

# Renewable Energy Research and Planning

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## Introduction

Hypertherm is committed to considering the impact its products have on people and the environment. In 2016, the company explored installing solar panels on several of its manufacturing buildings in NH. Ultimately, it decided to focus on energy reduction and efficiency efforts. Since 2012, Hypertherm has purchased RECs to account for all its US-based electricity consumption (scope 2 emissions).

To move beyond RECs, Hypertherm is now exploring its renewable energy procurement options.

## Approach

Background research into the renewable energy markets, regulation, electricity consumption for Hypertherm locations, and the carbon intensity of electricity at those locations.

Presentations and interviews with high-level internal stakeholders to gather key motivations for Hypertherm to pursue renewable energy procurement.

**Chief Financial Officer** VP, Engineering  
VP, People, Community, & Environment **Functional Team**  
VP, Corporate Development & Strategy **Leader, Facilities**  
Team Leader, Utility Operations

## Leadership Insight

Hypertherm's options are complicated by the geographical breadth of their operations. Energy market regulations vary significantly from location to location. Moving beyond purchasing unbundled RECs will necessitate a portfolio approach to their renewable energy procurement.

Reasons Hypertherm is pursuing renewables:

**Sustainability goals** Long-term orientation  
**Alignment with core values** Resiliency of electric grid  
**Corporate engagement** Assist with planning (predictable pricing)  
**Continuous improvement philosophy** Raising industry standards

Any cost of procuring energy from renewable sources is the cost of doing business well, of **doing business responsibly**, of doing business as **Hypertherm does**.



## Summary of Renewable Energy Procurement Options

Supply Option	Unbundled REC Products	Utility Supply Options	Community Choice Aggregation	Physical Power Purchase Agreements	Financial PPAs / Contract for Differences	On-site Self Generation	Off-site Self Generation
Upfront Capital Investment	None	None	None	None	None	\$\$\$-\$\$\$	\$\$\$-\$\$\$\$
Ongoing Expenditures Relative to Incumbent Electricity Option	Cost premium	Cost premium; tariff may offer savings	Varies	Cost savings over life of contract	Cost savings over life of contract	Cost savings over life of project	Cost savings over life of project
Term of Commitment	Varies; significant flexibility	Monthly; multiyear for green tariff	Consumer opt-out provision	Multiyear	Multiyear	Operational life of installed technology	Operational life of installed technology
Transaction Complexity	★	★	★	★★★	★★★★★	★★★	★★★★

## Recommendations

Leverage a tiered approach to procure renewable energy.

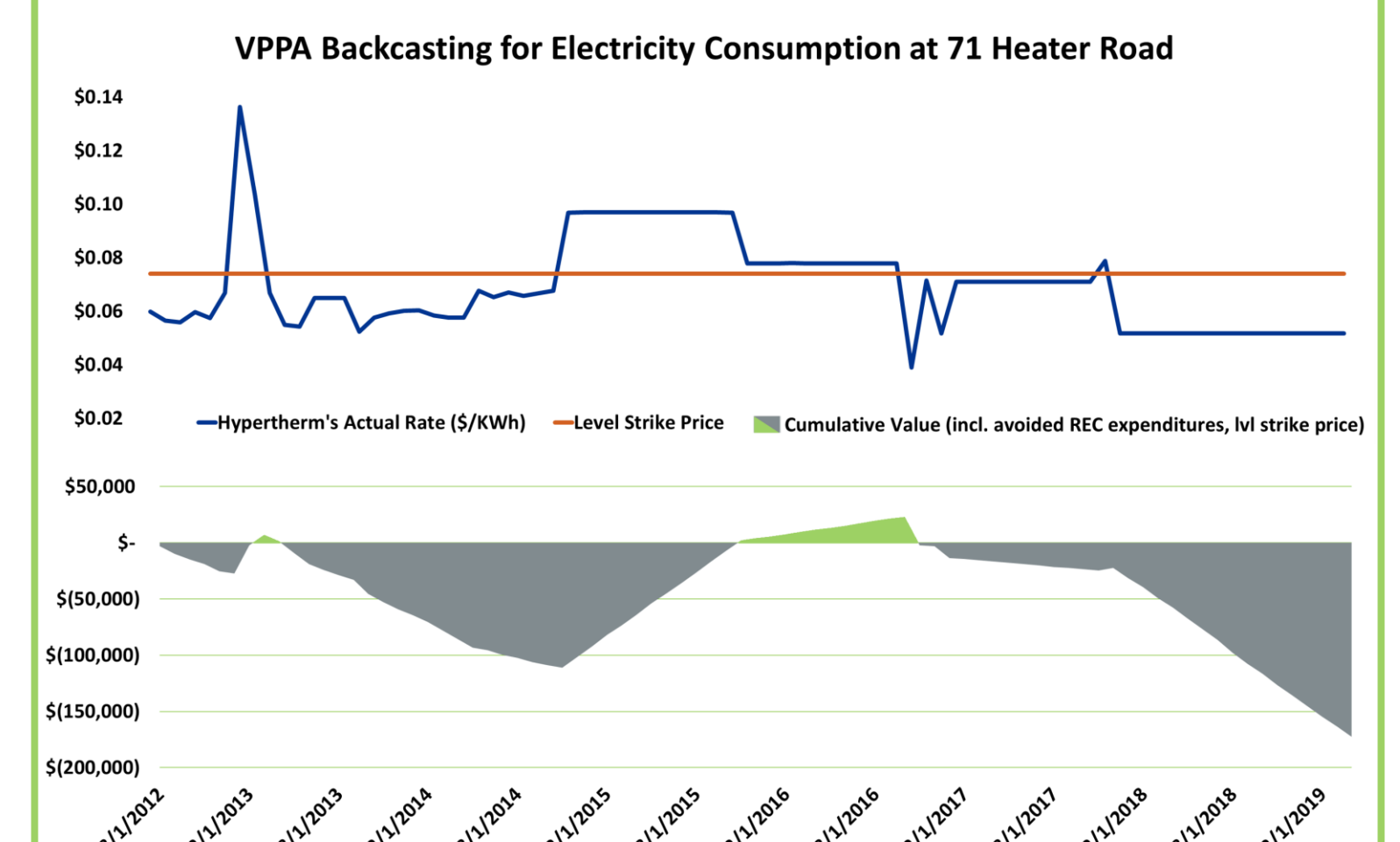
### Set specific 2030 renewable energy procurement goals

Review procurement annually to ensure progress toward renewable energy goal



### Explore moving a percentage of domestic energy consumption to aggregated Upper Valley PPA

Review results and leverage lessons learned to coordinate a future aggregated PPA with suppliers and customers



Average Hypertherm Rate (\$/KWh)	\$ 0.068371
Strike Price (\$/KWh)	\$ 0.074000
Total PPA Settlement	\$ (204,299.17)
REC Expenditures	\$ (31,828.26)
Total PPA Settlement (incl. avoided REC expenditures)	\$ (172,470.91)
Annual PPA Settlement	\$ (30,266.54)
Annual REC Expenditures	\$ (4,715.30)
Annual PPA Settlement (incl. avoided REC expenditures)	\$ (25,551.25)

### Move all international consumption onto RECs/GOs/I-RECs



## References

Corporate Social Responsibility Report, Hypertherm, 2018  
Guide to Purchasing Green Power: Renewable Electricity, Renewable Energy Certificates, and On-Site Renewable Generation, US EPA, September 2018



Sustainability Institute

**Hypertherm**