**Argentina WEEE ESM Activities Support for deepening economic integration and sustainable development of MERCOSUR**

**ECONORMAS MERCOSUR - EUROPEAN UNION Project).**

1. **WEEE Management Sector in Argentina**

By 2010 the Cooperation MERCOSUR-EU launched a program called ‘Support for deepening MERCOSUR and implementing the future MERCOSUR-EU Association Agreement; with a EU Community contribution of € 15 m. The financing agreement for the first phase entitled ‘Support for deepening economic integration and sustainable development of MERCOSUR(ECONORMAS MERCOSUR)’ was signed in December 2009 with the objective of stronger integration of MERCOSUR, among other things by deepening its customs union and sustainable development of the region, by promoting practices for sustainable production and consumption, environmental protection and health, and by increasing trade with the aid of convergence of technical regulations and conformity assessment procedures.

The focus of the ECONORMAS MERCOSUR **Project in Argentina was oriented to Small and Medium Sized WEEE Enterprises (SME-WEEE)**. These SME-WEEE are being audited and trained on Best Practices on e-waste Management. By the beginning of August, the results will be launched. More than 12 companies, both private and cooperatives are participating on the Program. A WEEE Best Practices Management Manual is being published soon.

Privately handled Management Systems keep on working and new players are opening new facilities. Business to Business (BtoB) WEEE Management Systems are not mandatory, and only are focused in Information and Technology (IT) scrap. The recovers and recyclers tax the service of WEEE collection and treatment, but don`t payback for that materials recycled. At the end of the day, recovers and recyclers are benefited by not having a WEEE regulations, keeping the benefits of the tax for their services and the benefits of the valuable recycled materials, and having no compromise to recycler what have low value or costs.

Even though the Best Practices on WEEE Management project centralizes in the Buenos Aires Metropolitan Areas State SME, the recycling process, scrap recovery, treatment and disposal will be hired to private companies or cooperatives. This opportunity is creating an incipient market for recyclers and raw material processors and refineries, both national o global companies sourcing in the locally pre-processed WEEE (printed circuit boards and other precious bearing scrap, batteries, CRTs, non ferrous scrap, plastics, etc.).

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| Waste generation | **Year 2010** | **Year 2025** |
| Argentine Population | 40.117.096 | 48.772.000 |
| Municipal solid waste generation per day | 0,91 (kg/person/day) | 1,30 (kg/person/day) |
| **Total MSW per year** | 13.324.893 tons | 23.142.314 tons |
| e-waste generation per year | 8,5 (kg/person/year) | 15 (kg/person/year) |
| **e-waste generation** | 340.995 tons | 731.580 tons |
| % WEEE/MSW | 2,56 % | 3,16 % |

Sources: INDEC, ENGIRSU, EMPA, World Resources Forum y Grupo Ecogestionar

Considering the expected WEEE generation for the next 10 year, Argentina have to develop a stronger, professional, scalable and certified network of WEEE processor to catch the volume to be produce during the next years. New service standards are required to catch the WEEE Reverse Logistic and Handling Procedures from other countries.

The new standards and requirements probably will increase the market price for the treatment of WEEE, from U$ 200 per metric Ton. to a range of U$ 300 to U$ 500 per Metric Ton. (U$ 1 = AR$ 8,10), plus reverse logistic cost. Some recovers and recyclers accept that the Original Equipment Manufacturer (OEM) transports to their facilities their WEEE, some other prefers a “full service”: collection, transport and disposal.

Some companies are evaluating WEEE or reverse logistic software to do the tracking and on-line/real-time reports for their clients, and recover and recyclers started to do on-site IT Asset erasing, redeployment and destruction; guarantying securely shredded in client’s facility and recycling of composite metals and plastics, as well as Legal certificates.

**1.1Take back programs**

Other important trend in the WEEE Management Market in the last months is the launching of at least 50 Municipal Take Back Programs. Cities such as Buenos Aires, Rosario, Córdoba, Tucumán, Tigre, Escobar, Quilmes, Avellaneda Esteban Echeverría, Bahía Blanca, Neuquén, Corrientes, among other started collecting days and Municipal e-waste programs.

In most of the Take Back Program, the local government, as well as the collecting containers finance the cost, areas, workers and commutation programs are financed by the Municipalities. They are motivated by two reasons: a) to avoid dumping e-waste into local dumps and b) for doing publicity among voters. Sometimes, if the collected WEEE is next to a Recycling Facility, these private companies collect them, in agreements that exclude any payment to municipalities.

Most of the scrap collected in Municipal programs is old or broken home/consumer appliances and computer scrap. In Argentina, such as many other Latin American countries, used Equipment are tried to be sold second hand and repaired once and again. So the Municipal collections are very poor for recyclers, due to the luck of printed circuit boards and copper bearing materials.

There is a wrong idea in many Municipalities official: that as metal scrap, the recyclers are willing to pay for the collection of WEEE. So they collect WEEE and intend to sell it to recyclers that bill between U$ 200 to U$ 500 per ton. At the end of the day, many of this Municipal Take Back Programs are abandoned because of the costs they represent to the local governments that mainly want publicity and not a long term and sustainable policy.

**1.2       Players in the WEEE Industry**

* The traditional Metal Scrap Processors, focused in spare parts with precious metals, non-ferrous or ferrous scrap content as well as collection of refused batteries, CRTs (Cathode Ray Tubes), or other dangerous waste bearing wastes. These will be big scrap-yards, middle technology, scrap dealers (buying o taxing the e-waste in function of its recyclability and value) focused in volume and mainly high copper or aluminum WEEE. This includes companies such as Silkers SA ([www.silkers.com.ar](http://www.silkers.com.ar/)), Industrias Dalafer ([www.dalafer.com.ar](http://www.dalafer.com.ar/)), Sertec Gestión Ambiental ([www.sgasa.com.ar](http://www.sgasa.com.ar/)) and Scrap Service ([www.scrapservice.com](http://www.scrapservice.com/));
* The Industrial Waste Facilities, focused in the service to the Electric and Electronic Industry, with full service, from collection, transport and treatment. These facilities might be from middle to large areas, and with the capacity to treat, recover - recycle and dispose in landfill any kind of WEEE. This companies will always bill for their service, guaranteeing traceability, documents and final disposal of want cant be recovered or recycled. In this group we include Gestión Ambiental ACE ([www.gestionambiental.info](http://www.gestionambiental.info/)); Grupo Pelco ([www.pelco.com.ar](http://www.pelco.com.ar/)), Marcos Martini ([www.marcosmartini.com.ar](http://www.marcosmartini.com.ar/)) and Befesa ([www.befesa.com.ar](http://www.befesa.com.ar/));
* The Reverse Logistic or Asset Management Companies focused in Return Material Allowance (RMA), Product Guarantee, Recalls and Take Back Programs. In this group will operate global supply chain or logistic companies with global contract with companies. Here we add: DHL, Fedex, Geodis, UPS, TNT, SMS Inc. and local companies such as Correo Argentino, OCA & Andreani These companies will offer, apart from direct and reverse logistic: maintenance management that covers the maintenance provider, contract entitlement and assignment letter; asset disposition status like decommission dates, erasure documents and recycling certificates.
* And at last, some Cooperatives supported by government Programs. As the State maintains more than 700.000 un-employed people programs, the National Institute of Industrial Technology (INTI) is developing prototype programs to dismantle WEEE generating employee and capacitating services. This will be probably located next to Municipal Solid Waste Disposal Areas, and will receive post consume WEEE collected in the street as well from Government Facilities.

This emerging WEEE industry will start to develop a significant market to collect WEEE from a National scope and will generate recovered o recycled scrap business opportunities. These movements have motivated to Giant Refineries such as Umicore, Xstrata and Aurubis started to send brokers to source from Argentine printed circuit board scrap and other copper bearing materials.

This will generate a business standard, a commercial process and material traceability, when all the WEEE components and materials have a destiny. And at the end of the day, Argentina will have the Value Chain from post-consume collection and dismantling to reselling of metals and plastics. For OEM, this will be an important step forward because competition starts and the suppliers become more efficient, serious and cost effective.

1. **Legal Framework Changes**

**2.1 Province of Buenos Aires**

The crowded Province of Buenos Aires Approved and Passed the Law 14.321/2011 for the Sustainable Management of WEEE, integrate the Provincial Law on Special Wastes (Nº 11720) and Municipal Solid Wastes (Nº 13.592). The Law includes all the WEEE “produced, sold or used in the territory of Buenos Aires Province”.

The definitions and concepts are based in the European WEEE Regulation, but:

* Producers should adopt “free” Collection Programs (for new and historical WEEE) and Tack Back Programs, and then send them to treatment facilities;
* Inform consumers the correct handling and the Producers should receive all their wastes and then pay for their treatment;
* Every Commercial Facility of the Producers or their Resellers with more than 500 square meters should have a Take Back Area to receive WEEE.
* Producers should ban the use of Lead, Mercury, Cadmium, Hexavalent Chrome and polibrominated (PBDE) substances.
* Producers should design their products to ease the reuse, dismantling and repairing
* Producers should inform to recyclers, six month after each equipment is launched to the Argentine market, the procedures to dismantle and recycle the WEEE, and communicate where the dangerous substances are located.
* The targets of this law are: a minimum of 40 % to 65 % of the WEEE (considering big appliances, IT, tools, etc.) weight should be recycled or reused;
* The province of Buenos Aires will have a Register where Producers and Distributors should inform a) Life Cycles Studies of the equipments sold in the Province; b) contaminant characteristics of the constituents or pieces of the WEEE; c) dismantling and valorization procedures; and d) reuse and recycling feasibility.
* Financing the WEEE Management: all the articles of the Law where  observed in the enacting Decree Law Nº 2300/11.

**2.2       City of Buenos Aires**

The City of Buenos Aires have focused in the Battery Management Programs under the Resolution Nº 262/GCBA/APRA/08 that request for all the IT Producers to have at least 10 take back points in the City, that can be shared by  different OEMs. The City government approved a Guide with the Minimum contents of the Take Back Programs. The program has been working since then and some containers are being exported to SNAM, in France, and Umicore, in Belgium, to final recycling and metal recovery.

**2.3       National and Province WEEE Law Projects on course**

This summary presents a view of the amount of Projects related to e-waste management regulations.

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| **District** | **Chamber** | **Project** | **Author** | **Bill Number** | **Situation** | **Comments** |
| **National** | Senate | Nation WEEE Management Law | Daniel Filmus (Frente para la Victoria-Government) | 934-S-2010 | Approved by the Senate 04/05/2011. Lost Parliament State by December 2013, but the spirit and ideas were taken by other similar Bills | Even though approved by 98 % of the Senate, in the Deputies Chamber was frozen. |
| National WEEE & Spent Batteries Management Law | Alfredo Martínez (Radical Party, Santa Cruz) | 675-S-2011 | Follower of Filmus ideas (strong State presence, Extended Producer Responsibility and Producer Financing by eco-taxes | **-** |
|  | María Eugenia Estenssoro (UNEN-Radical Party) | 874-S-2011 | More Liberal e-Waste Regulation, with the Recyclers and Industry as Managers of the System. Sent to Industry, Environment and Legal Senate Commissions | **-** |
| National WEEE & Spent Batteries Management Law | María José Bongiorno (Frente para la Victoria- Government) | 613-S-2011 | Sent to Industry, Environment and Legal Senate Commissions. NO new movements | **-** |
| Deputies Chamber | National WEEE & Spent Batteries Management Law. | Alicia Ciciliani (Socialist Party, Santa Fe) | 1433-D-12 | Socialist vision of the environment management, with strong control and sanctions. Sent to Industry, Environment, Penal Regulations and Budget Commissions. NO new movements | Was in a Day Order, but didn’t got the support to be voted |
| Regulatory framework for e-waste processors and promotion of the Recycling Industry | Alicia Comelli (MPN, Neuquén) | 46-D-2011 | Waste Operators, Processors and e-waste Recycling Industry Regulations. Sent to Natural Resources and Industry Commissions | Was in a Day Order, but didn’t got the support to be voted |
| National WEEE & Spent Batteries Management Law. | Virginia Linares (UNEN, Radical Party.) | 4845-D-2012 | Sent to Industry, Environment and Legal Deputies Commissions. NO new movements | Was in a Day Order, but didn’t got the support to be voted |
| National WEEE & Spent Batteries Management Law.. | CICILIANI, ALICIA MABEL -VILLATA, GRACIELA SUSANA - AGUILAR, LINO WALTER -TROIANO, GABRIELA ALEJANDRA – ZABALZA et al. | **2048-D-2014** | Sent to Industry, Environment and Legal Deputies Commissions | Was in a Day Order, but didn’t got the support to be voted |
| **Buenos Aires Province** | Senate from the Province | National Spent Batteries Management Law. | Daniel Expósito (MC) | E-98 /11-12 | Sent to Industry, Environment and Legal Deputies Commissions | Is in study by the Congress, but didn’t got the support to be voted. |
| Regulation on Selective Collection of Spent Batteries Law. | María Isabel Gainza (CC) | E-63 /11-12 | Sent to Industry, Environment and Legal Senate Commissions. NO new movements | On Commissions Studies. |
| Province WEEE and Spent Batteries Management Law. | Orlando Costa (UCR-opposition) y Alberto De Fazio (FPV-Goverment) | E-199 / 12-13 | On debate in Commissions | 26/03/2013 |
| Deputies | Spent Batteries Environmental Impact Management Law. | Jorge Mancini (Frente para la Victoria- Goverment) | D-366 / 11-12 | On debate in Commissions | Not approved |
| End of life disposal of WEEE and Batteries | Jorge Mancini ((Frente para la Victoria- Goverment) | D-367 /11-12 | On debate in Commissions | Not approved March 7th,  2013. |
| **Córdoba Province** | Unicameral | Province WEEE Management and Final Disposal Law | Nadia Vanesa Fernández (UPC) | 9905/2012 | On debate |  |
| **Chaco Province** | Unicameral | Province WEEE Management and Final Disposal Law | Clelia Mirtha Avila (Alianza Frente de Todos) | 1828/2010 | On debate |  |
| **Jujuy Province** | Unicameral | e-waste Recycling Program Bill | Miguel Ángel Morales (Bloque Unipersonal) | Bill 91/13 | On Commissions | Second presentation |
| **Salta Province** | Deputies | WEEE Province Management Bill | Dip. Pedro Sandez (PJ) | 91-29530/12 | On Commissions | On debate |
| **Santa Fe Province** | Senate | e-waste Recycling Program Bill | José Baucerop (PJ) | Dip. 25615 | Approved by the Province Senate. Sent to Deputies Chamber | On debate on Deputies Chamber |

1. **Legal Framework Changes**

The Best Practices to be adopted by WEEE recovers and recyclers to obtain raw materials (ferrous and non ferrous scrap, plastics, glasses, printed circuit boards and special metals form CRT, batteries and other spare parts) are:

* Best practices and cost reduction on the supply chain management of the reverse logistics costs, being more efficient and productive in the collections and transport of the used appliances or WEEE scrap;
* Minimization of energy usage along all the management procedures;
* Promotion of environmental consciousness among consumers, generators or public companies to improve in-house/office/plant WEEE pre-classification and handling to improve transport and recycling;
* Minimization of waste generated during recycling and recovering;
* Best practices in Positive Material Identification (PMI), adopting some new technologies such as on field metal or plastics determinations using hand spectrophotometers or other PMI equipment or better training of the employees;
* Human Resources training for best practices during the management of dangerous chemical substances present in the WEEE;
* Reduction in the burden on the atmosphere/water/soil; yearly monitoring of soils and water;
* Renewal of the Environmental Permits and Mandatory Environmental Insurance;
* Maintenance of harmony with nature and with the community
* Disclosure and communication of the companies environmental performance externally through independently assessed annual environmental reports
* Rearranging the current product-oriented scope towards a treatment category-oriented scope. This way of target setting can be made for collection amounts (on percentage basis, not in kilograms, to account also for large differences between consumers, Municipalities or BtoB generators).
* Increasing stakeholder awareness of specific responsibilities especially in SME’s;
* Reducing illegal waste dumps or illegal waste dumps.