

# VEC's Energy Transformation Program



# Tier III Planning & Decision Process

- **Carbon Reduction Opportunity**
- **Meaningful and Relevant to our Members**
- **Financial Responsibility**
- **Regulatory Compliance**

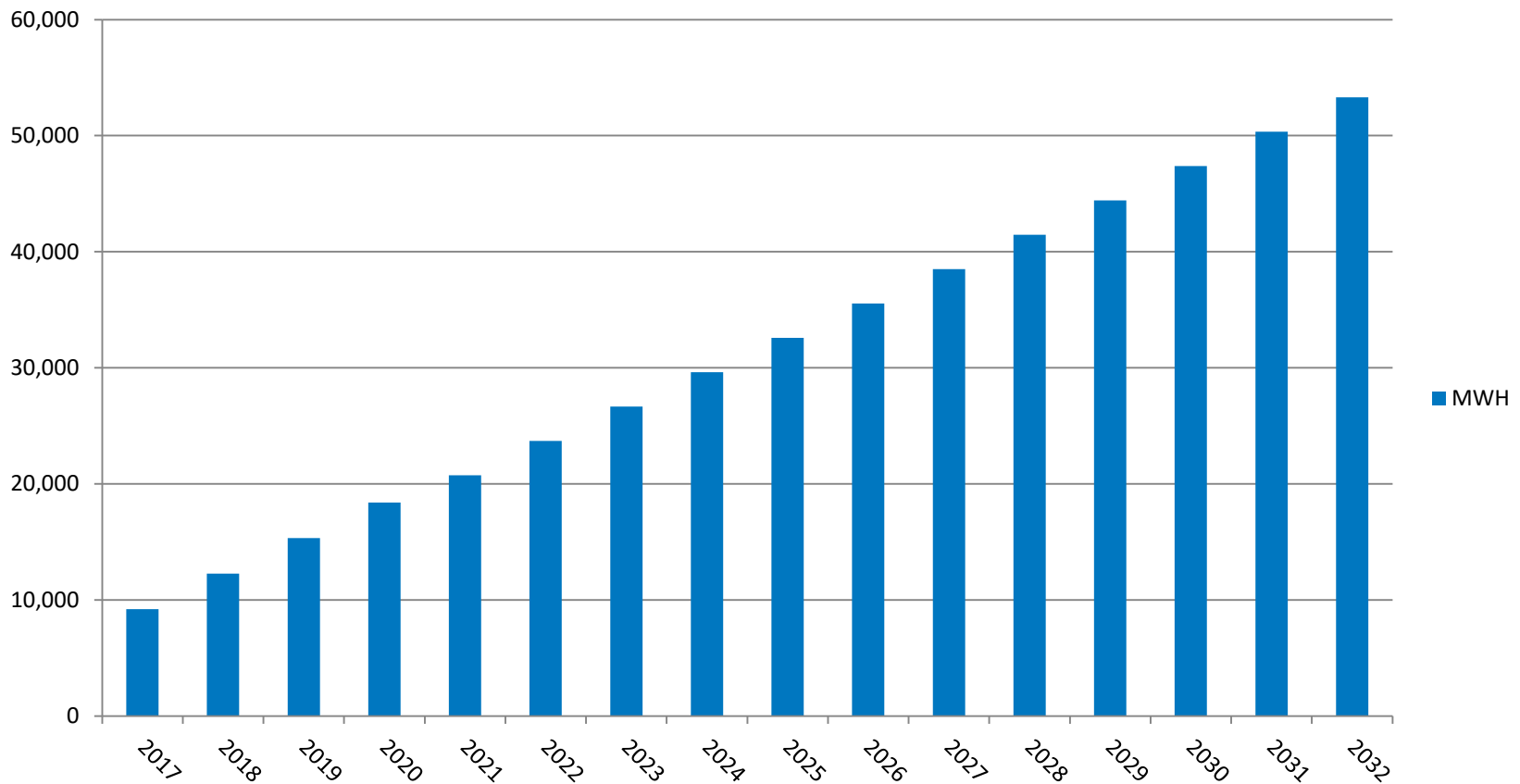
VEC Team:

Energy Planners, Financial, Regulatory,  
Engineering. Comprehensive approach.



# Tier III Requirements

Estimated Tier III Requirements



# Tier III Results to Date (MWh)

	2017	2018	2019
Requirement	8,883	12,267	15,333
Actual	11,467	18,427	22,988
Percent Met	129%	150%	150%

# Clean Air Program

**Purpose:** Provide discounted electric infrastructure to off-grid or underserved homes and businesses

**Total projects completed:** 13

**Project cost:** \$3k - \$171k, average of \$70k

**VEC share of cost:** \$1k - \$83k, average of 30%

**Total VEC program cost:** \$250k, \$150k annual budget

**Total expected lifetime MWh:** 33,658

CAP projects continue to drive our Tier III success

# Clean Air Program





# Thermal Measures

***Cold Climate Heat Pumps*** – 200 units - \$300 or \$450

***Heat Pump Water Heaters*** – 30 units - \$150

***Pellet Stoves*** – 30 units - \$150 or \$300

***Centrally Ducted Heat Pump*** – 2 units - \$300/ton

***Air to Water Heat Pump*** – 2 units - \$500/ton



# Transportation Measures

***Electric Vehicles*** - \$500 for purchase, \$100/yr for lease  
***Plug-in Hybrid EVs*** - \$250 for purchase, \$50/yr for lease

***Public Level 2 Charging Stations*** - \$500/head  
***Home Level 2 Charging Stations*** - \$250





# Tools & Equipment

***Electric forklifts*** – 5 units - \$1,000

***Residential mower*** – 50 units - \$50

***Commercial mower*** – 2 units - \$1,000



# Education & Outreach

- At least two bill inserts
- Direct emails to approximately 17,000 email contacts
- An article in each issue of VEC's quarterly newsletter Co-op Life, which is sent directly to all VEC members
- Social media promotion through Facebook, Twitter and Instagram
- Press releases when a new incentive is offered
- Events such as VEC's Annual Meeting of the Members, farmers' markets, town energy committees, and energy fairs

# Education & Outreach



# Tier III Results to Date

(1/1/17 - 2/17/20)

	Units	Incentive	MWh Credit	MWh/Unit	Payback
Clean Air Program	13	Varies	33,658	2,589	< 5
Cold climate heat pump	788	\$300 – 450	10,706	14	1-2
Heat pump water heater	75	\$150	240	3	1
Pellet stove	77	\$150 - \$300	3,452	45	1.5
Electric vehicle	89	\$500	2,283	26	2
Plug-in hybrid EV	61	\$250	907	15	2
Public charging station	20	\$500	200	10	8
Electric forklift	1	\$1,000	47	47	1
Residential mower	42	\$50	68	2	3

# Questions?

