THE
RECYCLIST
GLOBAL NEWS & VIEWS FROM BIR
EDITION 1, 2024
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Welcome to the inaugural edition of The Recyclist, a new magazine written exclusively for you, our membership. As BIR President, making this magazine a reality has been at the top of my agenda as I believe it will play a key role in uniting, inspiring and informing our members across the world.

It will be a key tool in helping us grow the reputation of our industry and highlight what we collectively do at a global level, which is so often in service of the planet. As you will read in these pages, the recycling industry has incredible stories to tell. Our narrative covers everything from innovation to tradition, family businesses to mega-corporations, community regeneration to government advocacy and, of course, we are a crucial pillar in the transition to a more circular and sustainable economy.

Ours is a global story, which comes alive at the most local level and it is something we really want to shout about. And this is where you come in; learn more about how you can contribute to future editions on page 4.

The Recyclist will be a biannual publication, issued in-between our Conventions so that we stay connected year-round. As stated on our stunning front cover, The Recyclist aims to bring you the global news and views from the world of BIR and we have certainly done so with this first, ideas-packed edition.

Leafing through the colourful, bold pages – which really showcase the diversity and vibrancy of this brilliant industry – you will find a wide range of topics.

Whether it’s our ‘Big Interview’ with futurist Matthew Griffin, who shares his insights on what’s next for recycling; a dive into our advocacy work and the proposed revision to EU Waste Shipment Regulation; insights into your expectations for 2024 in our Member Spotlight; or a look ahead to our next Convention in Copenhagen. I believe there is something here for everyone.

As many readers will know, my own history with recycling is long. I am proud to be a fourth-generation recycler. Our story started with my great-grandfather, George Burrage, who began collecting redundant metal items with a horse-drawn cart in the Kensington and Chelsea district of London and has led to the foundation of my own metal recycling business in 2001, which I still run today.

In my teenage years, I collected aluminium drink cans in exchange for pocket money and from there I graduated to working alongside my father, Tom. I accompanied him everywhere, learning the business first-hand. So, you can see that recycling is part of my DNA and I have been honoured to represent the industry over the years, culminating in my presidency of the BIR.
My commitment to you, as members, is to represent your best interests relentlessly. Since my inauguration in May 2023, I have worked alongside the BIR secretariat to facilitate several key initiatives to help us in our mission to be the global voice of recycling.

So, these include expanding our impressive secretariat team with the addition of four new members of staff; changing the Plastics Committee to the Plastics Division; producing a series of advocacy position papers; creating a new committee – spearheaded by Murat Bayram and Caroline Craenhals – to champion new ways of thinking, helping foster innovation and transformation across our industry; commissioning a landmark study into the recycling industry’s contribution to Net Zero; and, of course, the production of our biannual magazine, The Recyclist.

And that is just the beginning.

My aim is to equally represent all the divisions and committees of BIR and The Recyclist will be an important vehicle for this mission. I hope you will see all facets of our membership represented within these pages, and if not, I would like to hear from you. As the recycling space becomes more crowded with a wide range of vested interests, a strong, independent BIR voice is more important than ever to bring reason to the noise and deliver our pro-recycling message.

BIR continues to actively support the transition from a linear, throwaway society to one that is based on resource efficiency and conservation. Through free and fair trade, BIR believes the consumption of recycled materials should be optimised, displacing as much primary raw material as possible to bring huge environmental gains in the form of resource maximisation, energy savings and reduced CO₂ emissions.

BIR’s standing is such that it has become a staple presence wherever important environmental debates are taking place at the supranational level, be it at the United Nations, the OECD, or elsewhere. Only recently, BIR has had a pivotal role in the Basel Convention Plastic Waste Partnership and has been involved in a United Nations initiative to draft a new Global Plastics Treaty.

The recycling industry is often described as one of the world’s best-kept secrets. Today, however, no international or supranational body concerned with the economic and environmental welfare of the planet can afford to ignore recycling. The secret is finally out. Our global organisation’s story has already spanned three-quarters of a century, but there are still many more chapters to be written.

Susie Burrage OBE
BIR President

PS. I hope you enjoy reading our inaugural edition as much as I have enjoyed being part of its creation. We welcome any feedback or suggestions for future editorials, so please contact us at therecyclist@bir.org.

Share Your Stories

We know that our global membership has compelling and dynamic stories to tell. Your stories will be instrumental in helping us tell the world about the impact we are delivering, whether that is in the pages of future editions of The Recyclist or through other BIR communications initiatives.

We would love to hear stories about your business, whether they are about your people, innovations, your role in the community, advocacy work, successes, learnings, initiatives or something else. We welcome your input so that we can compile a richer and more complete story of our membership, one which we know will resonate with the wider world.

To make it as easy as possible for you to share your stories, simply email us at therecyclist@bir.org with a short (or long) summary and we will be in touch with any next steps.
The Big Interview

Moving the Dial on Recycling

Futurist Matthew Griffin focused his lens on recycling at our recent Convention in Abu Dhabi. His practical, yet pointed, presentation offered powerful insights into how the industry should position itself for the future.

Matthew’s vision for our future resonated with many in the Convention audience, so The Recyclist asked him to drill deeper into the recycling industry and offer actionable advice on what we need to do to become fit for the future.

It is not just us in the world of recycling who are turning to Matthew for guidance on strategy. Through his 311 Institute, he works with investors, multinationals, G20 governments and even royal households. Thanks to his scientific background in marine biology and conservation, alongside his inside knowledge of the technology world, he is perfectly equipped to assist global leaders in envisioning a more inclusive and sustainable future.

Recycling is punching below its weight

Matthew’s initial analysis of recycling is blunt – he believes the industry is punching well below its weight.

He explains, “Globally, you’re going to be very hard-pressed to find any organisation or C-suite individual who doesn’t think that sustainability is important.”

This means there is a clear agreement that we should be doing our best to look after the planet and the planet’s resources”. Yet, when you consider the 100 billion tonnes of the world’s resources that are consumed each year and compare that to the mere 312 million tonnes of hard waste that is recycled, it highlights a distinct gap between the desire for sustainability and the reality of what is being achieved.

Firstly, he believes the problem starts with how the industry presents itself. “From a marketing perspective, the recycling industry is arguably the greenest of all industries.” It takes products that have already been used and then recycles them. And this is increasingly being done in an environmentally-friendly, non-toxic way, so that materials can be repurposed and reused. Despite this, recycling terminology remains framed around waste, rather than resources.

Secondly, Matthew points out the industry’s lack of profile. When the topic of sustainability is being discussed either at a policy level or by businesses seeking to create circular products, recyclers rarely have a seat at the table. “Quite simply,” Matthew says, “the industry just doesn’t make enough noise”.

“From a marketing perspective, the recycling industry is arguably the greenest of all industries.”

Matthew’s third observation is that recycling is almost entirely missing from the investment radar. At a time when responsible investing and Environmental, Social and Governance (ESG) factors are driving investment flows into new energy and transitional technologies, very few – if any – recycling companies are featured in investment portfolios. He believes this needs to change if the industry is to source the funding needed to harness its potential.

“From a marketing perspective, the recycling industry is arguably the greenest of all industries.”
**Consumer convenience**

While there is clearly work for the recycling industry to do, Matthew concedes that the challenge is far broader. The success of recycling ultimately lies with the consumer, yet the vast majority of consumers remain unsure about what can be recycled in the first place. A matter that is further complicated by the growing complexity of even the most simple products. Matthew cites Christmas wrapping paper as an example, "If your Christmas wrapping paper contains any kind of plastic content it cannot be recycled, but how many people know that or end up putting all Christmas wrapping paper into the regular bin?"

While the recycling industry needs to advocate greater consumer education, Matthew believes we also need to consider how to make recycling less complex for consumers.

**Prioritising the stick over the carrot**

To reduce the complexities involved in recycling, Matthew believes policymakers need to do more to craft legislation that supports the expansion of the recycling industry – having more, conveniently-located recycling bins will mean little if the industry lacks scale.

Such legislation could include tax breaks, preferential planning agreements and grants for research and development; as well as more rigid regulations to compel the necessary habitual changes.

In terms of successfully changing consumer behaviour, Matthew points out that punitive measures have proven more effective than mere education. "We’ve been educating consumers that recycling and sustainability are important for decades, yet we’re still only at 312 million tonnes of recycling".

He points out that indirect taxes, such as paying for plastic carrier bags, have had a positive impact on consumer behaviour and could go further. He suggests an indirect tax on plastic food packaging could hasten the move towards more sustainable solutions by manufacturers who could better utilise existing technology for biodegradable plastic packaging.

However, Matthew concedes that implementing more indirect taxes may be problematic for governments. He acknowledges that “No one in the public domain would have ever voted to pay for plastic bags.” This means such policies tend to target less consequential issues, such as the banning of single-use plastics. He says, “Banning straws only solves part of the problem in our oceans. When you go to the middle of the Pacific, 50% of the garbage is fishing nets and only 0.001% has anything to do with straws.”

So ultimately, we are in a Catch-22 situation where to accelerate the move towards a sustainable economy, we need ‘sticks’ to encourage different behaviours, but such methods are unpopular with the public and, as Matthew notes, “If you’re a politician, you don’t want to do anything that is deemed unpopular.”

Furthermore, Matthew feels the real problem resides in the human condition, a thesis he outlined in his keynote speech at the recent COP28. "In general," he says, "recycling anything that isn’t metal is inconvenient and if we do bother to recycle something we generally get nothing in return. As humans, we favour the most convenient thing, and currently that is to use the bin."

He argues that we need to “stop being human” because being human means we prioritise convenience, adding, “If we really want to move the dial on recycling – i.e. recycle anything and everything – we’ve got to make it as convenient and as frictionless as possible. And that is difficult.”

**Centres of excellence**

That said, Matthew singled out the European Union (EU) for its strong green agenda. He points out that “The reason the EU is pushing a sustainability agenda is because, frankly, it sees jobs in it and that green industries will be a boost to local economies.”

Matthew believes it is this recognition of a greener future that is pushing Europe to become a centre of excellence for recycling. Not only is the EU driving through lots of responsible consumption policies and legislation compelling organisations to do their best to reach zero harm and zero waste, but it also has a Circular Economy Action Plan, which promotes sustainability, reduces waste, and supports recycling.

Matthew says, “I cannot see any other government on the planet that is putting on such a broad and deep variety of policies which cover almost everything to do with green, recycling, sustainability, waste and the circular economy, but that also leaves incredibly few loopholes.”

To truly capture the potential of recycling, Matthew believes the industry needs to explore the concept of centres of excellence. By replicating the model developed by the technology industry, he says "Centres of excellence can bring together different stakeholders and provide a space for everybody to talk about the latest breakthroughs and innovations.”

For example, sustainability-minded manufacturers could be invited to discuss how the recyclability and circularity of their products could be improved.
An AI-enabled future

The recycling industry, just like every other industry on the planet, will also increasingly need to be a technology-first industry. Matthew predicts that for recycling, a combination of four technologies – artificial intelligence (AI), machine vision, robotics and some form of sensors – will be transformative. “The reason these four technologies are so important is because when you look at waste streams, especially outside of the metals recycling industry, they include everything. While humans can sort waste, they are generally expensive, can only work at a certain rate and hiring is already problematic. Using automation within recycling would dramatically speed up the process”.

AI is already helping with material identification. For example, plastics have different spectrographic signatures and hyperspectral imaging can quickly identify these different elements. Aside from sorting, AI is accelerating the development of new solvents and synthetically engineered bacteria to improve the actual recycling process.

Matthew also believes a technology-centric approach could also help fix the consumer challenge. With technology being able to sort through mixed waste sources at extreme speed and accuracy, consumers will soon be able to throw all of their waste into just one bin!

Getting fit for the future

To secure their place in a circular economic future, Matthew urges recyclers to take up a more dominant role. First, he suggests they need a much stronger voice on the global stage. “Recyclers need to be incredibly vocal and ask if sustainability is so important, why is it not being done properly?” Second, the industry must find a way to be included in the ESG portfolios of investment organisations. And finally, it needs to address the circular economy challenge.

Matthew explains, “The circular economy includes the creation of circular products; simplifying the manufacturing of products and then making sure that the materials used are easily recyclable. The recycling industry must play more of a role in trying to ensure the success of the circular economy – create multi-sector and multi-stakeholder centres of excellence where individuals, companies and governments can come together to discuss solutions and problems.”

For us to achieve a proper circular economy, recycling needs to be at its core. Only then will the industry be able to start punching above its weight and effectively move that dial.
NEW KID ON THE BLOCK

Josephita Harry (Pan American Zinc, USA), Chairwoman of the BIR Electrics, Electronics and EV Batteries Committee

A long route to recycling

Many of us aspire to make a positive contribution, to make our world a better place. But finding a route in life to make a genuine difference is not always easy. In fact, for Josephita Harry – the Chairwoman of the BIR Electrics, Electronics and EV Batteries Committee – that journey took 20 years!

Born and raised in the southern part of India, Josephita first encountered recycling at the age of 13, when she participated in and won a national level school project called ‘Clean Up India’. Through this project, Josephita tracked the whole process of transforming recovered paper into a recycled material that could then be reused. She recalls, “My first introduction to the idea of recycling sparked a real fascination, but I didn’t know what to do with it. Nobody around knew that I could make a career out of recycling.”

She went on to become an engineer in electronics and instrumentation and worked as a technology consultant for almost a decade, but this role failed to reignite that early passion. Seeking a change, Josephita travelled – an experience that taught her three key life lessons. “First, I love talking to people; second, I wanted to continue to travel; and third, I wanted to make a difference.” It was during a trip to Dubai that she became reacquainted with recycling, but this time from an industry perspective, and embarked on the career that would fulfill her desire for purpose.

Scrapping ‘waste’

Josephita’s circuitous route into recycling has played no small part in her desire to advocate for the industry in any way she can, pledging “To all those children today who love recycling, I want to show you that there is an industry you can work in whilst making a real difference. I hope you can learn from my story”.

Having been a member of the BIR Electrics, Electronics and EV Batteries Committee (formerly the E-Scrap Committee) for four years, a key motivation behind Josephita’s decision to take on the role of Chair was the opportunity to change how the industry is perceived by the wider world. A firm believer that recycling is not an industry of waste but of materials, her first act was to change the committee’s name. “By removing the words ‘scrap’ and ‘waste’ from the committee’s name, it better reflects the work that we do and the importance of that work.”

Her next step is to spread that message in order to get more members to join the committee. At present, the BIR has members from over 70 countries and Josephita would like more members from outside Europe to join the committee, so that it can collectively make a difference. She believes communication via social media has a big role to play in creating better awareness of the crucial part recycling can play in a more sustainable future.
Recycling: an increasingly complex task

Josephita is well aware of the challenges that lie ahead. As the world becomes more electrified, the landscape for recyclers is becoming increasingly complex. She says, “The recycling industry needs to keep up with all the innovation that is happening in the world today and prepare for what’s ahead, so that we know how to recycle these products sustainably.”

And it’s hard for recyclers to keep up with the pace of innovation – Josephita acknowledges that. “Recyclers are not scientists, we are more situated at the very end of the value chain and, today, most electronic recycling is not just limited to the WEEE (Waste of Electrical and Electronic) appliances.”

For example, these days even greetings cards may have lights or a musical element meaning these products are not just paper but electronic as well. They contain small batteries which should be removed prior to recycling. This does not always happen and it can be hazardous. Josephita explains, “If batteries make it into the recycling stream for further processing without being removed or they are inadvertently stored where they are subject to extreme temperatures, that can cause fires.”

It is these hidden batteries, and the fact that even simple products are becoming more complex, that is creating a big challenge for recyclers. Josephita explains, “Previously, we understood the products that were coming through the recycling stream, and we knew how they needed to be processed. However, now we need to rethink how each item needs to be depolluted.”

In an ideal world, manufacturers would not only produce product manuals to assist consumers with how to use their products, but also a manual showing how to recycle it. Josephita believes this is something that would really help propel the recycling process. But as such roadmaps don’t currently exist, recyclers are currently forced to figure these issues out themselves in order to take electronics and EV batteries recycling to the next step.

EVs: a new set of recycling challenges

This situation is only going to become more complicated when electric vehicles (EVs) start coming into the recycling system. Josephita advises that recyclers are only currently seeing a small trickle of EVs. However, she cautions that the rapid evolution of EVs, their batteries and the components and critical metals being used within them will pose a whole new set of challenges for the recycling industry.

“Each year, EV manufacturers change and innovate their different makes and models and, as recyclers, we don’t know what these changes are. We just know it’s an electric car, which has batteries that need to be removed and recycled in a different way to traditional ICE vehicles. Besides that, other electronic elements have small lithium-ion batteries that are hidden in different parts of the car. As a recycler, there is no way to know where these batteries are hidden unless the manufacturers tell us.”

"Previously, we understood the products that were coming through the recycling stream, and we knew how they needed to be processed. However, now we need to rethink how each item needs to be depolluted.”
Collaboration needed to achieve circularity

As well as greater collaboration with manufacturers, Josephita wants to see better education for consumers on how to recycle products if we are truly to achieve a circular economy.

At present, only a small percentage of electrical and electronic equipment makes it into the recycling stream and a first step has to be ensuring that more products are recycled. Then, the industry needs to make sure no batteries go into the recycling stream and that these batteries are properly stored.

For Josephita, recycling is an issue for multiple stakeholders and involves greater awareness at every level of the value chain. “It’s not just manufacturers. Yes, recycling should be planned for during the design phase, but for the circular economy to truly work, we all need to take responsibility and play a part in it.”

In the near term, the world of electronic recycling is also planning for the implementation of new Basel Convention amendments that will go into effect on January 1st, 2025. This will involve governments worldwide issuing guidance on how materials should be recycled and will pay particular attention to electronic products. Josephita explains that one requirement will be a Prior Informed Consent (PIC) procedure. She adds, “Taking prior consent for every shipment will inevitably create more delays and a lot more paperwork. This feels counterintuitive when the industry is striving to capture as much recycling materials as possible.”

Differing interests locally create a complicated regulatory landscape globally. The challenge is to navigate this landscape in order to maximise value for everyone involved in the recycling industry.

Resilient recyclers

There may be many challenges ahead for the recycling industry, but Josephita takes heart from the industry’s spirit of resilience. “In the recent past, we have faced the pandemic, global supply chain disruptions, new regulations and geopolitical upheaval. Through it all, we as an industry have been very adaptive in facing what comes our way and innovative in finding ways to make it work.”

Moreover, the knowledge that the recycling industry is having a real impact, not only in saving the Earth’s limited supply of materials from ending up in landfill, but by giving them a second life is very fulfilling. Josephita concludes by saying, “Every time I go to a Convention, I always thank our members because I can see the effects of the work we do.

We are making a very big difference by just doing our jobs every day. By way of recycling, we are bringing in all these metals and even plastics back into the stream, and by reusing them, we use less energy and are helping the world reduce greenhouse gas emissions and carbon footprints.”
Serendipity is defined as an unplanned, fortunate discovery. History is littered with incredible inventions that only came about through sheer chance. And we can all cite circumstances in our own lives that were fortuitous.

For Ben László, it was a casual conversation with his father about a possible topic for his Master’s thesis that led him to the world of recycling and launched a promising career. His father, a photographer, had cooperated with the Northern European recycling services company Kuusakoski and thought they might be a suitable match for his son. Rather than targeting the recycling side of its business, his father pointed out that, “They deal with metals and sell them on the London Metal Exchange”, which dovetailed with Ben’s studies on financial markets.

Having contacted the company, Ben was asked to conduct his Master’s thesis as a commissioned study on how Kuusakoski could enhance its financial and operational hedging and to identify deficiencies, as well as improvements in the process.

After completing his thesis, the final stage of his studies was supposed to be an internship abroad at an IT company in Kuala Lumpur, but again fate intervened. This was in 2020 when Covid prompted the closure of many international borders, including Malaysia’s. Ben reached out to Kuusakoski once again and this time he was offered a strategy internship in Sweden. After the internship, Kuusakoski offered him a position as a business controller, which ultimately led to his role today as Business Development Manager. As Ben recalls, “I had different plans, but everything started from my thesis, followed by the cancelled work exchange in Kuala Lumpur. So, I found Kuusakoski entirely by accident.”

Applying an academic lens to the real world of recycling

Accidents often happen for a reason. Ben’s thesis on risk management in commodities markets merged academic theory with the practical realities of the recycling industry’s hedging processes. Ben reflects that, “In a purely academic world, everything is expected to be frictionless and work perfectly. My immediate observation was that there is a lot more friction in the real world, particularly in one where physical assets are transferred, stored, and processed.”

In comparison to other industries, there is more opacity in recycling. Taking recycled electronics as an example, Ben highlights that this tends to consist of different types of elements joined together. Often copper, precious metals, plastics, and other organics such as flame retardants are present. Essentially, recyclers cannot know what each 10kg of materials exactly contain, so they can only estimate, and estimates are never 100%.

This can be challenging when working with financial risk mitigation levers. Ben notes, “When you’re talking about hedging, there are two fundamental criteria that you need to be sure of: the amount and the timing. When you have uncertainty regarding the qualities and quantities it’s challenging to know how much you should hedge.”

It’s not just the quality and quantity part of this equation that is taxing for recyclers, timing is also surrounded by uncertainty. Ben explains that the recycled metals market is less liquid than the financial markets. While part of this illiquidity can be attributed to heterogeneity of materials and geographical factors, there are also regulations and policies that have an impact.

All in all, the lack of visibility can create significant margins of error when it comes to implementing hedges.
A multidisciplinary industry

While recycling wasn’t Ben’s initial career goal, he relishes working in an industry that is so closely linked to the global economy and the real world. He explains, “In terms of supply and demand, we as recyclers are heavily reliant on the manufacturing and purchasing managers’ indexes. Recyclers are dependent on company X generating recyclables, so that there is material to be recycled. Recycling is on the receiving end of whatever happens in the economy. All the shifts, all the trends, even Christmas lights eventually come to us!”

This interconnection means Ben gets to apply a wide variety of the tools he acquired during his academic studies.

On top of that, Ben praises the fact that the recycling industry is home to a truly diverse set of disciplines. “You get to work with physicists, metallurgists, chemists, operative personnel, and economists. Such a heterogeneous environment gives you an ample platform to be exposed to a mix of knowledge and interesting discussions.”

The industry’s ability to find value in discarded objects resonates with Ben’s values. It reminds him that as a child he made money from selling unwanted Pokémon cards on the street. Maybe working in an area that gives surplus items a second life was predestined after all.

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Collectively thinking for the future

While Ben was initially drawn to the industry for its economic aspects, he is now excited about the future due to recycling’s imperative role in the green transition and the possibility to rethink practices and find new solutions.

“Do not sit on your stock”

Companies on both supply and demand sides of recycled materials have risk in pricing, especially so with highly volatile commodities such as rare earth metals.

Yet, there are practical solutions to the hedging challenge.

In addition to financial contracts, there are feasible operational measures to alleviate price risk. Maintaining high inventory turnover rate – short processing times and consistent sales – alleviates the total price risk considerably, an application of the time diversification strategy.

A financial hedge is simply a contract between at least two parties. Thus, in addition to inventory management, another operational tool is to execute back-to-back transactions. By pairing purchase and a sales contract with concurrent settlement dates the market price risk is eliminated. In such a case the market price risk is handled operationally by matching two physical contracts, instead of purchasing a hedge from the financial markets.

Ben points out that the physical contracts in the secondary raw material market are highly heterogenic and using the correct financial instruments is essential. “For instance, if you have a physical contract where pricing is based on monthly averages, a monthly average futures contract from the London Metal Exchange serves you better compared to futures contract that has daily settlements”.

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Using the analogy of hot chocolate, Ben illustrates that it’s really simple to make hot chocolate but much harder to reverse this process and split the mixture back into its basic ingredients. He adds, “It is naive to believe that all materials can be salvaged from products if the design has been made without considering its true recyclability. In theory everything can be recycled 100%, but this is not reality.”

Currently the largest disruption originates from lithium-ion batteries and rare earth elements. “We are good at separating base metals, but we also need to be able to extract rare earth elements in an economically feasible way. I believe that the future will be shaped by a combination of technological advancements in recycling equipment, increased compensation for recyclers, and by the design of products and materials that are genuinely eco-friendly.”

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Nestled along Denmark’s eastern coastline, Copenhagen beckons with its unique blend of historic charm and modern vibrancy.

The city’s iconic symbol, the Little Mermaid, perches gracefully at the entrance to Copenhagen’s bustling harbour, embodying the city’s maritime legacy. This enchanting city, dating back to the 12th century, has witnessed the reigns of monarchs and the rise of iconic landmarks, and is today maybe best known for being the home of ‘hygge’ – the practice of well-being through simple and everyday experiences.

Strolling through Copenhagen’s cobblestone streets, one encounters a tapestry of architectural wonders, from the medieval spires of churches to the sleek lines of modern design.

The city’s commitment to sustainability is evident in its extensive bicycle lanes and network of green spaces, inviting locals and visitors to explore its neighbourhoods and parks. Copenhagen is a culinary haven, boasting Michelin-starred restaurants and bustling food markets that showcase the best of Danish, and international, gastronomy.

As day turns to night, the city’s vibrant nightlife unfolds, blending historic public houses with trendy bars, ensuring Copenhagen captivates every traveller with its timeless and contemporary allure.

“...The city’s commitment to sustainability is evident in its extensive bicycle lanes and network of green spaces, inviting locals and visitors to explore its neighbourhoods and parks...”

The original Danish pastries

La Glace: Located in central Copenhagen since 1870, La Glace is a historic bakery, celebrated for its decadent pastries and enduring legacy, it has been owned by the same family for generations. It’s a favoured choice among many locals, who choose La Glace particularly when purchasing birthday and holiday treats. With a rich history and a commitment to craftsmanship, eating at La Glace offers a taste of authentic Danish pastry, making it a must-visit establishment. And don’t miss out on the famous Sports cake!

Andersen Bakery: Located in Islands Brygge, Andersen Bakery reflects the vision of Japanese baker Shunsuke Takaki who, captivated by the Danish mentality and baking artistry, introduced authentic Danish pastries to Japan in 1962. Remaining faithful to Danish baking traditions, Andersen Bakery adds the precision of Japanese craftsmanship. A visit to Andersen Bakery offers a unique blend of Danish heritage and Japanese excellence.
Traditional lunch

Meyers i Tårnet, Christiansborg: Meyers i Tårnet, nestled in the iconic Christiansborg Tower built back in 1733, is the place to go for traditional Danish smørrebrød, which is the most consumed form of lunch in Denmark. This restaurant blends Nordic cuisine with a captivating backdrop steeped in political history. As guests indulge in delicious dishes crafted with precision, they are treated to panoramic views of Copenhagen from this unparalleled vantage point on top of the Danish Parliament.

Judie: Perched on a vessel in the iconic and pretty Nyhavn harbour, Judie offers a Danish lunch and dinner experience with a unique blend of maritime charm and culinary excellence. The restaurant’s boat setting adds an authentic nautical touch, providing a picturesque backdrop for enjoying expertly prepared Danish cuisine. The combination of the nautical ambience and gastronomic delights makes Judie a compelling choice for those looking to savour Danish cuisine in a distinctive and memorable setting.

Fine Dining

Geranium: Geranium is a culinary masterpiece in Copenhagen. With three Michelin stars and led by visionary Chef Rasmus Kofoed, the restaurant blends artistry and flavour to create a symphony of taste sensations through exquisitely crafted dishes. Located in the heart of Østerbro, home of the national football stadium, Geranium delights the palate and provides diners with sweeping panoramic cityscape views. The restaurant is a testament to Danish design, boasting a minimalist yet sophisticated aesthetic that contributes to an immersive journey through innovative gastronomy.

Mielcke og Hurtigkarl: In Frederiksberg, amid the scenic Frederiksberg Garden, Mielcke og Hurtigkarl stands out as a culinary gem. Renowned for transforming seasonal, organic ingredients into exquisite dishes, the restaurant – led by chefs Jakob Mielcke and Jan Hurtigkarl – showcases exceptional artistic finesse. A visit here offers a unique blend of culinary excellence and conscientious dining and is an essential stop for those seeking an unparalleled gastronomic experience in Denmark. Dinner can be followed by a stroll through the renowned Frederiksberg Gardens.
Nightlife

Curfew: In the vibrant Vesterbro district, the Curfew cocktail bar merges history with contemporary allure. The venue exudes character and its extensive cocktail menu ranges from the classics to more avant-garde blends, showcasing a mixology masterclass. A visit to Curfew offers more than just exquisite drinks; it provides an opportunity to experience Vesterbro’s dynamic local nightlife. Immerse yourself in the lively atmosphere, curated playlists, and the expertise of skilled bartenders.

Balthazar Champagne Bar: Next to Kongens Nytorv, one of Copenhagen’s iconic squares, Balthazar Champagne Bar is nestled within the esteemed walls of the 5-starred Hotel d’Angleterre and stands out as a sophisticated haven for lovers of champagne. As Denmark’s premium champagne bar, it distinguishes itself through a closely curated assortment of excellent champagnes and sparkling wines. Cocktails and snacks are also available for its high-end clientele.

Bike Copenhagen: Alternatively, Copenhagen can be explored on two wheels with Bike Copenhagen. Rent a bike at bikecopenhagen.dk or meet a guide at their premises at Nikolaj Plads 34, in the centre of Copenhagen, and embark on a pedal-powered adventure through the city’s streets and landmarks. Choose from various bikes – including city bikes, e-bikes and cargo bikes – to suit all riders. With Bike Copenhagen, you can experience the city like a local, take advantage of its bike-friendly infrastructure and move around in a sustainable manner.

Note: be careful when navigating Copenhagen’s bike lanes, as cycling is the primary form of transportation in the city and the bike lanes can be busy and fast.

Copenhagen Metro Guide: Explore Copenhagen’s charm with the efficient metro system. Of its four lines, M1 goes to Vestamager, M2 to Copenhagen Airport, and M3 – also known as the City Circle Line – covers areas such as Nørrebro, Østerbro, and Frederiksberg.

Transfers are also available at Frederiksberg and Kongens Nytorv stations. M4 heads to the northern neighbourhoods such as Nordhavn and Orienktaj. The metro facilitates easy navigation day and night.

The metro trains run frequently and the stations feature clear signage in English. Tickets can be purchased in advance via the ‘DOT Billetter’ app or directly at the stations, but make sure you check the schedule for night services.

Things to do:

Kayak through Copenhagen (as the Copenhagener does).

Kayak Republic: Rent a kayak in Copenhagen online at KayakRepublic.dk to explore the city’s picturesque canals and harbour at your own pace or choose a guided kayak trip through the historic scenery of Copenhagen; where you can gain a waterside view of the old Stock Exchange, Christiansborg Towers, Nyhavn, The Little Mermaid and much more.

For those wishing to support efforts to clean up Copenhagen Harbour, you can also borrow a GreenKayak from Kayak Republic free of charge for up to two hours by committing to collect waste on your trip through the harbour and canals!
A LOOK BACK

ABU DHABI
RITZ CARLTON, 23-24 OCTOBER 2023
From our last plenary sessions in Abu Dhabi

Stronger together in BIR
The Abu Dhabi Convention was launched by BIR President, Susie Burrage OBE of Recycled Products Ltd in the UK, who reflected on the 75 years of our federation’s existence and looked forward to a future in which recyclers cannot be ignored. She declared, “With our combined determination and abilities, we can become an unstoppable voice.”

Susie’s welcome address introduced two days of interesting debate and dialogue. Here are some of the Convention’s key highlights.

Keynote speaker: ‘Re-market yourselves’
Our keynote speaker, the futurist Matthew Griffin, urged recyclers to be more proactive about their vital role in ensuring the earth’s natural resources are recovered and used sustainably. The founder of the global advisory firm 311 Institute challenged recyclers to start by looking at themselves. Agreeing with a question suggesting recyclers receive insufficient credit, Matthew cautioned that many recycling businesses still use the word ‘waste’ and advised that as ‘resource recyclers’ “the word ‘waste’ should be replaced with ‘resource’”. He urged, “This is doing you a disservice. Re-market yourselves.”

Ferrous: Going green
With the steelmaking industry looking to decarbonise in the coming decades, the potential for recyclers was discussed centre stage during the Ferrous session. Guest speaker Kedar Joshi, Marketers Manager (Asia) for Davis Index, asserted “The revolution is here and we are all part of it.” Quoting his CEO, Sean Davison, he challenged: “BIR, it’s time we drive this message home to everyone we meet. Tell them: You want a greener planet? Just let us continue doing the job we’ve been doing for over a hundred years.”

Stainless/Alloys: Indian growth
The Stainless Steel & Special Alloys session stressed that India is playing an increasingly large role as the world’s second-biggest consumer of stainless steel. Hitesh Agrawal, General Manager at Jindal Stainless (ARE), said, “The per capita consumption of stainless steel in India is approximately 2.83kg and is expected to go up significantly in the coming years, reaching 8.5-11.5kg by 2047.” He added that a major challenge for India will be the availability of recycled metals, particularly as growing “nationalism in recycling materials” means other countries are keeping such resources within their boundaries. “That will remain a challenge until India becomes self-sustainable.”
Non-Ferrous: Bright horizons
The future for the non-ferrous sector is bright according to Joe Pickard, Chief Economist and Director of Commodities at ISRI, the US recyclers’ organisation. He forecast that, “Even though we are experiencing some short-term challenges, the medium-to-longer-term prospects are incredibly bright for our industry.”

Acknowledging that markets are changing, he referenced the additional recycling capacity coming upstream in the US, as well as India becoming the second-biggest market for all recycled commodities combined.

International Environmental Committee: Making the case
It was disclosed that BIR is compiling a new report on the environmental benefits of recycling. Whereas previous reports, in 2008 and 2016, emphasised metals, Trade & Environment Director Alev Somer explained that this new report would include all commodities represented within BIR. She added, “We are looking at other natural resource savings at a wider level, so we might include water consumption or transport emissions and have some comparisons between secondary and primary production.”

A new policy position on extended producer responsibility (EPR) is also underway. The thirty EPR schemes from the early 1990s have grown to around 400 today and the topic is on the agenda for the UN, the OECD and the EU, and BIR disclosed that it wants to be part of these conversations.

Plastics: Chemical or mechanical?
Huge investments in chemical recycling have ignited a debate not only about its acceptability but also its potential to undermine mechanical recycling. A robust defence of chemical recycling was set out by Carlos Monreal, Founder and Chief Executive of Plastic Energy in Spain, who insisted that “chemical recycling is not in competition with mechanical recycling. It’s not in a fight for feedstock.” He argued that mechanical recycling alone will not be able to cope with the expected growth in plastics, although he conceded that chemical recycling is not “a silver bullet.”

Paper: Take the credit
The rising importance of artificial intelligence (AI) and carbon credits in the future of the paper recycling sector was forecast by Ranjit Baxi, Managing Director of J&H Sales International in the UK. He argued the sector should harness the power of AI to improve quality, efficiency and costs, as well as verify ‘green’ audit trails. Meanwhile, he suggested a global carbon credit system would reward paper and other recyclers for their role in lowering CO₂ emissions as part of the drive to Net Zero.

Electrics, Electronics and EV Batteries Committee: The new kid on the block
Josephita Harry, Vice-President Sales at Pan American Zinc LLC in the USA, underlined her leadership of the re-named Electrics, Electronics and EV Batteries Committee (formerly the E-Scrap Committee) by deliberately and emphatically repeating this name. “You will notice I didn’t use the words scrap or waste,” she said. “It’s a very small change in the name but I consider it to be a very big step forward in the direction of acknowledging the importance of the work we do as an industry, recycling important materials and bringing them back into the value chain.”
Rewriting the narrative on recycling

The World Economic Forum has cautioned of an incoming era of resource scarcity. Resource scarcity is when demand for a natural resource outstrips supply. In other words, we need more than one planet to continue with our current economic practices. But there is no ‘Planet B’. Does this have to be the case? No. While the Earth’s limited raw materials are being consumed rapidly, and the ‘overshoot day’, sadly, falls earlier and earlier each year, a secondary source for important commodities is too often overlooked. Recycling can and must play a greater role in ensuring more of the planet’s valuable natural resources are recovered, reused and repurposed in order to improve sustainability.

Yet, despite the strong and obvious imperative to transition our economic model to a more resilient circular system, underlying hurdles continue to impede progress. And we, as an industry, need to rethink how we present ourselves and how we can transform our operating systems to align with changing global supply chains and evolving technologies. The planet can’t afford to ignore recycling and that message needs to be driven by BIR and the recycling industry.

Regulatory drivers

I find it ironic that those who until recently just saw waste as ‘waste’, now consider it a ‘strategic commodity’ as it better serves their interests.

The potential reclassification of recycled materials as strategic resources is a key reason why industry voices must be included in regulatory planning. Current moves to ‘weaponise’ critical commodities, through the implementation of protectionist barriers such as outright export bans or tariffs, will directly impact the recycling industry.

One may hope that the premium for rare resources will result in governments offering better tax and other incentives to boost domestic recycling production; but it is more likely that restrictions on global trading will only hinder recycling producers from establishing their natural marketplace. Such restrictions will also present an unwelcome barrier to achieving a circular global economy if only wealthy nations can obtain critical resources.
A paradigm shift

In the recent past, the end-of-life outcome for products was of little importance for manufacturers and consumers alike. But with environmental awareness and price pressure, consumers no longer want to be part of a throw-away society and want to recycle or repair rather than simply replace items.

New legislation for manufacturing, especially in Europe, is implementing extended producer responsibility (EPR) requirements and prescribing mandatory recycled content. This means manufacturers must take more responsibility for the entire life cycle of products, including their end-of-life. Such rules have incentivised the design of products that are easier to dismantle and have improved their recyclability. This is real progress but more needs to be done, such as greater transparency about the composition of products (especially for plastics) – after all, we can’t recycle what we can’t identify.

A changing future landscape

Outside of regulation, other structural drivers could have the potential to transform the recycling industry. Fracturing geopolitical alliances are redrawing the global landscape. Historically, China has been a major destination for recycling materials, but changes to its import policies, as well as moves by other nations to actively diversify away from China, are enabling other countries to increase their market share.

Southeast Asian countries such as Vietnam, Thailand and Malaysia are benefiting from this trend, but it is clearly India that has positioned itself to become a global leader in recycling. Part of this has been a strong political drive by the Indian government, recognising that our industry has the potential to create jobs, reduce the impact of waste on the environment and contribute to the country’s economic growth. Elsewhere, the Middle East is confirming its place as an important recycling hub, bridging the West and the East.

Technology is also expected to turn its attention to the recycling industry, with digital sensors and artificial intelligence (AI) initially enhancing the processing and identification of materials. AI is also expected to influence the trading side of the industry, just as it is changing the wider financial trading environment.

And recycling has a natural alignment with Net Zero goals. The 2016 BIR study on the environmental benefits of recycling (to be updated this year) showed that the use of recycled material has saved over 500 million tonnes of CO₂ emissions compared to primary production. But that’s just the external impact. Our members are also striving to lower their own carbon and environmental footprints, with some operators even having achieved a closed loop in terms of energy efficiency. Yet, measuring the total impact of our industry’s efforts in reducing carbon is hindered by a lack of consistent data.

A force for good

Global instability, incoming regulations and data inconsistencies are just some of the challenges our industry faces, but they also reinforce the importance of having a solid organisation to support the interests of the recycling industry on an international scale.

In this time of flux, BIR provides a dynamic platform to promote the benefits of materials recycling and advocates the free and fair trading of recyclables in a sustainable and competitive world economy.
Strengthening advocacy in a new era for recyclers

The need for circularity is turning the world’s attention towards the recycling industry. As recognition of recyclers’ vital role in ensuring the earth’s limited and valuable natural resources are recovered and used sustainably grows, so does the need for recycling’s voice to be included in the shaping of new policies and legislation that will affect the industry. At BIR, we are acutely aware of our position as the leading representative of the global recycling community. As such, we are strengthening our use of advocacy to ensure that our voice — and the views of our members — is not only heard but is also impactful during this era of rapid evolution for the industry.

As the scope of BIR’s advocacy activities increases, we want to keep our members informed of our actions. Global position papers are a core element of our advocacy team’s approach to taking proactive positions on pressing issues and priorities for the recycling industry. In our view, these papers offer a clearer approach when issues arise in international legal contexts and provide a stronger representation of BIR members’ interests.

Global position paper on Extended Producer Responsibility

On 20 November 2023, we issued our first position paper, looking at Extended Producer Responsibility (EPR) and calling for policymakers to ensure that EPR schemes are designed in such a way that they do not disrupt existing efficient markets. Through this paper, we expressed our support for the need to increase circularity, but also stressed that policymakers should consider other policy instruments to achieve it. In our view, making design for recycling mandatory and setting legally-binding recycled content targets should be prioritised. These measures will help to increase demand for recycled materials and level the playing field with extracted raw materials. When and where EPR schemes are considered an absolute necessity, recyclers must be involved in the governance bodies of such schemes to ensure an appropriate balance of interests among the most relevant stakeholders in the value chain.

We felt it was particularly important to publicly express our position on this topic as EPR is often seen as the silver bullet to ensure circularity, particularly when it comes to plastics, textiles and electric and electronic components. However, such policies often do not consider the impact on recyclers, disrupting existing efficient markets and turning recyclers into service providers when not designed correctly.

At a global level, EPR is specifically being promoted by governments to address plastic waste. In the Intergovernmental Negotiating Committee (INC) for a new global treaty on plastics, country delegations are considering including EPR under the treaty’s core obligations. Several countries have already moved from voluntary EPR schemes to legal provisions on EPR for specific material streams. These developments are occurring whether we are involved or not, and we felt it was important to have our position paper as a core reference point for when the BIR advocacy team needs to express its views in various fora. To underline this point, it has already been used with the INC last November regarding a new global treaty on plastics. It will also serve as a useful tool for members if they need to address EPR-related issues at a local or national level.

Looking ahead, the team have identified a series of topics on which they plan to produce further position papers, including the importance of free trade for the recycling industry, chemical recycling and on critical/strategic raw materials.
Study on the environmental benefits of recycling

We are launching a new study on the environmental benefits of recycling. Building on the two previous BIR studies conducted in 2008 and 2016, the scope of this new study will be extended to reflect the positive carbon impact of all commodities represented by BIR globally, as well as exploring the natural resource savings. To compile this research, we have reached out to 35 research partners and leading global consultants. The study’s Steering Committee, comprising volunteer BIR members, is currently in the process of selecting the most suitable partner based on their expertise and experience.

New global treaty on plastics

As mentioned, we are actively involved with the INC, which aims to deliver a new global treaty on plastics. Beyond EPR, the INC meetings stem from a UN resolution to develop a legally-binding instrument on plastic pollution, including in the marine environment. This is based on a comprehensive approach addressing the full life-cycle of plastic. This new Global Plastics Treaty will be developed through five INC meetings taking place between 2022 to 2024, with an aim to have a drafted and signed treaty in place by mid-2025. We have been actively involved since the beginning of this negotiation process and will continue to advocate for the interests of our members during both the drafting process and any potential intersessional work.

New E-Waste trade rules

The UN Basel Convention’s decision to impose notification controls for all ‘electrical and electronic waste’, as of 1 January 2025, is intended to make all E-waste, that was previously freely traded, subject to control procedures. This will mean that all E-waste will require prior written notification and then consent from exporting, transiting and importing countries’ competent authorities.

The Organisation for Economic Co-operation and Development (OECD) has also been addressing the revision of the OECD Decision on the transboundary movement of waste, which is where the Basel amendments on E-waste need to be transposed. The OECD Decision aims for the waste traded between like-minded OECD countries, for recycling or recovery, to benefit from a simplified control procedure.

In this regard, we have been supportive of a proposal from the Japanese government, which objects to the automatic transposition of the Basel amendments, to avoid Prior Informed Consent (PIC) procedures for all electrical and electronic waste; and focus instead on less onerous assurances of environmentally sound management. This would allow companies to build more resilient, responsible supply chains for metals, precious metals and critical minerals. We have also elaborated on the steps our members could take to improve the PIC procedure and support further discussions based on the revised Japanese proposal for new entries.

Following a year-long negotiation process, the OECD yielded towards a non-consensus decision, to be approved in the first quarter of 2024, resulting in the more restrictive handling of E-waste traded among OECD countries. In view of these developments, we strongly recommend that companies take a proactive approach and demonstrate in advance that they are environmentally soundly managed and apply for pre-consented status under the OECD and EU legal frameworks – ahead of all the new requests, which will soon pile up.

Throughout this negotiation process, we have advocated for the modernisation of the PIC procedure, demonstrating that there will be a significant burden on authorities and businesses by further delaying agreements for shipments with the ever-increasing number of notifications. It was agreed by both the UN Basel Convention and the OECD that country delegations should initiate the modernisation of PIC procedures. We will remain actively involved in this process to ensure the best possible outcome for our members and facilitate trade procedures.
Throughout the articles in this first edition of The Recyclist, three themes have recurred: the need to clarify the blurred distinction between waste and recyclable materials; the significant role recycling must play in the transition to a circular economy; and the rising dangers of protectionism.

These three interconnected elements are all embedded within the European Union’s (EU) amended Waste Shipment Regulation (WSR). There is little wonder that the recycling industry is paying close attention to these reforms, but questions are emerging about the extent to which these changes will be positive or negative for the industry.

What are the changes to WSR?

Last year, the European Parliament agreed to introduce stricter procedures and control measures for waste shipments, which includes a ban on all waste destined for disposal, greater efforts to ensure that recyclables are transported and treated in an environmentally sound manner, and improvements in how hazardous waste is classified to ensure traceability and increase recycling.

Few will dispute that action to control waste is needed. In 2020, the EU exported 32.7 million tons of waste to non-EU countries (a 75% increase since 2004) of which half was directed to non-OECD countries.

However, when it comes to actioning this new legislation, the devil may be in the detail for the recycling industry.

Key points of the revised WSR include: tighter controls on the exports of waste to OECD countries and stopping the export of plastics and hazardous waste for disposal in non-OECD countries entirely; enhancing the tracking of waste shipments; measures to ensure waste shipped outside the EU must be managed in an environmentally sound manner; and expanding the Prior Informed Consent (PIC) system and improving its transparency.

The positive factors underpinning the amended WSR are the EU’s acknowledgement that waste should be embraced as a valuable resource and be properly managed, and the recognition that the better recovery and reuse of secondary materials will be crucial for the shift to a circular economy.
Importance of uninhibited free trade

Whilst recyclers welcome the better management of waste as a secondary resource, there are concerns that any form of restriction on free and fair trade, no matter the positive environment and sustainability intentions behind them, could be prohibitive for the industry and constrain recyclers’ ability to grow their businesses and markets, as well as hampering circular economy objectives. BIR Director for Trade and Environment Alev Somer says, “The introduction of trade restrictions should not necessarily be treated as environmental considerations, especially in the case of the recycling industry, which contributes more to sustainability objectives and to the circular economy.”

In an era where resource scarcity is becoming a geopolitical matter, there is a fine line between applying the proximity principle for waste by keeping these resources within the EU and potentially disadvantaging trading partners outside the EU by denying them access to valuable and valued resources. Alev explains, “Trade barriers could limit the supply of resources to the manufacturing industry in some countries. It could lead to the lowering of recycling rates and a drop-off in investment that would harm not only the interests of the recycling industry but also be damaging to the environment.”

Capacity challenge

A second matter concerns whether or not the industry in Europe will have sufficient capacity to cope with the increased requirements for waste management. Data from the European Environmental Agency shows that whilst the recycling rate of waste (municipal, packaging and E-waste) is increasing, the pace of growth has been slow and the overall recycling rate, (i.e. the ratio between total waste generated, excluding major mineral wastes and the quantities that were managed through recycling, stood at 46% in 2020). Significant flows of investment into certain areas of recycling, such as plastics, have seen capacity grow at a much faster rate. An estimated €1.75 billion investment led to installed plastic recycling capacity growing by 17% in 2021. However, representatives of the plastics recycling industry have expressed concern that the demand for recycled plastic is not keeping up with increased supply, particularly as virgin plastic is still cheaper for manufacturers to use than recycled materials.

Regulatory hurdles

Other areas within the industry have also expressed concerns about how the WSR revisions will impact them. The EU is currently the world’s largest recycled steel exporter, with typical net exports exceeding 10M tonnes/yr. While reducing export volumes would mean EU metal workers have access to greater quantities of recycled metals, former BIR Trade and Environment Director, Ross Burlay, has cautioned that export restrictions could badly damage the business model. He warns that the combination of higher exporting costs and a smaller pool of European purchasers would depress prices and could lead to a fall in collection rates in the EU.

The new regulatory hurdles also have the potential to hobble the recycled electronics trade as the PIC changes could severely lengthen shipment approval processes. Furthermore, the EU’s plans to expand its definition of waste could mean further restrictions on the trade of electric and electronic recyclables. Currently, the checking, cleaning, repairing and refurbishing of equipment and products are generally considered permissible operations, but future changes may mean more things are subjected to controls and could potentially be prohibited. The tougher regulatory environment surrounding electric and electronic recyclables also lacks clarity about how it may affect battery recycling from smaller appliances – including lead-acid, nickel-cadmium and lithium-ion batteries – which is particularly frustrating at a time of soaring interest in battery recycling.

BIR perspective

As an official body representing recyclers, BIR has regularly vocalised the industry’s concerns about the potential impact of the WSR revision. As well as challenging whether the industry will be unfairly burdened by intergovernmental agreements and inspections, audits and checks on facilities in third countries; we have also queried whether worldwide concerns about plastic pollution are resulting in harsher export conditions for other recyclables.

Further legislative steps remain with the EU before the new regulation will appear, during which time BIR would like to reassure our members that we will continue our efforts to secure the industry’s future business. We have urged both OECD and non-OECD country governments to carefully consider the impact of these proposed laws on the material needs of their own industries.

“Trade barriers could limit the supply of resources to the manufacturing industry in some countries.”

We have frequently conveyed our fears about the potential damage that this regulation could inflict upon the international recycling industry, and we feel these regulations represent a thinly disguised back-door protectionism that puts our industry in danger, while severely disrupting the global circular economy.

It should be blatantly clear to everybody that the trade of vital raw materials, such as recycled metals, should not be restricted, and BIR as an organisation remains fully committed to ensuring exactly that – the free trade of recyclables in a global circular economy.
What issues are you most concerned about in 2024?

What our national associations think:

**Gremi De Recuperación De Catalunya**
Victoria Ferrer Maymó
Director General

The upcoming prohibition of waste exports will be a significant industry focus during 2024. These legislative changes could be particularly damaging, because if there are no mechanisms to allow recyclers to trade secondary raw materials around the world, many companies will not be able to sell such materials. The European Commission is also seeking to create extended producer responsibility systems, however these will also require further thought as when these systems are collective responsibility systems, however these will also require access to country-specific laws coming into effect, the industry could be confronted by a complete overhaul before 2030. These upcoming legislations are still work in progress, which creates a lot of uncertainty and inconsistency for the textile market and the industry as a whole. It will need to transition to new circular business models, but there is also a need to find a balance between high environmental objectives and the competitiveness of companies in the sector.

**BACT – Bulgarian Association of Circular Textiles**
Sirma Zheleva
Chief Executive Officer

The textile industry faces increasing legislative pressure right now. From Europe-wide regulations and directives to country-specific laws coming into effect, the industry could be confronted by a complete overhaul before 2030. These upcoming legislations are still work in progress, which creates a lot of uncertainty and inconsistency for the textile market and the industry as a whole. It will need to transition to new circular business models, but there is also a need to find a balance between high environmental objectives and the competitiveness of companies in the sector.

**INESFA – Brazilian Association of Iron and Steel Scrap Companies**
Roger Amarante
Head Of International Relations

2024 will see a host of challenges for the recycling industry. First, is the need to maintain free market trade with competitive prices. Second, the industry needs to reconcile increased logistical costs with the change of value for recycled materials. Decarbonised materials should see price increases, yet if there is a dispute between carbonised materials and decarbonised materials, overall values may drop. However, a ban on carbonised products could protect recycling plants.
Developing a circular economy is critical for the fight against climate change. Having joined the Science Based Targets initiative (SBTi) in 2023 and committing to set targets for company-wide emission reductions, our next challenge will be implementing the final steps towards climate neutrality in Scope 1 and 2 emissions by 2030. We are focusing on reducing our use of diesel. By electrifying our machinery, we can reduce emissions in the processing and handling of scrap. In terms of energy supply, we are utilising certified green electricity and investing in photovoltaic systems. Our ambitions are high but, alongside our partners, we want to shape a sustainable future for our industry. In our view, an efficient (stainless) steel industry will play a key role in achieving the Paris Agreement-aligned global climate commitments.

In May 2023, the European Commission (EC) introduced a new regulation limiting lead (Pb) content in PVC articles. The EC allowed the industry just 18 months to adjust to this regulatory change. However, the technology needed to remove lead from PVC has not yet been fully tested and scaled, and remains in laboratories. In addition, industry must also develop how to reintroduce an environmentally friendly stabiliser (Ca Zn) to ensure recycled PVC will not degrade. This issue will not only impact the plastic industry, but the recycling of copper and aluminium cables will also be affected, as thousands of tonnes of copper and aluminium cables will be shipped to Asia and the Middle East, rather than be recycled in Europe, leaving EU smelters short of supplies of valuable scrap. This is particularly ironic given copper and aluminium are considered critical metals in the EU.

It’s hard to believe anyone who claims they can predict future scrap metal prices with accuracy. The markets for scrap metals are constantly shifting as they are closely tied to global events, so even industry analysts can’t always anticipate how prices will change over time. Supply and demand largely determine prices, and factors such as inflation and new technology will impact supply chains and the demand for scrap metal in the coming years. However, several long-term industry projects are aiming to predict the future price of metals including steel, copper and aluminium. In our view, these will remain unable to predict external factors that have an impact on demand, such as an outbreak of war, energy prices and potential recessions. For this year, an anticipated slowdown in construction could have an impact on the demand for steel and could potentially lower prices for scrap steel.

In 2024 the waste and recycling industry faces a mix of challenges. We have been subject to frequent regulatory changes, especially regarding the handling and disposal of electronic waste, batteries and hazardous materials. These evolving regulations require continued adaptation of our operations to meet and uphold our environmental sustainability commitments and circular economy expectations. Meanwhile, the intrinsic technology in battery manufacturing, particularly in the electric vehicle (EV) sector, is advancing rapidly. While this is positive for cleaner energy and transportation, it poses challenges for recyclers. Keeping up to date with changes in battery chemistry, design and materials is essential to ensure effective and environmentally-friendly recycling processes. In addition, global supply chain disruptions and fluctuations in raw materials prices could also impact the operational efficiency and competitiveness of recycling companies. Safe and stable access to raw materials is essential to maintain effective recycling processes and meet market demands.
A major issue facing the plastic recycling industry in the coming year is the increasing negative public sentiment towards the use of plastics (notably single-use plastics) and the ensuing anti-plastic legislation, which includes the banning of plastic bottles in some areas. A drop in collection rates is also concerning, especially considering there is an upcoming increase in mandated content percentages. This could create a supply-demand imbalance and place a further strain on the industry. Supply and demand concerns are also proving to be a challenge for domestic plastics recyclers in the US. Imported recycled and virgin resin from Southeast Asia is competing with North American producers on the supply side, while demand has been impacted by thermoform manufacturers turning to cheaper virgin resin in preference to post-consumer resin (PCR). The lack of demand for PCR has put pressure on reclaimers’ ability to remain profitable and some have reduced their output.

A market shift from outward movement to inward demand is a big challenge for traders of scrap metal. The raw materials flow has tended to move from regions such as the US and Europe to Asia but with the onset of new technologies, new manufacturing facilities and the push for green metal, these flow patterns are changing. Manufacturing expansion has boosted local demand, keeping supply within local regions rather than being exported. Improved technology can now convert grades of scrap that were previously unusable, while processing can be undertaken without the need for manual labour, enabling scrap to stay local. Meanwhile, the push for green metal by manufacturers means more recycled metals are being incorporated into production processes, again raising local demand. All these factors are disrupting the flow of materials to traditional markets and are leading to new product lines as well as the search for new customer bases.

From a domestic perspective, political and economic instability in Pakistan is creating further challenges for metals recyclers. Not only is the wider economy dealing with the challenges of inflation and fiscal instability, businesses also face difficulties in terms of planning and investment. However, the greatest impediment for businesses based in Pakistan right now is currency fluctuation. The country’s high debt payments and an external funding gap are weighing on the rupee, ensuring that an already tough business environment is becoming even more testing.

We see challenges for the steel recycling market that are being shaped by the global economic downturn. The current economic retraction has led to an increased reliance on natural raw materials, particularly in countries endowed with abundant resources. This shift stands in contrast to the principles of a circular economy and the urgent need to reduce greenhouse gas emissions. For example, steel mills are opting to utilise their reserve stock, which is reducing prices and lowering the demand for recycled raw materials. At this time, we need to value recycled raw materials over natural resources to enhance competitiveness. Addressing this issue requires strategic measures that need policymakers’ support, such as tax reductions, the maintenance of open export borders and the implementation of laws mandating the use of recycled materials in new products. It’s urgent to foster a business environment where recycled material becomes a viable and attractive option.

In 2024, the greatest task for the textile industry will be to build a solid foundation to withstand the challenges ahead. All industry stakeholders are keen to take concrete actions and form agreements to push greater circularity across textiles. Looking ahead, sorting will be the undisputed bottleneck. Despite companies such as Texaid being willing to invest significantly, challenges persist. A notable technology gap exists, with databases and the accuracy and precision of scanning not yet being sufficiently advanced. Therefore, in the development of new sorting systems, it is imperative to adopt a modular approach and incorporate expansion stages from the outset. We cannot afford to wait for solutions to mature; we must proactively take steps now. And this is exactly what Texaid is committed to doing by developing a new plant with a capacity of up to 50,000 tonnes per year.
Acknowledgements

Thank you to all our contributors:

Susie Burrage OBE, BIR President, UK
Matthew Griffin, 311 Institute, UK
Josephita Harry, Pan American Zinc, USA
Ben László, Kuusakoski Oy, Finland
Emilie Søndergaard Christiansen and Karin Nørgaard, Think PR, Denmark
Arnaud Brunet, BIR Director General
Alev Somer, BIR Director for Trade and Environment

Content direction: Susie Burrage OBE, BIR President
Project coordination: Elisabeth Christ, BIR Communications Director
Copywriter: Kirsty Hudson
Editorial consultant: Sophy Norris, Selbey Anderson, UK
Design: AML Communications, UK

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We would welcome your ideas and input into future editions, to share these, simply email us at therecyclist@bir.org.
The next edition of The Recyclist will be out in September 2024.