

PRESENTATION FOR
ACEEE
ENERGY EFFICIENCY
FINANCE FORUM
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COST EFFECTIVENESS TESTING **OF FINANCING PROGRAMS**

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DUNSKY OVERVIEW



EXPERTISE



EFFICIENCY



RENEWABLES



MOBILITY

SERVICES



ASSESS
opportunities



DESIGN
strategies



EVALUATE
performance

Governments • Utilities • **CLIENTELE*** • Private firms • Non-profits



* selection of clients

WHAT IS IT, AND WHY DO I CARE?



- **Cost-Effectiveness Tests** assess the ratio of: $\frac{\text{Present Value of Benefits}}{\text{Present Value of Costs}}$
- **Three test, three perspectives**
 - ▶ **Global:** Total Resources Costs Test or Societal Cost Test (TRC or SCT)
 - ▶ **Utility:** Program Administrators Cost (PAC)
 - ▶ **Participant** Cost Test (PCT)
- **Why its important for Financing programs?**
 - ▶ Used to measure the economic merits of a program
 - ▶ Applied as screens for rate-payer supported programs
- **Today's Question:** can cost-effectiveness test fairly be applied to financing, and if so under what circumstances and by what methods?

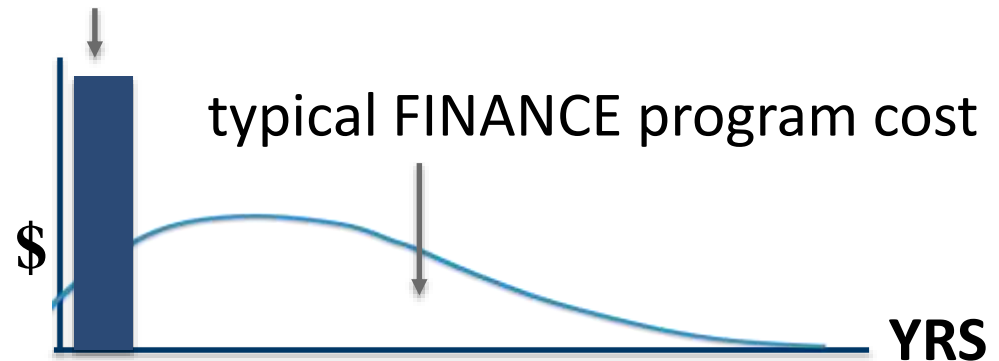




Fundamental differences between finance and incentives

1. TIME

typical INCENTIVE cost



2. SCOPE: Includes additional factors such as participant interest rate reductions and non-energy investments.

To help the CPUC address this challenge, in 2014 Dunsky prepared an CE framework tailored for financing



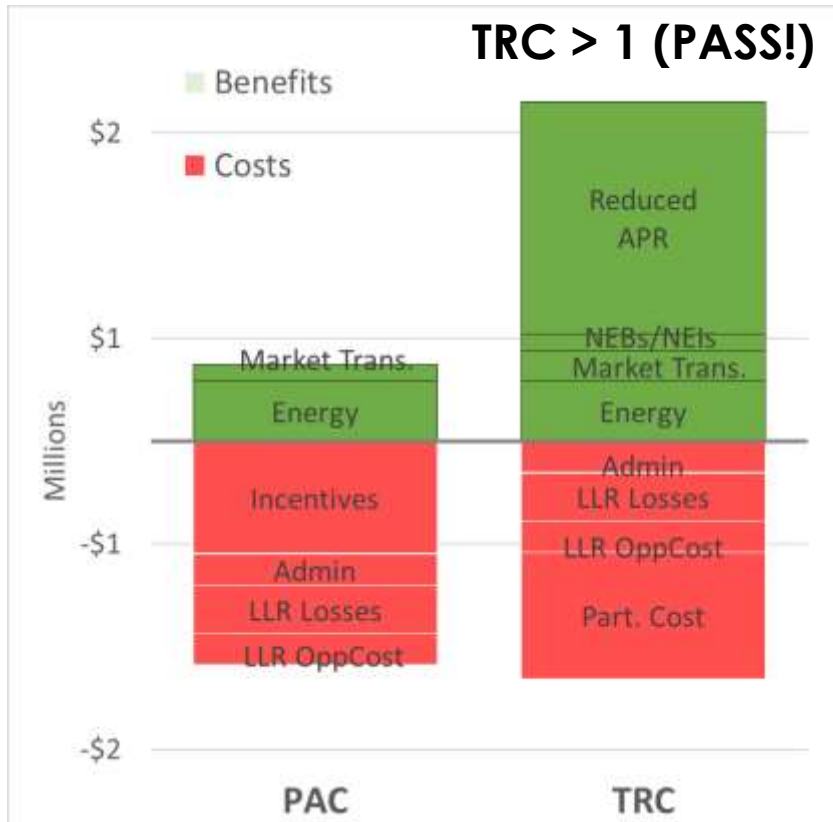
OBJECTIVES

- **Apply financing-specific CE framework** and compare with current Standard Practice Manual (SPM) interpretation
 - Non-energy investments (benefits)
 - Reduced interest rates (APR benefits)
 - Loan Loss Reserve costs/losses
 - Applied TRC and PAC
- **Compare cost-effectiveness of financing + incentives** versus the incentive alone.
- **Test cost-effectiveness sensitivity** to key metrics that may change over time (post program year) or require interpretation.
- **Identify implications for other financing programs** determining when and how cost-effectiveness testing may be appropriately applied.

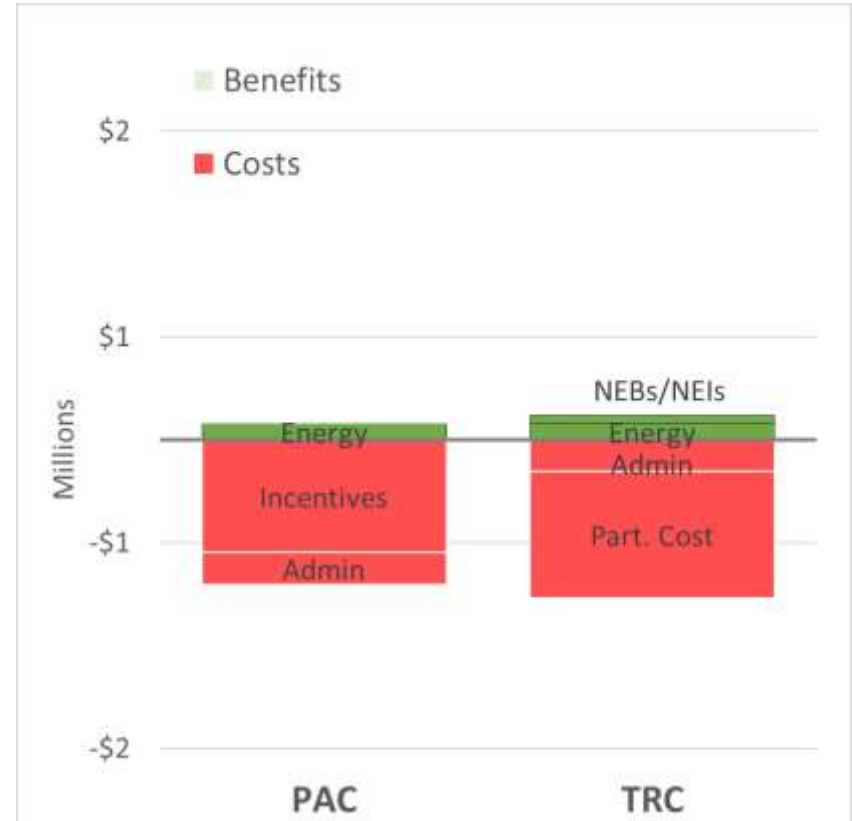


FINANCING VS INCENTIVES

Financing + Incentives proved to be much more cost effective than incentives alone for the Regional Financing Pilot participants.



Financing + Incentives

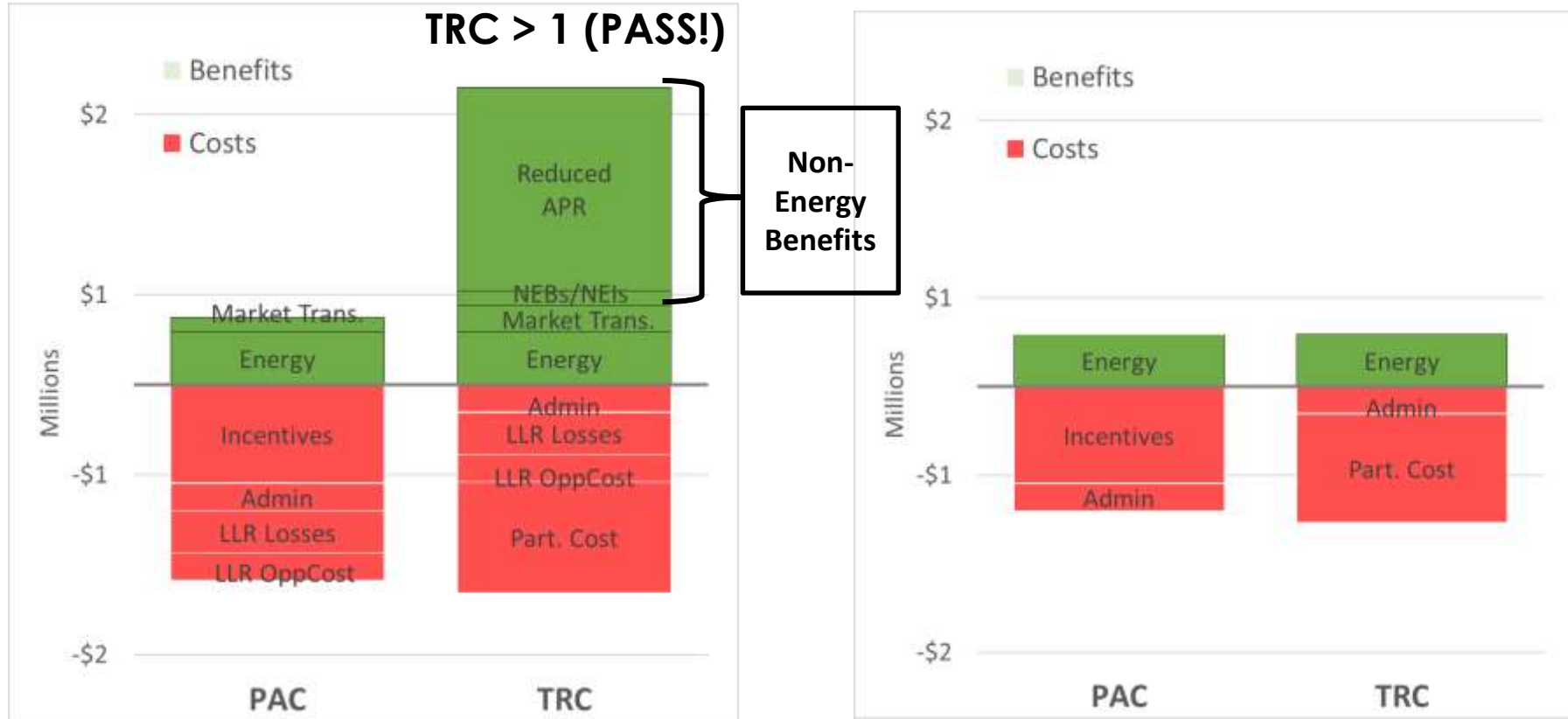


Incentives alone

FINANCING-SPECIFIC FRAMEWORK



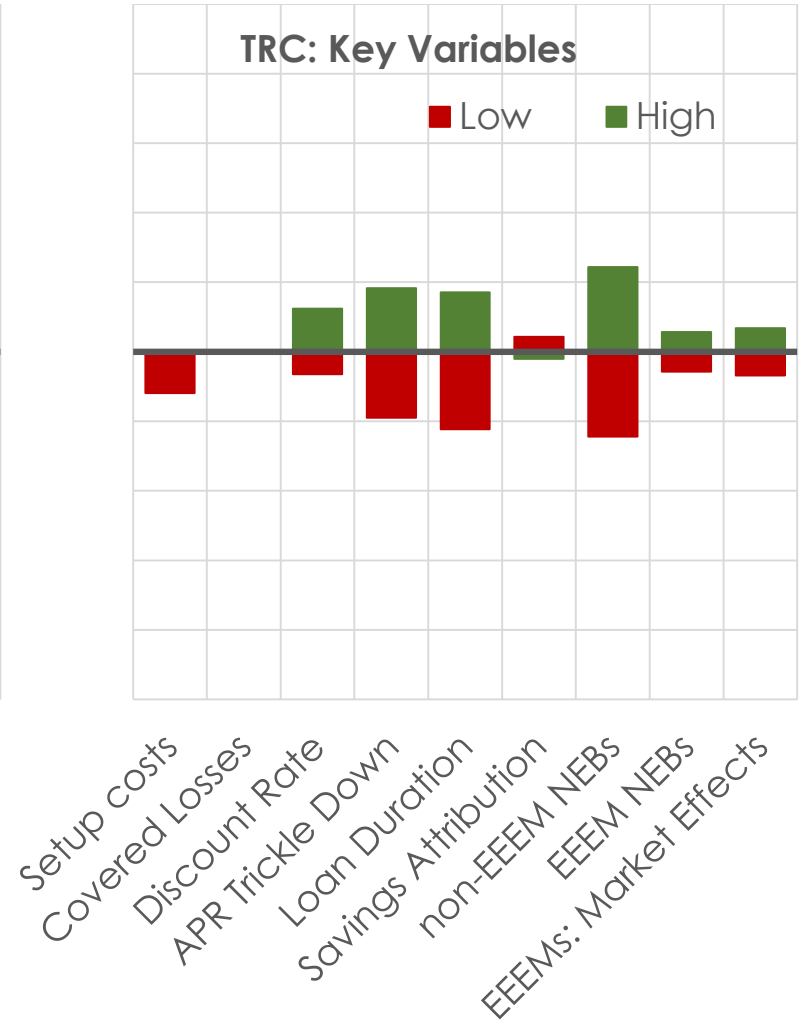
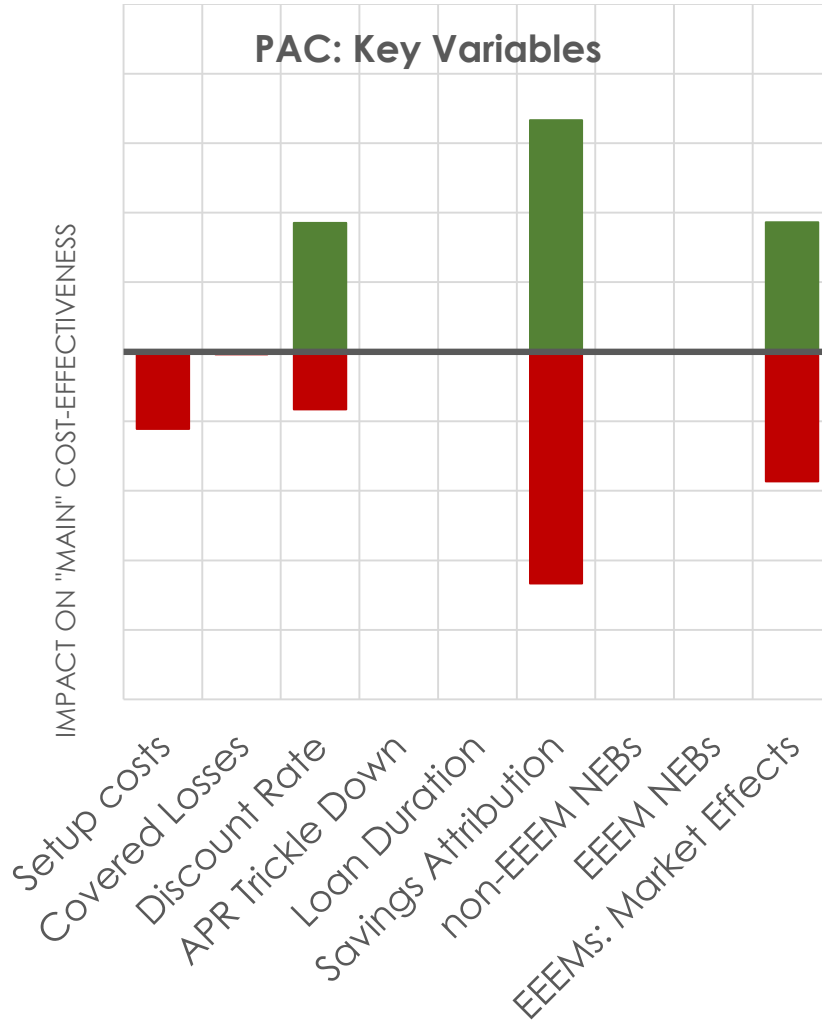
Non-energy (financial) benefits far outweigh the energy benefits under TRC allowing Financing + Incentive program combination to Pass the CE test.



Financing-Specific CE Framework

Standard Framework (CA SPM)

CE TEST SENSITIVITIES





- Whenever possible assess CE of Financing *together* with Incentives.
- Financing can be tested independently only when there are participants who took only financing but no incentives (e.g. no incentives offered)
- Where Financing is included in CE testing

Program Type	Non-Energy Investments/Benefits	APR Reduction	Early or Non Repayment
Interest Rate Buydown	Yes	No	No
Direct lending (or co-lending)	Yes	Maybe	Yes
Loan Loss Reserve (Guarantees)	Yes	Yes	Yes

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