

Stewardship of LABs and ELVs

- About the CBA and SARA;
- Product Stewardship vs Industry Stewardship;
- Saskatchewan LAB and ELV Facts;
- Hazardous Materials Management;
- Environmental, Economic and Social benefits;
- Issues and Approaches;
- Next Steps and Summary



Saskatchewan
Auto Recyclers Association

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About the CBA

History:

- Organized in 1970 by CDN battery manufacturers;
- Federally Registered Industry Association;
- Industry Focus – Not just a Stewardship Agency;

Members / Stewards in Saskatchewan:

- Manufacturers:** Exide / GNB Power; Johnson Controls; East Penn; Crown Battery; EnerSys; C&D Technologies;
- National Distributors:** Canadian Energy; Magnacharge; Eaton Power; Thomas & Betts; Dell; GM;
- Saskatchewan Distributors:** Prairie Batteries



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LABs and Product Stewardship

- Manufacturers preparing for Product Stewardship of all Lead-Acid Batteries from Coast to Coast to Coast;**
 - Return-to-Retail for Consumer Batteries – 20 locations so plus any Federated COOP as part of their Battery-Bucks program;**
 - Return-to-Warehouse for Industrial Batteries – 5 locations**
 - Go To www.recyclemybattery.ca for return collection facilities;**

- Work closely with Call2Recycle to ensure all consumer battery types covered – some industrial batteries not covered;**

- Virtually 100% recovery rate because of value of recycled lead**
 - Value of end-of-life batteries in SK – about \$5M**



Lead-Acid Batteries Stats

- Approximately 1 Billion kg of Lead-Acid Batteries in use;**
- Approximately 200 Million kg sold / yr in Canada;**
 - 140 million kg sold by CBA Members:**
 - SLI: 115 million kg - 82%**
 - Motive: 14 million kg - 10%**
 - Stationary: 11 million kg - 8%**
 - 15 million kg sold by Interstate:**
 - 25 million kg sold outside Stewardship Program:**
- Approximately 6 Million kg sold in SK in 2013**



Issue – Measure Recovery Rates

- Sales is relative straight forward:**
 - CBA members – about 80% of market share;
 - New Vehicle Sales – about 15% of market share;
 - Imports – eg: small SLAs
- Recovery is much harder to measure:**
 - LABs have value and traded as commodity;
 - About 35% of batteries recycled by private recyclers
 - Working with smelters to confirm recovery rates.



Issues - Compliance

Battery Recyclers - Proper Collection & Storage

- Provinces consider waste lead-acid batteries as Persistent or Chronic Hazardous Substance;
- Generator, storage and transportation permits & approvals required
- In BC most CBA Members initially out of compliance



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Issues - Compliance

Battery Recyclers - Proper Transportation

- Lead-Acid Batteries considered “Dangerous Good” by Transport Canada
- Battery retailers are the Consignor:
 - responsible for shipment;
 - ensure documentation and
 - shared liability during transport
- Most Consignors not aware of Canada’s TDG Requirements:



Solution – Downstream Compliance Program

CBA Program for the Collection, Storage and Transportation of Recyclable Lead-Acid Batteries;

- Operational Plan;
- Contingency Plan;
- Closure Plan.

Summary of all Federal and Provincial Obligations

- International Export laws;
- Transportation of Dangerous Goods;
- Provincial Hazardous Waste Regulations;

Site Visits to Ensure they know their obligations



About SARA

□ History:

- Organized in 2011 by Saskatchewan Automotive Recyclers;
- Provincially Registered Industry Association;
- Industry Focus – Not just a Stewardship Agency;

□ Members in SK – autorecyclers.ca/province/saskatchewan

Amigo's Auto Wrecking Ltd	Clavet	All Parts Automotive	Regina
Southwest Automotive	Mendham	SGI Saskatoon Salvage	Saskatoon
TopLine Salvage	Moose Jaw	Bucks Auto Parts	Saskatoon
SGI Moose Jaw Salvage	Moose Jaw	Brock Salvage	Saskatoon
Dale and Lisa's Farm & Auto	Mossbank	Affiliated Auto Wrecking	Saskatoon
SGI North Battleford Salvage	North Battleford	Vic's Automotive Ltd	Swift Current
Red Wing Auto Recyclers	Prince Albert	Jensen's Auto Salvage	Webb
SGI Regina Salvage	Regina	Southside Auto Wreckers	Weyburn
Bucks Auto Parts	Regina	SGI Yorkton Salvage	Yorkton



SARA's Industry Stewardship

- Auto Recyclers DO NOT want Product Stewardship :**
 - Recyclers MUST have salvage to survive
 - Control of salvage goes to New Car Dealers;
 - Stepping up to be the “Stewards” & preserve their businesses
- Changing Perception of Automotive Recyclers:**
 - From Junk Yard to “First Recyclers”;
 - From Junk Yard to “Green Recycled Parts”;
 - From Junk Yard to generating Env., Economic & Social benefits.
- Responsible End-of-Life Vehicle Management**
 - Adopted the Canadian Automotive Recyclers Environmental Code (CAREC)
 - Members must demonstrate Environmental Compliance – Env. Certification
 - SARA promoting Mandatory Environmental Certification for all Automotive Recyclers;



End-of-Life Vehicle Stats

Goal is all End-of-Life Vehicles in SK recycled to existing Environmental Standards;

Approximately:

- 35,000 ELVs recycled in SK every year;
- 60 Automotive Recyclers in SK;
- 18 are SARA members;
- Average commodity value: - \$200/ELV

Waste Oil	329,000	L/yr
Antifreeze	202,300	L/yr
Refrigerants	5,557	kg/yr*
Hg	5,583	g
Tires	175,000	Units
Lead-Acid Batteries	35,000	Units
7,502	Refrigerate tonnes CO2e	
56,000	Steel tonnes CO2e	

Green Recycled Parts:

- Economic benefits: Sell used parts and value added products – catalytic converters, aluminum and generates more than \$15M in economic activity and 300 jobs;
- Social benefits – keeps insurance rates down and affordability of low income earners to repair their vehicle;
- Environmental Benefits: - about 1.6T of CO2 for every tonne of parts reused and steel recycled – over 60,000 tonnes of CO equivalent



Environmental & Economic Benefits

- \$0.43 of every dollar on Green Recycled Parts into Economy;
- 15% of every dollar spent submitted in Taxes;
- LCA shows significantly lower Env. Impacts.

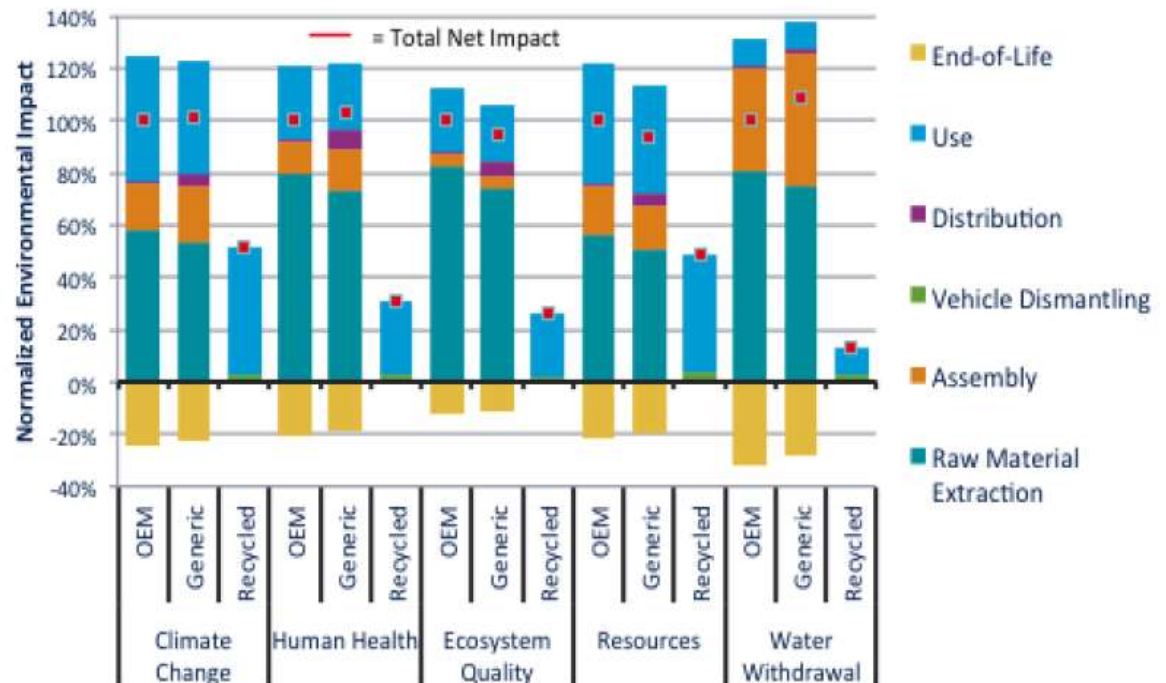


Figure 1-1: Comparison of normalized environmental impacts for the engines



Issues - Compliance

□ ELVs – Management of Hazardous Materials

- Waste Oil and Antifreeze considered Waste Dangerous Good;
- Mercury Switches, Refrigerants, Tires, batteries, washer fluids all require proper removal, storage and disposal;
- Contamination of surface and ground water, GHGs, air pollution most common environmental impacts.



Solution - Environmental Certification

Canadian Automotive Recyclers Environmental Code – CAREC

- Converts Regulatory Compliance into “Plain Language”;
- Environmental Inspection by Qualified Professional;
- Pollution Prevention Plan to address Deficiencies to the CoP;

Auto Recyclers Environmental Code of Practice

- Developed in the early 1990’s in British Columbia;
- Developed by Automotive Recyclers for Automotive Recyclers;
- Over 200 Automotive Recyclers in BC certified to CAREC – virtually 100% of industry

CAREC adopted Nationally - Automotive Recyclers of Canada

- Over 450 automotive recyclers certified to CAREC;
- 18 automotive recyclers in SK certified to CAREC;
- Auto recyclers support CAREC – change from Junk Yard to Automotive Recycler



Issue - Remote Communities

- ❑ End-of-Life vehicles and lead-acid batteries have high recovery rates in urban and rural communities – positive value;
- ❑ However, Canada is a vast country with lots of Remote Locations
- ❑ Can't take the ELVs and Batteries and leave tires, oil, etc.



Issue - Remote Communities

- Significant challenge – huge distances, no infrastructure; people
- Complicated logistics – ice roads, health and safety, TDG;
- Multiple jurisdictions, multiple products and small communities;



East Kootenays – Success Story



East Kootenays – Success Story

Before



After



Remote Communities

Need Coordination among Stewardship Agencies:

- Tires, batteries, computers, vehicles etc
- Communities small – need one point of contact.

Need Transportation Subsidy:

- CBA has a contingency fund;
- Automotive Recyclers have infrequent funding from Vehicle Scrappage Programs;

Need to engage:

- Aboriginal Affairs, Band Councils, Local Governments;
- Local Recyclers if possible



Next Steps

Two very different types of Stewardship:

- Both products have value at end-of-life
- Manufacturers implementing Product Stewardship of Lead-Acid Batteries;
- Automotive Recyclers developing Industry Stewardship of End-of-Life Vehicles;

Same Positive Outcomes:

- Improved Compliance;
- Environmental Protection;
- Solution for Remote Communities.

How Can You Help the stewardship of LABs and ELVs

- Promote stewardship by CBA and SARA members:
 - Use www.recyclemybatteries.ca;
 - Use www.autorecyclers.ca/province/saskatchewan/

