

# Rate change alternatives

Presented by:

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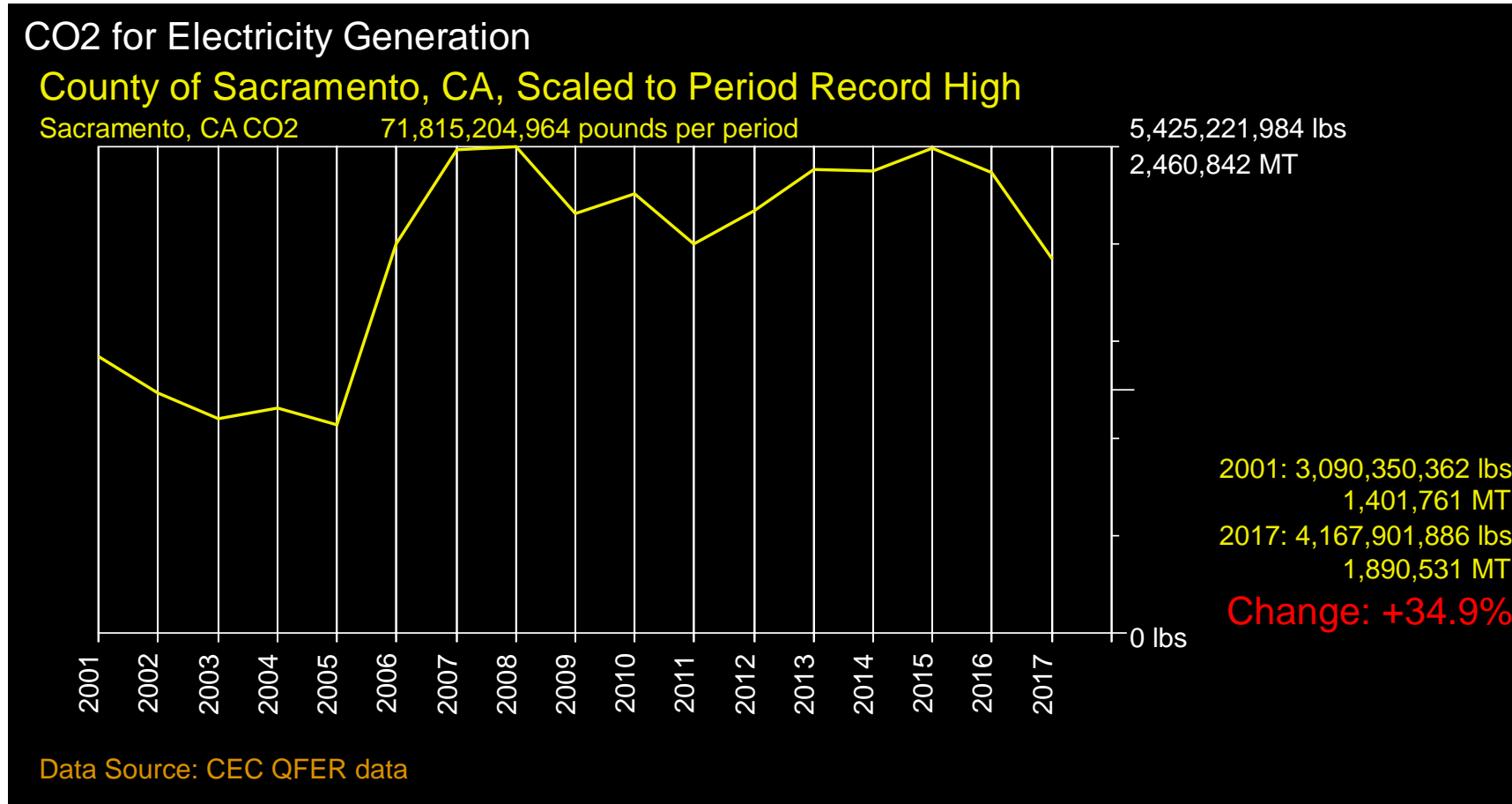
August 16, 2018

As governed by Public Utilities Code Section 14403.5

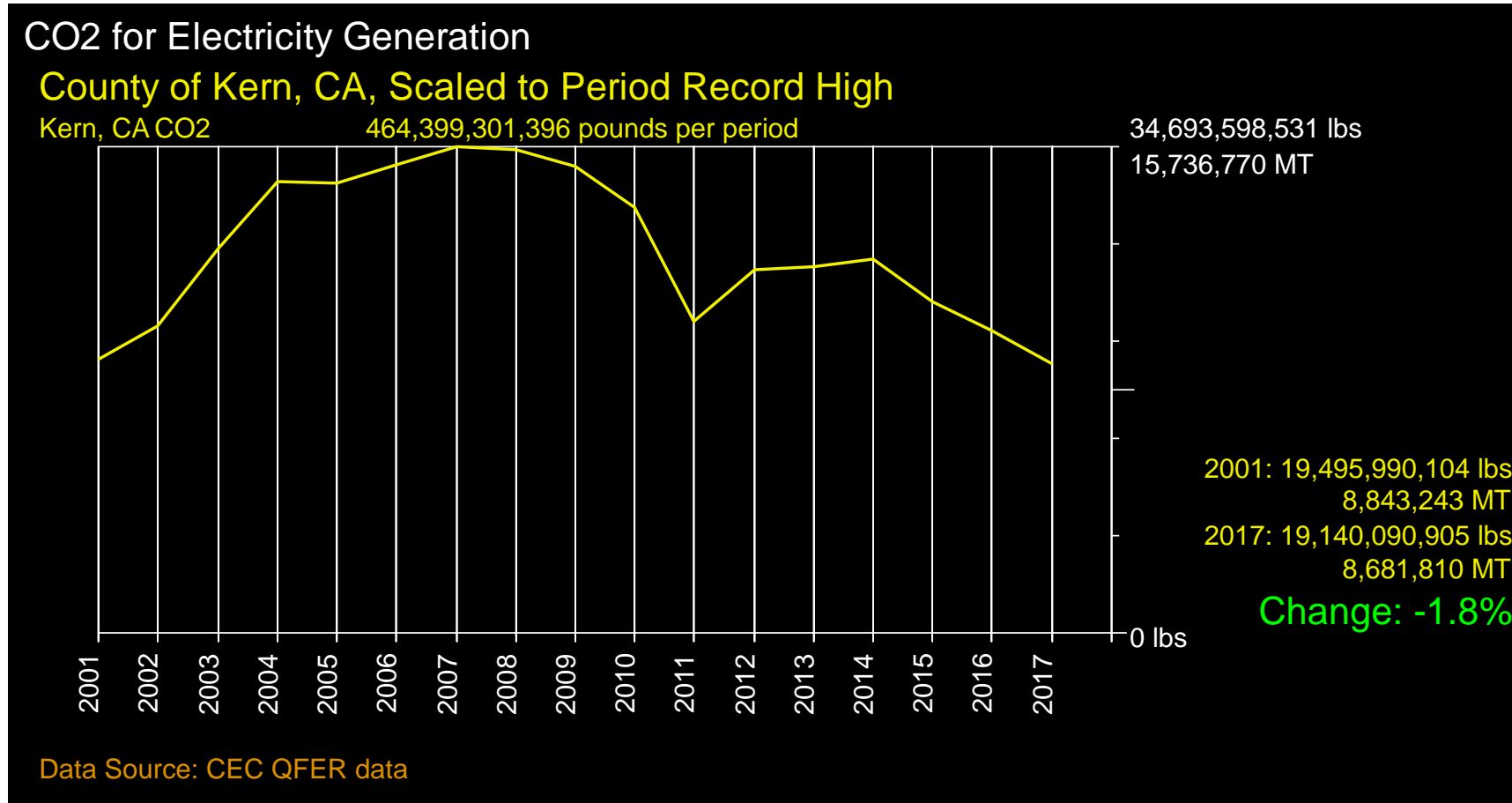
Sacramento County's carbon footprint for electricity generation has increased since 2005, Based on CEC QFER data.

- California Air Resources Board (CARB) announces California has met 2020 Greenhouse Gas goal, July 11, 2018.
- **Climate Pollutants Fall Below 1990 Levels for First Time**
- *Emissions down 13% since their 2004 peak while economy grew 26%*

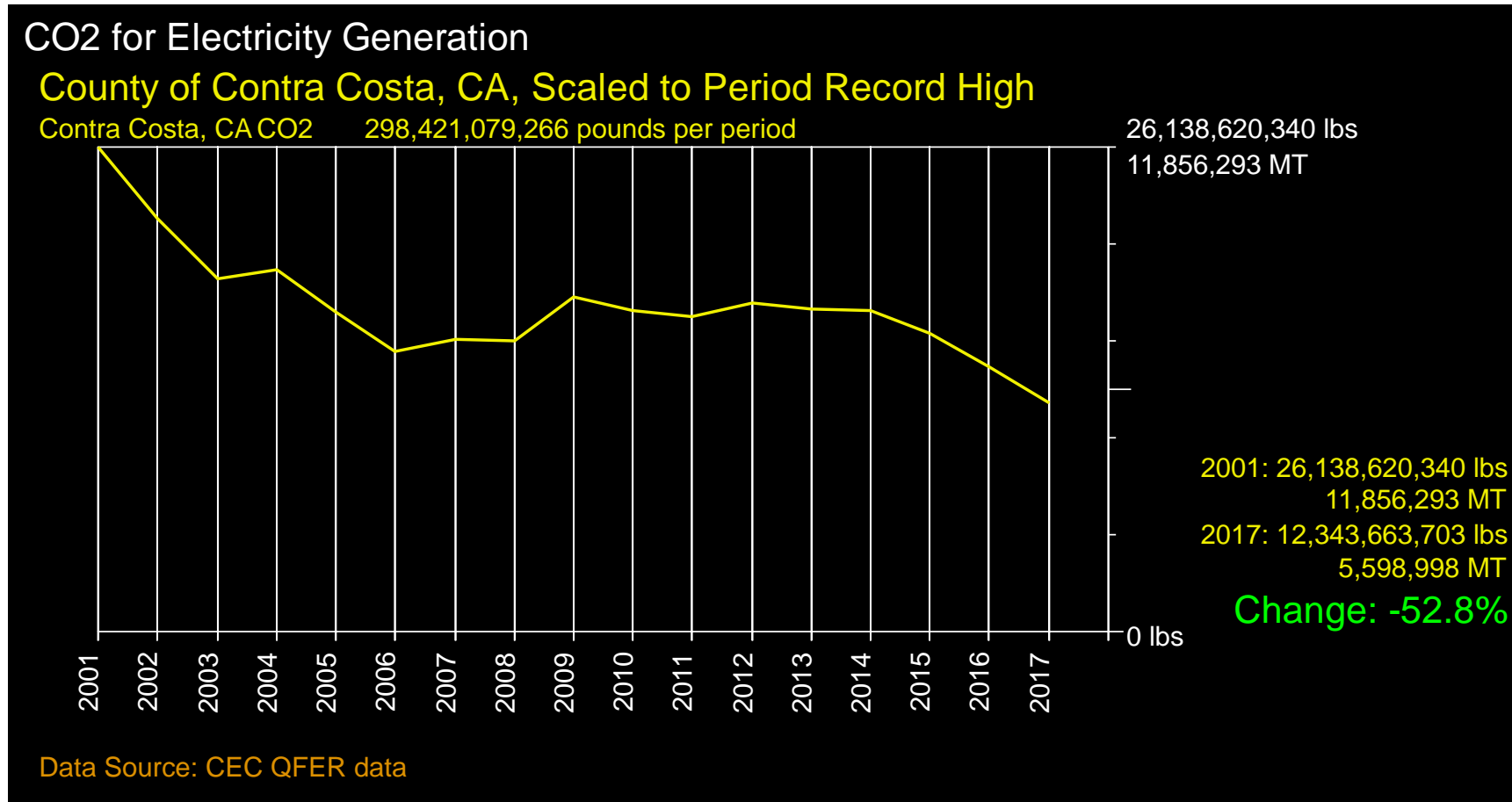
# Sacramento County Carbon Footprints



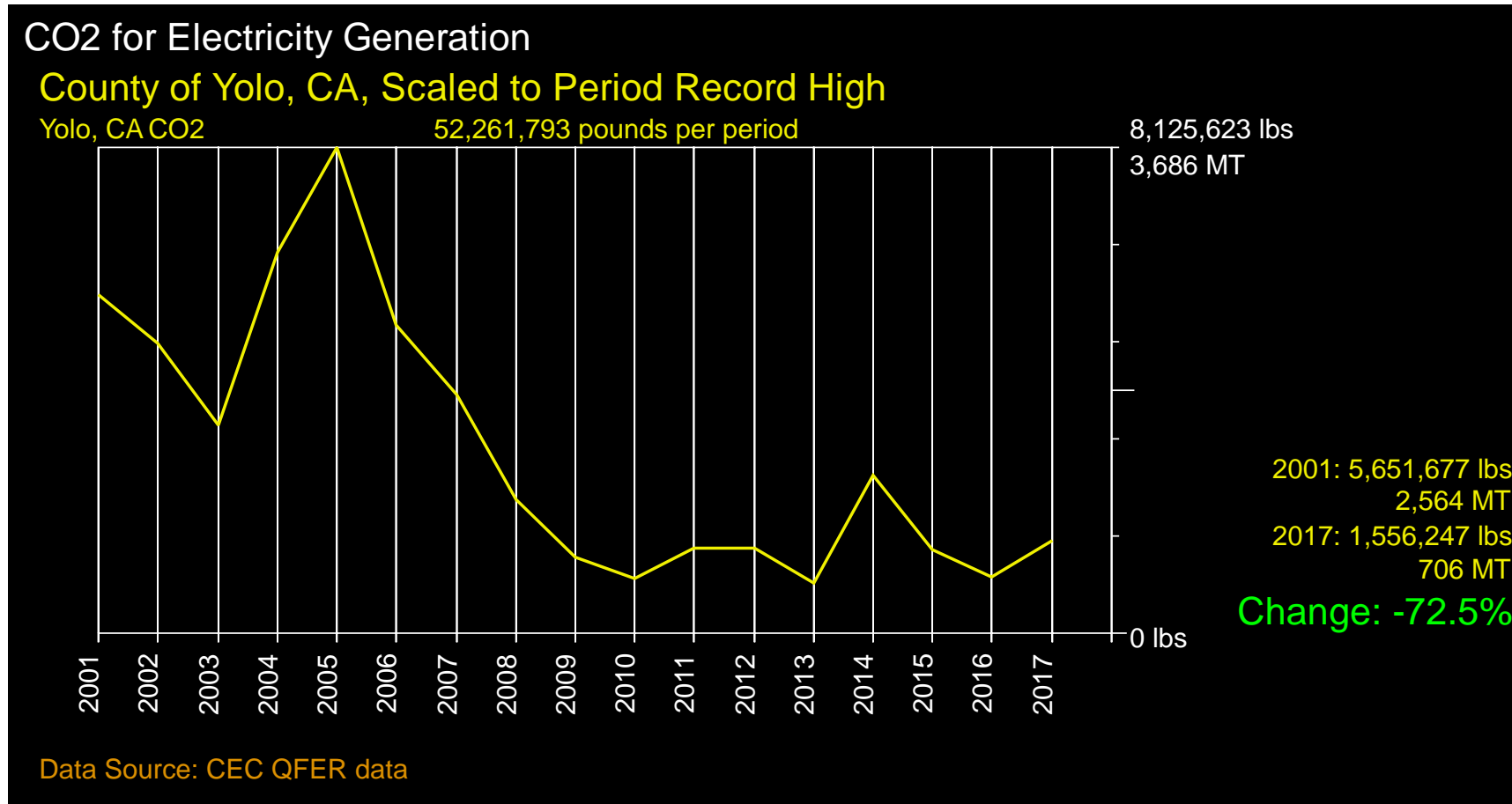
# Kern County Carbon Footprints



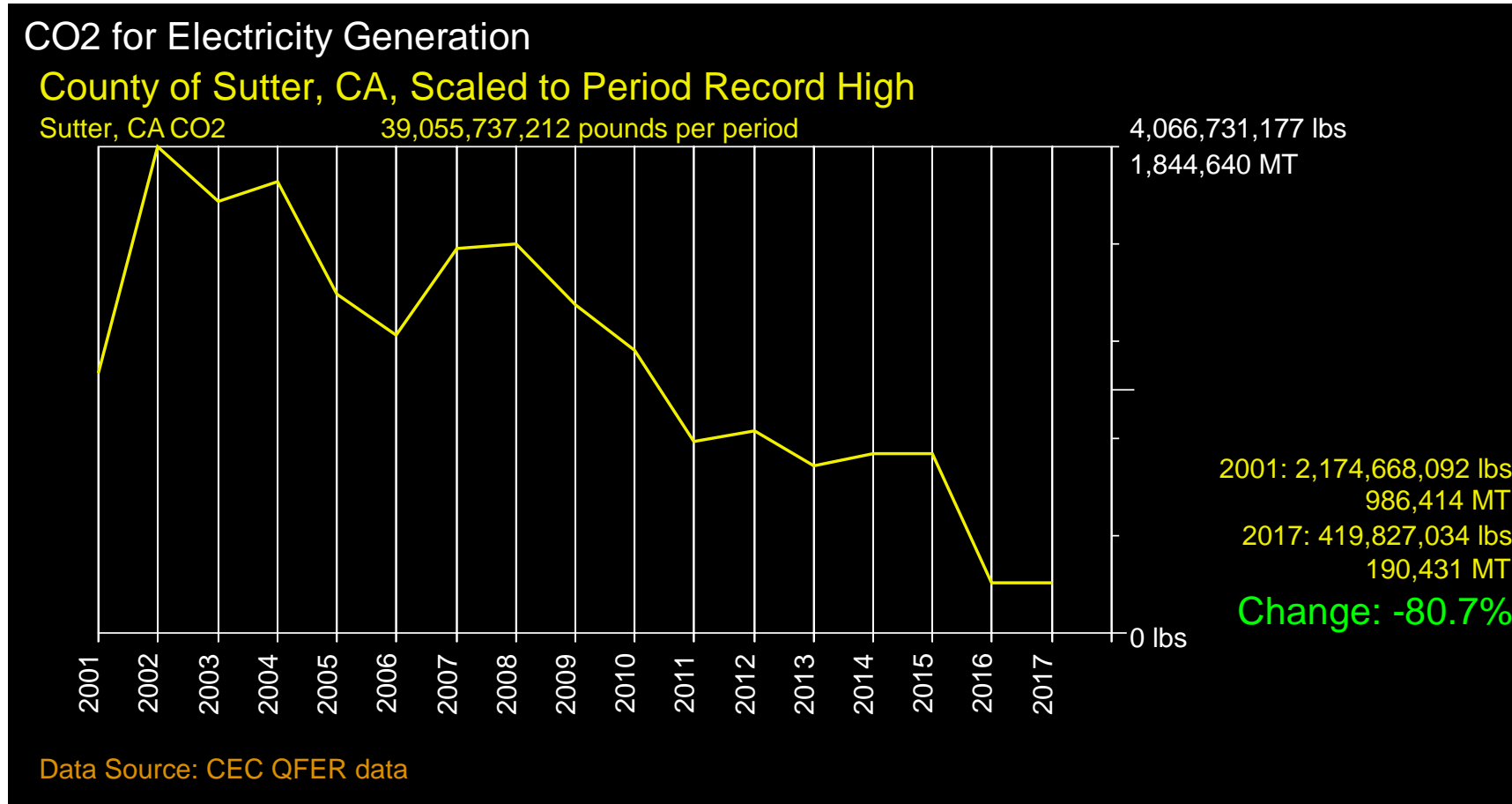
# Contra Costa County Carbon Footprints



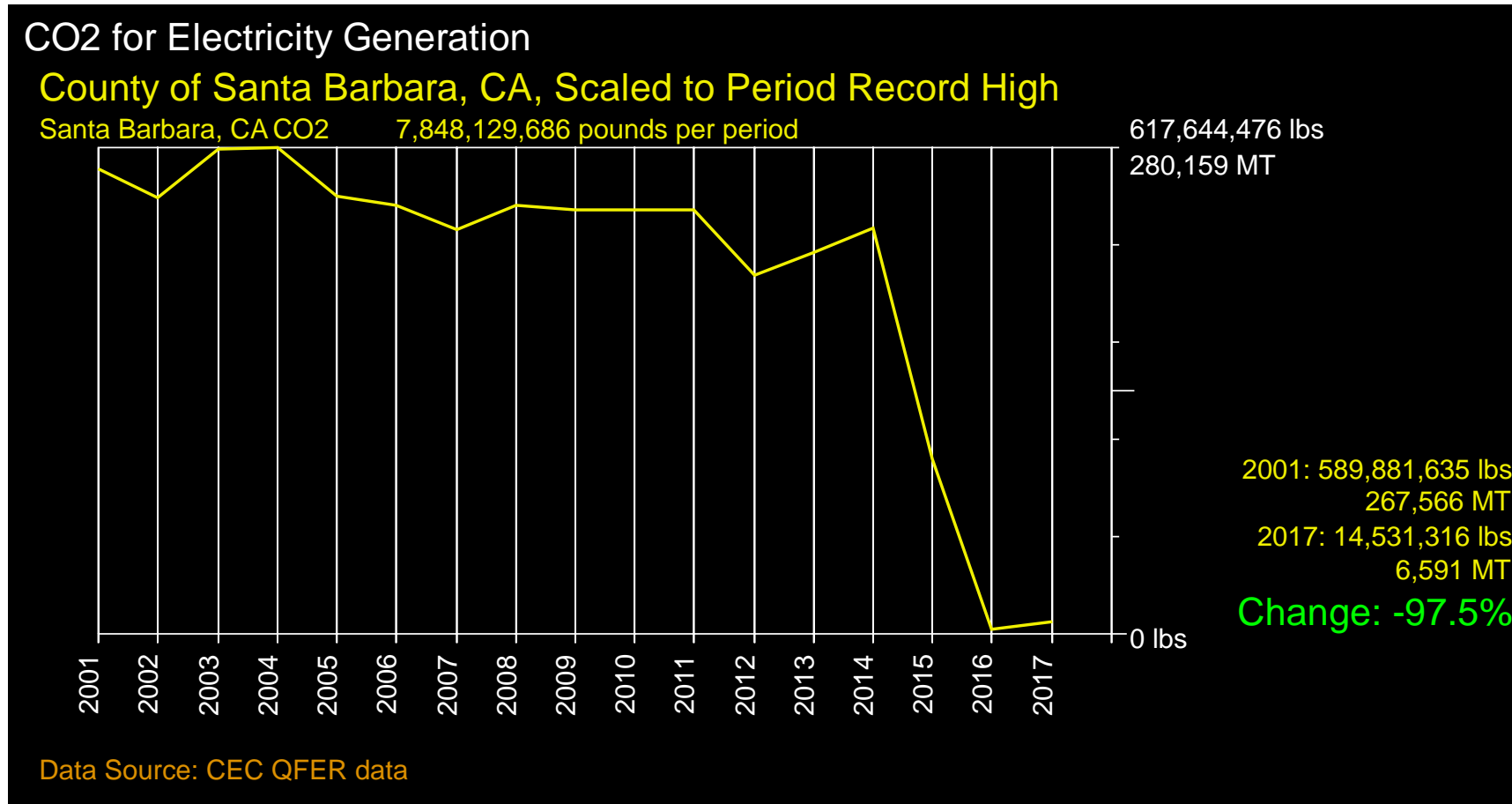
# Yolo County Carbon Footprints



# Sutter County Carbon Footprints

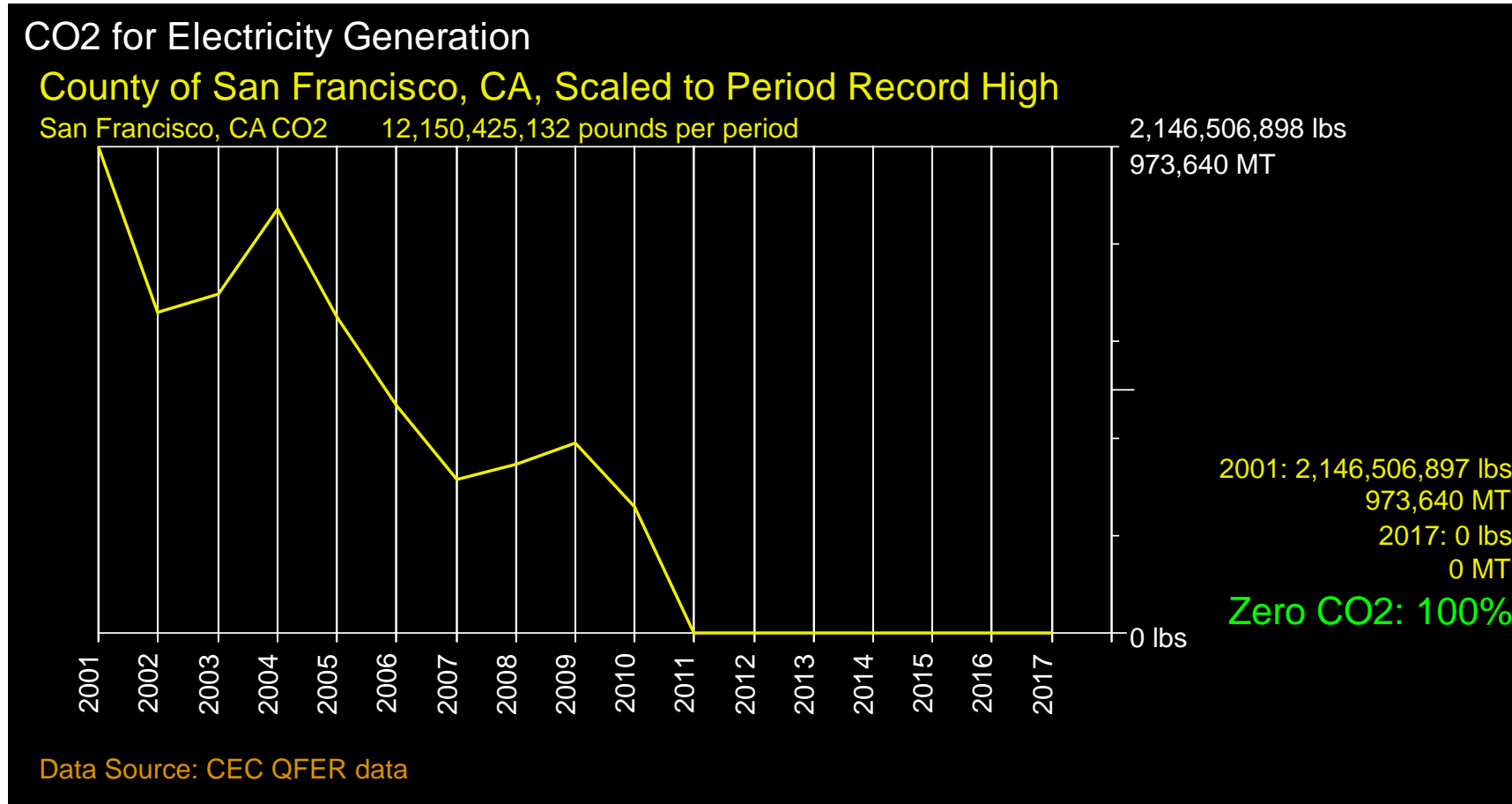


# Santa Barbara County Carbon Footprints





# San Francisco County Carbon Footprints



# General Manager Rate change drawbacks and flaws

- Lack of attention to reducing Sacramento County's carbon footprint for electricity generation.
- Rates higher than PG&E offers leads to higher minimum bills.
- Retention of funds such that some benefit from the burden of others.
- "Baked into the rates" methods disproportionately benefits large users and risks not meeting long term goals for short term gains of current SMUD staff.

No “Baking into the rates” to increase revenue



by selling environmental attributes counted for Renewable Portfolio Standard.

# Economic Development Rate (EDR)

- Rate proposal does not explain the impact on renewable energy for all other customers and the environment.
- SMUD has a lot of renewable contracts where the renewable energy is not delivered to SMUD service territory.
- Substitute energy greenhouse gases and toxic emissions such as (222)Ra and (210)Pb are delivered to Sacramento County.
- Net Zero Energy airborne emissions delivered to Sacramento County will be higher with the additional load.
- SD-7 Environmental Leadership is compromised.

# Action Requested on EDR

- Limit customers to those who have a sustainable energy use plan that will advance SD-7 goals and Sacramento County greenhouse gas reduction goals.
- Match load increases with delivered renewable energy to decrease Sacramento County power plant emissions.
- Publish real-time energy source data so all customers can help reduce Sacramento County's carbon footprint.
- Full Material Resource Plan discrete simulation of EDR using SAP or other MRP system instead of analog modeling such as E3 RESOLVE, PATHWAYS and PLEXOS.

# Daily Prorated Service Charge

- Board established a rate target of at least 10 percent below PG&E's published rates for each customer class (SD-2).
- Prorating will make a rate directly comparable to PG&E's Delivery Minimum Bill Amount (\$ per meter per day) of \$0.32854 (E-1 Rate)
- SMUD daily rate will be \$0.78077 (SIFC \$20.30/26 days)
- PG&E's published rate is much lower than SMUD's new daily prorated rate.
- PG&E's Minimum Bill Amount includes as much as 44 kWh/month usage with no additional charge.

# Action requested on Prorating service charge

- Adjust daily prorated charge to 10% below PG&E's Delivery Minimum Bill Amount (\$ per meter per day) of \$0.32854 (E-1).

# Hydro Rate Stabilization Fund (HRSF)

- Rate scheme has fundamental flaws that benefit some at the burden of others. Using funds from one period to benefit another period where the burdened may not benefit.
- Upper American River Project (UARP) license Table 17 recreational flows and other required flows such as pulse flows reduce usable hydro power and are not mentioned in the report.
- Other unreliable sources such as wind and solar don't use this rate structure.
- Renewable energy oversupply makes hydro power not cost competitive during required flows and other times.



# Action requested on HRSF

- Do away with the fund, it is fundamentally flawed.
- Reliably increase the value of hydro power by directly marketing its environmental attributes to Sacramento County customers in a traceable “value for what you pay” (SD-5) way.
- Do this by “soft metering” the power to electric vehicle owners who want to show in real-time their commitment to reducing Sacramento County greenhouse gas and toxic emissions without subsidization.
- Full Material Resource Plan discrete simulation for Hydro power using SAP or other MRP system instead of analog modeling such as E3 RESOLVE, PATHWAYS and PLEXOS.

# In Closing

- In following these alternatives, I believe the SMUD Board will ensure a lasting positive legacy.
- There will be a reduction of Board directions and decisions that will be strayed from by future SMUD Board members.
- The people of Sacramento County will have better actionable information to use in reducing the County's carbon footprint in real-time.
- The ability to do more than the minimum the law requires will be ensured to the delight of Sacramento County residents.
- I request the SMUD Board to direct SMUD staff prepare a draft resolution to enact the rates and services in this presentation.