


Recycling Lithium Ion Batteries

By: Kevin Ruano Hernandez

Presented to the Hazardous Materials Commission
May 27th, 2021



Who I am and why this issue is important to me

- ❖ Kevin Ruano Hernandez, Senior at Pinole Valley High School, grew up in North Richmond.
- ❖ I was born with Asthma at a young age however, outgrew it and started to see many people around me suffer from similar issues.
- ❖ That motivated me to get involved in these efforts and learn more.



What are Lithium Ion Batteries?



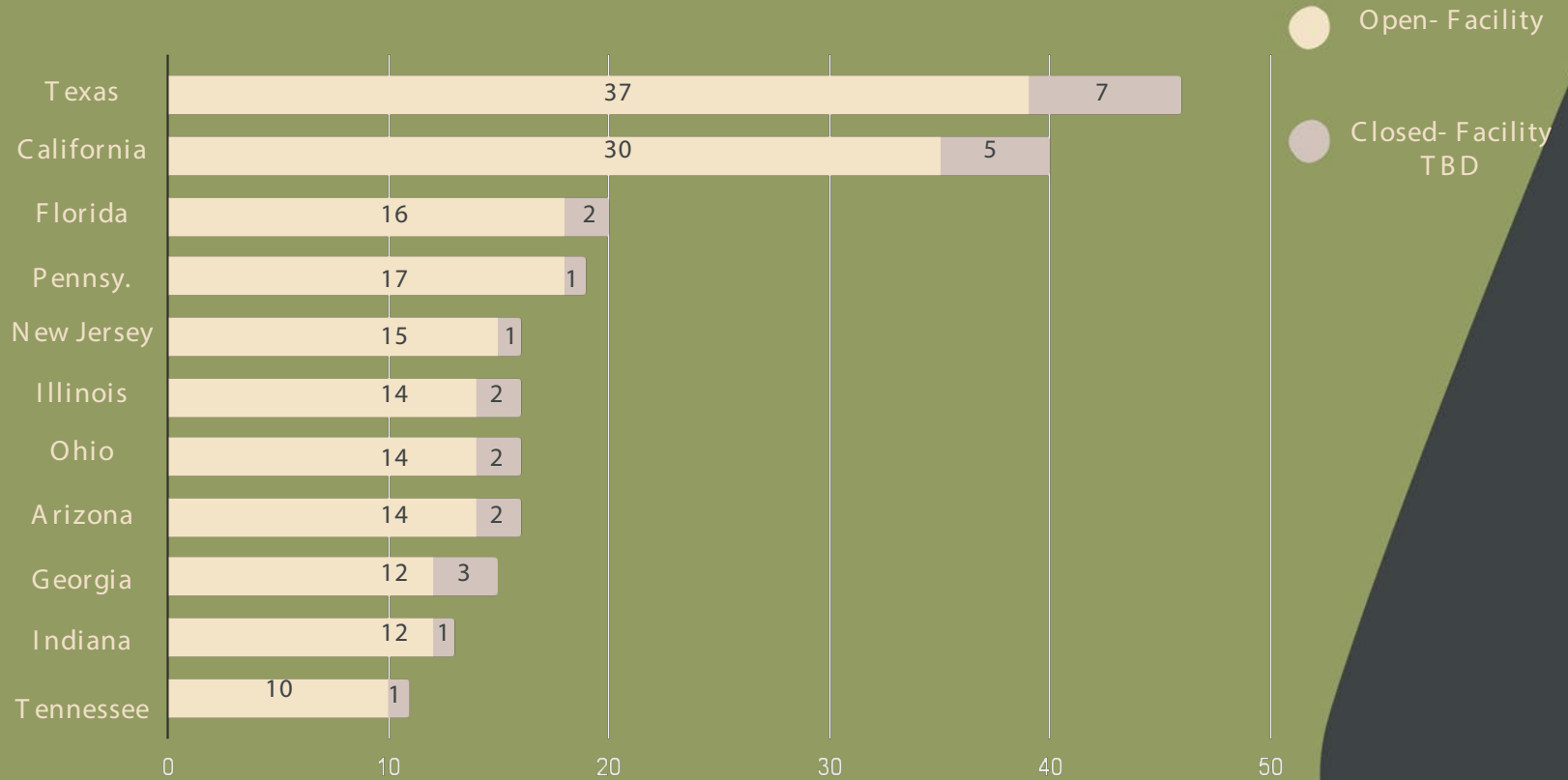
- ❖ Lithium Ion Batteries are popular for their energetic rechargeable source.
- ❖ They are also popular because they power technology devices such as our laptops, cellular devices, and cameras.
- ❖ Lithium Ion Batteries contain flammable electrolytes and lithium and cobalt.

The concern for my community

- ❖ Distribution centers are one of the causes of emissions and pollutions due to the diesel pollution produced in their delivery vehicles.
- ❖ A few year ago, one of the biggest distribution centers in the Bay Area, in Richmond, has been sold to Amazon.
- ❖ There is an interest in switching to zero emissions.
- ❖ But with the increased demand for electric vehicles, there will need to be a way to learn how to recycle these electric vehicle batteries safely and efficiently.

The number of Amazon warehouses/facilities in each state

States in the US



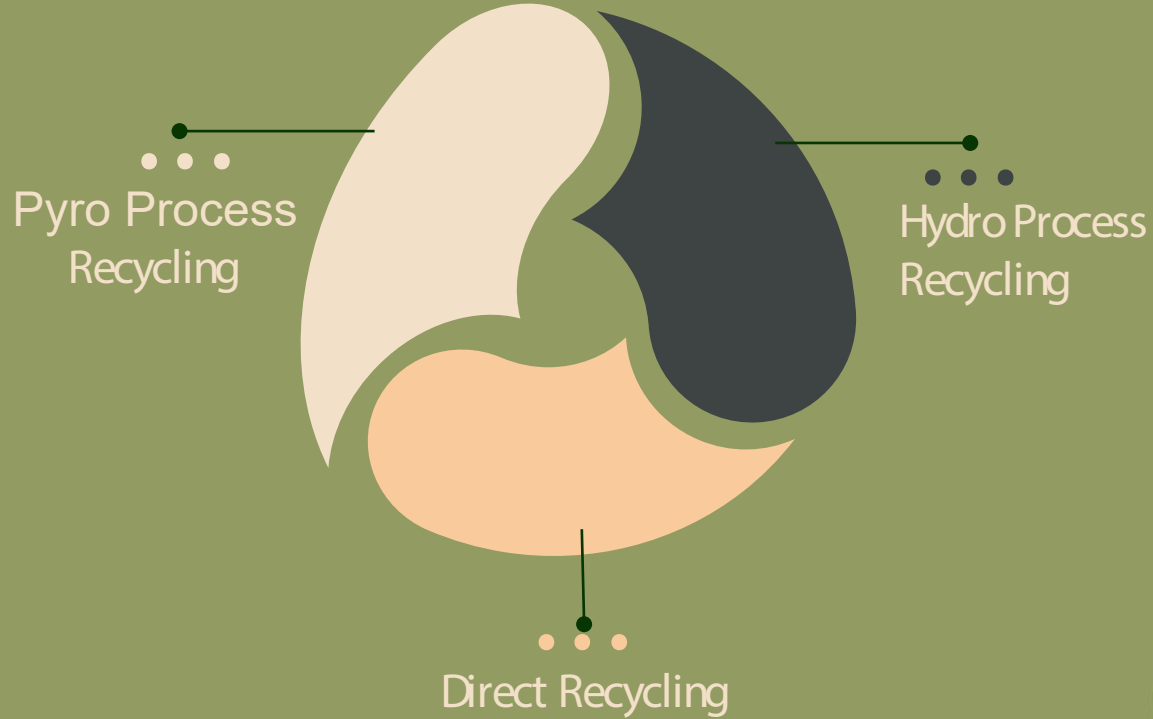
MWPVL International Inc.

of Warehouses/Facilities

What is the issue with recycling Lithium Ion Batteries?

- ❖ There are a limited number of lithium ion battery recycling plants in the United States.
- ❖ There are several economic barriers that exist.
- ❖ Recycling may increase the risks of environmental impacts

Ways how to recycle Lithium Ion Batteries



Proposal to the Commission

- ❖ We need a recycling plant that focuses on Lithium Ion Batteries in Contra Costa County or all across the US.
- ❖ As shown in recent news, there is potential for creating these businesses in the US.
- ❖ I recommend the Commission advocate for a Lithium Ion Battery recycling plant in Contra Costa County.
- ❖ The Commission should educate community groups on the hazards and potential dangers of these types of batteries.

Acknowledgment

SUNPOWER®



BAY AREA AIR QUALITY
MANAGEMENT DISTRICT



Union of
Concerned
Scientists



CALIFORNIA
AIR RESOURCES BOARD

Thank you for listening to my Presentation

Questions? Comments?
Suggestions?

