



# Creating an Acceptable Supply of Biomass Feedstock to Satisfy Project Financing Requirements

**SternBrothers&Co.**  
INVESTMENT BANKING SINCE 1917

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# Begin With the End in Mind

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Who—Well capitalized independent and integrated biofuel and bioproduct producers

What—Producing and selling significant volumes of biofuels and bioproducts

Where—Around the world

When—As Soon As Practicable

Why—Because customers will derive value from buying and using the products

How—By identifying and organizing stakeholders in a systematic and sustainable way to elicit the necessary capital investments

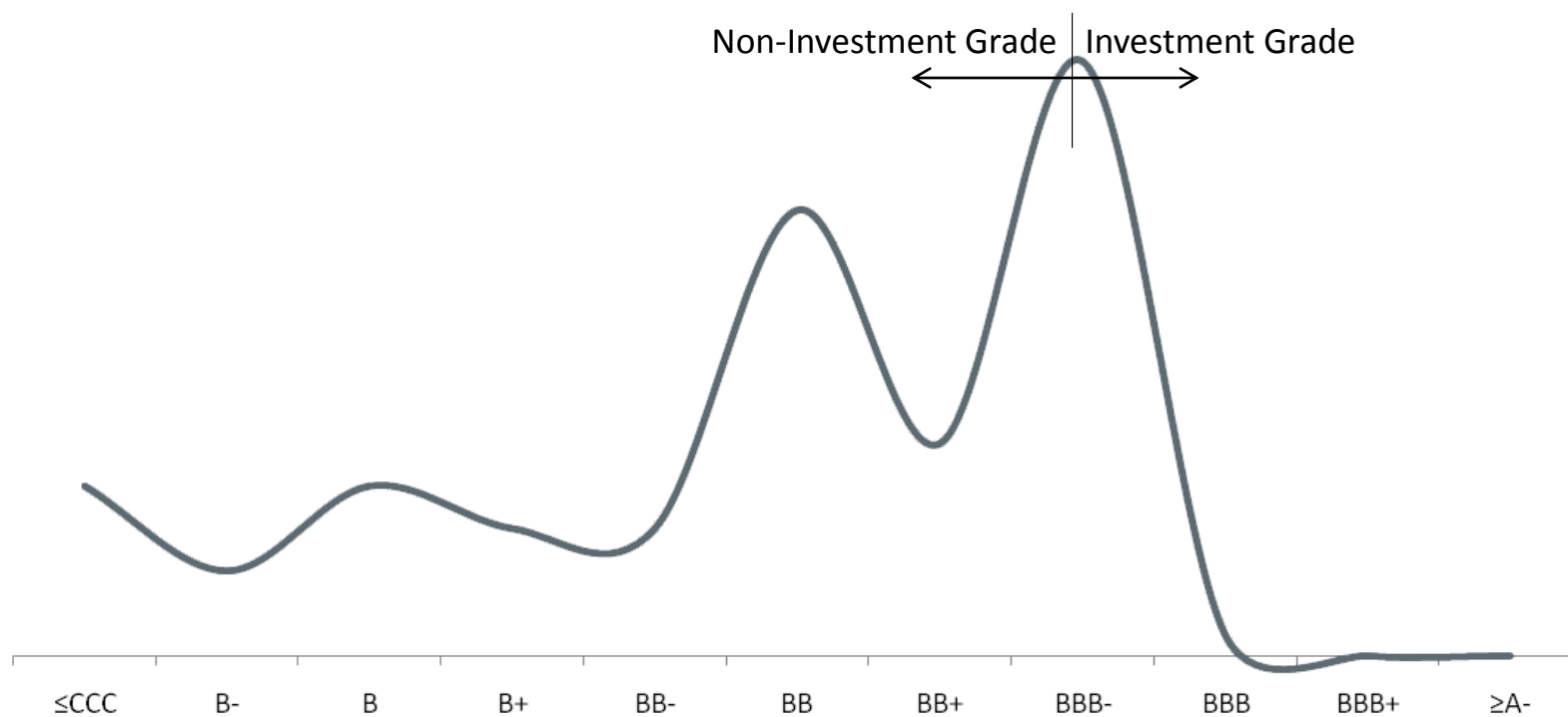
# Mismatch Between Demand For and Availability of Capital

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- Pike Research—Potential \$170 billion in new capital investment for biorefineries between 2012 and 2022.
- New global capital rules & lower risk tolerances discourage banks from funding biofuel and bioproduct projects.
- New Basel rules will make it harder for banks to hold loans for large projects.
- Biofuel and bioproduct projects on a bank's balance sheet = illiquidity + long tenor + (perceived and potential) technology risk as the industry matures.
- Emerging market institutions are expected to replace traditional European & U.S. project finance banks.
- The capital market (the bond market) is also a source of capital to replace bank debt as long-lived project assets can be matched with long-lived liabilities.

# Alternative Energy Project Credit Quality

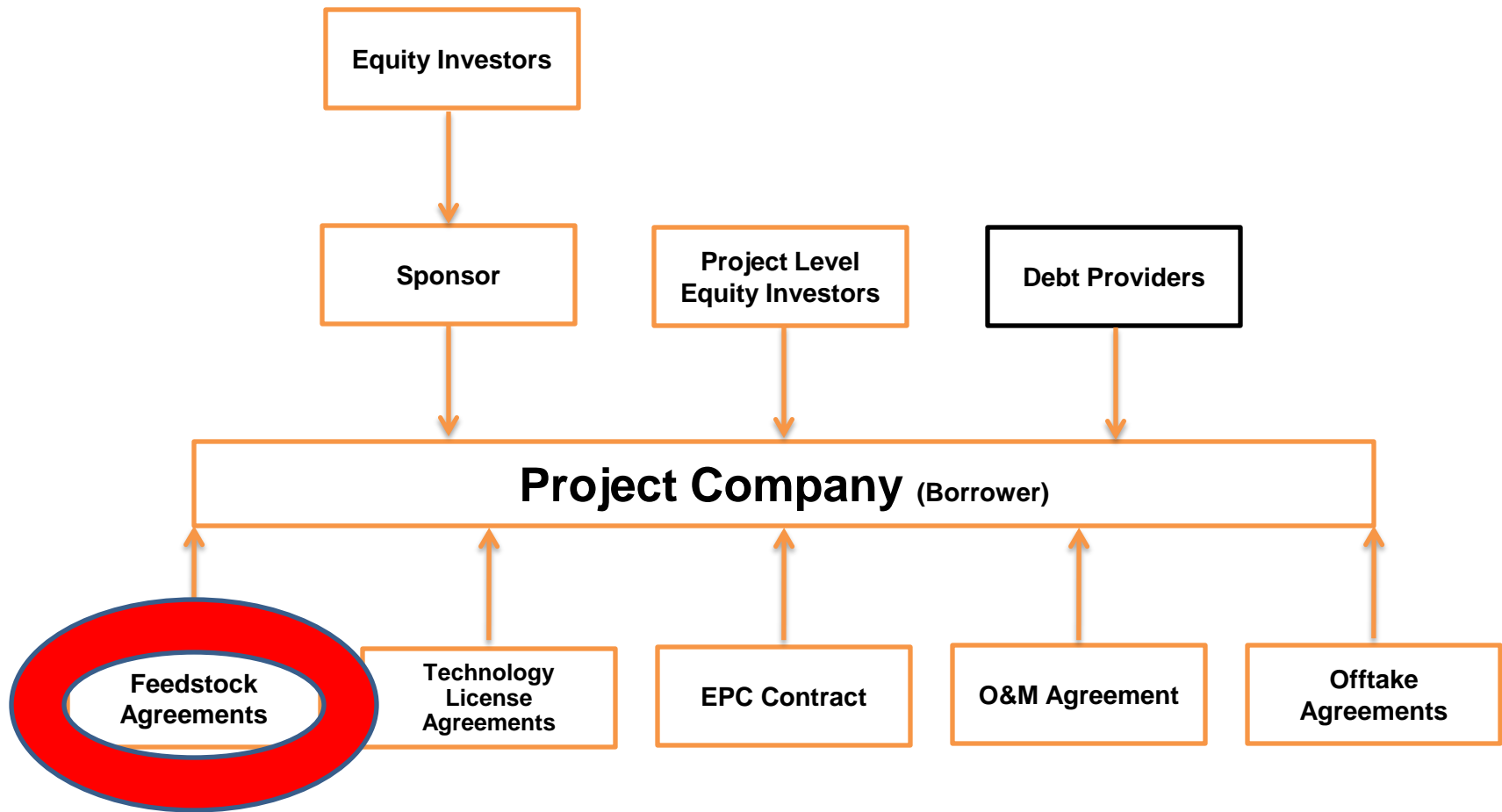
## Project Finance Renewable Portfolio Rating Distribution



Source: Fitch Renewable Energy Forum 6/23/11

Note: Includes Public, Private Ratings and Credit Assessments

# Typical Project Finance Schematic



# Project Structure Must Address Project Risks

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**SOUND  
PROJECT  
ECONOMICS**

**Feedstock Supply**

Adequacy of available feedstock.

Long-term quantity supply agreement..

Long-term fixed price supply agreement (or at least a price ceiling).

Adequate on-site storage.

# Project Structure Must Address Project Risks

