

**DOCKETED**

<b>Docket Number:</b>	19-IEPR-06
<b>Project Title:</b>	Energy Efficiency and Building Decarbonization
<b>TN #:</b>	229538-2
<b>Document Title:</b>	Update to the SB 350 Energy Efficiency Doubling Targets
<b>Description:</b>	Presentation by Anne Fisher, California Energy Commission
<b>Filer:</b>	Raquel Kravitz
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
<b>Submission Date:</b>	8/26/2019 10:46:46 AM
<b>Docketed Date:</b>	8/26/2019

# Update to the SB 350 Energy Efficiency Doubling Targets

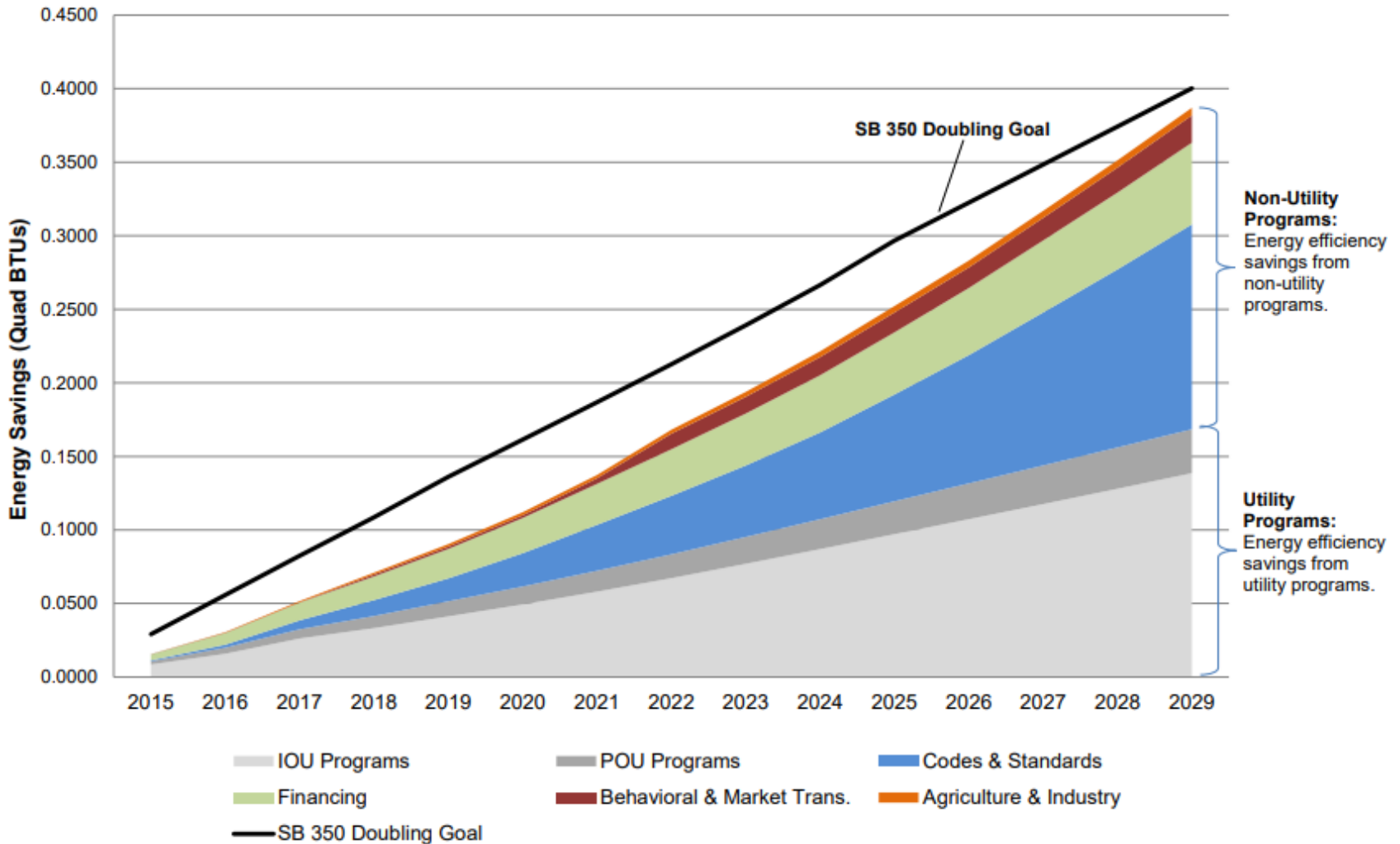
---



Anne Fisher  
August 27, 2019  
California Energy Commission

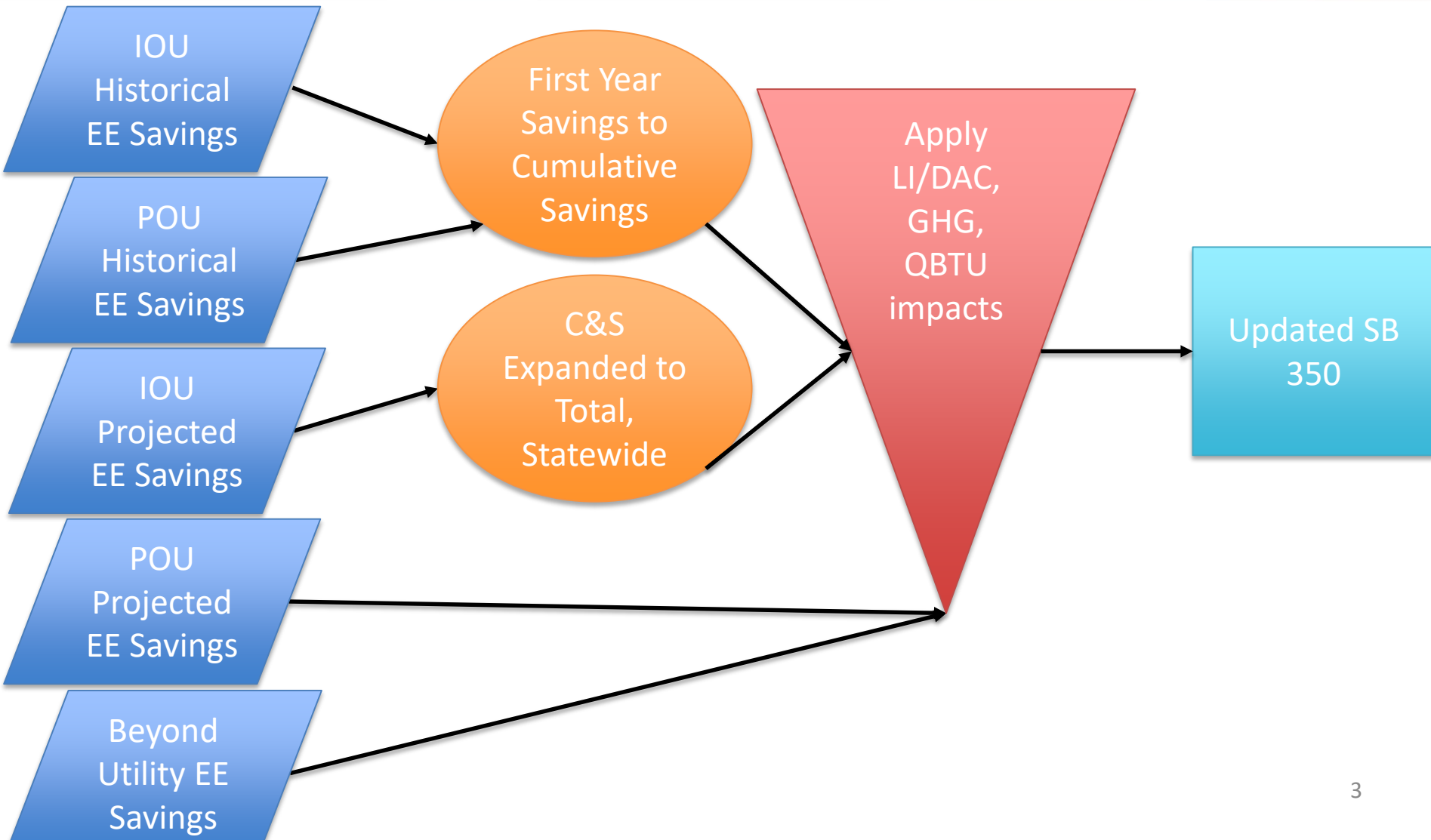


# SB 350 Target Setting- 2017





# SB 350 Data Streams





# Beyond Utility EE Savings Tool

Building Standards (Title 24) Res	PACE
Building Standards (Title 24) Comm	Benchmarking
Appliance Regulations (Title 20)	BRO's
Federal Appliances	Energy Asset Rating
Local Government Ordinances	Smart Meter and Controls
Air Quality Districts	Fuel Substitution
Local Government Challenge	Agricultural
Proposition 39	Industrial
GGRF: Low Income Weather	Conservation Voltage Reduction
GGRF: Water-Energy Grant	Disadvantaged Communities
DGS Energy Savings	Low Income
FCAA	



# Improvements Since 2017

- Industrial and Agricultural Sector Targets added
  - Potential energy savings estimated from activities not funded through utility programs using bottom-up approach
- LI/DAC population impacts added
  - Uses LI/DAC population metrics by utility, program specific modifiers, end-use specific modifiers, LI/DAC technology lag factor to develop LI/DAC savings ratios
- CVR potential savings added
  - Uses a top-down estimate of CVR potential based on regional CVR factors



# Improvements, cont.

- PACE updated savings method
  - Uses savings estimates from an actual PACE program, instead of aggregated data from CAEATFA, which may mix solar PV and EE savings. Broke up energy savings with informed end-use assumptions. Uses more accurate turnover rates to forecast future participation. Once available, we will use savings estimates from a new publication out of LBNL.
- POU Savings updated
  - NTG ratios consistent with IOU EE savings projections
  - High, mid, low POU scenarios examined



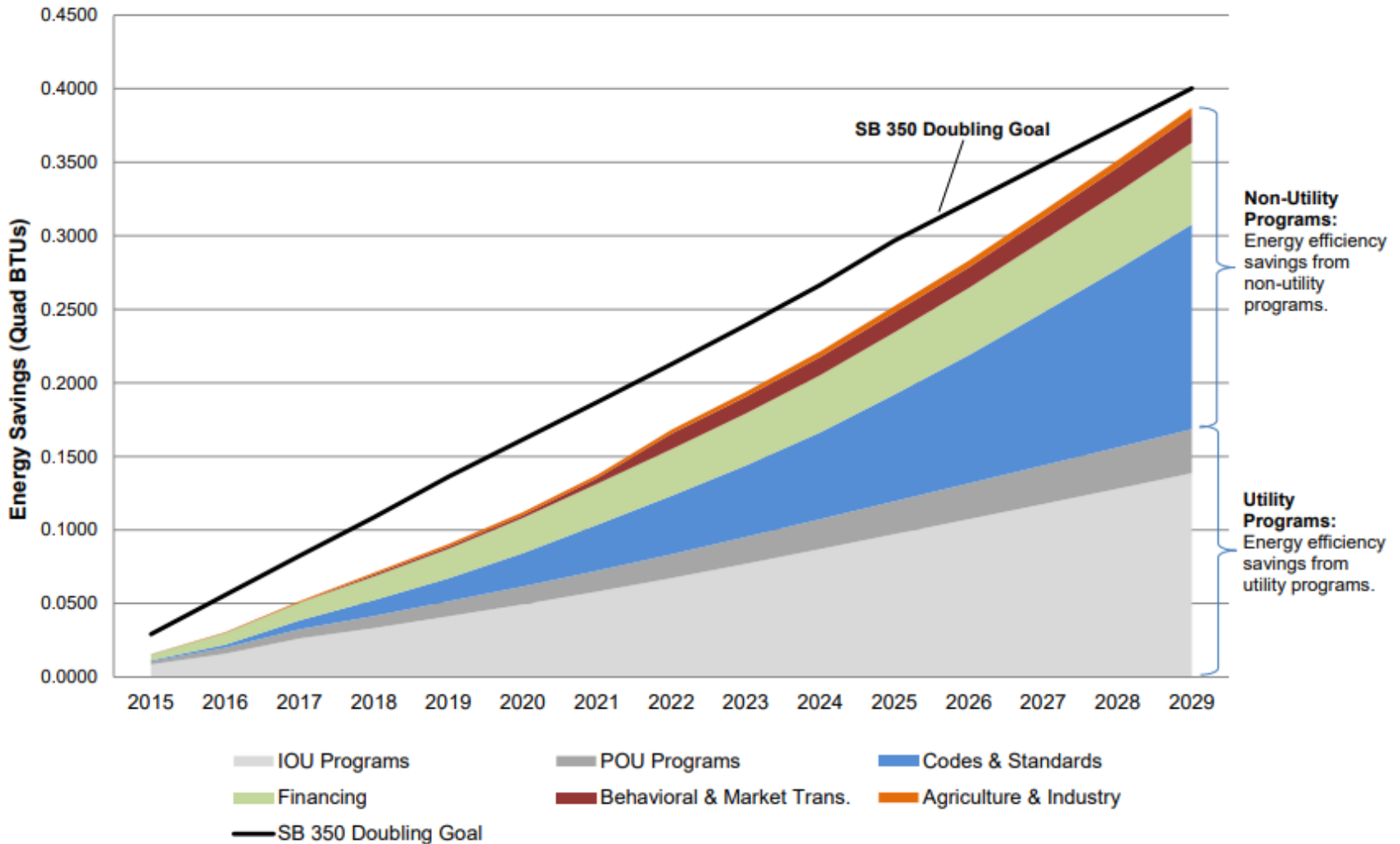
# Work in Progress

- Codes and Standards
  - T24 beyond 2022 code cycle
  - T20 and Federal Appliances
  - Include historical data missing in 2017 analysis
  - Public comment on best ways to scale IOU attributable C&S savings in the Potentials and Goals model
- IOU Projected Savings
  - Ensure they are consistent with adopted CPUC goals



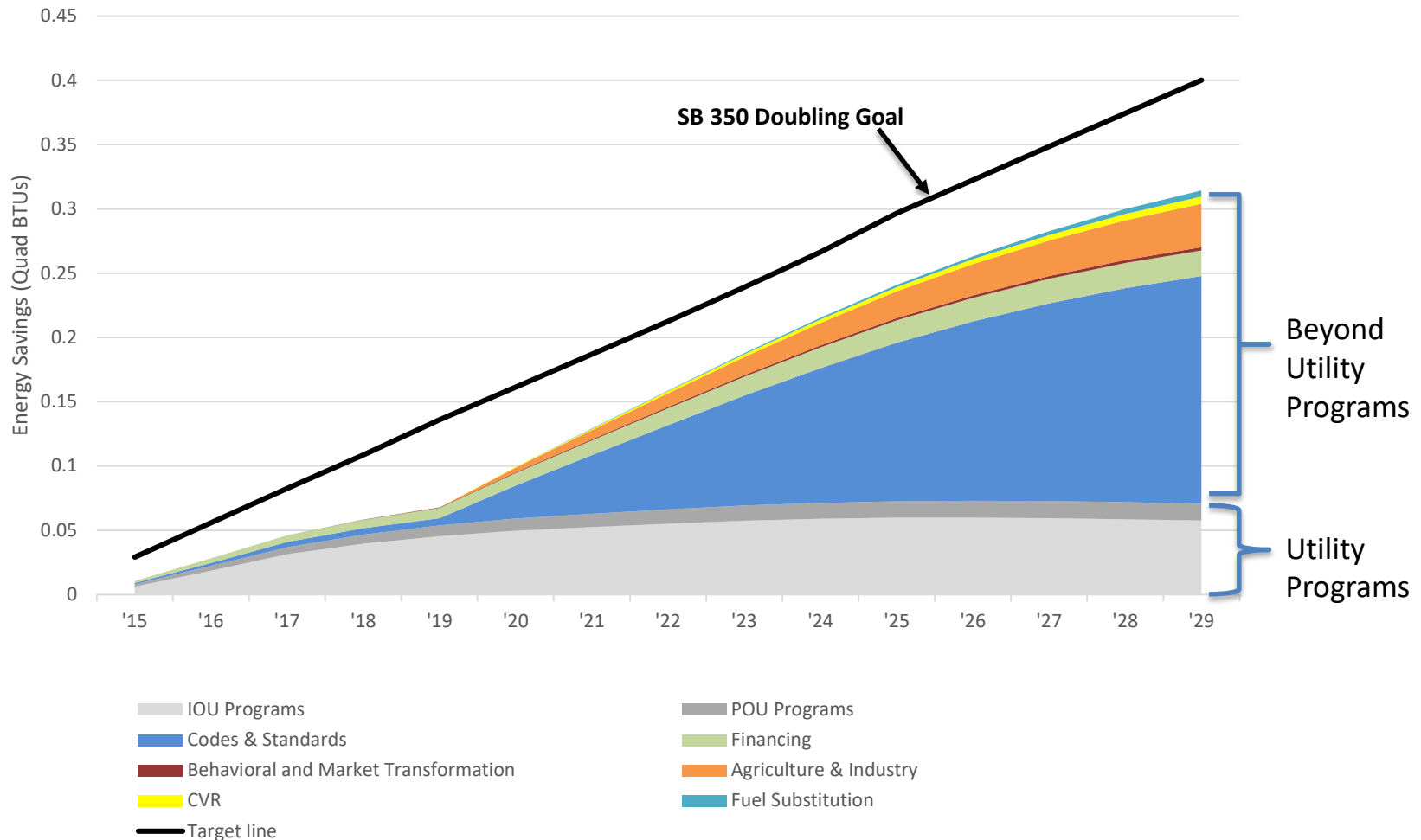


# SB 350 Projections- 2017





# SB 350 Projections- 2019



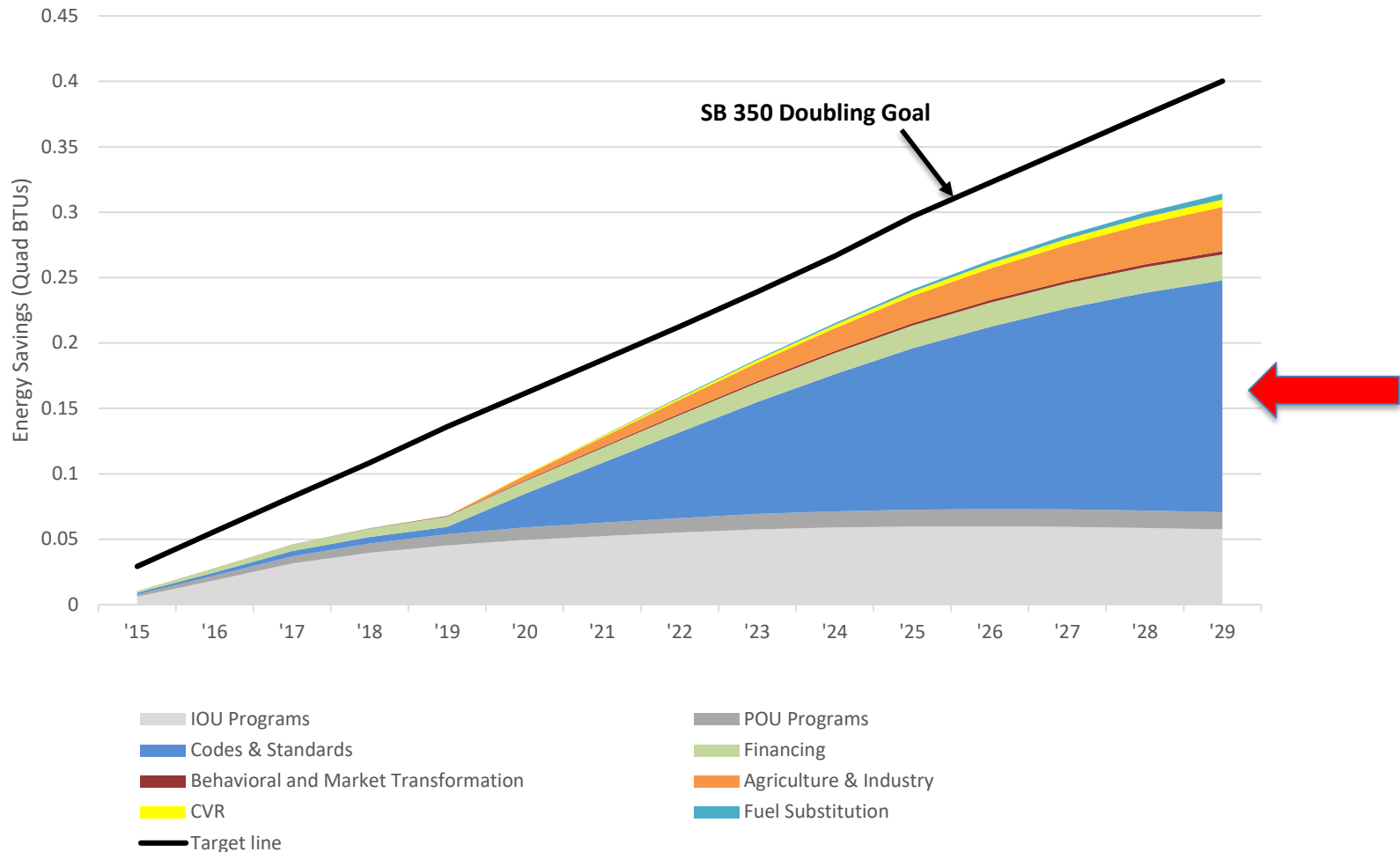


# Trends: 2017 vs. 2019

- Leveling off IOU cumulative potential savings
  - 2020 Potentials and Goals Study vs. 2018 PG Study
- Enhanced Agricultural, Industrial, CVR savings
- Lower PACE projections
- Financing programs adjusted with historical data through 2018
- Reflects actual program performance/adjusted future funding

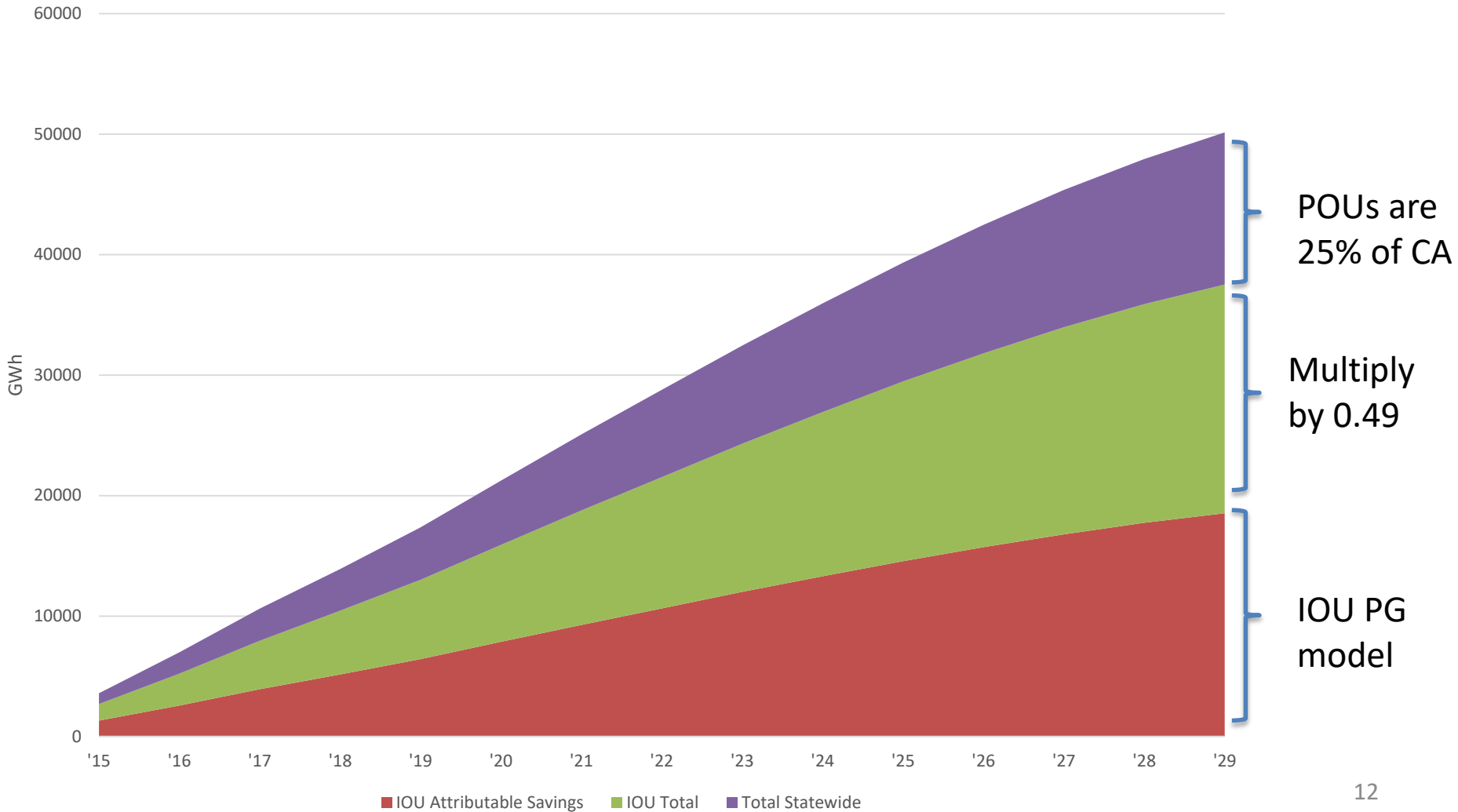


# Codes and Standards



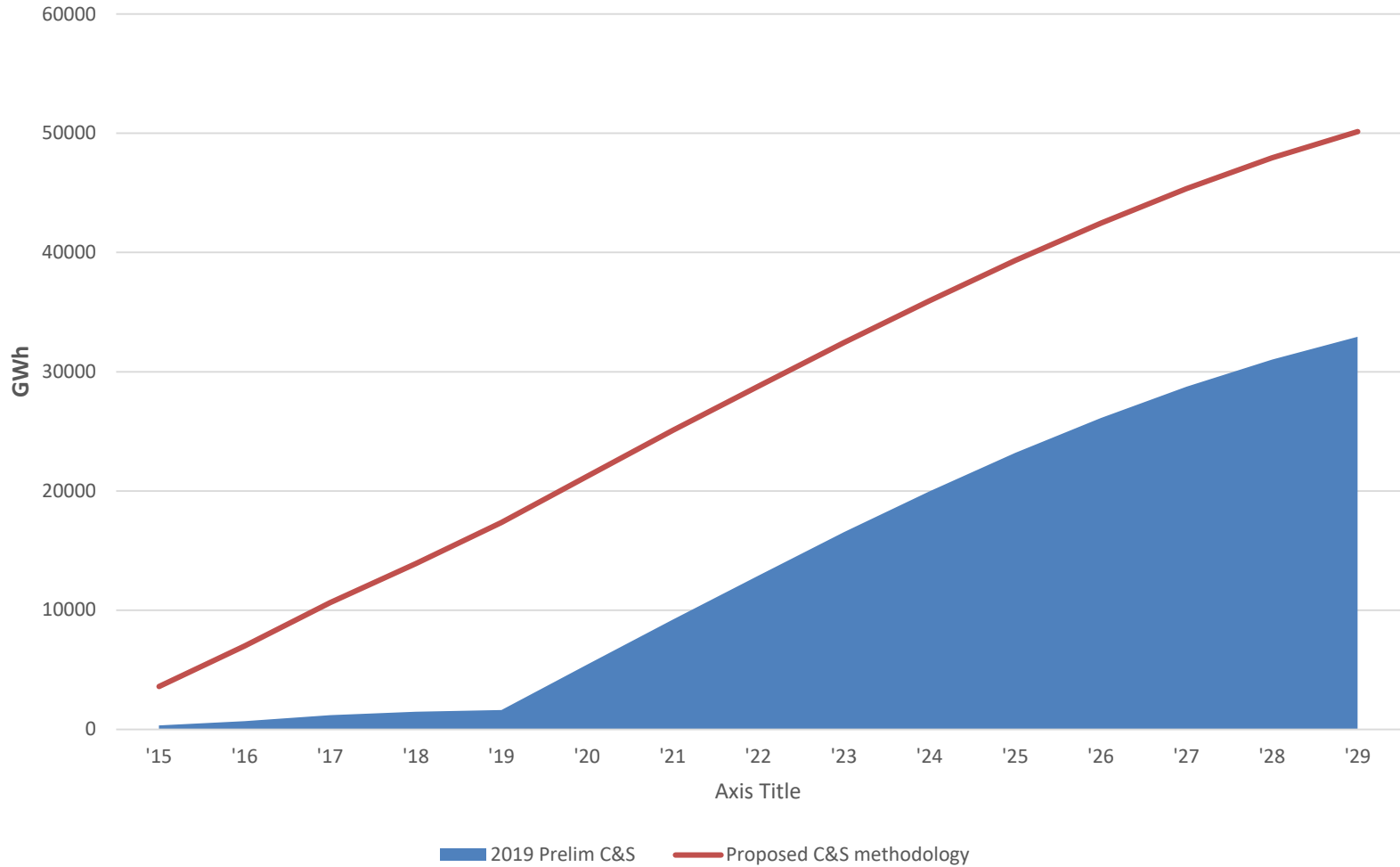


# C&S: Proposed Methods





# C&S Comparison





# C&S Questions for Public Comment

- How should the Energy Commission calculate total IOU C&S savings from attributable?
- How should the IOU C&S be extrapolated to POU territory to create statewide results? Use electricity sales or econ/demo forecast?