

# NAATBatt Recycling Committee for Advanced Automotive Batteries in North America

## 09Aug19 Meeting Minutes

Call-in. Prepared by Kely Markley, stand-in for Peter Karlson (Committee Secretary)

### Committee Mission Statement, updated 13Sep17:

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*To identify and promote the best methods for safely and responsibly recycling advanced automotive lithium-ion battery packs in North America in a manner that will extract positive economic value from the batteries and provide a useful template for the recycling of industrial and stationary lithium-ion energy storage systems.*

### Attendees:

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NAATBatt Advanced Battery Recycling Committee Roster				x = In Attendance
First Name	Last Name	Company	E-Mail Address	
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## Detailed Meeting Minutes

(Decisions in **GREEN**, Action items in **RED**) (Note that action items are duplicates of those in above summary)

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1. Welcome by Committee Co-Chairs
2. Stating the Goals and Flow of Today's meeting
  - a. Background: There was a consensus that the NATTBATT should do something to move forward the business of recycling therefore a request went out to members for proposals of what the committee could do that would help move forward the cause of recycling Li ion batteries. Responses were summarized in list of proposals sent out last Tuesday.
  - b. Big thank you to those who submitted their proposals. There were 14 in all.
  - c. Jim determined that the 14 proposals break down into 4 categories
    - i. Data Collection
      1. Information that can be collected and shared such as on a website
    - ii. Best Practices Documents
      1. Examples include how best to ship and package used batteries, how to assess risk of used batteries, etc.
    - iii. Advocacy Documents
      1. Such as case studies, cost analysis, business cases for recycling and reuse
      2. These would outline to policy makers and others how to best to engage in recycling and possibly reuse as well
    - iv. Facilitating a Used-Battery Exchange
      1. Place where people can go to buy or sell used batteries online
      2. For folks who are looking for source for used batteries and reliable information on them
  - d. Goal is to discuss those 4 categories and narrow down the list
3. Next Meeting

- a. In Ivory Room of Suburban Showcase at Battery Show in Novi
  - b. September 10<sup>th</sup>, 4:30pm to 5:30pm EST
  - c. There the group will narrow down list and decide on 1 or 2 projects for committee to undertake
4. Concerning Budget for Projects Proposed
- a. Will need to explore voluntary assessment of funding for projects among members if the project decided upon will require the hiring of an outside party for data collection or consulting
    - i. Will not necessarily need to pursue this direction, but be aware that funding will be necessary if committee decides to go this route
5. Comments on Projects
- a. Note: Please feel free to update or correct these where necessary as I know I missed a few points.
  - b. Renata
    - i. From a practical standpoint, the lowest hanging fruit would be identifying those projects that don't require this additional budget. First two in the best practices might be most valuable
  - c. Mike
    - i. Would some of the battery recycling prizes that come available Sept. 30 be possible to consider for proposals
  - d. Linda Gaines
    - i. Doesn't think that the prize applications will significantly overlap
    - ii. Most of these seem to be looking for data as opposed to methods for accomplishing things and therefore believes there won't be much overlap
    - iii. Argonne would like to see better data – what material, when, and at what cost
  - e. John Howes
    - i. Thinks projects 12 – 14 would be very interesting
  - f. Darnell Jones
    - i. Would like a tangible outcome – something physical that people can see/touch
  - g. Peter Karlson
    - i. The advocacy piece jumps out to him – one that emphasizes a robust (economically viable) recycling ecosystem
  - h. John Kincaide
    - i. Sees it important to get knowledge to people handling product (regulation, education, advocacy)
  - i. Keith Loch
    - i. OEMs might find it problematic to share rates and costs
  - j. Margaret O'Reilly
    - i. Interested in math that shows which states have best and worst policies
  - k. John Platt
    - i. Policy, advocacy are areas where NAATBatt would be well positioned to help

- l. Jeff Spangenberg
  - i. Information exchange
    - 1. Exposing rates could help all people get the better rate but that does kind of hurt competition perhaps
  - ii. Actual scrap rate data is of interest
  - iii. Notes having a directory of folks in the business so to easily identify who to call on what topic (Jim organizing building such a list at least among members)
- m. Pablo Valencia
  - i. From an advocacy or public data standpoint – there would be an added value on that list if members can identify pain points or issues on policy, regulation etc.
    - 1. List of regulatory items, identification of pain points would be beneficial
    - 2. If we see consensus we can move together on that
  - ii. Support among membership for projects of higher value recycling
    - 1. If they have interest, why do they have interest and if not, why not
- n. Bernie
  - i. Interested in public facing image
    - 1. Collecting data, be more effective,
      - a. Opportunity to take this information and make it available to the public
      - b. E.g. people who are sensitive to the negative aspects of these chemistries can see that we are doing something about this
    - 2. Interest in exchange for secondary use
      - a. Thinks this is important to facilitate this market
      - b. Thinks fee should be associated with this
- o. Lauren Roman
  - i. Came up with different buckets
    - 1. Logistics shipping and packaging
      - a. 1 5 7 14
    - 2. Regulation i
      - a. 2 8
    - 3. Best practices
    - 4. Market
      - a. Metals price monitoring, exchange
    - 5. Marketing in General
      - a. Advocacy and education
    - 6. Generally speaking she spoke to consortiums and associations that we can turn to in order to help us assemble information for this work
- p. Laura

- i. Best practices could be shared across organizations
    - ii. *Secretary note: I missed some of Laura's comments here, but I believe I have them captured in the next section.*
  - q. Sam Fournier
    - i. Best practices and regulations and how we can impact them
  - r. Sharon
    - i. An outline or flowchart based on national standards of the path you should take when seeking to identify a location or collecting the data regarding codes and standards
      - 1. AKA a roadmap for the physical "plant" of a recycling facility
    - ii. Wants to jump on what Bernie said in terms of platform for exchange
      - 1. In terms of coming years a lot of people will be looking on Ebay for miscellaneous used batteries
      - 2. If NAATBatt can create a platform for exchange where we can safely state battery information and data to make battery conditions transparent and benefit customers
      - 3. This type of thing would be worth something and therefore would make sense to charge a fee for
  - s. Taylor Brandt
    - i. Best practices documents will help whole market shift
  - t. Gary
    - i. Main issue to be able to promote reuse and repurpose of batteries is to do it efficiently and track life cycling of batteries – perhaps like a blockchain type thing
    - ii. Perhaps promote government policy to encourage reuse and refurbish instead of recycle and thinks that exchange platform might be an integral part
  - u. Steve Sloop
    - i. Just listening and hopefully connect with the rest of the group here
  - v. Mike Paszti
    - i. Not so much which we pick, but which one we do first
    - ii. All think they are valuable – he personally likes the focus on regulation since that is a mystery to most
6. Final comments (n.c. = no comment)
- a. Renata – will have to figure out how to triage and attack
  - b. Mark – seconds Renata's comment
  - c. Todd – a lot of info out there already that touches on a lot of these things, some not (like the exchange)
    - i. One possibility would be to pull what is out there to pull depository of existing information like Laura's comment about which organizations are working on each individual item and cull this info to see what's there and what might be lacking
  - d. Linda – n.c.
  - e. John Howes – he would hope that recycling is not viewed as some sort of a backburner issue. Encourages NAATBatt not to incur any sort of secondary status to recycling



- f. Darnell – n.c.
- g. Peter – n.c.
- h. John K. – should be proactive, (*missed part of this comment*)
- i. Keith Loch – seconds the idea of incorporating block chain in information or advocacy comments
- j. Marg – n.c.
- k. John – like the idea of surveying membership to see pain points or lack of solutions to fulfill needs that exist
- l. Jeff s – n.c.
- m. Pablo v. – nc. Will send comments in writing to Jim
- n. Bernie- believes that this committee’s discussion implies that committee should be titled reuse and recycling because reuse entitled to equal footing – interested in the nexus of reuse/refurb/recycling
- o. Lauren – take opportunity to create structure for the recycling committee, break down into subcommittees
- p. Laura Wagner – she likes this idea as well and wants to gather whatever information is already in existence and creating a repository for it, definitely documenting regulations and combining what industry knows more than policy makers to help with that
- q. Samuel - ?
- r. Sharon Bonesteel – supports idea of creation of subcommittees, as for influencing regulation – have people available to testify and write regulation documents
- s. No comment from the rest...

7. Based on comments, Jim proposed the creation of the following subcommittees

- a. Subcommittees
  - i. Regulatory Subcommittee
    - 1. What exists and what may be left
  - ii. Exchange Subcommittee
    - 1. Battery tracking

8. Open to other subcommittee ideas from the group

- a. Linda notes that she’s not sure what regulation there is of large batteries now so she’s not sure what that committee is going to find
  - i. John responded that there is regulation such as the resource recovery conservation act and people saying this needs to be looked at and paid attention to – it just hasn’t been looked at in the context of Lithium Ion batteries
- b. Peter thinks that starting with regulatory to identify areas of pain points and opportunity is a start that will dovetail into broader areas of advocacy
- c. A couple of suggestions of a 3<sup>rd</sup> committee of advocacy and education
- d. Regulatory should combine shipping and packaging
- e. Now is the time to get involved for advocacy of better regulation – and regulation that balances safety and industry progress

9. Conclusions and Actions

- a. The following subcommittees will be created
  - i. Regulatory
  - ii. Exchange
  - iii. Advocacy and Education
- b. Jim will send out an email asking for volunteers
- c. Members will indicate which committee they are most interested in
- d. Will pick up on Tuesday September, 4:30 eastern daylight savings time at battery show.

10. Meeting adjourned