

Pursuant to Assembly Bill 361 members of the **Torrance Environmental Quality and Energy Conservation Commission** and staff will participate in this meeting via teleconference or other electronic means.

PARTICIPATE BEFORE THE MEETING by emailing EnvironmentalCommission@TorranceCA.Gov and writing "Public Comment" in the subject line. In the body of the email include the item number and/or title of the item with your comments.

MEMBERS OF THE PUBLIC MAY VIEW AND PARTICIPATE IN THE MEETING via Zoom at: <https://zoom.us> or (720) 707-2699 and using the following credentials:
Meeting ID: 991 4547 8767
Passcode: 324924

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Clerk's office at (310) 618-2780. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. [28CFR35.102-35.104 ADA Title II]

Direct questions or concerns to the Commission Liaison at (310) 618-5930 or individual department head prior to submission to the Commission. Parties will be notified if the complaint will be included on a subsequent agenda.

**TORRANCE ENVIRONMENTAL QUALITY AND ENERGY CONSERVATION
COMMISSION AGENDA
JULY 07, 2022
REGULAR MEETING
7:00 P.M. VIA TELECONFERENCE OR OTHER ELECTRONIC MEANS**

**ENVIRONMENTAL QUALITY AND ENERGY CONSERVATION COMMISSION MAY
TAKE ACTION ON ANY ITEM LISTED ON THE AGENDA**

1. CALL MEETING TO ORDER/ROLL CALL

2. FLAG SALUTE:

3. REPORT OF STAFF ON THE POSTING OF THE AGENDA

The agenda was posted on the Public Notice Board at 3031 Torrance Bl. and on the City's Website on Thursday, June 30, 2022

4. ANNOUNCEMENT OF WITHDRAWN, DEFERRED, AND/OR SUPPLEMENTAL ITEMS

5. ORAL COMMUNICATIONS (Limited to a 15 minute period)

This portion of the meeting is reserved for public comment on items not on the agenda under the subject matter of the Environmental Quality and Energy Conservation Commission. Under the Ralph M. Brown Act, Commissioners cannot act on items raised during public comment but may respond briefly to statements made or questions posed; request clarification; or refer the item to staff. Speakers under this Public Comment period will have no longer than 3 minutes per speaker. Please do not use Bluetooth or speaker devices, mute the volume on your television or other electronic devices and speak clearly. Your phone call to the Commission meeting will be recorded as part of the meeting. By staying on the line and making public comment during the meeting, you are agreeing to have your phone call recorded.

6. CONSENT CALENDAR

Matters listed under the Consent Calendar are considered routine and will be enacted by one motion and one vote. There will be no separate discussion of these items. If discussion is desired, that item will be removed by a Commissioner from the Consent Calendar and considered separately.

ROLL CALL: Endo-Roberts _____ Hill _____ Jendrucko _____ Love _____ Seferian _____ Stecker _____ Chairperson Wright _____

TEQECC 7/07/2022

6A. APPROVAL OF MINUTES: JUNE 02, 2022

7. ADMINISTRATIVE MATTERS

7A. PRESENTATION BY DOUG MACMILLAN – “OFF THE GRID”.

Recommendation of the Community Development Director that the Commission accept and file the presentation.

7B. DISCUSSION OF CLIMATE SMART AWARDS NOMINATION FORM.

Recommendation of the Community Development Director that the Commission provide feedback and approval of the on-line version of the form.

8. PUBLIC HEARINGS – NONE SCHEDULED

9. COMMISSION ORAL COMMUNICATIONS

10. ADJOURNMENT

10A. Adjournment of Torrance Environmental Quality and Energy Conservation Commission Meeting, tentatively, to Thursday, August 04, 2022, at 7:00 p.m.

ROLL CALL: Endo-Roberts _____ Hill _____ Jendrucko _____ Love _____ Seferian _____ Stecker _____ Chairperson Wright _____

TEQECC 7/07/2022

**MINUTES OF A REGULAR MEETING OF
THE ENVIRONMENTAL QUALITY AND
ENERGY CONSERVATION COMMISSION**

1. CALL TO ORDER

The Torrance Environmental Quality and Energy Conservation Commission convened in a regular session at 7:00 p.m. on Thursday, June 2, 2022, via teleconference.

ROLL CALL

Present: Commissioners DeWitt, Endo-Roberts, Love, Montgomery, Seferian, Stecker, and Chairperson Wright.

Absent: None.

Also Present: Senior Environmental Quality Officer Sharron Jones, Environmental Quality Officer Nora Duncan, Planning & Environmental Manager Oscar Martinez, and Torrance Memorial Medical Center Chief Operating Officer Derek Berz, MHA, CMAC, FACHE.

2. FLAG SALUTE

Commissioner Love led the Pledge of Allegiance.

3. REPORT OF STAFF ON THE POSTING OF THE AGENDA

Environmental Quality Officer Duncan reported that the agenda was posted on the Public Notice Board at 3031 Torrance Boulevard on Thursday, May 26, 2022.

4. WITHDRAWN, DEFERRED, AND/OR SUPPLEMENTAL ITEMS

Environmental Quality Officer Duncan reported a supplemental item for Item 7A.

5. ORAL COMMUNICATIONS

A member of the public spoke.

6. CONSENT CALENDAR

6A. APPROVAL OF MINUTES: APRIL 7, 2022

MOTION: Commissioner Love moved to approve the April 7, 2022 minutes as amended. Commissioner Endo-Roberts seconded the motion; a roll call vote reflected unanimous approval.

7. ADMINISTRATIVE MATTERS

7A. PRESENTATION BY DEREK BERZ, TORRANCE MEMORIAL MEDICAL CENTER – GREEN / SUSTAINABLE BUILDING

Torrance Memorial Medical Chief Operating Officer Derek Berz, MHA, CMAC, FACHE, presented a PowerPoint presentation regarding the green / sustainable Torrance Medical Center Building:

- Practice Green Health is a national organization that strives to mitigate health care impacts, create community health, resilience, and lead broader social transformation.
- Torrance Memorial Medical Center (TMMC) looks at what's happening in the community through the following organizations: Torrance Climate Action Plan (CAP), the California Climate Action Plan, and OSHPD.
- TMMC investigates community needs assessments every 3 years and investigates action plans to address the needs of the community annually.
- Focus for TMMC includes medical-waste disposal, electricity, water conservation, food sustainability, electric vehicle stations, etc.; TMMC looks for ways to serve the community at a cost benefit, allowing more access to medical care.
- TMMC participates in the "Better Tomorrow Plan 2025" where food waste reduction, food recovery, food redistribution, green waste recycling, plastic / aluminum recycling, home gardening education, sustainable materials, and delivery consolidation are investigated, practiced, and implemented.
- To encourage carbon emission reduction, a Smogbuster Program for employees was drafted and incentivized with raffles and reimbursements for qualified employees who carpool, use public transportation, or walk or bike to work.
- Through their various programs from 2014 to 2022, TMMC is down 23-million gallons a year, down 120-million kW a year, have saved 1.4-million tons of carbon, and donated more than 20,000 pounds of food.
- TMMC's future programs and focus include solar energy and improvements in reducing medical waste.

Commissioner Montgomery stated that he and Commissioner Love are on the Torrance Strategic Planning Committee and recommended that TMMC look at the Stewardship of Environment Plan to discover potential partnerships.

Commissioner Montgomery inquired if the Torrance Memorial Food & Nutrition Service investigates foods that provide lower carbon emissions, require less water, and less input. Torrance Memorial Medical Chief Operating Officer Derek Berz, MHA, CMAC, FACHE replied that the program investigates plant-based foods, reducing the environmental impacts, food nutrition content, and total peritoneal nutrition currently.

Commissioner Endo-Roberts thanked Torrance Memorial Medical Chief Operating Officer Derek Berz, MHA, CMAC, FACHE for the presentation and stated that TMMC should be considered for one of the Climate Smart Awards.

Commissioner Montgomery inquired if individuals could volunteer at TMMC. Torrance Memorial Medical Chief Operating Officer Derek Berz, MHA, CMAC, FACHE replied that there is currently no subcommittee of community members to volunteer, but it could be investigated.

Commissioner DeWitt thanked Torrance Memorial Medical Chief Operating Officer Derek Berz, MHA, CMAC, FACHE for the presentation and stated that getting community members involved would be ideal for support and covering broader ideals.

Commissioner DeWitt stated that the solar panel installation in TMMC's future program would set a great example for the community.

Chair Wright inquired if TMMC had investigated peak trimming with battery storage. Torrance Memorial Medical Chief Operating Officer Derek Berz, MHA, CMAC, FACHE replied they had not, but had investigated fuel cell technology; TMMC uses an uninterrupted power source for operational purposes.

Commissioner DeWitt inquired if TMMC shared their knowledge, successes, and partnerships with smaller community members, business members, and / or suppliers. Chief Operating Officer Derek Berz, MHA, CMAC, FACHE replied that TMMC does information exchange with vendors and consultants but had not shared knowledge with community members.

A member of the public spoke.

7B. PRESENTATION BY ENVIRONMENTAL QUALITY COMMISSIONER DEWITT – PHASED-IN APPROACH TO GREEN LANDSCAPING IMPLEMENTATION FOR TORRANCE

Commissioner Dewitt presented a PowerPoint presentation regarding an analysis and proposal to phase in an electrified landscaping maintenance:

- There are 33 parks spread throughout the City of Torrance. A total percent on acreage and phased-in policy concepts were presented; phased-in policies proposed all City of Torrance park acreage be maintained with electric-powered equipment:
 - Policy A: 6.2% of total park acreage | pilot program for experience purposes.
 - Policy B: 11.3% of total park acreage | pilot program for logistics and management.
 - Policy C: 37% of total park acreage | full week of mower usage at multiple parks.
 - Policy D: 55% of total park acreage | commercial equipment due to expansion.
 - Policy E: 100% of total park acreage.
- Financial information and cost of ownership examples were provided as an effort to reach the goal of green landscaping for the City of Torrance.
- Feedback from the Parks and Recreation Commission will be sought after and provided to the Community Development Staff.

Commissioner Stecker inquired if the City of Torrance or neighboring cities had electric mowers currently. Environmental Quality Officer Nora Duncan replied that Staff can investigate.

Commissioner Stecker inquired on how electric mowers were charged. Commissioner DeWitt replied that a dedicated facility would be needed to charge the electric motors. The electric mowers use a 110V battery to charge and would need approximately 4 hours of charging.

Commissioner Montgomery inquired how Commissioner DeWitt wanted to move the project forward and how he could assist. Commissioner DeWitt replied that the agenda item was for discussion purposes at this time.

Commissioner Montgomery stated that getting money for new programs is essential and that he would be willing to contribute. Chair Wright seconded Commissioner Montgomery's statement and stated that the Commission could investigate contributing to the project.

Chair Wright stated that he would like to see a slide on sound reduction compared to gas-powered motors, and requested Staff find out if surrounding cities are investigating electrified landscaping maintenance.

A member of the public spoke.

7C. ENVIRONMENTAL COMMISSION CLIMATE SMART AWARD SUBCOMMITTEE TO PROVIDE SUMMARY OF LIBRARY COMMISSION MEETING

Chair Wright stated that the Library Commission was receptive, appreciative, and made no additions to the Climate Smart Award.

Commissioner Seferian stated that the Library Commission wanted to make sure that the Youth Council was involved in the process and that she had assured the Library Commission that they were.

7D. ENVIRONMENTAL COMMISSION CLIMATE SMART AWARD SUBCOMMITTEE TO PROVIDE SUMMARY OF CULTURAL ARTS COMMISSION MEETING

Chair Wright stated that the Cultural Arts Commission was receptive and provided interest in the Farmer's Market for the Climate Smart Award.

Commissioner Love stated that the Cultural Arts Commission requested more timelines, guidelines, and specifics. The Cultural Arts Commission looked to put together a subcommittee to speak more on the matter.

Commissioner Endo-Roberts stated that the Cultural Arts Commission was enthusiastic about the Climate Smart Awards.

7E. ENVIRONMENTAL COMMISSION CLIMATE SMART AWARD SUBCOMMITTEE TO PROVIDE SUMMARY OF WATER COMMISSION MEETING

Commissioner Seferian stated that the Water Commission was receptive and that they would investigate different groups for nomination.

Commissioner Montgomery stated that the water portion in the Climate Smart Award is set up nicely for the Water Commission and that the Commission should follow up with various Commissions once the finalized forms have been provided.

Chair Wright requested Staff draft a timeline for the Commission to move forward. Environmental Quality Officer Nora Duncan replied that Staff will present timelines during the next meeting; Staff is currently testing the fillable form online.

8. PUBLIC HEARINGS

- None.

9. COMMISSION ORAL COMMUNICATIONS

Commissioner DeWitt stated that it's his last night serving on the Commission after 10 years and thanked the Commission and Staff.

Commissioner Stecker thanked Commissioner DeWitt and Commissioner Montgomery for their service.

Commissioner Montgomery stated that it's his last night serving on the Commission after 8 years, thanked the Commission and Staff, and will look back on his time on the Commission with great pride and gratitude.

Commissioner Love thanked Commissioner DeWitt and Commissioner Montgomery for their service and encouraged them to keep providing ideas in the future.

Commissioner Endo-Roberts thanked Commissioner DeWitt and Commissioner Montgomery for their service, guidance, and input.

Chair Wright stated it was pleasure serving with Commissioner DeWitt and Commissioner Montgomery and thanked them for their service.

Environmental Quality Officer Nora Duncan, on behalf Staff, thanked Commissioner DeWitt and Commissioner Montgomery for their dedication, passion, and service.

10. ADJOURNMENT

MOTION: At 8:43 p.m., Commissioner Endo-Roberts moved to adjourn the meeting to Thursday, July 7, 2022, at 7:00 p.m. The motion was seconded by Commissioner Seferian; a roll call vote reflected unanimous approval.

###

Doug Macmillan

- Physics degree in New Zealand
- My first trip to the 40 years ago to teach in a summer camp
- Set up business in Torrance 22 years ago making Honda cars faster
- Happily married for 30 years
- 2 Kids at RPI NY
- Passionate about efficiency - less waste
- Passionate about education
- Save energy, money and pollute less
- Session about 30 minutes - Ask questions anytime.



Successful Torrance business

- **Very successful Torrance business employing 10 people**
- **From zero to a multi-million dollar business employing 10 people**
- **Make Hondas run more efficiently**
- **What I will cover will put my company out of business**

Topics

- **Challenges**
- **A healthier home**
- **Home heating**
- **Our world and CO2**
- **The costs of driving**
- **Driving on sunshine. Electric vs gasoline**
- **Getting off the gas**
- **Home / water heating -cooling / cooking**
- **You've got the power - going solar**
- **Keeping the lights on. Solar + battery**
- **How to get off the grid**
- **You can make a difference**
- **Resources**

Challenges

- Increasing heat waves
- Water shortages. Record low levels
- Fires



Healthy home

- Insulate
- Windows double or triple glazing with vinyl
- Quieter
- Walls
- House built in 1956. No wall insulation.
- Added aluminium foil. Cheap and very effective.
- Expanding foam
- Johns Mansville Comfort Therm fibreglass
- Ceiling
- Old sprayed in insulation was compacted and dirty.
- Removed and replaced with ComfortTherm
- Under floor. None. Added ComfortTherm
- Most heating now comes from the fridge, router, people & pets
- Use a Flir IR camera to see hot and cold spots
- Winter house heating now achieved by 4 things:
- My and my wife's body heat
- The fridge
- The internet router
- The cats



Home heating

- Winter house heating now achieved by 4 things:
 - Our body heat
 - The fridge
 - The internet router
 - The cats



Our world

- **The Earth's atmosphere is very very thin**
- **The white line 7 miles thin. A little higher than commercial jets fly**
- **This contains 80% of our atmosphere**
- **It does not take much to pollute**

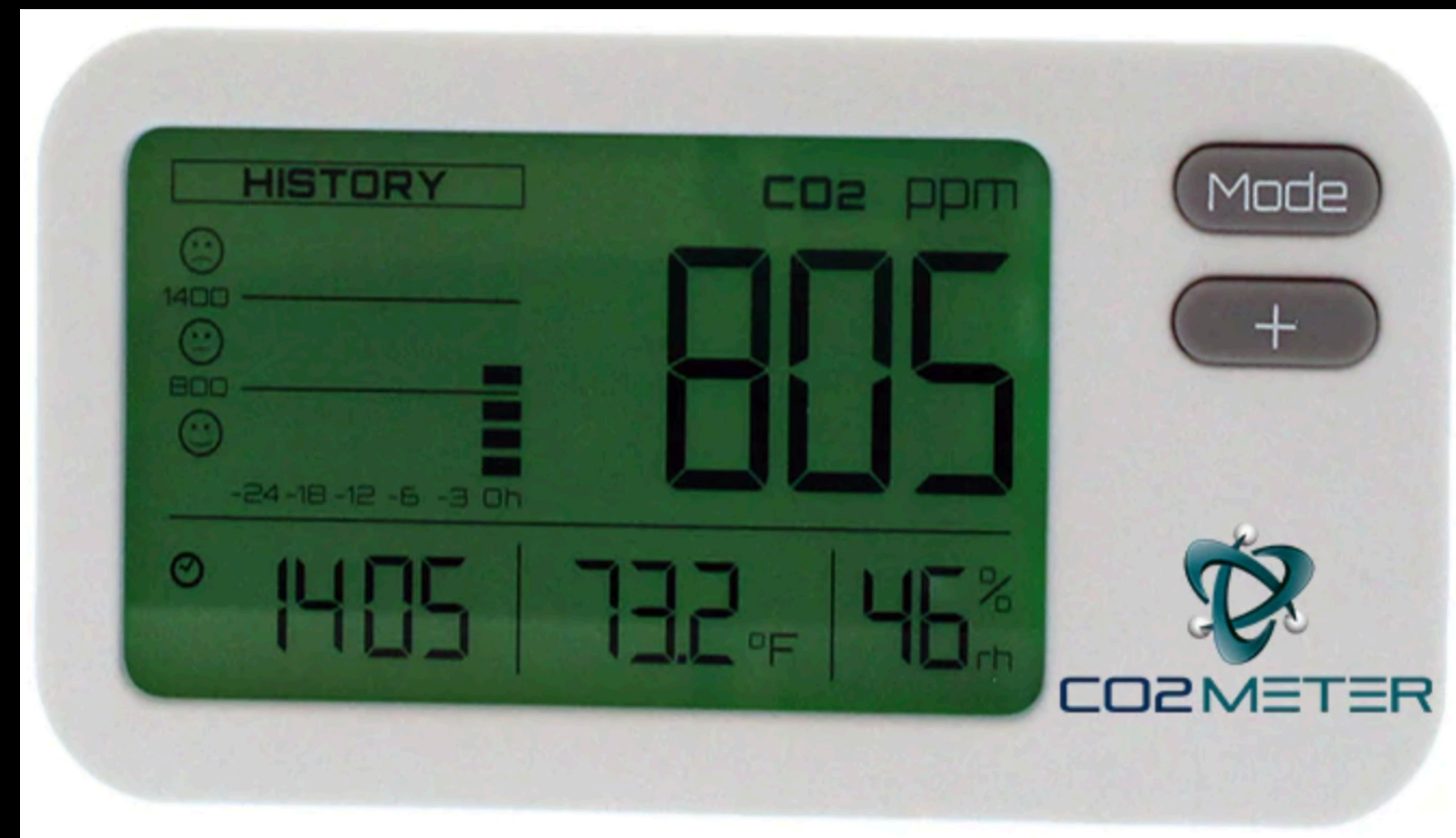


CO2

- **We breath it out**
- **It's impact is like a blanket trapping heat on the earth**
- **Sources**
 - **~ 90% from fossil fuels; Vehicle exhaust, power plants**
 - **Deforestation, cement production**
- **We have control over this. How do we improve?**

CO2 inside your house

- Air outside your house healthier than inside
 - Plastics, paints, cleaning chemicals
 - Cooking - switch to induction
 - CO2 above 1000 ppm thinking deteriorates
 - How do you improve - ventilate; open windows



CO2 outside your house

- **Car exhaust**
- **Electricity production**
 - **~ 50 % of California's electricity generation**
- **Heating / Natural gas**

Costs of Driving

- **A typical SUV drives 15,000 miles year at 20 mpg.**
- **At \$6.00 per gallon, this costs \$4500 per year.**
- **Add another \$1000 maintenance per year**
- **8 years of ownership, your vehicle burns 6000 gallons**
- **Costing you at least \$36,000 and \$8000 in maintenance.**
 - **Let's repeat that - \$44,000 ownership costs**
- **You create 100,000 lbs of CO2**
- **Lets visualize this:**

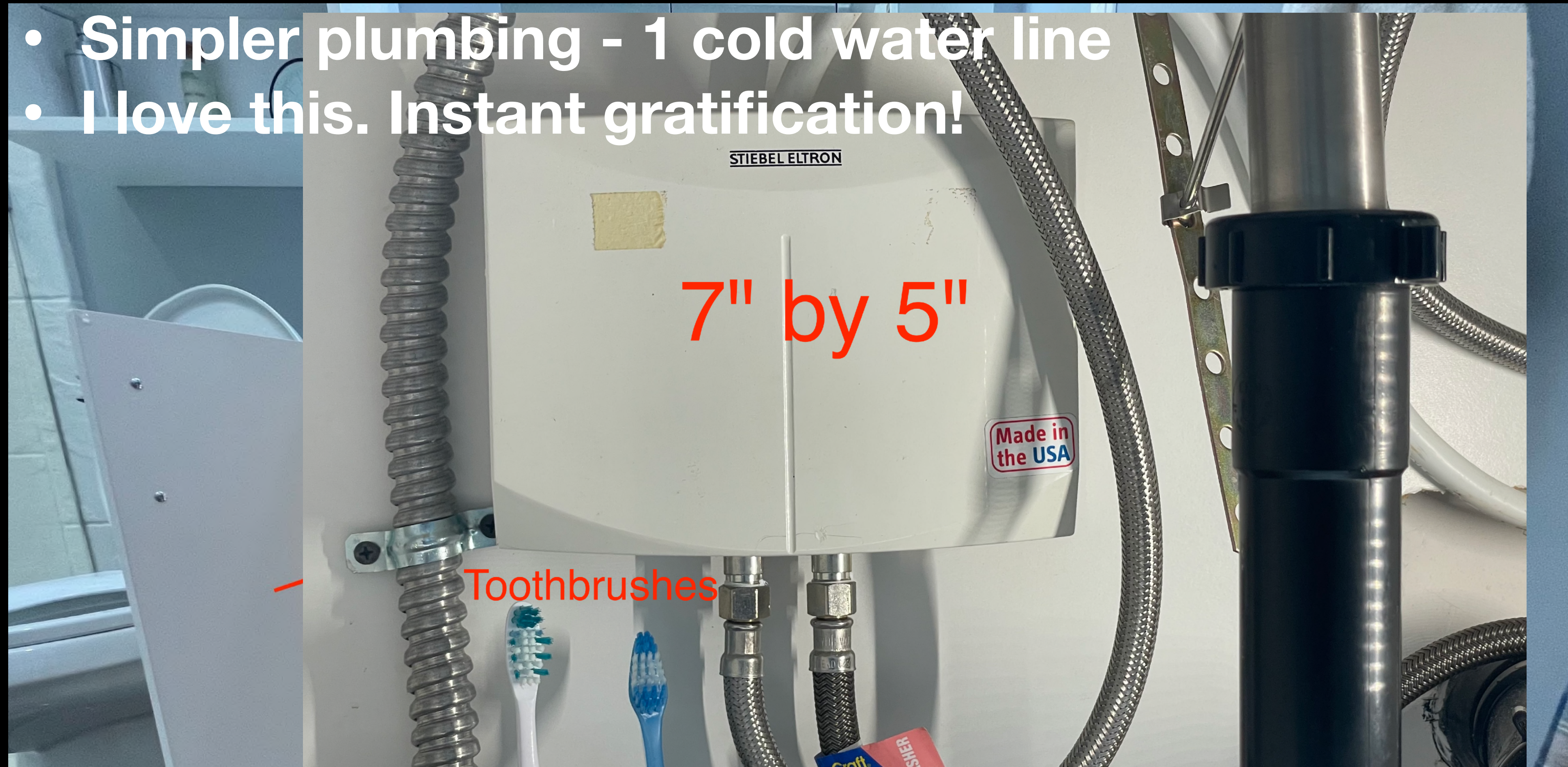
Dodger Stadium Keep



This would double the CO₂ content in the stadium

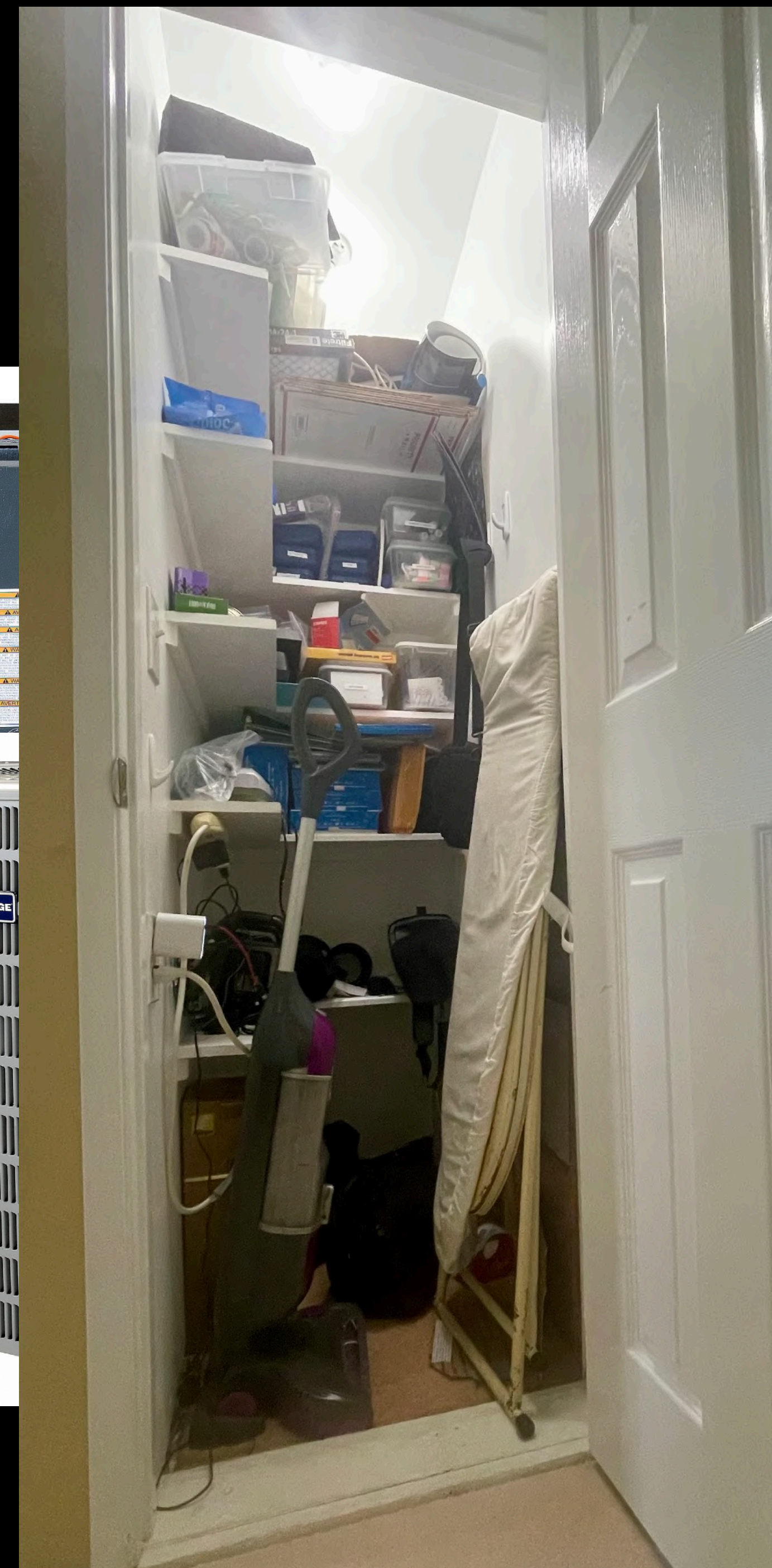
Bathroom hand washing

- How long does it take to get hot?
- How much water & energy do you waste?
- Small instant electric heater - 3 seconds (240V)
- Simpler plumbing - 1 cold water line
- I love this. Instant gratification!



Furnace to Heat pump

- Who here knows what a heat pump is?
- How many here have AC? - or a heat pump?
- My furnace burned gas, and electricity even when not working. A waste of money.
- Removed furnace and gained storage space
 - I've learned since moving to America, everyone needs more storage space
- I switched to heat pump
- Placed air handler in the ceiling, condenser outside
- How does it work? By moving heat
 - Hot to cold air and vise-versa. Very efficient.



Better water heating

- Heating water takes a huge amount of energy
- How many of you have:
 - Electric water heating?
 - Tankless (electric or gas)?
 - Gas water heating with cylinder storage?
- Gas cylinder burns \$200 of gas per year to keep the water at temperature
- New technology: Hybrid electric hot water heater
 - My plumber and electrician do not know about this
- Heat pump with electric backup
 - Like a fridge but in reverse
 - Saves money and no generation of CO2
 - 1/3 the power of a traditional electric heater (~hair drier)
- Rheem Performance Platinum
 - Saves \$315 / annum (Home Depot)



Stovetop Cooking

- Show of hands - how many have gas stoves?
- Gas stoves have dangerous by-products
 - CO, CO2 - brain fog
 - NO2 which can affect people with respiratory issues
 - Natural gas has 30 times the global warming effect as CO2
- Ask yourself, why are you burning fossil fuels inside your house?
- Gas stoves are bad for you and the environment.
- Consider an induction stove top - same tech as p
- Do you see why this is safer for kids and adults?
- Cook on paper towels to collect splatter
- Twice as fast as gas to boil
- Excellent heat control
- Lets look at that again. Ice cube on the element boiling rice
- This is fantastic!
 - Safe
 - Clean
 - Fast
- From \$57 on Amazon

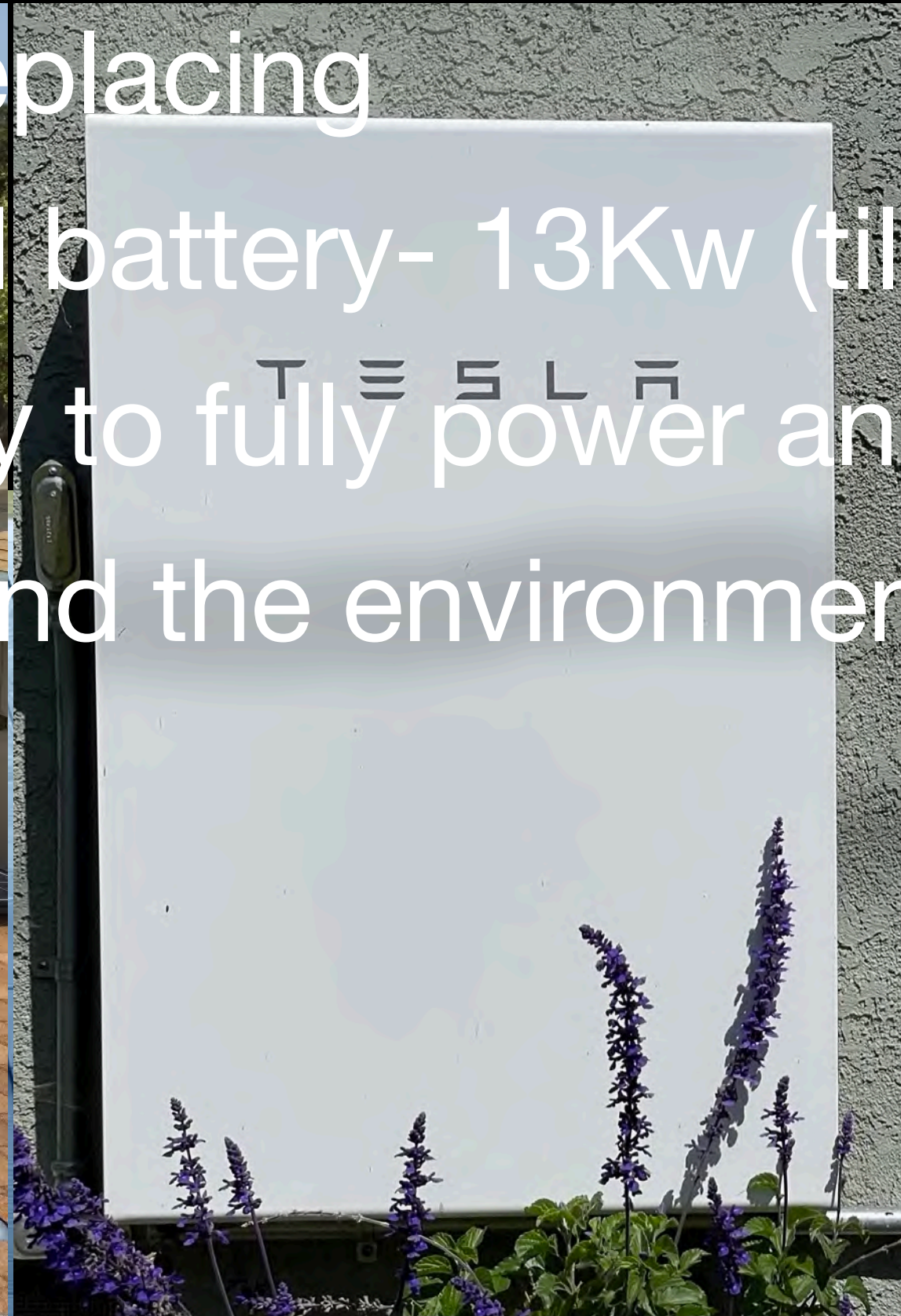


You've got the power

- 2020 CA fires burned 4 million acres, power lines and killed 33 people
- Hurricane Ida knocked out 30,000 poles & 6000 transformers.
 - People were without power for weeks.
 - 6 people died from generator CO poisoning
- Invest in resiliency. Be independent in case of catastrophes
- Sunshine is a perfect resource for us
- I plan to go off grid - here's how:

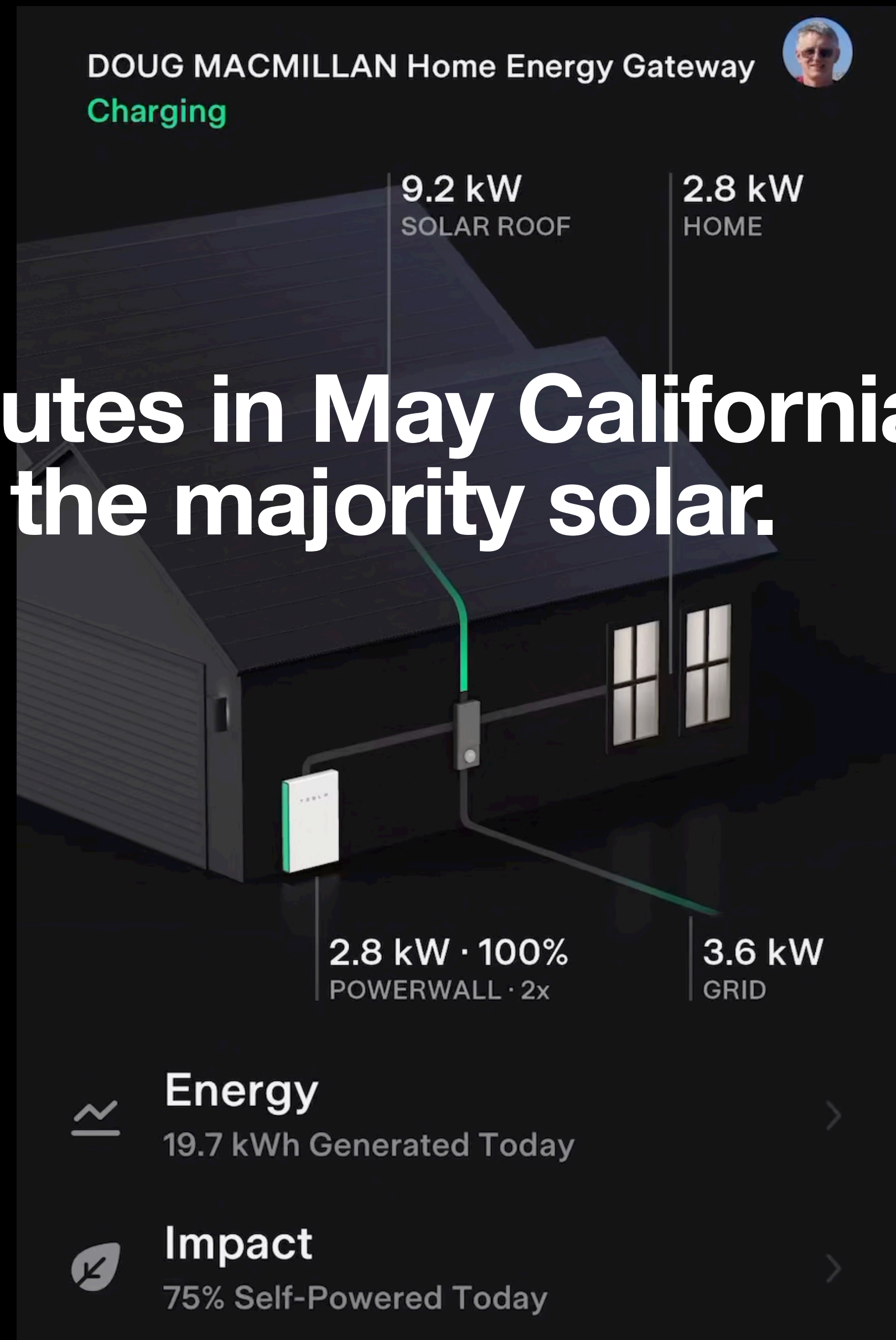
How to be self sufficient

- Started small in 2015. 2kw. No outages since.
- My 1250 sq ft tile roof needed replacing
- 2021: Tesla Solar Roof + second battery- 13Kw (tile)
- Today I generated excess energy to fully power another 2 homes
- Solar + battery is great for you and the environment



Generation 6/25/22

Fun fact. For 2 minutes in May California ran 100% on renewable energy; the majority solar.



Edison is not your friend

- Every person that installs solar costs SCE money
- So, they plan to tax solar panel owners
- Thousands of solar installers will lose their jobs

Where am I at the moment?

- Awaiting install of the hybrid hot water heater
- I may choose to stay connected to share my power to the grid
- 50,000 others like me are founding the Tesla Virtual Power plant
- 11th largest power plant in California
- Back feeds our battery power to the grid in cases of emergency

Action points

- **Invest in an electric vehicle**
- **Invest in solar + batteries**
- **Electrify your house appliances**
- **Disconnect natural gas**

Resources

- [CO2meter.com https://www.co2meter.com/collections/desktop](https://www.co2meter.com/collections/desktop)
- **Johns Mansville Comfort Therm insulation (USA)**
- **Bathroom tankless 5" by 7" Stiebel Eltron 240 V (USA)**
- **Bathroom 2 gallon tank 110 V Rheem (USA)**
- **Rheem Performance Platinum Hybrid electric water heater (USA)**
- **Bosch induction cooktop**
- **Duxtop 1800W Portable Induction Cooktop Countertop**

Torrance Climate Smart Award Nomination Form

Nominations accepted September -February and Awards distributed May - June

The Climate Smart Award is a program being implemented by the Environmental Quality and Energy Conservation Commission in support of the Stewardship of the Environment Priority in the 2021 Strategic Plan. The Strategic Plan can be found at www.TorranceCA.Gov/Government/City-Manager/Strategic-Plan. The goal of the award is to highlight people, businesses and organizations within Torrance that through services and actions clearly demonstrate the importance of environmental stewardship. The award categories are defined below.

1. Please check one of the following award categories:

- CLIMATE SMART ENERGY: Recognizes outstanding achievements in clean energy, energy efficiency, demand reduction and reduced greenhouse gas emissions.
- CLIMATE SMART WATER: Recognizes achievements in water conservation through implementation, planning and promotion of water conservation efforts.
- CLIMATE SMART YOUTH: Recognizes Torrance school aged youth, individuals or groups, for outstanding leadership in climate change and building awareness and engagement of their peers, school and/or community.
- CLIMATE SMART COMMUNITY: Recognizes an individual member of the Torrance community or a community group that has provided outstanding support to the implementation and goals of the strategic plan as it pertains to environmental stewardship.
- CLIMATE SMART BUSINESS: Recognizes retail, commercial, industrial and other businesses that demonstrate achievements in any areas of the award criteria or has received a recognized environmental certification, including but not limited to Clean Bay Restaurant, LEED and/or Green Business Network standards.

2. Please provide us with your contact information:

Name

Phone Number ext.

Email

3. Please provide us with Nominee contact and award nominee site information:

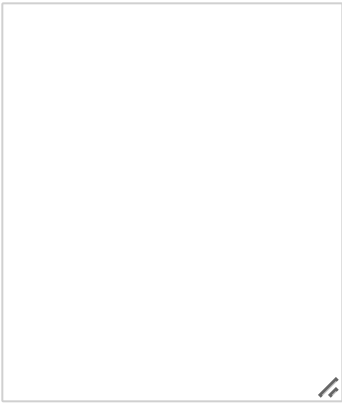
Nominee Name

Nominee Address

Nominee Phone Number ext.

Nominee Email

4. Briefly describe the achievements of this nominee and how their efforts have significantly improved life in the Torrance community.



5. Attach a photo of the nominee:

BROWSE...

CLEAR

Maximum size allowed: 5 MB

Allowed types: .gif, .jpg, .jpeg, .png, .doc, .docx, .xls, .xlsx, .rtf, .pdf, .txt

SUBMIT