

A Market Transformation Framework

Recommendations and Approaches in California

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Presented at the 2019 ACEEE National Conference on Energy Efficiency as a Resource

Background: California's Key Energy Policy

Senate Bill 350 - Clean Energy and Pollution Reductions Act of 2015

- Set aggressive goals to reduce GHG emissions that continues to guide the state's energy policy
 - Requires **doubling of Energy Efficiency (EE) savings** from electricity and natural gas end-uses by 2030
 - Increase **Renewable Requirements** from 33% by 2020 to **50% by 2030**
 - Sets a target for **40% economy-wide GHG emissions reductions** from 1990 levels by 2030
- Doubling Energy Efficiency Remains Key
 - Reduces the need for new power plants and new or upgraded T&D infrastructure
 - Creates headroom for load growth associated with building and transportation electrification
- Innovative markets solutions are needed to expand EE efforts
 - Harness emerging technologies and progressive program designs
 - Resource Acquisition and Market Transformation



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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

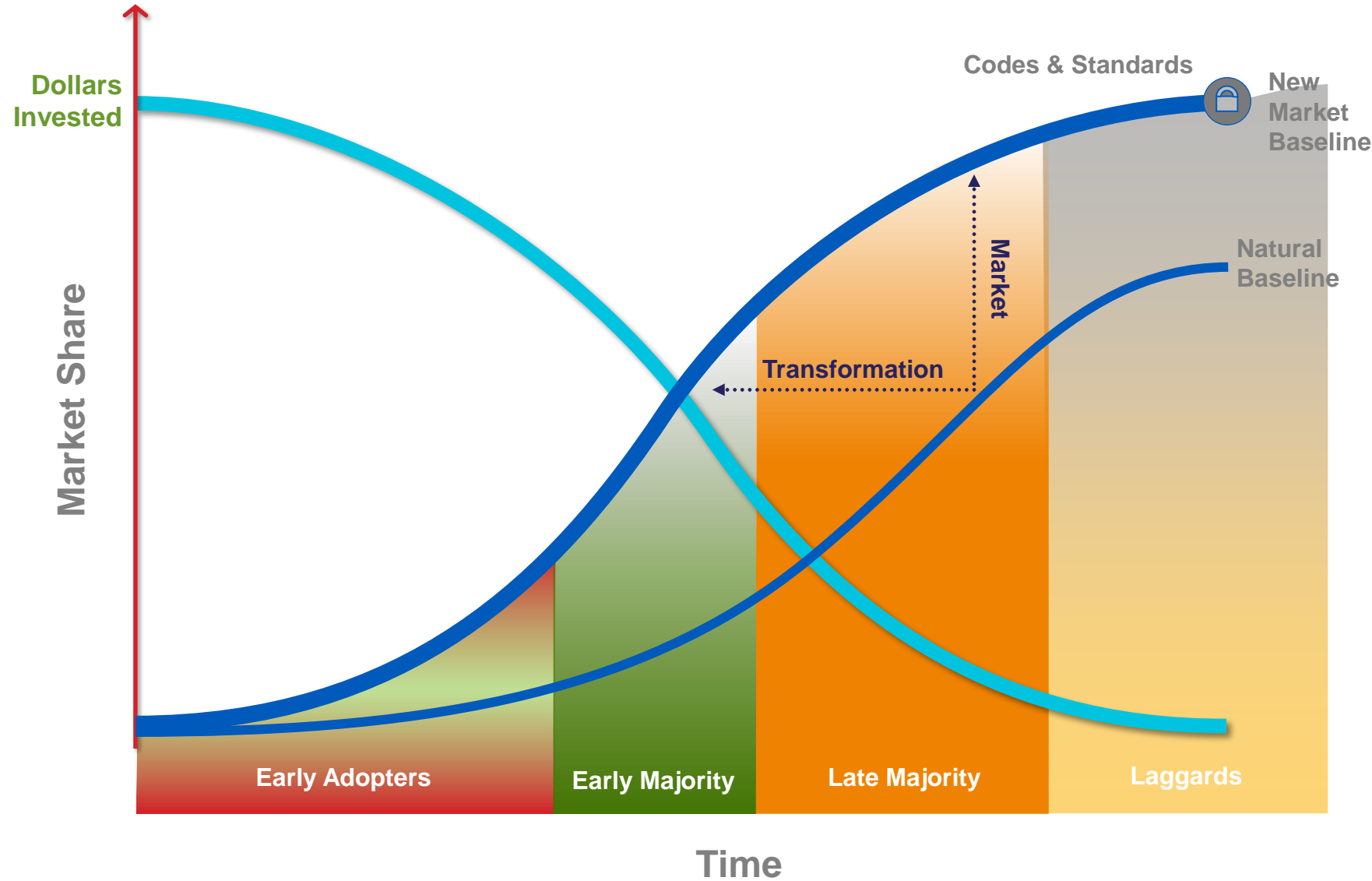
Order Instituting Rulemaking Concerning
Energy Efficiency Rolling Portfolios,
Policies, Programs, Evaluation, and Related
Issues.

Rulemaking 13-11-005

**ADMINISTRATIVE LAW JUDGE'S RULING SEEKING COMMENT ON
MARKET TRANSFORMATION STAFF PROPOSAL**

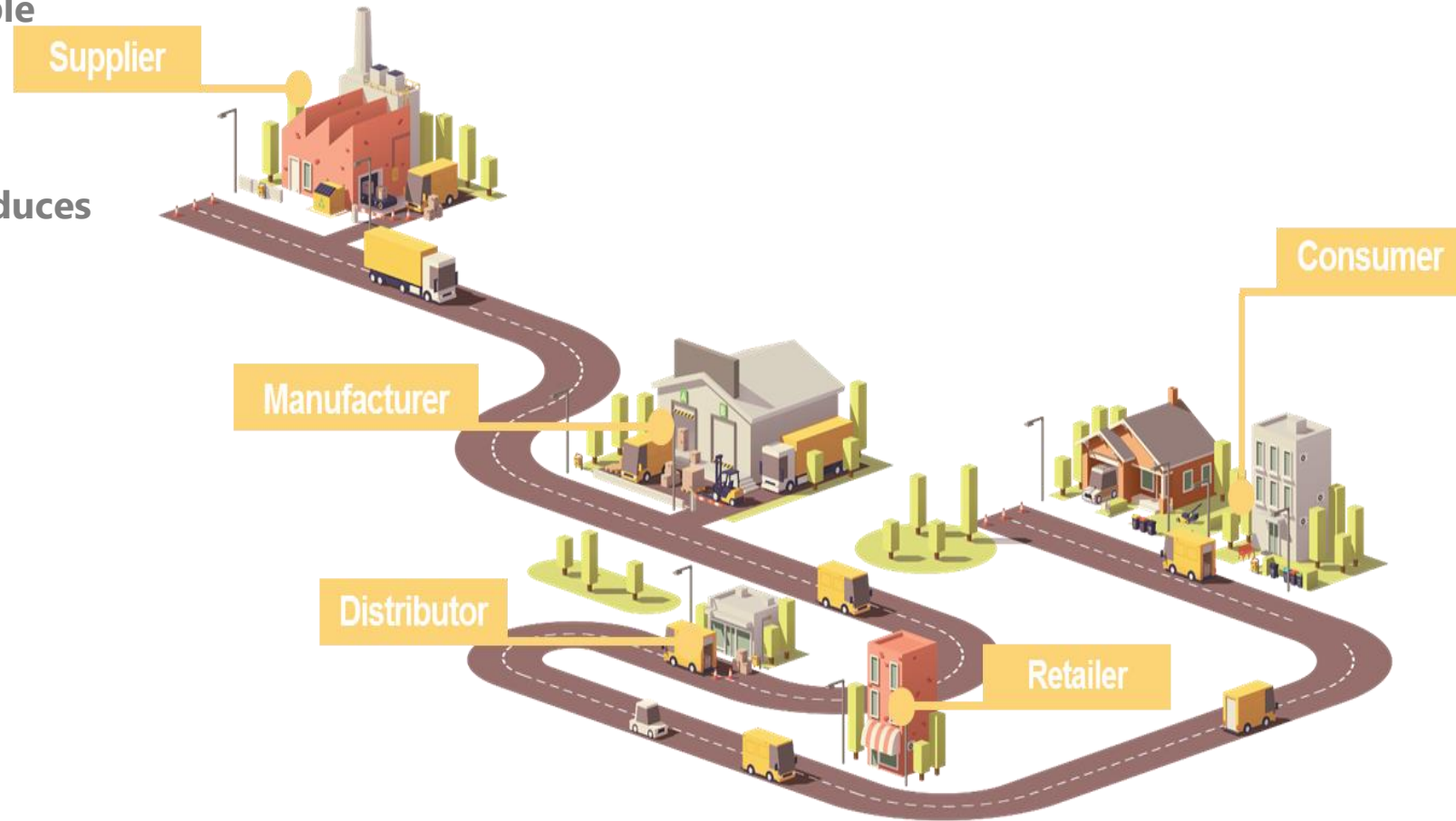
Market Transformation - An Intervention Strategy

Market Transformation is the **strategic process** of **intervening in the market** to create **lasting change** in market behavior by removing identified barriers and/or exploiting opportunities to accelerate the adoption of all cost-effective energy efficiency as a matter of standard practice



Market Transformation and Resource Acquisition

- **Resource Acquisition (RA) produces near-term savings as reliably and predictably as possible**
 - Buying savings one kWh at a time
 - Financial incentives play a central role
 - Focus tends to be on annual savings
- **Market Transformation Initiatives (MT) produces sustained increases in the adoption of EE technologies and practices**
 - **Whole** market perspective. Wider range of marketing approaches
 - **Focus** on long-term outcomes (5-10yrs)
 - **Design** grounded in barriers and opportunities
 - **Sustained** market change
 - **Leverage** points and natural market forces
 - **Measured** by market progress
 - **Adaptively** managed as markets change



Source: Northwest Energy Efficiency Alliance

How To Operationalize and Implement MT

- The Market Transformation Working Group (MTWG) was **initiated to develop a joint market transformation (MT) framework proposal** for submission to the California Public Utilities Commission (CPUC) in Rulemaking 13-11-005
- The **recommendations** within the report were **made by consensus of the 18 MTWG Member Organizations** except where multiple options were presented for MT Administration and the Cost Effectiveness Thresholds for MT initiatives.

Member Organizations

- California Efficiency + Demand Management Council (CEDMC)
- Resource Innovations
- Center for Sustainable Energy (CSE)
- San Diego Gas & Electric (SDG&E)
- CLEAResult
- Sheet Metal Workers Local 104
- Coalition for Energy Efficiency (CEE)
- Small Business Utility Advocates (SBUA)
- CodeCycle
- Southern California Gas Company (SoCalGas)
- Energy Solutions
- Southern California Regional Energy Network (SoCalREN)
- Natural Resources Defense Council (NRDC)
- Southern California Edison (SCE)
- Pacific Gas and Electric (PG&E)
- The Energy Coalition
- Public Advocates Office
- The Utility Reform Network (TURN)

Ex Officio/Resource Members

- California Energy Commission (CEC)
- Northwest Energy Efficiency Alliance (NEEA)
- California Public Utilities Commission (CPUC)

Market Transformation Framework Recommendations

Recommendation 1: An operational framework is needed

Recommendation 2: Initiatives should conform to a set of principles, guidelines, & operational strategies

Recommendation 3: Stakeholder roles & responsibilities must be defined

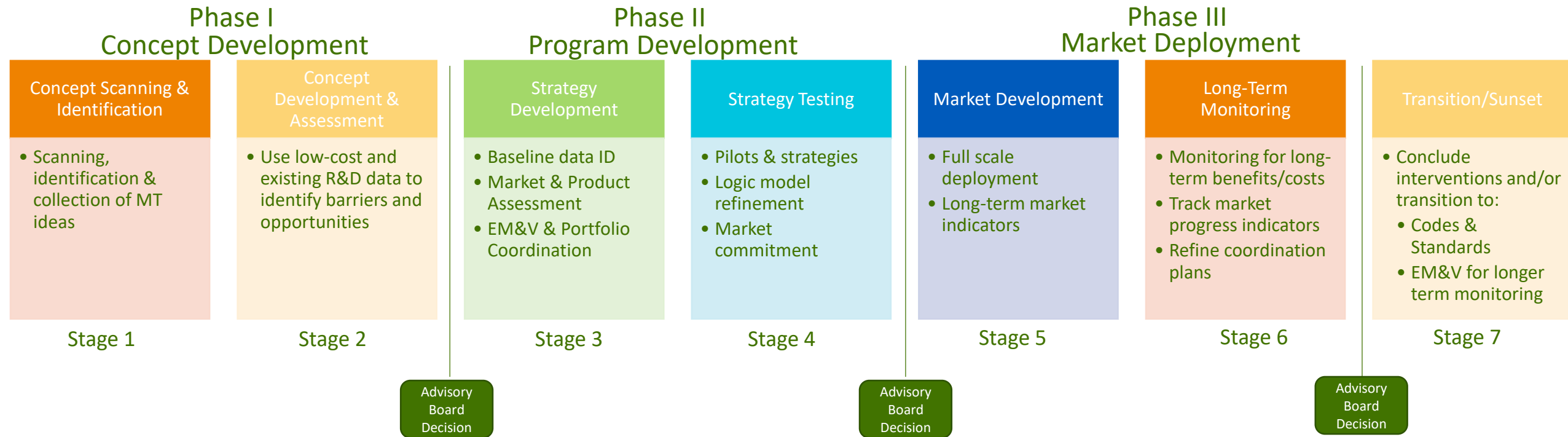
Recommendation 4: Budget checkpoints are needed

Recommendation 5: Cost-Effectiveness (CE) should be analyzed using a much longer time frame

Recommendation 6: MT must be carefully coordinated with RA efforts

Recommendation 1: Operational Framework

Market Transformation Stage-Gate Process



Recommendation 2: MT Initiative Principles and Guidelines

MT initiatives should conform to a set of high-level principles

- Drive incremental savings
- Be cost-effective
- Use a stage-gate process

MT initiatives should include guidelines on how to implement the intent of the high-level principles

- MTIs should not be limited to technologies
- MTIs should have timely feedback and evaluations
- MTIs should be vetted in a transparent way and include stakeholder, community, and potential participant feedback processes as applicable

*Some principles may not be applicable to each and every MTI

Recommendation 3: Stakeholder Roles & Responsibilities

- **Market Transformation Administrator(s) or MTA(s):** The entity responsible for overseeing the stage-gate process
 - **Option 1:** Administration by the Existing Program Administrators (IOUs), or
 - **Option 2:** Administration by a Single, Independent Statewide Administrator
- **Market Transformation Advisory Board or MTAB:** Advises MTAs and provide recommendations
- **Initiative Review Committee(s) or IRC(s):** A group of technical advisors assembled (if needed) for specific MTIs
- **Solicitation Advisory & Support** (if needed)
 - Procurement Review Group(s)
 - Independent Evaluator(s)

Recommendation 4: Budgets

- Each stage-gate should serve as a checkpoint for further funding authorization
- The budget associated with MTIs should not be predetermined, but instead based on the initiative scope and need
- The budget should be incremental to the currently authorized budgets for existing energy efficiency portfolios

Recommendation 5: MT and RA Coordination

- **Widespread potential for tensions between the two approaches in the absence of coordination**
 - Pressure to generate quick returns may weaken MT initiatives over longer term
 - Desire to maximize reliability of all savings may limit MT strategies
 - RA and MT *can* be used in combination to target the same market, but this requires systematic coordination
- **Identify overlaps early during the process of identification and selection of MTIs**
 - Select MTIs to enhance positive and minimize negative overlaps
- **Stakeholder collaboration is key**
- **Employ a dispute resolution process if necessary**

Recommendation 6: Cost-Effectiveness

The MTWG recommends using the current dual test of the Total Resource Cost Test (TRC) and Program Administrator Cost (PAC) Test with a focus on

- Counting C&S savings*
- Both costs and benefits need to be analyzed using a much longer time-frame than for RA programs
- The net-to-gross methodology.

Option 1: 1.25 Total Resource Cost Test/Program Administrator Cost Test

Option 2: 1.5 Total Resource Cost Test/Program Administrator Cost Test

Thank You

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