# Options for Financing Offset Projects and Managing Risk

EPRI GHG Emissions Offsets Workshop

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Some new thinking from Natsource.
More growth.  Less pollution.

# Overview

- Natsource Overview
- Types of projects
- Lending Goals vs Offset Purchase Goals
- Risk to Capital
- Mitigation

# Natsource Overview

- **Leading private sector greenhouse gas (GHG) asset manager with significant policy and commercial expertise**
  - Approximately $800 million in assets under management and commitments for compliance clients and investment clients as of September, 2009
  - New Energy Finance recognized Natsource as the largest buyer of contracted carbon offsets in the world with over 100 million tonnes contracted from Clean Development Mechanism (CDM) and Joint Implementation (JI) projects
    - Entered into GHG emission reduction purchase agreements (ERPAs) of over $1 billion
  - Staff participated in the development of the first carbon offset program and the Kyoto offset mechanisms and participated in some of the first and largest trades in these markets
- **Natsource offers integrated services in carbon and environmental markets**
  - Asset Management Services
  - Origination and Structuring Services
  - Advisory and Research Services
- **Headquartered in New York with global footprint**
  - Strategically located proximate to regions developing and utilizing carbon markets and major policy making centers

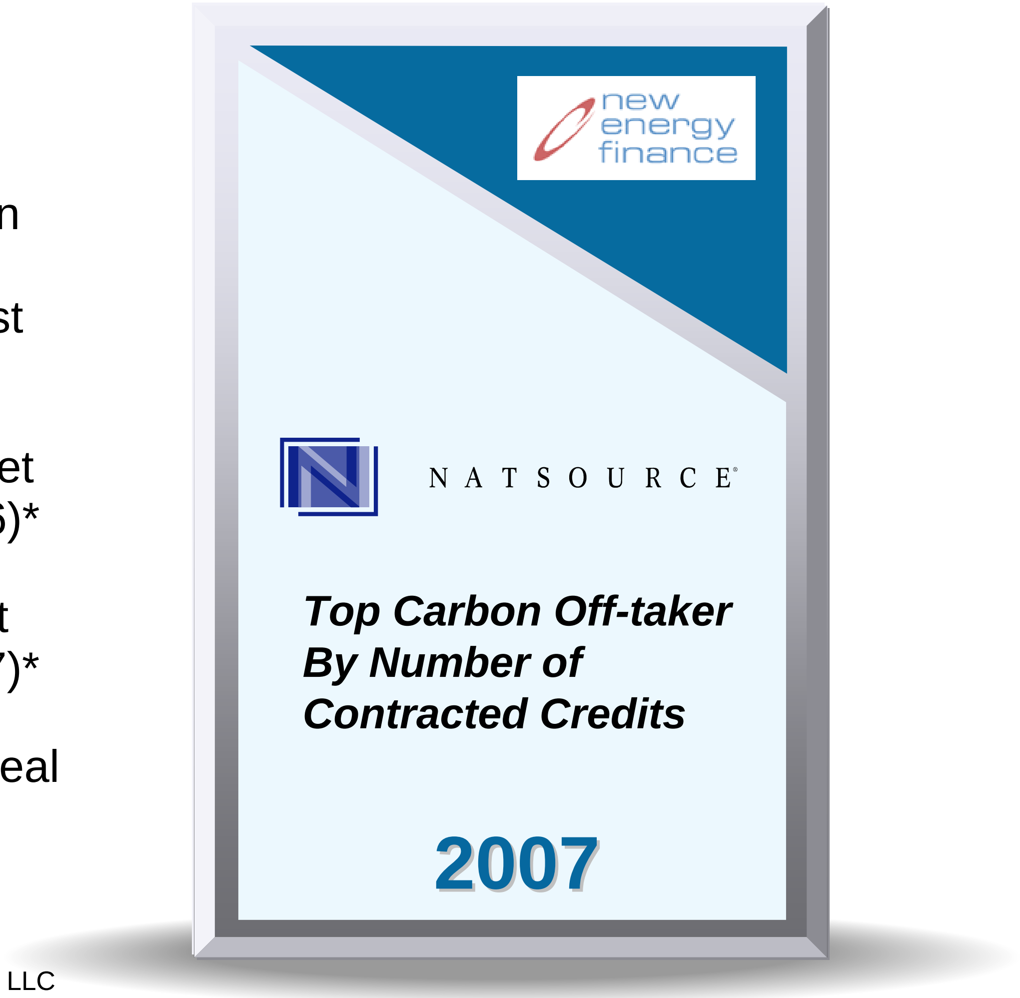
# Natsource's Competitive Advantage

- Natsource has the expertise required to originate, create and monetize carbon offsets

| Project Origination | Project Structuring and Finance | Offset Creation | Portfolio Development<br>• Industrial Clients<br>• Investment Clients | Monetize Offsets |
|---|---|---|---|---|
| ▪ Originate projects at early stage | ▪ Structure offset contracts for fund clients<br>▪ Arrange or provide finance and credit support<br>▪ Syndicate transaction if excess capacity | ▪ Review all information required to create offsets<br>▪ Monitor regulatory decisions to determine project eligibility<br>▪ Often work with seller in process to create offsets | ▪ Purchase offsets for industrial clients<br>▪ Develop portfolio of offsets for investment clients | ▪ Utilize global distribution network and relationships with buyers |

# Natsource Track Record

- Created one of the world's largest private sector compliance funds
- Largest buyer on behalf of clients in first $1 billion carbon offset deal – offsets created by 1st and 3rd largest projects (2006)*
- Completed 15th largest carbon offset deal to date according to UN (2006)*
- Completed 5th largest carbon offset deal to date according to UN (2007)*
- Completed 1st regulatory forestry deal in the U.S. (2008)**




* Institute for Global Environmental Strategies (IGES) CDM Project Database compiled for the UNFCCC secretariat

** The Pacific Forest Trust and Natsource Asset Management LLC announced the first commercial delivery of carbon offsets under the Forest Protocols adopted in the fall of 2007 by the California Air Resources Board (CARB). (Feb 2008)

# Types of Projects

- Inside the fence
  - Manufacturing process modification
  - Cogeneration
- Green field
  - Clean energy
  - Displacement of carbon

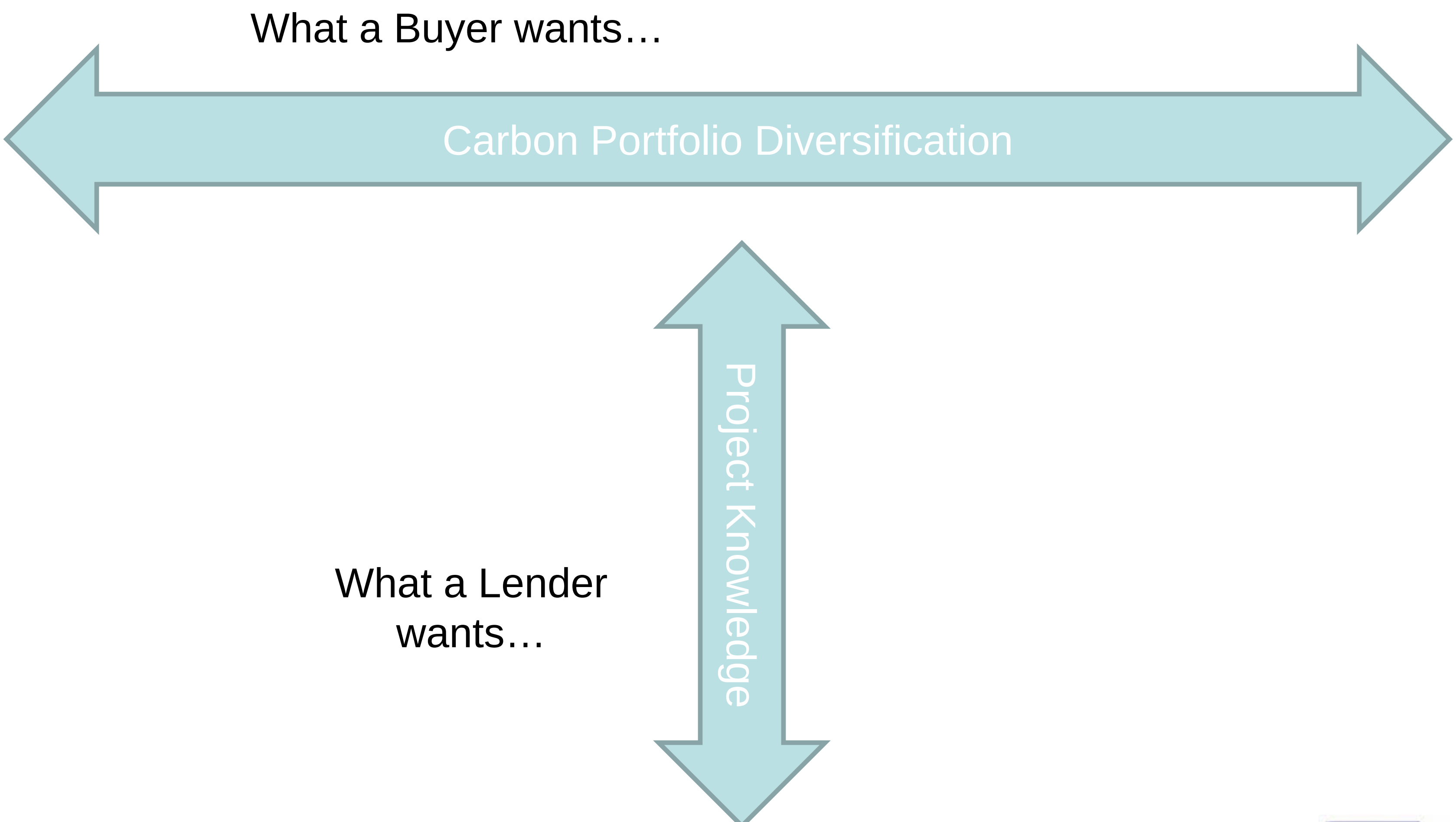
# Inside the Fence

- Promoter usually can’t own equipment
- If equity is possible, may not be desired
  - Exit strategy?
  - Low value for equipment outside of location
- Facility may not want to use much capital
  - Non-core business

# Green Field

- Promoter has technology specific business plan
- Often undercapitalized
- May need strong buyer to help secure financing
  - Removes price risk
  - Gives credibility

# Wide Vs. Deep



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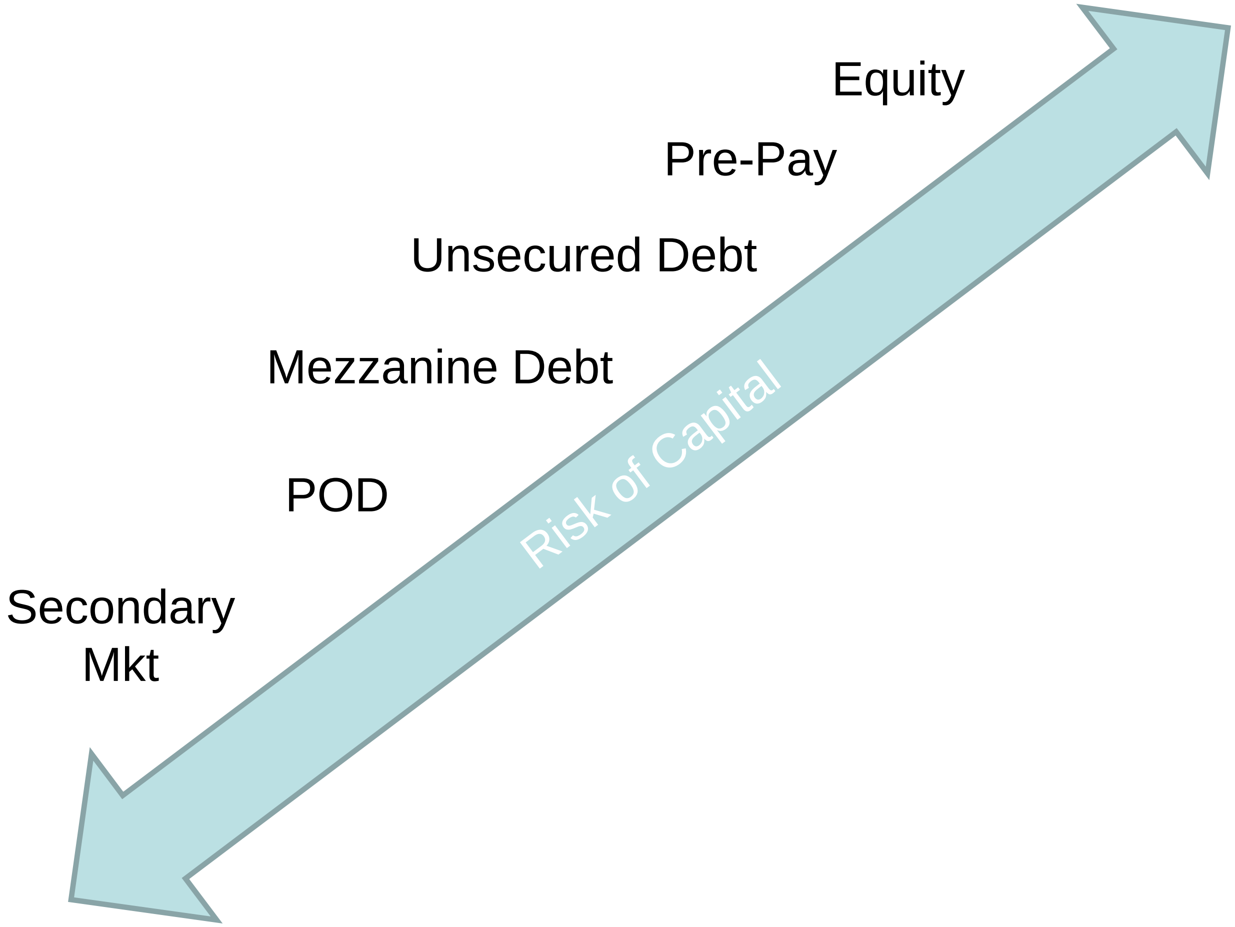
# Capital at Risk



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# Risk Capital

| | |
|---|---|
| ▪ Equity: | ownership |
| ▪ Pre-pay: | advance payment for Ers |
| ▪ Unsecured debt: | general obligation |
| ▪ Mezzanine debt: | last debt for capital completion |
| ▪ POD: | paid-on-delivery in the future |
| ▪ Secondary market: | already produced ERs |

# Equity

- Makes sense if part of existing operations
  - E.g., wind farms, grid efficiency
- May be reasonable investment if not at individual project level
  - Project development companies
- Mitigation
  - Diversification
  - Expertise
  - Control

# Pre-Paid Emission Reductions

- Comparatively low dollar amounts compared to total transaction size
  - Typically less than 15%
- Buyer accepts project risk subject to RPO standard
- Mitigation
  - Corporate guarantee
    - Effectively a loan but different accounting
  - Bank guarantee
    - Usually local bank

# Paid on Delivery

- Standard ERPA
- Risk is replacement cost for undelivered ERs
- Volumes can also be over delivered
- Project may use ERPA to secure local bank loan
- Mitigation
  - Price discrimination
  - Portfolio diversification

# Conclusions

- Financing not attractive by itself
  - Banking requires expertise and diversification
- May be needed to create project
- Mitigation of risk is limited but possible
- It's all about the price!

For additional information:

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