



Nov 13, 2018

530 St. Clair Ave. West TSCC #2334 Measurement & Verification Findings

Summary Findings

The following Measurement and Verification (M&V) analysis demonstrate the positive effect the H2minusO Flow Management Device (FMD) has had on the meter reading efficiency at 530 St. Clair Ave. West TSCC #2334. We were provided consumption data for 2016 and 2017 measurement periods. After a detailed analysis of the datasets, the meter reading efficiency showed significant improvement. The daily consumption decreased by an average of 19.22% with a payback in 1.02-years, exceeding the ROI projections of 14.47% with a payback in 1.29-years.

Key Project Metrics

One time project investment: \$14,320.00
Projected consumption 2018: 20,076 m3 or \$76,489.57
Cost per m3: \$3.81
Install date: Sept 6, 2018

Pre-Installation

Projected Savings: \$11,069.03
Projected Savings: 14.47%
Projected ROI (yrs): 1.29years

Post-Installation

Measured Savings (\$): \$14,701.28
Measured Savings (%): 19.22%
Measured ROI (yrs): 1.02 Years



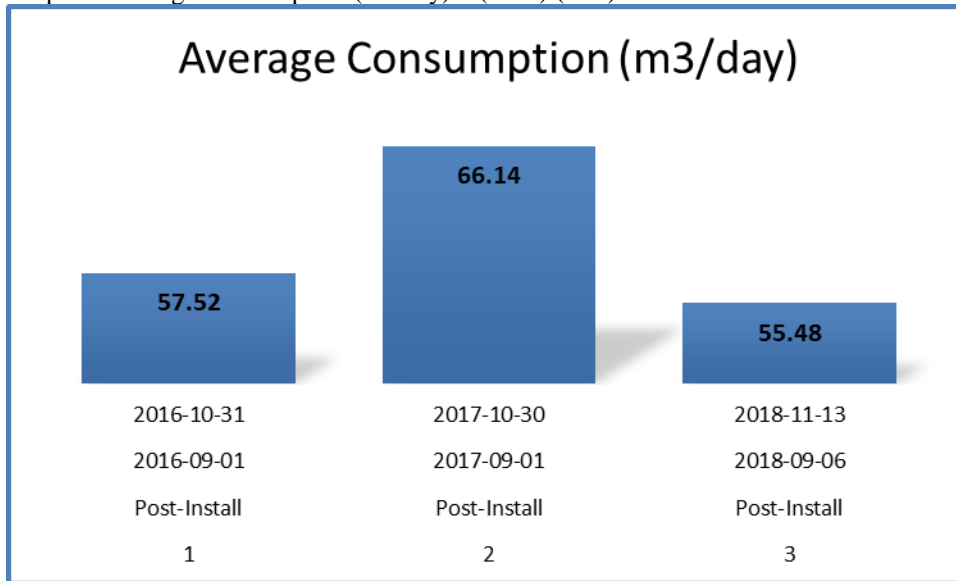
M&V Findings

The FMD was installed on Sept 6, 2018. Table-1 summarizes the consumption results for the FMD post-installation period from Sept-Oct 2016 (table-1 row-1 & row-2) and Sept-Nov 2018 (Table-1 Row-3). Column-7 shows the average daily water consumed for each period which is based on the actual water bills provided as well as actual water meter readings conducted post-H2minusO installation in 2018. The total consumption (m3) recorded in column-5 for each of the start and end periods (column-3 and column-4), shows a significant increase from 2016 to 2017 of more than 13%; but a significant decrease of over 19% from 2017 to 2018 after the installation of the FMD (column-8 row-3). It is also important to note that the Year-over-Year (YoY) Period-over-Period (PoP) consumption experienced a significant increase from 2016 to 2017, supporting the increasing consumption patterns seen in this building. The analysis of this buildings consumption patterns, confirms the vastly improved meter reading efficiency post-installation of the FMD. These measured results confirm improved efficiencies of over 19%.

Table 1: M&V Summary Results

#	H2 Reference	Start Period	End Period	Consumption (m3) in Period	# Days in Period	Average Consumption (m3/day)	Change in Consumption (m3/day) YoY Same Period
1	Post-Install	2016-09-01	2016-10-31	3,451	60	57.52	
2	Post-Install	2017-09-01	2017-10-30	3,902	59	66.14	13.03%
3	Post-Install	2018-09-06	2018-11-13	3,772	68	55.48	-19.22%

Graph 1: Average Consumption (m3/day) – (YoY)/(PoP)



Graph 1 shows the average daily consumption (m3) for the measurement period based on the start and end date post-installation of the H2minusO FMD.

Graph 2: Change in Consumption (%) – (YoY)/(PoP)

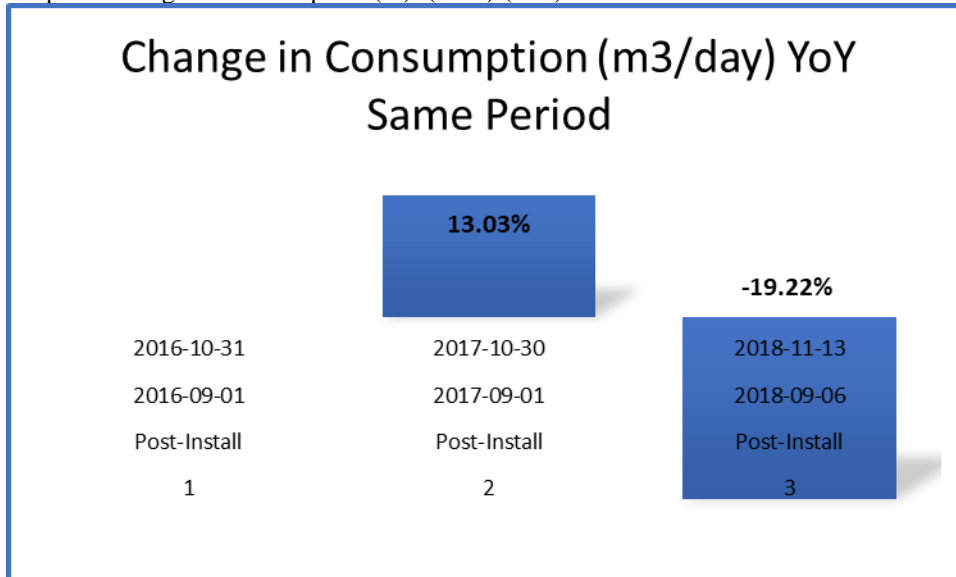


Chart 2 shows the average percentage change in consumption for the measurement period based on the start and end date post-installation of the H2minusO FMD.