The Public Private Partnership Model as a Funding Mechanism for Renewable Energy and Resource Development

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Iconic renewable energy technologies have garnered a positive connotation in society for the social and environmental benefits they provide: solar conjures imagery of sunshine and wind that churn megawatts of power. Today both technologies are reaching market parity made possible in large part using state and federal public investment mechanisms. Investing public funds (e.g. tax credits) has made their inclusion in the market possible, and production economies of scale and efficiency have begun to make solar and wind technologies economically competitive. A lower risk of investment and higher payoff equates to a greater desire for renewable energy development, yet project funding is under increasing threat as the availability of public investment declines.

Renewable resource development is the sustainable procurement of a natural resource by a community for the purpose of economic and social gain. In Oregon, wood-based biomass products are an example of renewable resource development. Woody biomass provides sustainable residual products that are collected from natural forest growth or previous forest product activity, such as a tree harvest. Depending on the region and biomass characteristics, end uses include local thermal energy production and marketable products like reconstituted wood pellets. Additionally, renewable resource development is believed to offer economic development advantage by generating revenue and increasing employment opportunities. These factors could benefit resource-dependent rural communities experiencing chronic economic conditions. [1]

Renewable resource development and renewable energy development share similar attributes and economic constraints. Both harvest value from renewable resources and provide social benefits. To date they both have shared a similar contingency for development: a public investment mechanism that relies on tax credits as an incentive. The tax credit model of public investment, however, is in decline. Two factors have reduced the effectiveness and use of tax credits. The first is public budget scrutiny of expenditures that occurred during the recent recession. The spotlight on budgetary woes portrayed tax credits as an unnecessary budgetary cost. The second reason is the political ideology that disputes the use of public tax dollars for such projects. Political disharmony and budget stress conspire to significantly diminish the use of tax credits to advance renewable energy and resource development. New and creative funding options now appear necessary. [2]

If renewable energy and resource development have economic and environmental importance and benefit, and that the premise of standard tax credit model is truly in
decline, then consideration of alternatives is in order. Two conditions are critical: 1) finding alternative funding sources and 2) the procurement mechanism to attract funding. To satisfy both conditions, private investment is necessary in order to fill the void of lost public-side monetary support. Under what conditions will private investment materialize? Again, two considerations are important. First, a particular project must have attractive attributes that invite private interest in investment. Second, the project could offer a marriage of sorts sort between public and private interests – such as a public/private partnership. A second option – the Master Limited Partnership – is also discussed here.

A Public Private Partnership (P3) is a contractual agreement between public representatives and private investors designed to share risk, reward, and cost. Both sides are held accountable throughout the term of the project. In essence, the P3 model expands the exposure of contractual relationships between the two parties to include outside investment interests. As such, the P3 model can be slow to develop due to complexity and varied interests. By comparison, the tax credit model is much quicker depending on budget cycle requests, but the P3 model is more inclusive and blunts objection of collecting tax revenue for redistribution of resource development. Also, the P3 model positions the public interest as a lead contractual consideration. Monetary investment is secondary to the public interest. [3]

Contract management is legally complex, and the P3 model offers some barriers. Creating a P3 contract is not like the typical procurement process of state agencies purchasing goods and services. In fact, execution of P3 contracts by a state requires significant effort to overcome embedded bureaucratic procedures and legislative provisions to allow government agencies to engage in P3 participation. Another barrier to P3 activity is the accounting rules that prohibit ‘co-mingling’ public funds with private interest. Again, a legislative provision is required that outlines specific P3 accounting procedures. Given the trajectory of traditional government activity and assumption of authority control, the likelihood of legislating new provisions for P3 participation is dim without intervention of outside interests. However, the power of investment opportunity could provide such an intervention. In this context the European Union experience in P3 development is both instructive and illuminating.

European Union development projects that feature the P3 model are financially structured to include a variety of sources comprised mostly of equity investors and investment banks [1]. Investment banks are the vehicles for private investors to participate in project development. Investment banks and investment funds in the EU are analogous to mutual fund investment in the U.S. Rather than being subjected to risk associated with direct investment, investment banks and investment funds, like mutual funds in the U.S., spread the risk among projects and attract a multitude of investors. Gain from investment remains an objective as expected. [4]

Investment gain is the hallmark of the Master Limited Partnership (MLP). The MLP is a popular investment mechanism in the oil and gas market. An MLP is taxed like a partnership but trades like a stock of a publicly traded stock company. Investors can buy and sell shares in the public market and developers have access to capital at low rates.
Limited partners are only liable for the amount invested; yet receive the tax benefit of a personal income tax deduction for losses during the development stage when costs exceed revenue. The deduction benefits investors that typically have lower income tax rates than corporations.

Today the MLP is the method of choice used by the oil and gas industry for all energy production and development activity. Most hydraulic fracturing of natural gas and oil extraction activities are conducted under structured MLPs created by large energy developers to avoid exposure to corporate tax liability. Separate companies are created as partnerships for specific development and service functions. The partnership companies and affiliates are able to claim income from almost any related activity, such as transporting and storage of hydraulic fracturing fluid and management fees even if the assets are owned by other business entities. As it now stands, rulings by I.R.S. support and encourage the industry. By allowing assets and services that are incidental to petroleum-based energy production to be spun off into MLP’s, the industry has become a corporate/partnership community that is effectively subsidized and exempt from higher corporate tax rates.

However, MLP benefits do not presently extend to renewable energy projects because the present tax code only recognizes projects with “depletable” resources, which therefore only benefits fossil fuel projects. Proposed legislation in Congress – “The Master Limited Partnerships Parity Act (MLPPA)” – presently remains stalled in political gridlock despite being sponsored by members of both parties and having bipartisan support. Until investment parity of the MLP extends to renewable energy and resource development, the MLPPA will likely remain stalled. The result is an oil and gas energy sector able to proliferate and realize monetary gain that are, in effect, a public subsidy. Inaction by Congress to pass the MLPPA and the present I.R.S. ruling that favors the oil and gas industry means that interest by investing parties in renewable energy and renewable resource development will remain secondary and largely unrecognized. [5]

Summary
Renewable energy and resource development has the potential to greatly improve environmental conditions and provide social benefit. If tax credit availability continues to decline or otherwise becomes restrictive, other mechanisms must be utilized. To date, alternative mechanisms like P3 and MLP are attractive but remain elusive because of their complexity or lack of availability. Resource development projects involving woody biomass, while arguably attractive, appear to require more robust support than either a P3 or MLP would provide in order to secure funding and broad political support. Detailed future research of scenario analysis on a particular resource or energy project using theoretical P3 and MLP would be a worthwhile endeavor to better inform politicians, the public, investing principals and researchers.
Additional Resources by Topic

[1] Woody biomass

Biomass Energy Resource Center (BERC)
Forming, Financing, and Permitting a District Energy Facility in Vermont

"Oregon Biofuels and Biomass: Woody Biomass in Oregon - Current Uses, Barriers and Opportunities for Increased Utilization, and Research Needs"
Oregon State University

"Woody Biomass"
U.S. Department Of The Interior. Bureau of Land Management
http://www.blm.gov/or/resources/forests/biomass.php

Oregon Forest Resource Institute
"Woody Biomass Offers Potential for Heat, Electricity and Fuel"

[2] Reduction of tax credits

Climate Solutions
“Updates to Oregon's Business Energy Tax Credit (BETC)"
http://climatesolutions.org/nw-states/oregon/updates-to-oregons-business-energy-tax-credit-betc
Sightline Daily
Oregon Tax Credit Program Needs Improving
Roger Valdez
http://daily.sightline.org/2009/05/20/oregon-tax-credit-program-needs-improvement/

Union of Concerned Scientists
Production Tax Credit for Renewable Energy


Decotis, Fitzpatrick & Cole, LLC
Stephen Pearlman and Ryan Scerbo
http://www.decotiislaw.com/assets/db/12674664673545.pdf

The National Council for Public-Private Partnerships
"Top Ten Facts About PPP's"

Wilson Sonsini Goodrich & Rosati, PC
Chris Groobey, John Pierce, Michael Faber, and Greg Broome
“Project Finance Primer for Renewable Energy and Clean Tech Projects”

[4] The EU P3 model
The World Bank
PPP in Infrastructure Resource Center
“Legal Framework/ Enabling Environment Assessment for PPP’s”

C.R.E.A.M
“Sustainable PPP Markets with Life-Cycle Project Alliancing”

and


European Investment Bank
"Lending Criteria. EIB and Energy: Delivering Growth, Security and Sustainability - EIB’s Screening and Assessment Criteria for Energy Projects"

Brookings.
Invest But Reform.
“Smarter Finance for Cleaner Energy: Open Up Master Limited Partnerships (MLPs) and Real Estate Investment Trusts (REITs) to Renewable Energy Investment”
Chris Coons, U.S. Senator

“Master Limited Partnerships Act” pending in Congress
http://www.coons.senate.gov/issues/master-limited-partnerships-parity-act

Environmental and Energy Study Institute

“New Approaches in Renewable Energy Finance: Master Limited Partnerships, Real Estate Investment Trusts, and Crowdfunding”

New York Times

Victor Fleisher

How the I.R.S Encourages Oil and Gas Spinoffs
http://dealbook.nytimes.com/2013/06/18/how-the-i-r-s-encourages-oil-and-gas-spinoffs/?_php=true&_type=blogs&_r=0