



Alternative Energy Project Finance or "How to Survive a Hurricane in a Sailboat"

Stonehenge Overview

Stonehenge Capital Company, LLC is a national specialty finance company with expertise in tax credit finance, structured finance and private equity.

- Principals previously were part of the senior management and investment management teams of Bank One (now JPMorgan Chase) managing investment banking, merchant banking, investment advisory, securities brokerage and insurance operations.
- 30+ professional employees in 9 states with partner level oversight in Louisiana and Ohio.

Stonehenge's Business Groups include:



Tax Credit Products: Experience structuring and placing over \$1.3 billion in state premium tax, income tax, and franchise tax credits across the United States;



Venture Capital & Private Equity: Manages approximately \$580 million in 10 regionallytargeted funds and a mezzanine/growth fund without geographic targets;



Community Development: \$486.7 million of Federal and state New Markets Tax Credit (NMTC) allocation authority aimed to encourage investment in low income communities. Stonehenge also provides NMTC compliance management for Liberty Bank and Trust; and



Entertainment Finance: Primarily motion picture and television tax credit finance, a joint venture with Aramid Entertainment Fund and Aramid Capital Partners.

👖 S T O N E H E N G E

Stonehenge Business Groups Historical Geographic Footprint



Why is financing alternative energy projects difficult?

- Non-renewable energy is cheap and abundant (under current market conditions) and alternative energy infrastructure is very expensive projects do not cashflow.
- Proven technologies (solar, wind, etc...) are inefficient relative to non-renewable energy sources (much longer pay-back periods).
- New and developing alternative energy technologies are promising, but unproven; this causes uncertainty and less interest (higher perceived risk) in the investment from the capital markets.
- Void of capital (both debt and equity) created by relatively low returns and long pay-back periods for proven technologies, high risk for unproven technologies.
- Lack of knowledge with respect to complex political, legal, and accounting issues with governmental subsidies.

So I like a challenge and still want to finance a renewable energy project....here is what you will need:

- Capital Structure:
 - Tax credit equity (federal, state)
 - Depreciation
 - Debt
 - Equity
 - Other subsidies RECs, local grants, private grants, etc...
- Development/Management Team with competent legal, accounting, and tax counsel.
- Proven Technology
- Feedstock sourcing and energy offload agreements
- Regulatory/compliance approval permitting, etc...

- Tax credit equity
 - Federal:
 - US Treasury Renewable Energy Grant expires 12/31/10
 - » 30% for fuel cells, solar, small wind
 - » 10% for others
 - Investment Tax Credit
 - » 30% for fuel cells, solar, small wind
 - » 10% for others
 - Production Tax Credit
 - » \$0.021/kWh for wind, geothermal, closed-loop biomass
 - » \$0.011/kWh for others
 - » Generally available for first 10 years of operation

- Tax credit equity
 - State (# of states/# of programs):
 - Rebates (19/24)
 - Grants (20/29)
 - Production Incentives (3/3)
 - Tax Credits/Deductions/Exemptions (27/58)
 - Low-Interest Loans (27/31)
 - Sales Tax Exemptions (22/23)
 - Property Tax Incentives (30/40)
 - Industry Recruitment Incentives (13/19)
 - Visit <u>www.dsireusa.org</u> Database for State Incentives for Renewables and Efficiency - excellent database for state incentives; sponsored by NCSU, NC Solar Center, IREC, and USDOE

- Depreciation
 - 5 year MACRS and bonus depreciation for projects in the GO Zone.
 - Passive/active rules apply
- Debt
 - Few large institutions lending to large deals \$50MM+
 - Generally low LTV (50% or less)
 - Interest rates and terms vary widely from deal to deal
 - Strict underwriting
 - Technology risk
 - Feedstock sourcing and energy output risk
 - Management/developer experience
 - Cash flows
 - Creditworthy guarantors

- Equity (aka, skin in the game, capital at risk)
 - Often from management team, developer, project sponsor, others:
 - Joint venture projects
 - Private equity
 - Venture capital
 - Equity capital will be the most expensive money in the capital structure if it is OPM.
 - 20%++ IRR
- Other subsidies
 - RECs voluntary vs. statutory are they bankable?; some projects are dependent on RECs, others viewed as lagniappe
 - Municipal incentives
 - Private grants
 - New Markets Tax Credits (tremendous boost if project can secure NMTCs)

Money, money every where, but not a drop to drink? Where are the projects?

- Even with the abundance of state and federal incentives, monetizing those incentives and filling the remaining capital needed can be difficult.
- Largest RPS markets are (and states w/ largest RE portfolios):
 - Arizona
 - New Jersey
 - Nevada
 - Colorado
 - These are the states with the most solar capacity additions
- Wind and solar dominate the market in terms of volume of projects; some utility scale projects but mainly 5MW and less.

Where's the data? I need a chart!

Type and Footprint of RE Closed in Q3 2009



Primary Renewable Energy Technologies Deployed and

Financed

Geographic Dispersal of Projects



Source: NREL Q3 2009 Questionnaire

Capital Structure

Project Financial Structure



Federal Tax Incentive Taken



Source: NREL Q3 2009 Questionnaire

Source of Equity / Expected ROE





Source: NREL Q3 2009 Questionnaire

Debt Terms



10.00%+

8.50-

9.99%

Source: NREL Q3 2009 Questionnaire

Conclusions

- Alternative energy project finance is difficult and complex, but is achievable.
- In most cases, federal and state incentives are required to complete the capital structure; the continuation of these subsidies is necessary to maintain adoption of renewable projects.
- Assuming fossil fuel energy prices increase, this will reduce the financing gap for renewables and provide for ease of project finance.
- Continued research in new and more efficient (and cheaper) renewable energy technologies is necessary to make renewables more competitive with non-renewables.
- More individuals and companies are embracing double bottom line and triple bottom line economics driving an increase in interest in the adoption and investment in renewables.
- Knowledge is key: developers, investors, legal, tax, and accounting professionals all need to be knowledgeable regarding the nuances of renewable energy finance.
- More knowledge and certainty attracts capital and the perceived risks (and corresponding hurdle rates) allowing for more renewable projects to be financed.
- The Wild Card??? Cap and trade, carbon tax, feed-in tarrifs, mandatory state and/or federal RPS will these mechanisms assign a cost to carbon and thus create parity among all energy sources?



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