MCE Empowering Our Clean Energy Future

CONTRA COSTA | MARIN | NAPA | SOLANO

MARIN COUNTY | NAPA COUNTY | UNINCORPORATED CONTRA COSTA COUNTY | UNINCORPORATED SOLANO COUNTY
BENICIA | CONCORD | DANVILLE | EL CERRITO | FAIRFIELD | LAFAYETTE | MARTINEZ | MORAGA | OAKLEY
PINOLE | PITTSBURG | PLEASANT HILL | RICHMOND | SAN PABLO | SAN RAMON | VALLEJO | WALNUT CREEK

MCE SPECIAL Meeting
Friday, September 29, 2023
9:00 A.M.

San Rafael Community Center, 618 B Street, San Rafael, CA 94901

1. Roll Call
2. Public Open Time (Discussion)
3. Welcome & Introductions (Discussion)
4. Review of Mission, Vision, and Key Priorities (Discussion)
5. MCE Investments Program (Discussion)

Break

6. 2022 Power Supply Statistics and Content Label (Discussion/Action)

   Meeting will adjourn for Lunch and the Fieldtrip agendized below.

Lunch

7. Fieldtrip: MCE Solar One at 835 Castro Street, Richmond, CA 94801.
   No transportation provided; Meeting will Adjourn from this location.

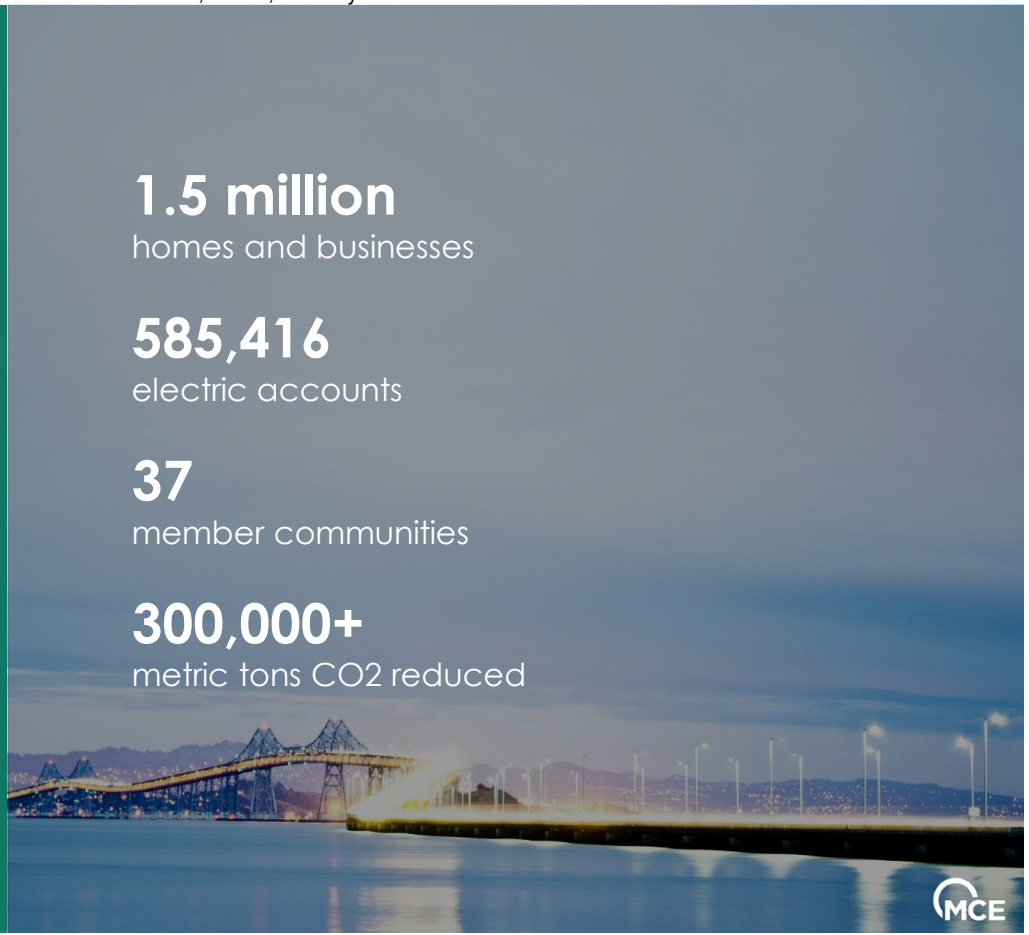
The Board may discuss and/or take action on any or all of the items listed on the agenda irrespective of how the items are described.

DISABLED ACCOMMODATION: If you are a person with a disability which requires an accommodation or an alternative format, please call MCE at 1 (888) 632-3674 at least 72 hours before the meeting start time to ensure arrangements for accommodation.


MCE
Empowering
Our Clean
Energy Future
CONTRA COSTA | MARIN | NAPA | SOLANO
Mission, Vision, and Key Priorities
MCE BOARD RETREAT | SEPTEMBER 29, 2023

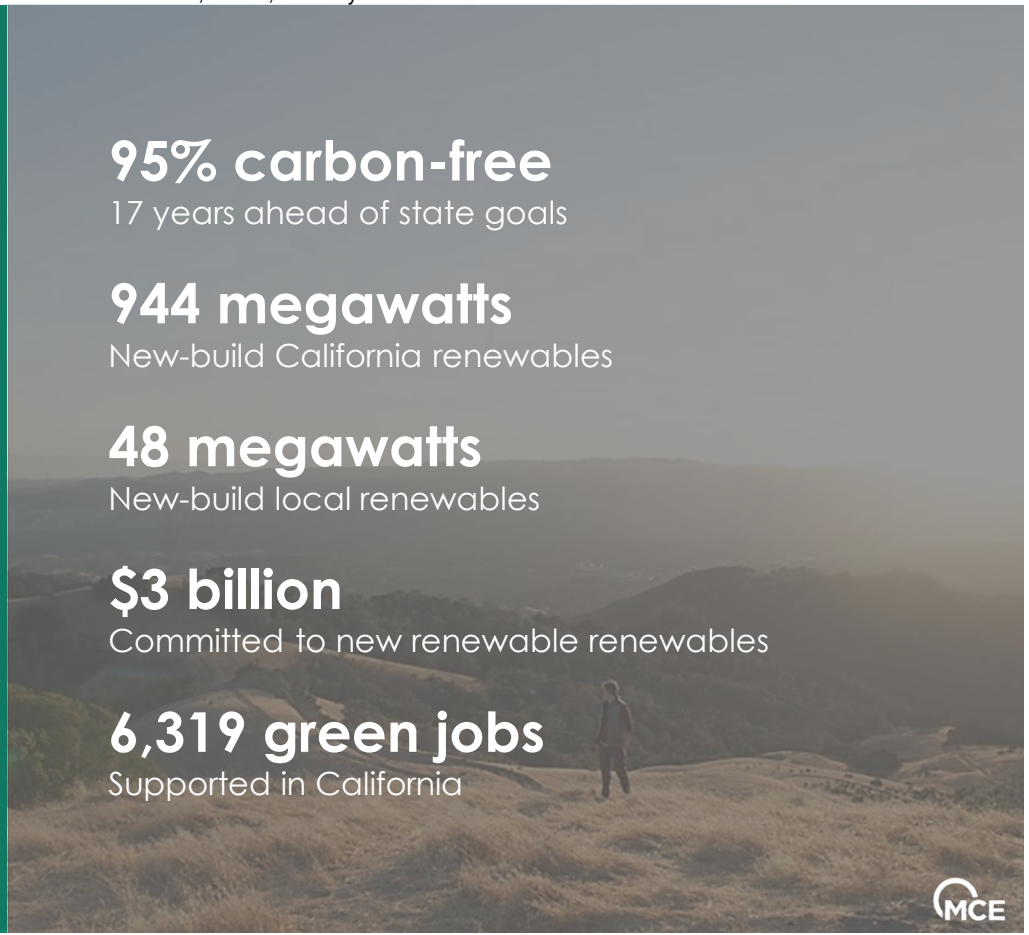
MISSION

Confront the climate crisis by eliminating fossil fuel greenhouse gas emissions, producing renewable energy, and creating equitable community benefits.



VISION

Lead California to an equitable, clean, affordable, and reliable energy economy by serving as a model for community-based renewable energy, energy efficiency, and cutting-edge clean-tech products and programs.



⚡Key Priority

Reduce greenhouse gas emissions with proven and new strategic programs and through supply of fossil-free energy products.

Customer Programs

ALICE HAVENAR-DAUGHTON
Vice President of Customer Programs
ahavenar-daughton@mceCleanEnergy.org

EVs & EV Charging

PROGRAM UPDATE

photo: MCE EV rebate recipient, Sandra S. from Richmond

Incentives and technical assistance for EV charger installation; rebates to help low-income customers purchase EVs; and managed home charging through the MCE Sync app.

Highlights

- **1,000+ EV chargers** at workplaces and multifamily properties. 950 more under construction (80 new ports in the first half of 2023).
- **1,800+ MCE Sync users** for managed charging. 90% of charging shifted out of 4-9pm peak. Customers save an average of $170/year.
- **421 EV rebates** distributed to income-qualified customers. **New Point of Sale EV Rebate launched in May.** 76 awarded May-August.

Battery Storage

PROGRAM UPDATE

Incentives for customer-owned energy storage systems combined with solar. Batteries provide resiliency during outages and reduces daily energy consumption during peak hours.

Highlights

- **69 homes** installed batteries totaling over 1 MWh storage.
- **21 critical facilities** installing 4.4 MWh of storage including:
  - Medical clinics, food banks, schools, community centers, and fire stations.
- Program currently paused. Non-res will reopen in 2024 as a result of federal earmark funding.

Peak FLEXMarket

PROGRAM UPDATE

Compensates customers for shifting or reducing electricity use during Flex Alerts when the grid is most constrained to help prevent power outages.

Highlights

- **2022 Results:**
  - 2,158 residential customers
    - solar + storage, smart thermostats, EV chargers
  - 35 non-residential customers
  - 39,000 kWh saved over 55 Flex Alert hours
- **2023 Outlook:**
  - Increased enrollments, far fewer Flex Alert hours

Energy Efficiency

PROGRAM UPDATES

$2.35 million in rebates distributed in 2022.

January – June 2023 Highlights

- MCE Energy Efficiency programs avoided as much GHG emissions as:
  - Taking 2,873 cars off the road for one year or
  - Eliminating the electricity usage of 1,512 homes
- Energy efficiency upgrades at:
  - 494 units at 9 multifamily properties
  - 110 moderate income homes
  - 29 small businesses
  - 20 large customers

2024-2031

ENERGY EFFICIENCY FUNDING

- **$158 million awarded to MCE from the CPUC for energy efficiency and electrification in 2023**
  - Nearly doubles all-time funding and continues programs through 2031
  - 5x increase in electrification incentives

Customer Operations

ZAE PERRIN
Director of Customer Operations
zperrin@mceCleanEnergy.org

100% renewable energy service

Highlights

- **70,000+** Deep Green customers
- **12%** of MCE's customer base
- **438%** increase in customers in 2022
- **$300,000+** saved by 8,000 lower income customers enrolled in Deep Green at no extra cost

100% local solar energy service tied to solar Feed-In Tariff project in Novato. Service launched in 2017.

Highlights

- **Cleaner power & lower cost**: Stable rates offered through long-term energy contract. Lowest cost service option today.
- **338 residents saving $100/year**, on average, compared to PG&E.
- **Equitable access:** Low-income residents in underserved areas of Richmond, Vallejo, and unincorporated Antioch enrolled this year.

100% renewable energy at a 20% discount, in addition to CARE & FERA discounts, for up to 20 years

Highlights

- **3,200 low-income residents** living in zip codes with heavier environmental burdens as recognized by the California Environment Screen.
- **$830,000+ in customer discounts**, easing the financial burden of energy costs for those in need.
- Powered by Cottonwood **solar in Kern and Kings Counties.**

CUSTOMER OPERATIONS

MCE Service Center

- **1,880 average inbound calls per month**, 21% increase year over year.
- **5:51 average call time**, reduced by 40%.
- **13x increase in Spanish calls this year**, from 2% to 31% of all calls.
- **17% of opt out requests retained**, 140% improvement year over year.

Power Resources

VIDHI CHAWLA
Interim Vice President of Power Resources
vchawla@mceCleanEnergy.org

BALANCING DEMAND AND SUPPLY

Procurement Challenges

- **Regulatory Environment**
  - IRP Procurement Mandates
  - Resource Adequacy Slice-of-Day
- **Availability of resources in the market**
  - Limited supply to provide reliability and meet specifics of procurement mandates

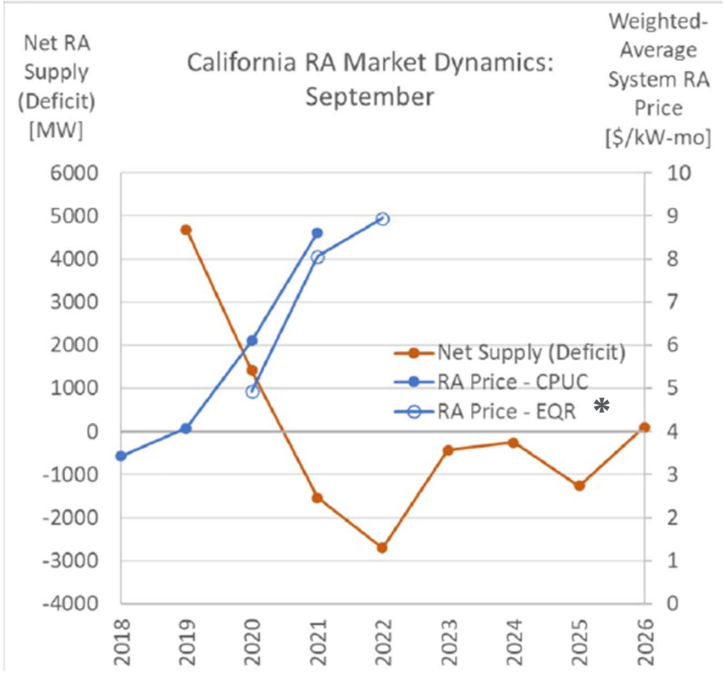
Balancing Demand and Supply

Procurement Challenges

- ❑ Increasing Costs
- ❑ Decreasing Supply

A recent CalCCA analysis shows that system average RA prices have doubled between 2019-2021.

A 6 GW drop in net RA supply over 2019-21 accompanied by doubling of the average RA price

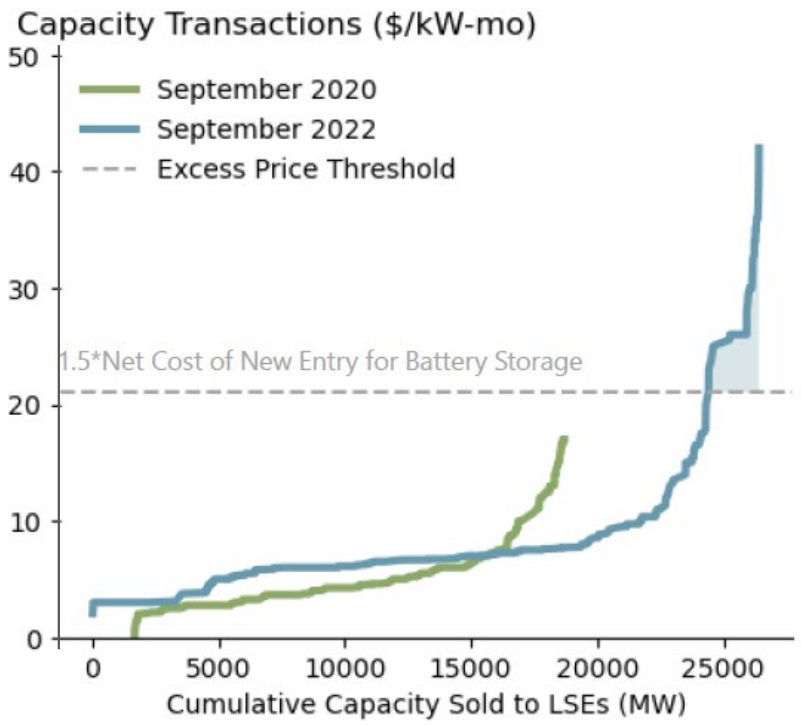


**Electric Quarterly Report (EQR) is a reporting mechanism required by Federal Energy Regulatory Commission (FERC).*

Balancing Demand and Supply

Due to the scarcity in the market, the last chunk of MWs are sold at very high prices. In 2023, prices have been even higher.

Small share of RA is sold at very high prices

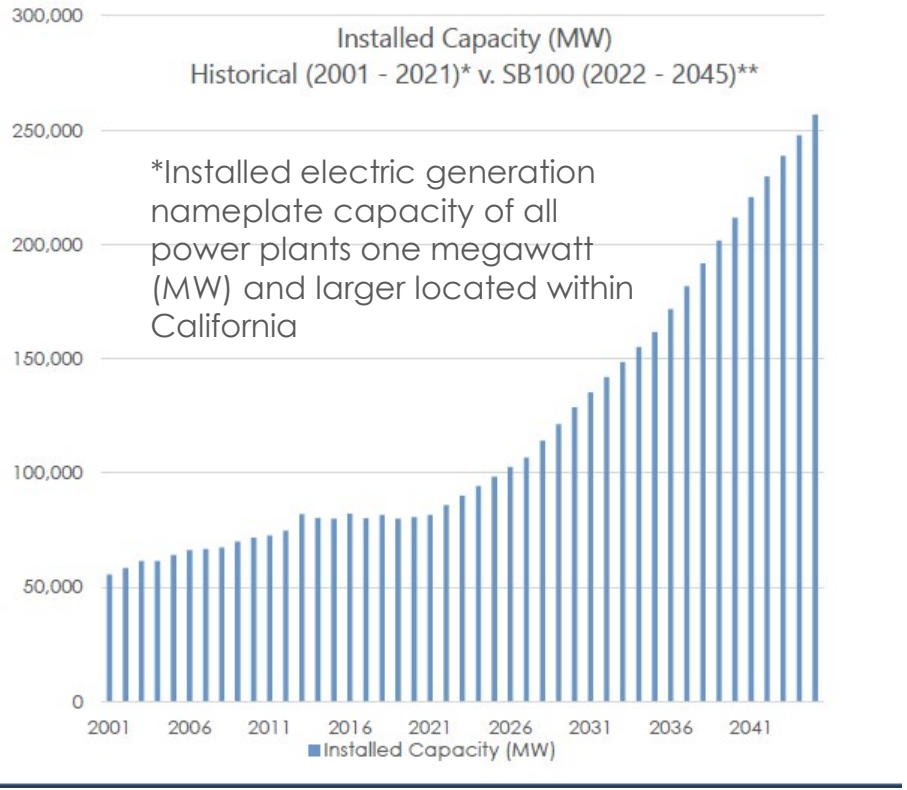


Balancing Demand and Supply

Procurement Challenges

- Project Delays - Supply Chain, Interconnection and Permitting

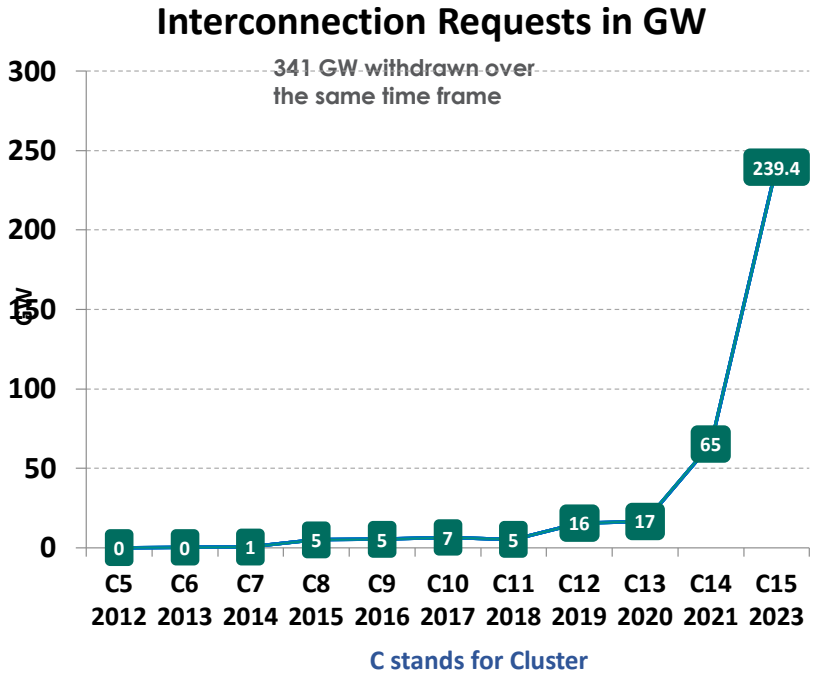
Data Source: SB 100 Joint Agency Report
https://efiling.energy.ca.gov/EFiling/GetFile.aspx?tn=237167&DocumentContentId=70349
Assumes straight line growth between years identified in the report



Data Source: SB 100 Joint Agency Report
https://efiling.energy.ca.gov/EFiling/GetFile.aspx?tn=237167&DocumentContentId=70349
Assumes straight line growth between years identified in the report

Balancing Demand and Supply

- The need to build new generation has put pressure on the CAISO interconnection queue.
- Some projects have been waiting more than 10 years for CAISO interconnection; adding to the lack of supply and increase in costs.



STRATEGIES FOR COST-EFFICIENT GENERATION & PROJECT IMPLEMENTATION

Path Forward

- Continue to remove roadblocks to bring MCE contracted projects online
- Add more long-term resources through contracting or ownership for cost-certainty and stability
- Work with regulators on long term fixes needed to build the needed generation at reasonable costs

⚡Key Priority

Enhance MCE's internal and external approaches to building equitable communities.


Strategic Initiatives
ALEXANDRA MCGEE
Director of Strategic Initiatives
amcgee@mceCleanEnergy.org
24
MCE

Electrification

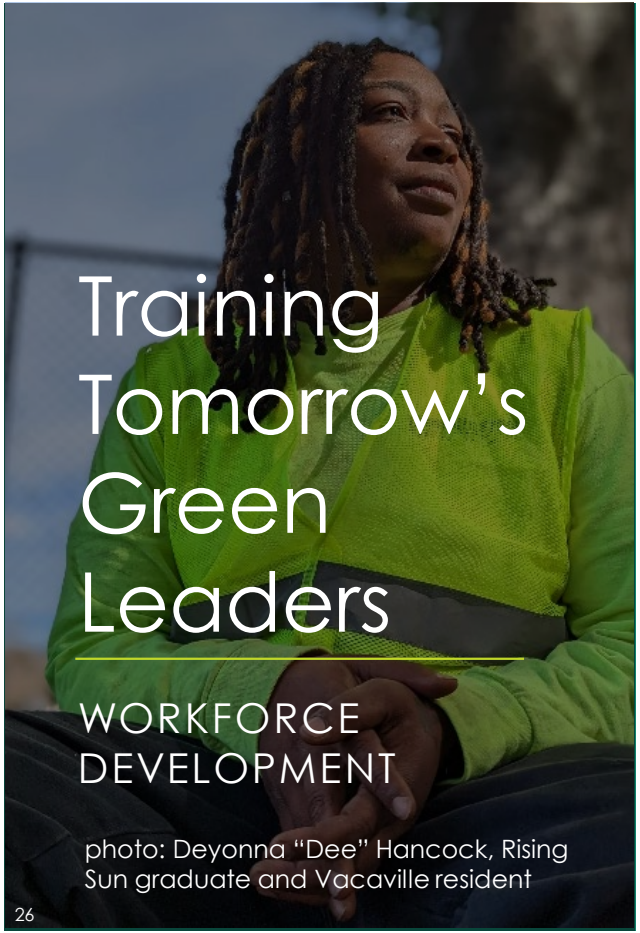
- **139 low-income multifamily units** installed Heat Pumps Water Heaters
- **110 moderate-income homes** installed no-cost efficiency upgrades

Driving Clean Transportation Forward

- **128 income-qualified** EV rebates
- **$180,000 grant** for free EV charging at 150 multifamily units in Marin

Innovative Financing

- **0% 10-year loans** for low-income Virtual Power Plant participants for electric panel upgrades and batteries



2-year partnership with Rising Sun for green job training

90 TRAINEES: 78% of grads had immediate job placement

Participant Demographics

- **29:** median participant age
- **65%** identify as Black, Latine, or Asian
- **52%** identify as women
- **28%** impacted by the legal system
- **15%** experienced homeless

Workforce Partners

- County of Marin
- Transportation Authority of Marin
- MarinCAN
- BayREN
- Next Gen Trades Academy

Joint Efforts

- **Promoting MCE Internship Program**
  - Materials to 15,000 diverse candidates through college access listservs
  - Informational sessions
- **Coalition building to sponsor a 2023 workforce development cohort for underserved youth**
  - construction training
  - safety certifications
  - 8 months career counseling

CULTIVATING DIVERSITY, EQUITY, & INCLUSION

Listening, Engaging, & Educating

- **Youth Education** Toolkits, coloring books and videos to be presented at the California Science Education conference.
- $1,000,000 DOE grant application for **grassroots-informed clean transportation projects** via participatory budgeting.
- Engaging **environmental justice advocates** on novel technology, i.e., green hydrogen and virtual power plants.

photo: MCE staff visit a Pittsburg Therapeutic Summer Program classroom to teach students about renewable energy.

Supplier Diversity

photo: guest speakers at MCE's 'Certify and Amplify' event

Engaging small, diverse, local businesses to educate about CPUC's Supplier Diversity program.

Highlights

- **396% increase** on diverse vendor expenditures from 2021 and 2022.
- **$49,500,000 spent** on 12 certified small/micro businesses and 61 local businesses in 2022.
- **50% more** registrants at MCE Certify and Amplify event in 2023.
- From the CPUC's report to the legislature: *"CCAs procured 2.21% of non-power goods and services or $5.4 million from diverse suppliers in 2022. Only MCE reported power procurement spend, procuring 1.51% or $3.1 million from a diverse supplier."*

⚡Key Priority

Be fiscally prudent and amplify our impact by applying for and utilizing state, federal and other funding

photo: MCE Staff and Board travel to DC to meet with legislatives and advocate for funds

$6,529,999 awarded in 2022-2023

Grants

- **$3,000,000** for **Richmond Healthy Homes** (Strategic Growth Council)
- **$180,000** for **multifamily EV Charging** (Marin Community Foundation)
- **$99,999** for Richmond Virtual Power Plant (California Energy Commission)

Earmarks

- **$2,000,000** for EV charging (Housing and Urban Development, Rep. Huffman)
- **$750,000** for Healthy Homes (Housing and Urban Development, Rep. Garamendi)
- **$500,000** for energy storage at critical facilities, (Department of Energy, Senators Padilla and Feinstein)

PENDING FUNDS

$14,250,000 Requested

- **$10,000,000 (DOE)** to develop an advanced modeling and a state-of-the-art load forecasting tool with CAISO
- **$1,670,000 (federal earmark, Rep. DeSaulnier)** for main panel upgrades & ancillary services for income qualified customers
- **$1,180,000 (FEMA Hazard Mitigation Grant)** for Napa County to install 150kW solar + 700kWh storage at 2 water treatment and pumping facilities in Berryessa Highlands
- **$1,000,000 (DOE)** for community-level participatory budgeting for EV infrastructure investments
- **$400,000 (Buildings UP)** for electrification

photo: Staff presenting at Contra Costa County Inflation Reduction Act Conference.

FUNDING OPPORTUNITIES
On the Horizon

Decarb & Energy Efficiency

- CEC Equitable Building Decarb
- DOE High-Efficiency Electric Home Rebate Act
- DOE Contractor Training for Green Workforce

FLEXmarkets

- CEC Demand Side Grid Support
- CEC Distributed Electricity Backup Assets
- DOE Home Energy Rebates

Electric Vehicles

- CPUC Locally-Invested Transportation Electrification
- CEC Clean Transportation Program Municipal Fleets

Utility Scale Renewables

- EPA Solar 4 All – Expand MCE's Disadvantaged Community Green Tariff
- CPUC Bioenergy Market Adjusting Tariff Feed-in Tariff

Virtual Power Plant

- CEC Electric Program Investment Charge

Community Benefit Funds

Power Resources

photo: Geothermal plants in The Geysers field, Sonoma County. Photo by John Burgess/The Press Democrat

PPA sellers pledge to contribute community benefit funds for initiatives like workforce training, environmental stewardship, education, and renewable energy projects. Negotiated by MCE Power Resources staff.

Project	Resource	County	Online	Benefit
Mayacma	Geothermal	Lake	2024	$21,000
Hecate	Storage	Los Angeles	2024	$100,000
Golden Fields	Solar + Storage	Kern	2025	$100,000
Humboldt House	Geothermal	Pershing (Nevada)	2025	$60,000
Wind Power Partners	Wind	Riverside	2025	$100,000
Geysers 1	Geothermal	Sonoma	2025	$50,000
Geysers 2	Geothermal	Sonoma	2027	$50,000
			TOTAL	**$481,000**

⚡Key Priority

Inspire others to confront the climate crisis and create energy equity by telling our story.

Policy and Legal

STEPHANIE CHEN
Director of Legislative Affairs
schen@mceCleanEnergy.org

Telling Our Story

- Reliable
- Affordable
- Equitable and inclusive
- Solutions-oriented

MCE supports state priorities through local action

- ✓ AB 1373
- ✓ Budget advocacy

Telling Our Story

MCE is not afraid of tough issues and we lead with our values

- ✓ Regionalization
- ✓ Responsible Biomass Procurement

photo: Staff visit BioMAT FIT site within the Sierra National Forest.

MCE delivers holistic, cutting-edge programs rooted in community priorities

- ✓ Richmond Advanced Energy Community (VPP)
- ✓ PeakFLEX and MCE Sync
- ✓ LIFT and equitable efficiency & electrification programs

Public Affairs

JB (JAYME) ACKMANN
VP of Public Affairs
jackmann@mceCleanEnergy.org

photo: (top) MCE staff, Tyla Brown, talks with Girl Scouts at Pinole Earth Walk. (bottom) MCE staff, Martin Bond, at Solano Land Event

Community & Business Development Focus

- *Connecting municipal partners* with resources to build their energy efficiency profile
- *Raising awareness* about MCE's energy initiatives
- *Focus on connecting communities that have experienced historical environmental and social harms* with electrification rebates, programs, services, workforce training and youth outreach

2023 Outcomes

- **196 community events** and meetings facilitated or attended
- **48 council presentations**
- **2 Community Power Coalition** meetings (to date)
- **1 Power Hour** meeting (to date)
- **2 Workshops/Webinars** supported
- **10 new PeakFLEX** participants committed
- Hercules membership request

PARTNERSHIP DEVELOPMENT

Building Equity-Based Engagement

- Engaged **23 community partners**
- Sponsored **$10,500** to help priority communities: assisting first generation college students, 220 BIPOC youth into nature, and assist displaced workers back into the workforce
- Partnered with **nine entities** to promote **workforce development**, including green construction trades and MCE internships
- **Outreach to 15,000+ diverse applicants** for MCE internships through partner promotions, and in-person and virtual information sessions
- Sponsored Next Gen Trades Academy
- **Reached approximately 2,400 subscribers** through the virtual Climate Careers Chat for underrepresented students interested in green careers

photo: MCE Partnership Development Manager Tyla Brown facilitates a Climate Careers Chat.

REACHING NEW AUDIENCES

Raising Education & Awareness

Communications Messaging Focus

- Connect with new audiences through community-based organizations, news outlets, and municipal and energy industry partners
- Enhance language accessibility and increase collateral and targeted outreach to diverse audiences
- Expand the reach of MCE's messaging while positioning MCE staff as experts in the delivery of community choice energy alternatives

2023 Communications Impact

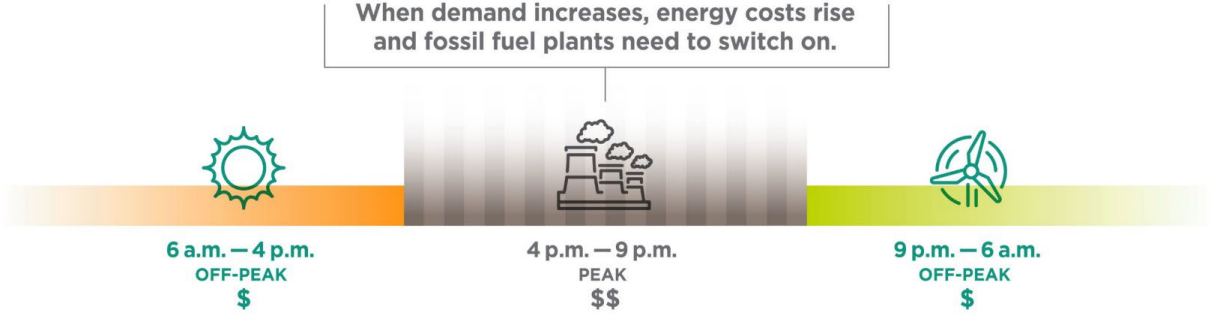
- **18 press releases, 17 blog posts, 9 eNewsletters** produced to date
- Extraordinary Women in Business: Bay Area Feature "Power to the People"
- SF Business Times Executive Profile Focus: Dawn Weisz
- **23 articles and local media** stories about MCE's work
- Received North Bay Business Journal 2023 Diversity in Business Award

photo: MCE's Chief of Staff Jamie Tuckey and CEO Dawn Weisz walking across Cooley Quarry Solar site.

PROMOTING BEHAVIORAL CHANGE

Advertising Campaign

- Customers: reduce electricity use between 4–9pm (peak hours)
- Rates are highest for most
- More fossil fuels are on the grid (load shifting)
- 2023 campaign has additional digital components and began earlier
- Campaign duration: 6/26–9/24*



Landing Page: mce4–9.org

Digital Banners & Social Static Ads

Social Media

Streaming TV + Radio

Swag + Branded Collateral

Key Results: Social Media

- Social ads have driven **97% of total clicks** at a **31x lower cost-per-click** than digital banner display ads
- Average click through rate is nearly **3x higher** than industry average – Total impressions to date across all advertising platforms **4,353,000**
- The **two social media videos performed best** of all creative variations, though all creatives have performed strongly – Instagram videos received over **10,000 total views** within first 6 weeks of campaign.
- "Money saving" messaging produced the **most visits to the /4–9 webpage – 7,612 CTR**

Key Results: Spanish-Speaking Audiences (midway)

- Social was very effective at reaching Spanish-speaking audiences with Spanish ads being served **200k times**
- Digital display ads had a much smaller Spanish-speaking audience than social (15k), but exceedingly high engagement among those that did see the ad with up to **0.7% click through rate** (industry avg. 0.05 – 0.08%)

Use less power between 4 and 9 p.m.!

⚡Key Priority

Enhance internal processes to improve the employee experience, simplify workflows, and achieve results through cross-team collaboration.

Internal Operations

JUSTINE PARMELEE
Director of Internal Operations
jparmelee@mceCleanEnergy.org

Hybrid Meetings

- Board & Committee
- Internal staff and cross-department meetings
- External meetings
- Space sharing with community partners
- Closed captioning and ASL interpretation

Streamlining with Mobile solutions

Brivo
Control access platform to ensure speedy onboarding/ offboarding and ensure no accidental lockouts

Alert Media
Emergency notification app to reach a mobile and hybrid workforce

Skedda
Desk booking platform to ensure staff have the space and system they need

Office Sustainability

- Relaunch of Green Team
- California Green Business Recertification
- Return of reusables
- E-waste bins at offices
- Opportunities for professional development

Opportunities for Savings

$150,000 in FY2023-24

We renegotiated the Concord office lease to include rental abatement for the remainder of 2023, reset our baseline expenses, and an additional monthly savings starting in 2024

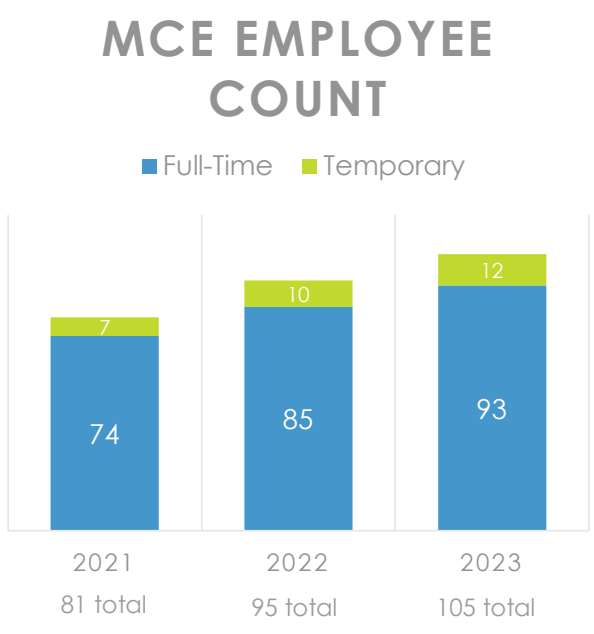
$12,000 per year

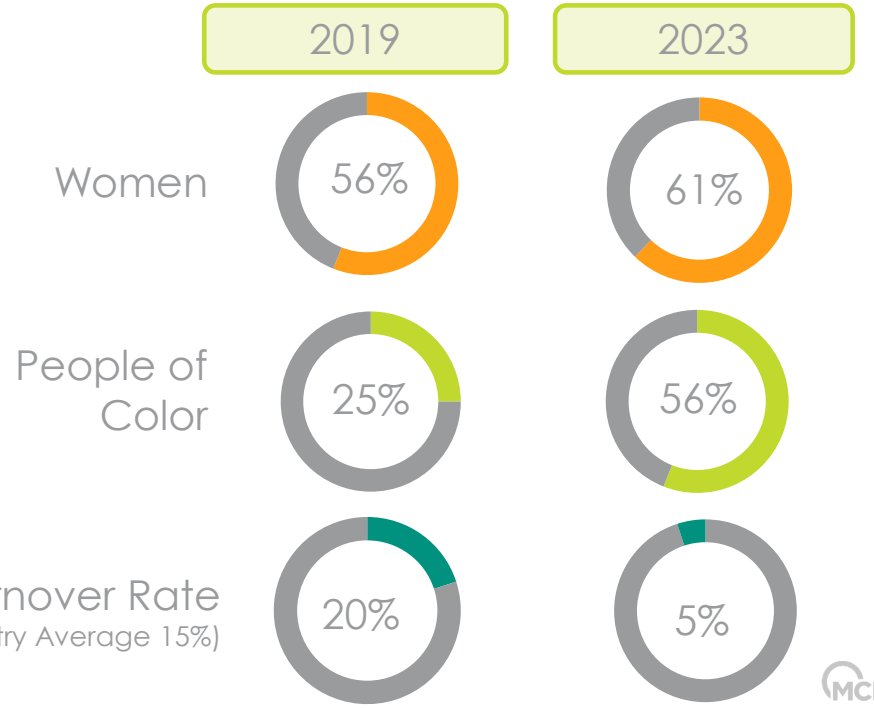
Due to MCE's comprehensive remote work benefits, we were able to make room to close out our storage unit rentals and bring the remaining property into the San Rafael location

Human Resources

SHAHEEN KHAN
VP of Human Resources, Diversity, and Inclusion
skhan@mcecleanenergy.org

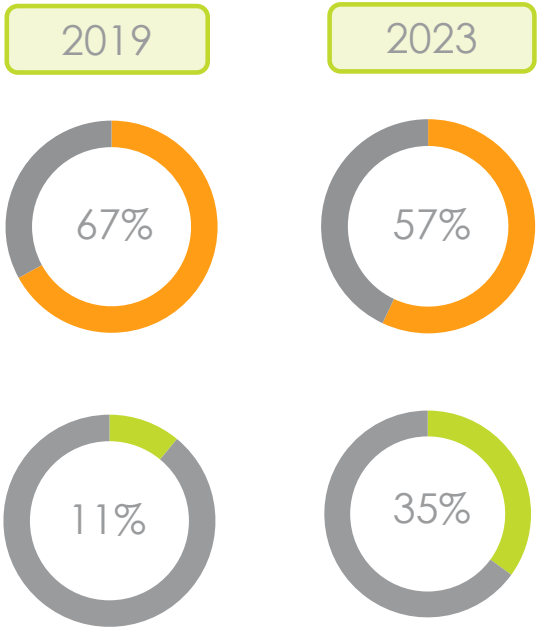
MCE Employee Stats





MCE Leadership Stats

The senior leadership team consists of 14 members



Internship Program

"This internship has impacted my life greatly. It has allowed me to gain insight into what a career in the renewable energy industry looks like, the different career paths it offers, and how my daily efforts as a professional could impact actual change within our communities." Ashley Muth, Solano County

"What I enjoyed most about this internship and being a part of MCE was meeting people who were like-minded, had a sense of community, and cared about progress." Mike Rodriguez-Vargas, Contra Costa County

"I learned that continuing education is important even after graduating college. I have a goal of creating my own business, and with this internship, I learned about software and tools that would help me with that." Allison Miranda, Marin County

Internship Demographics

33

Interns have participated in the 3-6 month program since winter 2021

75%
Non-white

25%
LGBTQIA+

58%
Women

4%
Non-binary

13%
Continued working at MCE past the internship

70%
From MCE Service Area

MCE Top Workplace Award

TOP WORK PLACES 2022-2023

San Francisco Chronicle

Marin Clean Energy is a 2023 Top Workplace!
2 Years Running

Special designation for best benefits out of 4,200 Bay Area companies/agencies

Benefits, Culture, and Flexibility

Benefits

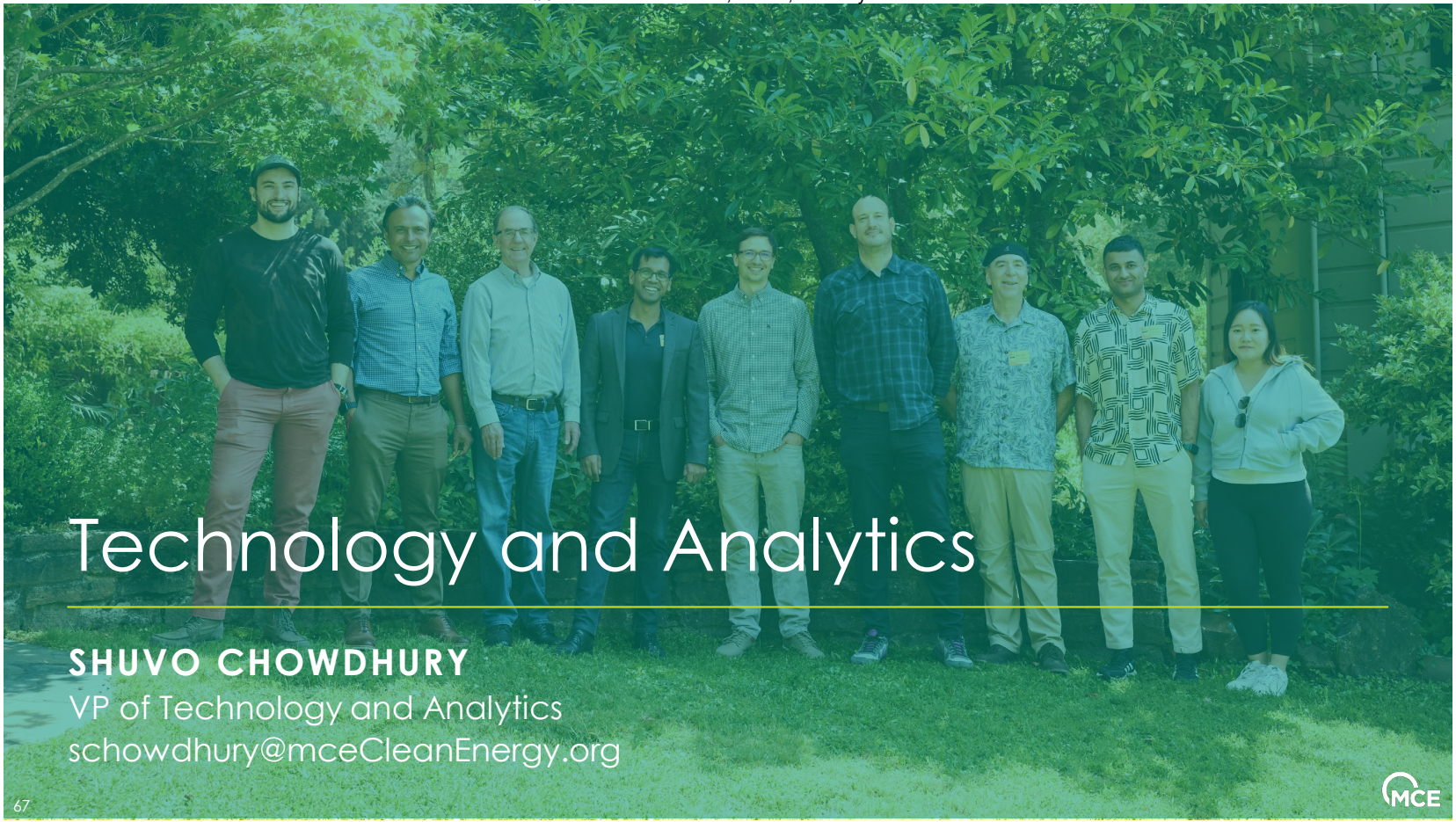
- Commuter Benefits
- Family Planning / Dependent Care
- Lifelong Learning

Culture

- Meaningful time spent together in person
- Remote coffee breaks
- Thoughtful onboarding

Flexibility

- Approach to leave planning
- Hybrid work environment



Technology and Analytics

SHUVO CHOWDHURY
VP of Technology and Analytics
schowdhury@mceCleanEnergy.org

Technology & Analytics

Data Analytics Platform

- PG&E Bills & Invoice now available in the MCE DataLake
- 30 Data Analytics requests completed in Q2 2023
- One additional Dashboard now available: PG&E Interconnection report
- Amperon onboarded as an additional load forecaster
- Project Initiated to build "Rates Engine"

CRM

- Self-service model for 3rd Parties: Three third parties now have (limited) access to the MCE CRM
- Customer service change requests now run through the MCE website and go to the CRM first
- Multi-directional Sync between MCE-SMUD is stable
- CRM Architectural redesign to accommodate customer hierarchies

Information Technology

- New Managed Security Services Provider onboarded
- Review of MCE's cybersecurity posture underway
- Triennial AMI audit passed

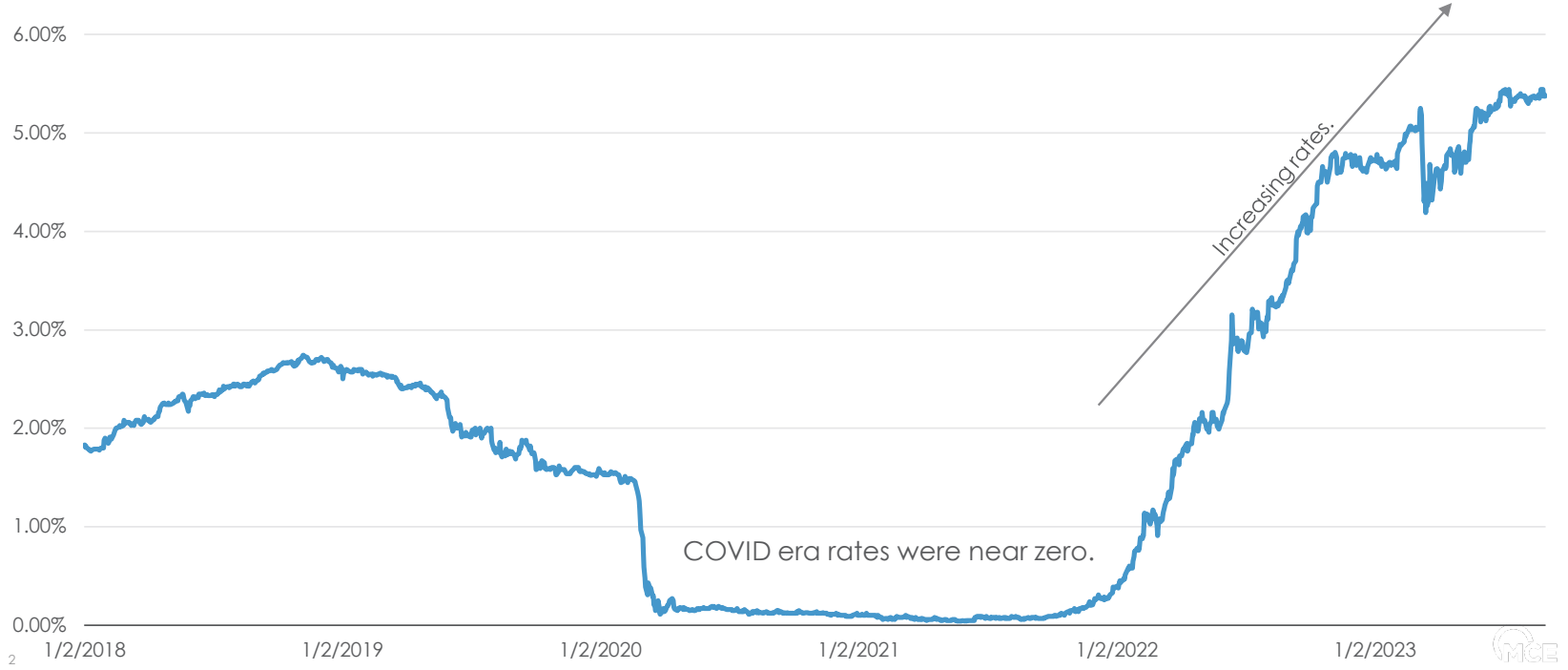
Special Projects

- Distributed Energy Resources Management System (DERMS) for VPP project now up and running in an MCE cloud instance
- Data exchange between MCE DataLake and DERMS established
- First full cycle test to be completed in October


Thank You
photo:
(left) Finance Department
(right) Legal Department
MCE

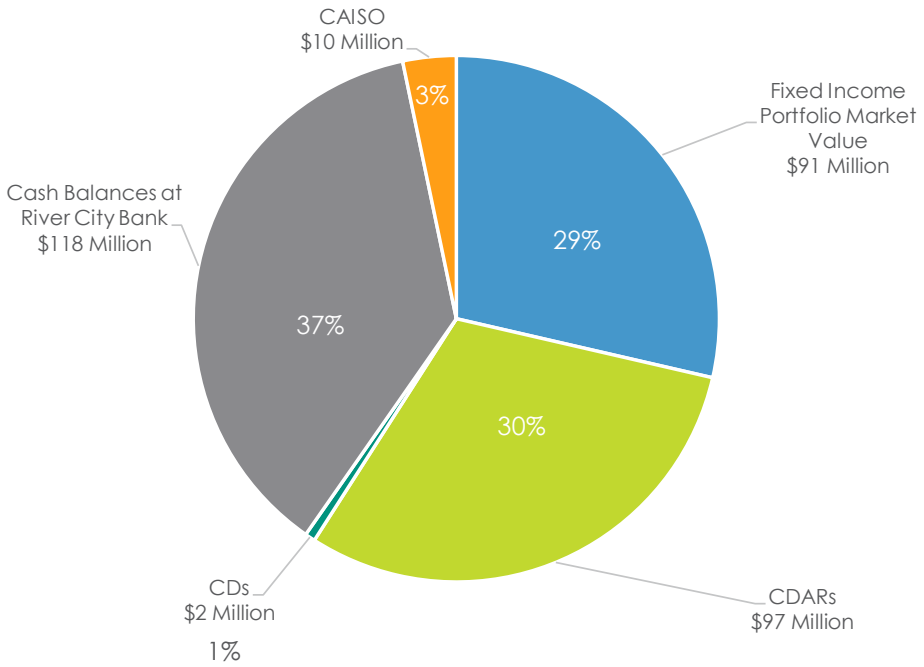

MCE Investments Program
MCE BOARD RETREAT | SEPTEMBER 29, 2023
MCE
Empowering
Our Clean
Energy Future
CONTRA COSTA | MARIN | NAPA | SOLANO

1-Year U.S. Treasury Yield 1/2/2018-8/31/2023



Summary of Investments and Cash Balances

MCE Investments and Cash Balances as of 8/31/2023

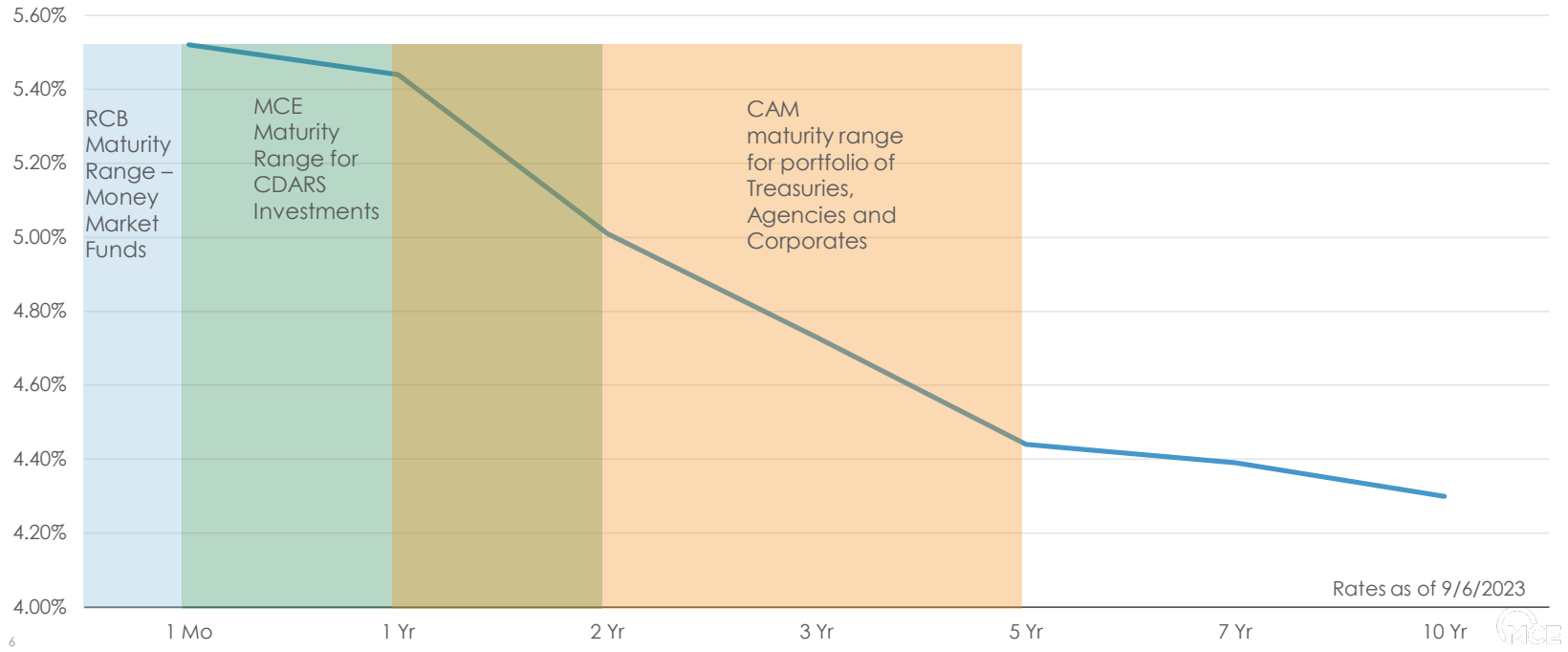


Total: $318 million

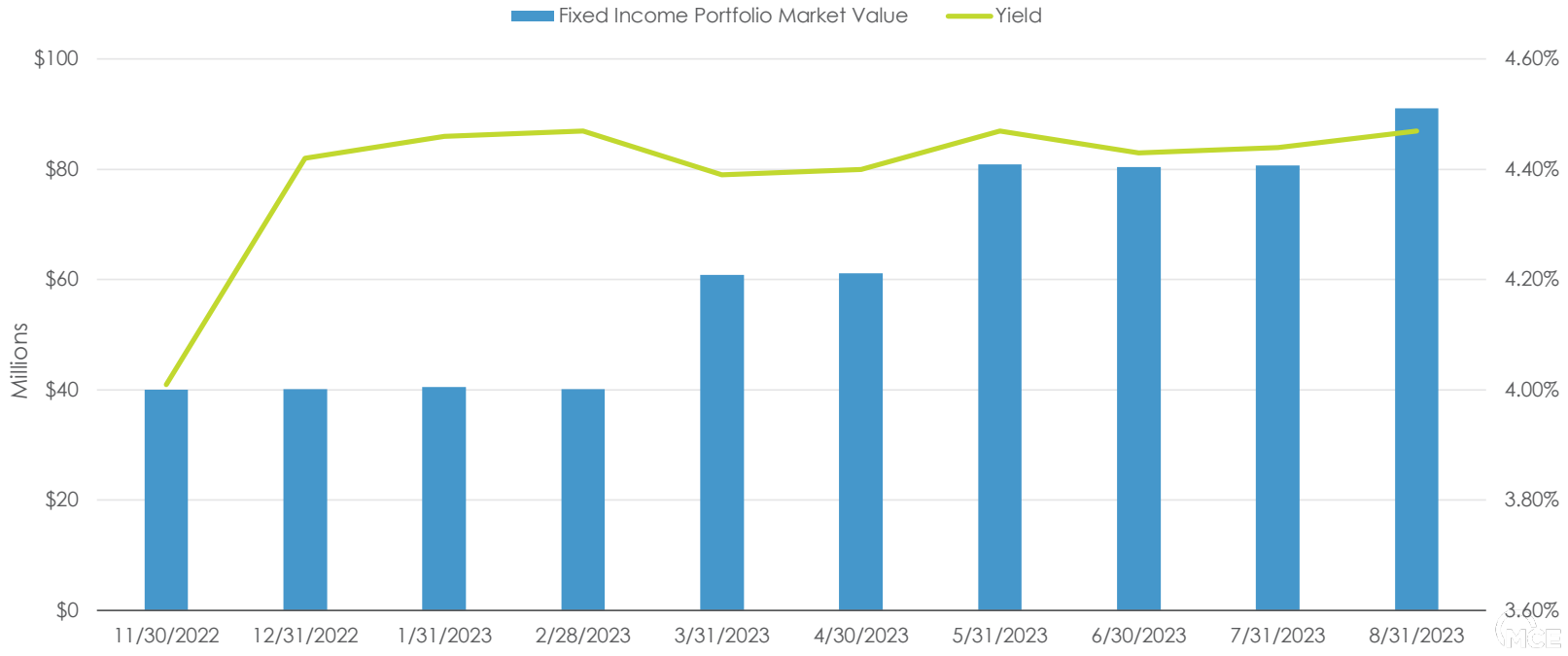
Characteristics of MCE's Investments and Cash Balances

- Fixed Income Portfolio
  - Held by MCE's trustee bank, USBank
  - Managed by Chandler Asset Management
  - Portfolio of U.S. treasuries, agencies, and corporate bonds
  - Average life of 2.81 years
- CDs/CDARs Portfolio
  - Held at River City Bank
  - FDIC insured or collateralized
  - Managed internally
  - Average life of 9 months
- Cash Balances
  - Held at River City Bank in liquid money market funds
  - FDIC insured and/or collateralized

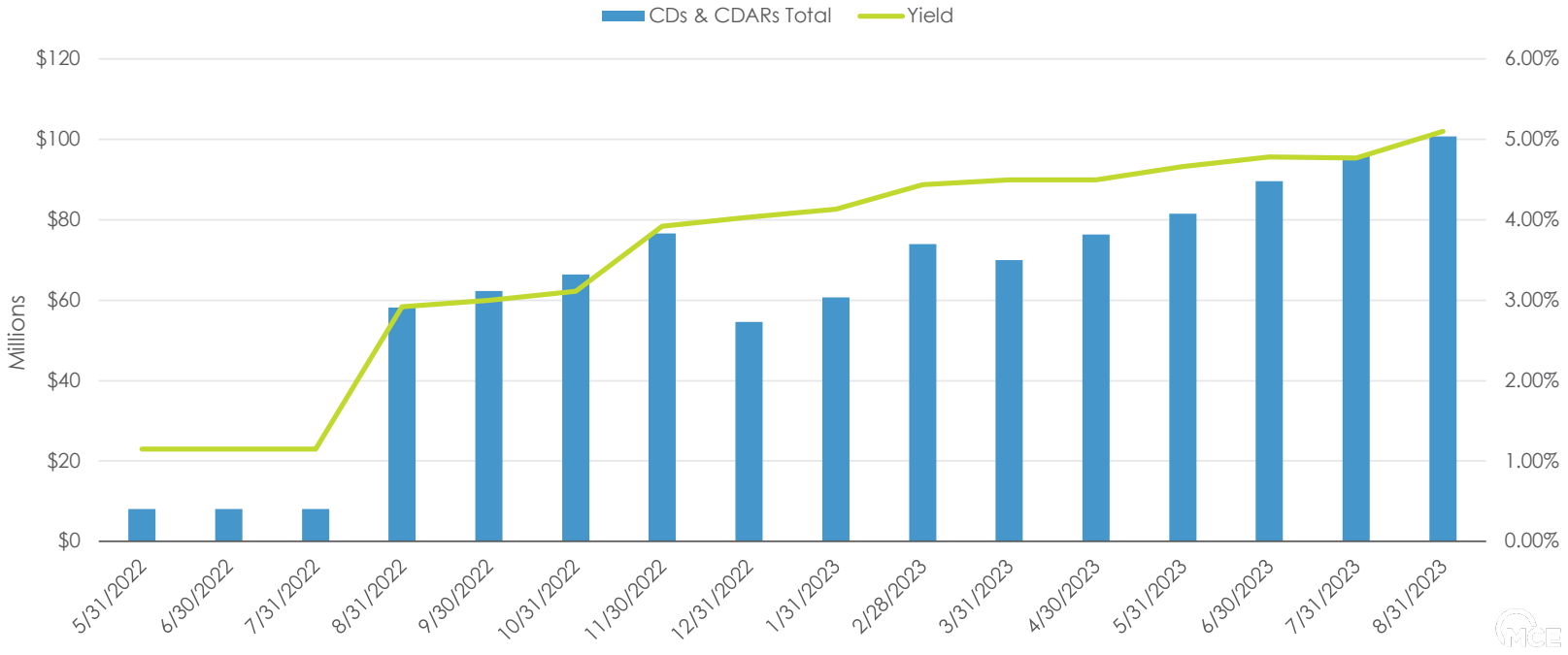
U.S. Treasury Yield Curve Interest Rates



Market Value of Fixed Income Portfolio and Average Purchase Yield To Maturity



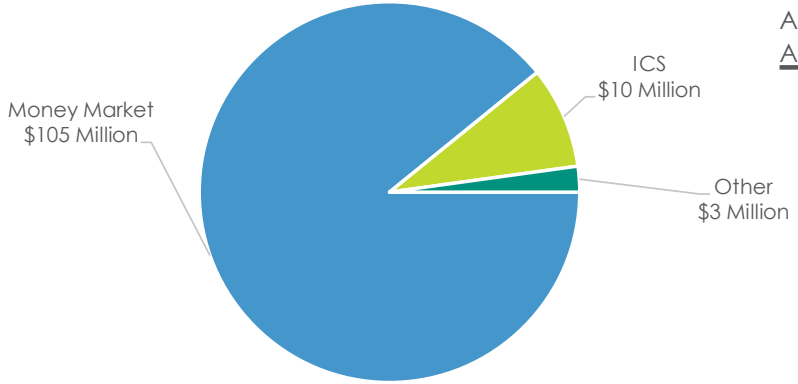
CD and CDARs Amounts and Average Annual Percentage Yield



Investments Dashboards

Characteristics of MCE's Cash Balances as of 8/31/2023

Breakdown



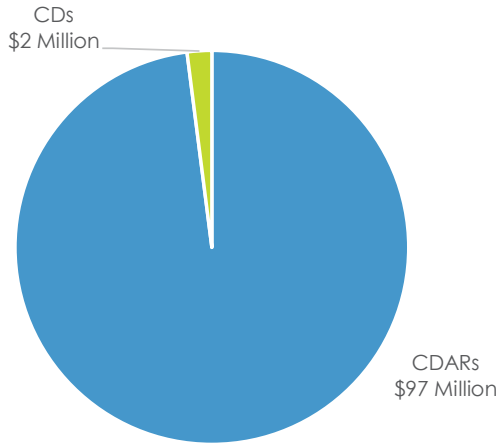
Characteristics

Average Yield	3.40%
Average Life	Na
Average Size	Na

- Cash balances function as MCE's working capital for its operating expenses
- Yield is pegged to yield of the LAIF (Local Agency Investment Fund administered by the California State Treasurer) and will gradually rise as it catches up with rising interest rates

Characteristics of MCE's CDs/CDARs as of 8/31/2023

Breakdown



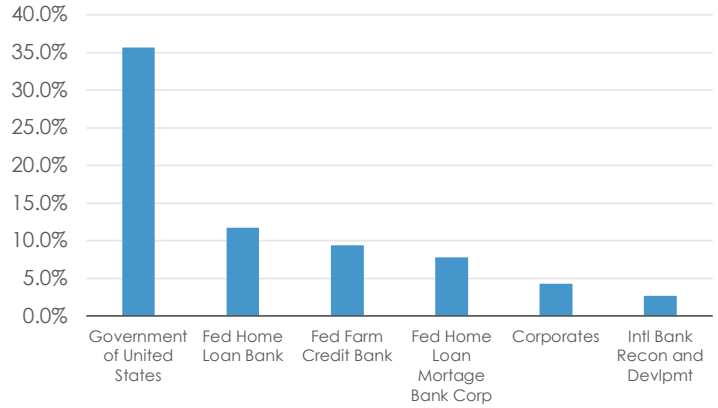
Characteristics

Average Yield	5.23%
Average Life	9 months
Average Size	$4 million
Number of CDs	1
Number of CDARs	27

- Portfolio average life is on the shorter side
- As CDs/CDARs mature, average interest rate may decrease or increase depending on decisions made by the Federal Reserve
- CDs/CDARs make up 31% of MCE's overall holdings

Fixed Income Portfolio Dashboard as of 8/31/2023

Top Issuers



Characteristics

Average Purchase YTM	4.47%
Average S&P/Moody rating	AA/Aa1
Average Life	2.81 yrs

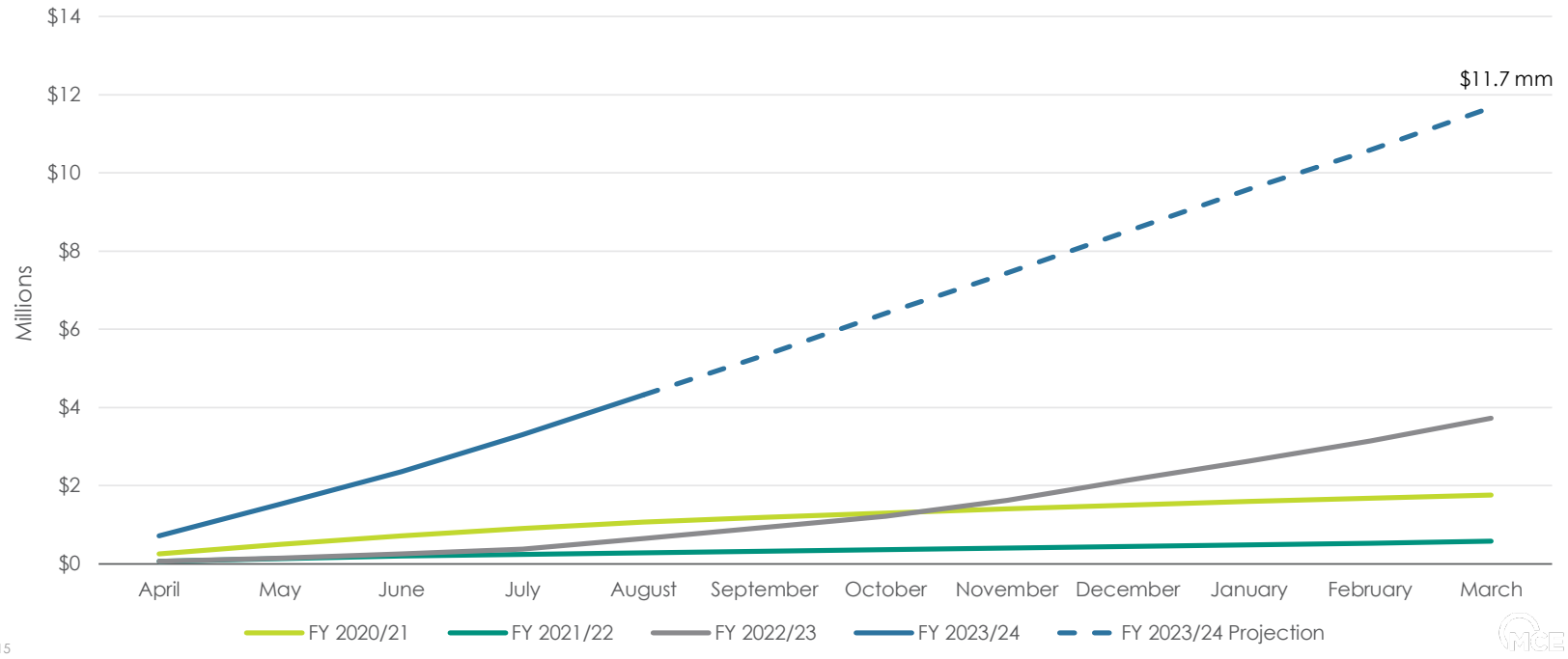
- Funds are invested per MCE's investment policy

Interest Income Earned & Projections

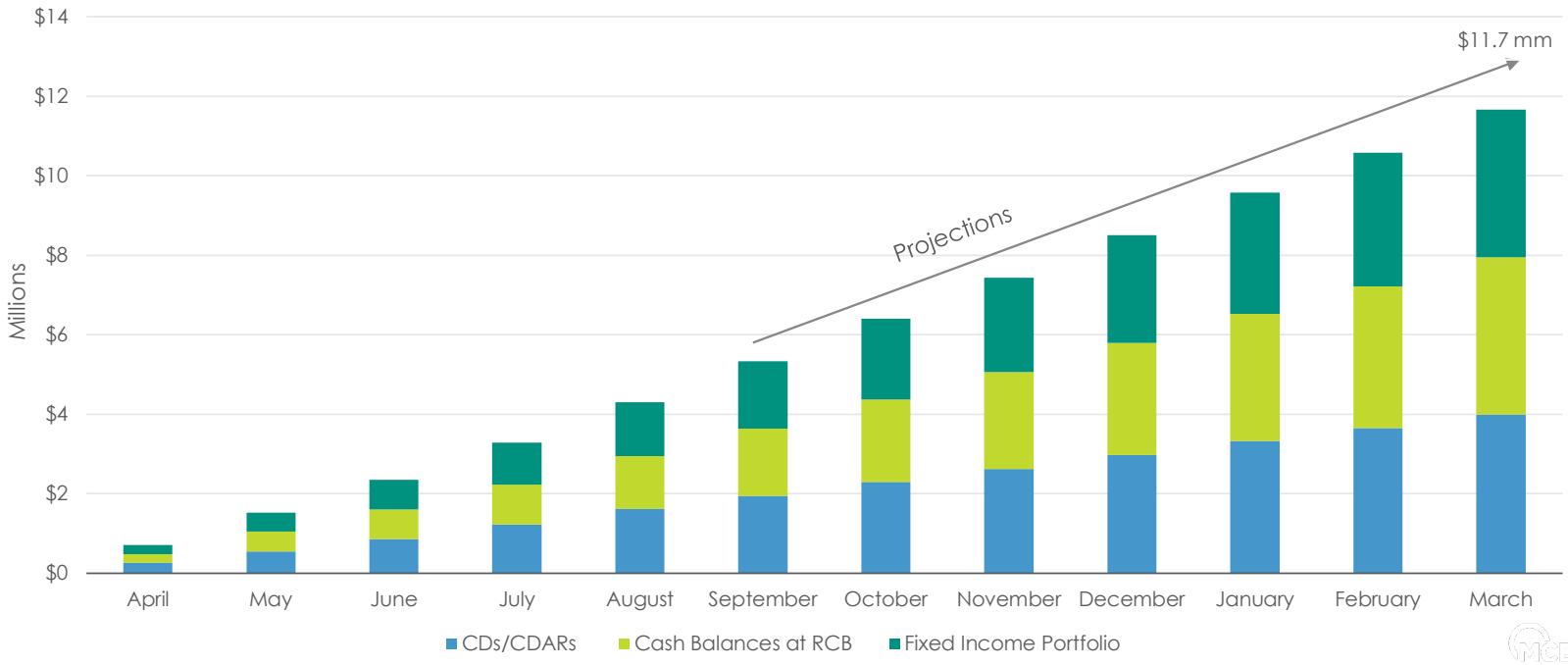
Assumptions on Projections

- Fixed Income Portfolio: **4.43%** yield
- CDs/CDARs: **4.70%** yield
- Other funds at River City Bank: **3.30%** yield
- Interest rates are subject to change per decisions made by the Federal Reserve and trends in the US economy

Earned and Projected Interest Income from FY 2020/21 – FY 2023/24



FY 2023/24 Actual and Projected Interest Income

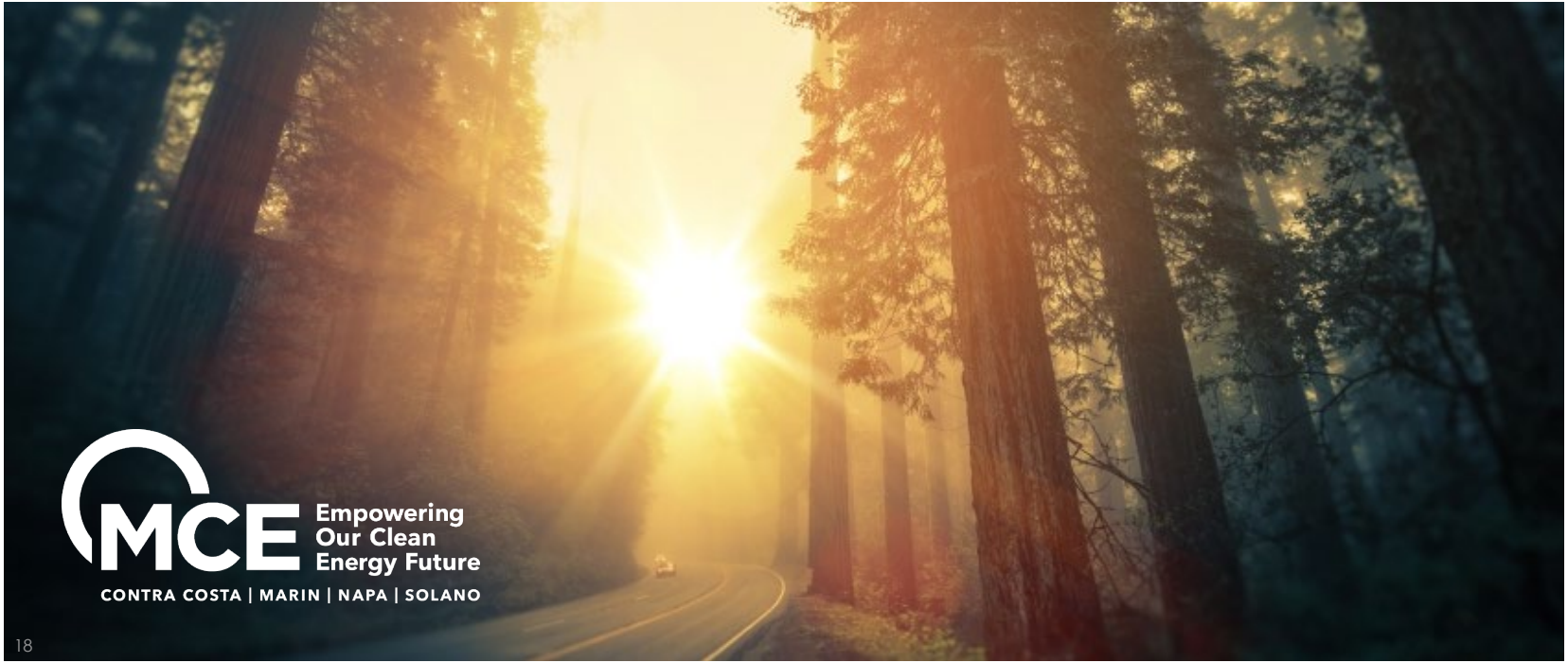


Wrap up

- MCE's Finance Department has been methodically diversifying its investment portfolio while adhering to the Investment Policy's tenets of **safety**, **liquidity**, and **return on investment**
- Modernized and continually updating MCE's Investment Policy
- Executing the Board's directive on managing MCE's reserves and operating cash

Thank You

Garth Salisbury CFO & Treasurer
Efren Oxlaj Financial Analyst II
finance@mcecleanenergy.org



September 29, 2023

TO: MCE Board of Directors

FROM: Vidhi Chawla, Interim Vice President of Power Resources
Kirby Dusel, Pacific Energy Advisors

RE: 2022 Power Supply Statistics and Content Label (Agenda Item #06)

Dear Board Members:

SUMMARY: California Public Utilities Code requires all retail sellers of electric energy, including MCE, to disclose "accurate, reliable, and simple-to-understand information on the sources of energy, and the associated emissions of greenhouse gasses, that are used to provide electric services."[1] Applicable regulations direct retail sellers to provide such communications to customers following each year of operation. The format for this communication, named the Power Content Label (PCL) by the California Energy Commission (CEC), is highly prescriptive, offering little flexibility to retail sellers when presenting such information to customers. Similar to the presentation of information on a nutritional label, the PCL informs retail electricity customers of the power sources that were procured to serve their electric energy needs. Prior to distributing the PCL to its customers, MCE annually submits reports to the CEC detailing specified-source power purchases for each retail service offering that was made available during the previous year. These annual reports and the PCL are required elements of California's Power Source Disclosure Program (PSD Program); information reflected in each annual report is contributory to the PCL (with the power supply breakout reflected in each annual report inserted in MCE's PCL template).

Information presented in the PCL includes the proportionate share of total energy supply attributable to various resource types, including both renewable and conventional fuel sources. In the event that a retail seller meets a certain percentage of its resource needs from unspecified resources/purchases, the report must identify such purchases as "unspecified sources of power." As your Board is likely aware, certain of MCE's power supply agreements reflect the delivery of unspecified/market power to satisfy a portion of MCE's energy requirements. These purchases, which have diminished over time consistent with MCE's adopted integrated resource planning objectives, serve to promote budgetary certainty and rate stability – these purchases, as

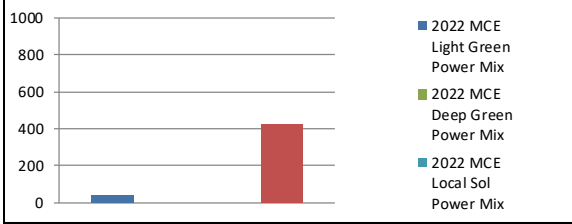
[1] California Public Utilities Code Section 398.1(b)

well as electric energy provided by the California Independent System Operation for purposes of grid balancing, have been appropriately identified as "unspecified sources of power" in MCE's PCL. Note that MCE's unspecified power purchases have significantly decreased in recent years, amounting to less than 1% of total purchases during the 2022 reporting year.

During the 2022 calendar year, MCE successfully delivered a substantial portion of its electric energy supply from various renewable energy sources, including wind, solar, geothermal, hydroelectricity, biomass and landfill gas-to-energy – for Light Green customers, the percentage of supply attributable to renewable energy sources exceeded 60 percent of the total (with over 99 percent of total Light Green energy purchases sourced from zero- or low-carbon sources). Note that the reflection of 0.4% nuclear supply within the Light Green portfolio relates to a relatively new PSD reporting convention (incorporated following the implementation of Assembly Bill 1110) that separates purchases from Asset Controlling Suppliers by resource type. MCE made no specified nuclear purchases in 2022, and the reflection of such purchases simply relates to residual amounts of nuclear power that were included in purchases from Asset Controlling Suppliers located in the Pacific Northwest – nearly all Asset Controlling Supply is comprised of hydroelectricity with small amounts of renewable, natural gas, nuclear and system power used for portfolio balancing. For the Deep Green, Local Sol and Green Access retail service offerings, CEC-certified renewable resources were the exclusive sources of energy procured to serve participating customers. The following table reflects MCE's 2022 PCL, presented in the CEC's required format.

2022 POWER CONTENT LABEL
MCE
mceCleanEnergy.org/energy-sources

Greenhouse Gas Emissions Intensity (lbs CO_2e/MWh)					Energy Resources	2022 MCE Light Green Power Mix	2022 MCE Deep Green Power Mix	2022 MCE Local Sol Power Mix	2022 MCE Green Access Power Mix	2022 CA Power Mix
2022 MCE Light Green Power Mix	2022 MCE Deep Green Power Mix	2022 MCE Local Sol Power Mix	2022 MCE Green Access Power Mix	2022 CA Utility Average						
44	0	0	0	422	**Eligible Renewable**[1]	**59.6%**	**100.0%**	**100.0%**	**100.0%**	**35.8%**
					Biomass & Biowaste	5.3%	0.0%	0.0%	0.0%	2.1%
					Geothermal	5.1%	0.0%	0.0%	0.0%	4.7%
					Eligible Hydroelectric	3.8%	0.0%	0.0%	0.0%	1.1%
					Solar	28.4%	50.0%	100.0%	100.0%	17.0%
					Wind	17.0%	50.0%	0.0%	0.0%	10.8%
					Coal	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**2.1%**
					Large Hydroelectric	**39.5%**	**0.0%**	**0.0%**	**0.0%**	**9.2%**
					Natural Gas	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**36.4%**
					Nuclear	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**9.2%**
					Other	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**
					Unspecified Power[2]	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**7.1%**
					TOTAL	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**



Percentage of Retail Sales Covered by Retired Unbundled RECs[3]:	1%	0%	0%	0%	

[1]The eligible renewable percentage above does not reflect RPS compliance, which is determined using a different methodology.
[2]Unspecified power is electricity that has been purchased through open market transactions and is not traceable to a specific generation source.
[3]Renewable energy credits (RECs) are tracking instruments issued for renewable generation. Unbundled renewable energy credits (RECs) represent renewable generation that was not delivered to serve retail sales. Unbundled RECs are not reflected in the power mix or GHG emissions intensities above.

For specific information about this electricity portfolio, contact:	**MCE** **1 (888) 632-3674**
For general information about the Power Content Label, visit:	https://www.energy.ca.gov/programs-and-topics/programs/power-source-disclosure-program

Consistent with applicable regulations, MCE will complete requisite customer communications following your Board's approval of pertinent information to be included in the 2022 PCL. Customers receiving 2022 PCL communications will include all those

served by MCE during the 2022 calendar year. Such customers will be provided with a copy of the PCL no later than December 31, 2023, consistent with recent guidance provided by the CEC.

While preparing MCE's 2022 annual PSD reports and PCL, staff performed a detailed review of all power purchases completed for the 2022 calendar year. This review included an inventory of all renewable energy credit transfers within MCE's Western Renewable Energy Generation Information System (WREGIS) account, related contract documents and pertinent transaction records associated with other specified energy purchases. Based on staff's review of available data, the information presented in the annual reports and PCL was determined to be accurate.

To fulfill its obligations under the PSD Program, MCE must also provide the CEC with an attestation of its Governing Board regarding the accuracy of information included in its PSD reports and PCL for the 2022 operating year. With regard to this internally administered attestation process, applicable regulations state[2]:

A retail supplier that is a public agency providing electric services is not required to comply with the provisions of subdivision (a)(1) if the board of directors of the public agency submits to the Energy Commission an attestation of the veracity of each annual report and power content label for the previous year.

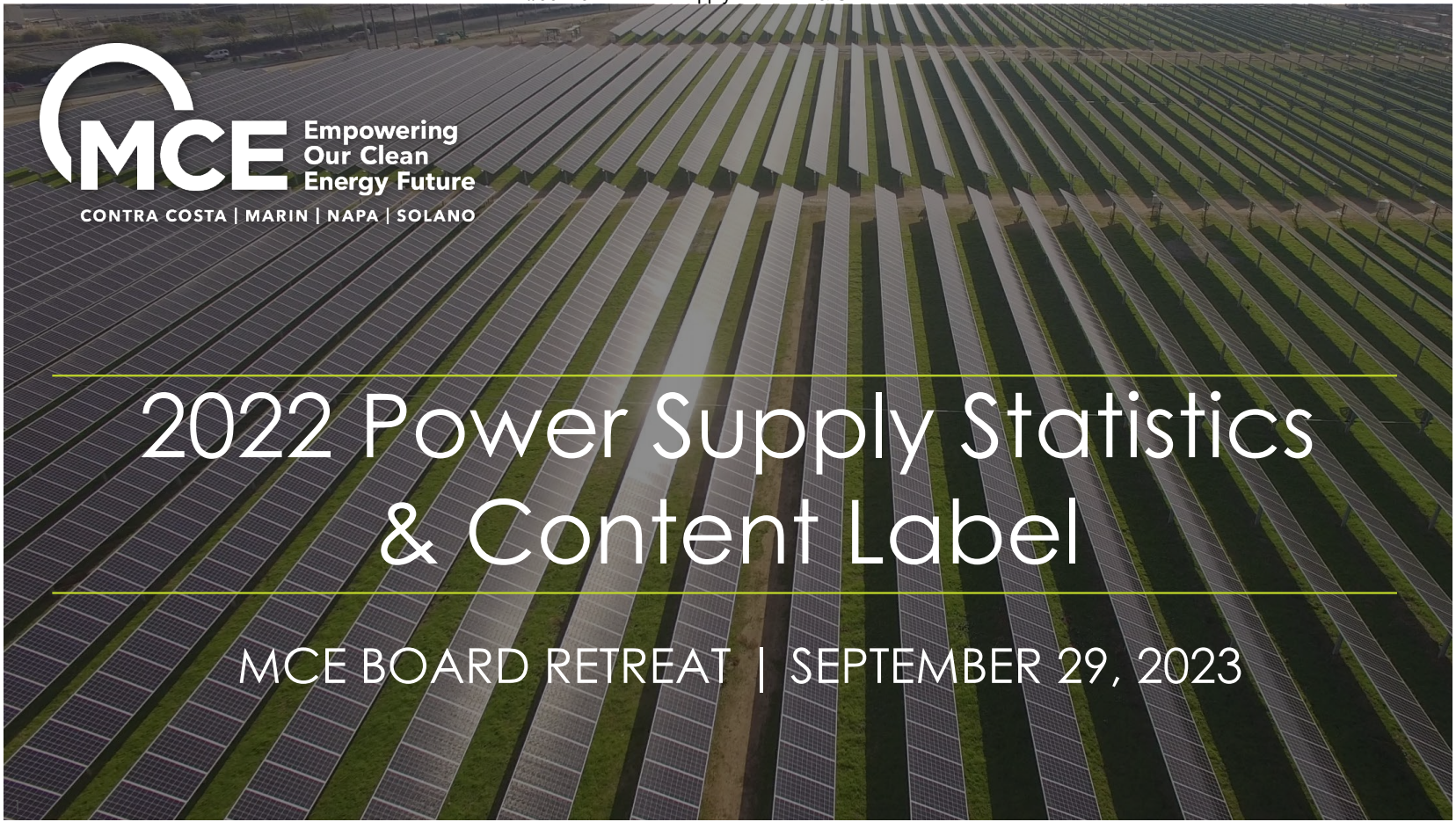
Evidence of MCE's attestation must be provided to the CEC no later than October 1st.

In consideration of MCE's internal review and applicable regulations, staff requests that your Board accept this determination of informational accuracy and, based on this staff-level determination and related recommendation, attest to the accuracy of information included in MCE's 2022 Power Source Disclosure reports and PCL. Should your Board endorse staff's recommendation, a copy of: 1) this staff report; 2) meeting minutes for today's Board Meeting; and 3) a copy of MCE's completed 2022 PCL template (in both Excel and PDF formats) will be forwarded to the CEC, thereby completing MCE's obligations under the PSD Program for the 2022 calendar year.

Fiscal Impacts: Other than the typical cost of producing and distributing Power Content Labels to MCE customers, there are no expected fiscal impacts.

Recommendation: Based on staff's review of the power purchases supporting MCE's various retail supply portfolios in 2022, it is recommended that your Board endorse the accuracy of information presented in MCE's 2022 PSD reports for Light Green, Deep Green, Local Sol and Green Access service as well as the related PCL reflecting such products.

[2] Note that Section 1393.2.(a)(1), as referenced in the excerpt from applicable PSD regulations, refers to the completion of annual independent audits.



2022 Power Supply Statistics & Content Label

MCE BOARD RETREAT | SEPTEMBER 29, 2023

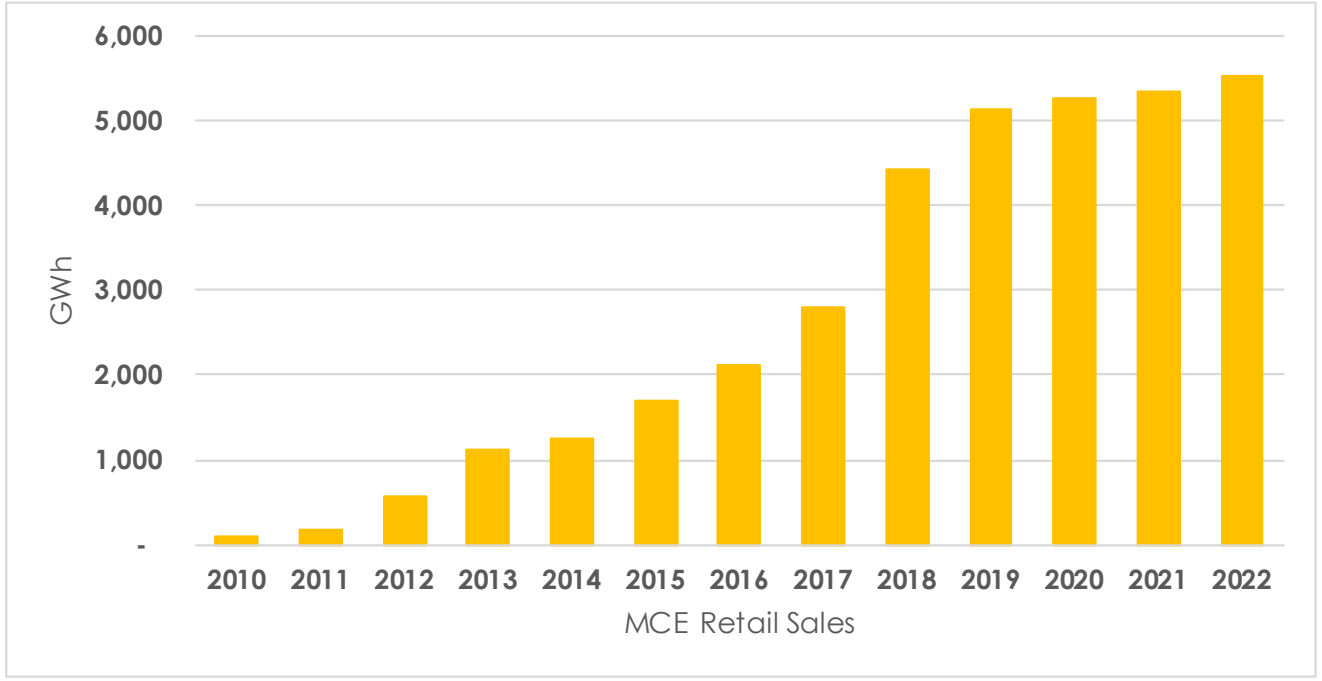
Key Drivers of Power Supply Statistics

- MCE's Integrated Resource Plan (establishes targets)
- Actual vs. forecasted retail sales (denominator in most power portfolio calculations)
- Actual vs. forecasted clean energy production:
    - Product Availability & Budgetary Impact
    - Resource intermittency
    - Curtailment
    - Outages
    - Hydro conditions
- AB 1110 emission accounting methodology (first reported in 2020)

MCE Planning & Procurement Process

- MCE's resource planning process utilizes a two-phased approach with attention given to:
  - **Clean-energy commitments**: contracted supply and open positions are evaluated in consideration of current IRP targets and compliance obligations.
  - **Price risk mitigation/budgetary certainty**: resource commitments are evaluated in consideration of potential market price exposure and budgetary/rate impacts.
- Clean-energy purchases/sales are pursued to align resource commitments with IRP targets on a projected basis.
- Additional clean-energy purchases or sales may be executed throughout the year to balance commitments relative to needs (subject to product availability).
- Certain contractual commitments are specifically executed to minimize MCE's exposure to market price volatility but may not impact power supply statistics.

MCE Historical Retail Sales Growth



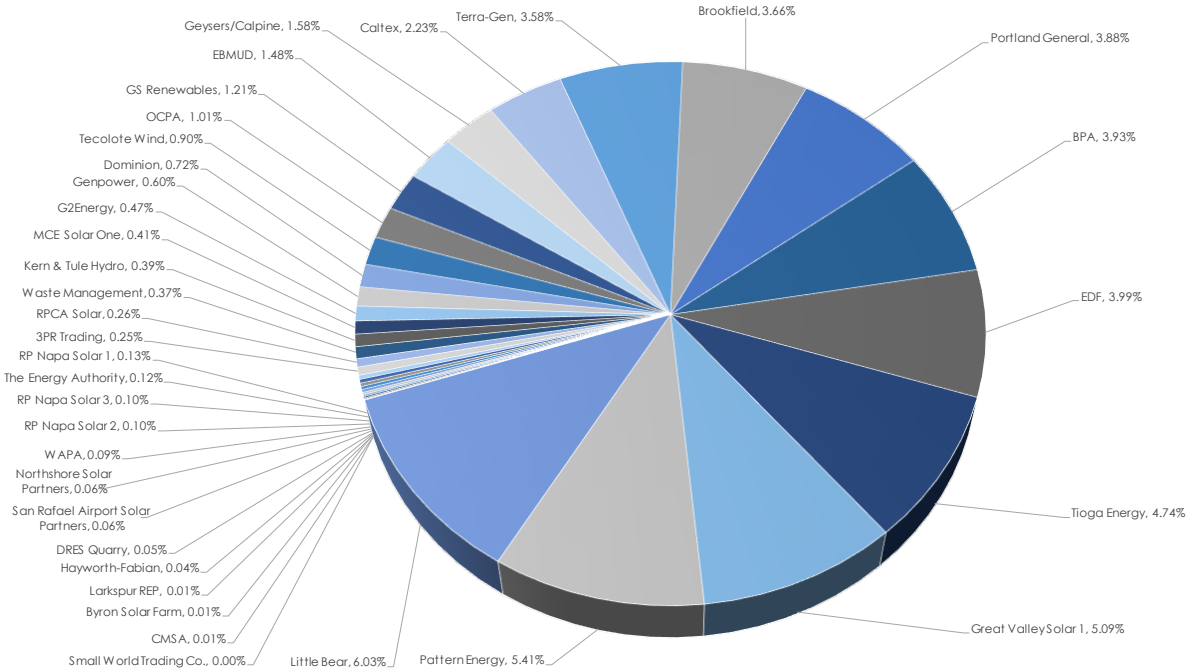
MCE 2022 Sales & Customer Snapshot

	% of Retail Sales	Retail Sales (MWh)	Customers (as of 12/31/2022)
MCE Light Green Total:	**96.06%**	**5,318,090**	**569,998**
Residential	50.77%	2,810,682	512,259
Non-Residential	45.29%	2,507,408	57,739
MCE Deep Green Total:	**3.91%**	**216,508**	**13,138**
Residential	0.82%	45,282	8,977
Non-Residential	3.09%	171,226	4,161
MCE Local Sol Total:	**0.02%**	**1,365**	**176**
Residential	0.02%	1,273	170
Non-Residential	0.00%	92	6
MCE Grand Total:	**100.00%**	**5,535,963**	**583,312**

- **MCE's Peak Demand of ≈1,567 MW occurred on September 6, 2022, HE 17 (5:00 P.M.)**
  - **26.4% increase in peak demand relative to 2021**
  - **Peak demand of ≈1,240 MW on September 8, 2021 (5:00 P.M.)**
- **MCE experienced a 3.8% increase in retail sales relative to 2021 (5,333,206 MWh)**

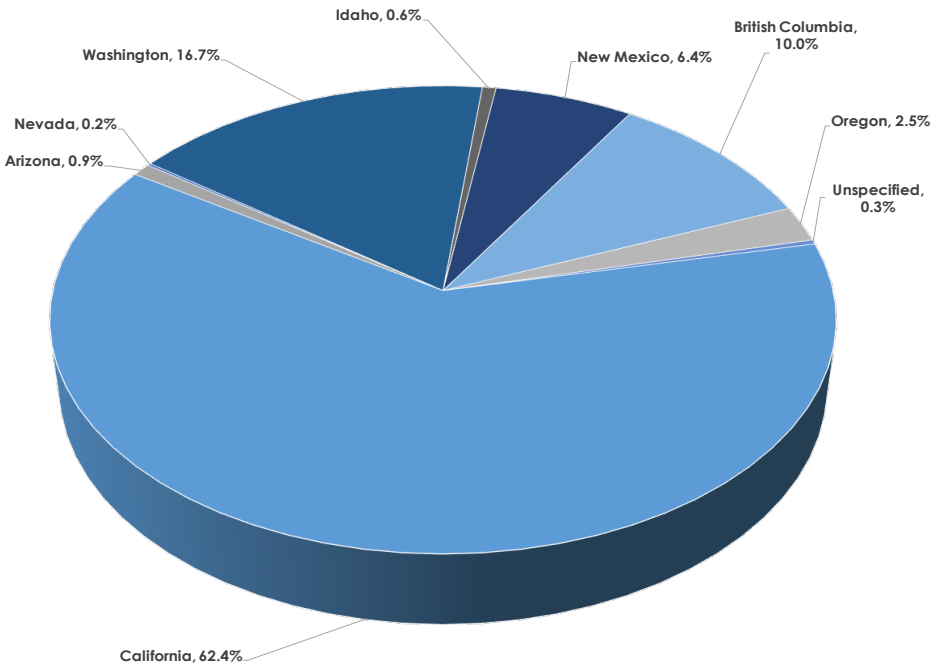
MCE 2022 Supplier Inventory

MCE received specified-source energy products from ≈40 unique suppliers in 2022



MCE 2022 Resource Locations

≈92% of specified source power delivered from California and Pacific Northwest in 2022



MCE 2022 Power Content Label

POWER CONTENT LABEL*					
ENERGY RESOURCES	2022 MCE TOTAL POWER MIX (Actual)	2022 LIGHT GREEN POWER MIX (Actual)	2022 LOCAL SOL POWER MIX (Actual)	2022 DEEP GREEN POWER MIX (Actual)	2022 GREEN ACCESS POWER MIX (Actual)
Eligible Renewable**	**61.7%**	**60.1%**	**100.0%**	**100.0%**	**100.0%**
-- Biomass & waste	5.1%	5.3%	0.0%	0.0%	0.0%
-- Geothermal	4.9%	5.1%	0.0%	0.0%	0.0%
-- Small hydroelectric	3.6%	3.8%	0.0%	0.0%	0.0%
-- Solar	29.4%	28.4%	100.0%	50.0%	100.0%
-- Wind	18.3%	17.0%	0.0%	50.0%	0.0%
Coal	0.0%	0.0%	0.0%	0.0%	0.0%
Large Hydroelectric	37.8%	39.5%	0.0%	0.0%	0.0%
Natural Gas	0.0%	0.0%	0.0%	0.0%	0.0%
Nuclear	0.4%	0.4%	0.0%	0.0%	0.0%
Other	0.0%	0.0%	0.0%	0.0%	0.0%
Unspecified sources of power	**0.5%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**
TOTAL	**100.5%**	**100.5%**	**100.0%**	**100.0%**	**100.0%**

*Representative example of resource breakout reflected in CA's PCL

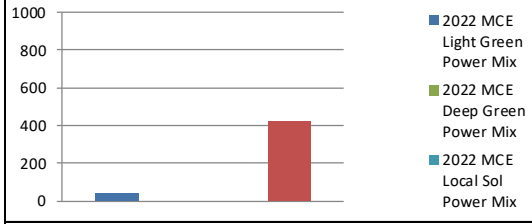
**MCE Total Power Mix and Light Green Power Mix include purchase of 0.5% unbundled RECs from CA biomass resource

MCE 2022 POWER CONTENT LABEL

2022 POWER CONTENT LABEL
MCE
mceCleanEnergy.org/energy-sources

Greenhouse Gas Emissions Intensity (lbs CO_2e/MWh)

2022 MCE Light Green Power Mix	2022 MCE Deep Green Power Mix	2022 MCE Local Sol Power Mix	2022 MCE Green Access Power Mix	2022 CA Utility Average
44	0	0	0	422



Energy Resources	2022 MCE Light Green Power Mix	2022 MCE Deep Green Power Mix	2022 MCE Local Sol Power Mix	2022 MCE Green Access Power Mix	2022 CA Power Mix
Eligible Renewable[1]	**59.6%**	**100.0%**	**100.0%**	**100.0%**	**35.8%**
Biomass & Biowaste	5.3%	0.0%	0.0%	0.0%	2.1%
Geothermal	5.1%	0.0%	0.0%	0.0%	4.7%
Eligible Hydroelectric	3.8%	0.0%	0.0%	0.0%	1.1%
Solar	28.4%	50.0%	100.0%	100.0%	17.0%
Wind	17.0%	50.0%	0.0%	0.0%	10.8%
Coal	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**2.1%**
Large Hydroelectric	**39.5%**	**0.0%**	**0.0%**	**0.0%**	**9.2%**
Natural Gas	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**36.4%**
Nuclear	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**9.2%**
Other	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**
Unspecified Power[2]	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**7.1%**
TOTAL	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Percentage of Retail Sales Covered by Retired Unbundled RECs[3]**:**	**1%**	**0%**	**0%**	**0%**	

[1]The eligible renewable percentage above does not reflect RPS compliance, which is determined using a different methodology.

[2]Unspecified power is electricity that has been purchased through open market transactions and is not traceable to a specific generation source.

[3]Renewable energy credits (RECs) are tracking instruments issued for renewable generation. Unbundled renewable energy credits (RECs) represent renewable generation that was not delivered to serve retail sales. Unbundled RECs are not reflected in the power mix or GHG emissions intensities above.

For specific information about this electricity portfolio, contact:	**MCE** **1 (888) 632-3674**
For general information about the Power Content Label, visit:	https://www.energy.ca.gov/programs-and-topics/programs/power-source-disclosure-program

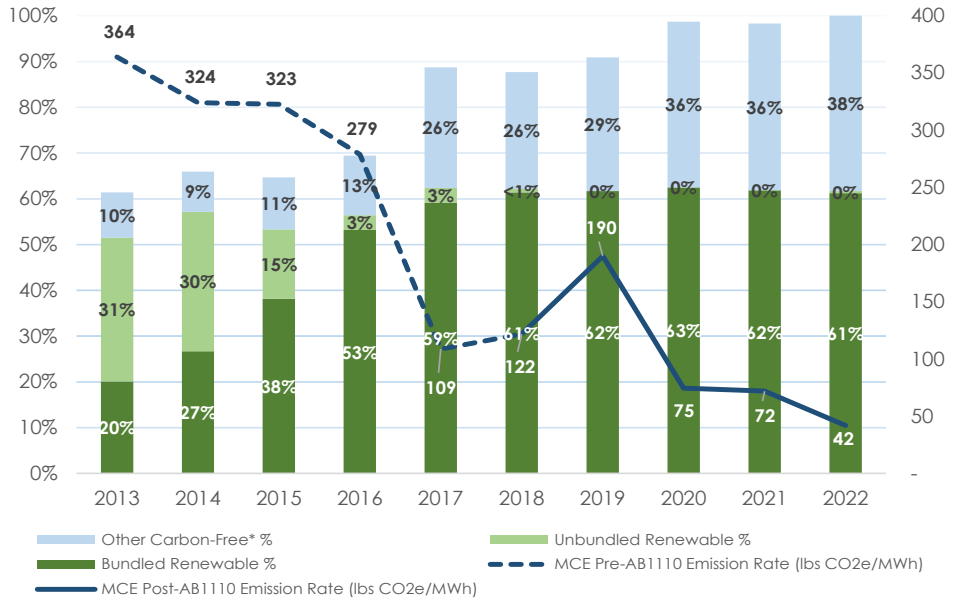
2022: Statistical Highlights

- 99.5% Clean Energy* (98.3% in 2021)
- 61.7% RPS-Eligible Renewable (61.9% in 2021)
  - 60.5% Bucket 1
  - 0.7% Bucket 2
  - 0.5% Bucket 3
- 37.8% Large Hydro**
- 0.4% Nuclear**
- 62.4% California-based supply (all sources)
- 73.0% California-based renewables (as a % of total renewables)
- Light Green Emission Factor (AB 1110): 44 lbs CO2e/MWh (95% GHG-Free equiv.)
- Aggregate Portfolio Emission Factor (AB 1110): 42 lbs CO2e/MWh

**RPS-eligible Renewable + Carbon-Free + ACS*

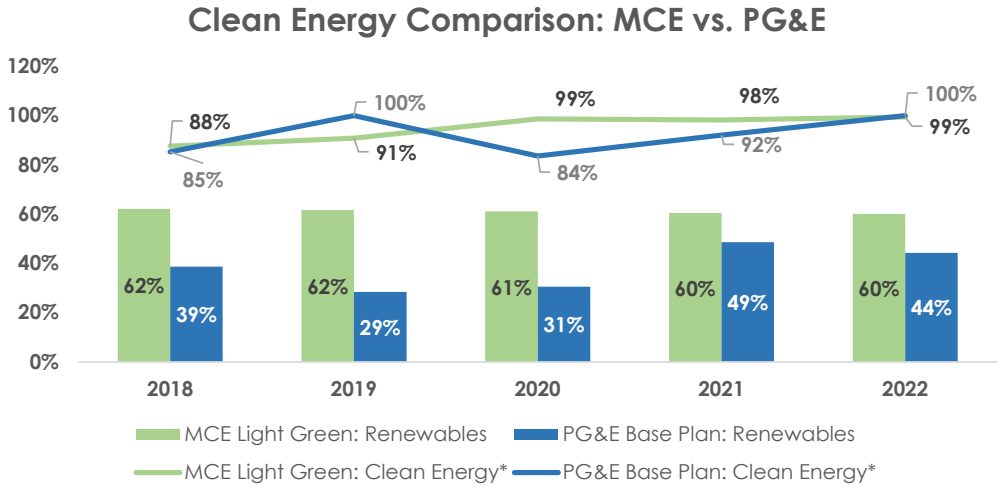
***Includes proportionate allocations from ACS purchases*

MCE Historical Power Content (2013-2022)



*Includes energy delivered by large hydroelectric generators and Asset Controlling Suppliers

MCE & PG&E Five-Year Portfolio Summary



*Includes RPS-eligible renewable, large hydro and nuclear power sources

PG&E's Base Plan power portfolio included **49.3% nuclear energy & 6.0% Unbundled RECs**

PG&E's Base Plan Emission Factor = 56 lbs CO2e/MWh (MCE Light Green Emission Factor = 44 lbs CO2e/MWh)

2018-2022 Source Data: Annual Power Source Disclosure Reports, as provided by the CEC, and related Power Content Labels

Thank You