

Submission: Battery Champion





Batteries for Recycling at KMK

With **39 years' experience** in the recycling business, KMK Metals Recycling Ltd. (KMK) have grown and developed to become Ireland's **industry leader** in metal, waste electrical & electronic equipment (WEEE) and battery/ accumulator recycling and recovery.

Established in 1979, KMK initially began with the recycling of precious metals and electronic scrap. In 1985, KMK received approval for operations at their **EPA-licensed and fully compliant** end-of-life facility in Tullamore,

HEALTH

OH5A5 18001:2007

NSAI Certified

ENVIRONMENT

ISO 14001:2015

NSAI Certified

Co. Offaly. Employing six people at first, the company now provides employment for approximately **96 individuals** from the local area and provides consistent work for many more local sub-contractors.

KMK have been certified by NSAI since 2001 and possess the Environmental **ISO 14001**, Quality **ISO 9001** and Health & Safety **OHSAS 18001** standards under a **continuously audited** and efficient integrated management system. KMK are **fully permitted** by the NWCPO as part of their nationwide collection service and all exported materials are **securely traceable and**

all exported materials are **securely traceable and compliant** with records maintained as per the requirements of the NTFSO.

In 2014, KMK were the very **first** Irish facility to acquire **WEEELABEX accreditation** for their innovative processes, leading the way not only here in Ireland but in Europe also. KMK are the compliance scheme WEEE Ireland's **principal** battery collection and sorting contractor, recycling a colossal 1,100 tonnes at the facility in 2017 alone.

OUALITY

150 9001:2015

NSAI Certified

Showing Initiative

Since 2014, as part of the EU waste recycling, recovery and diversion targets, a mandatory target of **45%** of all portable batteries placed on the market were to be collected for recycling. The **free battery collection and recycling service** offered by WEEE Ireland, in partnership with KMK, established itself well ahead of the game.

True pioneers of battery recycling in Ireland, KMK and WEEE Ireland developed and implemented a hugely successful **nationwide** collection programme **(WEEE Pledge)** while raising **public awareness** about the importance of battery recycling. Awareness of this campaign has been raised with the public via **advertising campaigns online** via Facebook, Twitter, the KMK website and the WEEE Ireland website. KMK have also assisted the public as part of



Weee

TidyTowns. WEEE Ireland's partnership with the **LauraLynn Children's Hospice** was further incentive to get the country recycling.

KMK also arrange free WEEE / battery collections or '**Open Days**' advertised and held in WEEE Ireland operated counties. These 'Open Days' allow KMK to meet with the public, **educate** them on the importance of WEEE and battery recycling and contribute to the achievement of Ireland's targets.

KMK developed the **only semi-automated battery sorting plant** of its kind in Ireland to deal with the different types/ chemistries of batteries as a vital part of the recycling process. The **purpose-built** plants development meant one less aspect of this specialist service needed to be shipped abroad.





All types of batteries are collected through KMK's battery recycling services including:

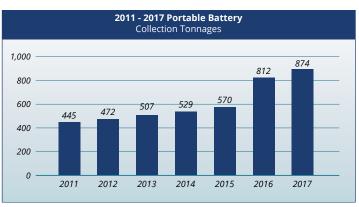
- Alkaline/Zinc Carbon
- Nickel Metal Hydride (Ni-MH)
- Nickel Cadmium (Ni-Cd)
- Lithium/Lithium lon (Li-ion)
- Button Cells
- 🛛 6 Volt
- Lead

The **end destination** for the sorted batteries are **dedicated recycling facilities** in the UK and Germany. These end destination facilities are managed to the **highest compliance standards**. All paperwork in relation to KMK's exports are fully traceable and in compliance with KMK's **Broker/Dealer Licence**, provided by the NTFSO.

Increased Recycling Volumes

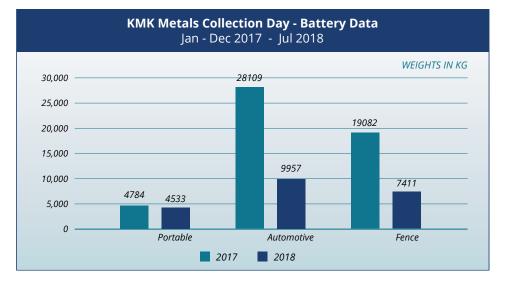
In 2017 KMK and WEEE Ireland assisted in achieving Ireland a 46% waste portable battery collection rate, **surpassing** the EU target of 45%. Ireland now sets the **gold standard** in WEEE recycling for best performing small country in Europe.

In 2017, KMK's recovery rate for portable / household batteries was **64%** and **86%** for lead acid batteries. With a **'no waste to landfill'** policy in place, KMK has prevented collected WEEE and batteries ever reaching landfill sites with any waste generated going for **sustainable treatment** in waste to energy facilities in Ireland. This has helped to significantly offset Ireland's national **carbon footprint**.



KMK is the proud owner of a **newly-permitted** daughter facility in Kilbeggan, Co. Westmeath, which is currently undergoing the necessary steps to achieve **EPA IED licence** status. The company intends to increase operations at this facility to include the collection and recycling of **electric vehicle batteries**, which will further increase recycling volumes and rates. Specialist battery boxes will be used in this process with KMK's **trained electricians** dealing with the first response aspects of high voltage situations, particularly in the case of damaged EV batteries.

In their role as host for **nationwide Collection Days**, KMK have interacted with the general public to bring awareness to the importance of recycling all types of batteries. **Portable battery recycling**, which is widely promoted in schools to assist in raising funds for LauraLynn has shown to be very successful and KMK are optimistic that **2018 shall deliver a hugely increased volume**.



KMK: Battery Champion Submission



All-Round Involvement

KMK has an **experienced and dedicated team** that work with a **wide range of stakeholders and business partners**.

KMK personnel who work on the battery sorting line have received training from battery recycling giants **Van Peperzeel B.V.** in the Netherlands, to efficiently identify and sort the individual batteries brought to the facility from organised collections as well as those generated by KMK's processes by type and by chemistry. **Battery quality checks** are conducted for all alkaline/zinc carbon battery exports with an incredible **99.8%** battery conformance rate in 2017.





On behalf of WEEE Ireland, KMK employ an **expert team of battery collection agents** who collect from retail outlets, participating businesses and schools. These agents, like the operators of the battery sorting plant, have received the highest level of training in all aspects of battery handling and management.

KMK have worked with commercial partners **Greenstar/Starrus**, **Rehab Enterprises**, **Wisetek**, **ICT**, **AES**, **Recycle IT**, **Clean Ireland**, **Indaver**, **Veolia** and **Thornton's Recycling** to recycle **120 tonnes** of batteries throughout 2017.

Different battery types and chemistries take **bespoke export packaging** which KMK manages in line with legislation and outlet expectations. KMK Metals Recycling have a **DGSA** and veteran **ADR-trained drivers** on-site to ensure no legislative rock is left unturned.

KMK's **authorised and dedicated outlets** process fractions and components after pre-treatment at KMK in accordance with the **waste management hierarchy** and **sound environmental and ethical practices**. KMK has close relations with all outlet facilities including **Redux GmbH** and **Accurec Recycling GmbH** which has benefited all in sharing industry expertise and best available techniques (**BAT**) in battery recycling and transportation.



KMK's **Compliance Department** are highly involved in the process of recycling batteries, ensuring **continual health & safety**, **quality and environmental improvements** are made in conjunction with regular auditing. **Detailed procedures and records** are in place for the whole cycle of battery recycling to, at and from the facility.

Management before Collection

Customers can be assured of **compliant treatment** of their materials. KMK offer a fully licensed specialised collection service across the **32 counties** using KMK's van fleet and carefully selected transport contractors for the provision of trucks and skips. KMK provide a range of **collection services** for waste portable batteries (household batteries) at retailers, Civic Amenities Sites, schools, businesses, and special events throughout the Republic of Ireland.

Battery collections are carried out as follows:

- Every 3 months for retailers and Civic Amenity Sites;
- On request, when >10 boxes or >50 kg in weight has accumulated, or;
- When a smaller quantity has been requested for collection and a collection agent is in the area.

Batteries are collected in suitable containers (Battery Boxes, Drums or Bins) as provided by WEEE Ireland. Customers are provided with **like-for-like replacement receptacles** at time of collection. All batteries are collected in **UN-approved** battery boxes or batteries drums.



Collections are arranged over the **phone or via e-mail** with KMK's practiced commercial team. Along with the arranged Open Days for public recycling, KMK offer **tailored collection services** including:

- **'Desk-side'** Materials are collected from designated locations in the customers building. The only requirement is that the material is disconnected.
- **'Pallet service'** Pallets of material, wrapped and readily accessible are collected singularly or in any quantity.
- 'Drop & collect' Arrangements can be agreed to provide a service which involves an initial delivery of empty receptacles, allowing customer to manage a clear out or staff collection with subsequent collection.
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- **'Next day'** Typically collections are arranged on demand and facilitated within 5 working days but next day or same day collections are possible.

KMK has **100% traceability** of all materials once received. KMK's **new recording system** 'CURTIS' has improved the recording of all waste movements. **Recycling Certificates** are issued upon receipt of all material.

Service to the Community

To date, KMK Metals Recycling Ltd. has been a **significant employer** of the local area of Co. Offaly and subcontract work from a variety of local businesses.

The Open Day service KMK provides to the public have been received with **great positivity** from the public. Recent **Customer Satisfaction Surveys** at the Open Day events have shown that the public appreciate having this service for the recycling of their old WEEE and batteries and would return for the same service the following year.

KMK **sponsor** a number of **charity and local events** each year as part of a programme of public information. Charity and local events sponsored / fundraised by KMK recently include:

- Barretstown Helping Hands Day 2016
- At the time we scrapped the E-Voting machines, KMK donated €10,000 to Barretstown.
- Cappincur GAA Club Sponsorship
- Christmas Jumper Day 2017 LauraLynn
- Christmas Lights Charity Appeal in aid of Tullamore Town's Festive Street Lighting
- Concern's Worldwide Annual Fast 2017
- Daffodil Day 2017 Irish Cancer Society
- Drogheda Fashion Show 2017
- GOAL Jersey Day 2017
- Goal Duvet Day 2017
- Junk Kouture 2016
- Pink Lunch Irish Cancer Society 2016
- Rotary Club Meals on Wheels 2017
- Tullamore Lions Club Sponsorship
- Tullamore Tractor Run 2017 in Aid of Dóchas OffalyCancer Support Group

874 tonnes (43 million AA batteries) of portable waste batteries collected by KMK and WEEE Ireland in 2017 brings donations to the charity LauraLynn Children's Hospice up to €335,000 since 2011.

All events help to **raise the public's awareness** of the services provided by KMK and assist in increasing recycling nationwide.



