

Introducing NEEP's new Cold Climate ASHP Product List Website

- Dave Lis, Director, Technology and Market Solutions
- Claire Miziolek, Sr. Manager, Technology and Market Solutions



•

Webinar Logistics



- Attendees will be muted for the entirety of the webinar
- There will be an opportunities to comment/ask questions. We will ask you to enter questions via chat box on the GoToWebinar sidebar
- Webinar is being recorded and will be made publically available



Slides will be circulated following call

Purpose of today's webinar



Provide ASHP stakeholders:

- An introduction to the new web-based ccASHP Product List format and functionality
- A clearer understanding of how to subscribe/engage the Initaitive

Northeast Energy Efficiency Partnerships

"Assist the Northeast and Mid-Atlantic region to reduce building sector energy consumption 3% per year and carbon emissions 40% by 2030 (relative to 2001)"

Mission

We seek to accelerate regional collaboration to promote advanced energy efficiency and related solutions in homes, buildings, industry, and communities.

Approach

Drive market transformation regionally by fostering collaboration and innovation, developing tools, and disseminating knowledge

About NEEP

A Regional Energy Efficiency Organization





4

Launch Polls



- Stakeholder type?
- Current level of engagement with NEEP's ASHP Initiative?

Agenda



• Welcome

- Background of Specification/Product List
- Demo of new Website's format/functionality
- How to become a subscriber
- Q&A
- Wrap-up

Initiative history





Regional ASHP Market Transformation Strategy





Market Transformation Strategies



- **1.** Increase consumer education and awareness
- 2. Increase installer/builder awareness of, and confidence in, ASHP through expanded training and education
- **3.** Reduce upfront costs of installed systems through robust and aligned promotional programs and the support of alternative business models
- 4. Mobilize state and local policymakers to expand support for ASHPs
- 5. Promote advanced control technologies to allow automated coordination among multiple heating systems
- 6. Enable the promotion of climate-appropriate ASHPs through improved performance metrics
- 7. Develop more accurate tools to predict energy, cost and GHG savings associated with ASHP installation through collection and analysis of real world performance data

Market Transformation Strategies



- **1.** Increase consumer education and awareness
- 2. Increase installer/builder awareness of, and confidence in, ASHP through expanded training and education
- **3.** Reduce upfront costs of installed systems through robust and aligned promotional programs and the support of alternative <u>business models</u>
- 4. Mobilize state and local policymakers to expand support for ASHPs
- 5. Promote advanced control technologies to allow automated coordination among multiple heating systems
- 6. Enable the promotion of climate-appropriate ASHPs through improved performance metrics
- 7. Develop more accurate tools to predict energy, cost and GHG savings associated with ASHP installation through collection and analysis of real world performance data

Drivers for ccASHP Specification/Product list



- Antiquated test procedure/performance metrics for ASHPs
- Creates difficulty in differentiating high performing systems, particularly for cold climate applications
- For more background on development of Specification, visit NEEP's website https://neep.org/ASHP-Specification

NEEP Cold-Climate Specification/ Product List



	А	В	С	D	E	F	G	Н	I	J	К	L	М	N	0
1	DISCLAIMER- Some of	the performance	e values reporte	d as part of the C	old-Climate ASHP Speci	fication are NO	OT derived fro	m industry st	andard test pi	ocedures or f	hird-party tested/v	erifie	d (i.e. perform	ance values a	a <mark>t 5°F).</mark>
2	Products added to list si	ince previous up	date highlighted	in pink											
3			···		• · · · ·										
4					General Inform	ation							Cap	acity (btu/h	nr)
	Updated: March 9, 2017	7													·
	Manufacturer	Brand	AHRI	Outdoor Unit	Indoor Unit Model(s)	HSPF	SEER	EER (@	ENERGY	Ductless	If Ductless,		Minimum	Rated	Maxim
		(if applicable)	Certificate	Model		(Region IV):		95°F)	STAR	or Ducted	Multi-zone or		Capacity	Capacity	Сара
6	·	· · · · · · · · · · · · · · · · · · ·	No. 🚽	-	·	· · · · · · · · · · · · · · · · · · ·	-	· · · · · · · · · · · · · · · · · · ·	Certifie	-	Single-zone	-	47°F 🔻	47°F 🔻	47°
7	Daikin		3208521	RXG09HVJU	FTXG09HVJU	11	26.1	15.8	Yes	Ductless	Single-zone		4,668	12,000	18,670
8	Daikin		3208522	RXG12HVJU	FTXG12HVJU	10.55	24.2	14	Yes	Ductless	Single-zone		4,668	16,000	19,130
9	Daikin		3208523	RXG15HVJU	FTXG15HVJU	10	21	12.9	Yes	Ductless	Single-zone		4,668	18,000	21,280
10	Mitsubishi		4217888	MUZ-FE18NA	MSZ-FE18NA	10.3	20.2	14.2	Yes	Ductless	Single-zone		7,500	21,600	29,700
11	Mitsubishi		4908219	MUZ-FE09NA	MSZ-FE09NA	10	26	15.5	Yes	Ductless	Single-zone		3,000	10,900	18,000
12	Mitsubishi		4934170	MUZ-FE12NA	MSZ-FE12NA	10.5	23	12.9	Yes	Ductless	Single-zone		3,000	13,600	21,000
13	Fujitsu		5063325	AOU9RLS2	ASU9RLS2	12.5	27.2	16.1	Yes	Ductless	Single-zone		3,100	12,000	22,000
14	Fujitsu		5063326	AOU12RLS2	ASU12RLS2	12	25	13.8	Yes	Ductless	Single-zone		3,100	16,000	22,110
15	Daikin		5265753	RXS09LVJU	FTXS09LVJU	12.5	24.5	15.3	Yes	Ductless	Single-zone		4,400	12,000	15,600
16	Daikin		5265755	RXS12LVJU	FTXS12LVJU	12.5	23	12.8	Yes	Ductless	Single-zone		4,800	14,400	18,000
17	Daikin		5265756	RXS15LVJU	FTXS15LVJU	11.6	20.6	14.4	Yes	Ductless	Single-zone		5,800	18,000	22,300
18	Daikin		5265757	RXS18LVJU	FTXS18LVJU	11	20.3	12.7	Yes	Ductless	Single-zone		5,800	21,600	26,700
19	Daikin		5265758	RXS24LVJU	FTXS24LVJU	10.6	20	12.5	Yes	Ductless	Single-zone		7,800	25,400	31,400
20	Nortek Global	Maytag	5597453	PSH4BG024K	B6VMAX024K-B	10	19	13.9	Yes	Ducted	N/A		10,200	22,400	24,700
21	Nortek Global	Maytag	5597457	PSH4BG036K	B6VMAX036K-B	10	19	12.9	Yes	Ducted	N/A		16,500	34,400	36,800
22	Fujitsu		5751311	AOU9RLFC	AUU9RLF	13	24	14.5	Yes	Ductless	Single-zone		3,100	12,000	18,000
23	Fujitsu		5751312	AOU9RLFC	ARU9RLF	12.2	21.5	14.5	Yes		Single-zone		3,100	12,000	18,000
24	Fujitsu		5751313	AOU12RLFC	AUU12RLF	12.2	21.9	12.8	Yes	Ductless	Single-zone		3,100	16,000	19,400
25	Fujitsu		5751314	AOU12RLFC	ARU12RLF	11.5	20	12.8	Yes	Ductless	Single-zone		3,100	16,000	19,400
26			5859619	LUU187HV	LCN187HV	10.1	20	15	Yes		Single-zone		9,300	20,000	22,000
27	LG		6236101	LSU240HSV3	LSN240HSV3	10.2	20	12.5	Yes	Ductless	Single-zone		3,070	27,600	38,900
28	American Standard		6749789	4A6V0024A1	*AM8C0B30V21	10	19.25	13.75	Yes		N/A		7,800	20,200	21,900
29	American Standard		6749791	4A6V0048A1	*AM8C0C48V41	10	19.25	12.5	Yes		N/A		11,800	42,500	42,600
30	Trane		6749942	4TWV0024A1	*AM8C0B30V21	10	19.25	13.75	Yes		N/A		7,800	20,200	21,900
	Trane		6749944	4TWV0048A1	*AM8C0C48V41	10	19.25	12.5	Yes		N/A		11,800	42,500	42,600
	American Standard		6750232	4A6V8036A1	*AM8C0C36V31	10	18	13	Yes		N/A		8,200	32,200	32,200
33	American Standard		6750233	4A6V8048A1	*AM8C0C48V41	10	18	12.5	Yes	Ducted	N/A		11,800	41,000	43,000
-	Current Pro	duct List (3.9.1	7) Delisted	(on 1.1.17)	(+)										

How is the Specification/Product List being used? Program Summary





Program summary:

<u>https://neep.org/sites/default/files/r</u> <u>esources/2019ASHPProgramSummar</u> /UpdatedFeb2019.pdf

List both used by:

- Programs for qualification
- Engineers, contractors, and other practitioners to assist in sizing/selection of products

Drivers for Change....

		date highlighted												
General Information										H	Capacity (bluftr)			
Updaled March 9, 20														_
Manufecturer	Brand (If applicable)	AHRI Certificate No.	Outsioor Unit Model	Indoor Unit Model(s)	(Region IV)	SEER	SET	ENERGY STAR Certifiel	Ductiess or Ducted	# Ductiess, Multi-zone or Single-zone' *		Minimum Capacity 47*f -	Rated Capacity 47*F *	Maxie Cape 47
Dakin		3206521	RXG09HVJU	FTX009HMAU	\$1	26.1	15.8.	Yes	Ductors	Sindle-zone		4.008	12,000	18.670
Dakin		3208522	RXG12HVJU	FTXG12HVJU	10.55	24.2	14	Yes	Ductess	Sindle zone	1 1	4,668	16.000	19.130
Dakin	1	3200523	RXG15HVJU	FTXG15IWJU	10	21	12.9	Yes	Ouctess	Single-zone	1 1	4,068	18,000	21,260
Mesideshi		4217888	MUZ-FE18NA	MSZ-FE1/MA	t0 3	20.2	14.2	Yos		Single Jone		7,500	21,000	29.700
Mesubishi		4906219	MUZ-FE09NA	MGZ-FEC9NA	10	26	15.5	Yes	Ductess	Single-zone	1 1	3,000	10,900	18,000
Mesubashi		4934170		MISZ-FE 12NA	10.5	23	12.9	Yes		Single-zone		3,000	13,600	10
Fuptia		5063325	ADUER1.52	ASUSIALS2		27.2	16.1	Yes		Single zone		3,100	12,007	
Fujtsu		5053326	A0U12RL52	ASU12RLS2	12	25	13.8	Yes	Ductess	Single-zone		3,100	16,0	
Dakin	1	5285753	RXS09LVJU	FTXS09.VJU	12.5	24.5	55.3	Yes	Ductors	Single Jone		4,400	12	
Dakin		5265,755	RXS12LVJU	FTXS12LVJU	12.5	23	12.8	Yes	Oucloss	Single-zone		4,800	∇	
Dakin		5266756	RXS15LVJU	PT0315LVJU	11.6	20.6	14.4	Yes		Single-zone		5,800		
Dake		5255757	RXS18LVJU	FTX818LVJU	11	20.3	12.7	Yes		Single zone		5,800		
Dakin		5285758	RXS24LVJU	FTXS24_VJU	10.6	20	12.5	Yes	Ouctess	Single-zone		7,900		
Nortek Gobal	Maytag	5597453	PSHABGOAK	ENVMAX024K B	10	19	13.9	Yos		NA		10,200		
Nortek Global	Maylog	5597457	PSH48G096K	BIANWAY000K-B	10	19	12.9	Yes		NA		16,500	31.	
Fujtsu	10000	5751311	ADUSRLFC	AUUSRU	13	24	54.5	Yes	Ouctess	Single-zone		3,100	12,000	
Fujba		5751312	ADUMENTC	ARISRLF	12.2	21.5	14.5	Yes		Single-zone		3,100	12,000	Dan
Fujtau	1.1.1.1	5751313	A0012RLFC	AUU12RLF		21.9	12.8	Yes		Single zone		3,100		19,400
Fujtui		5751314	AOU12R, FG	ARU12RUF	11.5	20	12.8	Yes		Single-zone		3,100		19,400
16		5859819	LUUIB/HV	LCN187HV	10.1	20	15	Yes		Single-zone		9,300		27,000
10		6236101	LSU24085V3	LSN240HSV3	10.2	20	12.5	Yes		Single-zone		3,070		38,900
American Standard	-	6749789	4AEV0024A1	*AMBC0B30V21	10	19.25	13.75	Yes		NA		7,800		21,900
American Standard	1.1	6749791	4A6V0048A1	*AM8C0C48V41	10	19.25	12.5	Yes		NA		11,800		42,60
Trane		6749942	4TWV0024A1	*AM9C0830V21	10	19.25	13.75	Yes		N/A.		7,900		21,900
Trana		6749944	4TWV0048A1	*AUSICOC48V41	10	19.25	12.5	Yos		NA		11,800	42,500	42,600
American Standard	1 3	6750232	446V0006A1	*AMBCOC36V31	10	10	13	Yes		NA		8,200		32,200
American Standard		6750233	4A0V0048A1	*AM9C0C48VE1	10	16	12.5	Yes	Ducted	N/A.	1 (11,500	41,000	43.00

- **User-friendly** igodol
- Sort/Search functions ightarrow
- Streamline application ightarrowprocess
- Security/content \bullet control





na			
Cert	#: 10324704 A	HRI Type:	HRCU-A-CB-0
,400	Btu		

Efficiency Specs	
EER	13.00
Energy Star	true
Duct Type	Centrally Ducted

N	Model Numbers								
	Indoor/Outdoor	Model #							
	Outdoor	AVZC200241A*							
	Indoor	CA*F3642*6D*+MBVC1200**-1A*+TX							
F	Pan Heater								
	Туре	None							

Per	forr	nano	ce	Specs	

outdoor Dry Sulb	Indoor Dry Bulb	Unit	Min	Rated	Max
7°F	70°F	Btu/h	5,507	23,600	23,600
		kW	0.33	1.87	1.87
		COP	4.92	3.70	3.70
7°F	70°F	Btu/h	3,943	13,915	15,200
		kW	0.34	1.49	1.82
		COP	3.42	2.74	2.45
°F	70°F	Btu/h	1,650	-	11,400
		kW	0.30	-	1.60
		COP	1.63	-	2.09

Thanks for you patience



- Special thank you to Manufacturers for your engagement and patience during transition period.
- Still going to be a work in progress



...Demo time!



- 1. Landing Page... neep.org/ashp
- 2. Product Search features
 - 1. Products page; Intro to search filters
 - 2. Detailed view (pdf capability)

3. Complete List Download (restricted to subscribers) ccASHP@neep.org

Subscription Benefits



- "Unfettered" Access to ccASHP Product List
- Participation in NEEP's ASHP/VRF Working Groups
- Participation in a number of sub-committees
- Opportunity to contribute to the development of NEEP resources/tools
- Technical assistance
- Visibility

Initiative Subscription Costs



TABLE B: 2019 NEEP ASHP & Smart Controls Annual Subscription Fees (Required by 4/1/2019)

1.	State Partnership Subscription (same as 2019 State Partnership pricing)	Population < 3 million \$25,000	Population 3-10 Million \$35,000	Population > 10 million \$50,000
2.	Utility/Government Program Subscription (i.e., utilities/programs not part of a state	Program Budget <\$10M	Program Budget \$10M-\$100M	Program Budget >\$100M
	partnership)	\$5,000	\$10,000	\$20,000
3.	(i.e., manufacturers, service providers,	Non-profit, Small Business (<20 employees)	Standard Industry	
	consultants, non-profit organizations, trade associations)	\$2,500	\$5,000	
4.	Individual ASHP installer/Municipal Employee/ Community-Based Organization Subscription/Grant Providers ^{Note 1}		No Cost	

Next steps to become a subscriber



• Go to NEEP's website

- https://neep.org/initiatives/highefficiency-products/emergingtechnologies/ashp/subscription
- Complete Subscription Form linked at top or bottom of Subscription page
- Subscribers receive 25% discount toward NEEP's Allies Program









Please type your questions into the sidebar

Installer/Consumer Resources





Go to; www.neep.org/ASHPInstallerResources Need your help in driving use!

In-person ASHP Workshop- Save the dates!

ne ep

- June 18-19
- Woburn, MA
- Day 1: ASHP
- Day 2: ASHP/VRF
- Topics of discussion include:
 - Policy and Decarbonization
 - ASHPs and Controls
 - Mass Adoption: Getting this right, right now!
 - Transforming the VRF
 Market



Sponsorship options available!

2019 NEEP Summit: Pathways to Decarbonization in the Northeast





https://neep.org/events/2019-neep-summit-electrification-northeastsymposium For sponsorship opportunities, please contact Lucie Carriou

THANK YOU FOR JOINING TODAY'S MEETING!



- Slides/Recording will be circulated tomorrow
- Go to NEEP website to Subscribe!
 - https://neep.org/initiatives/high-efficiency-products/emergingtechnologies/ashp/subscription
- Register for our annual 2019 ASHP Market Transformation Workshop
 - https://neep.org/events/2019-ASHP-workshop
- Please follow up with Dave Lis and/or Claire Miziolek with any further questions or comments.
 - djlis@neep.org , 781-860-9177 x127
 - cmiziolek@neep.org, 781-860-9177 x115
 - ccASHP@neep.org

Hands in!







THANK YOU!

David Lis djlis@neep.org

April 17, 2019

81 Hartwell Avenue Lexington, MA 02421 P: 781.860.9177 www.neep.org