

EGYPT - SAUDI ARABIA



INNOVATING A CLEANER TOMORROW

COMPANY PROFILE
2025

Egyptian Company for Integrated Waste Management "ECWM"



Our goal is to develop reliable waste treatment solutions based on waste quality and quantity

ECWM is specialized in the construction and operation of municipal solid waste treatment and disposal facilities, as well as the manufacturing of waste treatment and recycling systems. ECWM's presence in the waste management sector represents a long-term strategic commitment. Our goal is to develop reliable waste treatment solutions based on waste quality and quantity, leveraging advanced technologies and skilled human resources to meet market needs and promote our solutions and products across the Middle East and Africa.

ECWM continues to grow and aims to maintain sustained growth by expanding into new sectors. The company has partnered with leading German and Austrian companies to develop waste treatment models tailored to waste quantity and composition. We intend to expand geographically into dynamic markets, exchanging expertise and strengthening regional and international collaboration.

We maintain a high standard of service in the construction and operation of waste treatment, recycling, and disposal facilities, and we continuously enhance our practices to deliver innovative, environmentally sustainable, and reliable solid waste management systems in Egypt and the Middle East.

Eng. Ahmed Abd Allah Hassan
Chairman, Egypt



The Kingdom of Saudi Arabia is one of the fastest-growing countries in the world, and this growth is accompanied by a significant increase in waste generation. In 2020, the Kingdom generated more than 29 million tons of municipal solid waste, a figure that is expected to increase by approximately 50% by 2030. This growing volume of waste is not only a burden on landfills, but also poses a serious threat to the environment and jeopardizes the achievement of the Sustainable Development Goals.

As Vision 2030 positions the Kingdom as a leading global hub for tourism and business, this ambition cannot be fully realized without effective and sustainable waste management solutions. Drawing on our extensive experience in the waste management sector, we are strongly committed to delivering reliable and environmentally sustainable solutions that support the Kingdom's development objectives.

ECWM has developed integrated waste treatment and recycling systems tailored to waste quality and composition in order to achieve high diversion rates. We co-manufacture treatment and recycling systems and spare parts, supported by an experienced operation and maintenance team. In terms of disposal, ECWM has in-house capabilities to design, build, operate, and close municipal solid waste landfills in accordance with the highest environmental protection standards.

I am confident that ECWM-KSA will add significant value to the waste management sector in the Kingdom. With our skilled team, technical expertise, and strong commitment, we are well positioned to make a meaningful contribution to the national economy and the sustainable development of our country.

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Abdullah bin Saleh Alromayyan
Chairman, KSA

ABOUT US

Egyptian Company for Integrated Waste Management “ECWM”

ECWM is an international environmental services company specialized in the construction and operation of municipal solid waste treatment and disposal facilities, as well as the manufacturing of waste treatment and recycling systems.

ECWM is confident in delivering practical and reliable solid waste management systems.

In alliance with its sister company, EnTrans Consulting, ECWM offers a comprehensive range of technology-related services, covering conceptual design, planning, production, assembly supervision, and component servicing.

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OUR MISSION

To deliver tailored waste treatment and recycling solutions that protect the environment and promote recycling, ensuring safe and healthy communities for current and future generations.

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OUR VISION

To be a leader in the development and implementation of innovative, environmentally sustainable, and reliable solid waste management systems in Egypt and the Middle East.

ECWM not only delivers high- quality treatment facilities, but also provides comprehensive, end-to-end services tailored to the needs of municipalities and clients, supported by project-specific business plans.

ECWM offers a complete package for MSW treatment and disposal, encompassing design, construction, manufacturing, operation, and maintenance services. For each project, ECWM develops customized solutions based on waste quantity and characterization to ensure optimal performance and sustainability.



Treatment

ECWM employs a four-step process (sorting, separation, shredding and composting) that maximizes material recovery while producing high-quality finished compost, Refuse Derived Fuel (RDF), and recyclables that meet industry requirements.

We are motivated to design and deliver innovative, high-performance machinery and to evaluate alternative solutions in close collaboration with our clients. Whatever the project objectives, we provide the most suitable and effective solution to meet your needs.

OUR SERVICES

*We design,
build,
manufacture,
operate and
maintain*

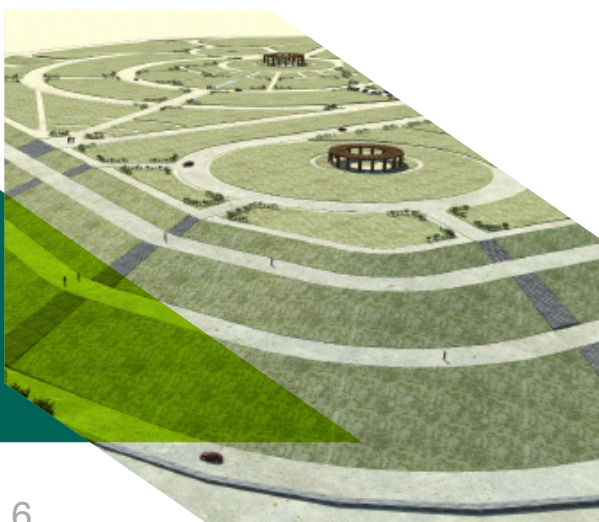
Landfills

In collaboration with its sister company, EnTrans Consulting, ECWM has extensive experience in the design, construction, operation, and closure of municipal solid waste landfills. This scope includes site characterization, planning, detailed design, construction and required supervision, and landfill closure with provisions for future land use.

All landfills are designed, constructed, and operated in accordance with the highest environmental protection standards, including engineered lining systems, leachate collection and treatment systems, and biogas collection systems.



During Construction



After Closure

Design & Manufacturing

In cooperation with Westeria and Untha, ECWM designs, manufactures, and builds waste treatment facilities and RDF feeding systems for the cement industry. Each waste treatment system is tailored to the specific quantity and quality of waste.

This cooperation also includes a regional spare part warehouse and a dedicated regional technical support team, providing a comprehensive, end-to-end solution for municipalities, operators, and the cement industry.

ECWM provides “integrated” advice, solutions, products and services to meet a wide range of waste processing requirements across Egypt and the region. We design, manufacture and build waste treatment and recycling plants.

Our manufacturing approach includes:

Planning and Design: Defining the product concept, and preparing detailed design and shop drawings through the mechanical design unit of EnTrans Consulting. This process includes:

Technical Analysis and Finite Element Analysis (FEA), to ensure that designs incorporate optimized performance, durability, and safety for every system component. By simulating real-world operating conditions and stresses, the design achieves maximum efficiency, minimum material fatigue, and prevention of potential failures before deployment. This commitment to data-driven design ensures that our material handling systems are robust, reliable, and precisely tailored to the demanding conditions of waste treatment and recycling operations.

Our engineers focus on how various mechanical components interact with each other and their environment. The primary objective of the mechanical design process is to produce the most efficient, reliable, and cost-effective **mechanical systems**.

www.entransconsulting.ca

Whether developing a completely new product or system, or optimizing and upgrading the performance of existing production assets, our team possesses the expertise to successfully deliver the project.



Selection of Raw material: Identifying and procuring the most suitable selection of raw materials for each product, based on required quality, performance, and reliability.

Manufacturing and Production: Converting raw materials into finished components through a range of processes, including cutting, forming, and machining.

Assembly: Assembling individual parts and components to produce the final product in accordance with design specifications.

Quality control: Inspecting finished products to ensure full compliance with applicable specifications, standards, and quality requirements.

Our services

- Production lines manufacturing, modification and upgrading
- Contract manufacturing
- Metalworking
- CNC laser cutting
- Conventional lathing
- CNC milling
- Spare parts manufacturing

We use the latest equipment and modern manufacturing technologies in our factory to deliver high-precision and reliable products.

CNC Laser Machine: In the rapidly evolving field of metal processing, laser cutting machines stand out for their precision, versatility, and efficiency. They are used for cutting, engraving, and drilling a wide range of materials with a high degree of accuracy.

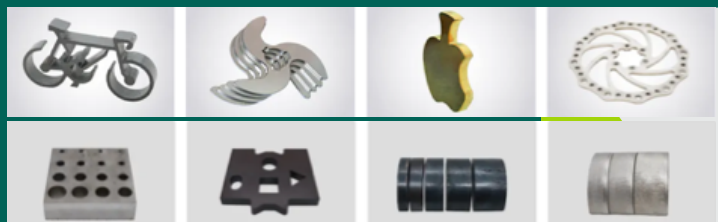
Sheet metal rolling machines are used to shape metal sheets by bending or rolling them into circular, conical, or other specified cross-sectional forms. These machines are across a wide range of industrial applications, including waste recycling and treatment solutions (such

as trommel rings and internal screens), the construction sector for producing structural sections (beams, angles, and columns), and pipe manufacturing for the production of welded and seamless pipes.

Bending machines are used to bend and shape sheet metal to achieve specific angles and geometries. They are essential tools in industries that rely on precise metal forming.

A corner bending machine, also known as an **angle rolling** or metal section bending machine, is used to bend and shape metal sections such as angles, pipes, and rectangular or square profiles into circular or curved forms. This equipment is widely used in industries requiring accurate forming of curved metal sections.

The lathe, also known as a **turning machine**, is one of the most important metalworking tools for producing precise and consistent components such as shafts, screws, and discs.



PDM Services

Condition Monitoring technologies and Predictive Maintenance (PDM) consultancy enable us to provide support to organizations that seek to transition from a reactive and planned strategies to a predictive and proactive maintenance approaches. This transition minimizes machinery downtime and enhances reliable and continuous operations.

These services include:

- Condition monitoring
- Machinery fault diagnosis
- Vibration measurements and analysis
- Precision Alignment
- Thermography
- Training

These services are provided through the sister company, EnTrans Consulting.

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IT Services

Our IT services include a range of solutions designed to enhance security, safety and operational efficiency.

These services include:

Networks:

Reliable and secure network infrastructure connecting offices, warehouses, and factories, featuring high-performance wired & wireless coverage, centralized monitoring, smart alerts, and internet redundancy to reduce downtime.

Specialized Thermal Cameras:

Thermal imaging solutions for early detection of abnormal heat and potential fires in critical equipment and sites.

Smart alarms, recorded images and reports help prevent incidents, support preventive maintenance, and integration with the control room.

Scale Program (Truck Weighbridge System):

End-to-end truck weight management from entry to exit, providing accurate weighbridge readings and standardized ticketing.

The system integrates with financial platforms and supports license plate recognition, detailed user access permissions, and complete movement history to prevent tampering and ensure full traceability

These services are provided through the sister company, EnTrans Consulting.

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OUR PRODUCTS

In many parts of the world, municipal solid waste is primarily disposed of through landfilling, and to a lesser extent, incineration. However, increasing attention is being given to alternative waste management approaches, such as source separation into organic and inorganic fractions. The organic fraction is treated through composting or anaerobic digestion, with associated biogas production, while Refuse Derived Fuel (RDF) is extracted from the inorganic fraction. Other treatment technologies include pyrolysis and gasification.

ECWM processes between 700,000 and 850,000 tons of organic waste annually using an open windrow composting system. Composting diverts organic waste from landfills, thereby reducing biogas emissions.

Compost

ECWM compost enhances soil fertility by supplying essential nutrients such as nitrogen (N), phosphorus (P), and potassium (K), thereby reducing the need for chemical fertilizers. ECWM compost also improves plant health, as it is free from weed seeds, nematodes, and pathogenic microorganisms.

In addition, the incorporation of compost into soil increases soil organic matter (SOM), resulting in several positive effects, including improved soil structure, increased water-holding capacity and infiltration, enhanced workability, and reduced soil erosion.



Refuse Derived Fuel (RDF)

Refuse Derived Fuel (RDF) has increasingly been recognized as an alternative renewable energy source. The production of RDF from waste significantly increases diversion from landfills and is expected to play a transformative role in the renewable energy sector in Egypt.

ECWM produces high-quality RDF that is commonly used as a fuel substitute—primarily for coal—in the cement industry, contributing to a reduction in CO₂ emissions. Continuous efforts are dedicated to researching innovative technologies and enhancing existing processes to further improve fuel quality. In general, ECWM adopts a multi-stage processing approach to produce RDF that meets the stringent technical requirements of the cement industry.

OUR FACILITIES

Practical, economically feasible and proven solutions for waste treatment and recycling with maximum diversion

ECWM manages the treatment and disposal of MSW collected from Cairo Governorate. Over the past five years, ECWM facilities have received and managed more than 10 million tons of waste from the four service zones—Northern, Southern, Eastern, and Western Cairo.

In May 2020, ECWM commenced operations at the 15th of May and El-Salam–Obour facilities. Prior to operation, both facilities were upgraded with the required infrastructure, including civil and electrical works, and were equipped with new treatment and recycling lines, each with a capacity of 4,000 tons per day, in addition to the construction of engineered landfill cells. All sites are equipped with surveillance camera systems and control rooms to monitor operations.

In April 2025, ECWM completed the construction of its new MSW treatment and recycling facility and engineered landfill at the Waste Treatment and Disposal Complex in 10th of Ramadan City. Operations at the new site are expected to commence in May 2026, serving the Eastern and Northern Zones of the Cairo Governorate. The facility was developed over an area of 210,000 square meters and has a treatment and recycling capacity of 7,000 tons per day, making it the largest MSW treatment and recycling facility in the Middle East.

15th of May

Location: 15th of May City.

Service Zones: Serving the Southern and Western Zones of the Cairo Governorate, where all collected waste is treated and the final reject is disposed of at a sanitary landfill.

Team: Approximately 220 employees providing 24/7 operation coverage.

Capacity and Operations: Between February 2020 and October 2021, the facility received and treated approximately 4,000 tons of waste per day to produce compost and RDF. All collected waste is processed, with the final reject (waste residue) transported and disposed of at the sanitary landfill.

The facility is equipped with complete treatment lines, including sorting, screening, shredding, air separation, and biological treatment processes. The associated landfill is a fully engineered sanitary landfill, incorporating a lining system, leachate collection and treatment system, and gas collection system.





El Salam - Obour

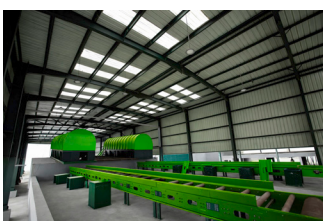
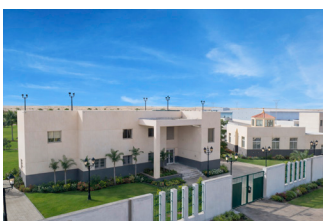
Location: Temporary MSW treatment and recycling facility in El Salam City, with the associated landfill located in Obour City.

Service Zone: Serving the Eastern and Northern Zones of the Cairo Governorate, where all collected waste is treated and the final reject is disposed of at the landfill.

Team: Over 300 employees providing 24/7 operational coverage.

Capacity and Operations: Approximately 4,000 tons of waste per day are received and treated at the temporary facility to produce compost and Refuse Derived Fuel (RDF). All collected waste is processed, and the final reject (waste residue) is transported and disposed of at the landfill.

The facility is equipped with complete treatment lines, including sorting, screening, shredding, air separation, and biological treatment processes.



10th of Ramadan

Location: Waste Management Complex, 10th of Ramadan City - Cairo

Footprint: Treatment and Recycling Facility: 210,000 sqm; Engineered Landfill: 252,000 sqm.

Service Zone: Northern and eastern regions of Cairo Governorate.

Team: Approximately 400 workers providing 24/7 operational services.

Capacity and Operations: The site includes a treatment and recycling facility and an engineered landfill with a combined treatment and recycling capacity of 7,000 tons per day, making it the largest MSW treatment and recycling facility in the Middle East.

The facility is equipped with complete treatment lines, including sorting, screening, shredding, air separation, and biological treatment processes to recover recyclables and produce compost and RDF. The associated landfill is a fully engineered sanitary landfill, incorporating a lining system, leachate collection and treatment system, and gas collection system.

Our professional team provides 24-hour technical support and long-term service to ensure reliable operations. The ECWM team brings extensive practical experience, further strengthened through close collaboration with experts and consultants from our sister company, EnTrans Consulting, in the operation of waste management facilities and the resolution of complex waste management challenges.

Today, ECWM employs more than 400 employees, including highly qualified and experienced engineers, technicians, and operators. Our team is continuously committed to developing innovative and efficient solutions to address complex operational requirements.



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