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OBJECTIVE OF THE PRESENTATION

Take a tour of the different sections of the report on EPR Schemes in ULAB in the Region, sharing recommendations and lessons learned.

WORK METHODOLOGY

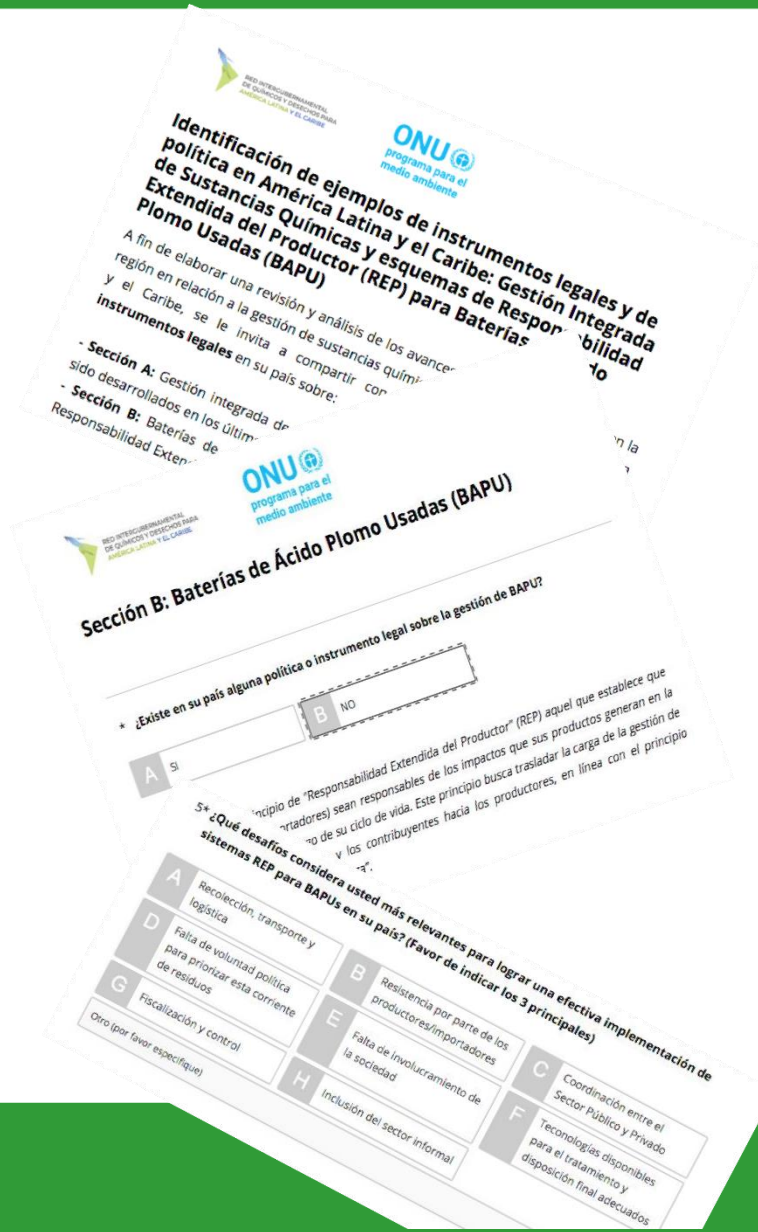
An online form was sent to all countries:

- Current ULAB regulations
- REP schemes in ULAB
- Challenges to achieve Environmentally Sound Management (ERM)

The identification of 7 study countries was carried out, with which bilateral meetings were established:

- Brazil
- Chile
- Colombia
- Costa Rica
- Honduras
- Dominican Republic
- Uruguay
- + 1 treatment company

Review of available literature from sources of international recognition and official information of the region





CONTENT OF THE REPORT

- **History** of ULAB management within the framework of Multilateral Environmental Agreements, international forums and the regional context.
- **Analysis** of the impacts on health and the environment resulting from poor management of ULAB and the need to achieve their rational management.
- An introduction to the REP model is made in broad terms and its application in the region is described. Then, the ULAB management systems in the study countries are analyzed.
- Lessons learned are identified and recommendations identified for the region are elaborated.

Esquemas de responsabilidad extendida del productor (REP) existentes para baterías de plomo-ácido usadas (BAPU) en la región de América Latina y el Caribe

Este Proyecto de Consultoría se enmarca en la Red Intergubernamental de Químicos y Desechos para América Latina y el Caribe, que a su vez se enmarca en el Subprograma de trabajo de Químicos, Desechos y Calidad del Aire del Programa de la ONU para el Medio Ambiente (PNUMA), según Acuerdo UNEP/ROLAC (SSFA/CHM/001-2020).

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BASEL CONVENTION



BACKGROUND

ULAB are classified as **hazardous waste** under the Basel Convention

In 2003, within the framework of the Basel Convention, the "**Technical Guidelines for the environmentally sound management of waste lead accumulators**" were developed, and in 2004 the **Training Manual for the preparation of management plans**.

Lead exposure caused **1.06 million deaths** in 2017, and **24.4 million years of life adjusted** for long-term health effects lost.

In 2017, **UNEP Resolution 3/9** (Elimination of exposure to lead in paint and promotion of the rational management of used lead-acid batteries) is issued, inviting the parties of the CB to consider **updating the Guidelines**, mainly the linked to **new technologies**.

The **Intergovernmental Network on Chemicals and Waste for Latin America and the Caribbean** has included in its Action Plan Promote actions to eliminate exposure to lead.



IMPACTS ON HEALTH AND THE ENVIRONMENT

Health risks from sulfuric acid and lead compounds:

Acute overexposure (once)

Chronic (long-term) overexposure

- **Inhalation:** eg. severe damage to the lungs and the entire respiratory tract, causing coughing and/or shortness of breath
- **Ingestion:** eg. severe irritation in the mouth, throat, esophagus and stomach, abdominal pain, nausea
- **Skin contact, Eye contact:** eg. Irritation, burns.

Risks to the environment:

- Lack of neutralization and safe disposal of battery electrolyte: Acidic effluent seeps into **water, rivers and sanitary systems;**
- Uncontrolled emissions from furnaces cause **atmospheric pollution**
- Furnace waste with high lead content, leaches or is indiscriminately dumped

RATIONAL MANAGEMENT

Basel Convention

Technical Guidelines for Environmentally Sound Management of Waste from Lead Accumulators.

Training Manual for the preparation of environmentally sound management plans for ULAB.

- **The Technical Guidelines for the Environmentally Sound Management of Waste from Lead Acid Accumulators** establishes the aspects to be taken into account in the phases prior to recycling (collection, transport and storage), and during recycling (battery fragmentation, and the reduction and refining of lead).
- **The Training Manual for the preparation of environmentally sound management plans for ULAB** constitutes an operational tool to assist in the implementation of the Guidelines, providing elements for the preparation and implementation of national plans for ESM of ULAB

EXTENDED RESPONSIBILITY

Producers (or importers) are responsible for the impacts that their products generate on health and the environment throughout their life cycle, up to the moment of post-consumption.

156 / 5.000

Return and return system (Take-Back)

Economic Instruments

Regulations and performance standards

Information-based instruments

- **recycling and collection targets** for the product or materials, and through incentives for consumers to return used product to the point of sale
- **Deposit-refund:** an initial payment is made at the time of purchase and is fully or partially refunded when the product is returned
- **Early Disposal Fee (ADF)**
- Minimum content of recycled material in a product
- EPR programs are indirectly supported by raising public awareness.

EXTENDED RESPONSIBILITY

Analysis of REP in BAPUs in the world

European Union (Directive
No. 2006/66/EC)

USA
Law No. 104-142EPA

Japan
Use Promotion Law

Resource Effectiveness

Scope Chosen system

Responsibility of producers/importers

Stakeholder roles: retailers,
consumers, local authorities, collection
and recycling managers

ULAB in the study countries

	ULAB Specific Regulations	National production of new BAP	Importación de BAP nuevas	Import of new BAPs	REP For ULAB	Allows Exp of ULAB	Allows Imp of ULAB	charge specific rate
Brasil	✓	✓	✓	✓	✓	✓	✗	✗
Chile	✓	✓	✓	✓	✓	✗	✓	✗
Colombia	✓	✓	✓	✓	✓	✗	✗	✗
Costa Rica	✓	✗	✓	✓	✓	✗	✓	✗
Honduras	✗	✗	✓	✓	✓	✓	✓	✗
Rep. Dom.	✓	✓	✓	✓	-	✗	✗	✗
Uruguay	✓	✗	✓	✗	✓	✓	✗	✗

LEARNED LESSONS

1. Evaluation and Diagnosis

Factors that will facilitate the achievement of rational management:

- Inventory Vendors
- Sales and collection mechanisms
- recycling processes
- Health and security
- Public education and awareness
- Policy development – Regulations/instruments
- Consolidation of informal activity
- Determine if the national ULAB Recovery program is Environmentally Sound

LEARNED LESSONS

2. Establishment of an adequate ULAB Management scheme

SISTEMAS DE DEVOLUCIÓN Y RETORNO (TAKE-BACK)		
	FORTALEZAS	DEBILIDADES
INTERNAS	<ul style="list-style-type: none"> ✓ Se trata del instrumento de REP más utilizado (72 % a nivel mundial). ✓ Se logran tasas más altas de recolección y reciclaje/renovación. ✓ Los consumidores participan en el sistema, fomentando una cultura y un comportamiento sostenible. ✓ Si hay pocos importadores y productores, se facilita la coordinación entre ellos. ✓ Reduce los costos de gestión de residuos a cargo de gobiernos y/o contribuyentes. 	<ul style="list-style-type: none"> ✓ Requiere la instalación de infraestructura y/o el establecimiento de los mecanismos necesarios para asegurar una gestión adecuada de los desechos. ✓ Disponibilidad de espacio para almacenamiento en tiendas minoristas o puntos de recolección. ✓ Costos altos de monitoreo y vigilancia, se necesita una estructura dedicada. ✓ Necesidad de establecer sanciones en casos de incumplimiento.
EXTERNAS	OPORTUNIDADES	AMENAZAS
	<ul style="list-style-type: none"> ✓ Fomentar la jerarquización de la gestión de residuos. ✓ Facilitar la transición a una economía circular. ✓ Incluir y mejorar las iniciativas de reciclaje existentes. ✓ Generar oportunidades laborales para las partes interesadas, incluidos los recicladores informales. ✓ Formalizar la mano de obra de los recicladores de acuerdo con las normas de seguridad y salud. ✓ Mitigar los peligros para la salud y el medio ambiente derivados de la mala gestión de BAPU. 	<ul style="list-style-type: none"> ✓ Puede implicar el establecimiento de una nueva infraestructura que compita con la existente, especialmente el sector informal. ✓ Resistencia de productores, importadores y minoristas a participar. ✓ El gobierno o el sector privado deben asumir un nuevo papel para poner en marcha el esquema de gestión. ✓ Sector privado versus sector público: dificultad para establecer una división clara de tareas y roles.

LEARNED LESSONS

2. Establishment of an adequate ULAB Management scheme

INSTRUMENTOS ECONÓMICOS Y COMERCIALES		
	FORTALEZAS	DEBILIDADES
INTERNAS	<ul style="list-style-type: none"> ✓ Facilita una adecuada cobertura geográfica tanto en el país como en las ciudades. ✓ Se aplica fácilmente. ✓ En caso de no haber fabricación nacional, se facilita el control de los que no son alcanzados por el sistema y las fugas. 	<ul style="list-style-type: none"> ✓ Si no hay producción local de BAP y los mercados son pequeños en relación con el mercado global, el instrumento económico y comercial recomendable es el ADF. ✓ Alto nivel de resistencia de los productores, importadores y consumidores a los impuestos, oposición al principio de quien contamina paga. ✓ Experiencia de cobros ambientales que no se invierten en propósitos ambientales. ✓ Falta de participación de los consumidores en la gestión de BAPU. ✓ No aborda el problema del sector informal. ✓ Dificultad para evaluar los costos reales de la gestión del ciclo de vida de las BAPU y, por tanto, cobrar en consecuencia.
EXTERNAS	OPORTUNIDADES	AMENAZAS
	<ul style="list-style-type: none"> ✓ Reducir los costos de gestión de residuos a cargo de gobiernos y / o contribuyentes. ✓ Cobrar las tarifas en la aduana, no al por menor, para evitar la falta de cobro si se realizan ventas informales. 	<ul style="list-style-type: none"> ✓ La distribución de la recaudación de impuestos entre el gobierno nacional y los gobiernos subnacionales puede requerir de la participación de diferentes autoridades. ✓ Riesgo de ser considerado una barrera técnica al comercio.

LEARNED LESSONS

3. Policy development – Regulations/instruments

- Clear, precise and easy to understand regulatory frameworks;
- Inclusion of all actors and society in general in the development of regulations, through an informed and participatory process;
- Life cycle approach that considers the generation, recovery and disposal of BAP, and that uses environmentally sound practices and procedures;
- Use the REP approach;
- Assign responsibilities to each actor;
- Establish environmental standards for releases and emissions to the environment, occupational health and safety criteria;
- Progressive minimization of waste through mechanisms to extend the useful life and reuse of ULAB;
- Supervision and control mechanisms;
- Policies of awareness and education in the matter;
- Guarantee access to justice.

LEARNED LESSONS

4. Supervision and control strategies in both the formal and informal sectors

- Database that includes: quantities of BAP produced and imported; commercialized BAP; ULAB collected and recycled; ULAB imported and exported for recycling; informal ULAB recycling;
- Registration of the actors involved throughout the entire chain;
- Regular inspections in all instances of the life cycle;
- Strengthen national capacity to improve the analysis and monitoring of management plans;
- Alliances and agreements with the actors involved to ensure safety and hygiene measures in treatment companies;
- Compliance with the Basel Convention (mainly Environment and Customs sectors);
- Establish an effective sanctions regime.

LEARNED LESSONS

5. Communication and information

- Collaboration of the different sectors involved(public health authorities, environmental authorities and non-governmental organizations, educational entities, manufacturers, exporters, importers and recyclers);
- Define the target audience and segment the message according to the recipient (population living in the vicinity of a foundry, mechanical workshops, importers, the general public, others);
- Accuracy in the message so as not to generate confusion and discourage public participation;
- Constancy in the campaigns;
- Efficiency in communication channels;
- Evaluate the impact and improve its effectiveness;
- Mobile application development

LEARNED LESSONS

6. Occupational Health and Safety procedures

- PPE
- Work practices
- Opening, reducing and refining operations inside closed buildings
- Uncovered areas
- Internal transport slag storage
- air filtration system
- outdoor operations
- Trucks and other means of transportation
- stored carbon
- Rainwater harvesting

LEARNED LESSONS

7. Transboundaries Movements

ULAB have a commercial value: The exporter will not seek the lowest price but the highest benefit.

- Define the import and export policy for PR in general and for ULAB in particular;
- Meet the guiding principles of the Basel Convention and international environmental declarations, such as prevention, minimization, precaution, proximity, among others;
- Carry out analysis of installed capacity for the treatment of ULAB in the region;
- Ensure that the transboundary movement of ULAB is minimized and ensure ESM of ULAB;
- Counter the “Not In My Back Yard” effect (NIMBY), Meet the demand of national treatment companies that need to take advantage of installed capacity;
- Work on the identification of the tariff headings of new and used batteries.



THANK YOU

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