €35,000,000

Initial Funding Date April 2007

Sector Wind

Project Location Germany / France

Ranking Subordinated



### **Background**

The Breeze III transaction is a securitization of a portfolio of wind farms in construction or operations in Germany and France. The transaction was structured by HVB, the German bank, and offered to ECEF and other investors as a capital markets operation.





### **Investment Summary**

Issuer AB Bioenergy France S.A.

Committed Investment €10,000,000

Initial Funding Date July 2007

Sector Biofuels

Project Location France

Ranking Subordinated



### **Background**

AB Bioenergy is building a 200 million liters p.a. corn-fed bioethanol production facility in the southwest of France at a total cost of approximately €200 million. Financing comprises €102.2 million of senior debt and €15 million of subordinated notes. ECEF underwrote a €10 million participation in the subordinated notes.





## **Investment Summary**

Issuer Confidential

Committed Investment €30,000,000

Initial Funding Date October 2007

Sector LNG Regasification

Project Location Europe, North America

Ranking Subordinated



### **Background**

The Company is developing a portfolio of LNG regasification terminals in Europe and North America. Financing comprises €300 million Equity PIK Loan facility. ECEF underwrote a €30 million participation in the subordinated notes.

## **Contact Information**



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