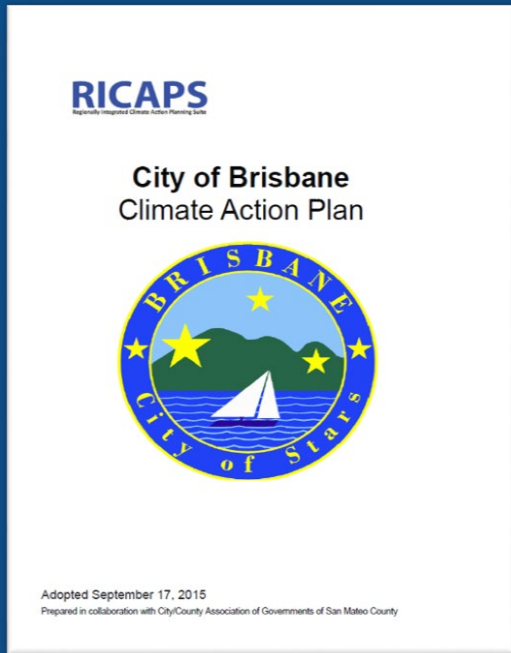




Brisbane Building
Efficiency Program

Adrienne Etherton
Sustainability Manager
City of Brisbane

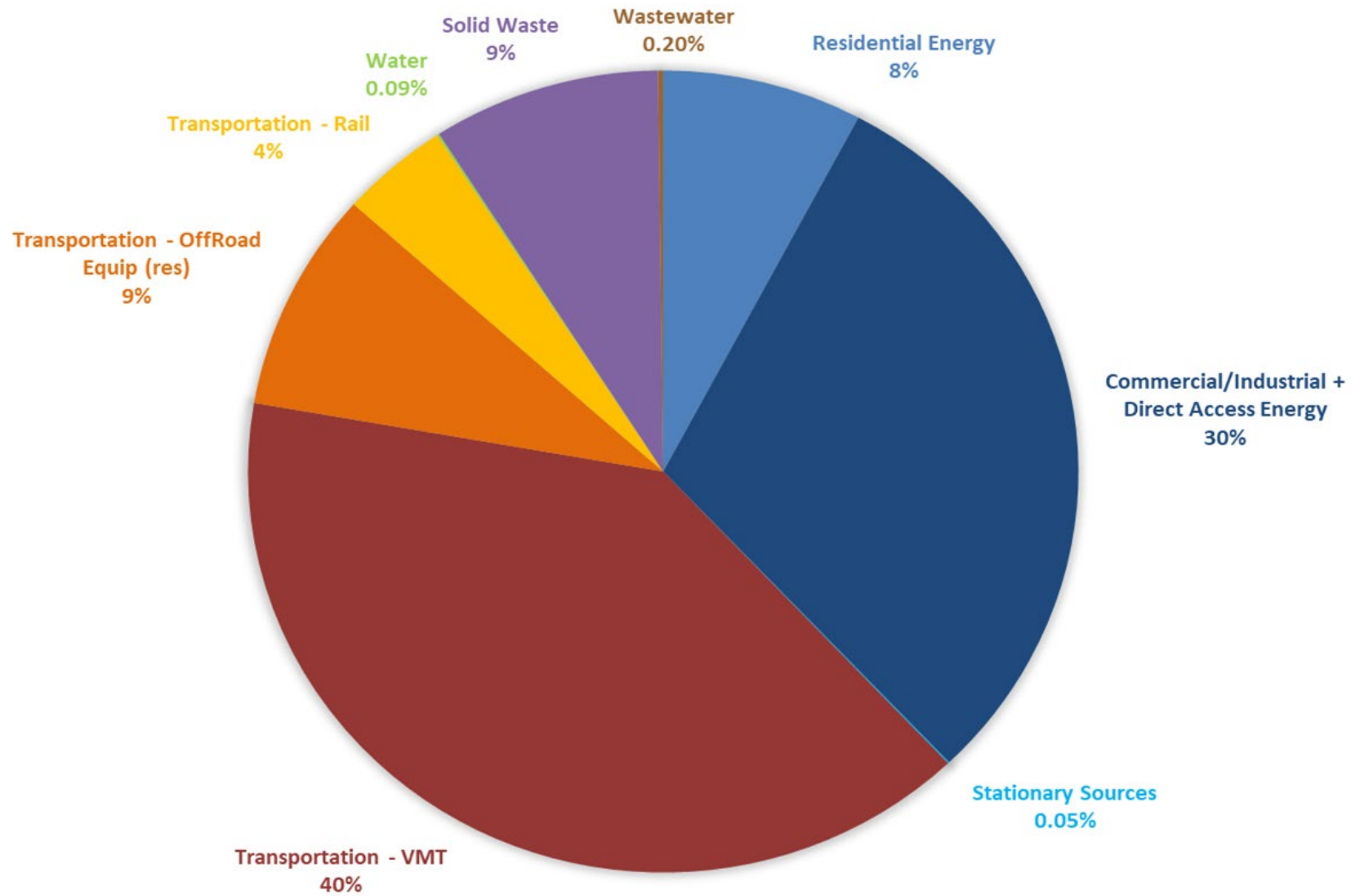
Context



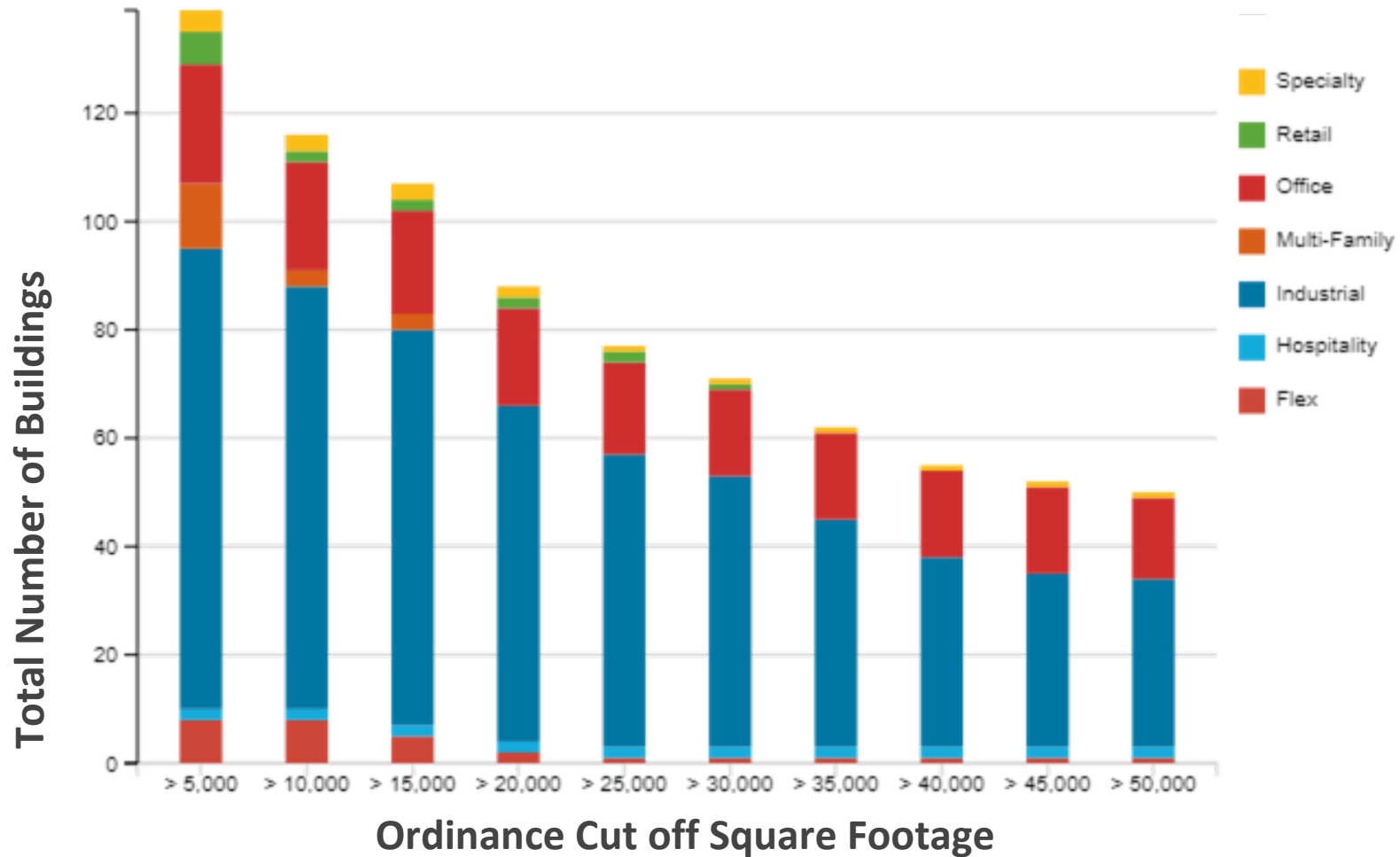
BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT



Brisbane 2015 Community GHG Inventory



Market Analysis



Innovating to address concerns

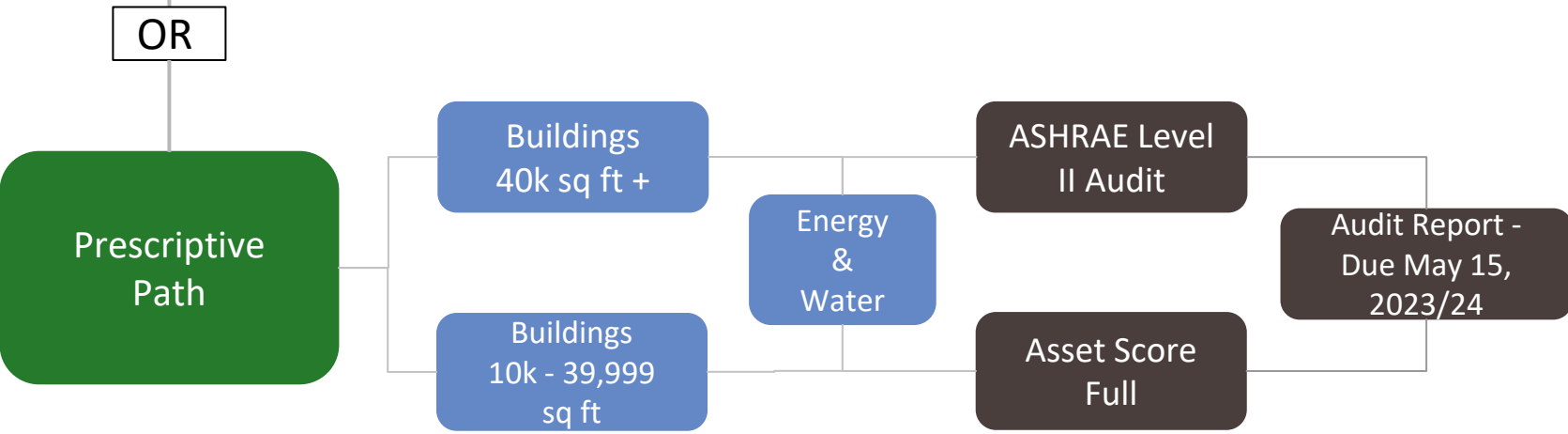
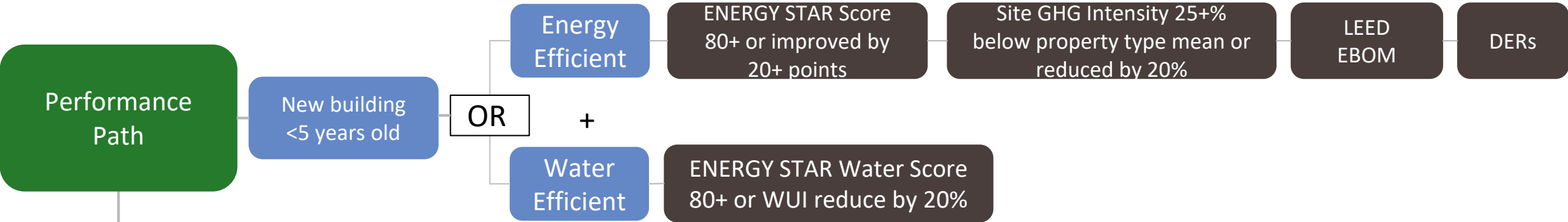
- Industrial buildings included
- Extends requirements to tenants
- Green Lease compliance option
- Report on current or planned distributed energy resources



Compliance Pathways

Annual Benchmarking beginning 2021 - 10,000 sq ft or more

Beyond Benchmarking - every 5 years beginning: 2023 for commercial, 2024 industrial + residential



Take action in next 5 year cycle:

- Retro-Commission
- OR
- One Energy Measure + One Water Measure
- OR
- Green Lease



Metrics for Success

- Context matters!
- Our CCA:
 - Supplies 98% of Brisbane electric customers
 - 100% GHG-free energy in 2021 & 100% renewable by 2025
- ENERGY STAR Score
- Site GHG Intensity
- Distributed Energy Resources



Expected Impacts

*pre-implementation

- **Buildings affected**
 - Benchmarking: 109 / 6.6M sqft
 - ASHRAE Level 2 Audits: 48 / 5.3M sqft
 - Asset Score - Full: 61 / 1.3M sqft

- **GHG Impacts**
 - ~2700 MTCO₂e reduction within 5 years of ordinance effective date
 - ~ 14.4% reduction from sector / ~4% citywide

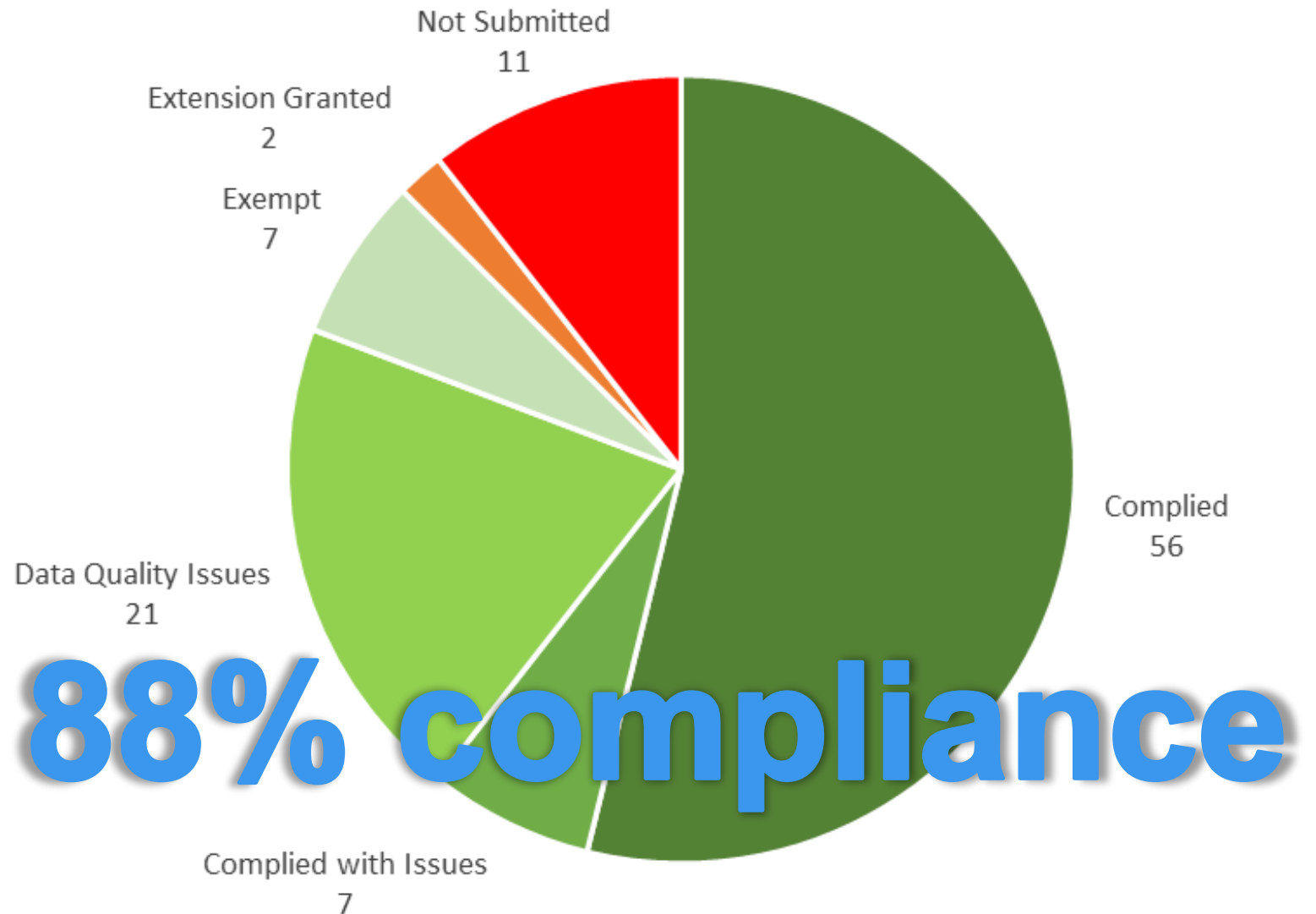


Compliance

*first year of reporting



2020 Compliance Status

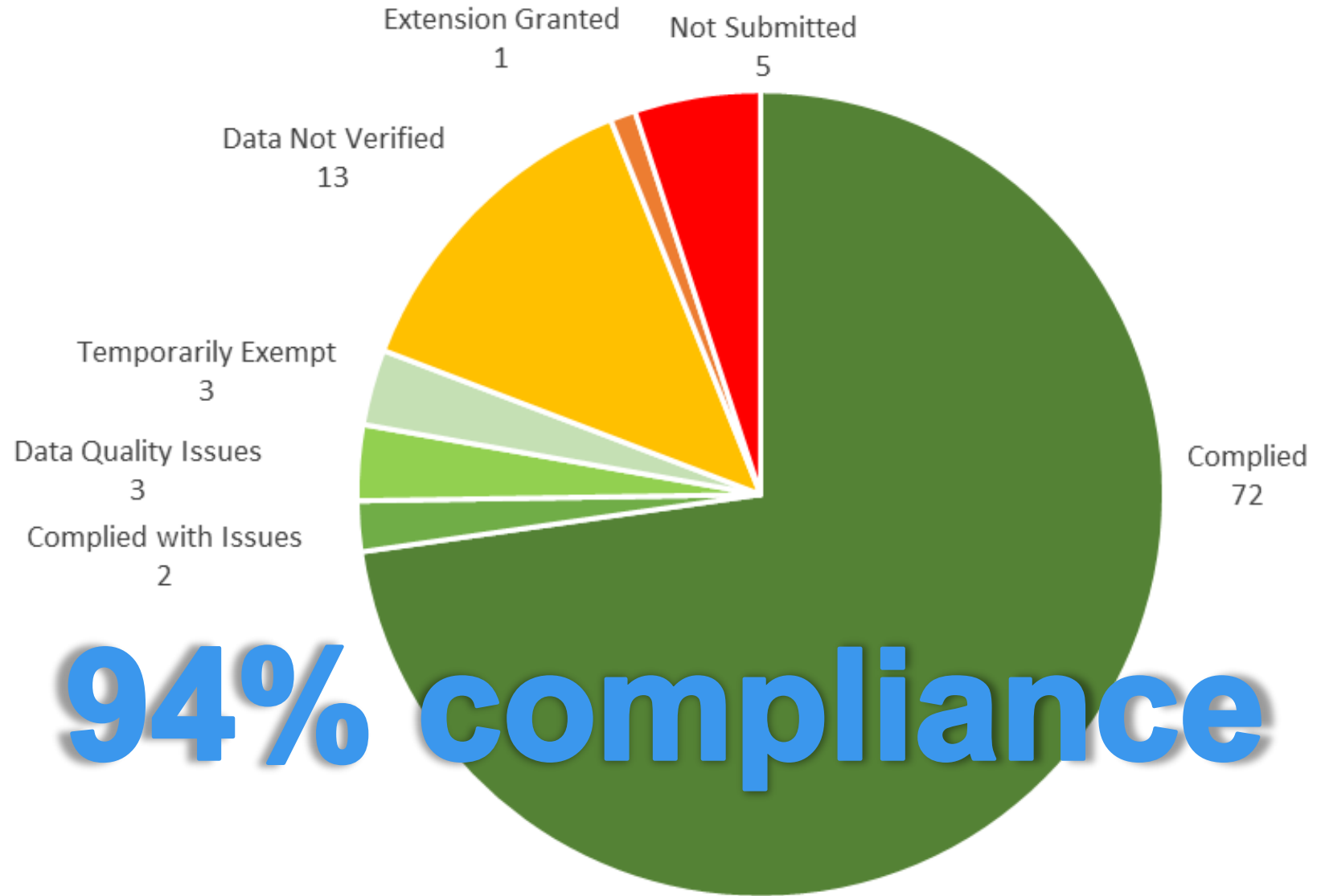


Compliance

*most recent year



2021 Compliance Status



94% compliance

Number of Buildings

100

Combined Area

5.1M ft²

Total Electricity Use

1.7G kWh
kilowatt hour (kWh)

Total Natural Gas Use

131.4M (kBtu)
British thermal unit (Btu)

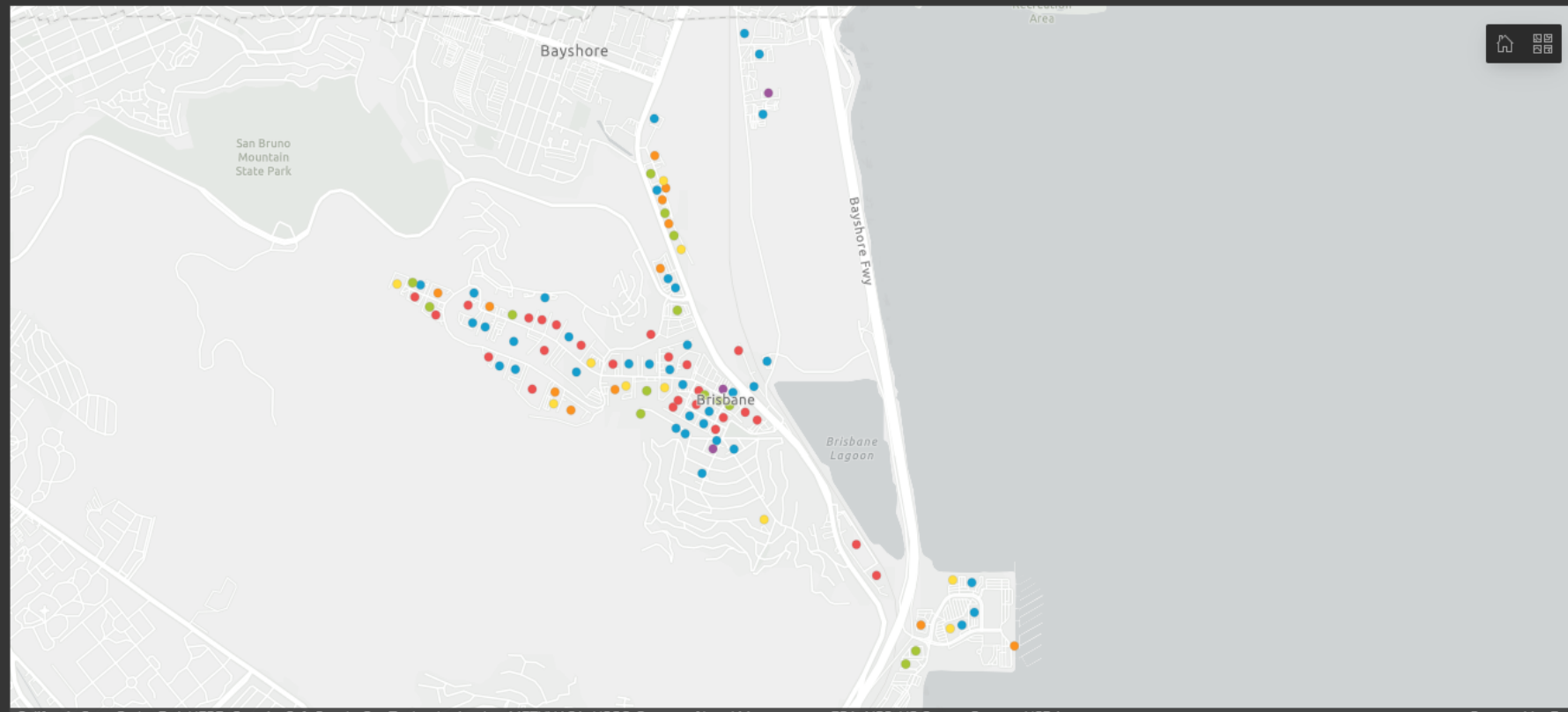
Total Water Use

52.4k (kgal)

BBEP Buildings

Map Legend

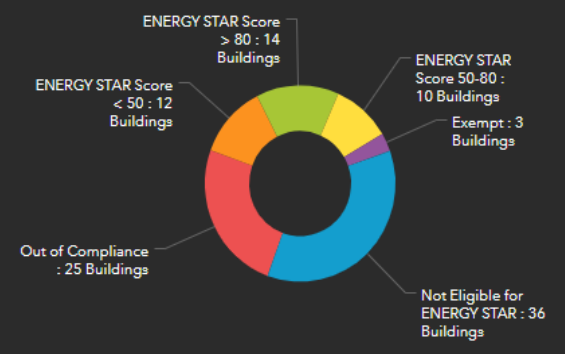
- ENERGY STAR Score > 80
- ENERGY STAR Score 50-80
- ENERGY STAR Score < 50
- Out of Compliance
- Exempt
- Not Eligible for ENERGY STAR



California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA

Powered by Esri

2022 BBEP ENERGY STAR Compliance Status



Click on the chart to interact with map.
Click inside the donut to reset.

Trends & Lessons Learned

- LOTS of outreach required
 - Climate Corps Fellow / Sustainability Intern to the rescue!
- Smaller companies need help (and sometimes larger ones too)
- Low EUI
 - 2020 was not a normal year!
- Custom IDs & other special requests
 - Errors & blanks very common
- Be patient!
- But don't be afraid to send Notices & Citations



Next Steps

- Converting our program management software
- Evaluating buildings' year-over-year progress
- Building out Beyond Benchmarking process
- Communicating with building reps
 - “Scorecards” of current status
 - Which pathway we believe they are on
 - Resources for Beyond Benchmarking phase
- Considering existing building reach codes



Thank You

Adrienne Etherton

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www.brisbaneca.org/bbep

www.brisbaneca.org/bbep-toolkit

