



Workshop on Sound Management of Used Lead Acid Batteries: An Introduction

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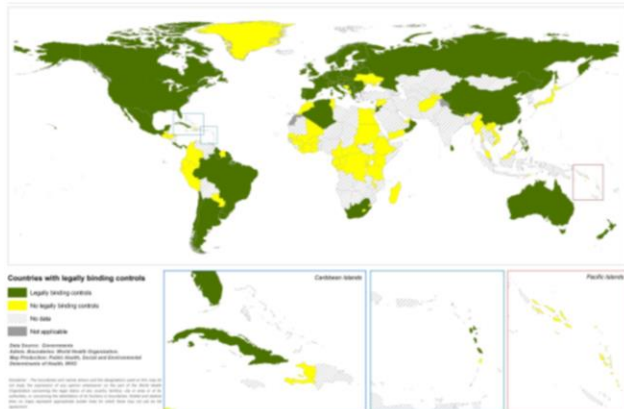
UNEP Lead and Cadmium Programme

UNITED NATIONS
ENVIRONMENT PROGRAMME
Chemicals Branch, DTIE

Final review of scientific information on cadmium

Version of December 2010

- Reviews of Scientific Information on Lead and Cadmium (2010)
- Partnership for Clean Fuels and Vehicles
- Lead Paint Alliance



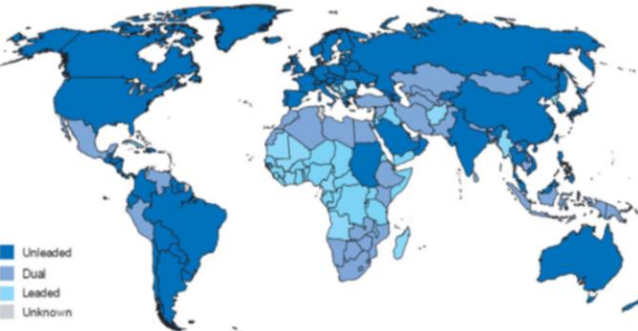
Lead in petrol



Leaded Petrol Phase-Out: Global Status October 2002



Leaded Petrol Phase-out: Global Status April 2014



Compilation on abatement techniques

- UNEP Governing Council in Feb 2013 requested UNEP to compile information on techniques for emissions abatement and on the possibility of replacing lead and cadmium with less hazardous substances or techniques.
- UNEP issued a survey to governments and stakeholders. 22 countries responded, including China, Malaysia and the Philippines (<http://www.unep.org/chemicalsandwaste/LeadCadmium/Publications/DevelopmentofTechniquesforEmissions/tabid/838787/Default.aspx>).
- Report will be available before UNEA 2 in May 2016.

Uses of Lead

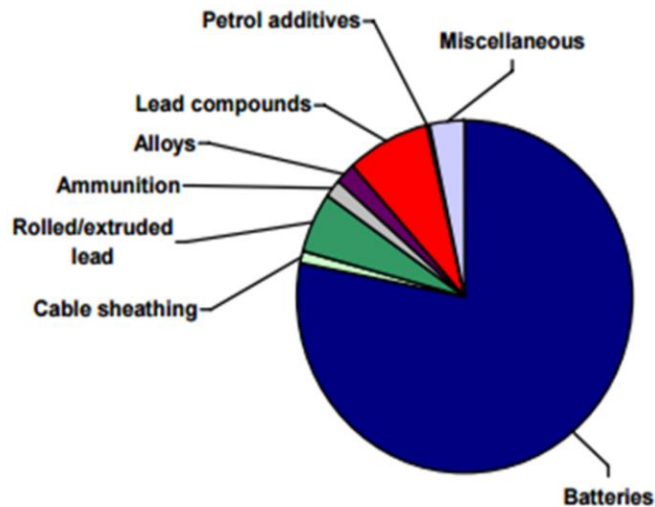


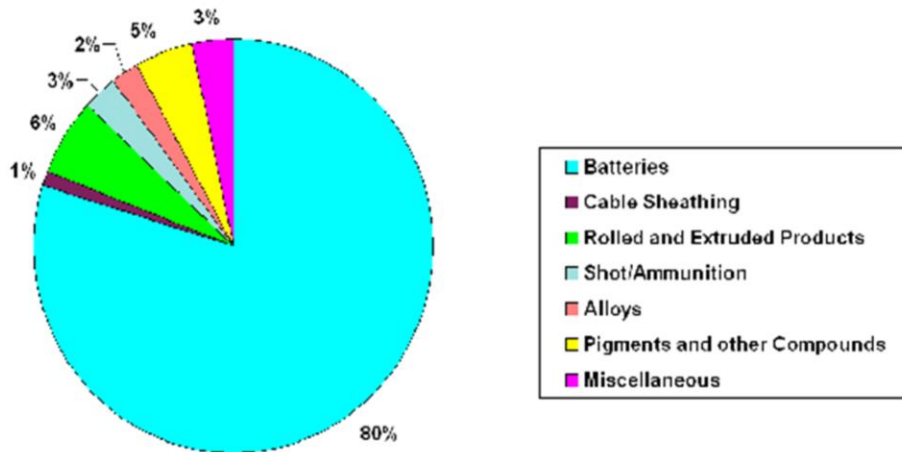
Figure 6

Intentional lead consumption by end-uses in 2003 as reported by member countries of the International Lead and Zinc Study group (ILZSG) representing about 86 percent of the total global consumption of lead. (ILZSG, 2006)



1. The major end-use of lead is lead batteries, accounting for 78 percent of reported global consumption in 2003. Other major application areas are lead compounds other than those used in batteries (8 percent of the total), lead sheets (5 percent), ammunition (2 percent), alloys (2 percent) and cable sheathing (1.2 percent). The most significant change in the overall use pattern during the period 1970 to 2003 is that batteries account for an increasing part of the total, whereas cable sheathing and petrol additives have decreased due to substitution.

Uses of Lead Updated



<http://www.ilzsg.org/static/enduses.aspx?from=1>

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ILZSG was formed by the United Nations in 1959 to:

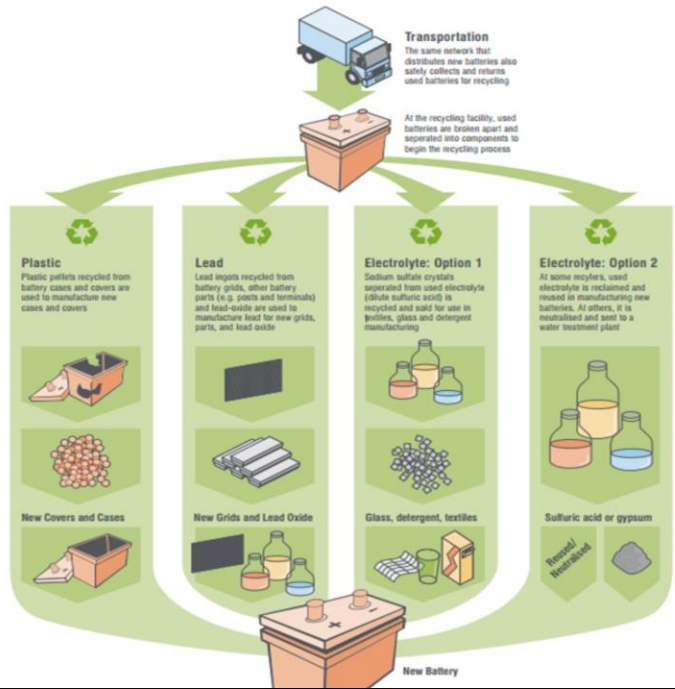
provide opportunities for regular intergovernmental consultations on international trade in lead and zinc,

provide continuous information on the supply and demand position of lead and zinc and its probable development and to make special studies of the world situation in lead and zinc,

consider possible solutions to any problems or difficulties which are unlikely to be resolved in the ordinary development of world trade.

The main role of the ILZSG is to ensure transparency in the markets for lead and zinc worldwide. This is achieved by producing a continuous flow of information to the market place on supply and demand developments in lead and zinc through the monthly publication of high quality statistics and in depth economic studies. We also organise international sessions and special conferences bringing together industry and governments to discuss matters of concern in the lead and zinc sectors.

Used Lead Acid Batteries (ULAB) are recycled...



... but with
severe
environmental
and health
damages.



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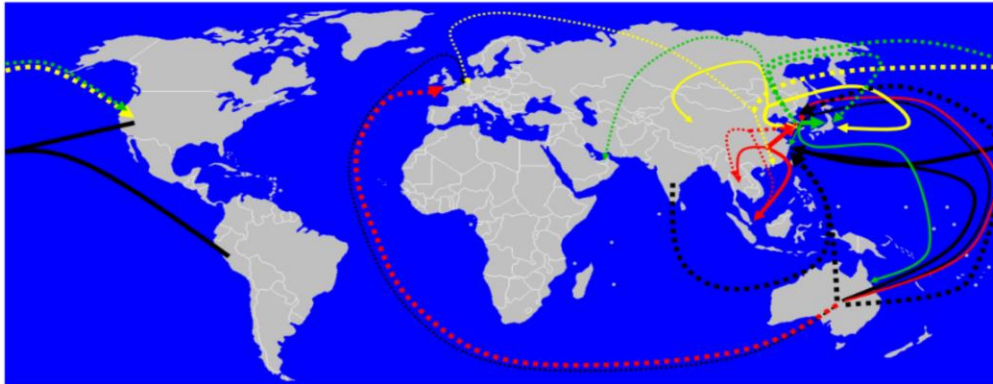
http://www.worstpolluted.org/projects_reports/display/90

1. Regions most Impacted by Lead Population from ULAB Recycling are:
 - South America with 15 polluted sites and 322,800 estimated impacted population
 - South Africa with 10 polluted sites and 287000 estimated impacted population
 - Africa with 8 polluted sites and 154000 estimated impacted population
 - Southeast Asia with 34 polluted sites and 123500 estimated impacted population

Population estimates are preliminary and based on an ongoing global assessment of known polluted sites which are in **BlackSmith** database.

Founded in 1999, **Blacksmith Institute** (also known as [Pure Earth](#) as of March 10,2015) is an international not-for-profit organization dedicated to solving life-threatening pollution in the developing world. Blacksmith identifies and cleans up the world's worst polluted places - over the last decade it has removed toxic pollution from 75 sites in 20 countries, focusing on communities where children are most at risk.

International dimensions



CODE	DESCRIPTION	MT	REPORTER	FLOW	MT	SUPPLIER	MT	EXPORTER	FLOW	MT	DESTINY
HS-05-280710	Lead ore and concentrates	9,137,452	China	←	1,961,991	USA	4,129,240	Australia	→	1,941,182	Republic of Korea
		2,619,861	Republic of Korea	←	1,580,672	Finu		→	1,331,272	China	
		1,294,756	Republic of Korea	←	1,208,944	Australia		→	825,982	Indonesia	
HS-05-7901	Unmelted lead	1,294,756	Republic of Korea	←	1,033,127	Australia	1,420,271	India	→	1,307,640	China
		682,283	Singapore	←	791,034	China	3,717,895	Australia	→	1,185,804	United Kingdom
		740,944	Thailand	←	305,084	Australia	3,625,219	China	→	789,271	Republic of Korea
HS-05-8471	Automatic data processing machines and units thereof (computers)	851,058	China	←	301,095	China	3,657,016	China	→	495,530	Singapore
		556,022	Japan	←	301,070	China		→	330,520	Thailand	
		528,363	Republic of Korea	←	245,193	China		→	1,074,218	USA	
HS-05-850710	Lead-acid electric accumulators (vehicles)	544,844	Japan	←	322,328	China	2,840,106	Republic of Korea	→	545,681	Hong Kong
		329,127	Australia	←	303,892	China		→	823,744	Netherlands	
		102,498	Republic of Korea	←	82,841	China		→	349,010	Japan	
									→	345,854	USA
									→	226,185	United Arab Emirates

Figure 5-1 Trade flows of products containing lead to and from the Asia and Pacific region, 2000 - 2009 period



Workshop on Sound Management of Used Lead Acid Batteries: Goals and Objectives

- The overall goal: to advance international analysis, commitment and action to address the challenges associated with the management and recycling of ULAB.
- Objectives :
 - Review the current situation on the international movement, management and recycling of ULAB, and associated environmental and health risks.
 - Exchange information on the government policies and stakeholder actions to address these risks.
 - Identify potential future UNEP activities towards the environmentally sound management of ULAB.
 - Finalize a draft report on proposed UNEP action to promote sound management of ULAB.

Partners

- **UNEP** contributes through its **Chemicals and Waste Branch (CWB)** and the **Economy and Trade Branch (ETB)** and provides perspectives on the management of environmental and health risks of lead and the international trade of ULAB and their recycling respectively. CWB is contributing through the Geneva-based Technology and Metal Partnership Team (overall coordination) and the **International Environmental Technology Centre (IETC)** based in Osaka.
- **WHO** nominated an expert to address the human health dimension and will author a part of the report.
- **Basel Convention Regional Center for Central America and Mexico** prepares the draft workshop document and finalize a report on ULAB management with the help of experts.
- **Global Environmental Centre Foundation** compiles a report with input from these partners and experts, and makes practical arrangements for the Workshop.

Workshop programme

Session 1: Opening and Introduction

- Objective: *Develop shared understanding of global challenges of ULAB management and recycling*
- Presentations: Trade analysis, health impact, environmentally sound management

Session 2: Challenge in Asian Countries

- Objective: *Provide national perspectives and identify good practices for designing policy*

Session 3: Future UNEP activities on lead batteries

- Objective: *Identify and design possible UNEP activities: what, who, where, when and how*
- Presentations: Certification scheme for ULAB recycling, Case example and low-cost model, Better Environmental Sustainability Targets (BEST) for Lead Battery Manufacturers, ILA assessment scheme, IETC e-waste projects

Session 4: Summary, conclusions and evaluation

- Objective: *Agree on course of action*