Sustainability report 2021

El-Kretsen

El-Kretsen 2021

About this report

This sustainability report refers to the performance in 2021 of the company as a whole. It has been produced in accordance with Swedish accounting law and is published as a separate document alongside the annual report. El-Kretsen meets two of the three criteria governing corporate sustainability reporting (Chapter 6, paragraph 10 of the Annual Accounts Act). El-Kretsen is a nationally approved collection system for WEEE and batteries. This basic process has been outlined in the report along with the resulting statistics. The report also includes risks, possibilities and important sustainability aspects as identified by El-Kretsen's management.

In this sustainability report we focus solely on our own business. Being able to correctly determine where our influence begins and ends is always a challenge. Take, for example, the metals and various components that make up the electronic products we handle. For these areas we have refrained from reporting data, focusing instead on listing the processes we use and the evidence we get that we are making a positive difference.

Onwards and upwards!

Following a year overshadowed by the pandemic, we were looking forward to 2021 being the year when things returned to normal. Only this didn't quite happen. Looking back, it is now obvious that the beginning of 2021 was merely the half time marker. However, the pandemic's massive effect on global trade did not seem to spill over to adversely affect the ongoing visionary and strategic work. On the contrary, sustainability reports from producers and recycling organisations give a uniform picture of determined efforts being made throughout to get to a position of climate neutrality and circular material flows. Reading these reports in greater detail also reveals information on what has been accomplished so far, what difference this makes and what is being planned for the future. It is also obvious that sustainability reports have come a long way since they started being more widely used some 25 years ago.

One of El-Kretsen's key concepts is co-operation. We are by no means the only ones who pursue the development of a sustainable society and a circular economy by reintroducing materials back into society. We are affected by the others in this field, just as our actions affect them. I hope and believe that our processes and co-operation also help our customers and suppliers to reach their own sustainability goals.

I'm convinced that the proactive efforts made throughout the world will also help to strengthen us in our role: collecting WEEE and batteries and treating them in order to eventually reintroduce the recovered materials to producers for making new products. Our aim is to do this while retaining the highest quality possible.

Our vision is to recirculate all the resources we source from WEEE and batteries. Needless to say, this is a long-term vision, but we have already started planning and developing strategies for reaching this goal. All these things are pointing us towards the future. And what last year looked like in greater detail will be revealed in this report for those who read on.

Martin Seeger,
CEO El-Kretsen

A national collection system

El-Kretsen's business idea is to offer producers of electronics and batteries a nationwide service for collecting, recycling and reusing WEEE and batteries. By advancing our own knowledge and technical expertise, El-Kretsen propels the development towards a sustainable society and a circular economy and we offer our customers quality-assured handling of their products when these have come to the end of their useful life. El-Kretsen is a non-profit organisation owned by 19 trade organisations.

El-Kretsen has been around since 2001 when the producer responsibility legislation came into force. The collection, transportation and pre-treatment operations are carried out by a network of external partners. Despite dealing with large volumes and making collections all over Sweden, El-Kretsen employs only 14 people. The company is based in Stockholm in premises we share with Näringspunkten, a network of trade associations including many of El-Kretsen's owners.

El-Kretsen's business idea is to offer producers of electronics and batteries a nationwide service for collecting, recycling and reusing WEEE and batteries. By advancing our own knowledge and technical expertise, El-Kretsen propels the development towards a sustainable society and a circular economy and we offer our customers quality-assured handling of their products when these have come to the end of their useful life. El-Kretsen is a non-profit organisation owned by 19 trade organisations.

El-Kretsen has been around since 2001 when the producer responsibility legislation came into force. The collection, transportation and pre-treatment operations are carried out by a network of external partners. Despite dealing with large volumes and making collections all over Sweden, El-Kretsen employs only 14 people. The company is based in Stockholm in premises we share with Näringspunkten, a network of trade associations including many of El-Kretsen's owners.

El-Kretsen´s organisation

- **Marketing/Communications**
  Responsible for El-Kretsen's website, the production of information and publicity materials for customers, as well as for the customer support that services affiliated producers.

- **Operations Management & Quality Assurance**
  Responsible for collection and logistics as well as for customer support servicing municipalities, collection points, transportation companies and pre-treatment companies.

- **Finance**
  Responsible for budget work, invoices and external questions on financial matters.

- **Purchasing**
  Responsible for the procurement of services and purchasing of materials.

- **Business Development/IT**
  Responsible for El-Kretsen's IT system, its analytical plant and for external research projects.

From policy to practice

El-Kretsen's general business policy was last revised at the end of 2019 and has remained in force since then. It forms the basis for the decisions we make and you can also find it on our website.

El-Kretsen is a service company that manages the collection and recycling of batteries and electric and electronic products for the Swedish business sector. El-Kretsen should be known for its high degree of competence, service-mindedness, responsibility and flexibility and for its awareness of what impacts on quality and our natural and working environments. We persistently and systematically work on engaging competent colleagues who strive always to use the most environmentally-friendly and economically viable solutions to treat the waste we collect. All our actions are characterised by our commitment to maintain high social, environmental and ethical standards with respect to all our partners. El-Kretsen prevents pollution and lives up to the legislation present in our society and the demands placed upon us by our partners.

The legal foundation of El-Kretsen's operations can be found in the producer responsibility regulations. The Swedish Environmental Protection Agency (SEPA) acts as our supervisory authority to ensure that we meet the legal requirements and work to reach the existing goals.

Not only are we bound by the law. We also need to meet the requirements of our customers – and we, in turn, place certain requirements on our own partners. All these requirements are regulated in the agreements we sign and continually monitored through dialogue and/or revisions. El-Kretsen has played a prominent part in developing harmonised European recycling standards: Cenelec and WEEELabex. The flows of materials are reported in the common reporting tool Reptool.

Our partners all follow CECED's (The European Committee of Domestic Equipment Manufacturers) Code of Conduct. In short, this means that we make sure our partners adhere to the same ethical guidelines that ban child labour, promote fair wages and combat discrimination, etc.

El-Kretsen uses ISO 14001 and ISO 9001 to further its environmental and quality performance.

Sustainability Strategy

When it comes to materials we take from the earth, there is substantial and well-documented proof that the environmental benefits of recycling and reusing are huge compared with mining new materials. Not only that - it is also the only viable long-term perspective from which to view resources. We rely on technical expertise and regulations on how to treat waste products to make the recycling process as efficient and safe as possible. However, according to UN surveys only 20 per cent of the waste worldwide passes through established or approved systems. While illegal waste trading is by no means a new phenomenon, the growing amount of electronic and electric waste worldwide means that the problems associated with it are also growing. Careless handling of WEEE obviously affects both the environment and the people involved in the processes. El-Kretsen's primary contribution to sustainability is to make sure that as much as possible of the WEEE created in Sweden is treated in the best way possible. Being a national collection system, we have no say in what happens in the rest of the world, but we are always happy to share information about our processes as well as about what has worked well and less well during the 20 years our business has had to take shape and develop. For countries that are now planning on introducing producer responsibility, this information exchange can be a useful way of avoiding having to reinvent the wheel. Instead, they can focus on creating regulations and technical solutions that lead to sustainability.

El-Kretsen's own environmental and quality management practices are based on ISO 14001 and ISO 9001. These standards list both risks and possibilities and also point out important sustainability aspects. The aim is to assess these structurally based on the following parameters: El-Kretsen's level of say in the matter; the likelihood of something happening and finally what effect any given issue might have. A high score in this matrix is a clear indication that the issue is one that El-Kretsen needs to work on.

Important sustainability aspects

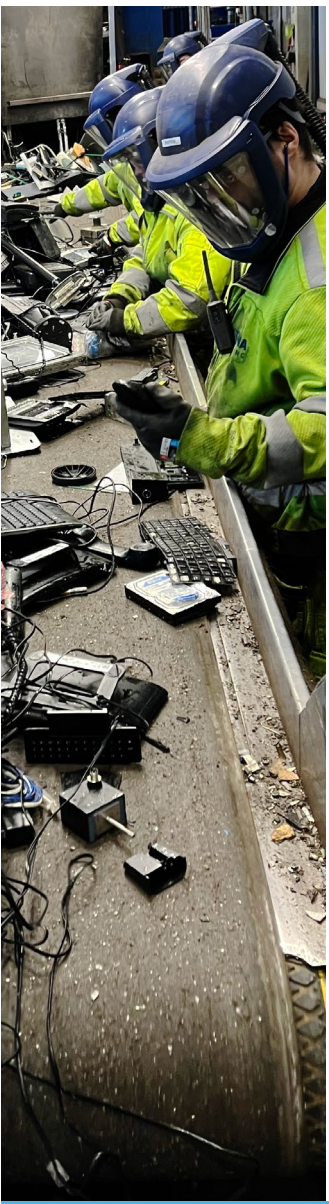
Many important sustainability aspects are already closely linked to El-Kretsen's core operations. Making sure that collections, transportation, pre-treating and recycling is done systematically and using safe processes reduces the risk of accidents and prevents spreading hazardous waste. It also supports the reintroduction of resources to the manufacturing industry, which in turn reduces the need to mine virgin materials.

To handle these aspects, El-Kretsen has a strategic approach which can be explained in three parts:

- Agreements, standards, monitoring and dialogue with our suppliers ensures that the services we buy are of high quality.
- We are all "decision makers", both at home when we ponder whether it matters if a battery goes in the household bin instead of the recycling bin, and in formal situations like working with legislative changes. At El-Kretsen, we are confident that we can provide useful information to both kinds of decision makers. We are also confident that if we all make decisions based on the best environmental outcome, it will have a significant overall effect. This is why sharing information and knowledge is so important.
- To be able to share authentic and current information, we can't rely solely on the experiences we get from our own processes. We also need to know what is happening in our business area. This is why we regard Research and Development as a key factor, ensuring that all our actions and statements are sound.

Indirect risks

Indirect risks include electronics that are not recycled at all or processed in a manner that is hazardous to people's health and/or the environment. It is vital that all products and the metals and other components they contain have more than one life cycle. Equally vital is a recycling process free from unnecessary risks. The fact that the informal sector handles a large part of the world's WEEE comes with a major and obvious risk: that this waste is not processed with a focus on sustainability, but to produce the highest possible profit.



El-Kretsen has two approaches to indirect risks depending on whether the perspective is national or global. On a national level, we work with quality assurance and researching and developing existing processes as well as with new ways of making recycling processes safer and more efficient. Moreover, we run a long-term information campaign aimed at motivating all parts of society and making people better informed about the role recycling plays in society. On a global level, we work with business intelligence and information exchange. Normally, we would receive numerous delegations and/or be invited to visit those who are interested in our business. In 2020 and 2021, however, all such initiatives were postponed because of the pandemic.

Direct risk

The direct risks relate to our own operations. At El-Kretsen, we work with some 15 different transport companies. Insufficient fill rates, old fleets and aggressive driving styles all contribute to unnecessarily high levels of CO2e emissions. As we handle hazardous waste, another direct risk is that of accidents involving staff or the environment.

Most of our collecting is done in co-operation with Swedish municipalities and their recycling centres. There are different containers for WEEE and the re-sorting is handled by El-Kretsen's sub-contractors. This handling poses direct risks to the natural environment. Some measures are now regulated by special legislation, such as the requirement for weather proofing at collection points or the requirement for special containers for transporting batteries. Precise regulations lessen the risks, but they do not affect the scope for human error, for example as a result of carelessness and ignorance primarily in conjunction with loading and transporting WEEE.

The same applies to personal injuries. These can be direct accidents like falling, crushing or transport-related accidents, and indirect harm can be caused through contamination or inhaling hazardous substances such as asbestos or mercury. Finally, corruption and unethical business methods always constitute a threat to any business operation, ours included.

Anti-corruption

Our procurement processes include a requirement for international standards that uphold a clear position on anti-corruption as well as methods for preventing corruption. We use the guidelines set out by CECED (the European Committee of Manufacturers of Domestic Equipment). Their policy covers a vast array of environmental, social, ethical and health-related issues, two of which are corruption and human rights. The CECED policy is a well-established and well-prepared model for placing specific demands on European cooperation projects.

Many play a part in shaping the recycling experience

As a collection system, El-Kretsen plays a major part in Sweden. With respect to our workforce, however, we are only a small company and we rely on a long line of partners to assist us in the day-to-day running of our business. This ranges from those who provide basic essentials like IT services or text translation to those who operate on a larger perspective, for example motivating consumers to take their WEEE to designated collection points or making sure the waste collected is removed for recycling.

Owners

El-Kretsen was set up in 2001 as a joint venture between a number of trade organisations. Today, the shares are distributed between 19 trade organisations. El-Kretsen is still a non-profit organisation.

Producers

Those who have producer responsibility for electronic and electrical equipment (see SFS 2014:1075) and batteries (see SFS 2008:834) can apply to become an El-Kretsen affiliated partner. As an affiliated partner, you automatically become part of a nationally approved collection system. Our customers report what they put on the market and at the end of the calendar year this information is collected along with information on the amounts that have been recycled. The sum total is then reported to the Swedish EPA. At the end of 2021, El-Kretsen had 2,068 customers. We also collect WEEE directly from many producers or their stores.

Municipalities

El-Kretsen has co-operation agreements with all of Sweden's 290 municipalities. The collection system is based around the municipal recycling centres, but these are also supplemented with alternative collection points like mobile collection systems, collection close to real estate, etc. Another way in which El-Kretsen contributes is by providing municipalities with information which they can use to educate and motivate the residents.

Recyclers

The process that precedes the actual recycling is called the pre-treatment

process. This is where screens, circuit boards, leads, batteries and other parts are disassembled into smaller components. These components then take different routes to be recycled, as there are separate recycling plants for different kinds of WEEE. Some suppliers deal with the complete process, from waste to new raw material, whereas others focus on preparing the waste for recycling.

Transport companies

El-Kretsen's contracted transport companies pick up waste from the many different collection points and transport the different fractions to the appropriate treatment facility. The majority of all WEEE is collected and transported in cages, but luminaires and batteries are an exception and travel in plastic boxes. Some major collection points also ship their waste in skips.

Research institutions

El-Kretsen följer, stödjer och samverkar med forskning som främjar vår vision om att alla resurser från elprodukter och batterier ingår i ett kretslopp.

Authorities

The legislation governing the collection, transporting and handling of hazardous waste is very strict – as are the criteria that need to be met to qualify as a nationally approved collection system. At the same time, laws and regulations change over time. Having a good relationship to other authorities as well as the same view of our duties from a legal perspective is central to El-Kretsen. We don't just want to be a passive entity that reports only for supervision.

Politics

A large part of El-Kretsen's activities are outlined on the local, national and European political scenes. Here, our role is to share the knowledge we have to enable fact-based political decisions.

Non-Governmental Organisations and Trade Organisations

El-Kretsen provides information and promotes a dialogue with organisations that have an interest in the issues we support. These may be trade organisations that represent our customers but are not among our owners, or organisations that operate in the grey zone between research and politics and that nudge society in a certain direction.

Media

El-Kretsen provides fact-based knowledge and information upon request. We also play an active role in airing the issues that support our vision.

Society, schools and private individuals

For information seekers who wish to extend their knowledge about WEEE and batteries, El-Kretsen has expanded its website with a Sustainability Library. Here, we have gathered articles on our activities as well as information about projects and studies on and around sustainability in relation to WEEE and batteries. We are also co-operating extensively in order to reach the next recycling generation: Sweden's school children.

Safe and sustainable transport

In order to be able to recycle, we need to be able to transport. And transportation means climate emissions. This is El-Kretsen's single largest environmental aspect. Renewable fuels are a challenge to the entire transport sector. For this reason, El-Kretsen has opted to align itself with the Swedish environmental objective to reduce greenhouse gasses by 70 per cent between 2010 and 2030. The 15 transport companies that plan, load and transport WEEE and batteries for El-Kretsen all continuously strive to improve their operations. Our contracts include a basic requirement for reporting of environmental information such as type of fuel used, vehicle category rating according to the Euro emissions standard, and distance covered. Every year, we evaluate the companies' performance and take some time to discuss possible improvements. El-Kretsen's aim is to run up as few kilometres as possible with lorries that have been loaded as full as possible. At the same time, we need to be sensitive to the needs of our waste suppliers. Many collection facilities have limited capacity to store large items like white goods, fridges and freezers.

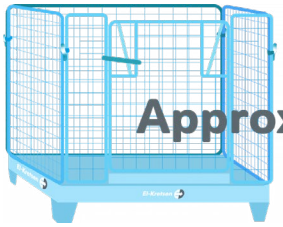
In 2021, we carried out an internal survey into how best to make demands on our transporters and follow up various aspects relating to our transport activities. We see an advantage in using common targets and tools for this purpose too, just as we did when we adhered to the national environmental transport objective. For this reason, we have set as a future target that our transporters should be Fair Transport certified – a sustainability certification for goods transporters offered by the Swedish road transport companies.

In 2021 we drove some 500,000 kilometres, which corresponds to some 3,600 tonnes of CO2e. In comparison with the emissions released through mining virgin raw materials, those figures are virtually negligible. If we take aluminium mining, the process of turning the mined ore into useful raw material requires almost 98 per cent more energy than the production of aluminium from recycled materials. Another aspect is the CO2e in fridges which we can capture and save through handling fridges in a specialised closed process. Today, all greenhouse gasses from capacitors and insulation materials are handled in closed processes. If this gas were to be released, it would correspond to 1.2 million tonnes of CO2e. This should also be taken into account when looking at the 3,600 tonnes of CO2e produced by our transport vehicles.

Collected and treated

The collection is divided into different fractions.

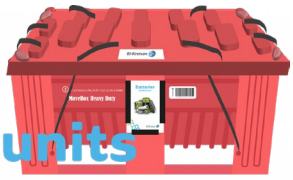
Fractions for collection	2020	2021
Small appliances	84 512 tonnes	68 208 tonnes
Fridges & freezers	28 120 tonnes	28 474 tonnes
White goods	36 017 tonnes	35 051 tonnes
Batteries	3 460 tonnes	3 547 tonnes
Fluorescent lamps (compact and straight)	1 813 tonnes	1 716 tonnes
LED and incandescent light bulbs	616 tonnes	537 tonnes
Other/professional electronics	1 183 tonnes	1 214 tonnes
Total	**155 721 tonnes**	**138 749 tonnes**



Approx. 40 000 units

Electric cages in circulation in Sweden

5 000 units



Battery boxes in circulation in Sweden

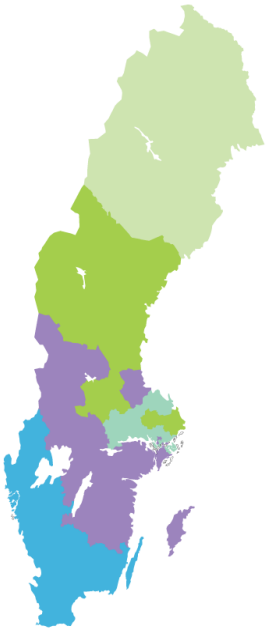
The statistics in the table above mainly stems from what we collect in co-operation with the municipalities in Sweden. However, some consumer electronic waste is collected by private entrepreneurs. Coffee percolators, for example, are classified as household consumer goods whether they have been used in someone's home or in an office. The recyclers we co-operate with who collect household consumer goods from offices or users other than private individuals supply us with their statistics, and we then compile all the figures and report the result to the Swedish EPA. While we have less control over these lateral flows, they nevertheless affect our statistics. The reduction in amounts visible in the above table is mainly the result of these lateral flows reporting fewer kilos.

Where does the waste go?

The maps below show where the collected electronics within each fraction is dealt with and by which of El-Kretsen's partners. The collection of luminaires is most easy to describe, as it is taken to the same facility regardless of where in Sweden it is collected. Some products, like white goods, can be handled in many different locations, while products like refrigerators and batteries require closed and more specialised processes which have only been set up in one or a few locations.

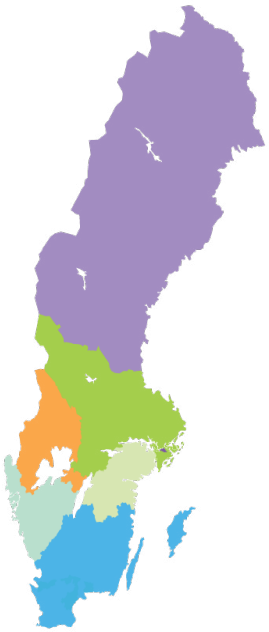
Fridges & freezers

- Revac: Hova
- Svensk Freonåtervinning: Hässelby
- Stena Recycling: Halmstad



Small appliances

- Kuusakoski: Skellefteå
- Kuusakoski: Timrå
- NG Metall
- Stena Recycling: Rosersberg
- Stena Recycling: Halmstad



White goods

- Kuusakoski: Skelleftehamn
- Lantz Järn & Metall: Västerås
- Svensk Freonåtervinning: Hässelby
- Revac: Hova
- Lantz Järn & Metall: Norrköping
- Skrotfrag: Göteborg
- Stena Recycling: Halmstad

Batteries

- Renova: Göteborg
- NG Metall
- Stena Recycling: Halmstad

Reporting to the Swedish EPA

Sweden's recycling targets for WEEE and batteries are regulated by SFS 2014:1078 and SFS2008:834. WEEE is reported in six different categories. The Swedish legislation is based on EU Directive 2012/19/EU.

Reported amounts of collected and treated WEEE

Category of WEEE	Tonnes collected	Reused	Material-recovery	Additional recycling*	Other kinds of treatment**
1. Equipment for temperature control	29 442	1%	84%	13%	2%
2. Screens and monitors	11 709	0%	68%	29%	3%
3. Lamps	2040	0%	16%	79%	5%
4a. Large EEE	46 539	0%	71%	23%	5%
5. Small EEE	27 548	0%	74%	16%	10%
6. Small IT and telecommunications equipment	6999	0%	86%	6%	8%

*Energy recovery and materials that replace virgin materials, for example fillers or construction material.
**Concrete, porcelain and similar materials that are not recycled, as well as environmentally hazardous materials that undergo thermal combustion or storage.

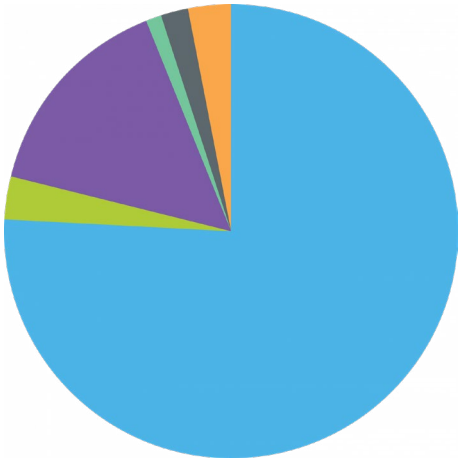
Reused

Extending the lifespan of our electric and electronic products generally benefits the environment. How many owners the products we collect have actually had is hard to say, as is to what extent these products have been mended and patched up before they reach El-Kretsen. Most of the products we collect have reached a ripe old age, but there are always exceptions. Some of the products that end up in our collections are still serviceable, and in order to give them a second chance El-Kretsen initiated a reuse project in 2019. In 2021, 320 tonnes of all the WEEE we collected went on to be reused. Of this, 70 tonnes were parts or components primarily from the IT sector which had gone into the fraction known as "small appliances". In addition to this, approximately 225 tonnes of white goods and fridges/freezers were suitable for reconditioning and resale. When a product is not reusable in its entirety, in many cases it is still possible to reuse some of its components. For products that are to be reused, there are requirements to be met such as maximum age, energy classification, reconditioning to meet a certain standard and also follow-up procedures. This ensures that these products are fit for purpose.

One thing is hardly noticeable when you look at weight but makes a world of difference from an environmental point of view, and that is the oil we empty out of compressors. This oil is checked, purified and can then be used as a new product. Compressors are found in fridges and freezers, for example, which also contain refrigerants. These refrigerants would have a seriously adverse effect on the environment if they were released into the air, so they are handled in separate and closed processes. Through gas separation we are able to extract hydrochloric acid and hydrofluoric acid, both of which can be reused.

Materials Recovery

Even if we reuse a product, it will at some point end up as waste. At this point, we need to have the processes and technology available to deal with the different materials present it contains. We managed to recycle and recover 75 per cent of all the waste we collected in 2021. The table below shows the different materials we recovered.



Material recovered
Iron 76%
Aluminium 3%
Copper 2%
Other metals 1%
Plastics 15%
Glass 3%

The petrol green wedge is called “Other metals”. This is an umbrella term for the metals we manage to recover but in such small quantities that they don’t have individual categories. Some examples of such metals are the zinc, nickel, lead and cobalt present in batteries. Other metals included here would be gold, silver and palladium, all of which are found in electronic equipment.
When we recycle metals, we are not yet able to restore all kinds of metal to their original state. Earth metals and other rare metals that only exist in very small quantities in WEEE, such as in alloys on circuit boards, can be separated, but the cost in energy spent is very high. However small the volumes are, these metals do possess unique properties and in order to solve the problem of how to return them to their original state, researchers are now approaching the issue from two angles: at the production level and at the recycling stage. Several producers have stated that their aim is to have reached 100 per cent circularity in the next few decades. You can read more about this in the sustainability reports published by different producers.
In El-Kretsen’s Sustainability Library you can read more about the role we play and the various projects we are involved in.

Materials recovery of plastics from electronic waste has been a challenge for quite some time. Just like metals, there are many different kinds of plastic, all with different qualities and properties. These different plastics all lend distinct qualities to a product, like offering a certain finish or fireproofing, but the same differences also make the plastics more difficult to recycle. One example of how El-Kretsen has contributed to advancing the recycling process of plastics is by engaging in long-term contracts and close co-operation with suppliers to create an incentive to draw up, invest in and construct a facility for plastics recovery. You can read more about this particular project here.

Additional recycling

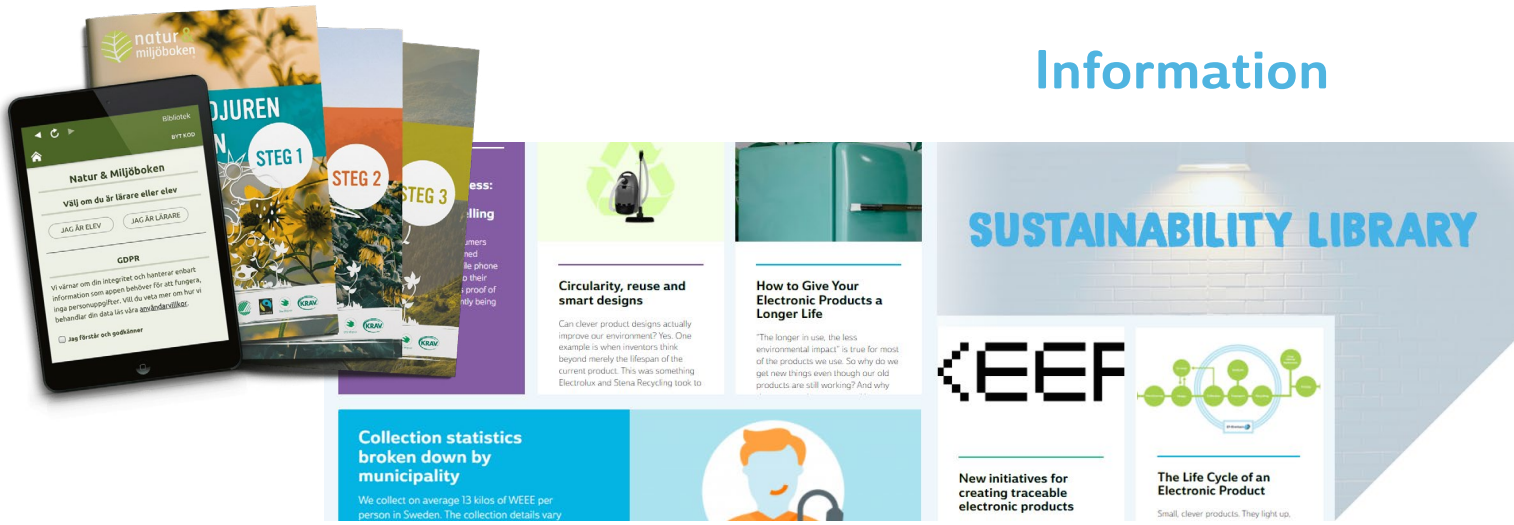
Additional recycling includes the waste we turn into heating, such as unrecoverable plastics, wood, fabric, or other combustible materials.
Since 2020, materials that are reused for construction purposes are also classed as "additional recycling". This change in classification is most noticeable in the category "Luminaires". When crushed glass is used to replace other construction materials, these luminaires are now filed under "additional recycling" rather than "materials recovery".

Recycling processes are constantly refined in an effort to increase recovery rates. By improving the sorting of plastics, in the future we hope to be able to recover and reuse some of the plastics that are currently used for energy recovery. Another example is our investment in 2021 in a new recycling plant for luminaires in which we hope to produce crushed glass of higher purity that will be easier to reuse.

Other kinds of treatment

Finally, there is waste that cannot be recovered, recycled or reused as energy. The bulk of this category is made up of the weights used in white goods such as washing machines. In the past, these weights were made of metal, but these days they are made from concrete or some similar stone-based material.

"Other kinds of treatment" also covers hazardous waste that goes into storage, like mercury or radioactive units found in smoke alarms. Other examples of hazardous waste may be materials or liquids with particularly dangerous properties. These need to be burned in specialised thermal incinerators.



How do you communicate a vision?

El-Kretsen has many partners from vastly different backgrounds. Many of our relationships are conducted on a contractual basis, but some are founded on information exchange. As a business, El-Kretsen's motto has also become the company culture: Everything we do is done in a Safe, Smart and Sustainable way. Here, "safe" relates to our commitment to quality. It means that we keep our promises and that our figures and statistics are reliably based on fact. "Smart" means that we are actively looking for innovative solutions that can be used in our business model, which in turn leads to the most cost-efficient offers possible. And "sustainability" is our core business, our very raison d'être and what we have in common with all our partners and associates.

The partners we have a contractual relationship with we also have a dialogue with. Many of our contracts include monitoring and assessments as a way to invite discussion on how things could be improved. Needless to say, this dialogue also carries over into our regular everyday contacts. In order to take our co-operation with Sweden's municipalities one step further, we have set up a special forum, Elretur-rådet, where municipal representatives can meet with colleagues from Avfall Sverige (the Swedish Waste Management Association) and SKR (the Swedish Association of Local Authorities and Regions) as well as El-Kretsen. Moreover, El-Kretsen provides municipalities, suppliers and producers with targeted information in the shape of newsletters, webinars and, now that the pandemic is slowly releasing its hold, also through physical meetings.

A lot of El-Kretsen's information can be found on our website. In 2021, we extended it to include our Sustainability Library, which is where you will find more in-depth information on sustainability. But to further our vision of a circular society where all resources enter the recycling loop, and to bring home the more indirect but important aspects we have already mentioned (such as the importance of WEEE and batteries being recycled), we have one main strategy: reaching out to the recyclers and decision-makers of the future on their home ground.

Natur & Miljöboken ("A Book on Nature and the Environment") is a Swedish educational series in three parts for school children aged 10-12. The information has been adapted to the relevant age groups and the material is available both in printed and digital form. Each stage has its own teacher manual. The overall experience is a comprehensive, climate-smart educational series for pre-teens. El-Kretsen's contribution is providing information on the recycling of WEEE and batteries.

For younger children who have not yet turned 10, El-Kretsen supplies complete study kits based on the Swedish comic book character Bamse. This is a special issue dealing with batteries and recycling.

Digital solutions that make life easier

From time to time, the legislation on waste management changes. One change which has made a considerable practical difference is the requirement that all businesses and agencies that submit hazardous waste have to report this to the Swedish EPA. The report has to contain information on what the waste consists of and from where it has come. Those who receive hazardous waste from others have to report the same things as well as to where the waste is being forwarded for treatment.

Initially, this new legislation caused queues and insecurity at the handover points. Who was meant to do what? And how? More often than not, the tools used were pen and paper. During last year, El-Kretsen made it a priority to create two apps to neatly solve the situation – one for those who submit waste and one for those who collect it.

Both the legislation and the tools are still quite new, but we hope that we have managed to improve the overall efficiency for our customers and others who wish to submit waste, as well as for the collectors which are largely represented by the recycling centres that welcome businesses and agencies.


El-Kretsen