

City and County of Honolulu

# Climate Action Plan Implementation

Climate Change Commission Sept 16, 2021

## One Climate One O'ahu

Accelerating O'ahu's clean energy future for our communities | 'āina | economy

CLIMATE ACTION PLAN 2020-2025

Y & COUNTY OF HONOLULU









## "Plans are one thing; it's how you react and what you do in the days and weeks ahead."

-Mayor Rick Blangiardi, Earth Day









### The CAP: 9 strategies to reduce emissions across Oahu

- **Encourage density and mixed land use in strategic areas**
- 2 Enable and provide multiple modes of green transportation
- 3 **Encourage mode shift through parking efficiency**
- **Electrify the City Fleet and support high efficiency vehicles**
- 5 Reduce energy demand by increasing energy efficiency
- Maximize energy efficiency and renewable energy throughout City 6 operations and assets
- 7 **Expand renewable energy planning and expedite permitting**
- 8 **Promote waste prevention**
- 9 Maximize waste resource efficiency

TRANSPORTATION & LAND USE

**BUILDINGS & ENERGY** 

WASTE



### Strategy 4-7 of the CAP: vehicles and buildings

- 1 Encourage density and mixed land use in strategic areas
- 2 Enable and provide multiple modes of green transportation
- **3** Encourage mode shift through parking efficiency
- 4 Electrify the City Fleet and support high efficiency vehicles
- 5 Reduce energy demand by increasing energy efficiency
- 6 Maximize energy efficiency and renewable energy throughout City operations and assets
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TRANSPORTATION & LAND USE

BUILDINGS & ENERGY

**WASTE** 

### **Vehicle Electrification**







### **Vehicle Electrification**



**City Fleet Electrification** 



Public EV-Charging: City Lots



**EV Ready Ordinance** 

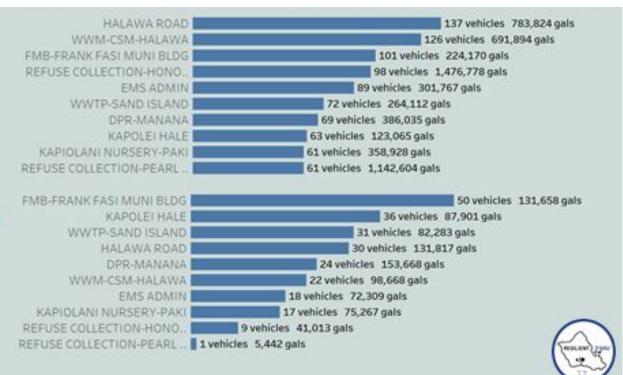


### **City Vehicles & Electrification (ICF Analysis)**

### Top 10 sites by vehicle count

### Top 10 sites by replacement ready\* vehicle count

Replacement ready = Commercially available electric sedan, SUV, light truck, or cargo van available now or within one year and model year of existing vehicles >6 years old



# GET YOUR BUILDING READY FOR ELECTRIC VEHICLES



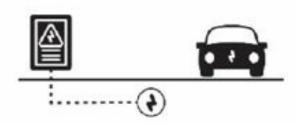
#### Ordinance 20-10 Compliance Guide

**June 2021** 

Ordinance 20-10 (Bill 25 (2019)), adopted in June 2020, adopts the State Energy Conservation Code (2017) as the updated energy code for the City and County of Honolulu. It includes several local amendments to expand access to energy efficiency improvements, solar power and electric vehicles (EV) for O'ahu residents. Amendments include new requirements to ensure a percentage of new parking stalls built for new residential and commercial construction are EV "ready" or EV-charger-ready.

#### What is EV-Charger-Ready?

For construction of new parking stalls at new residential or commercial buildings to be compliant with Ordinance 20-10, the development should be designed and constructed to include adequate electrical panel capacity and dedicated conduit for a future Level 2 EV-charger at a certain percentage of parking stalls.



There are two ways you can comply with Ordinance 20-10: 1) Baseline Compliance Path or 2) Alternative Points System.

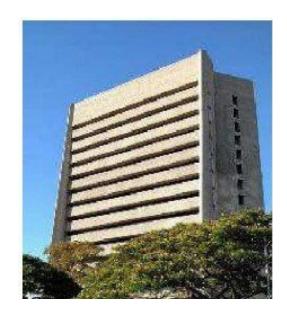
### **Building Efficiency**







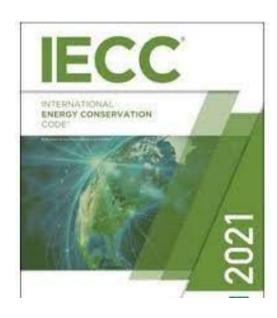
### **Building Efficiency**



**Municipal Benchmarking** 



**City Wide Benchmarking** 



**Energy Code Adoption** 



### What is Benchmarking?





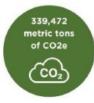
### **Municipal Building Retrofits: JCI Phase 1**

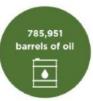
Utility Bill Savings: \$2,100,000 annually

Utility Rebates: \$995,168 from Hawaii Energy

Energy Savings: 480,000,000 kilowatt-hours (Over the 20-year Project Term)

Equivalent to:









Benchmarking: Facilities greater than 10,000 sq. ft. will be benchmarked and EUI

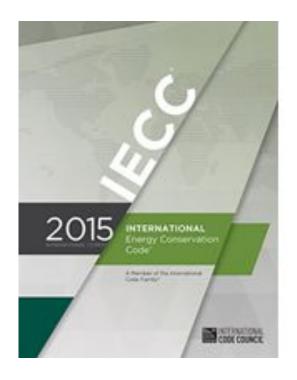
tracked and monitored as part of the post-construction

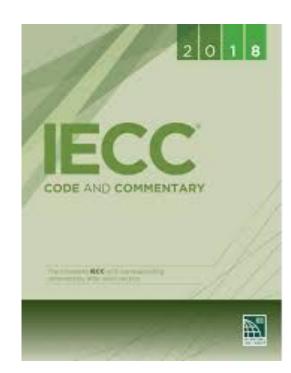
measurement and verification process.

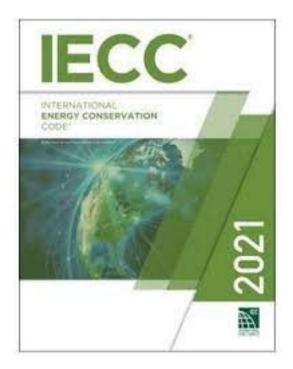
https://www.sustainablehonolulu.com/presentations



### **Energy Code Adoption**







### Mahalo!



resilientoahu.org/climate-action-plan