

Charlottesville City Schools

City of Charlottesville Fiscal Year 2022 Annual Energy and
Water Performance Report Presentation

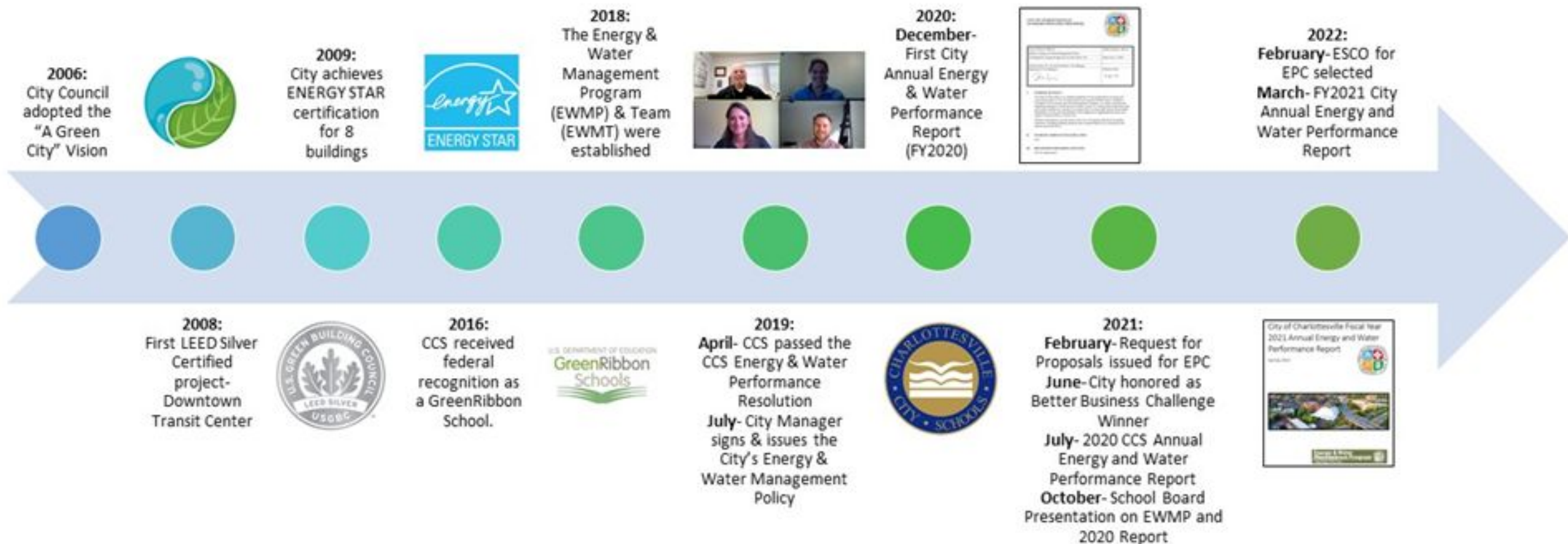


**Energy & Water
Management Program**

City of Charlottesville

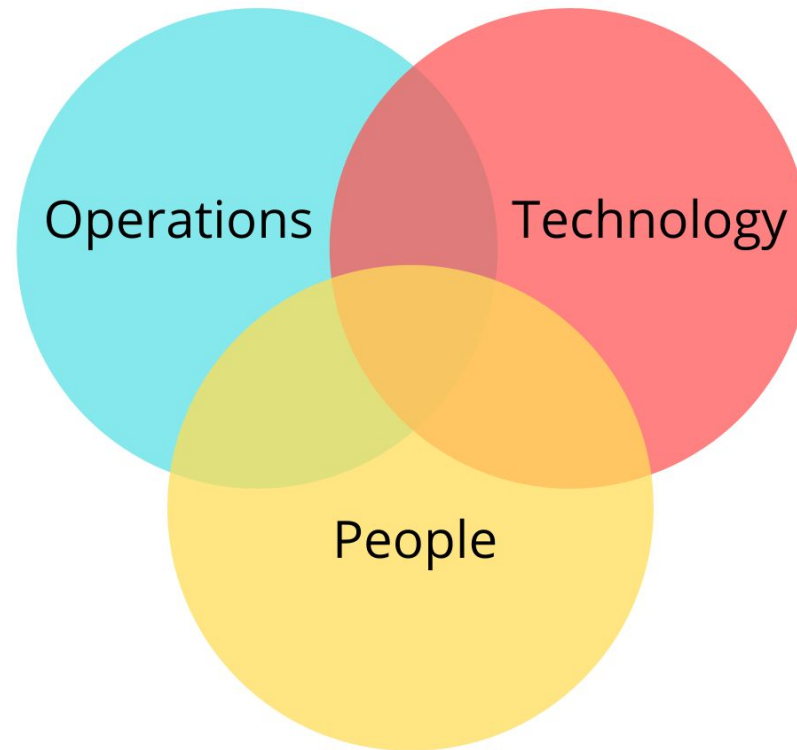


Energy and Water Management Timeline



Annual Energy and Water Performance Report

- ▶ **FY2022 Report-** City wide report on fiscal year 2022 performance and actions
- ▶ **FY2021 Report-** City wide report on fiscal year 2021 performance and actions
- ▶ **2020 Report-** Focuses on 2020 performance and actions
 - ▶ COVID-19 is addressed often in this report
- ▶ **2019 Report-** Inaugural report which includes more detail and establishes a baseline of information and data
- ▶ **Report Outline**
 - ▶ Actions
 - ▶ Operations
 - ▶ Technology
 - ▶ People (Behavior)
 - ▶ Performance



Reports & Interactive Dashboards Available on Website:

[Charlottesville.gov/EnergyWater](https://charlottesville.gov/EnergyWater)

Operations

- ▶ EWMT and Monthly Meetings with CCS Administration
- ▶ Utility Tracking & Investigation
- ▶ HVAC Schedules, BAS Settings, & Communication
- ▶ Demand-Side Management: Load Shedding

- ▶ Strategies Planned and FY2023 Outlook





Technology

- ▶ LED Lighting: CHS and Buford
- ▶ HVAC Equipment Replacement: Buford Middle, Clark Elementary, Greenbrier Elementary, Venable Elementary, and Walker Upper Elementary
- ▶ BAS Upgrade: Venable (2021)
- ▶ Project Rebate Programs
- ▶ Energy Performance Contract

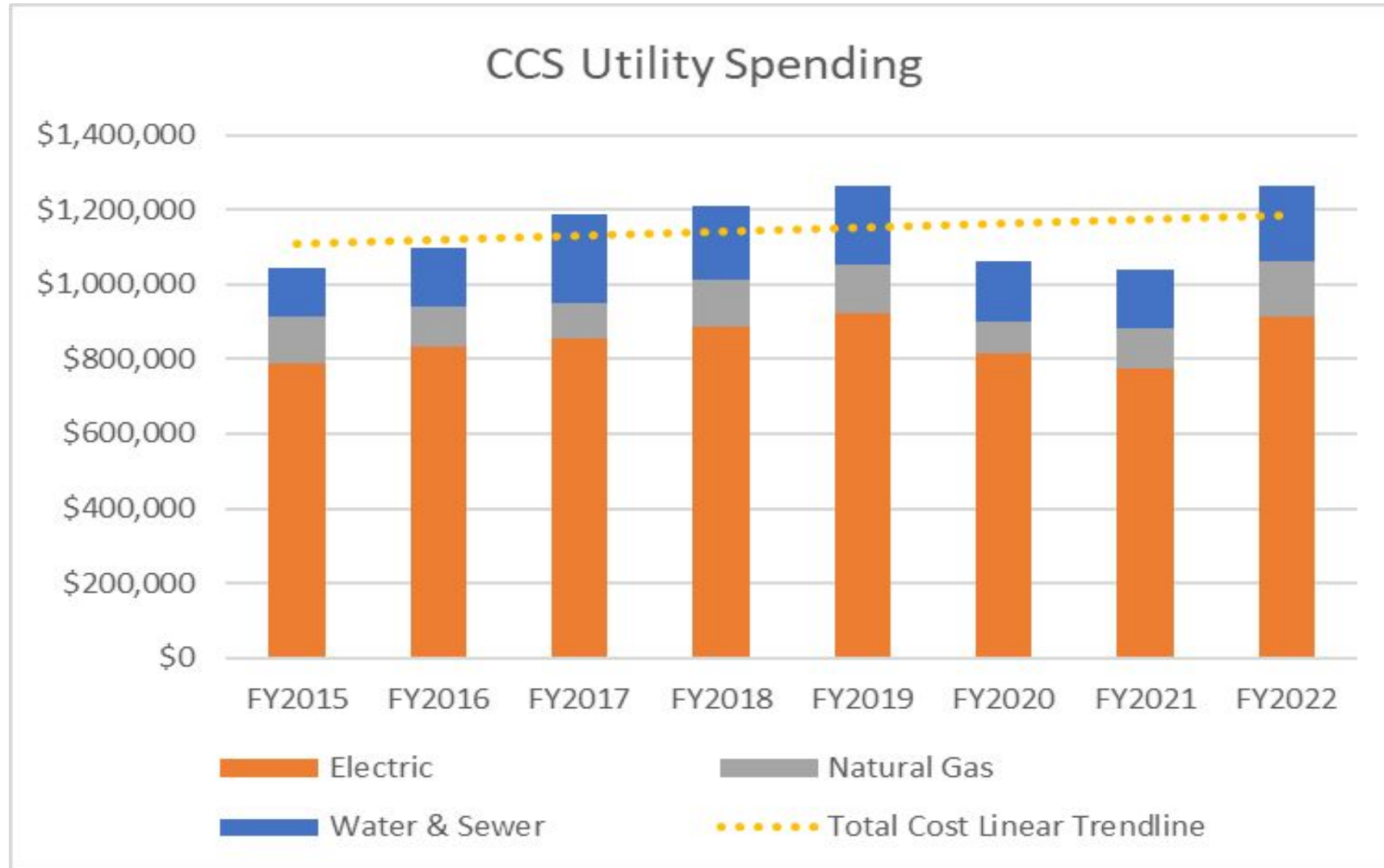
- ▶ Strategies Planned and FY2023 Outlook

People (Behavior)

- ▶ 2021-2022 Education Campaigns: Turn Action into Savings
 - ▶ Fall 2021: Apply your energy and water saving actions you did at home to do school
 - ▶ Winter 2021-2022: Put numbers to your actions and calculate your savings at School
 - ▶ Spring 2022: Understanding the source
 - ▶ Summer 2022: Put numbers to your actions and calculate your savings at Home
- ▶ Climate Action Kits at Walker Upper Elementary
- ▶ "Think Global Act Local" Classroom Activity
- ▶ Bottle Filling Water Conservation Signs
- ▶ Employee Outreach- Space Heater PSA
- ▶ **Strategies Planned and FY2023 Outlook**
 - ▶ Light switch reminders, piloting at BME this winter!









Performance- Cost



**Total FY2022
Utility Cost:
\$1.26 million**

Performance- Usage

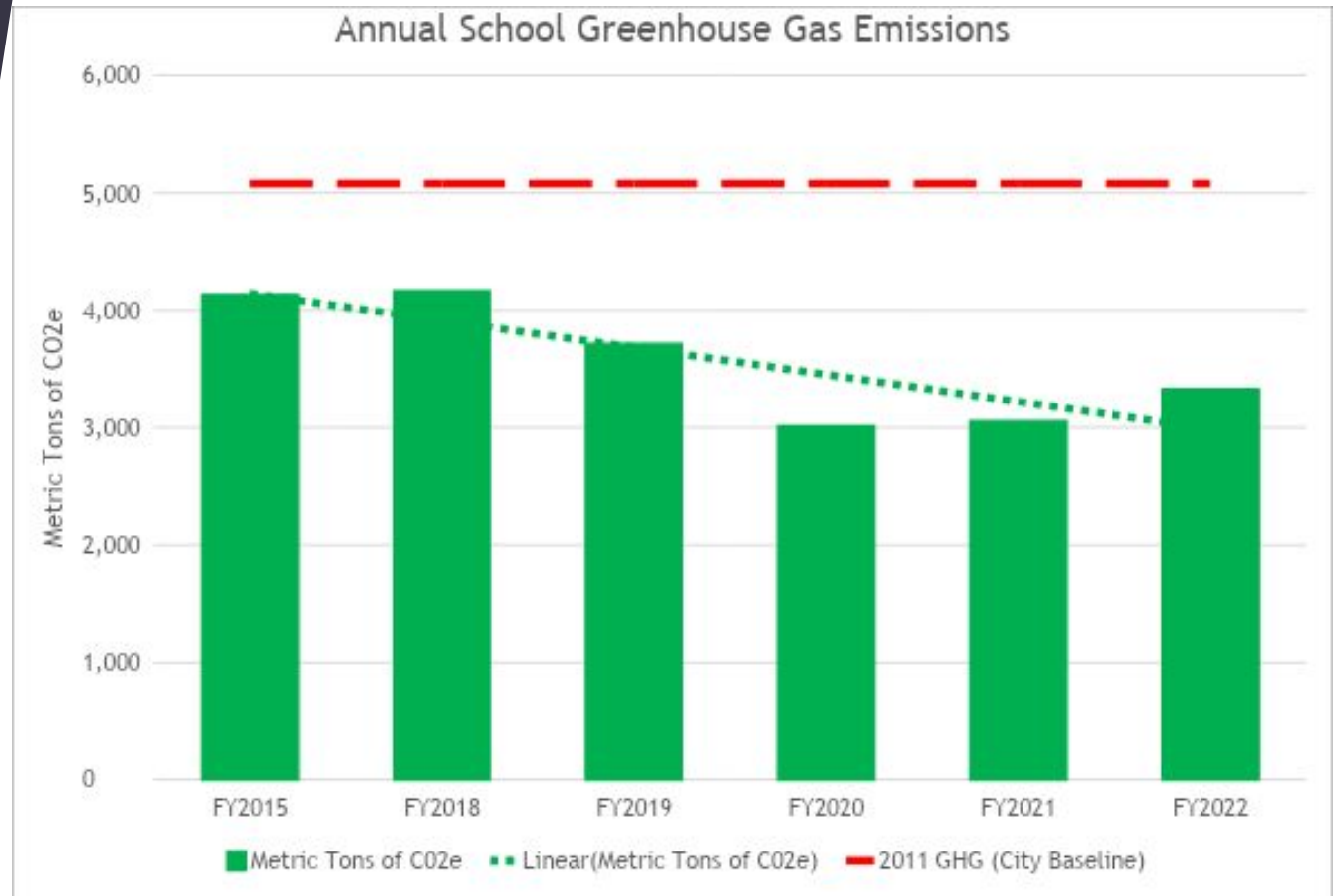
| | Electric | Natural Gas | Water |
|---|---|--|--|
| FY2022 Usage | 9,116,873 kWh | 13,285,104 cf | 1,408,165 cf |
| Percent Change <i>(Usage Reduction Goal: 2% decline annually)</i> | | | |
| FY2021 to FY2022 | 13%  | -3%  | 27%  |
| FY2015 (baseline year) to FY2022 | 5%  | 3%  | 9%  |

Performance- ENERGY STAR

| School Facilities | ENERGY STAR Score* | | |
|--|--------------------|--------|--------|
| | FY2015 | FY2021 | FY2022 |
| Buford Middle School | 43 | 59 | 47 |
| Burnley-Moran Elementary School <i>(ES Cert. 2009)</i> | 33 | 68 | 66 |
| Charlottesville High School <i>(ES Cert. 2009)</i> | 71 | 69 | 58 |
| Clark Elementary School <i>(ES Cert. 2009)</i> | 37 | 55 | 41 |
| Greenbrier Elementary School <i>(ES Cert. 2009)</i> | 51 | 67 | 60 |
| Jackson-Via Elementary School <i>(ES Cert. 2009)</i> | 65 | 67 | 57 |
| Johnson Elementary School <i>(ES Cert. 2009)</i> | 71 | 78 | 76 |
| Lugo-McGinness Academy | 82 | 96 | 85 |
| Venable Elementary School | 52 | 63 | 61 |
| Venable School Annex | 1 | 56 | 10 |
| Walker Upper Elementary School | 40 | 30 | 29 |

Performance- Greenhouse Gas Emissions

- ▶ 8.9% increase in GHG emissions in FY2022 from FY2021
- ▶ 19.5% decrease since 2015, 34.5% decrease since 2011





Performance- FY2023 Outlook

- ▶ Continued extended ventilation for COVID-19
- ▶ Alignment with the Climate Action Plan
- ▶ Energy Performance Contract
- ▶ Solar

Thank You for
Your Time

Contact:

EnergyWaterTeam@Charlottesville.gov

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Facebook

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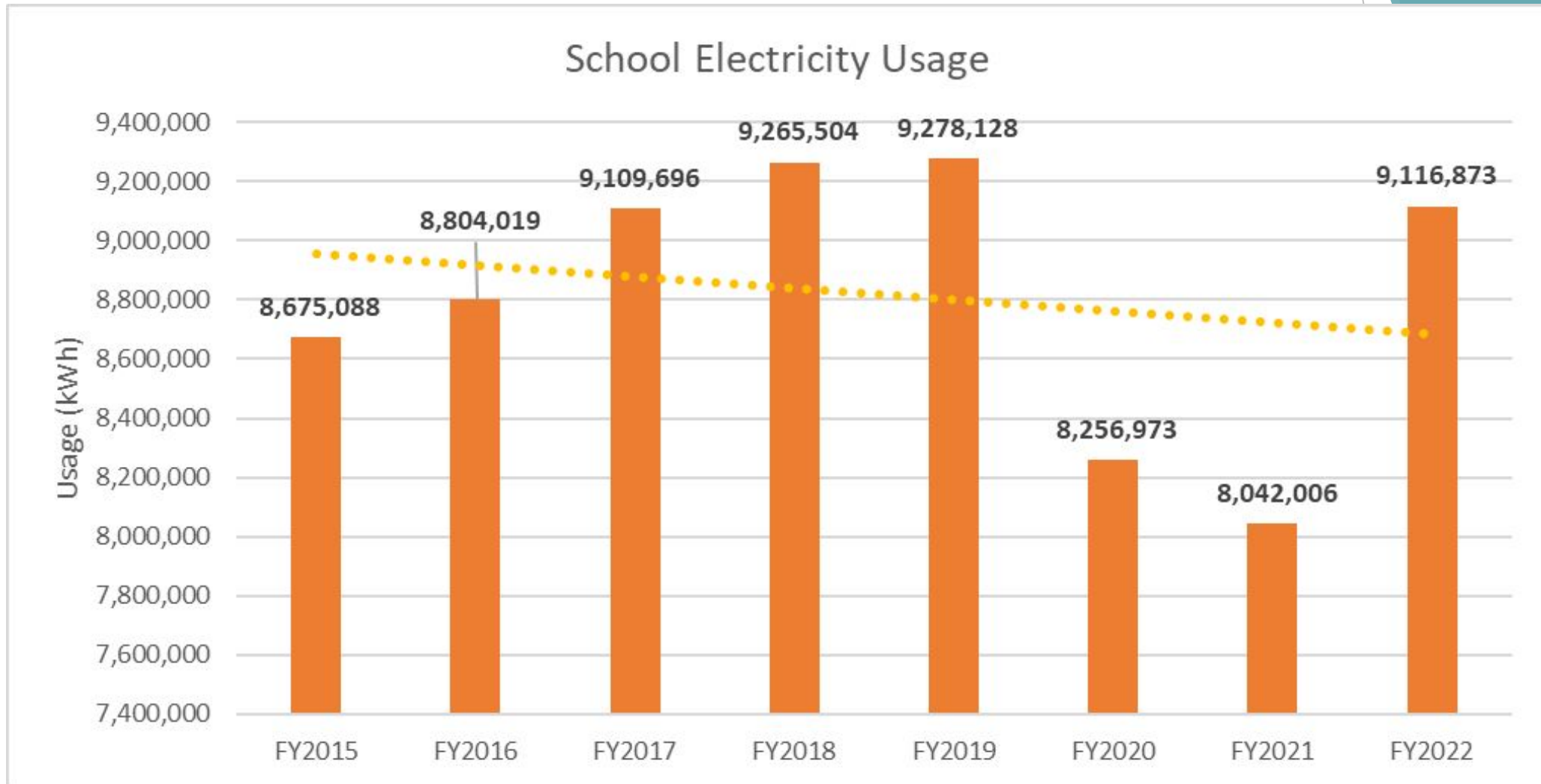
Twitter: [@CvillePW](https://twitter.com/CvillePW)

Charlottesvilleschools.org/Conservation

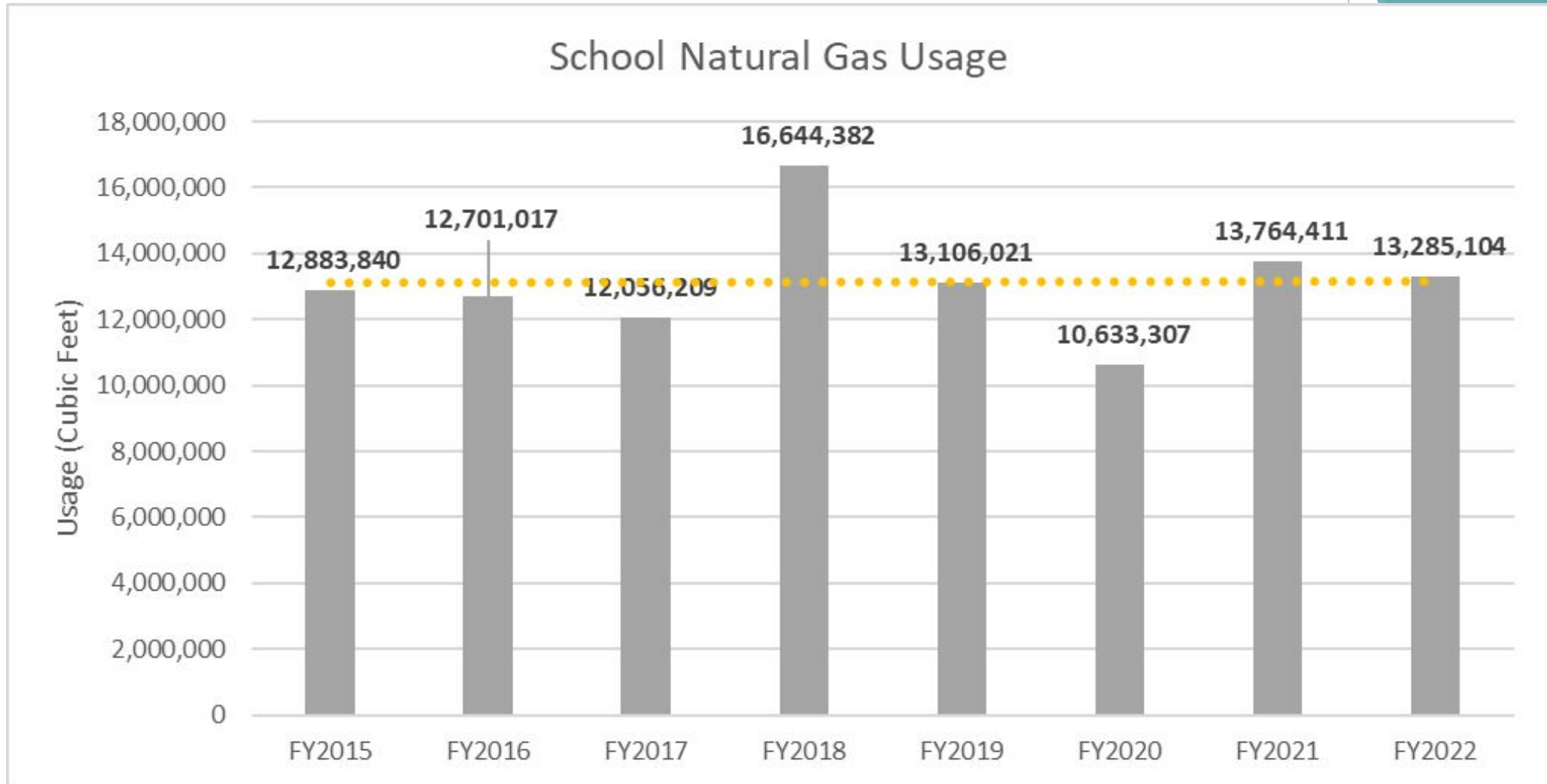
Charlottesville.gov/EnergyWater

Additional information on
performance by utility

Performance - Electricity



Performance - Natural Gas



Performance - Water & Sewer

School Water Usage

