

ACTIVITY REPORT 2017-2018



ETIRA

European Toner & Inkjet Remanufacturers' Association aisbl/ivzw

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ETIRA is the non-profit trade association for the European companies involved in state-of-the-art toner and/or inkjet remanufacturing and their business partners. Every day, remanufacturers bring the European consumers and businesses a first-class high quality product which is competitively priced and, thanks to re-using natural resources, makes a major contribution to the European environment and a cleaner world. Yearly, the industry adds an average 1,7 to 2 bn euro to the European economy, directly and indirectly provides 16,000-20,000 jobs, and prevents 300,000 m3 of waste from going to landfill. Visit www.etira.org for more information.



From the President

The global economy is doing substantially better than before. Also the European economy is showing positive signs. In Germany and The Netherlands, unemployment is lower than ever before, and France, Spain etc, are back on the path to growth. However, in the eurozone, public debt levels for many countries remain far above the official 60% ceiling. Thanks to the unprecedented low interest lending programs of the ECB, the cost of servicing that debt is, for now at least, sustainable.....

In our industry however, the overall picture is less positive. As 3rd party remanufacturers of OEM cartridges, we still face tough market conditions. The market as a whole has continued to contract due the fact that across the board, consumers and businesses tend to print less and therefore need fewer cartridges. Although this affects OEM's, remanufacturers and newbuilts alike, it is an unwelcome development in a market already suffering from competition from OEM's and their anti-remanufacturing chips, unfair patents, etc., as well as from cheap non-OEM newbuilts imported from SE Asia.

For 2017, I expect little improvement in the overall picture: remanufacturers should therefore look at business diversification and ways to cooperate with partners.

In our 2015-2016 Annual Report, I wrote about industry concentration. I forecasted that this global concentration trend would further accelerate in the next years. And time proved us right: in fact, the past few years have brought more concentrations than ever before in the history of European cartridge remanufacturing. Many remanufacturers joined hands. And we even witnessed an OEM printer manufacturer (Lexmark) being acquired by an Asian consortium. And shortly thereafter, HP announced it had acquired Samsung's print activities.

Concentration is a way to address the major challenges we face in the market, and can bring cost savings and better market access. Nonetheless, printer manufacturers must not become dominant players who shut out the competition in ways that are not in line with equal competition rules. ETIRA will monitor these developments closely and act when needed.

As mentioned in 2015, industry concentration also impacts ETIRA itself: as a body representing an industry going through a process of structural change, ETIRA must change along with it. Due to the concentration and tough market conditions, the number of ETIRA members has declined slightly, which obviously affected our budget and resource base. But we remain strong, thanks to a solid group of dedicated members who see the benefit of being part of a group of companies that stand out from the rest in terms of quality, reputation, global presence, etc.

ETIRA's primary task is lobbying for our industry at EU level. In the past, we have been very active on environmental issues such as ecodesign, green public procurement and the Ecolabel for printers. Since 2016, we added the EU's new Circular Economy policy initiative to our work portfolio. Please refer to the information in the "Environment"-section in this Annual Report for details on how legislation will help us grow our market share.

At the ETIRA annual meeting in Lisbon in June 2016, we celebrated my 10th anniversary as President. And I was proud to be re-elected there for another 2-year mandate. But I stress that ETIRA is not my personal "hobby": it is a team effort, undertaken by our Board of Directors and the Secretariat. We are all committed to dedicating our limited time and resources to bring the European cartridge remanufacturing industry forward. Together, we work for the benefit of all. But we need your help to do that, and I call on all industry players to join ETIRA as Member. We can only be successful if we represent the vast majority of the industry.

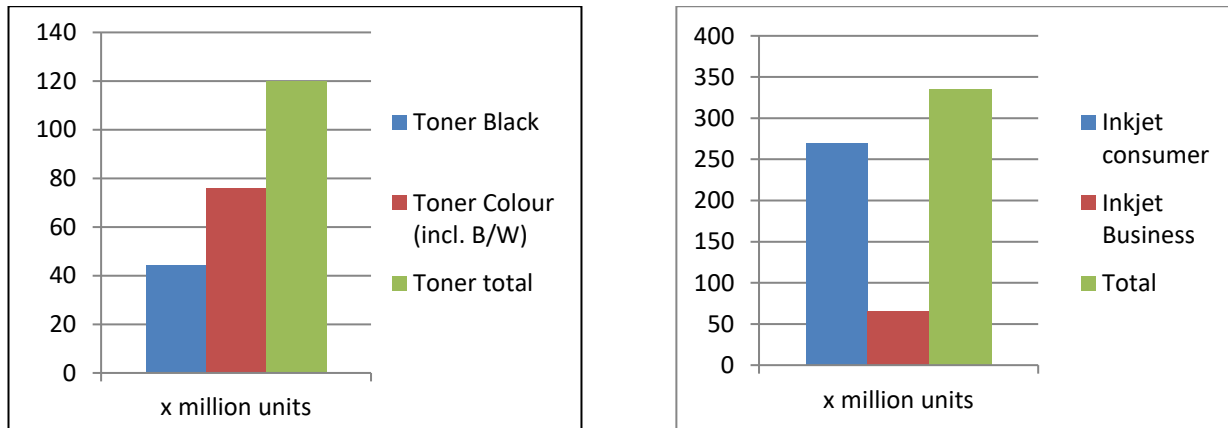
As always, I thank you for your interest in cartridge remanufacturing, and in ETIRA. Don't hesitate to talk to us anytime you want: info@etira.org.

Feldkirchen, Austria, June 2017
Christian Wernhart (Embatex), President of ETIRA

General market developments

Since 2013/2014, annual overviews of the market in remanufactured cartridges show a similar picture: a decline in sales volumes across most countries. The period 2016/2017 was no exception. Like in the previous years, market conditions remained very challenging for the independent 3rd party remanufacturers of OEM cartridges. Price pressure continues to be the name of the game across European markets. Suppliers of non-OEM newbuilts continue to offer low price products, sometimes even below the cost of an OEM-empty. OEM's lock in customers with low-price MPS sales programmes, reducing the availability of empties for remanufacturing. Moreover, lower print volumes in the home and office reduce the overall market size, affecting OEM's remanufacturers and suppliers of non-OEM newbuilts alike.

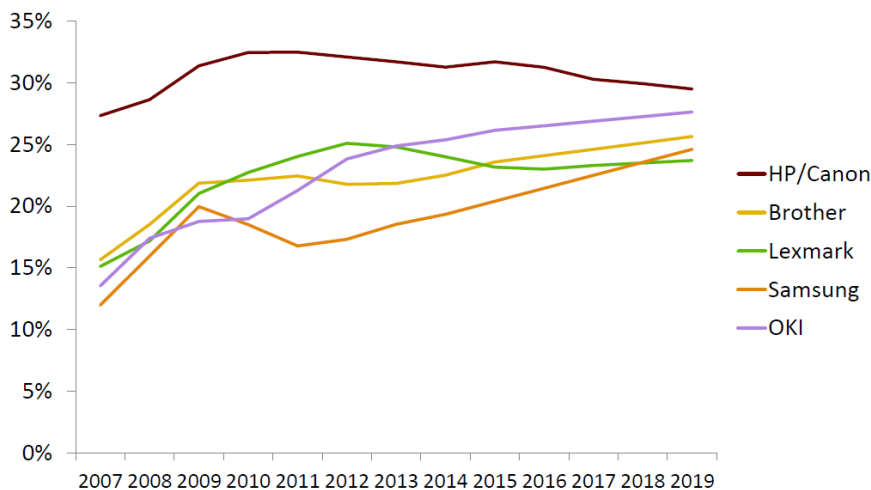
According to market intelligence company Keypoint Intelligence – InfoTrends, the printer cartridge market size in W-Europe (*i.e. Europe excluding CEE countries*) is approx. 120 million toner units and 335 million inkjet units annually.



W-European market in toner and inkjet cartridges - units (x million), source: Keypoint Intelligence – InfoTrends

Data showed that the 2015 toner B/W aftermarket (=remanufactured OEM and non-OEM newbuilts) share in W-Europe ranged from around 20% to 30%, depending on the OEM brand:

Western Europe B/W Laser Cartridge Aftermarket Share of Units



Source: Keypoint Intelligence- InfoTrends

Since a few years, color toner is seen as the growth engine for the remanufacturers, and the non-OEM share was forecast to grow to 12%-15%. And indeed this is actually happening in the case of some OEM-brands. But newbuilt non-OEM cartridges from SE Asia have taken away a large part of that growth, mainly because those products are sometimes offered at very low prices. Remanufacturing OEM-color lasers, as performed by many ETITA Members, is still an expensive and challenging business activity which can only be sustained if margins cover the high production cost.

In inkjet, the aftermarket share ranges between 12% and 20%, depending on the OEM brand. Here, the non-OEM newbuilt share of the total cartridge aftermarket is very high for some brands (60%-80% of the aftermarket), but in other brands, remanufactured OEM cartridges still represent 60% to 80% of the total non-OEM market.

Still, ETIRA expects that non-OEM newbuilts will remain present on European markets in the long run, as an addition to the dominant OEM market share and the existing market share held by remanufactured OEM products.

LEGAL ISSUES

Legal issues, including patents and fair competition rules, are permanently on ETIRA's radar screen.

OEM's apply a wide variety of tools to hinder the growth of our industry. Examples of the tools they use include (non-exhaustive list):

Intellectual property rights (patents) and aggressive legal actions against remanufacturers

Most OEM's have registered thousands of national and EU-wide patents on part(s) of, or on the entire cartridge, which can make (re)manufacturing that cartridge illegal. Very often, the patents concern in particular those parts of the cartridge that are subject to wear and tear, which makes it impossible to legally exchange these parts, yet is needed in order to produce a quality alternative product.

Often the remanufacturing of the cartridge is patented, even when that OEM does not remanufacture its own cartridges. Most OEM's aggressively sue remanufacturers in courts across Europe for alleged infringement of their patents. Due to the bullying legal tactics used by these large multinational companies against the small and medium-sized remanufacturers, the latter are often unable to sustain a lengthy and expensive legal procedure. The OEM then wins that court case, even without a judge having had the opportunity to assess the validity of the patent in full.

Because of patents on remanufacturing, a large percentage of models in the marketplace are currently not being remanufactured. An example is a recent cartridge with a plastic bag to hold the toner. In our view this bag does not have any useful innovative aspects, but it is patent-protected so that remanufacturers are obliged to find a way around the patented bag to avoid being sued in court.

Embedded software preventing the reuse of the cartridge

Today, almost every cartridge is fitted with a kind of embedded software/clever chips. The software creates the handshake with the printer: without it, the printer does not recognize the non-OEM cartridge and will not print, or the printer gives confusing messages to the end-user.

A June 2015 report on 3rd party inks from German consumer organisation Stiftung Warentest acknowledges the ETIRA view that this tendency to fit software on the cartridge is increasing, not slowing. In the 1990's, OEM cartridges had no chips at all.

As a result of this OEM anti-reuse strategy, it has become impossible for a growing number of cartridge models to be remanufactured by 3rd parties.

The result is that end-users are reluctant to buy remanufactured cartridges as they fear that non-OEM cartridges may not work in their printer. They fear the risk, and they "do not want the hassle". Obviously, this unfounded fear is an unnecessary loss of market opportunity for remanufacturing, and creates more waste cartridges.

No eco-design: cartridges are not designed to allow reuse

Most cartridges today are not designed in a way to allow easy reuse as a cartridge. In fact, the cartridge is deliberately designed in a way that makes remanufacturing very difficult, or even impossible. The clearest example is that in the 1990's, many cartridges only had screws to fit parts together. But since then, cartridge parts are glued together. The only reason why OEM's have changed to glue was to turn the cartridge into a single-use product, and make remanufacturing of the cartridge very hard or even impossible.

As a result, today our industry is technically unable to remanufacture a number of models.

No sharing of information on how to remanufacture

OEM's do not make the information needed for easy remanufacturing available to customers or 3rd parties in any way. The software and clever chips which are present on every cartridge today, all have proprietary codes owned exclusively by the OEM. These are business confidential data and not publicly available. And OEM's do not offer the codes to 3rd parties under a licensing arrangement either.

Hence the remanufacturing industry must resort to reverse-engineering these codes. This is a complex technical activity, which can only be performed by specialized high-tech companies. For each cartridge model, they are forced to invest millions of euro's in decoding the respective cartridge chip, and due care must be taken not to infringe patents. The whole process may take up to 1 or 2 years to complete.

Printer firmware updates locking out non-OEM cartridges as side-effect

Many printers are connected to the printer manufacturer via the internet. Throughout the printer's lifecycle, a user receives many software overnight updates from the printer manufacturer.

But often, as a side-effect of this unsolicited update, the printer no longer recognizes the non-OEM cartridge, even though it used to work perfectly fine until the update.

As a result, remanufacturers sometimes need to replace or reset thousands of installed cartridges, or even supply a fully new remanufactured cartridge.

The need for the update is often questionable. The usual reason claimed by the OEM is "improved functionality, technical requirements, of the printer etc". But updates can always be designed in such a way that they do not lock out 3rd party remanufactured cartridges. That is why we cannot but conclude that some OEM's do these firmware updates only to discourage customers to use 3rd party remanufactured cartridges.

Example: In March respectively September 2016, global HP firmware updates resulted in major problems for users of certain printer models having non-HP cartridges installed. These printers no longer recognized the cartridge and stopped working after the overnight automated firmware update. The issue caused major frustration among users and businesses all over the world. The story was widely reported in the global media, and many users announced legal steps against HP. ETIRA filed a strong protest, and argued that the HP firmware update brought major damage to the overall image of remanufactured HP cartridges. It was a serious shock to end-users and could push them away from alternative brand cartridges. And although HP finally apologized and promised an update, this solution came far too late.

Limited printer functionality when non-OEM cartridges are used

Printer manufacturer increasingly add functions to the printer that are only available if you use original OEM cartridges. So doing, buyers may be reluctant to buy non-OEM cartridges for fear the printer may not work !

Example: in 2016 ETIRA filed a complaint concerning Canon. The Japanese printer manufacturer launched printer model series Pixma TS5050, and some of its scanning- and other functions only work if you use original Canon cartridges. As these functions have nothing to do with the ink container, ETIRA views this as a violation of fair competition rules. Tying your hardware product to the use of a particular brand of consumables was ruled illegal many decades ago !

Obliging customers to not sell remanufactured cartridges

Some OEM's oblige their customers to sell only OEM cartridges. If these distributors do not comply, OEM's will withdraw that customer's benefits and rebates. As a result, remanufacturer access to these sales channels is blocked.

Denial of honouring of warranties

A few OEM's still threaten end-users that the printer warranty is void when non-original cartridges were used in the printer. However, any obligation to only use OEM-cartridges violates EU fair competition laws, and will not stand up in court.

Closed-shop customer supply programmes

Many OEM's have sales programmes whereby they sell both the printer and the full supply of cartridges during the lifecycle of that printer (MPS). But as OEM's only offer new cartridges and do not reuse the cartridges they collect after 1st use, this sales programme also locks reuse cartridges out of the market.

Closed-shop collection programmes for used cartridges

Many OEM's have company-own collection programmes for empties. ETIRA estimates that OEM's collect only 10-15% of the cartridges they place on the market. But after collection, these empties are generally not remanufactured to be used as cartridge again but merely recycled: they are taken apart and their materials are shredded, plastics melted, and partially used as base material to produce other products.

Several OEM's showcase their cartridge collection and recycling activities as being good for the environment. However, the environmental footprint of mere recycling is much higher than first performing several reuse cycles, followed by recycling. Hence, it is likely that the real OEM objective behind mere recycling is to reduce the number of empties available for remanufacturing !

The EU waste hierarchy clearly puts reuse above recycling, but many OEM's do not endorse reuse of their cartridges as a cartridge, and some even take legal action against 3rd parties which do reuse cartridges. The behaviour of some OEM's is extra frustrating as many OEM's publicly claim to have a business philosophy based on sustainability and low environmental footprint. But when it comes to cartridges, their claims are mostly "greenwashing": the reality is that OEM's pro-actively obstruct cartridge reuse.

Where and when required, ETIRA fights these tools to ensure a level playing field in competition with OEM's.

OEM patents on remanufacturing

Patents on remanufacturing are a permanent problem for our industry. Some OEMs apply for patents which merely seek to render the legitimate activity of remanufacturing OEM cartridges impossible, even when they do not remanufacture cartridges themselves. Thus, they pro-actively prevent the environment-friendly reuse of their product, only for commercial reasons.

Moreover: the European Patent Office EPO grants patents far too easily, i.e. even for ideas which were fully obvious to a person skilled in the art, or without a proper analysis of the existing prior art, etc.

Canon patent lawsuits against newbuilts and remanufactured cartridges -Patent 2 087 407.

Since 2014, Canon has sued many European aftermarket companies, charging them with infringement of toner cartridge patent 2 087 407. Defendants in the case were mainly manufacturers of non-OEM newbuilt toner cartridges. But at a later stage, Canon expanded its legal actions, and also sued a few remanufacturers who simply reuse the original cartridge.

As a rule, ETIRA supports the right of OEM's to protect their intellectual property rights against fully newbuilt, one-on-one copy cartridges, dumped on the European market without any consideration for patents held by the printer manufacturer. But repairing the empty original OEM cartridge after its 1st use, and then reusing it as a cartridge, is not a patent infringement anywhere in the world. Rather, it is a perfectly legal and environment-friendly, lower cost alternative choice for the European consumer. Remanufacturing original cartridges has been done for more than 30 years, so it's a well-established practice. Even some printer manufacturers remanufacture cartridges !

ETIRA reached out to Canon and asked them to respect the universal legal right to remanufacture an original cartridge. If they are truly dedicated to sustainability as they publicly claim they are, they should welcome cartridge remanufacturing instead of preventing it. Unfortunately, Canon has not given in, and continues its anti-environment strategy. That is why ETIRA will continue to fight this patent.

ETIRA opposition at EPO against HP inkjet patent 0940 259/258 on memory device

In 2006, ETIRA filed official Opposition with the European Patent Office (EPO) against HP patent 0940 258 B. This patent concerns the refurbishment of an inkjet container, and was applied for by HP back in 1999. After years of litigation, in 2015 parties withdrew from appeal, and as a result the patent was automatically revoked.

ETIRA opposition at EPO against Canon patent EP 153 6207 on shaft

In July 2014, ETIRA assessed Canon shaft patent EP 153 6207. Applied for in 2004, it was awarded in early 2014 and has no less than 180 (!) claims. Like many similar patents, EP 153 6207 seeks to monopolize basic techniques that have been used by many remanufacturers for years. Following an in-depth assessment by ETIRA, we decided in early October 2014 to file an official Opposition at the EPO against this Canon patent. A Hearing of the parties took place in autumn 2016. After that, the Appeal Body found that some elements of the patent were indeed not innovative, and hence could not be patented. Still, it concluded to reject our Opposition. But as we saw possibilities to win this case, ETIRA decided in early 2017 to contest that rejection. A ruling is expected later this year.

Patent infringing newbuilt cartridges from SE Asia

Since 2008/2009, the EU market has seen an invasion of cheap newbuilt non-OEM cartridges imported from SE Asia. Very often these products infringe OEM patents. Moreover, they are bad for the environment as they are neither collected nor remanufactured. Unfortunately, traders who do not care about patents, quality, or the environment, sell these products to unwary European customers every day.

ETIRA opposes the trade in such patent-infringing newbuilt cartridges because it is an offense, and resellers and distributors should not buy these products if they want to stay out of court and avoid bankruptcy. And it's also anti-environmental and anti-social behaviour: these Asian cartridges typically pollute the European environment as they are neither remanufactured (that would be just as illegal as manufacturing them) nor recycled. They are simply thrown away after 1st use, resulting in unnecessary extra landfill in Europe. European individuals or companies caring about sustainability should only buy remanufactured OEM cartridges.

Legal actions against patent-infringing newbuilts

In the past years, OEM's have acted aggressively against newbuilt cartridges which infringe their patents. Across Europe, dozens of importers, traders and distributors were sued for damages. In most cases, the OEM prevailed and the defendants were forced to stop trading the infringing products and pay damages to the OEM. The general public can help OEM's identify companies selling patent-infringing newbuilts, by reporting these firms via the respective OEM e-mail dropboxes.

ETIRA welcomes OEM legal action where it concerns pure newbuilts that infringe patents.

ETIRA has also been active by addressing the lack of awareness among distributors and resellers regarding the various kinds of cartridges in the marketplace. Many customers are unable to distinguish between remanufactured OEM and newbuilt non-OEM cartridges. That is why we produced the "ETIRA Guide to Clones". Freely downloadable from the ETIRA website in 14 languages, this Guide defines "clones" and is a useful tool for ETIRA Members and their clients in our ongoing fight against the flood of cheap newbuilt patent-infringing non-OEM cartridges from SE Asia.

Public tenders excluding remanufactured cartridges under the tender

Objecting against public tenders excluding remanufactured cartridges from participating in the tender is a quasi-permanent task for ETIRA. Some public bodies, deliberately or not, ask only for OEM products and exclude remanufactured OEM cartridges. The kind of exclusion may take many different forms: ranging from a simple direct exclusion (*"only OEM products can be offered"*) through an indirect exclusion (*demanding that "the original manufacturer certifies the non-OEM product"*) to outright nonsense argumentation (*"only OEM because warranty on the printer is void if non-OEM is used"*).

It is unfortunate that we continue to see public bodies still not fully complying with EU law on free competition, and illegally excluding remanufactured a fair and equal opportunity to tender.

But as this is a matter of principle for our industry, we continue to protest everywhere we find these illegal exclusions. For use by its Members, ETIRA has available a model letter outlining the legal arguments why public tenders cannot exclude remanufactured.

In 2016, ETIRA protested against exclusion in tenders in several countries. In Spain, we are fighting a major case before a national court. In several cases where ETIRA intervened, the tendering public body changed their tender criteria because of our protest.

In 2016, Italy passed a law setting environmental criteria to be used in its public tenders, thus promoting the use of remanufactured cartridges.

Warranties

Several times a year ETIRA has to deal with complaints about printer manufacturers or maintenance firms which refuse to honour the printer warranty simply because non-OEM cartridges were used in the printer. But in accordance with EU and national law, a manufacturing company cannot argue that the printer warranty is null and void just because non-OEM cartridges were used: for the warranty to be justifiably refused, there must be clear and undisputed proof that the malfunction of the printer was directly caused by the non-OEM cartridge. If this proof cannot be provided, the warranty must be honoured in full.

Luckily, today almost all OEM's have published clear statements (even on the internet !) that the printer warranty is not void simply because non-OEM cartridges are used. Also the EPEAT public procurement scheme and similar public procurement schemes clearly require OEM's to provide these assurances.

In 2016/2017, ETIRA intervened in a few cases against companies that falsely stated that the warranty was void if non-OEM cartridges were used.

Turkey: new regulation on imports of reuse products hindered export of reman carts

In 2016, Turkey adjusted its import regime on reuse goods, following issues with EU waste goods being dumped in Turkey. This change negatively impacted the export of our products to Turkey. ETIRA Member firms experienced difficulties, and the Secretariat reached out to the Turkish authorities to ensure our products can be imported into Turkey as usual.

PROMOTING QUALITY REMANUFACTURING

Product quality is the #1 priority of ETIRA: only if our product is as good as, or better than, the OEM-equivalent, are we able to grow our market share. This is why most of our efforts focus on enhancing quality across the industry. ETIRA Members do not compromise when it comes to quality: only the best will do. ETIRA welcomes pan-European and global standards that set clear parameters, and are widely recognized. ETIRA contributes, directly or indirectly, in the development of the following standards:

ISO cartridge standards

To measure cartridge yield, ISO has developed standards 24711 (ink), 19752 (toner B/W) and 19798 (color toner). ISO product standard 29142 for cartridges applies to OEM, compatible and remanufactured cartridges alike, and covers labelling and environmental performance criteria.

The entities participating in the ISO work are predominantly the major international OEM's. Some manufacturers of newbuilt compatibles, and a few remanufacturers also contribute to the work of this ISO Working Group. Being a trade association, ETIRA does not directly participate in ISO.

DIN standards for remanufactured cartridges

DIN standards for cartridges 33870-1, 33870-2 and 33871-1 apply only to remanufactured cartridges. DIN have recently reviewed its existing standards and introduced auditing provisions. The standards can be obtained from DIN.

ISO standard 8887 on remanufacturing/design for reuse

ISO has standard 8887 "Design for manufacture, assembly, disassembly and end-of-life processing (MADE)". Although this is a general standard on generic remanufacturing, it also affects products like cartridges.

In 2017, standardization may become even more relevant in the context of the recent EU Circular Economy policy initiative (for details see elsewhere in this Annual Report). The EU has indicated that this policy may bring the need for recognized product standards, in order to benefit from the Circular Economy policy initiative.

ENVIRONMENT

Remanufacturing empty cartridges is good for the environment. This is why ETIRA insists that European public policy should promote remanufacturing, and support our industry in its call for a level playing field.

Unfortunately, this is not always the case.

The EU has defined a clear hierarchy in the environmental impact of waste: prevention of waste has the lowest impact, and re-use (=remanufacturing) follows immediately after that, so before recycling. With re-use prevailing over recycling, re-use should always be the preferred option.

EU Circular Economy policy initiative: ETIRA viewpoint

In Brussels, the Circular Economy is the new buzz word. The notion that we have only one planet is finally filtering through. Acknowledging that our natural resources are not infinite, over 193 nations signed the Paris agreement to fight climate change. Since then, the EU has agreed several policies to implement the commitments, and promoting reuse is one of them. ETIRA has been active in reaching out to EU policy makers to raise awareness about the benefits of cartridge reuse. In 2016/2017, we attended many meetings and events in Brussels and elsewhere to make the industry voice heard. We took part in several stakeholder surveys and in a June 2016 paper we outlined the main barriers to cartridge reuse. In summary, we stated that:

ETIRA CIRCULAR ECONOMY CALL ON THE EU:

Printer manufacturers dominate both the printer market and the markets in the cartridges for their own printers, at the expense of reuse cartridges. As a result of the OEM market domination, the printer cartridge industry generates revenues and employment mainly outside Europe, but the environmental cost is carried by Europe and the European taxpayer.

Remanufactured cartridges have only a small marketshare, mainly because printer manufacturers do not reuse cartridges and proactively frustrate 3rd party cartridge reuse. They apply tactics like patent lawsuits against remanufacturers, software preventing reuse of the cartridge, no eco-design, firmware updates locking out non-OEM cartridges, pressure on customers to not sell remanufactured cartridges, denial of honouring of warranties, closed-shop customer supply programmes, closed-shop collection programmes for used cartridges, etc.

As a result, cartridge reuse has never been able to develop to its full potential. The European environment, the EU consumer, and the European reuse industry are the victims.

Cartridge reuse and remanufacturing is a process whereby a third party (remanufacturer) refurbishes a used OEM cartridge to make it work as a cartridge again. It is environment-friendly and consumer-friendly, because remanufactured cartridges save natural resources and reduce CO2 emissions. Moreover, they are less expensive than original OEM cartridges. Cartridge remanufacturing is labour-intensive and provides local jobs, and generates local revenue for charities, sport clubs, etc

Now is the time for the EU to remove the aforementioned barriers and promote cartridge reuse. In the context of the Circular Economy legislative initiative, EU and national authorities should take remedial action.

On ecodesign, the EU has a Voluntary Agreement Imaging Equipment. It has failed to deliver on its promise regarding reuse. It focused on reducing energy consumption of a product, but more environmental benefits can be obtained by including product design requirements. Due to its voluntary nature, it's unclear wording, it's narrow interpretation by the OEM's, and its limited focus on energy, the EU Directive on eco-design has not delivered on its promise to reduce CO2 emissions and use of natural resources.

Designing the cartridge with its reuse in mind may increase cartridge reuse from its current 15-20% level to 80-90% of all cartridges. We now need strong and compulsory EU-wide ecodesign rules obliging printer manufacturers to produce their cartridges with a low environmental footprint in mind. Reuse as a cartridge should be made the first option after 1st use. Recycling of the cartridge material should be allowed only after as many reuse cycles as a cartridge as possible have been made.

This will bring large benefits for the EU. If reuse is promoted, there is large market and jobs' growth potential. Removal of the abovementioned barriers could result in growing the EU market in remanufactured cartridges from today's 1,7 bn euro to 3,4 bn to 5,1 bn euro annually, and bring revenues and American and Asian jobs back to Europe. In terms of employment, removal of the abovementioned barriers could result in growing the total number of jobs from today's 16,000 to 32,000-48,000 FTE's."

Reuse should receive a higher priority than it has today, as existing eco-friendly policies often fail to deliver a tangible increase in reuse. ETIRA insists that for a real circular economy to materialize, clear targets for reuse

should be set and Member States must be forced to meet them. Legislative tools should include strict regulatory, not voluntary, action on eco-design (no clever chips !) and the removal of legal barriers which frustrate remanufacturing (patents and other IP-rights). And we need the government to lead by example: e.g. public tenders should reserve a minimum percentage of the tendered volume for remanufactured products.

EU eco-design policy

Since 2005, ETIRA has constantly lobbied worldwide for the introduction of eco-design rules that support reuse of cartridges, and prohibit OEM's anti-remanufacturing practices and devices such as clever chips. After all, the largest environmental impact from printing comes from the many cartridges used in the printer during its lifetime, not from the printer as such. Reuse of cartridges can reduce CO2 emissions by 40%-60%. In the larger framework of promoting eco-friendly printing in both the EU and in the USA, regulators are working to set rules for imaging equipment. In that context, ETIRA has reached out to authorities and participated in seminars, meetings, working groups, etc. We successfully lobbied for favourable wording in the EU ecodesign criteria for imaging equipment, the EU Ecolabel for imaging equipment, the EU criteria for green public procurement (GPP), the US public procurement scheme EPEAT, and lastly the Nordic Ecolabel (=formerly "Nordic Swan"). In 2016, we lobbied the EU Commission regarding their new Circular Economy initiative

EU Voluntary Agreement Imaging Equipment: upcoming review should encourage reuse !

The EU Directive on eco-design aims to reduce energy-use of products by obliging manufacturers to design products in such a way that they have the lowest environmental impact. Under a policy of self-regulation, compliance could be achieved by industry setting up its own voluntary rules, under so-called industry-wide "Voluntary Agreements (VA's)", instead of by using compulsory EU laws.

One of these VA's concerns Imaging Equipment. After years of fighting, ETIRA succeeded in getting positive wording on cartridges also included in that VA: it's article 5.4 now says cartridges may not be designed to prevent their reuse and recycling, and printers must accept non-OEM cartridges. Unfortunately, the OEM's also added an "escape clause", which says that *this article shall not be interpreted in such a way that would prevent or limit innovation, development or improvements in design or functionality of the products, cartridges, etc.*

We have since lobbied the Commission and NGO's and Member States for the removal of this escape clause. According to ETIRA, this extra sentence renders the noble objectives completely useless: after all, OEM's will always argue that each of their new anti-remanufacturing devices were "necessary to innovate, or improve design, functionality" etc. And as most OEM's do not endorse the remanufacturing of their cartridges, the result is that this article will have no practical value whatsoever, and cartridge re-use will not be promoted. The EU environment will be the victim. We also argued that other EU Commission policy initiatives (*Ecolabel-criteria, GPP criteria, WEEE*) fully and proactively support the remanufacturing of cartridges. This VA should therefore not counter those initiatives.

For several years ETIRA discussed with the OEM's (EuroVAprint) to try and agree an alternative wording. The talks have proven unsuccessful due to OEM intransigency. That is why ETIRA no longer considers a compromise solution possible, and has asked the EU Commission to introduce mandatory legislation to replace the toothless Voluntary Agreement.

An evaluation of the VA Imaging Equipment is foreseen for 2017/2018. ETIRA is currently reaching out to the relevant EU lawmakers to highlight our viewpoint, using the Circular Economy policy initiative as an extra lever.

EU Ecolabel and Green Public Procurement: 2017 review to support remanufactured cartridges

EU Ecolabels allow consumers to identify the products which have the best environmental performance. The label also serves as tool for public authorities that want to buy green products, because the Ecolabel is part of the EU's recommended Green Public Procurement criteria (GPP) which public bodies can use when buying office equipment (*see all EU languages here: http://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm*).

In December 2013, the EU Commission published criteria for the new EU Ecolabel for imaging equipment in all EU languages (*Commission Decision 2013/806/EU published in OJ L 353 of 28 Dec 2013, see here for all languages: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013D0806>*).

Following 3 years of intense lobbying by ETIRA, this criteria set also includes criteria for cartridges. Thanks to our outreach, this Ecolabel is only available to printers that accept remanufactured cartridges and were designed while taking reuse of cartridges into consideration. Moreover, the Ecolabel criteria stipulate that anti-reutilisation devices/practises may not be present or applied. And to avoid all misunderstandings, OEM's must include the following message in the instruction manual of any Eco-label approved printer: "The cartridges of this equipment are designed for reuse. It is recommended to reuse the cartridge as this is saving resource." Moreover, OEM's selling Ecolabel-certified printers must offer users a take-back system for the return of toner and/or ink modules and containers supplied or recommended by the OEM for use in the product, in order to channel them to reuse and/or material recycling, with preference given to reuse. Third parties (i.e.

remanufacturers and brokers) may be subcontracted to perform this task and they shall be provided with instructions for proper handling of residual toner. Non-recyclable product parts shall be properly disposed. When tendering for supplies, public authorities often simply choose the cheapest product offered, which in many cases is a patent-infringing newbuilt cartridge. So doing, they neglect the environmental burden and loss of local jobs that these products bring about. The GPP and Ecolabel criteria allows remanufacturers, being only small and medium-sized enterprises, to capitalize on their added value: the environment-friendly reuse of a product, produced by local workers, thus saving natural resources and creating local jobs.

Unfortunately, printer manufacturers have actively frustrated the development of a Ecolabel for printers. Up until today, they have not built a single printer that qualifies under the EU Ecolabel ! This shows that EU voluntary programmes fail to deliver on their promise, and that the only way to bring about a real change in behaviour is regulation.

The EU has noted this and the Ecolabel and GPP criteria are being reviewed in 2017/2018. The EU's scientific body JRC is assessing the matter and has asked stakeholders for input. In that context, ETIRA has provided extensive input to the JRC and EU Commission. We exposed the OEM behaviour to EU lawmakers and call for a separate Ecolabel for cartridges to force printer manufacturers to build environment-friendly cartridges.

EU electronic waste policy (WEEE)

The WEEE is the EU's legal instrument to address the growing electronic and electrical waste pile. In 2014, an updated version ("WEEE-2") was approved. In April 2014, the EU Commission published a new FAQ document on the WEEE-2. In this FAQ, the Commission says that all cartridges that need electronic current are covered under the WEEE.

The WEEE is implemented very differently across EU Member States. Even though a FAQ is not a legal document, many Member States follow this Commission recommendation. But in some Member States, cartridges are in the scope of the WEEE only as of 2017/2018.

For cartridge remanufacturers, this may bring about a number of changes to our business model. Being in scope of the WEEE implies that cartridges must carry the wheeled dustbin logo, and have a sound "end-of-life" solution, such as being covered under a collection programme. ETIRA assists its Members across Europe in this matter.

EU case study on cartridge reuse

In 2016, the EU Commission decided to do a case study on cartridge reuse. Under article 4 of the WEEE directive, Member States are obliged to take measures to stimulate reuse of electronic waste like cartridges, and to ensure anti-reuse devices and practices are prevented. But the call for tender for the study acknowledged that, in the case of cartridges, little progress has been made up till now. The study is to describe the EU cartridge market, and to identify any measures taken in Member State to prevent anti-remanufacturing actions. It should also present specific proposals for improving the current situation with regard to the re-usability/reuse of printer cartridges. The study should be finalized in 2017.

Through meetings, papers, etc., ETIRA provided extensive input to the agency writing the study and to the EU Commission. We call for legislative action to force printer manufacturers to allow 3rd party cartridge reuse.

EU Remanufacturing Council

In 2016, the EU Remanufacturing Council (ERC) was launched in Brussels. The ERC is supported by the EU and will promote the growth of business activity in the sector. It will reach out and lobby on behalf of remanufacturing. ETIRA joined the ERC and attended its meetings. We briefed members about the problems and barriers facing cartridge remanufacturers today. We called on the EU to take decisive action under their Circular Economy policy initiative and stop OEM anti-reman tactics, and promote ecodesign for easy reusability and green public procurement.

UN's International Resource Panel

In 2017, ETIRA attended a Workshop in Brussels promoting remanufacturing. Organized by the UN's International Resource Panel, the EU Commission and the G7 Alliance on Resource Efficiency, the session discussed preliminary findings of a future IRP report on Resource Efficiency. It also identified barriers to reuse and ways to tackle them. The meeting's findings served to draft recommendations for the G7 Environment Ministers meeting later in 2017. ETIRA's Vincent van Dijk voiced our concerns regarding cartridge remanufacturing.

NETWORKING

Organising events on a regular basis is a key activity of ETIRA: meeting current and new partners, in both informal and formal settings, helps to create new business and raise the overall industry market share.

ETIRA/THE RECYCLER FOE event and annual meeting in Lisbon in June 2016

On 16-17 June, ETIRA met in Lisbon for its annual meeting, and for the FOE Focus On Europe Conference. The event was a top opportunity for networking and learning, With its 100+ delegates, and organised by The Recycler magazine, the FOE Conference is the 2nd largest industry event in Europe after remanexpo@paperworld.



ETIRA President Christian Wernhart (l.) says "Thank You" to outgoing industry veteran David Connett (r.)

On Thursday, ETIRA held its internal Board meeting and annual statutory meeting. The 2-day event saw an impressive group of FOE Speakers addressing the floor on many topics facing remanufacturers today. And the Thursday Cocktail and Dinner were great for informal networking and new bizz opps !

In Lisbon ETIRA elected a new Board of Directors for the mandate 2016-2018. Mr Christian Wernhart (Embatex) was re-appointed as association President, while David Connett, founding Member of ETIRA and Vice-President, stepped down. Also stepping down were Carsten Edelmeier of OCP and Pierre-Antoine Pluvinage of ARMOR. New faces on the Board included ARMOR's MD for Office Printing Gerwald van der Gijp, The Recycler's Stefanie Unland, and Jörgen Wonisch, CEO of Greenman in Sweden. They joined re-elected Members Philippe Guenin (LVL), Jan-Michael Sieg (KMP), Javier Martinez (Consuprint), and Joachim Kretschmer (Pelikan).

ETIRA says "Thank You" to David Connett and Christian Wernhart

In June 2016, Mr David Connett, former editor of The Recycler, founding ETIRA Member and its Vice-President since its creation, stepped down from the Board. In Lisbon, the industry and ETIRA paid homage to a man who has been instrumental in the growth of this industry. Having started as a remanufacturer himself, he went on to procure industry magazine The Recycler in the nineties, and built it into the #1 industry magazine worldwide. The success of the magazine was reinforced by the many trade reman shows, first small in Paris, then larger and larger shows in Barcelona, Düsseldorf, and today in Frankfurt. And throughout he has focused on building the remanufactured common brand, and bringing the industry together. Over Dinner at the FOE Conference, ETIRA President Wernhart presented David with the ETIRA Lifetime Achievement Award, in recognition of his major contributions to ETIRA and its Members.

ETIRA also thanked Mr Christian Wernhart: we celebrated his 10 years at the helm of the trade association. Having guided ETIRA through a period of strong growth, he remains committed to serving the industry also now when the market faces major challenges. ETIRA thanks organizers The Recycler magazine and main sponsor Static Control, plus co-sponsors Embatex, Biuromax and OWA Armor, for a very successful 2-day event in Lisbon !!



Networking and newbiz leads at ETIRA booth and at the ETIRA Cocktail, January 2017, at remanexpo.in Frankfurt

ETIRA booth and Cocktail at remanexpo@paperworld 2017

From 27 to 31 January, ETIRA again exhibited at the 2017 remanexpo at the international trade show Paperworld. This largest European show for office supplies was held at Frankfurter Messe in Frankfurt, Germany. We met with Members and prospects, and distributed flyers urging visitors to buy remanufactured and services from ETIRA Members only. We also handed out ETIRA's "Guide to Clones". On Sunday, there was the traditional ETIRA Cocktail, jointly with The Recycler Awards ceremony. Over 140 persons met at this "must attend" industry networking opportunity. The Cocktail was kindly sponsored by Messe Frankfurt: many thanks to them and to organisers of the Recycler team !

German customs and OEM lawyers were also "on site", checking booths of SE Asian exporters for the presence of illegal cartridges. And ETIRA's Vincent van Dijk presented ETIRA's work for the industry and why you need to be a member. In addition, the Board of Directors of ETIRA met on Sunday to discuss latest market news, problems, and our 2017 activities.

ETIRA speaks at March 2017 Recycling Times industry conference in Cairo, Egypt

On invitation by the organisers, ETIRA's Vincent van Dijk attended the RT Media EMEA exhibition and Summit event in Cairo. In a panel session with trade associations from the USA and China, we highlighted the benefits of having trade associations working on behalf of the industry. We also met with ETIRA member firms attending the show.

ETIRA attends UKCRA meetings in Coventry

In October 2015 and November 2016, ETIRA's Vincent van Dijk attended the meetings of UK national cartridge remanufacturers' association UKCRA in Coventry. Both sessions addressed several topics affecting the European and UK cartridge remanufacturing industry. Industry expert Dr Michael Gell discussed WEEE issues. ETIRA briefed UKCRA delegates about latest industry developments.

ETIRA Board of Directors met in Düsseldorf to discuss 2016/2017 strategy

In July 2016, the ETIRA Board of Directors met for a full day in Düsseldorf. The group discussed the strategy of ETIRA going forward and the 2016/2017 work programme.

Various

In 2016/2017, ETIRA-manager Vincent van Dijk visited many ETIRA member firms and prospect-members across Europe, to discuss current topics and highlight the benefits of ETIRA membership.

Newsletters and articles

Frequent Newsflashes were sent to members to inform them about industry developments and ETIRA activities.

PUBLIC RELATIONS

ETIRA's role includes raising awareness about the industry among the general public. We stress that remanufacturing used OEM cartridges is a high-tech, innovative and dynamic activity, good for both the customer and for the environment.

ETIRA booth at annual Paperworld international trade show

To help ETIRA Members grow their business, ETIRA exhibits every year at the annual remanexpo@paperworld trade show held in January/February in Frankfurt. We use the booth to showcase our industry, and inform many resellers and distributors from all over Europe about remanufactured cartridges, and the added benefits of trading with an ETIRA Member.

We distribute leaflets and info in different languages. We answer enquiries about ETIRA and the Code of Conduct logo, outline the advantages of buying from an ETIRA member, and inform visitors why ETIRA Members provide value for money.

Website and social media

ETIRA operates a website (www.etira.org) for the general public to learn about the benefits of inkjet and toner remanufacturing, and to enhance the general industry image. The website also lists all ETIRA members, allowing clients to find suppliers instantly.

In 2016, ETIRA opened a dedicated LinkedIn platform and a Facebook page. In only 1 week we signed up a few thousand followers. The LinkedIn account and the Facebook presence will serve to reach out to a larger audience, including distributors and resellers, and raise awareness about the benefits of remanufactured cartridges.

Articles

The Secretariat regularly writes in industry magazine The Recycler, and frequently contributes to other publications. Information is also posted regularly on our website: www.etira.org.

ETIRA Code of Conduct and "Ticked-R" collective mark

The ETIRA Code of Conduct is a code of good business practice. Its obligations include social and environmental responsibility, promotion of top-quality and innovative products, clear warranties, compliance with laws and regulations at national and international level, and ensuring consumer and worker safety and health. The Code also includes a clear obligation to refrain from trading patent-infringing newbuilts as defined in ETIRA's "Guide to Clones". All ETIRA members must comply with the Code, allowing them to use the association's green/yellow "Ticked-R"-logo, distinguishing them in the marketplace.

The ETIRA Code of Conduct is available for download from the ETIRA website.

ETIRA BODIES

ETIRA is the acronym of the European Toner & Inkjet Remanufacturers' Association aisbl/ivzw. A non-profit organisation in accordance with Belgian law, its statutory seat is Brussels, Belgium, with a Secretary General's office in Breda, The Netherlands. ETIRA represents the interests of the European inkjet and toner cartridge remanufacturers and related service providers/compatibles manufacturers, etc. in Europe. Created in 2003 by 17 founding companies, the current 45 ETIRA members now account for over 65% of industry turnover. A full up-to-date list of ETIRA Members and their contact details can be found on our website: www.etira.org

Today, ETIRA is the recognized industry body for all topics affecting cartridge remanufacturing, and registered in the EU Transparency Register.

General Assembly

The General Assembly is comprised of all ETIRA full Members and meets at least 1x per year. It sets the general guidelines of the Association, elects the Board of Directors, approves the annual accounts and budgets, etc.

Board of Directors

ETIRA's Board of Directors is elected by the General Assembly every other year, and composed of respected company representatives from the various sections of the cartridge remanufacturing industry across Europe. Meeting approx. 2-3 times per year, Board Members are not remunerated and carry their own travel expenses. The Board of Directors implements the General Assembly's guidelines, sets an annual work program, approves membership applications, prepares annual accounts and budgets, etc.

The ETIRA Board of Directors is currently (June 2017) composed of the following persons (mandate 2016-2018):

President	Christian Wernhart	Embatex	A
Treasurer	Philippe Guenin	LVL	F
Member	Jan-Michael Sieg	KMP PrintTechnik AG	D
Member	Jörgen Wonisch	Greenman	S
Member	Joachim Kretschmer	Pelikan	CH
Member	Gerwald van der Gijp	Armor Group	F
Member	Javier Martinez	Consuprint	E
Member	Stefanie Unland	The Recycler Magazine	UK

Secretariat

ETIRA aisbl/ivzw, European Toner & Inkjet Remanufacturers Association

Vincent van Dijk, secretary general

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EU Transparency Register nr. 66749712601-11

ETIRA is the non-profit trade association for the European companies involved in state-of-the-art toner and/or inkjet remanufacturing and their business partners. Every day, remanufacturers bring the European consumers and businesses a first-class high quality product which is competitively priced and, thanks to re-using natural resources, makes a major contribution to the European environment and a cleaner world. Yearly, the industry adds an average 1,7 to 2 bn euro to the European economy, directly and indirectly provides 16,000-20,000 jobs, and prevents 300,000 m3 of waste from going to landfill. Visit www.etira.org for more information.