





# Mark J. Riedy, Esq.

- *Has Represented Clients In Renewable Energy (Fuels and Power) Project Finance Since 1978, Government Funding Initiatives (Grants, Loans, Loan Guarantees, Etc.) Since 1980, And Clean Tech Private Placements Since 1999, Domestically And Internationally.*
- *A Founder And Original General Counsel:*
  - *Renewable Fuel Association -1979-1984.*
  - *Clean Fuels Development Coalition - Since 1985.*
  - *Clean Fuels Foundation - Since 1990.*
  - *American Council On Renewable Energy/Biomass Coordinating Council - Since 2001.*
  - *Latin American Council On Renewable Energy - Since 2009.*
- *Assisted Clients In The Creation Of The Original Alternate Energy Tax Incentives In The 1978 And 1980 Tax Acts, And Their Expansions and Extensions Thereafter.*
- *Assisted Clients In The Renewable Fuels And Renewable Power Industries In The Development Of Provisions In The 1978 Public Utility Regulatory Policies Act, 1983 Caribbean Basin Economic Recovery Act, 1990 Clean Air Amendments (And Reformulated Gasoline Regulations thereto), 1992 Energy Policy Act, 2005 Energy Policy Act, And The 2007 Energy Independence And Security Act, 2008 Food, Conservation And Energy Act, and 2009 American Recovery And Reinvestment Act.*
- *Named One of The Top 100 Bioenergy Leaders Worldwide - BiofuelsDigest - 2011-2012*
- *AV Preeminent Rating by Martindale-Hubbell for last 15 years*



# I. Where Were We

## A. Grants For Pilot And Demonstration Scale Projects

1. DOE
  - Integrated Biorefineries Grant Program
2. USDA
  - Rural Energy for America Program (Section 9007)

## B. Loan Guarantees

1. DOE
  - Section 1703 & Section 1705 (uncapped senior debt)
2. USDA
  - Section 9003, Section 9007, and the Business & Industry Program (senior debt at \$250MM, \$25MM, \$10MM-\$25MM, respectively, at 60-80% of senior debt guaranteed)

## C. Tax Incentives

1. Section 1603 Cash Grant
2. Section 1603 Investment Tax Credit
3. Biofuels Tax Credits and Bonus Depreciation for Renewable Power and Advanced Biofuels (100% bonus depreciation through 2011/50% bonus depreciation through 2012)



## II. Where Are We

### A. Grants For Pilot And Demonstration Scale Projects

#### 1. DOE

- \$15 million for pilot-scale projects
- \$35 million for biomass R&D in Biomass Research & Development Initiative
- \$40 million for military advanced biofuels – \$20 million for each of FY2012 and FY2013

#### 2. EPA

- \$20 million in grants for clean diesel projects

#### 3. USDA

- Section 9007 offering up to \$500,000 in funding for projects. \$12.5 million in total available for FY2012

#### 4. FY2013 funding potentially available through an Energy Appropriations Act, Agriculture Appropriations Act, or Farm Act of 2013 when enacted

#### 5. Foreign Funding

- Australia
- United Kingdom
- Canada



## II. Where Are We (Cont'd)

### B. Loan Guarantees

#### 1. DOE

- Section 1703 - requires appropriation
- Section 1705 - expired

#### 2. USDA

- Section 9003 has no FY2012 funds
- Section 9007 has \$48.5 million available
- Business & Industry Program has \$850 millions for FY2012
- FY2013 funding potentially available through Farm Act of 2013 (Sections 9003/9007) and Agriculture Appropriations Act of 2012 (B&I) when enacted

### C. Tax Incentives

1. *Section 1603 Cash Grant has expired*
2. *Section 1603 Investment Tax Credit expires for biopower after 12/31/13*
3. *Only the \$1.01 cellulosic biofuels production tax credit exists through the end of 2012*
4. *Extensions possible after the U.S. Presidential Election*



### III. Where Are We Going

- A. Need to extend 30% 1603 cash grant for biopower and add the incentive for advanced biofuels
- B. Need to protect the Renewable Fuels Standard ("RFS") – Senate has established the "Biofuels Investment and RFS Market Congressional Study Group" (Senators James Inhofe-R-Okla and Chris Coons-D-Del) to study RFS
- C. Need to continue energy program funding through enactment of Farm Act of 2013 - USDA Loan Guarantee Programs for Sections 9003, 9007 Programs, and Agriculture Appropriations Act of 2013 for Business & Industry Program

1.		<u>9003</u>	<u>9007</u>
	Senate Farm 2013 Bill	\$100MM	\$48.2MM
	Senate FY2013 Appropriations Bill	\$150MM	\$20MM
2.	\$25MM set aside for Biochemicals as the 9003 Program opens for Bioproducts of all types		

- D. Need to fill equity holes
  - 1. Company level
  - 2. Project level
- 4 E. Need to develop new financing mechanisms



## **IV. How Do We Succeed in Funding Integrated Biorefineries:**

### **A. Pilots & Demos**

#### **1. Australia**

- Australian Renewable Energy Agency (“ARENA”) offering \$3.2 billion in funding for pilot and demonstration projects - commences July 1, 2012
- Clean Energy Finance Corporation (“CEFC”) will provide \$10 billion in funding for renewable energy and energy efficiency - commences July 1, 2013
- \$170 million also is available for R&D on low-pollution and energy efficiency technologies

#### **2. United Kingdom**

- UK Green Investment Bank provides funding with an initial capitalization of \$4.8 billion - opened on April 1, 2012

#### **3. Canada**

- Sustainable Development Technology Canada (“SDTC”): SD Tech Fund (\$590 Million) (grants - pilots/demos) and Next Gen Biofuels Fund (\$500 Million)(takes pilots/demos to 1<sup>st</sup> commercial project through loans)

#### **4. New DOE/USDA initiatives are required**

#### **5. Increased role for strategic investors required**

#### **6. Continued Role for VCs**

- Average time from initial funding to IPO is 8.3 years for cleantech versus 9.4 years for other venture backed technologies (National Venture Capital Association Report)



## IV. How Do We Succeed in Funding Integrated Biorefineries (Cont'd)

### B. First Commercial Plants

1. Farm Act - Sections 9003 & 9007 with Credit Enhanced Project Bonds (We have been 12 for 12 in client finalists in the last 2 years, 3 closed; 5 in queue to close; and 4 in queue for conditional loan guarantees)
2. Performance Guarantee Insurance Wraps on Technology Risks (for scalability and integration risks)
  - Insures against failure to deliver a project on time or to meet performance requirements (European Insurers - performance only/policy is less comprehensive)
  - Term - 5 years (European Insurer - up to 10 years)
  - Range - approx \$10 Million to \$450 Million (European Insurer - same range)
  - Premiums - 15% to 25% of costs associated with technology risk (European Insurer - 3%-5% of revenues under offtake agreement(s) attributed to project debt payments during policy term)
  - Targets projects with up to 24 month construction (European Insurers - same)
3. Continue Strategic Investor Equity
4. Continue IPOs (8 biofuels closed/9 pending; 2 biochemicals pending; 2 biopower closed; fertilizer MLP closed) and Later Round Private Placements (Series C, D, etc.)
5. Use of Australia's Fund and the UK Green Bank for First Commercial Projects
6. Military Initiatives
  - Navy-DOE-USDA Public Private Partnership - \$510 Million for equity investments over 3 fiscal years (Broad Agency Announcement ("BAA")/FOA (June 27, 2012) Phase 1-\$30 MM; Phase 2-\$70MM; FY2013 – \$40MM-DOE, \$70MM to \$110 MM-Navy, \$170MM-USDA) – House/Senate bills would prohibit non-market price purchases
  - Army-\$7 Billion for renewable power PPAs; Navy and Air Force - 1 GW each for renewable energy PPAs
7. Capital Stack also may contain New Market Tax Credits ("NMTCs"), tax exempt bonds, Section 1603 tax equity (where a power plant is attached), state revolving funds (for working capital, debt service reserve accounts, credit enhancement), state grants/loans/loan guarantees, etc.



## IV. How Do We Succeed In Funding Integrated Biorefineries (Cont'd)

### C. Second Commercial Projects

#### 1. Domestic US

- Traditional project finance with insurance wraps on any continuing technology risks along with EPC Performance Guarantees
- Use USDA B&I (small projects - \$10 million senior loan cap) and Rural Utility Service (“RUS”) (biopower projects)(12.5 basis points over Treasuries - less than 2.5% for shorter of PPA length or 35 years) Programs
- Credit enhanced project bonds to investment grade with (a) loan guarantees (from USDA/B&I, DOT, HUD, SBA, Bureau of Indian Affairs) and (b) Treasury Strips or pooled mortgages (so-called “Covered Bonds”), letters of credit, bank guarantees, etc. and sell these bonds to institutional investors at low coupon rates and long maturities
- Strategic equity including U.S. infrastructure funds and company specific or consortium funded renewable energy funds
- EKF (Denmark), MITI (Japan), Belgium Ex-Im Bank - can provide loans/loan guarantees for U.S.

#### 2. International

- Low Cost Loans (US Export - Import Bank at 3% Fixed for 18 years against 85% of US content)
- Project Bonds Credit Enhanced with AAA - Rated Multilateral and Bilateral Finance Agency Loan Guarantees (US Overseas Private Investment Corporation (“OPIC”), International Finance Corporation (“IFC”), Asian Development Bank (“ADB”), Inter-American Development Bank (“IDB”), etc.)
- Equity from IFC, ADB , Inter-American Investment Corporation (“IIC”)/IDB
- International Infrastructure Funds (OPIC can increase/leverage existing equity funds with loan guarantees)
- OPIC Political Risk Insurance
- Climate Private Public Partnership (“CP3”) with an initial \$3 billion green energy fund for post first commercial projects in developing countries - based in the UK



## **IV. How Do We Succeed In Funding Integrated Biorefineries (Cont'd)**

### **D. New Creative Funding Mechanisms**

#### **1. Master Limited Partnerships ("MLPs")**

- Currently, 72 energy-related businesses constitute 78% of all existing publicly-traded MLPs representing a market capitalization exceeding \$350 billion for 2011 (\$220 billion-2010 figure and \$22 billion-2006 figure) with average dividends at approximately 6%
- MLP tax liability is not subject to a corporate income tax. Taxed at personal, ordinary income level
- Would require a statutory amendment to include renewable power generation and advanced biofuels production - Senator Chris Coons (D-Del) and Jerry Moran (R-Ks) introduced MLP bill (originally drafted by Mintz Levin) for renewable power and fuels production inclusion on 6/7/12

#### **2. Real Estate Investment Trusts ("REITs")**

- In 2011, publicly-traded REITs represented \$440 billion equity market capitalization with average dividends of approximately 10%
- In 2011, REITs raised a total of \$51.3 billion in initial debt and equity capital offerings with \$35.2 billion raised in secondary equity common and preferred share offerings
- At least 95 percent of a REIT's annual gross income must be derived from real property.
- At least 75 percent of the value of a REIT's total assets must be comprised of "real estate" assets
- Taxed at personal, ordinary income level
- 90% of REIT income must be distributed annually – construct new projects
- May require a statutory amendment to include renewable power generation and advanced biofuel production or a Treasury guidance to accomplish the same (Mintz Levin is working with DOE, Treasury and White House)

#### **3. OPIC Programs**

- Political risk insurance products, such as technology risk insurance warranty policies, to wrap risks for new renewable fuel and power projects in developing countries. Debt/equity funds and loan guarantees for renewable energy project financings

#### **4. Crowd Funding Under The New Jump Start Over Business Start Ups ("JOBS") Act**

- Allows "crowd funding" or a private financing comprised of pooled investments of up to \$1 million within a 12 month period from many small investors subject to certain restrictions. Such funding must be handled by a broker or "funding portal" registered with the SEC



## **IV. How Do We Succeed in Funding Integrated Biorefineries (Cont'd)**

### **D. New Creative Funding Mechanisms (Cont'd)**

#### **5. Global OPIC Model**

- A Global OPIC, funded by governments worldwide, could conduct due diligence on and provide loan guarantees for projects in developed and developing countries. The debt could be repackaged into asset-backed securities that could be sold to investors worldwide

#### **6. Clean Tech Fund Financed by Sovereign Wealth Funds**

- Focus on debt for 1<sup>st</sup> commercial projects

#### **7. High Yield Bond Funds**

- These funds focus on technology risks, such as the established or historic funding of telecommunication's wireless startups
- Recent Energy Example: MidAmerican Energy Company's 550MW Topaz Solar PV project
  - \$1.2 billion bond financing was over subscribed
  - Though financed without a government guarantee, the company was investment grade (Thus, it may not work broadly)

#### **8. ReCharter U.S. Export-Import Bank and U.S. OPIC to permit U.S. lending – FY2012 funding at historical high of \$140 billion**

#### **9. Have Banks Pool Funds for Loan Guarantees**

#### **10. Permit Foundations To "Invest" In Cleantech Companies and Projects - IRS is Reviewing a 1971 Rule.**

#### **11. Peru Recently Completed a Major Bond Finance of a Marine Port Without a Loan Guarantee or Insurance Warp and Sold The Long Term Bonds (25 years) to Institutional Investors at 8.125%**