

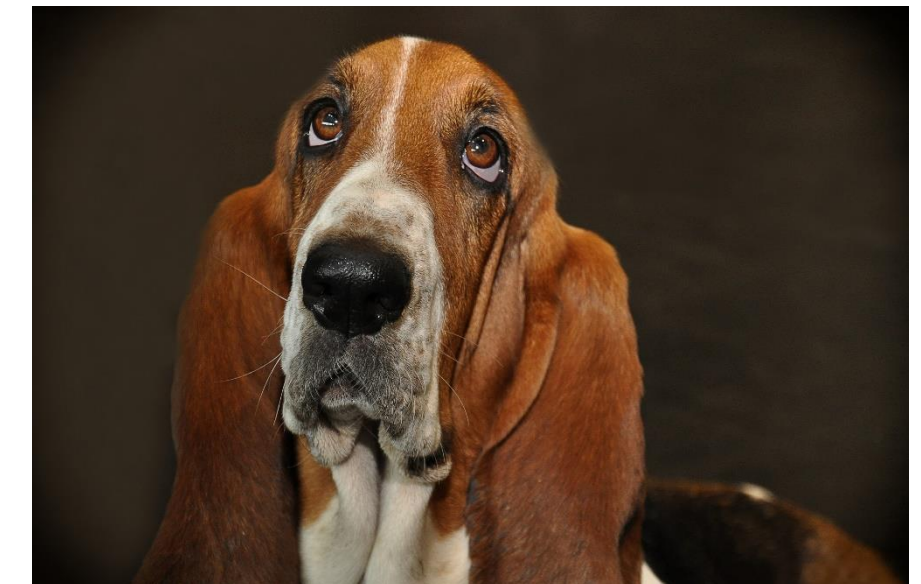
# LITHIUM-ION BATTERY RECYCLING PRIZE



U.S. DEPARTMENT OF ENERGY

<b>Team Name:</b>	Bassett
<b>Primary Submitter Name:</b>	B. Willard
<b>City and State:</b>	Atlanta, GA
<b>Member Names (including partners and affiliates):</b>	N/A
<b>Submission Title:</b>	Choice + Voice = Action
<b>Submission Track:</b>	Other

## A Public Document



### Concept

- Lithium ion batteries power portable devices which are **assets** primarily owned by consumers.
- Consumers want a **choice** and a **voice** in who their assets are transferred to, how their assets will be used, and how much they will be compensated.
- The compensation amount must be fair to both the consumer and the “buyer”. This compensation can be tangible, intangible, or a combination of both.
- The technologies developed to collect, transport, sort, and store recycled batteries must have enough transparency that consumers believe their choice is being honored.

### Approach

- Consumer motivation and engagement is the engine that will drive battery recycling above the 90% goal.
- If a consumer feels that their asset will be misused, wasted, cause harm to either themselves or others, or cause harm to the environment - they will not easily give up their asset.
- The approach proposed here is to develop an organization which serves as a **trusted advisor** to consumers and businesses on the choices that are available to them when they are ready to transfer their Lithium ion battery-powered asset.
- The choices provided would be based on the user’s priority. For example, receive the maximum dollar value, help someone in need, responsibly recycle, etc..

### Potential Impact

- It is estimated that there are millions of Lithium ion battery powered devices such as mobile phones, laptops, cameras, etc..sitting idle and unused in American households.
- Assuming there are 250M idle devices and each device has a 25-gram Lithium ion battery pack, there is over 1400 metric tons of Cobalt available to be “mined” in the U.S.
- Using a cost of Cobalt at \$25,000 per metric ton results in over \$35M dollars of untapped value to consumers with just this metal alone.
- The intangible value of this Cobalt is likely greater as the United States produces a negligible amount of Cobalt from mining operations.