Briefing Paper
Alternative Approaches to Supporting Renewable Energy Project Development

June 11-12, 2010

Summary

Staff is exploring the idea of providing incentives to renewable energy projects earlier in the development process, prior to completion. This briefing is meant to test the board's willingness to entertain this approach on a pilot basis. Two figures are attached to the paper: Figure 1 shows the renewable energy project development process overall; Figure 2 shows how Energy Trust incentives might be deployed differently via a construction loan, a portion of which would be forgiven at project completion.

Background

- Historically, Energy Trust has paid incentives only after renewable projects are completed. We help fund pre-construction feasibility studies and analysis, but expect projects to fund their own permitting, environmental and interconnection studies, engineering and management.
- Our own experiences and studies commissioned by Energy Trust indicate that well-conceived renewable projects with capable developers are languishing because they lack funding after completing preliminary studies and before projects are completed.
- We believe this is a factor that limits our ability to meet our renewable energy goals.
- The studies offer several reasons why projects have a financing challenges:
    - Long timelines and unfamiliar development processes worry financial institutions;
    - Without significant equity, projects scramble to patch together high-interest venture capital or other financing, often at the expense of time spent on other aspects of the development process;
    - Lenders lack experience with renewables and often consider technologies unproven, even though Energy Trust considers them commercially viable technologies; and
    - Lack of general project development expertise and a solid, experienced team concerns lenders.
- Our recent experience confirms these perceptions:
    - An irrigation district building a hydropower project encountered difficulties paying construction costs due to the timing of numerous grants and loans, resulting in project delays. An incentive payment in the form of a construction loan would have helped keep the project on track. The

developer indicated interest in Energy Trust construction financing for their next project, anticipated in 2011.
  - A central Oregon wind project is delayed due to difficulties in assembling financing. Once all sources are final, this project can be completed within 6 months. Construction financing would have helped complete the project financing package.
  - Another irrigation district hydropower developer is considering 1-2 projects and has repeatedly asked about options for incentive payouts including early payment or loans.
  - We examined these projects and consider them viable but for the lack of construction financing. The project owners and developers were experienced and well-organized, and the projects have cash flows to support long-term debt.
  - We have had positive results as we have provided more targeted support services up front over the past few years (up to $40,000), and have seen some complex projects move through development. However, these same projects are still being stopped by lack of financing.

- Energy Trust has also seen projects we would not consider financially viable even if our incentive dollars were used for construction expenses. These projects have not passed our due diligence review and we advised developers to rework their design or funding structure.

Discussion

- Staff would like to proceed with a pilot-scale initiative with limited budget and time to test whether Energy Trust can effectively address this problem. Given that projects stall for more than just financing difficulties, the pilot would carefully screen projects to eliminate those with challenges other than financing.

- The purpose of the pilot would be to test whether Energy Trust can increase the volume and pace of projects by providing above-market-cost construction loans to well-conceived projects with capable management. ,.
- Scope:
  - Construction loans with a portion of the loan forgiven on project completion
  - Projects subject to more intensive due diligence review
  - Two projects (each to exceed $1M total cost and 250kW capacity)
  - Any technology
  - Time frame: 2010 - 2011
  - Incentives limited to: (a) above-market-cost ; and (b) 10% of 2010/2011 incentive budgets, $1.2M cap

- Management:
  - Manage in-house
  - Contract for: (a) Project finance specialist; and (b) Loan servicing and collection
  - Loan review committee: ETO senior staff, external expert

- Budget:
  - Contracts: Legal assistance re: loan documents, project finance specialist, loan servicing and collection $150,000-160,000
  - Loan review committee (senior staff + expert) 4 hours/member

Next Steps

- If the board is willing to entertain projects of this type, staff will begin to identify projects and propose funding for them at future board meeting(s).

Figure 1

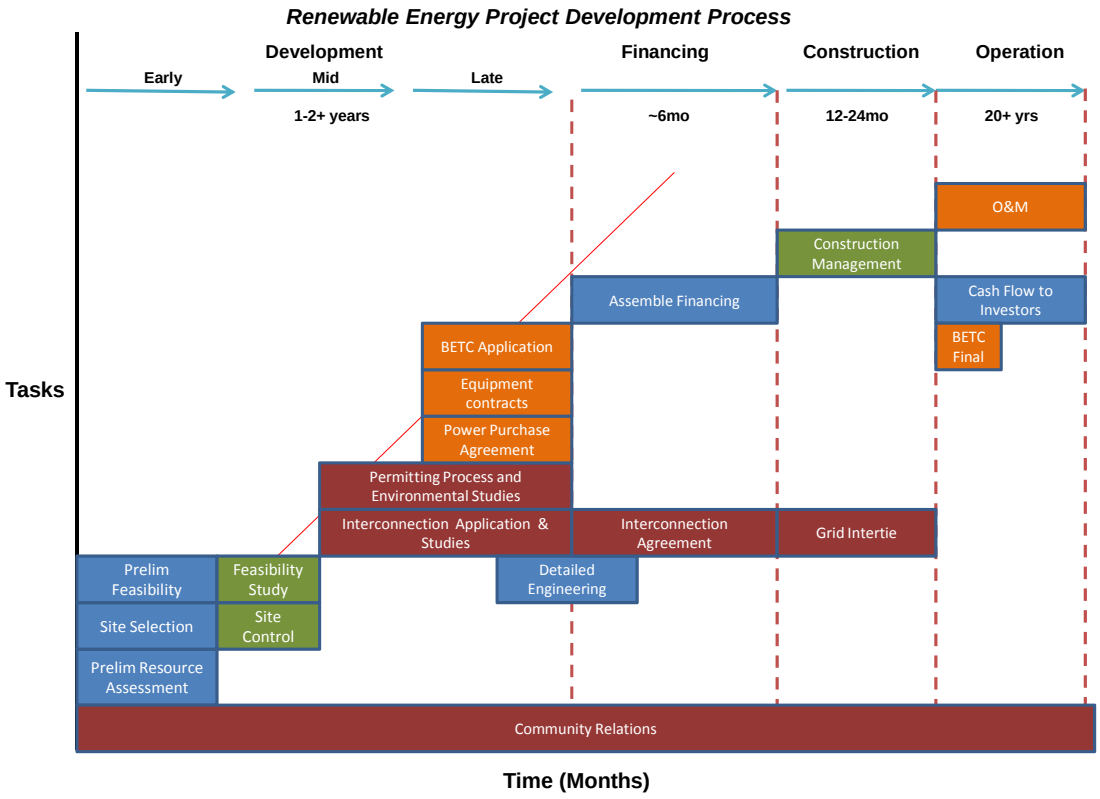
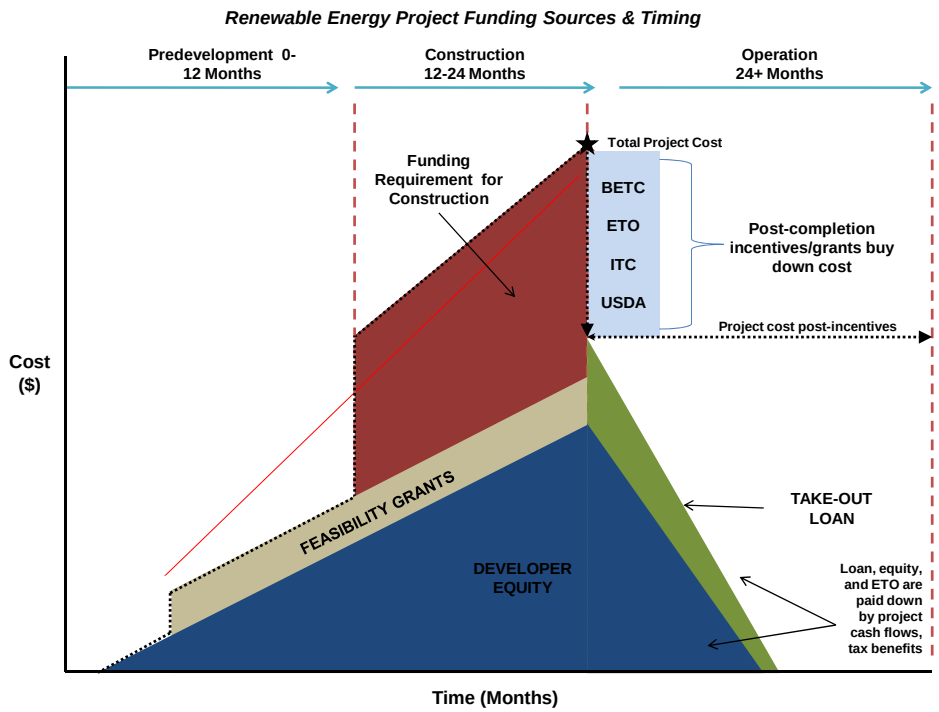
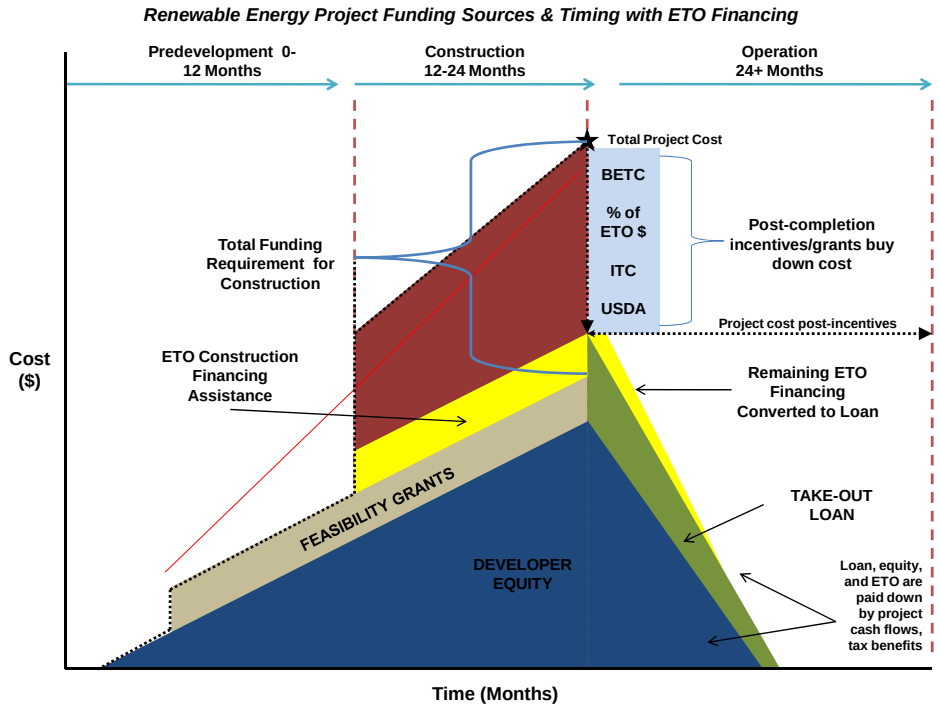

Renewable Energy Project Development Process
Development
Financing
Construction
Operation
Early
Mid
Late
1-2+ years
~6mo
12-24mo
20+ yrs
Tasks
O&M
Construction Management
Assemble Financing
Cash Flow to Investors
BETC Application
BETC Final
Equipment contracts
Power Purchase Agreement
Permitting Process and Environmental Studies
Interconnection Application & Studies
Interconnection Agreement
Grid Intertie
Prelim Feasibility
Feasibility Study
Detailed Engineering
Site Selection
Site Control
Prelim Resource Assessment
Community Relations
Time (Months)

Figure 2

Current timing of incentives:



Proposed timing: