

Decarbonization Pathways Report



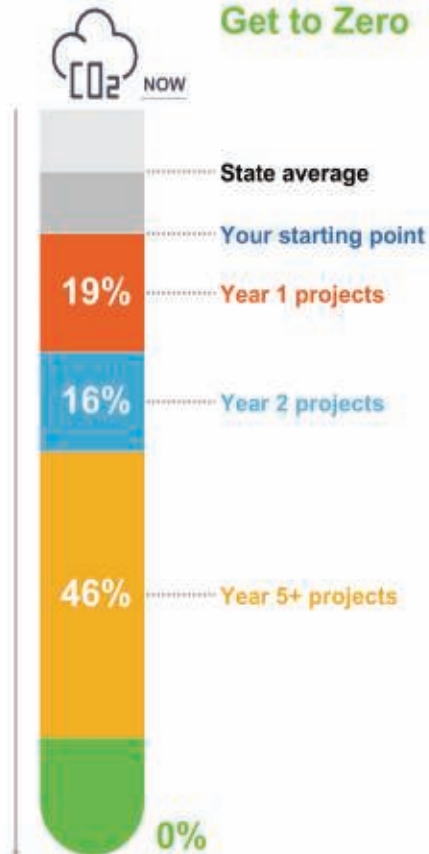
Your Current Carbon Footprint



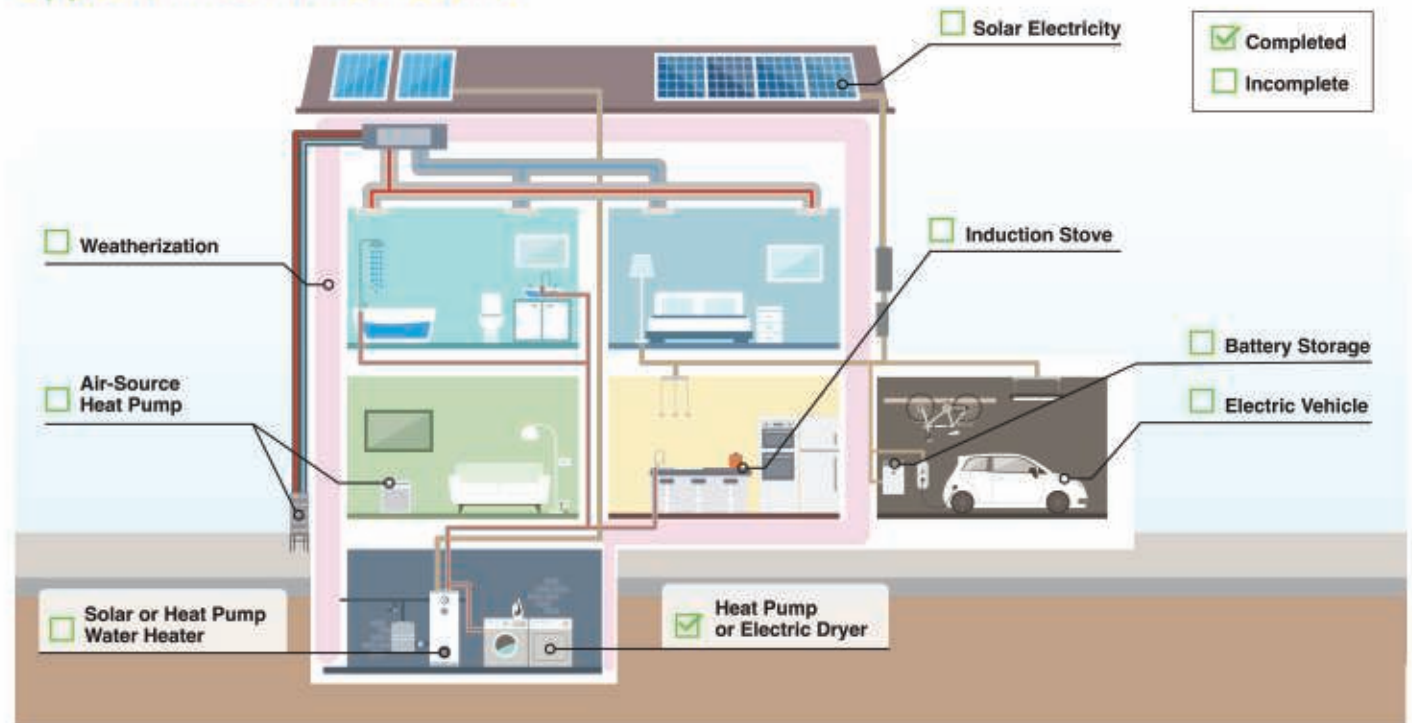
Year 1 Financial Snapshot



Get to Zero



Opportunities in Your Home



Your Decarbonization Roadmap

1 PLANNING

Work with our Support Service Team to plan your Year 1 projects.

- Complete an decarbonization assessment
- Address any Customer **Required Actions** from the assessment
- Schedule a planning session online with Support Services
- Schedule contractors to complete the work

HELPFUL RESOURCES

- [Support Services Overview](#)
- [Support Services Online Scheduling](#)
- [MassCEC Rebates](#)
- [Find a Contractor](#)

2 YEAR 1 19% CO2

Complete your Year 1 projects and take full advantage of the first-year incentives available in the MassCEC Decarbonization Pathways pilot.

- Mass Save List
- R6 Continuous Insulation
- Triple Pane LowE Windows
- All LED Lighting
- Kitchen Exhaust Hood
- Air Source Heat Pump

CONTRACTORS NEEDED

- [Electrician](#)
- [Mass Save Contractor](#)
- [HVAC Contractor](#)
- [Window/Door Contractor](#)
- [Siding Contractor](#)

3 YEAR 2-5 16% CO2

Keep the momentum going on as many high impact measures possible.

- Solar Thermal Water Heater
- Induction Cooktop
- Outdoor Power Equipment
- Electric Vehicle
- EV Charger

CONTRACTORS NEEDED

- [Electrician](#)
- [Solar Thermal Contractor](#)

4 YEAR 5+ Down the road 46% CO2

Think decarbonization and energy efficiency with any new major purchases or home improvements.

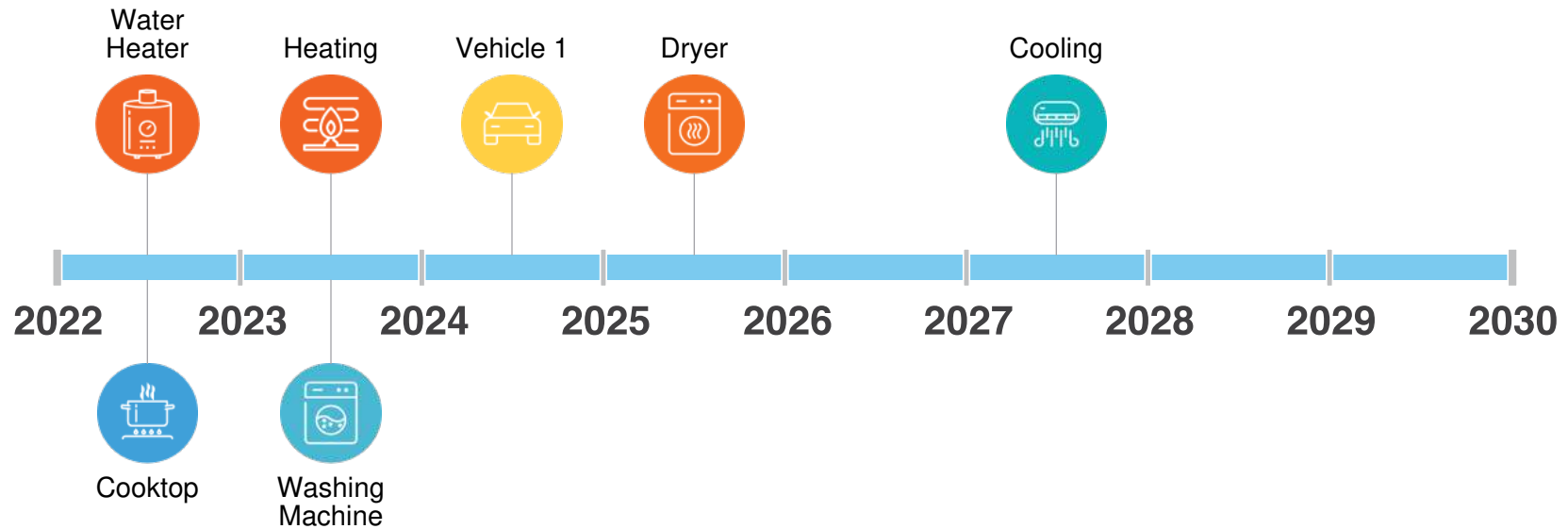
- Washing Machine
- Heat Pump Dryer
- Rooftop Solar

CONTRACTORS NEEDED

- [Electrician](#)
- [Solar Contractor](#)

Expected End of Equipment Life

When you're trying to decarbonize, unexpected equipment failures can make it more difficult to find the right replacement solution on short notice. Planning ahead and replacing equipment before it breaks is the best strategy. The timeline below shows when equipment, appliances, and cars that you currently own will likely need replacement. If something on the list does break, don't panic, but instead take a look at the suggested equipment replacements provided in the following pages. By our estimates you have ~\$50,275 in replacements coming up in the next 10 years.



Resources Library

HELPFUL RESOURCES

- [Support Services Overview](#)
- [Support Services Online Scheduling](#)
- [MassCEC Rebates](#)
- [Find a Contractor](#)

REBATES AND INCENTIVES

- [Mass Save Rebates](#)
- [SMART Program](#)
- [MA EV Rebates](#)
- [Federal EV Rebate](#)

EDUCATIONAL RESOURCES

- [Guide to a Clean Energy Home](#)
- [Air-Source Heat Pumps](#)
- [Ground-Source Heat Pumps](#)
- [Electric Vehicles](#)
- [Solar Electricity](#)
- [Battery Storage](#)
- [Solar Hot Water](#)



Financial Summary

Estimated Net Cost to Decarbonize

NET COST
TO DECARBONIZE

\$11,876



ESTIMATED
TOTAL COST

\$164,912

\$123,450 - \$223,274



INCENTIVES

\$46,721

Take advantage of incentives of up to **\$46,721**. **\$10,000** of which is only offered in year 1 through the MassCEC pilot.



AVOIDED COSTS

\$50,275

With no investment in decarbonization, over the next **10 years** you will spend roughly **\$50,275** on replacing existing equipment, appliances, and vehicles as they fail.



OPERATIONAL SAVINGS
OVER 10 YEARS

\$56,040

Completing all recommended projects in the first year saves you an estimated **\$56,040** over 10 years. The sooner you decarbonize the more you will save!

Estimated Cost and Savings

ROADMAP PROJECTS	ESTIMATED COST AFTER INCENTIVES	ESTIMATED INCENTIVES	ESTIMATED ANNUAL SAVINGS	ESTIMATED CO2 REDUCTION
YEAR 1	\$50,110 \$36,632 - \$66,188	20%	\$678	19%
YEAR 2-5	\$46,410 \$25,510 - \$80,910	22%	\$635	16%
YEAR 5+ Down the road	\$31,671 \$24,587 - \$39,456	27%	\$4,291	46%
TOTALS	\$128,191 \$86,729 - \$186,553	22%	\$5,604	81%

Year 1

PROJECT	ESTIMATED BILL SAVINGS	EST. CO2 REDUCTION	ESTIMATED COST BEFORE INCENTIVES	MASS SAVE INCENTIVES	STATE TAX CREDIT	FEDERAL TAX CREDIT	DECARB PATHWAYS INCENTIVE	TOTAL COST AFTER INCENTIVES	CONTRACTORS NEEDED	EFFORT LEVEL	PROJECTS TO COMPLETE BEFORE/WITH
Mass Save											
- Air Sealing - Rim Joist Insulation - Attic Floor Insulation	\$548	-	\$3,200	\$2,400	-	-	Group 1G See below	\$800 \$800 - \$800	Mass Save Contractor	Low	-
Air Source Heat Pump	\$25	12%	\$20,300 \$15,050 - \$25,550	\$10,000	-	-	Group 2G See below	\$10,300 \$5,050 - \$15,550	HVAC Contractor Electrician	High	Mass Save and Envelope Improvements, Electrical Upgrade
All LED Lighting	\$131	2%	\$142 \$126 - \$158	-	-	-	-	\$142 \$126 - \$158		Low	-
Kitchen Exhaust Hood	-	-	\$1,500 \$900 - \$2,100	-	-	-	Group 1G See below	\$1,500 \$900 - \$2,100	HVAC Contractor	Med	-
R6 Continuous Insulation	\$128	2%	\$11,368 \$7,656 - \$15,080	-	-	-	Group 1G See below	\$11,368 \$7,656 - \$15,080	Siding Contractor	High	Siding, Windows, Interior/Exterior trim
Triple Pane LowE Windows	\$240	3%	\$26,000 \$22,100 - \$32,500	-	-	-	Group 1G See below	\$26,000 \$22,100 - \$32,500	Window/Door Contractor	Med	Siding, Continuous Wall Insulation, Air Sealing, Interior/Exterior trim
Total Package	\$678	19%	\$62,510 \$49,032 - \$78,588	\$12,400	\$0	\$0	See Below	\$50,110 \$36,632 - \$66,188	-	-	-

Year 2-5

PROJECT	ESTIMATED BILL SAVINGS	EST. CO2 REDUCTION	ESTIMATED COST BEFORE INCENTIVES	MASS SAVE INCENTIVES	STATE TAX CREDIT	FEDERAL TAX CREDIT	DECARB PATHWAYS INCENTIVE	TOTAL COST AFTER INCENTIVES	CONTRACTORS NEEDED	EFFORT LEVEL	PROJECTS TO COMPLETE BEFORE/WITH
Solar Thermal Water Heater	\$12	3%	\$11,000 \$6,000 - \$14,000	-	\$30	\$2,860	Group 3G See below	\$8,110 \$3,110 - \$11,110	Solar Thermal Contractor	Med	Adding Heat Pumps, Electrical Upgrade
Electric Vehicle	\$637	12%	\$45,000 \$30,000 - \$75,000	-	Up to \$2,500	\$7,500	-	\$35,000 \$20,000 - \$65,000	Electrician	Med	Electrical Upgrade, Charging station
EV Charger	-	-	\$2,000 \$1,500 - \$3,000	-	-	-	Group 5G See below	\$2,000 \$1,500 - \$3,000	Electrician	Med	-
Induction Cooktop	\$-14	0%	\$1,300 \$900 - \$1,800	-	-	-	Group 5G See below	\$1,300 \$900 - \$1,800	Electrician	Low	Electrical Upgrade
Outdoor Power Equipment	-	-	House Specific	-	-	-	Group 5G See below	House Specific	-	Low	-
Total Package	\$635	16%	\$59,300 \$38,400 - \$93,800	\$0	\$2,530	\$10,360	See Below	\$46,410 \$25,510 - \$80,910	-	-	-

Year 5+

PROJECT	ESTIMATED BILL SAVINGS	EST. CO2 REDUCTION	ESTIMATED COST BEFORE INCENTIVES	MASS SAVE INCENTIVES	STATE TAX CREDIT	FEDERAL TAX CREDIT	DECARB PATHWAYS INCENTIVE	TOTAL COST AFTER INCENTIVES	CONTRACTORS NEEDED	EFFORT LEVEL	PROJECTS TO COMPLETE BEFORE/WITH
Rooftop Solar	\$4,093	44%	\$40,002 \$33,918 - \$46,086	-	Up to \$1,000	\$10,401	-	\$28,601 \$22,517 - \$34,685	Solar Contractor	Med	Electrical Upgrade, Roof replacement, Tree service
Washing Machine	\$0	0%	\$1,200 \$600 - \$1,800	-	-	-	-	\$1,200 \$600 - \$1,800		Low	-
Heat Pump Dryer	\$198	2%	\$1,900 \$1,500 - \$3,000	\$30	-	-	Group 5G See below	\$1,870 \$1,470 - \$2,970	Electrician	Low	Electrical Upgrade
Total Package	\$4,291	46%	\$43,102 \$36,018 - \$50,886	\$30	\$1,000	\$10,401	See Below	\$31,671 \$24,587 - \$39,456	-	-	-

Decarbonization Pathways Pilot Incentives

GROUP NUMBER	DESCRIPTION	>120% OF SMI	ESTIMATED ELIGIBLE COSTS	ESTIMATED INCENTIVES
Prerequisite	Mass Save Opportunity	See note Below*	-	-
Group 1	Weatherization, Envelope Improvements, Ventilation	Capped at \$4,000	\$39,668	\$4,000
Group 2	Heat Pump	Capped at \$6,000	\$10,300	\$6,000
Group 3	Hot Water Solution	Capped at \$2,000	\$0	\$0
Group 4	Electrical Upgrades & Other Barrier Mitigation	No Cap (Must be paired with another measure)	\$0	\$0
Group 5	Appliances: Cooking Range, EV Charging, Dryer, Lawn Equipment, etc.	Capped at \$1500 each	\$0	\$0
Group 6	Electric Vehicle, Solar, Battery Storage	Not Eligible	\$0	\$0
Total			-	\$10,000

*Must complete all recommended Mass Save measures and install a heat pump to unlock incentives