



Welcome to Today's Webinar
DOE's Lithium-Ion Battery Recycling Prize

August 04, 2021
1:30 pm – 4:00 pm EST



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Presented in Partnership with the NCDEQ Division of Waste Management – Hazardous Waste Section



Webinar Housekeeping

- If You Have Audio Trouble: Switch to phone (see number and code in Audio section of the webinar toolbox)
- Slides, Handouts and Recording will be posted to the ESI Events Website (can be accessed via deq.nc.gov)

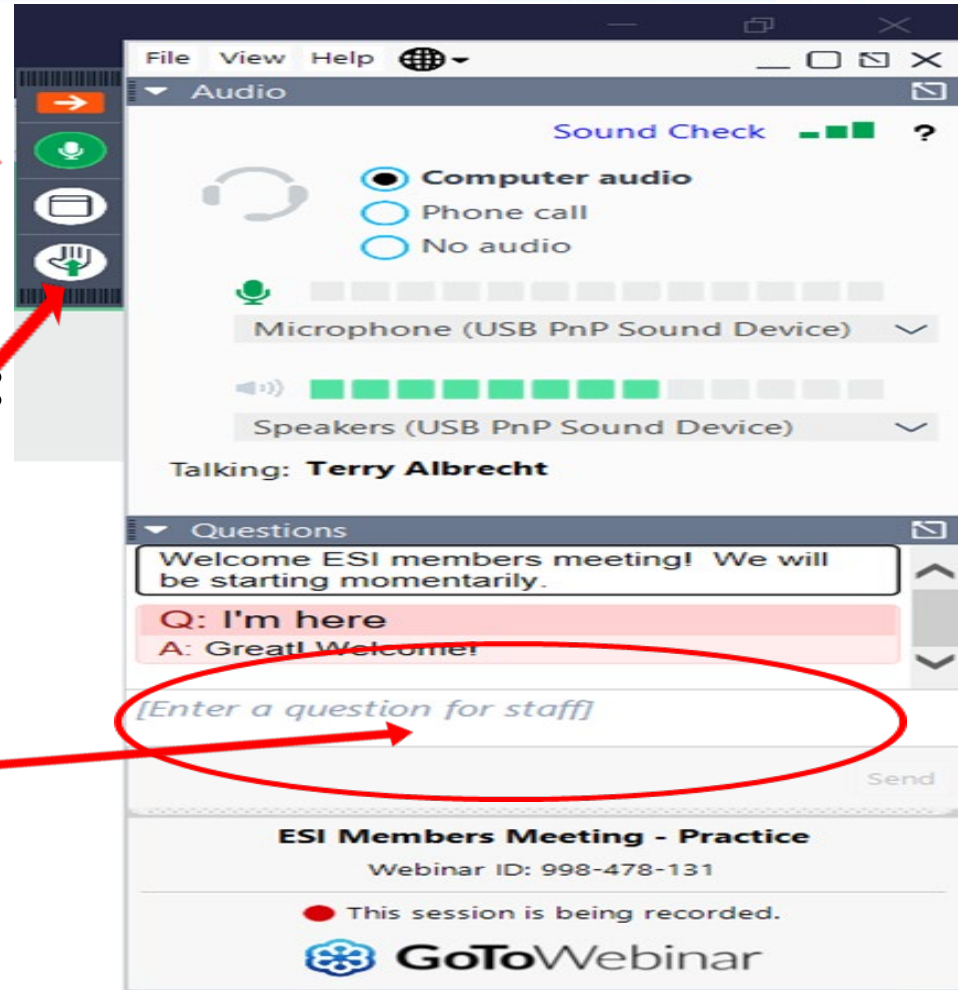
The screenshot displays the audio control interface of a webinar. The 'Audio' section is expanded, showing three radio button options: 'Computer audio' (selected), 'Phone call' (highlighted with a red circle and a red arrow), and 'No audio'. Below the audio options are sliders for 'Microphone (USB PnP Sound Device)' and 'Speakers (USB PnP Sound Device)'. The 'Questions' section shows a welcome message: 'Welcome ESI members meeting! We will be starting momentarily.' followed by a Q&A exchange: 'Q: I'm here' and 'A: Great! Welcome!'. At the bottom, the webinar title is 'ESI Members Meeting - Practice', the ID is '998-478-131', and a red dot indicates 'This session is being recorded.' The GoToWebinar logo is also present.

Participation

Mute/Unmute

How to Ask Questions:

1. Raise your hand.
2. Use the Question Box.



Environmental Stewardship Initiative



- DEQ recognition program
- Promotes and encourages superior environmental performance
- Voluntary program; no cost
- Going beyond compliance while conserving natural resources and resulting in economic benefits
- Approximately 200 member sites
- Networking and training benefits

2019 ESI MEMBERS REPORTED RESULTS			
REDUCTIONS	Air Emissions	247	Tons
	Greenhouse Gas Emissions*	24,190	Metric Tons CO ₂ e
	Hazardous waste	158	Tons
	Landfilled waste	803	Tons
	Energy	838,230	mmBtu
	Water Use	1,050,057,201	Gallons
	Material Consumption	265	Tons
	Wastewater Pollutants	399,871	Tons
	Wastewater Volume	3,630,628,382	Gallons
REUSE	Biomass Recovery**	77,361	Tons
	Total Recycled Volume	186,998	Tons
TOTAL COST SAVINGS \$ 11,287,397			

For more information contact:

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ESI Members



INTERNATIONAL



We are TRU to our customers!



Waste Reduction Partners



- Innovative partnership between NCDEQ and the Land of Sky Regional Council
- Non-regulatory
- Typically no cost
- Assist facilities improve environmental and energy management through efficiency techniques that save money
- Provides consulting services using 40 retired engineers and scientists
- Conducts on-site assessments and provides cost saving strategies and resources
- Client cost savings since the year 2000: \$137 Million
- Client energy saving since 2000: 5.66 Trillion BTUs



For Services Contact: Terry Albrecht (828) 251-7475

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Presenters & Panelists

DOE's Lithium-Ion Battery Recycling Prize

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Technology Program Manager, National Renewable Energy Laboratory

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- **John Shusterich: Clarios (john.shusterich@clarios.com)**
- **Lauren Crandon: Onto Technology (lcrandon@onto-technology.com)**
- **Trish Tran: Smartville (trish@smartville.io)**

batteryrecyclingprize@nrel.gov



Lithium-Ion Battery Recycling Prize



Li Industries

Li Industries

Machine learning-based, automated Smart Battery Sorting System.

David Young

david.young@li-ind.com

OnTo Technology
Deactivate, identify, sort, and cut (DISC) solution for end-of-life processing.

Lauren Crandon

lcrandon@onto-technology.com



Powering the Future

Leveraging the existing network of collection for lead-acid batteries to collect end of life LIBs.

John Shusterich

john.shusterich@clarrios.com



Renewance

Renewance Connect digital platform tracks and manages LIBs throughout their full life cycle.



Smartville

Distributed heterogeneous unifying battery facilities to reduce costs in the reverse logistics supply chain.

Trish Tran

trish@smartville.io



Team Portables

Reward to Recycle is a smartphone app that rewards consumers for recycling.



Titan Advanced Energy Solutions

Battago Battery Market Intelligence platform built to generate, aggregate, and connect data.

<https://www.herox.com/BatteryRecyclingPrize>

Questions & Contacts



DOE's Lithium-Ion Battery Recycling Prize



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More to Follow!

Thanks for Attending!

Watch for a survey for your feedback and check out the ESI webpage (www.ncesi.org) webinar materials and recording link!

