

# **A Financial Model for Evaluating Projects with Performance Contracts**

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# Introduction

- The Financial Task Force was formed in Brazil in 2001
- Purpose of the FTF
- Organizations supporting the FTF
- The Financial Modeling Tool
  - Provided by Econergy (EIC)
  - For use by the Brazilian Financial Task Force (FTF) finance team
  - The purpose of the model is to aid the FTF in developing and evaluating financially viable energy efficiency projects in Brazil as part of its program administered by IBMEC.

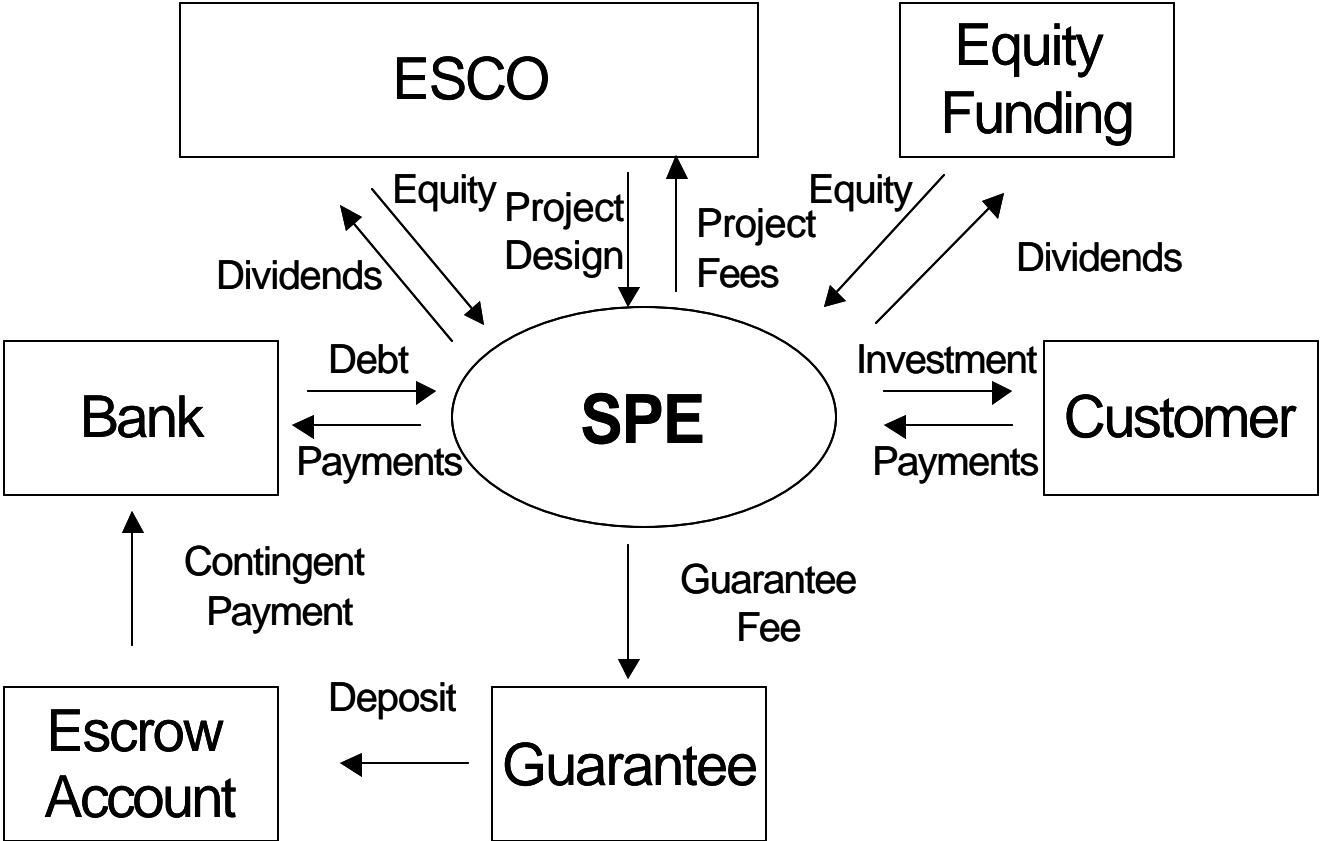
# The Brazilian Context

- In 2003 Brazil possesses approximately two dozen firms that can fairly characterize themselves as ESCOs.
  - Some have experience in the application of performance contracting.
- Third party “financial guarantee” is necessary to make financing available for performance contracting.
- Most banks require adequate guarantees in excess of the loan amount.
  - A minimum of 150% of the loan amount would have to be guaranteed.

# The Guarantee Issue

- The FTF has considered several possible financial structures.
  - Fundo de Aval exclusively for energy service companies
  - Equity fund exclusively for energy service companies
  - SuperESCO structure that provides a third party “leasing” approach to ESCO development.
- No single consensus
- In the April International Roundtable, the FTF finance team recommended the use of a SPE (Special Purpose Entity).

# SPE



# Advantages of an SPE

- ESCO as the third-party guarantor
- It allows any third party “equity fund” to invest with a clean investment structure.
- It reduces the risk for several of the other participants
  - It removes the project revenue stream from the ESCO balance sheet.
- The recommendation is to proceed with the SPE approach for the first few projects.
  - Transaction costs to set up an SPE will be minimal compared to the overall due diligence to make these first few projects finance worthy.

# Review of the Financial Model

- Dynamic Excel spreadsheet which characterizes the full financial parameters of an energy service project.
- The model will provide: NPV, IRR, Income Statement, Balance Sheet and amortization table, which allows the user to see if the project is viable for all parties.
  - Key financial information on the customer
  - Key financial information on the ESCO as a guarantor of the project performance
  - It allows the user to plug in a cost for a third party guarantee
  - It allows for third party equity to be infused into the SPE and shows the equity investor a projected yield on its return

# Possible Funding Sources

- There is little in the way of financial choices in Brazil
- Commercial banks are interested in new industries but are reluctant to participate.
- Some form of intermediation is required to prompt commercial lenders to participate.
- Equity funds have been seen as an alternative financing source.
  - Sumitomo
  - Clean Tech Fund
  - CAF
- Pension funds might be interested in performance contract financing.



# Use of Financial Guarantees

- The structure proposed by the FTF provides three natural “guarantors”
  - The customer
  - The ESCO
  - The third guarantor could be provided by a separate financial facility interested in supporting an ESCO activity such as FGPC and FAMPE.

# Risks and Mitigation Strategies

- Country Risk
  - Short-term payback projects
  - Financial screening
- Inflation
  - Coordination between the sales and engineering teams
- Environmental Risks
- Performance and Persistence Risk
  - SPE needs to calculate how changes in operation can affect the facility's energy use prior to the retrofit.
- Contractual Liability
  - Insurance Provisions

# Risks and Mitigation Strategies (cont)

- Currency, Inflation and Interest Rate risk.
- Sponsor Risk
- High transactions costs
- Long lead times
  - The SPE should have an adequate cash reserve to ensure project success.
- Savings guarantee

# Brazilian Performance Contract Issues and Recommendations

- The “Guaranteed Financing” is the preferred structure in USA and Europe.
- The “Shared Savings” structure.
- The financing of the project as an operating lease.
  - ESCO is the lessor.
- Which style or structure should be used for an ESCO contract?

# Conclusions

- The FTF financial team should to proceed with the application of the SPE model.
  - The SPE can receive guarantees from the customer, the ESCO or from third party sources.
  - Equity funds can be tapped to invest in a project to create greater comfort for a lender.
- Use the Financial Modeling Tool in the evaluation of the proposed projects for financing.
  - Provide the model to applicants to the FTF.
- The FTF should publish a series of performance contract models that interact with the Financial Modeling Tool.