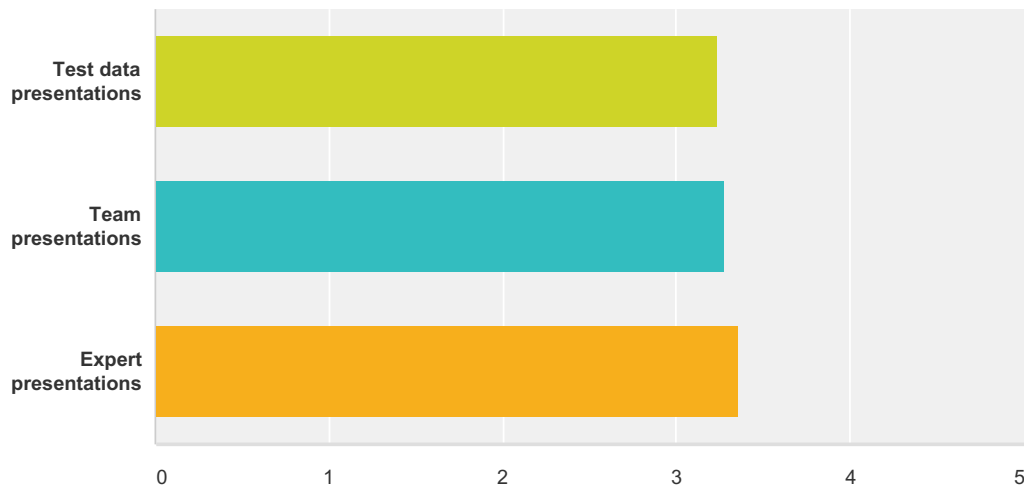


Q1 How helpful were the following Workshop sessions to you?

Answered: 25 Skipped: 0



	1 (least helpful)	2	3	4 (most helpful)	Total	Average Rating
Test data presentations	0.00% 0	20.00% 5	36.00% 9	44.00% 11	25	3.24
Team presentations	0.00% 0	16.00% 4	40.00% 10	44.00% 11	25	3.28
Expert presentations	4.00% 1	12.00% 3	28.00% 7	56.00% 14	25	3.36

#	Comments?	Date
1	Did not get to attend most of these presentations...	11/18/2014 3:10 PM
2	This was a fantastic event! Being able to discuss, question and review many of the designs and leaders in this field was a invaluable experience. It was great being able to talk with the Testo and Wohler people and seeing their instruments in use. Talking with Tom Butcher and Ellen Burkhard was also very enlightening and worth every bit and then some of the time stuck in NYC traffic... I very much look forward to next years event.	11/18/2014 2:46 PM
3	I'd suggest a bit more refinement and interpretation with the test data, but I do recognize how tight a schedule it was.	11/18/2014 2:34 PM
4	I don't know if I went to team presentations? I was talking with the teams when they were running their stoves. I liked being able to talk to individuals informally so that i could better understand their inovations and concepts with the equipment.	11/17/2014 2:52 PM
5	Some of the teams had difficulty interpreting their test data, and presenting it in a way that could be understood. If, in the future, teams were going to present data, which I thought was a great idea and very helpful, perhaps each team would be provided with someone who could sit down and explain some of the data to them, and provide graphs/templates to them.	11/17/2014 12:28 PM
6	It wasn't easy to see all the presentations. So it's great you provide them as downloads.	11/17/2014 2:22 AM
7	It would have been good to have soemone give a workshop to explain the data the first day to help folks understand the testing.	11/14/2014 7:28 PM
8	was only able to make a few of the presentations due to testing duties	11/14/2014 4:03 PM
9	Too busy to attend many	11/14/2014 2:15 PM

10	I missed a lot of the presentations (especially Expert and Test data presentations) because of the overlapping sessions/measurements.	11/14/2014 1:42 AM
11	Remember that as owners I am not skilled with stoves so test presentation did not mean such a lot for me	11/13/2014 8:35 PM
12	The format allowed for great discussion points. Plenty of smart folks in the audience evaluating the data.	11/13/2014 1:14 PM

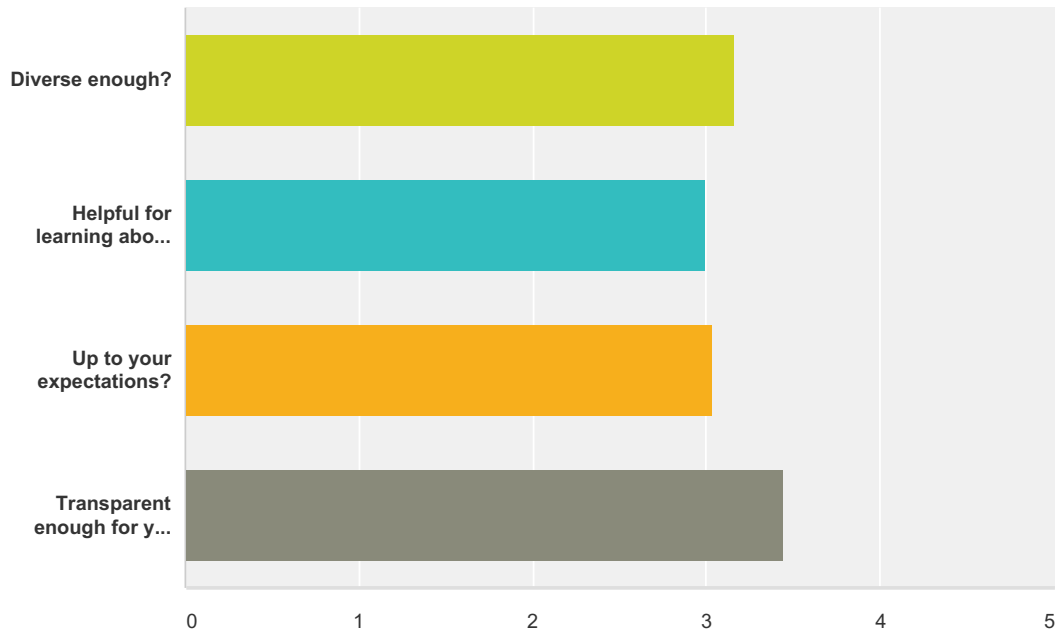
Q2 What was the most beneficial part of the Workshop for you?

Answered: 25 Skipped: 0

#	Responses	Date
1	Meeting everybody and hearing their issues and concerns	11/19/2014 8:28 AM
2	Interaction with a wide spectrum of wood burning community from regulators, to experimenters, to researchers, manufacturers, and environmentalists. Open-ended discussions were quite enlightening.	11/18/2014 3:13 PM
3	Getting contacts and expand knowledge base	11/18/2014 3:11 PM
4	Everything...but the one on one conversations with Testo, Tom Butcher and Ellen were most useful.	11/18/2014 2:47 PM
5	The discussion time following presentations and informal discussions between presentations were absolutely invaluable.	11/18/2014 2:34 PM
6	Seeing test data across all stoves.	11/17/2014 4:31 PM
7	All of the formal presentations combined with seeing the individual systems running during their different phases and having plenty of time to speak with individuals to understand their system, and the unique needs of the populace in their geographic area due to available types of biomass, climate, other heating possibilities used in conjunction with the wood stoves. I also learned a great deal about pellets- pro and con.	11/17/2014 2:56 PM
8	working closely with the other team members, and learning about their products	11/17/2014 12:56 PM
9	The discussion times with everyone in the room following presentations.	11/17/2014 12:28 PM
10	Discussions between different kind of people and different disciplines.	11/17/2014 2:23 AM
11	Tuesday presentations	11/14/2014 7:28 PM
12	Being able to speak directly with individuals from the EPA and other agencies.	11/14/2014 5:01 PM
13	exchanging information with other experts	11/14/2014 4:04 PM
14	Smaller discussions	11/14/2014 2:15 PM
15	discussions of testing protocols, current and future policies and performance guidelines	11/14/2014 12:28 PM
16	Get in contact with all the different kind of people and discussing the issues around the Workshop.	11/14/2014 8:14 AM
17	Communications and collaboration with participants and teams.	11/14/2014 1:45 AM
18	Informal discussions	11/13/2014 8:38 PM
19	Meeting up with the Witrus team. Also finding out that our stoves with the VcVs performed well away from the lab	11/13/2014 8:36 PM
20	Free testing and collaborative atmosphere	11/13/2014 3:16 PM
21	Being able to visually see the technology and discuss it with the designer/s before, during and after test results were available.	11/13/2014 1:31 PM
22	The stoves	11/13/2014 1:15 PM
23	Social and interactive time with all parties involved. The Q & A sessions allowed for free flow discussions.	11/13/2014 1:15 PM
24	side conversations for future collaborations	11/13/2014 12:53 PM
25	The presentations because it brought everyone together to discuss.	11/13/2014 12:53 PM

Q3 Were stoves at the Workshop...

Answered: 25 Skipped: 0

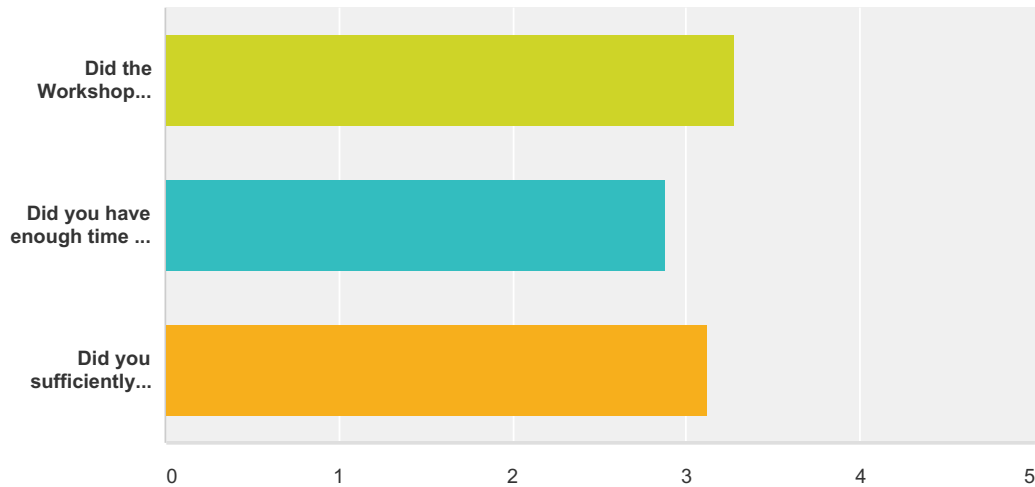


	1 (strongly disagree)	2	3	4 (strongly agree)	Total	Average Rating
Diverse enough?	0.00% 0	20.00% 5	44.00% 11	36.00% 9	25	3.16
Helpful for learning about automation?	4.00% 1	20.00% 5	48.00% 12	28.00% 7	25	3.00
Up to your expectations?	4.00% 1	16.00% 4	52.00% 13	28.00% 7	25	3.04
Transparent enough for you to understand how they worked?	0.00% 0	8.00% 2	40.00% 10	52.00% 13	25	3.44

#	Comments?	Date
1	Being a technical person, I nearly always would additional technical information.	11/18/2014 2:35 PM
2	I thought the level of technology to be weak. The mixing of add-ons and stoves makes a rather complex mixture to assess.	11/13/2014 8:39 PM
3	again, hard to answer fairly with my limited knowledge.	11/13/2014 8:37 PM
4	Being able to discuss technology options with the designers was especially helpful.	11/13/2014 1:33 PM
5	They were very early in development, which is probably good since the teams had a lot to learn yet about the hurdles to bring products to market.	11/13/2014 1:17 PM
6	not many of the stoves were truly automatic- felt last year stoves were much more innovative	11/13/2014 12:53 PM

Q4 Regarding the testing of stoves...

Answered: 25 Skipped: 0

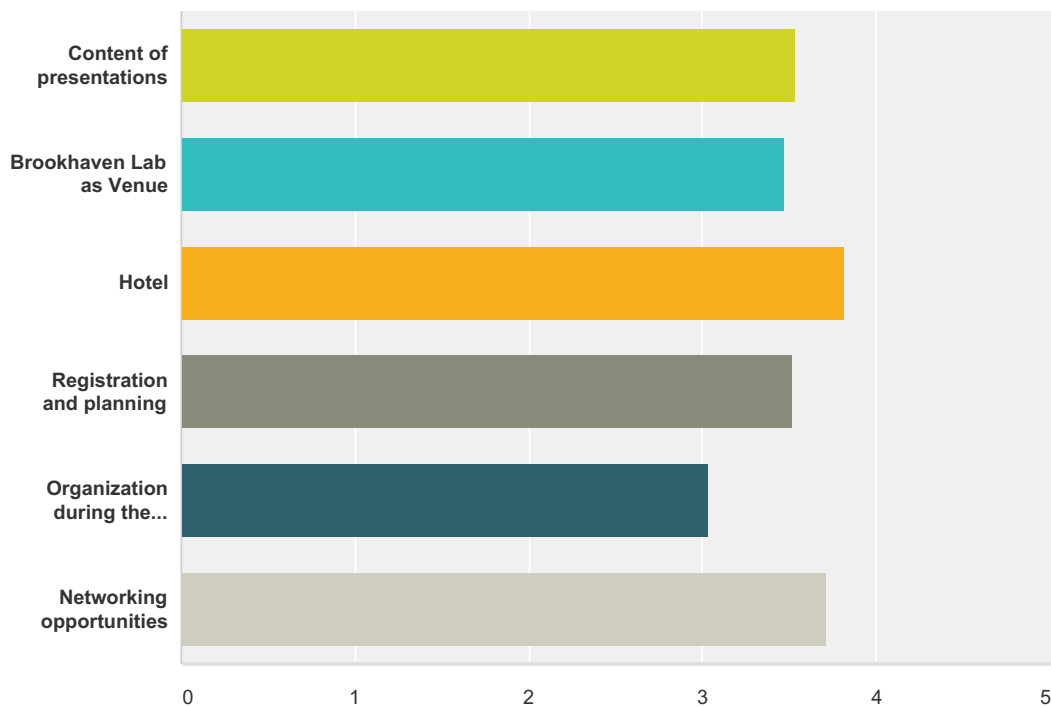


	1 (strongly disagree)	2	3	4 (strongly agree)	Total	Average Rating
Did the Workshop increase your understanding of test equipment?	4.00% 1	20.00% 5	20.00% 5	56.00% 14	25	3.28
Did you have enough time in the lab?	8.00% 2	28.00% 7	32.00% 8	32.00% 8	25	2.88
Did you sufficiently understand how the testing was being done?	4.00% 1	24.00% 6	28.00% 7	44.00% 11	25	3.12

#	Comments?	Date
1	My limited participation may have cut into what I was able to glean from the testing, so it's probably not a planning issue.	11/18/2014 2:37 PM
2	There was enough time in the lab, however it felt that the lab time was unorganized. Not everyone was prepared when they needed to be or even in the lab when they needed to be. Testing was set to start at X time, but then actually started much later.	11/17/2014 12:30 PM
3	We only had one official burn for five days.	11/14/2014 7:29 PM
4	The testing schedule was disorganized at times- this led to many wasted hours in the morning waiting for the necessary people to show up to the labs to be able to begin testing. Some stoves also had more opportunities to test than others.	11/14/2014 5:03 PM
5	Testo and Wöhler was already well known. EPA methods and the possible revision of EPA methods should be discussed further.	11/14/2014 1:51 AM
6	As I don't perform testing or involved in stove design I was probably the least informed in testing protocol.	11/13/2014 1:37 PM

Q5 On a scale of 1-4, please indicate your overall satisfaction with

Answered: 25 Skipped: 0



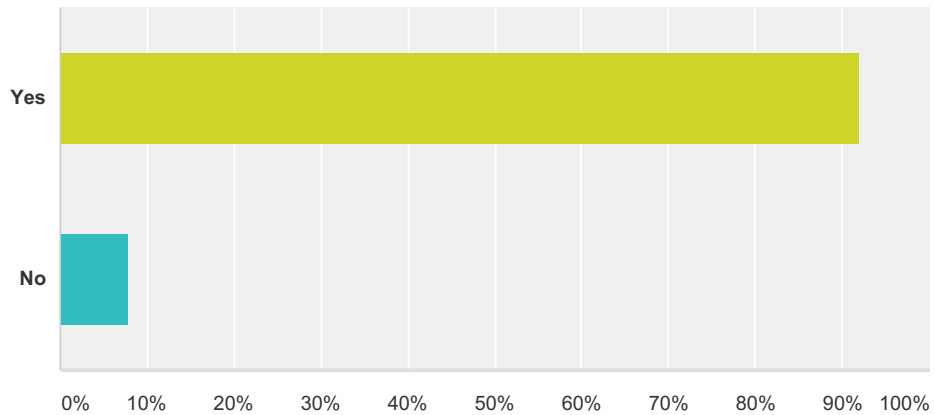
	1 (very dissatisfied)	2	3	4 (very satisfied)	Total	Average Rating
Content of presentations	0.00% 0	0.00% 0	45.83% 11	54.17% 13	24	3.54
Brookhaven Lab as Venue	0.00% 0	8.00% 2	36.00% 9	56.00% 14	25	3.48
Hotel	0.00% 0	0.00% 0	18.18% 4	81.82% 18	22	3.82
Registration and planning	0.00% 0	8.00% 2	32.00% 8	60.00% 15	25	3.52
Organization during the Workshop	0.00% 0	36.00% 9	24.00% 6	40.00% 10	25	3.04
Networking opportunities	0.00% 0	4.00% 1	20.00% 5	76.00% 19	25	3.72

#	Comments?	Date
1	Dryness of wood appeared to be an issue better resolved in the future. From superficial appearance, the flues did not appear to be equal. Some insulated, some not. That may have provided uneven playing field.	11/18/2014 3:16 PM
2	1.I did not stay at a hotel- so I do not know about the situation. 2.It would have been nice to have more time to talk to people during the workshop to make sure that i was understanding what they had presented, or how the woodstove or catalyst worked in their particular system.	11/17/2014 3:00 PM
3	The lab was a decent venue, but it would have been nicer to have it all in one place. The workshop itself was organized, but the lab was not clear about set-up times, times the building opened, etc. The wood was not prepared ahead of time and that took quite a while to prep everyday before testing began.	11/17/2014 12:33 PM

4	sometimes organisation during the day was a bit difficult. So if I have to take one point away it's this one. But in general you did very well.	11/17/2014 2:27 AM
5	We gave stove dimensions before the event. Tests would have gone quicker if the fuel was prepared at least 12 hours prior to testing.	11/14/2014 7:31 PM
6	The fueling was the bottleneck, and seemed very ad hoc.	11/14/2014 4:09 PM
7	Being testing until other teams present their datas, was not good. We wanted to discuss together our and their problems, to learn from each other.	11/14/2014 8:19 AM
8	Because of overlapping sessions and tests, I have missed some presentations.	11/14/2014 1:55 AM
9	There was a lack of industry engagement I felt. This is not necessarily the Alliance's fault. Just an observation	11/13/2014 3:17 PM
10	The security made it a little inconvenient but overall worked out well. Having to use different buildings took up a little time.	11/13/2014 1:40 PM
11	Although a map was provided, the BNL campus is not as easy to navigate. A location with a little less isolation would have been better for lunch breaks and social interaction.	11/13/2014 1:19 PM

Q6 Was the Workshop well-structured?

Answered: 25 Skipped: 0

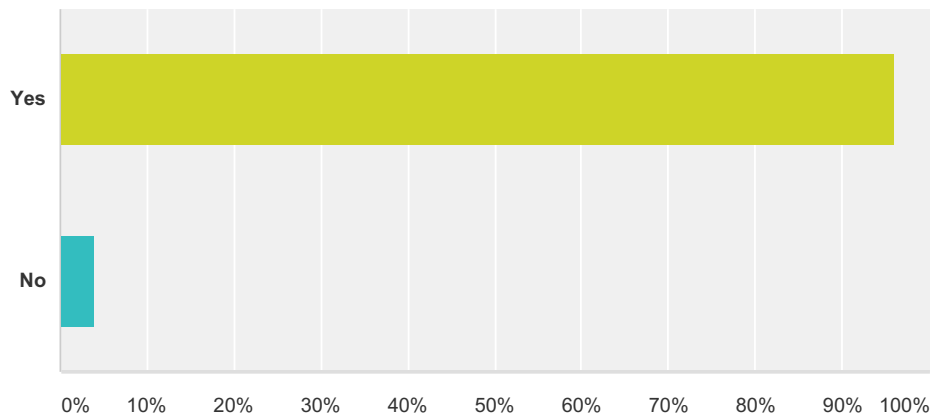


Answer Choices	Responses
Yes	92.00% 23
No	8.00% 2
Total	25

#	Comments?	Date
1	Not so filled with presentations that we didn't have time to follow the testing and talk informally.	11/18/2014 3:17 PM
2	Yes, however I would have preferred more time to observe testing and not miss any of the speakers. Perhaps, in the future, there should be specific time set aside for everyone to go around and witness testing.	11/17/2014 12:35 PM
3	The schedule was well-structured but it was not followed very closely at all times, making it difficult to properly prepare for testing and presentations	11/14/2014 5:04 PM
4	It was more of a learning opportunity to apply to future workshops.	11/14/2014 4:10 PM
5	Timing was not held. The timing structure was changed day by day.	11/14/2014 8:19 AM
6	There was too little time to actually see the stoves in action given all of the presentations.	11/13/2014 8:40 PM
7	The combination of having the stoves available along with the designers plus testing and results presented was a great combination. Also having subject experts available for various presentations was excellent!	11/13/2014 1:42 PM

Q7 Did you feel the event was sufficiently collaborative?

Answered: 25 Skipped: 0

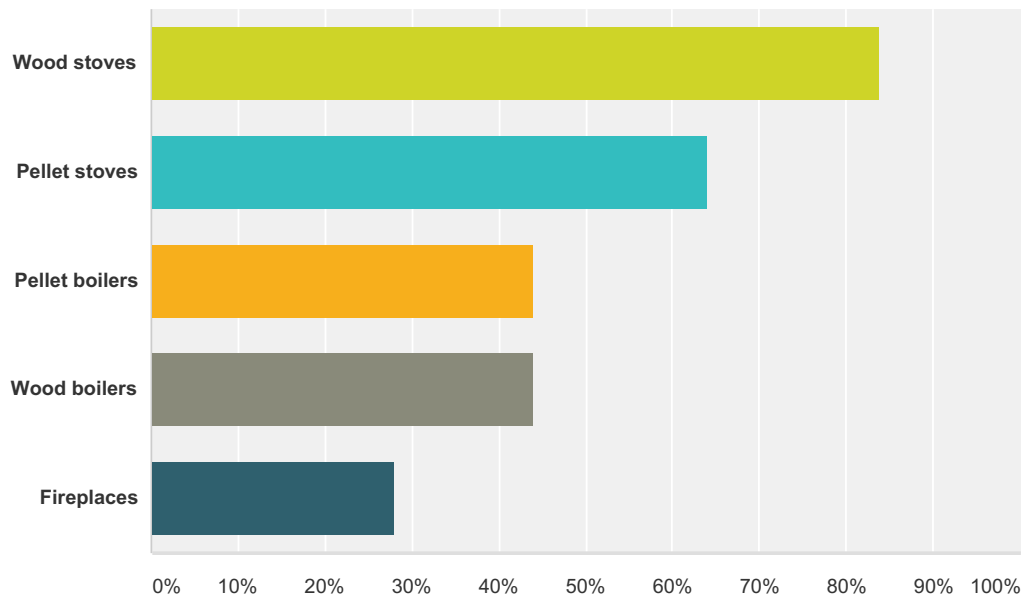


Answer Choices	Responses
Yes	96.00% 24
No	4.00% 1
Total	25

#	How could it be more collaborative?	Date
1	Perhaps lunches served informally in the same room or similar natural conversation setting.	11/18/2014 3:18 PM
2	Perhaps someone covered this and I missed the talk, but there could have been one or more overview talks that attempt to summarize the current state of the technology and the field.	11/18/2014 2:39 PM
3	By having more time together with the other teams.	11/17/2014 1:01 PM
4	More open forums with future topics such as the use of handheld testing in future methods.	11/14/2014 7:32 PM
5	The dinner the first night was very collaborative- it would have been beneficial to have more open time in the schedule during the day to talk with other teams/judges/organizers	11/14/2014 5:05 PM
6	Continue to invite participants from stove industry, designers, state and federal agencies (EPA and local agencies responsible for air plans) and other subject experts.	11/13/2014 1:45 PM
7	Especially during the presentations.	11/13/2014 12:55 PM

Q8 Select all that apply: Do you think such an event could add value for...

Answered: 25 Skipped: 0



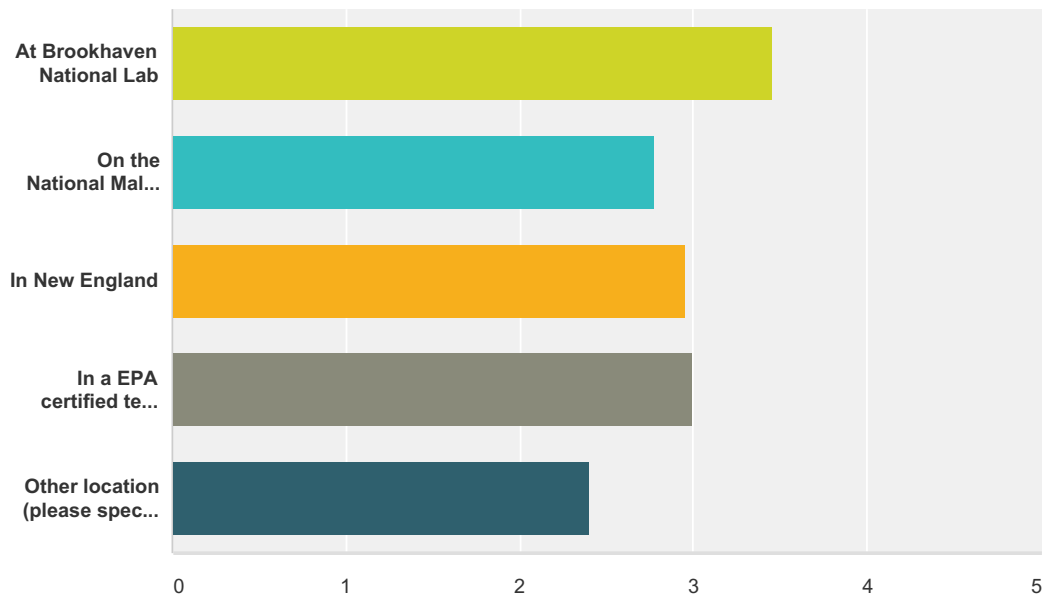
Answer Choices	Responses
Wood stoves	84.00% 21
Pellet stoves	64.00% 16
Pellet boilers	44.00% 11
Wood boilers	44.00% 11
Fireplaces	28.00% 7
Total Respondents: 25	

#	Which technology should we focus on, and why?	Date
1	Wood boilers because they tend to have the worst emissions and neighbor complaints	11/19/2014 8:30 AM
2	I think the wood-stove insert and retrofit possibilities are interesting. It seems a shame to scrap all those non-conforming stoves if retrofit is feasible. There must be millions of fireplaces out there that could be made clean and efficient. I think the pellet industry and wood boiler industry will take care of itself. I'm interested in multi-fuel combustors that would work efficiently and cleanly on any intrinsically-clean solid fuel.	11/18/2014 3:22 PM
3	I would love to attend all of the above, as I think seeing the designs used across different technologies help spur ideas in ones own field.	11/18/2014 2:50 PM
4	Possibly exploring external (exhaust/chimney cap) technologies for pollution reduction?	11/18/2014 2:41 PM
5	Not pellet stoves...The greater challenge and need for improvement lies in wood stove development.	11/17/2014 4:33 PM
6	We need a technology to dry wood fast!	11/17/2014 1:02 PM
7	For each technology, the value would depend on the focus of the event. If thermal efficiency were the focus for any of the systems, it would be very valuable, even for wood boilers. Pellet stoves would be a great technology to focus on with CO and emissions because they are known for being "clean" but that is not always the case.	11/17/2014 12:38 PM

8	The most common and most used technologies should be prioritised, so the environmental impact will be better and faster.	11/17/2014 2:29 AM
9	Boiler set up can take a long time. Not sure how you would facilitate fireplaces. mCHP could be a good topic for two or three years out.	11/14/2014 7:35 PM
10	Wood stoves and boilers should be focused on more since it is still seeing vast improvements and still has much more room for improvement compared to pellet burners.	11/14/2014 5:07 PM
11	Personally, my interests are (in order of interest): - masonry heaters, wood stoves, pellet boilers, wood boilers, pellet stoves. "Fireplace" is not a well defined term.	11/14/2014 4:13 PM
12	Also retrofits to existing stoves. It would be particularly interesting to address heating issues in low and middle-income countries.	11/14/2014 12:31 PM
13	Because these systems are fully automated and they achieve low emissions, more focus on pellet boilers and stoves as well as precipitators and secondary measures should be considered for future workshops.	11/14/2014 2:04 AM
14	I can't contribute anything here	11/13/2014 8:39 PM
15	Wood stoves, although pellet devices certainly need work and advancements, wood stoves remain the dominant source of heat and have the potential to have the greatest variance of emissions due to the non-automated nature of the device.	11/13/2014 1:48 PM
16	Wood stoves because the momentum is already in motion.	11/13/2014 12:56 PM

Q9 On a scale of 1-4, would you like to see another event take place next year...

Answered: 24 Skipped: 1



	1 (strongly disagree)	2	3	4 (strongly agree)	Total	Average Rating
At Brookhaven National Lab	0.00% 0	16.67% 4	20.83% 5	62.50% 15	24	3.46
On the National Mall in Washington, DC	0.00% 0	47.83% 11	26.09% 6	26.09% 6	23	2.78
In New England	4.55% 1	22.73% 5	45.45% 10	27.27% 6	22	2.95
In a EPA certified test lab	9.09% 2	27.27% 6	18.18% 4	45.45% 10	22	3.00
Other location (please specify below)	20.00% 2	40.00% 4	20.00% 2	20.00% 2	10	2.40

#	Location:	Date
1	I liked the freedom BNL gave us to move around and see various testing, talks etc. whenever. DC or a private lab may stifle that type of freedom. if however it doesn't then I would be open to those places.	11/18/2014 2:51 PM
2	New England is fine, but other regions would be okay, too.	11/18/2014 2:44 PM
3	ClearStak, LLC (in New England)	11/17/2014 12:39 PM
4	ClearStak could offer to host in the future	11/14/2014 7:36 PM
5	West	11/14/2014 2:17 PM
6	not really able to answer but you are doing a great job and hope this continues	11/13/2014 8:40 PM
7	Easy to get to location.	11/13/2014 12:57 PM

Q10 What suggestions do you have for future events?

Answered: 14 Skipped: 11

#	Responses	Date
1	One devoted to stove retrofits or fireplace inserts.	11/18/2014 3:24 PM
2	It would be nice to have discussion mixer sessions after every two presentations (regardless if they are from commercial vendors, scientists or inventors of new systems. Also, it is very helpful to learn more about the differences in locals where these units could be used. Would some woodstoves be better used in certain locals, or designed to meet the needs of areas that have larger diversity of available wood fuels. The problems of availability of pellets in some locals, and communities that would chose to burn pine specifically, and other communities that may have to revert to garbage at certain times of year due to difficulties with obtaining or paying for other safer forms of biomass fuel.	11/17/2014 3:07 PM
3	Workshops and testing should be done separately to allow more time to work together	11/17/2014 1:06 PM
4	prepare the wood ahead of time, even the night before. Keep to the schedule or else let everyone know to anticipate schedule changes such as presentation times, and testing slots.	11/17/2014 12:41 PM
5	Chip burner, retrofits,	11/14/2014 7:36 PM
6	Try to stick more to the schedule and be more clear with all judging/rule changes throughout.	11/14/2014 5:09 PM
7	Pay more attention to fuel and fueling protocols. Make test repeatability a stated goal.	11/14/2014 4:15 PM
8	Learning mor about other teams problems and finding solutions together. Findig Government people that are interested in the products and ask questions, and that show, that want to be envolved.	11/14/2014 8:22 AM
9	Please try to invite more international guests and experts/researchers.	11/14/2014 2:13 AM
10	It would be good to have a pellet competition.	11/13/2014 8:42 PM
11	Standardized results reporting	11/13/2014 3:18 PM
12	Somehow encourage more participants in addition to encouraging existing participants to further their research and better their designs. As the challenge goes into multiple years we don't want participants to view it as 'same old stuff'.	11/13/2014 1:56 PM
13	bigger!	11/13/2014 1:17 PM
14	Nothing at the moment. This was a great event!	11/13/2014 12:57 PM