

Sustainable Solutions for **Solar Panel Recycling**

As the first generation of solar panels reaches the end of its life, a critical challenge arises: how do we sustainably manage solar panel waste?

SILVER | Top 15%

ecovadis

Sustainability Rating

NOV 2024



Our Story

We have been operating in the environmental services sector for over 24 years. As a wholly owned subsidiary of the UK's leading electrical wholesaler, City Electrical Factors (CEF), **we have a big company reach with small company feel.**

We guarantee efficient waste management services, from providing receptacles for safe waste storage to transportation, treatment, and recycling.

Our innovative model combines in-house and outsourced solutions, allowing us to deliver a bespoke service tailored to your business needs, minimising the need for multiple service providers. We offer an unrivaled nationwide service, with exceptional customer care and environmental compliance at the core of our operations.

We have a ambitious growth strategy focused on strengthening our contribution to the circular economy, tackling climate change, and supporting our wider communities.

Our Mission & Vision

We have made significant strides in our Environmental, Social, and Governance (ESG) and sustainability initiatives, earning an EcoVadis Silver Medal in recognition of our achievements. We are proud to demonstrate our commitment to excellence in business and people management through our Investors in People and Investors in Wellbeing accreditation. Additionally, we have begun the process to obtain B Corp certification.

We have developed a comprehensive Net Zero plan with the ambitious goal of achieving net zero emissions by 2040.

Our Mission

Our mission is to lead the waste and recycling sector with innovative solutions that minimise environmental impact, protect communities, and uphold the highest standards of corporate ethics.

● Our Environmental Pledge

We aim to lead the waste management industry by continually improving our processes, ensuring all activities are conducted responsibly to protect the environment from harm or degradation.

Our Vision

Our vision is to create a future where waste is minimised, resources are conserved through a circular economy, and our staff and wider communities thrive together, demonstrating that social responsibility and profitability can coexist harmoniously.

● Building a Circular Economy

We are fostering a sustainable future by promoting a circular economy, educating customers and society to use materials responsibly, reuse products, and divert waste from landfills to recycling and recovery.



How Can We Help?

With the UK's solar panel waste expected to exceed **100,000 tonnes annually by 2030**, responsible disposal is more critical than ever. However, many waste management companies lack the expertise and facilities needed to process photo-voltaic (PV) panels correctly.

The result? Panels end up shredded, stockpiled, or even sent to landfill, leading to serious compliance, financial, and environmental risks.

At Waste Experts, we provide a fully compliant, transparent, and high-value recycling solution for solar panels. Through our **exclusive partnership with ROSI**, we ensure that panels are not just broken down, but fully recovered, keeping valuable materials in circulation.

Unlike standard UK processes that only recover 35% of materials, ROSI's patented recycling technology **extracts up to 95%**, including:



High-Purity Silicon

Reused in new solar panels and semiconductor manufacturing.



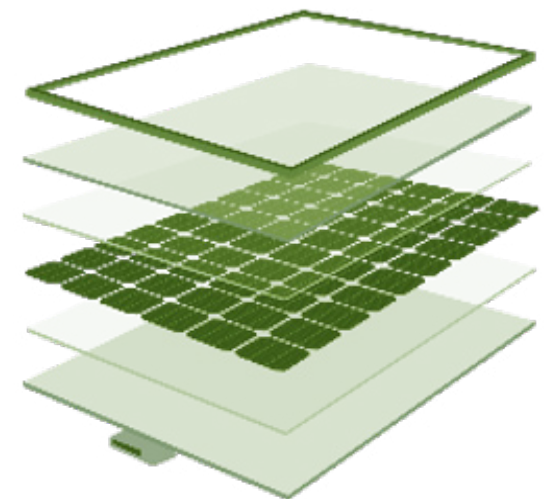
Silver & Copper

Recovered for use in the electronics and renewable energy industries.



Aluminium Frames & High-Transparency Glass

Re-purposed for construction and manufacturing.



Your Partners in True Sustainability

With **strategic partnerships** and cutting-edge technology, we help organisations move toward a **future of zero waste**.



Total Waste Management

Our expert advice **maximises returns and minimises environmental impact**. We innovate bespoke solutions, managing waste disposal costs, market placement, and structured services to meet your environmental goals efficiently.



Dedicated Account Manager

Our team is made up of time-served waste professionals with combined over **150 years of experience** in the sector. You will be assigned a dedicated Account Manager who will help guide and shape a bespoke waste management solution for your business.



Customer Portal

Our online customer portal provides our customers with **unprecedented access to data** in one simple to use cloud-based platform. This includes waste reporting, landfill diversion, electronic paperwork, Duty of Care, invoicing and CO2 data plus so much more.



Zero Waste to Landfill

We aim to divert 100% of the waste we receive from landfill and will always find the most **environmentally friendly route** for all waste streams. Any non-recyclable waste is sent to an Energy from Waste facility to generate a fuel source such as electricity and/or heat.



Recycling Solar Panels the Right Way



The UK's current recycling infrastructure is severely lacking when it comes to recovering high-value materials from end-of-life solar panels. Many traditional methods rely on shredding, which destroys critical raw materials such as silver, copper, and high-purity silicon, meaning they can't be reused.

This is why Waste Experts have partnered with ROSI, Europe's leading solar panel recycling innovator.

Why Did We Choose ROSI?

The First Facility of Its Kind

ROSI operates the world's first industrial-scale plant dedicated to the high-value recovery of solar panel materials.

Market-Leading Recycling Technology

ROSI's process preserves and extracts high-purity silicon and silver, which are lost in traditional recycling.

A Near-Zero Waste Approach

Less than 1% of waste is disposed of, ensuring that nearly all materials from each panel remain in use.

1 Tonne of Panels Recycled = 1 Tonne of CO₂ Saved

Reducing emissions and supporting global Net Zero goals.

Current Recycling Methods

G: Glass | Cu: Copper | Al: Aluminium | Ag: Silver | Si: Silicon



<35% Recovered



Shredding
Mechanical Separation (Hot Knife)
Other Methods (Laser, Lights)

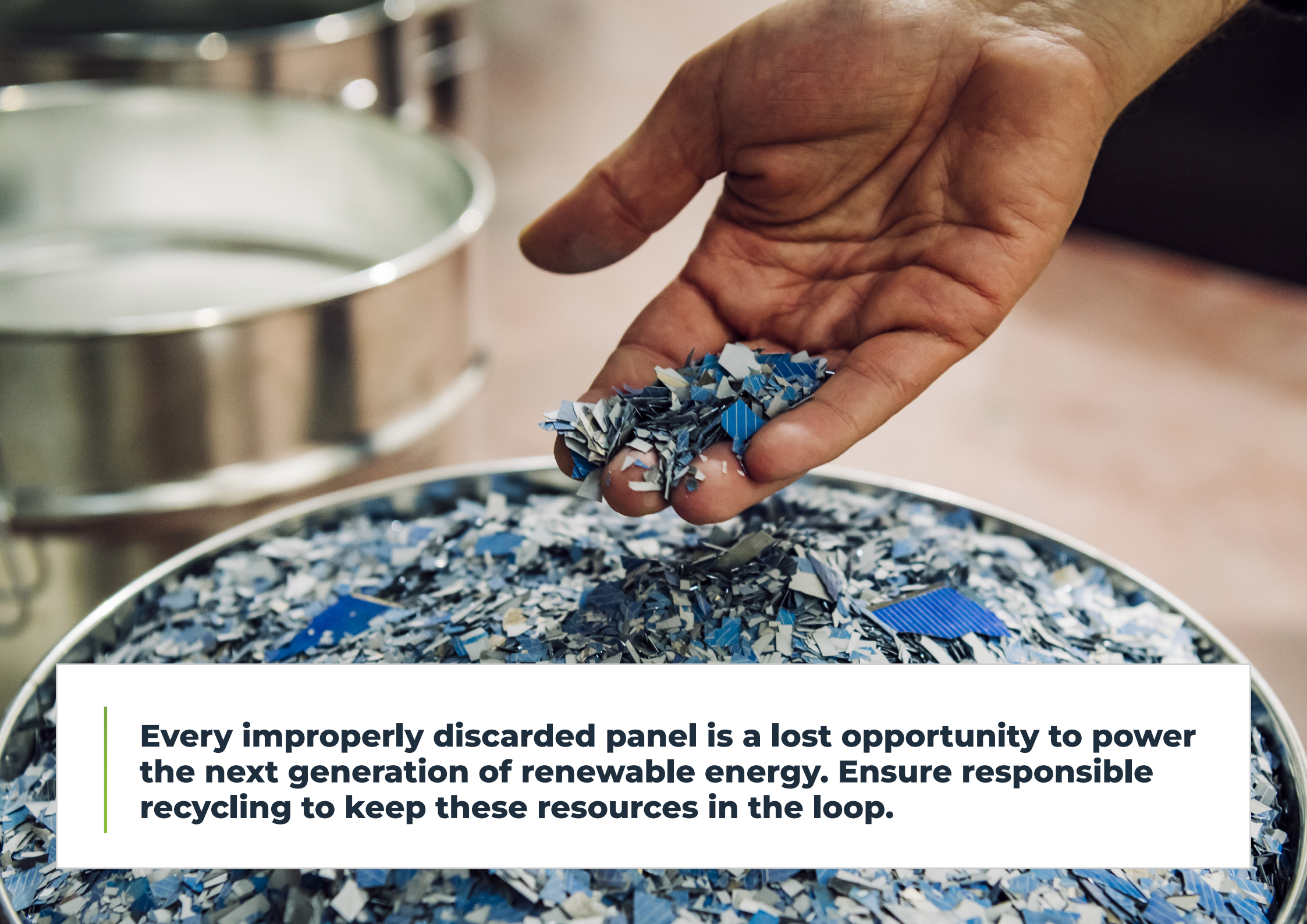
ROSI's Recycling Method



Up to 95% Recovered



Thermal Polymer Degradation
Mechanical Sorting
Mild Chemical Separation



Every improperly discarded panel is a lost opportunity to power the next generation of renewable energy. Ensure responsible recycling to keep these resources in the loop.

Collection to High-Value Recovery

At Waste Experts, we offer a seamless nationwide collection service, ensuring your end-of-life solar panels are transported safely, efficiently, and compliantly.

Whether you're a solar farm, installer, wholesaler, or business upgrading to newer PV technology, our specialist fleet is designed to handle collections of all sizes.

Built for Your Needs

Nationwide Coverage

We collect from solar farms, businesses, warehouses, and installers across the UK.

All Panel Types Accepted

Mono-crystalline, polycrystalline, thin-film, and associated components.

Sustainable Transport

We optimise vehicle loads to reduce emissions and environmental impact.



What Happens After Collection?



Once collected, your solar panels are assessed for reuse potential. If refurbishment isn't viable, they are sent to ROSI's advanced recycling facility, where they undergo a state-of-the-art high-value recovery process.



Step One

Panels are safely stored and transported to our processing facility.



Step Two

Panels are evaluated for potential reuse or refurbishment. Non-reusable panels are sent to ROSI for high-tech recycling.



Step Three

The panels arrive at ROSI's facility and they begin their advanced recovery processes.



Step Four

Track your positive impact and feel good for powering a **sustainable future**.



Need Guidance on Handling?

Scan the QR codes on the back page for our Pallet & Stillage Guides.





flexible - reliable - responsible

Allow us to enhance your sustainability journey.

Just reach out to our friendly team of experts! They'll help you find the **perfect solution** for your business.

Call, email, or visit our website today to see how we can help you achieve your goals.

Head Office

School Lane, Kirkheaton,
Huddersfield, West Yorkshire,
HD5 0JS

Telephone

0800 804 8612

Email

info@wasteexperts.co.uk

Web

www.wasteexperts.co.uk



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