



CONSULTANT TEAM 2020-2022 WORK PLAN YEAR ONE

► January 22, 2020

CONTEXT



- ▶ **Incorporates proposed EEAC priorities, Councilor input, and experience from previous work plans**
- ▶ **Covers a 12-month period from January 2020 – December 2020**
- ▶ **2020 heavily focused on supporting 2019-2021 Plan achievement**
 - Support accounts for ~ 65% of the proposed budget
- ▶ **Strategic planning will begin in summer**
- ▶ **Formal planning including stakeholder meetings begins in the fall**
- ▶ **Getting KPIs right is a key focus**

CONSULTANT TEAM UPDATES IN 2020 AND BEYOND



- ▶ **New Active Demand Advisory Group added to focus on these issues**
 - Includes existing Team members and members Sean Becker and Mike Rufo
- ▶ **C&I Advisory Group to be led by Adam Jacobs**
- ▶ **Caroline Hazard and Elizabeth Chant join Residential Advisory Group**
- ▶ **Eric Belliveau to continue as Principal-in-Charge; Gretchen Calcagni to serve as project manager**

EM&V



- ▶ **Context: Critical engine for providing objective and fact-driven results to ensure reliable savings claims, past and present**
- ▶ **Work Areas**
 - EM&V Planning
 - Study implementation
 - EM&V Reporting
 - Council and stakeholder engagement
- ▶ **21% of consultant budget**

EM&V



► **Specific areas of focus in 2020 include:**

- Overseeing the studies laid out in the Strategic Evaluation Plan (SEP)
- Completing and reporting on key studies related to participation barriers, Energy Optimization, and demand
- Building a mature framework for savings claims from market effects and new codes and standards provisions
- Working with the PAs on EM&V aspects of potential savings studies for the planning process for the 2022-2024 Plan
- Developing additional studies as needed to support the evolution of programs, policies, and markets.

PLANNING AND ANALYSIS

- ▶ **Context: Ensuring the Council effectively performs its responsibilities; supporting development of a strategic vision for the future; reviewing and analyzing 2019 results and 2020 reporting**
- ▶ **Work Areas**
 - Council support
 - Technical analysis/Review reports and data
 - Regulatory support
- ▶ **33% of consultant budget**

PLANNING AND ANALYSIS



► **Specific areas of focus in 2020 include:**

- Ensuring effective program performance and to achievement the 2019-2021 Three-Year Plan goals
 - Providing guidance related to new elements in the Plan including energy optimization, active demand, residential enhancements, etc.
 - Reviewing and commenting on results of the PA MMBtu study
- Aiding the Council in the process of outlining key elements of the 2022-2024 Three-Year Plan
- Ensuring the Council effectively performs its responsibilities, and that EEAC processes are informative, effective, and efficient
- Providing technical analysis to support the development and implementation of a strategic vision for the future

ACTIVE DEMAND



- ▶ **Context: Reviewing and analyzing available information to guide implementation, evaluation, and reporting of ADR elements of the Plan including daily dispatch; participating in strategic planning**
- ▶ **Work Areas**
 - Planning and Implementation Support
 - Identifying New Opportunities and EM&V Impacts
- ▶ **7% of consultant budget**

ACTIVE DEMAND



► Specific areas of focus in 2020

- Reengaging Demand Reduction Working Group to discuss 2019 ADR results and planned efforts for summer 2020
- Reviewing daily dispatch demonstration results and provide support for Council and DPU approval
- Monitoring and reviewing the winter 2019-2020 demand management efforts.
- Coordinating with sector teams to ensure fully integrated program delivery of ADR and EE in the programs
- Tracking and participating in winter benefits study
- Reviewing 2019 EM&V results and plan and evaluations for 2020 offerings
- Coordinating with PAs on gas and other ADR opportunities

RESIDENTIAL AND LOW INCOME

- ▶ **Context: Refining existing program strategies to incorporate EO; increase participation; heat pump goals; tracking Key Performance Indicator (KPI) data; assessing new technologies and program approaches**
- ▶ **Work Areas**
 - Program and effective practices support
 - RMC and Council meeting participation
 - Income eligible program review
- ▶ **~17% of consultant budget**

RESIDENTIAL



► Specific areas of focus in 2020:

- Collaborating with the PAs on implementing, tracking, assessing, and reporting on 2019-2021 residential enhancements including
 - Active demand reduction
 - Strategic electrification—particularly heat pumps
 - Increasing conversions through facilitated services
 - Energy optimization education for customers
 - Passive House
 - Serving all customers including renters and moderate income
 - Home Energy Scorecards
- Continuing to identify and bring forward opportunities for realizing an integrated, state-of-art residential program in MA
 - Follow up on recommendations from white paper: "[Mass Save® 2019 Residential Program Review: Opportunities and Recommendations for 2020 and Beyond](#)"

INCOME ELIGIBLE



► **Specific areas of focus in 2020:**

- Increasing participation and savings by renters, moderate income customers, and limited English proficiency customers
- Continuing to work with PAs and LEAN to address findings, outputs, and recommendations of Multifamily Census and Low Income Process Evaluation

COMMERCIAL & INDUSTRIAL

- ▶ **Context: Monitoring lighting market changes and their impacts on programs; Small Business participation; tracking KPI data trends; identifying new and existing non-lighting technologies with additional potential, focusing on opportunities for controls**
- ▶ **Work Areas**
 - Program and effective practices support
 - New technologies and innovation support
 - C&I Management Committee and Council meeting participation
 - Incorporate feedback from EM&V and studies
- ▶ **~17% of consultant budget**

COMMERCIAL & INDUSTRIAL

► Specific areas of focus in 2020:

- Small Business/Turnkey Initiative
- New construction program improvements
- Strategic energy management (SEM)
- Lighting and lighting controls, including lighting transition planning and street lighting
- Custom HVAC projects
- Equipment System Performance Optimization (ESPO) program
Manufacturing custom process
- Demand and storage program performance
- Technical assistance and training for contractors and distributors, especially with respect to lighting and HVAC controls
- Combined Heat and Power savings and project size
- Energy Optimization and fuel switching, including air and ground-source heat pumps and variable refrigerant flow (VRF) systems
- Workforce development issues relevant to C&I building operations and maintenance

TECHNICAL SERVICES



- ▶ **Context: On-going administrative tasks that support the Council's information sharing, review of website for visits and potential changes in 2020**
- ▶ **Work Areas:**
 - Meeting minutes for EEAC and Ex Comm. Potential support of strategic planning meetings
 - Website maintenance, updates, and document posting
 - Consultant Team quarterly report
- ▶ **5% of consultant budget**
- ▶ **Specific focus area for 2020 includes updated website structure/functionality based on EEAC feedback**

Q1 DELIVERABLES

Month	Category	Topic	Description	Advisory Group(s)
January	Memo	2020 Work Plan	Describes Consultant Team tasks, deliverables, and budget for 2020	All
	Presentation	2020 Work Plan	Summarizes Consultant Team tasks and deliverables for 2020	All
	Memo	Residential Program Design	Started in December 2019, this memo provides the Consultant Team's recommendations regarding remaining residential program opportunities and suggested metrics measuring success	Residential
February	Tracking Spreadsheet	EM&V Status Update	A spreadsheet summarizing the status of current and planned EM&V studies	EM&V
	Memo	Energy Management Systems (EMS)	Memo clarifying appropriate baseline considerations for Energy Management Systems	C&I EM&V
	Memo	Consultant Team Quarterly Report	Report on Consultant Team activities for Q4 of 2019.	All
March	Presentation	PA Q3 Report	Observations on KPIs, PA differences, areas PAs not on track to meet goals or council priorities	P&A Residential C&I
	Presentation	Non-participant studies	Results of the non-participant studies conducted in response to language in the 2019-2021 term sheets	EM&V

HIGH-LEVEL BUDGET PROPOSAL

\$1,558,000

	Staff	Role		Strategic Planning	Planning & Implementation	Oversight of EM&V	Coordinate Technical Services	Total Hours
Optimal Energy, Inc.	Eric Belliveau	Principal in Charge		450	250	50	100	850
	Gretchen Calcagni	Project Manager and Technical Services Lead		350	450	50	200	1,050
	Phil Mosenthal	SME: Codes and Standards, Policy		40	40			80
	Matt Socks	SME: AESC Study, Potential Studies, TRM		350	75			425
	Mark Kravatz	SME: Low Income/Healthy Housing		80	80			160
	Elizabeth Chant	SME: Low Income/Equity		80	80			160
	George Lawrence	C&I Core Member		75	75			150
	Adam Jacobs	C&I Lead		500	300			800
	Senior Analyst	Senior Analytic Support		50	100		50	200
	Analyst	Analyst Support		50	100		50	200
Individuals	April Clodgo	Contract Administrator & Technical Services Core Member					100	100
	Jeff Schlegel	SME: Active Demand, Avoided Cost study, ISO issues, Policy		150	100			250
	Caroline Hazard	Residential and Low Income Core Member		100	100			200
	Ralph Prael	EM&V Lead				975		975
	Bob Wirtshafter	EM&V Core Member				200		200
	Michael Rufo	SME: GHG strategies, Distributed Energy Resources, CA best practices		45	45	30		120
	Other Consultants (TBD)	SME TBD if necessary (average projected rates)		20	20			40
Cahool AEC	Lori Lewis	EM&V Core Member				180		180
	Carol Lasky	SME: Website and Graphic Design					70	70
CX CEI	Design Support	SME: Website and Graphic Design					75	75
	Margaret Lynch	Residential and Low Income Lead		400	250			650
EFG	Jennifer Chiodo	C&I Core Member and EM&V Core Member		200	160	190		550
	Glenn Reed	Residential and Low Income Core Member		125	150			275
SP	Anna Sommer	SME: Planning and Analysis		50	50			100
	Dan Mellinger	SME: Lighting		50	25			75
	Sean Becker	SME: Energy Storage and ADR		100	80			180
LABOR TOTALS			Hours	3,265	2,530	1,675	645	8,115
			Amount	\$620,765	\$476,040	\$328,400	\$96,375	
			Travel	\$15,000	\$15,000	\$5,000	\$1,000	
DIRECT COSTS TOTAL				\$15,000	\$15,000	\$5,000	\$1,000	
TOTALS				\$635,765	\$491,040	\$333,400	\$97,375	\$1,557,580