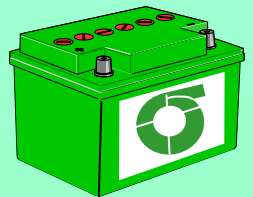


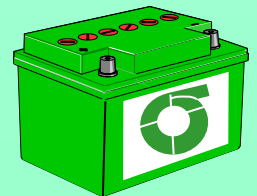
The Green Lead Initiative

Miguel Araujo
BCRC-CAM

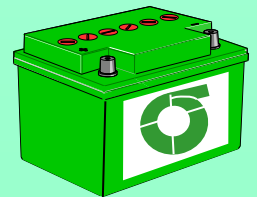
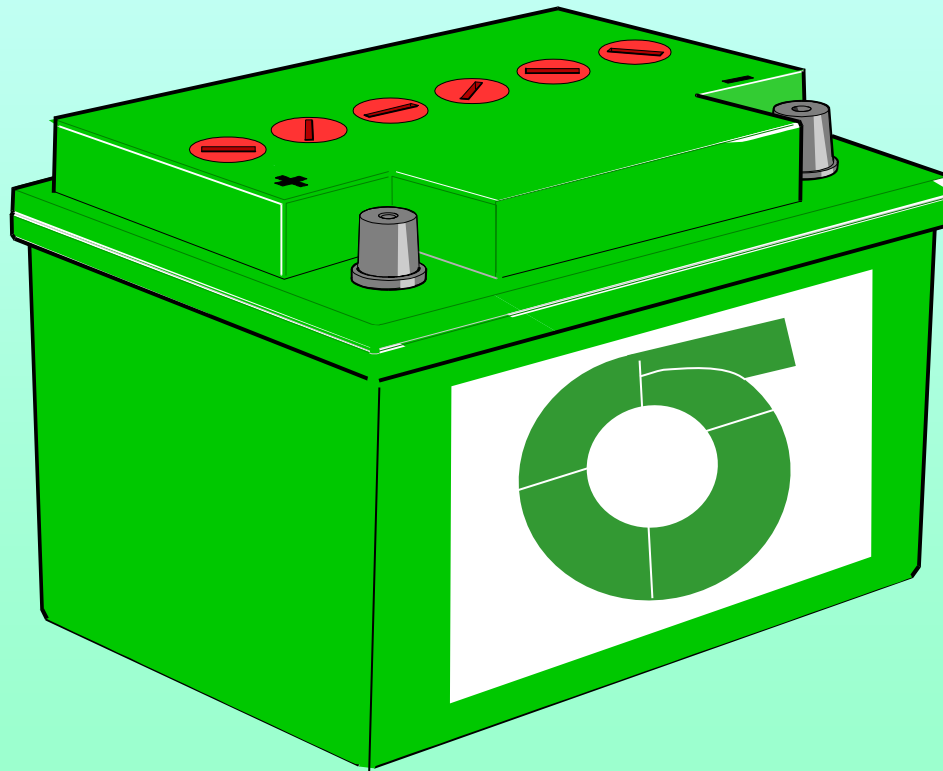


What is **Green Lead**?

- ❖ *Sound Lead Life Cycle Management*
- ❖ *Proactive Product Stewardship*
- ❖ *Involves all LAB Stakeholders with interests in the Environment and Population Health*



**RIP
USED
BATTERY**

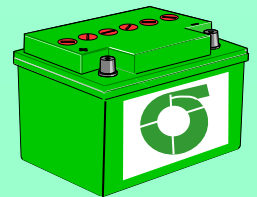


Mobius Loop

Manufacture

Use

Recycle

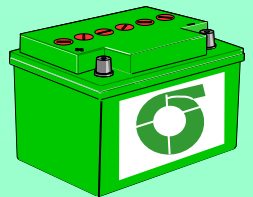


Mobius Loop

Manufacture

Recycle

Use

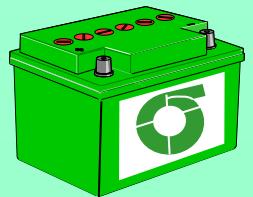


Mobius Loop

Manufacture

Recycle

Use

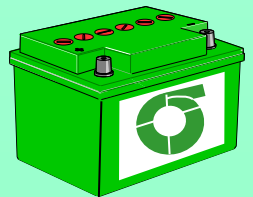


Mobius Loop

Manufacture

Recycle

Use

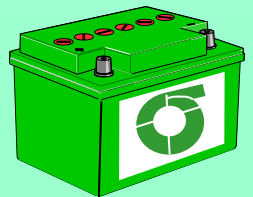


Mobius Loop

Manufacture

Recycle

Use

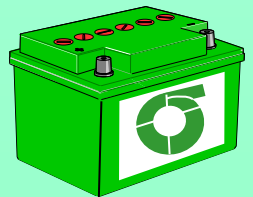


Mobius Loop

Manufacture

Recycle

Use

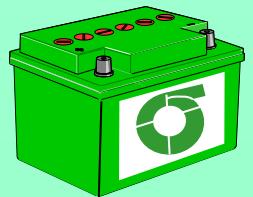


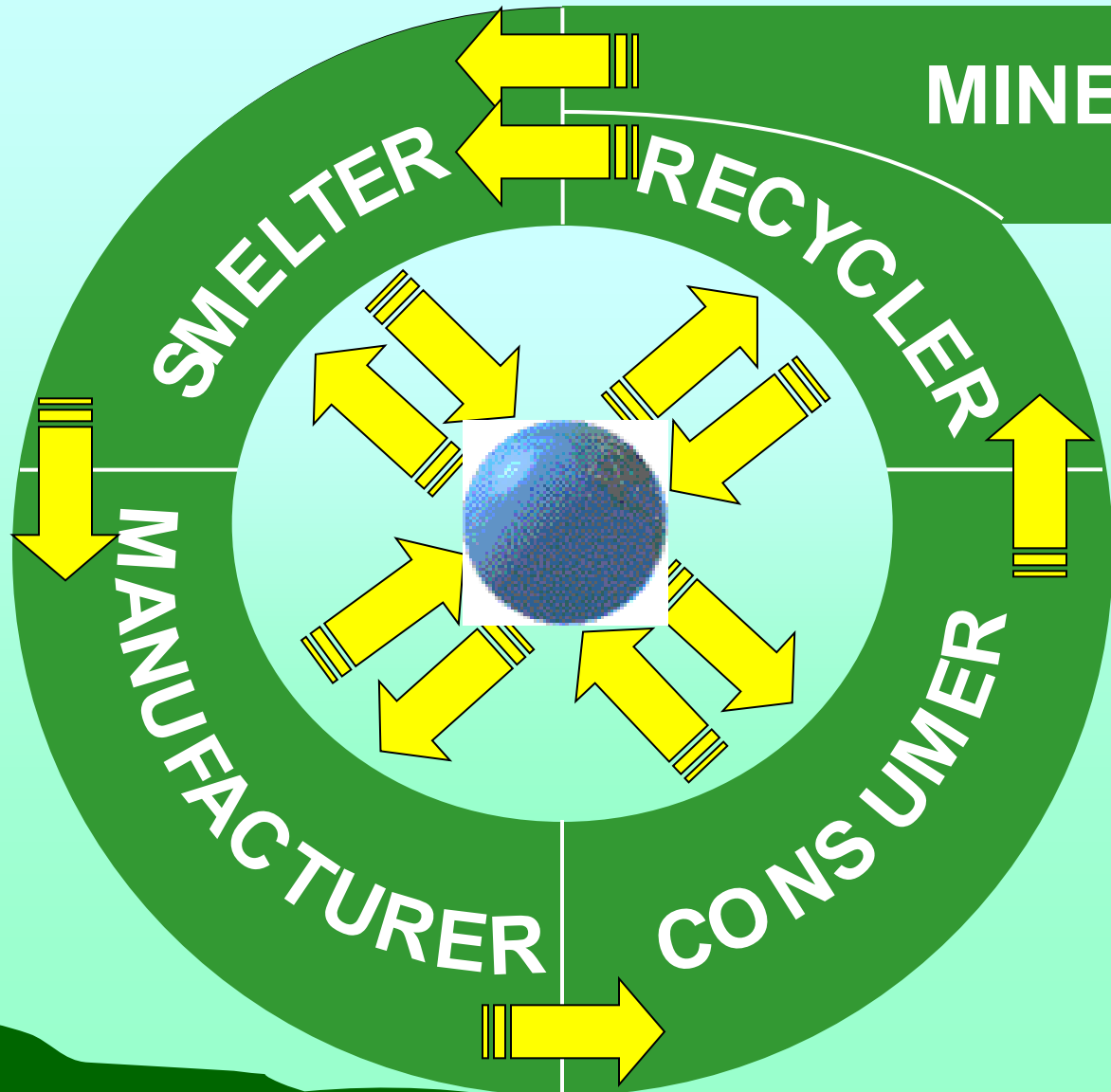
Mobius Loop

Manufacture

Recycle

Use





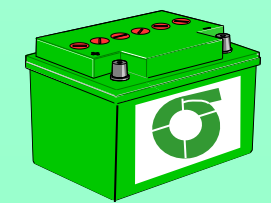
MINE

SMELTER

RECYCLER

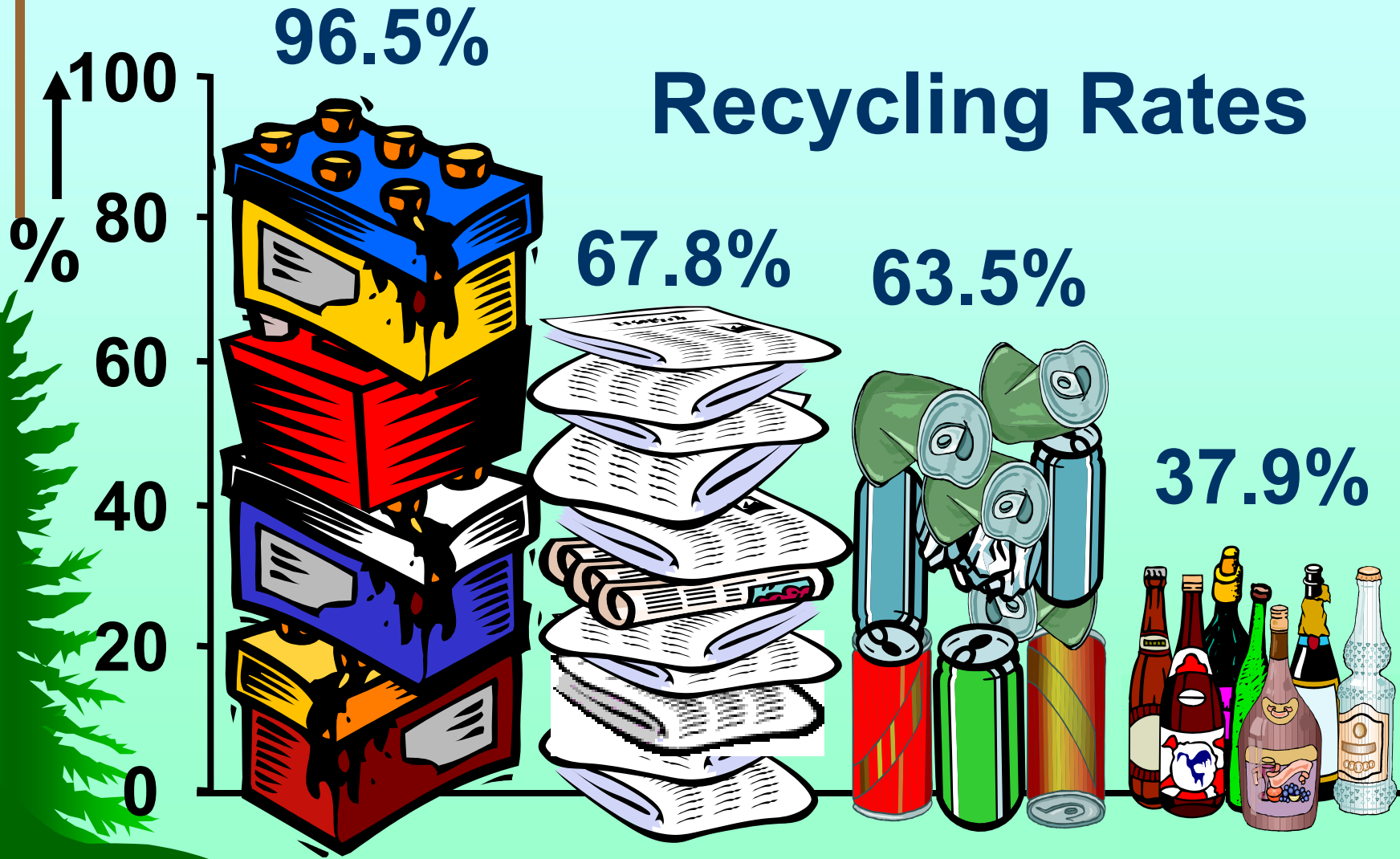
MANUFACTURER

CONSUMER

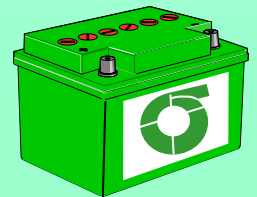
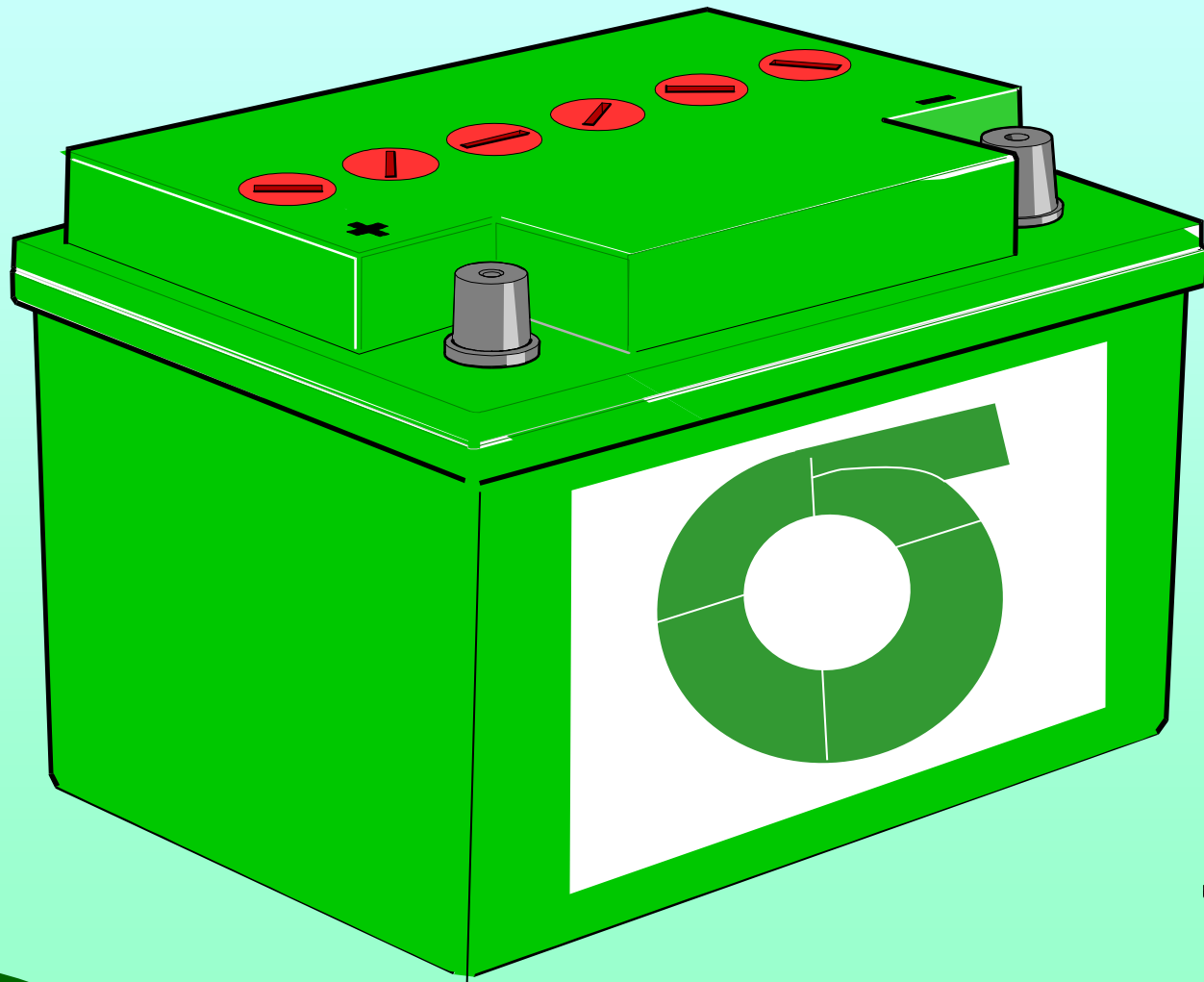


Green Lead TM

Recycling Rates



Green Lead TM



Green Lead TM

Life Cycle Analysis

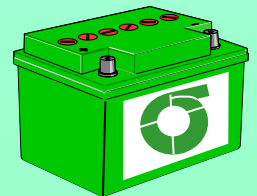
1. Inventory

- *Materials*
- *Recyclables/Waste*



2. Impact Analysis

- *Environmental*
- *Economic*
- *Health*
- *Social*



Green Lead™ Protocols

Why have GL Protocols?

- More rules!*
- More paper!*
- Less work!*

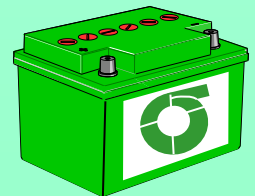


Green Lead™ Protocols

ISO 14001 and OHSAS 18001

.....Does not check

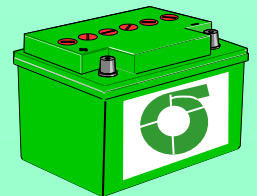
- ✘ Operating practices!!
- ✘ Sustainability
- ✘ Life Cycle Management
- ✘ Product recycling
- ✘ Social issues



Green Lead™ Protocols

Holistic

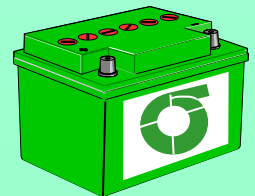
- ✓ Environmental Management System
- ✓ Safety
- ✓ Hygiene
- ✓ Recycling Procedures
- ✓ Sustainable Resource Strategies
- ✓ Employment Practices
- ✓ Outreach Activities



Green Lead™ Protocols

Focus is:

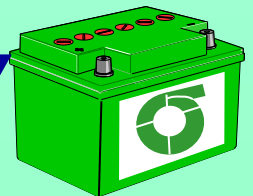
- *Product Chain Management*
- *Communication Links*
- *Continuous Improvement*
- *Recycling*
- *Social Issues*



Green Lead™ Protocols

Benefits

- ✓ **Helpful**
 - *guidelines*
 - *options*
 - *best practice notes*
- ✓ **Promotes**
 - *sharing good ideas*
 - *recycling*
 - *social awareness*
- ✓ **Reduces**
 - *informal activity*



Green Lead™ Inspections

1. Internal Self Assessment

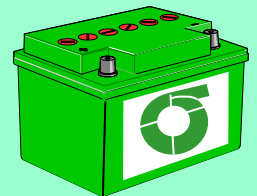
- for continuous improvement

2. External Third Party Assessment

- for Green Lead Award

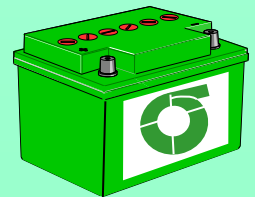
3. External Third Party Audit

- for Green Lead Certification



Green Lead™ Protocols

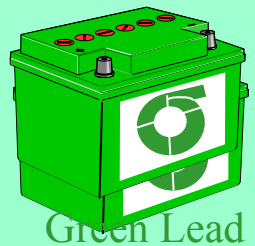
- *Medical surveillance – blood leads*
- *Solid waste management*
- *Effluent treatment and discharges*
- *Emission Control Systems*
- *ULAB collection, transport & shipping*
- *Battery Labels*
- *Public communications & awareness*
- *Site sustainability*
- *Community outreach*
- *Safety*



Green Lead™

Two Green Led Awards given
to Acumuladores Iberia.

3 to 4 likely new Green Lead
Awards in the process

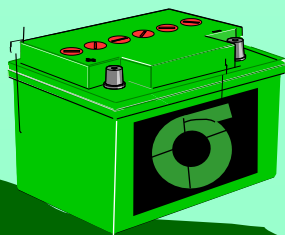




Basel Convention

Project Outcomes

Acumuladores Iberia SA



Green Lead Award

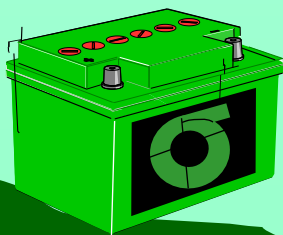




Basel Convention

Project Outcomes

Acumuladores Iberia SA



Green Lead Award





Basel Convention

Project Outcomes

Acumuladores Iberia SA



Green Lead

**Site Assessment Award for
Environmentally Sound Management**

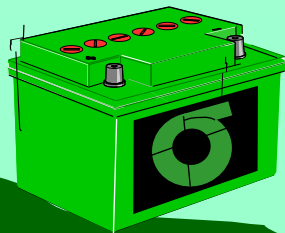
The Acumuladores Iberia S.A. Lead Recycling Plant, Guatemala City, has been verified by Site Inspection and Assessment to be in compliance with the Green Lead Protocol for the Environmentally Sound Management of Used Lead Acid Battery Collection, Packaging, Transport and Recuperation.

On behalf of the Green Lead Certification Committee.

.....
Brian Wilson – Site Assessor.

February 16, 2009

Valid until March 2011



Green Lead Award





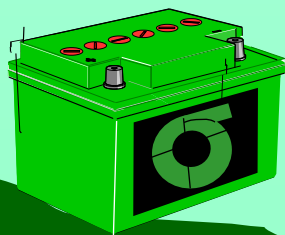
Basel Convention

Project Outcomes

Acumuladores Iberia SA



Green Lead Award

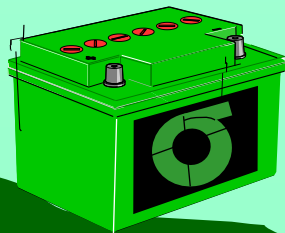
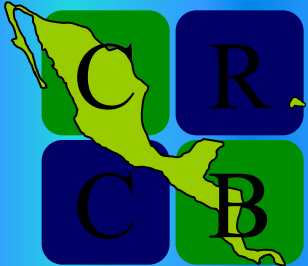




Basel Convention

Project Outcomes

Green Lead Assessment Workshop



Guatemala

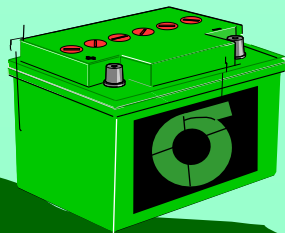




Basel Convention

Project Outcomes

ULAB Packaging and Transport

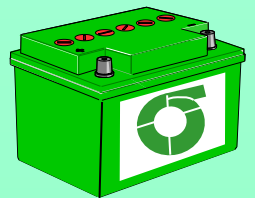


Guatemala



Green Lead™

In Process to be
coordinated by the
IETC with the
active participation
of BCRCs, WHO,
Industry, and
NGOS!



Green Lead

Green Lead™

THANKS!

