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Poster Title: Public Buildings Portfolio Reporting: From Interval Data To Action

Abstract: Public agencies have a responsibility to lead climate change efforts at the local level. To achieve this, they must have meaningful information to strategically plan their energy future and drive action. Interval consumption data offers the potential to provide enhanced information that can help target energy efficiency and distributed energy resource (DER) adoption. While a myriad of tools can help customers interpret their energy consumption trends, the public sector market segment presents a unique and untapped challenge: scale. Public agency sector customers manage portfolios of hundreds to thousands of meters. When staff are faced with unpacking an entire agency's portfolio to identify energy opportunities, it is not clear where to start or what to prioritize. Interval, and even monthly data at this scale is not actionable without visualization, trend analysis, and interpretation. It is not efficient for each public agency to address these challenges independently. To assist in these challenges, the Southern California Regional Energy Network (SoCalREN) was created with ratepayer funds to assist public agencies in meeting the State's ambitious GHG reduction goals. SoCalREN and Performance Systems Development (PSD) collaborated to provide agencies with reports from Compassâ„¢ to offer actionable data insights. Unique to this approach is the ability to understand not only the building stock, but also infrastructure such as water pumping, street lights, and other public assets. For SoCalREN, Compassâ„¢ automates the collection, analysis, and reporting of utility consumption and billing data. Three automation mechanisms are available to import agency scale consumption and billing data into Compass: Green Button Connect (GBC), ENERGY STAR Portfolio Manager (ESPM), and spreadsheet upload. Reports have been developed collaboratively with the goal to iteratively improve the information agencies are provided. Portfolio reporting include annual summaries by load type, annual summaries of time-of-use during demand windows, and load profile metrics. From these portfolio reports, buildings and assets with high consumption and anomalous performance are identified and targeted for further analysis. Individual building and asset reports include a building scorecard using ESPM benchmark data, and interval consumption visualization and analysis using GBC data. To date, SoCalREN has provided portfolio reports to nearly 50 public agencies in Southern California. SoCalREN plans to build upon these results with the introduction of enhanced portfolio-level interval data analysis to provide greater insights into each building's performance, and potential to identify opportunities for energy savings and DER adoption.