

A Straw Proposal:

Market Transformation, Codes and Standards, and the Attribution Dilemma

Savings Attribution Sub-MTWG Meeting

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Overview

- **Problem Statement**
- **Proposed Path Forward**
- **Conclusion**

Problem statement: “All savings and all costs” are not being captured in the Rolling Portfolio

- The paper lays out the history of codes and standards as well as the development of the energy attribution model for the statewide IOU Codes and Standards Program that was adopted by the CPUC
- Successes in Codes & Standards raises code baselines, and impacts savings potential for incentive programs. In 2005, CPUC agreed to count C&S savings in order not to have to cancel incentive programs due to portfolio-level cost effectiveness. Over time, the proportion of C&S savings that “counted” has gradually decreased.
- Incentive programs currently do not receive recognition for any contribution to widespread market changes (including MT and C&S)
- Attribution is not being awarded appropriately in the current Rolling Portfolio between C&S and incentive programs. The same attribution problems would face MTIs. MTIs may exacerbate attribution problems
- Attributing only energy savings do not necessarily capture all program participant, ratepayer, and societal benefits such as GHG reduction, grid impacts, long-term change in customer attitudes/behavior, etc.
- Just because it’s not called “market transformation”, it doesn’t mean incentive programs do not have market effects that persist

Proposal: Recognize all savings and all contributions to MT/C&S

- 1) Align and coordinate impact evaluations
 - Impact evaluations are done in silos, risking double-counting (small savings) and savings left on table (large savings)
 - Start with baselines: IOU C&S evaluations uses different baseline for savings than IOU incentive programs
 - The C&S program baselines use previous code levels. Adjustments include program influence and NOMAD which are not rigorously determined and subject to differing opinions
- 2) Remove conflicts: Need to address different cost-effectiveness tests, currently more stringent for incentive programs
 - Warren-Alquist Act/CEC code proposal requirements (participant facing test)
 - CPUC impact evaluation of Codes and Standards Program (TRC)
 - CPUC Fuel Substitution Test for incentive programs
- 3) Current evaluation methods don't capture all savings and all costs.

Note: Discussion of savings attribution between MTIs and Rolling Portfolio programs are by definition moot if MTIs target non-cost effective savings (i.e., not in Potentials and Goals study)

Conclusion

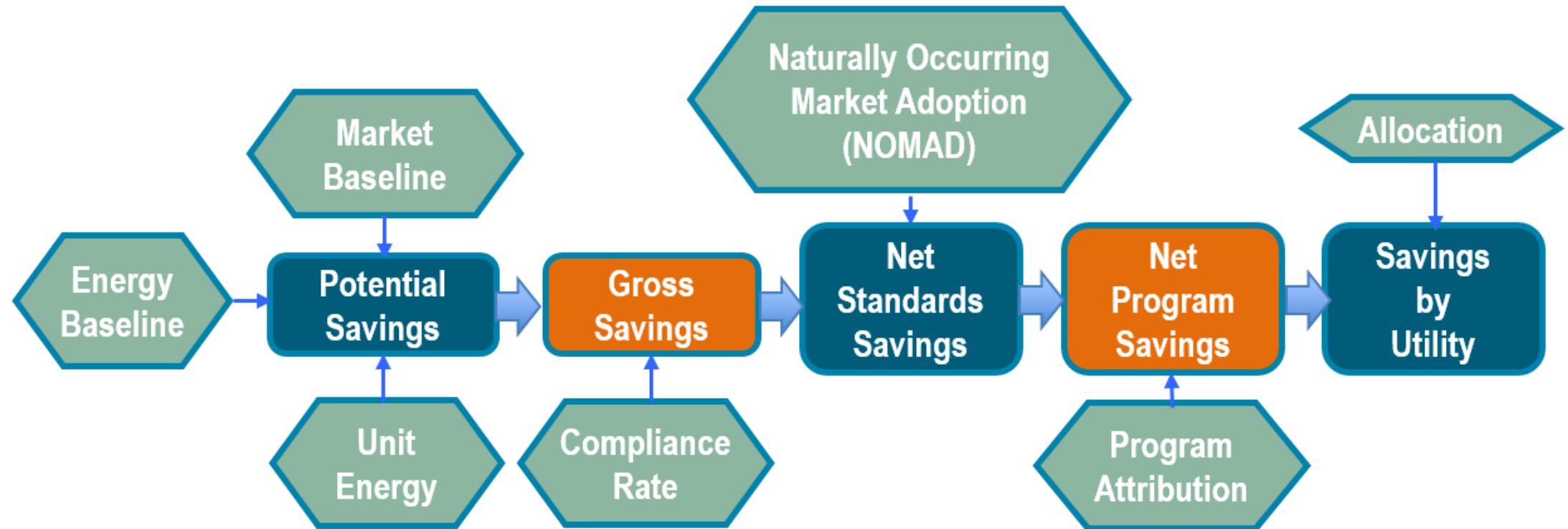
- David Goldstein (Goldstein, 1993) summarized the need for an integrated, holistic top down attribution model:

“An interesting consequence of the synergy between DSM and standards is that, over the long run, it may be impossible for program evaluators to establish what fraction of the efficiency potential was realized through DSM and what fraction through building codes. For example, if a DSM program achieves a steadily increasing market share over a 3-year cycle, allowing standards to be promulgated at that level in the fourth year, can the savings from the standard be attributed to the DSM program?...The potential savings from DSM, as distinguished from other policy mechanisms, can therefore never be pinned down, either prospectively or after they have occurred. Program planners must be satisfied with the understanding that DSM can be part of a coordinated energy policy that can define and achieve the technical potentials.”

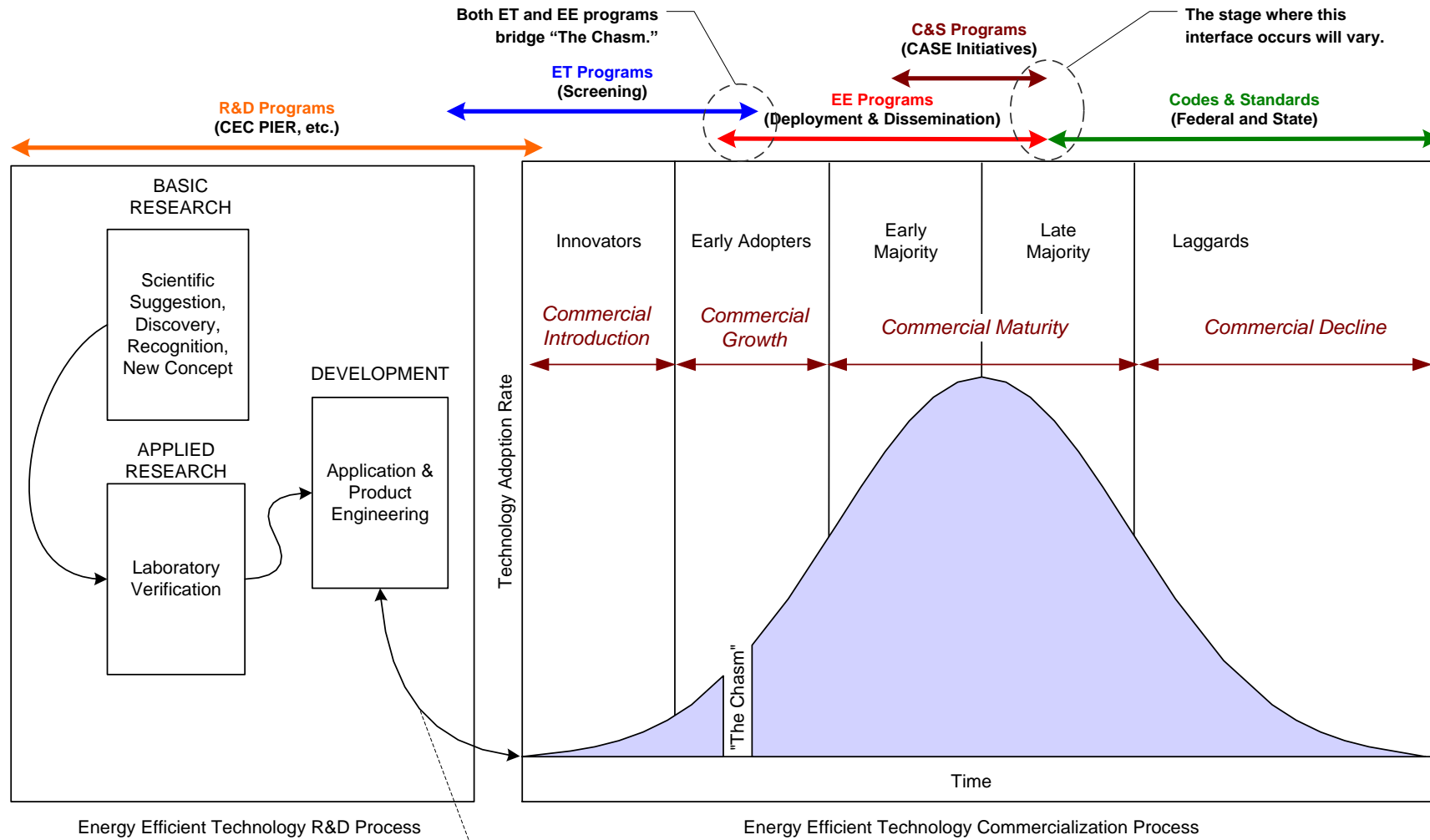
- A rising tide lifts all boats: “The Joint IOUs argue that current cost-effectiveness requirements are too restrictive, not allowing the codes and standards programs to claim savings. They advocate that the Commission modify the regulatory and evaluation framework for calculating and claiming savings from codes and standards advocacy activities, and then incorporate this into the market transformation framework.” D.19-12-021 p. 68

Backup Slides

C&S Program Energy Savings Attribution Model



Technology Diffusion Curve



--- New technologies and applications may cycle between Product Engineering and Commercial Introduction several times until the correct mix of features, performance, price, availability, etc. are reached. Degree of failures and risk are high.

Technology Innovation Cycle

