

# Cal TF Custom Subcommittee Meeting #14



**DECEMBER 6, 2023**

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**Outdoor Holiday Activities: Share your favorite eco-friendly outdoor holiday activity (e.g., hiking or nature walks, tree planting, outdoor volunteering, etc.)**

① Start presenting to display the poll results on this slide.

# Agenda & Goals

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- **Meeting Agenda**

- Recap 2023 + Plan for 2024 – 30 min
- Custom Tools Library – 30 min
- Custom Measures Prioritization – 45 min
  - ✦ Slido.com **#caltfcs12**

- **Meeting Goals**

- Share where we've been; where we are going
- Stakeholder Input on:
  - ✦ 2024 priorities/activities
  - ✦ Custom Tools Library
  - ✦ Stakeholder Input on Custom Measure Package priorities
  - ✦ General feedback on meetings, communications, etc.

# Quick Updates

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- Thursday, 12/14 – Cal TF Meeting and EOY Celebration (Los Angeles)
  - [RSVP for In-Person](#)
- 2024 Subcommittee Calendar
  - Continue monthly, first Wednesday (2<sup>nd</sup> Wed in Jan, Jul)
  - Cal TF will send 2024 calendar invites
  - Custom items on TF agendas
- ISP White Paper Update

# Custom Initiative – Status

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Metric	Activity/Task	Status Update	Plan for 2024 –
5X	<a href="#">Custom Initiative Workplan</a>	<a href="#">Workplan</a> affirmed by TF, PAC in April	See <a href="#">Draft 2024 Business Plan</a>
5A-1	Regulatory Summary & Review	- <a href="#">Custom Resource Library</a> - Drafting proposal for improved guidance organization and communication	<b>5A.</b> Centralize and Summarize Commission Policy; Streamline and Clarify Custom Policy, Guidance, and Resources
5A-2	SW Custom Measure ID	Moved to 2024 Business Plan	Develop SW Custom Measure Codes
5A-3	List of Measures for SW Custom Measure Packages	Developing prioritized list of custom measures / measure packages	<b>5C.</b> Develop SW Custom Measure Packages (CMP) for at least ten (10) Measures and at least ten (10) SW Custom Tools
5A-4	List of Custom Tools	- <a href="#">Custom Tool Library</a> - Developing prioritized list of custom tools to update/develop	
5B	Custom Roadmap	See <a href="#">Draft 5-Year Roadmap</a> ; for TF/PAC affirmation in December	Roadmap to be reviewed, updated annually with Business Plan
5C-1	SW Measure Characterization	- TF Affirmed: Steam Boiler, Chiller Systems, HVAC RCx CMPs - In Progress: Boiler Add-Ons, Pump Systems - <a href="#">Custom Measure Library</a>	See <b>5C</b> above
5C-2	Custom MP and Tool Development Workflow	Established formal workflow/steps to develop custom measure packages & tools	Follow workflow for <b>5C</b> activities
5D	eTRM Documentation	Custom Measure Characterization Template	TBD based on eTRM implementation
5E-1	eTRM Custom Phase 1	Developed <a href="#">eTRM designs</a> for Custom Library, Custom Tools, and Custom Measures	Assess opportunity to add custom measures and tools, incorporate templates into the eTRM
5E-2	Future Custom eTRM Modules	Moved to 2024 Business Plan	
6B	White Paper: ISP	Draft ISP White Paper in Progress	Implement White Paper recommendations

# Draft 2024 Business Plan: Goal 5

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## Draft 2024 Business Plan

- **5A** – Centralize and Summarize Commission Policy; Streamline and Clarify Custom Policy, Guidance, and Resources
- **5B** – Establish Streamlined, Organized, Structured Statewide Custom Templates and Codes
- **5C** – Develop SW Custom Measure Packages (CMP) for at least ten (10) measures and at least ten (10) SW Custom Tools
- **5D** – Custom Policy Initiative

## Metric 5A-4

### List of Custom Tools

- **Objective**
  - Identify and characterize custom tools that stakeholders may use to develop custom projects
- **Approach**
  - Identify and gather existing tools
    - ✦ Need support from CPUC, IOUs, implementers to identify and access
  - Characterize tools (e.g., use, status)
  - Identify and prioritize needs to improve the library of useful tools
- **Deliverables**
  - List of characterized custom tools used in past five years.
  - **Public library of custom tools with summary information**
  - Prioritized list of needs to update, seek approval, and/or develop new custom tools.



# Public Tool Library

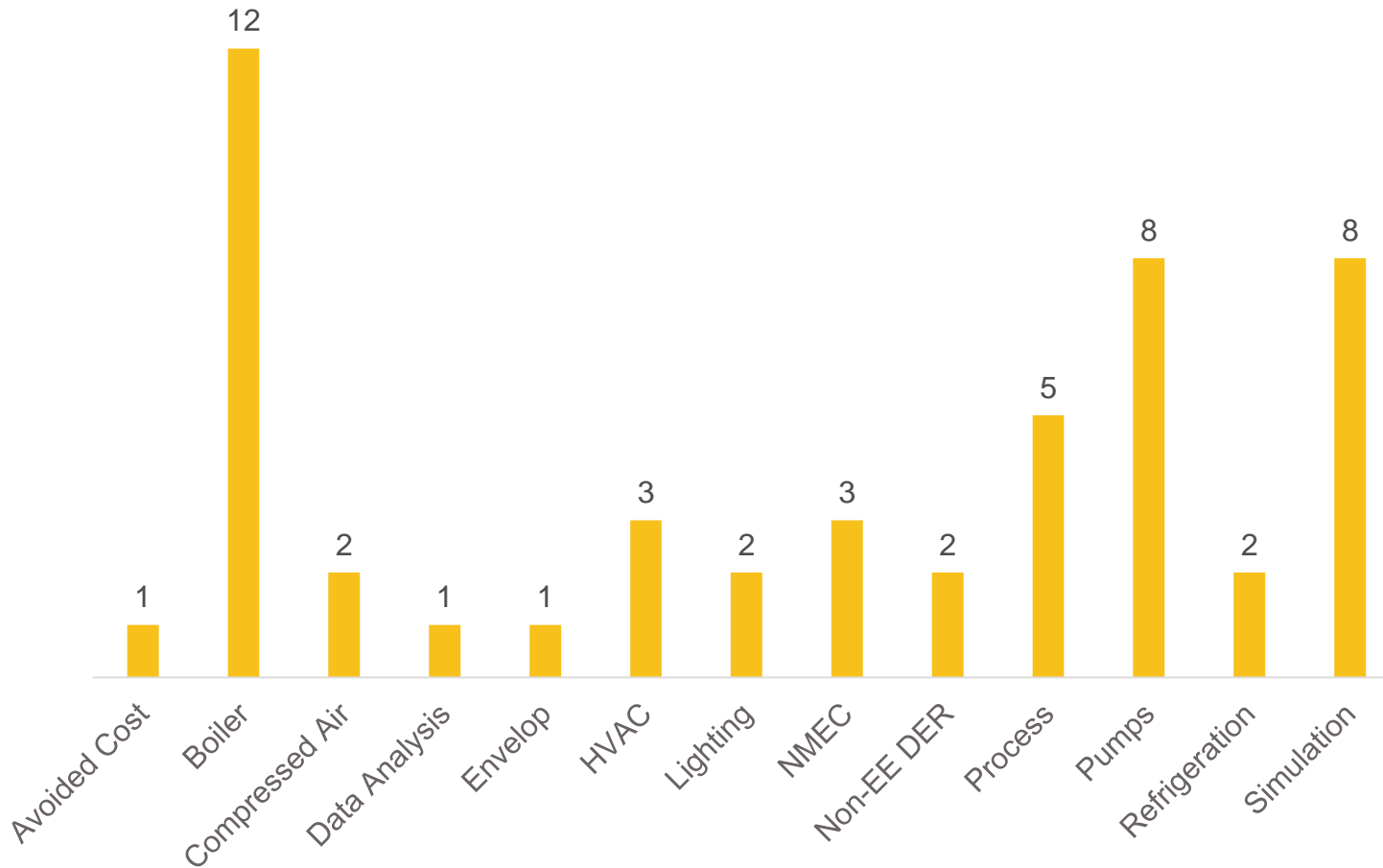
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- 50 total tools in [Custom Tool Library](#)
  - 26 are up to date
  - 9 need updates
  - 15 likely need updates
- Included
  - Tools prioritized through stakeholder feedback
  - Pool Pump Calculator was “saved” from the removed list by stakeholders
  - 39 “internal” to CA program activity; 21 “external” to CA program activity
- Not Included
  - “Removed” tools
  - CCT tools
  - Some tools with limited stakeholder prioritization (e.g., single project specific; IOU could not locate tool; Obsolete due to eligibility issues)



# Public Tool Library

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# Key Information in Public Tool Library

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- Description
  - Brief description of the tool
- Tool Category
  - boiler, process, pumps, HVAC, data analysis, etc.
- Tool Status
  - Up to date, out of date, updates in progress
- Tool Location
  - Download, In Library, Online
- Download Link
  - Not populated for “In Library” tools
- Tool Owner

# Public Tool Library

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**DEMO**

# Stakeholder Feedback

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- What other information would be helpful in the tool library?
- How can we make this more user-friendly?
- Ongoing Question: What other tools should be included?

# 2024 Activities

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- Continue adding to the library
  - Not a finite library
- Develop standard document for each tool
  - Uses, applicability, inputs, methodology, outputs, etc.
- Determine updates needed for each tool
  - Detailed Cal TF Staff review of each tool
- Coordinate and execute prioritized updates
  - Potential Cal TF/Stakeholder working group

## Custom Measure Prioritization

- **2023 Custom Measure Packages (CMPs)**
  - Cal TF Affirmed
    - ✦ Steam Boiler Replacement
    - ✦ HVAC RCx
    - ✦ HVAC Chiller Systems
  - In Progress
    - ✦ Pump Systems
    - ✦ Boiler Plant Measures
- **Meeting Goal**
  - **Subcommittee's prioritization for 2024 activity (Slido)**

# Measure Groupings

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- Groupings for similarities of measures and streamlining activities
- Four groupings
  - Measure
  - System
  - Program activity
  - Subsector

# Standard/Common Custom Measures

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Measure	System	Activity	Subsector
<ul style="list-style-type: none"><li>• Steam boiler replacement</li><li>• Pump system overhaul</li><li>• Compressed air leaks</li><li>• HVAC controls</li><li>• Mechanical vapor recompression</li></ul>	<ul style="list-style-type: none"><li>• HVAC chiller</li><li>• Boiler Plant</li><li>• Pump systems</li><li>• Boiler distribution</li><li>• Compressed air</li><li>• Lighting</li><li>• Pool pumps</li><li>• Process equipment</li><li>• Process fans</li><li>• Process refrigeration</li><li>• Process cooling</li></ul>	<ul style="list-style-type: none"><li>• HVAC RCx</li><li>• Fuel substitution</li><li>• Site NMEC</li><li>• Strategic Energy Management</li></ul>	<ul style="list-style-type: none"><li>• Data centers</li><li>• Indoor horticulture</li><li>• Oil production</li><li>• Multifamily existing whole building</li><li>• Non-res new construction individual systems</li><li>• Res new construction whole building</li><li>• Wastewater</li></ul>

2023 complete or in progress

2023 paused



# Stakeholder Input

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## Slide.com #caltfcs12

Rate your interest/value for developing CMCs (i.e., clear, standard savings protocols) for each measure.

1 - No interest/value in developing a CMC      5 - High priority/value to develop a CMC

Give your rating

# Measure Details

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Measure	Description
Compressed air leaks	Program process to address compressed air leaks.
HVAC Controls	Replacement of controls with additional functionality.
Mechanical vapor recompression	Energy recovery process through mechanical recompression of exhaust streams.
Boiler distribution	Steam system measures in the distribution system.
Compressed air	Suite of measures related to compressed air systems.
Lighting	Non-horticulture lighting efficiency and lighting controls.
Pool pumps	Large pool pumps outside of the deemed and DOE Energy Conservation Standard.
Process equipment	Process improvements relating to kWh/widget and therms/widget calculations
Process fans	Suite of measures relating to process fans.
Process refrigeration	Suite of measures related to process refrigeration systems.
Process cooling	Suite of measures related to process cooling systems.

# Measure Details

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Measure	Description
Fuel Substitution	)Non-deemed fuel substitution measures (e.g., industrial)
Site NMEC	Documented process, approach, and policy related to site NMEC
Strategic Energy Management	Documented process, approach, and policy related to site SEM
Data centers	Suite of measures associated with data centers.
Indoor horticulture	Lighting and HVAC measures for indoor horticulture.
Oil production	Suite of measures associated with oil production.
Muli family existing whole building	Addresses suite of measures including value of the process and accuracy of savings.
Non-Res new construction individual systems	Define specific approaches for system level fuel substitution and energy efficiency improvements where a whole building simulation is not cost effective.
Res new construction whole building	Addresses suite of measures including value of the process and accuracy of savings.
Wastewater	Suite of measures associated with wastewater systems.

# Measure Prioritization Assessment

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Measure	Historic Electric	Historic Gas	Historic Measures	Existing Tool	Policy Issue	Other Importance/Value
Compressed air leaks	Low		Low	Yes		High Potential
HVAC Controls	Low	Low	Low	Maybe	MAT	
Multi vapor recompression		High	Low	No		
Boiler distribution	Low	Low	Low	Yes		
Compressed air	Low	Low	Low	Yes		High Potential
Lighting	High		High	Maybe		High Potential
Pool pumps	Low		Low	Yes		
Process equipment	Low	Low	Low	No		
Process fans	Low		Low	Yes		
Process refrigeration	Low		Low	No		
Process cooling	Low		Low	No		
Fuel Substitution	Low	Low	Low	Partial		Decarbonization
Site NMEC	High	Medium	Low	Yes	MAT, Savings	Policy Priority
Strategic Energy Management	High	High	Medium	Yes		Policy Priority
Data centers	Low	Low	Low	No		
Indoor horticulture	Medium	Low	Low	Partial	SP	
Oil production	Low	Medium	Low	No		
Multi family existing whole building	Low	Low	Medium	Yes	Calculation	
Non-Res NC individual systems	N/A	N/A	N/A	No	SP	
Res NC whole building	Low	Low	High	Maybe		
Wastewater	Medium	Low	Low	No		

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**Rate your priority level for each potential Custom Measure Characterization (CMC).**

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## Wrap-Up & Next Steps

- **Action Items**
  - Input on Business Plan, Roadmap
  - Share feedback on Resource, Tools, Measure Library
  
- **Upcoming Meetings**
  - 12/14 TF Meeting + EOY Celebration (Los Angeles) – [RSVP](#)

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**Share any feedback on what is working well and ideas to consider/implement re Meetings, Communications, SharePoint, etc. Thank you!**

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