

# Boston Advanced Energy Series

*IoT, Technology & Innovation*

---

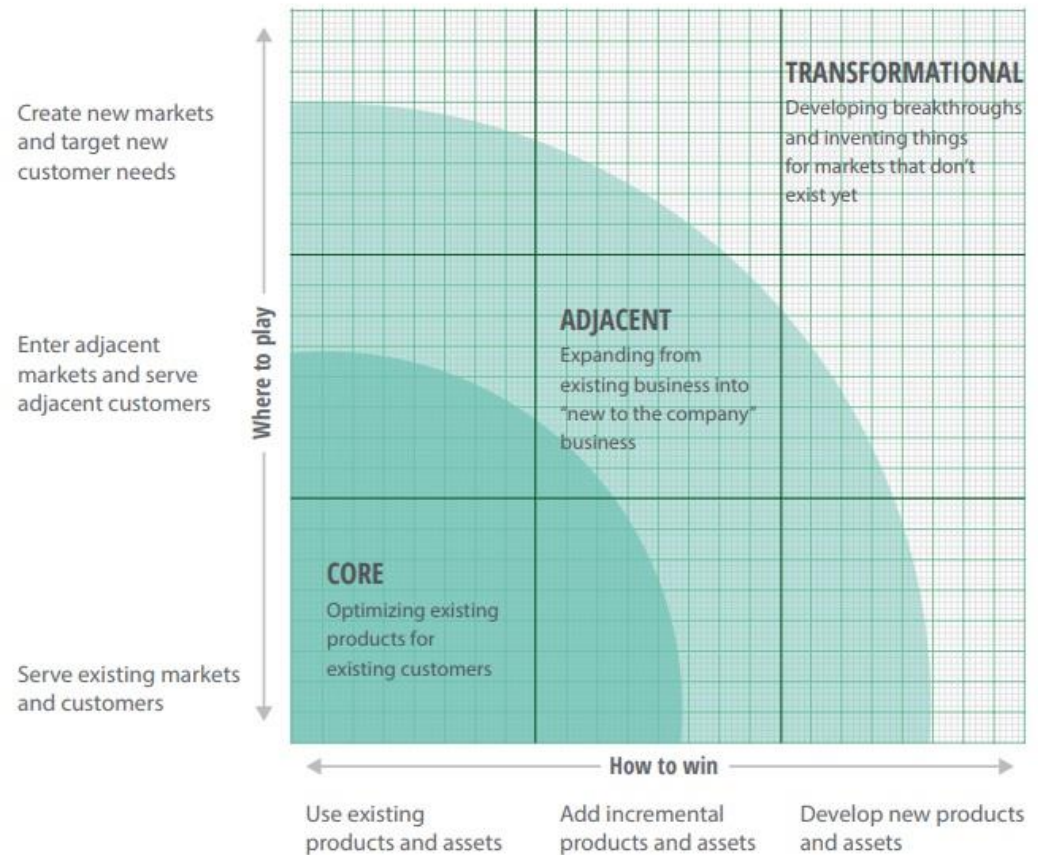
September 13, 2018



# High Performance Buildings in Boston/MA: Where Are We? Where Do We Need to Go?



# MassCEC's Innovation Portfolio



# Smart Building Interoperability Challenges

Schneider Electric EcoBuilding Open Protocol Matrix

		Wired Protocols										Wireless Protocols			
		BACnet /IP	MS/TP	LonWorks /IP	FTT-10	KNX	DALI	C-Bus	Modbus RTU	TCP	M-Bus	OPC	Web Services	EnOcean	ZigBee
Building Management Systems		Availability													
SmartStruxure™ solution	Global	x	x	x	x				x	x		x			
SmartStruxure™ Lite solution	Global	x							x			x	x	x	
Building Insights	North America	x							x			x		x	
Building Insights Pro	North America	x							x			x	x	x	
Light and Room Control Systems		Availability													
C-Bus Systems Offer (with controllers)	APAC						x	x			x	x		x	
DALIcontrol Systems Offer	APAC						x				x	x			
KNX Systems Offer (homeLynk and spaceLynk)	EMEA, APAC					x									
SE7000 Series Room Controllers	Global		x		x									x	
SE8000 Series Room Controllers	Global		x						x					x	
Emergency Lighting Solutions		Availability													
Emergency Lighting	EMEA				x		x		Slave						
Residential Systems		Availability													
KNX Systems Offer (homeLynk)	EMEA, APAC					x									
C-Bus Wiser™	APAC							x						x	
Wiser™ Air	North America											x		x	
Wiser™ Smart	Europe											x		x	
Home Insight™ Cloud	EMEA, APAC	x				x	x		x	x		x			
Ulti ZigBee	APAC											x		x	
Power Meters		Availability													
EM3500 Series Energy Meter	Global		x		x				x						
EM4200 Series Enercept Power & Energy Meter	Global		x						x						
BCPM	North America								x	x					
CM4000T	North America								x	x					
EM4000 Series	North America								x	x					
EM4300 Wireless Meters	Global													x	
EnerlinX Com'X (Com'X 200/210, Com'X 510)	Global								x			x		x	
iEM3000 Series	EMEA		x		x				x	x	x				
E5600	North America								x						
ION6200	Global								x	x					
ION7300 Series	Global								x	x					
ION7550/7650 Series	Global								x	x					
ION7550 RTU	Global								x	x		x			
ION8650 Series	Americas								x	x					
ION8800 Series	Global								x	x					
PM3000 Series	Global								x	x					
PM5000 Series	Global								x	x					
PM700 Series	Global								x	x					
PM800 Series	Global								x	x					
PM8000 Series	Global								x	x					
Field Devices		Availability													
CWLP CO2 Sensor (Veris Industries)	Global		x						x						
HWLP Humidity Sensor (Veris Industries)	Global		x						x						
Services		Availability													
Building Analytics	Global	x	x	x	x				x	x		x	x		

# Challenge Statement

*Grid interactive technology interoperability challenges threaten Boston and the region's ability to meet ambitious 2050 carbon reduction, resilience, and renewables integration goals.*

*What are the best solutions to this barrier, and who is best positioned to lead an effort to solve this market challenge?*

Thanks!

*gnelson@masscec.com*

*@galennelson*