



# ANNUAL REPORT 2019

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*System operator for managing electrical and electronic waste  
in the Federation of Bosnia and Herzegovina*

# WELCOME

*This year in pages of our report we have prepared for you information on collected quantities of e-waste, results in the field of cooperation with local communities, our ecological projects and, of course, new street e-waste containers our citizens have at their disposal.*

*With this report we would like to provide a total insight and knowledge on state of environment in matters of managing electrical and electronic waste in our country, in order for you to share this with your friends and family.*

*We are counting on you.  
Enjoy your reading.*

## LEGEND

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**E-equipment** – electrical and electronic equipment

**E-waste** – waste electrical and electronic equipment

**LHA** – Large household appliances

**SHA** – Small household appliances

**C&F** – Cooling and freezing appliances (refrigerators and freezers)

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**Rulebook** – Rulebook on managing waste of electrical and electronic products (“Official Gazette of the Federation of BiH”, number 87/12, 107/14, 8/16, 79/16 and 12/18).

**Law** – Law on Waste Management (“Official Gazette of the Federation of BiH”, number 33/03, 72/09 and 92/17).

**System clients** – Producers, importers and distributors of electrical and electronic equipment that are for the first time placing the electrical and electronic equipment on the market in the Federation of Bosnia and Herzegovina.

**System operator** – is the company enabling the System clients to pay lower fees for e-waste management, performs administration related to reporting, provides support in form of informing on legislation, manages electrical and electronic waste, authorized by the Federal Ministry of Environment and Tourism of BiH based on the Law and the Rulebook.

# HIGHLIGHTS

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*The role of ZEOS eko-sistem operator*

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*Community of the greatest*

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## Director's report

ZEOS eko-sistem is the System operator for managing and handling e-waste which means that it fulfils all legally prescribed obligations on behalf of the e-waste importer, distributor and producer, concerning waste management of this type on the principle of extended producer responsibility. In performing our obligations, we are always thinking about our mission which, in addition to fulfilling legal requirements, obliged us to protect and preserve the environment. We have therefore established and are handling the e-waste management system that insures the cost-effective fulfilment of long-term legal obligations and ecological standards.

The annual report for 2019 reflects the development of the waste management system in the Federation of Bosnia and Herzegovina. Our success is based on continuous dedication of being at service to our System clients and citizens in order to fulfil our mission of preserving the environment through common activities under the authorities prescribed by the Federal Ministry of the Environment and Tourism.

Successful decisions and strategies in the field of waste management implemented by our employees have ensured framework for handling the total collected wasted e-equipment, pursuant to the existing legal provisions. The business activities of the company are non-for-profit, i.e. non-profit oriented, which enables us to significantly manage business in the interest of the country and contribute to development of the recycling industry. This report is another way in which we have tried to make our business and system management as transparent as possible, in order for our partners to recognize us as a reliable e-waste management system.

Last year was overall stable in the field of e-waste management. The collected quantity of e-waste amounts to 36% in reference to the e-equipment placed on the market of FBiH. Authorized collectors for processing and recycling e-waste have not had technical difficulties, and generated amount of e-waste was according to plan.



A sustainable collection network has additionally been secured, which will continue to fulfil high ecological targets in the future.

The development of targets of collecting e-waste in the following years will represent a great challenge for us, and in accordance with this we would like to invite all our distributors and retail chains to take over the e-waste from the citizens and to handle it in accordance with the provisions via the ZEOS eko-sistem operator.

In 2020 we will be focusing on realizing the legal rate of collecting e-waste, which has increased by 5%. Also, we are planning to continue educational campaigns for providing information to citizens and raising awareness in the field of e-waste management and recycling, in collaboration with local communities.

Detailed information and data on results realized in 2019 can be found in the annual report below. On behalf of all employees of the company ZEOS eko-sistem, I sincerely thank you for your collaboration and trust, which have been imperative for us to realize our goals in the field of e-waste management!

Emil Šehić, M.Sc., Director





Collected quantity of e-waste:

**2.430.612 kg**

Equipment placed on the market in FBiH:

**6.784.587 kg**

Share of collected e-waste in reference to quantity placed on the market (the legal aim is 30%):

**36%**

Increase of collected quantities in reference to the previous year:

**14%**

System clients:

**205**

Press releases:

**1.015**

Number of activities of raising awareness:

**46**

Recycling locations:

**102**

## ZEOS eko-sistem management



### SECURITY AND RESPONSIBILITY

Our IT system insures the confidentiality of your data, as well as availability at any given time.



### SYSTEM EFFICIENCY

Our collection network includes the greatest e-waste processors and recyclers in our country, and we possess the most extensive collection network. We have collected over 10,000,000 kilograms of e-waste.



### INNOVATIONS

We are the first in the country to have established a network for separate collecting and handling e-waste. We strive to use our capacities as responses to new challenges, with the increase of the recycling rate.



### NON-PROFIT BUSINESS

The non-for-profit principle is a special business mechanism that makes our business operation stand out. The benefit realized in efficient business and cost management of the company is further invested in system efficiency, collecting and educational campaigns.



### RESPONSIBLE BUSINESS MANAGEMENT

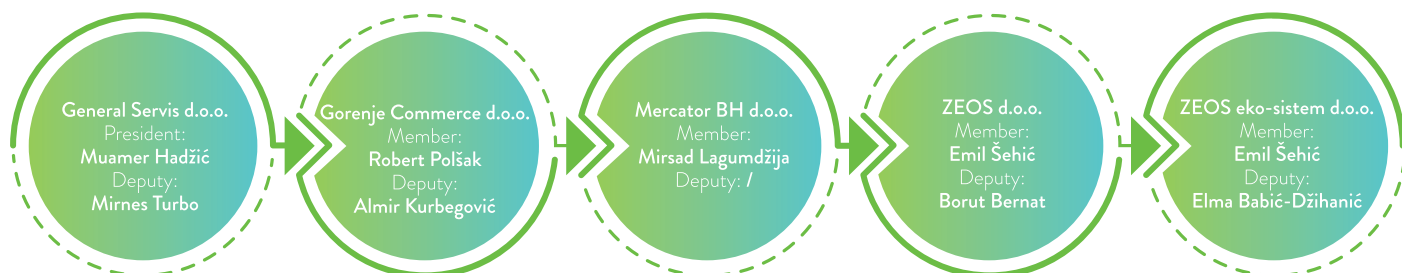
Through our business, we are mindful to fulfil the obligations handed over to us by the System clients, as well as in handling e-waste. We continuously educate the wider public and invest in infrastructure for collection of e-waste.



### TRANSPARENT BUSINESS

Through different media channels, we inform the wider public on our business activities. We are dedicated to directing our resources toward protecting the environment, which builds trust in reference to our partners.

## BUSINESS COUNCIL



## Role of the ZEOS eko-sistem operator

ZEOS eko-sistem is a community that enjoys the support of all importers, producers and distributors that have transferred their obligation of reporting on e-equipment placed on the market in FBiH as well as the obligation of handling e-equipment to the authorized System operator. In this manner, System clients become parts of the network for handling e-waste pursuant to legal provisions.

Our company manages business according to the non-for-profit principle, which enables adequate protection of the environment and sustainable development of the system as a whole. Also, the System operator uses its capacities

and resources to promote proper waste disposal and ensure efficient recycling process with the aim of raising awareness and developing healthy habits, and preserving the environment.

Our role is reflected in directing the e-waste through legal flows, ensure handling in BiH, but also export abroad for categories of hazardous waste, which cannot be handled in our country due to the lack of infrastructure.

The recycling system covers only the recyclers that possess waste management licenses issued by authorized ministries.



## Collection network

ZEOS eko-sistem through continuous work improves the quality of service and increases the number of infrastructural units for collecting e-waste, so that there are 102 locations in 34 municipalities of the Federation of Bosnia and Herzegovina where e-waste can be handed over for recycling free-of-charge.

For all institutions and legal entities, the handover is performed by completing an order via our website [www.zeos.ba](http://www.zeos.ba), and the e-waste management service is free-of-charge.



If you decide to join our collection network, contact us via e-mail: [info@zeos.ba](mailto:info@zeos.ba)

## *E-waste infrastructure*



Accurate locations of presented infrastructure are available on the map via website [www.zeos.ba](http://www.zeos.ba).



# REACHING GOALS

# 401

TRUCKS WITH  
TRAILERS



7 YEARS OF BUSINESS

# 10.015.007<sup>kg</sup>

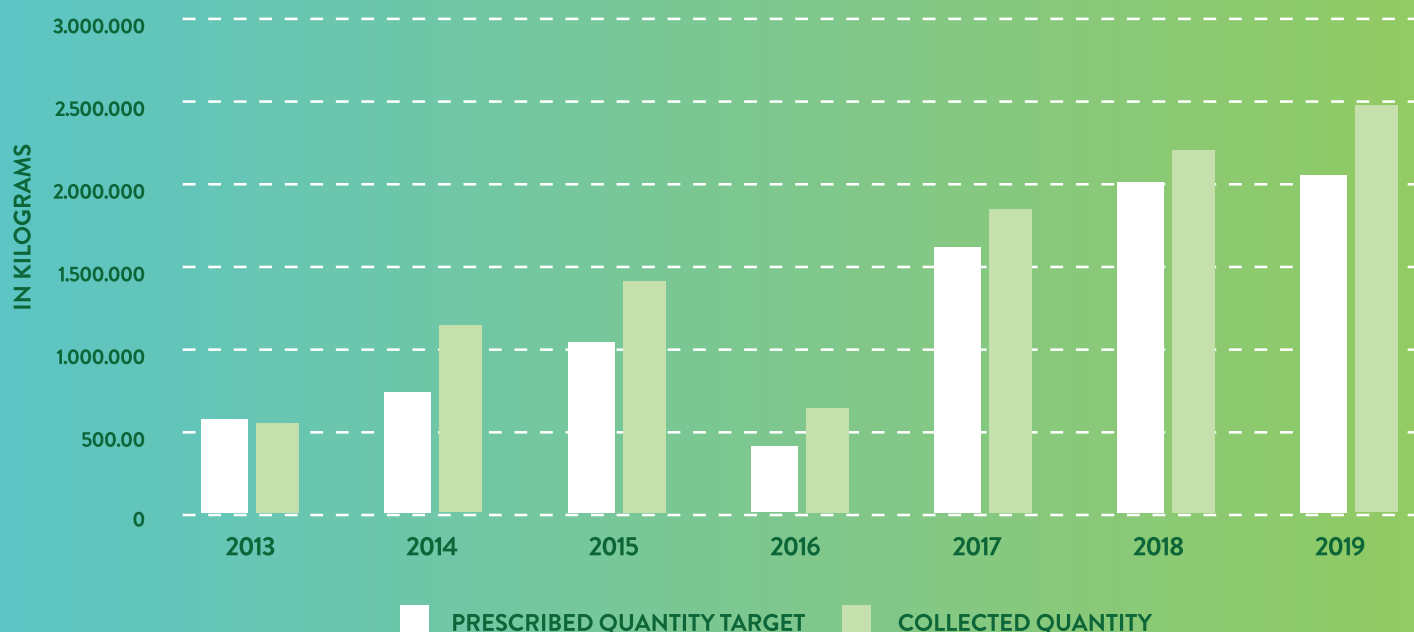
# 3.920<sup>kg</sup>

COLLECTED DAILY



The increase in the quantity of e-waste being collected on our behalf annually is a challenge. Considering that the e-waste is the fastest growing category of waste, we are obliged to fulfil the prescribed legal targets that are increasing long-term. The increase in collected quantity of 14%, in reference to 2018 indicates to significant increase in the quantity of e-waste generated in our country. The reason for this is primarily the short service life of new appliances, but also the inability of repairing old appliances.

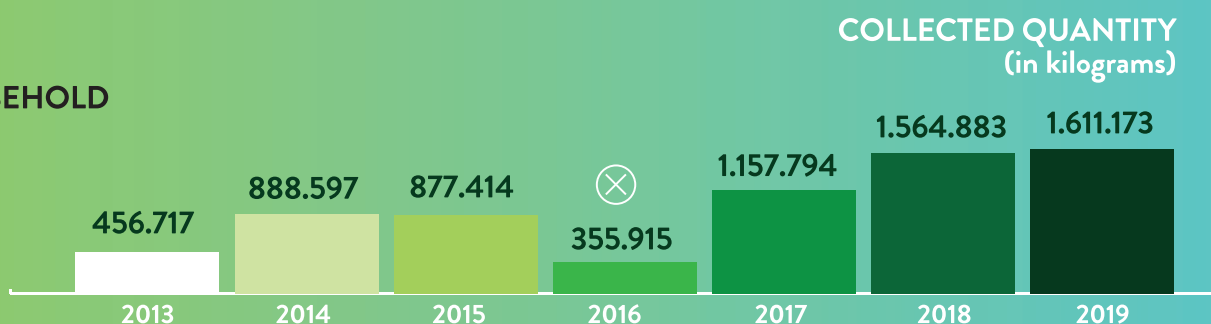
## Overview of 2013-2019 efficiency of collecting e-waste (in kg)



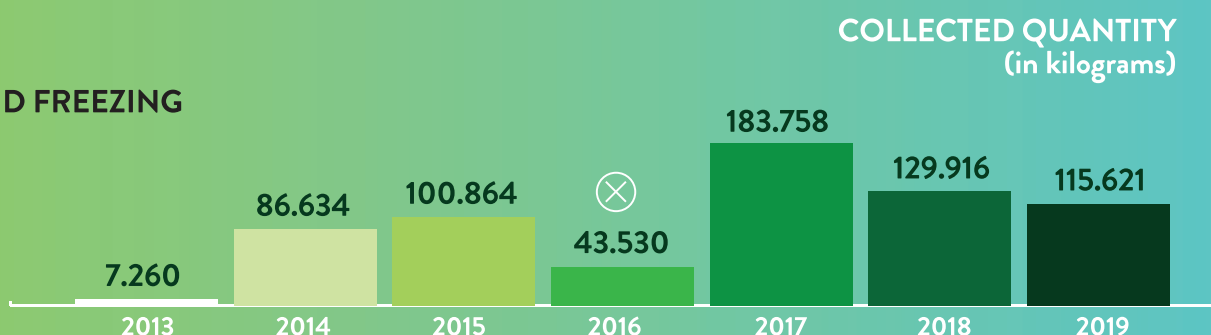
\* In 2016, the quantity of collected e-waste has decreased due to Rulebook on revoking the Rulebook that caused the downtime for ZEOS eko-sistem for that year.

# 3.525 HANDOVERS OF E-WASTE WERE PERFORMED (2013 – 2019)

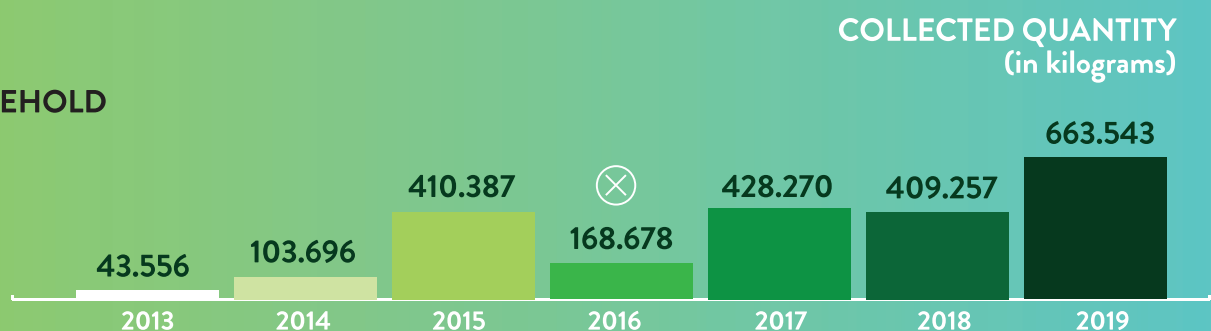
## LARGE HOUSEHOLD APPLIANCES



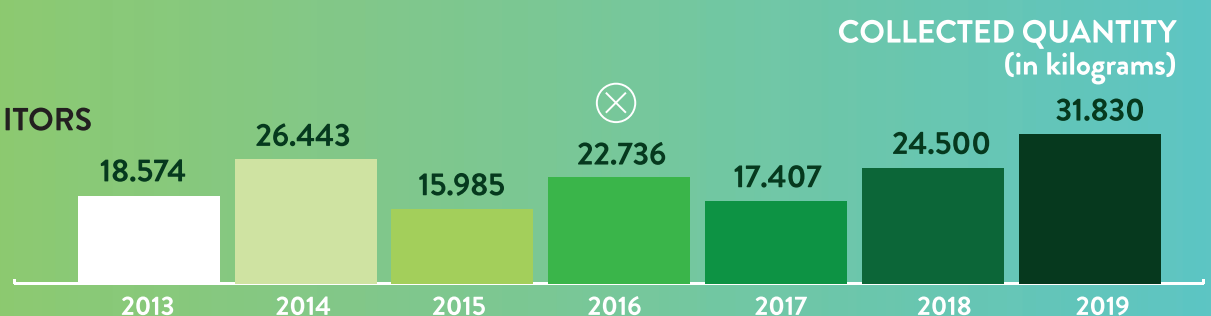
## COOLING AND FREEZING APPLIANCES



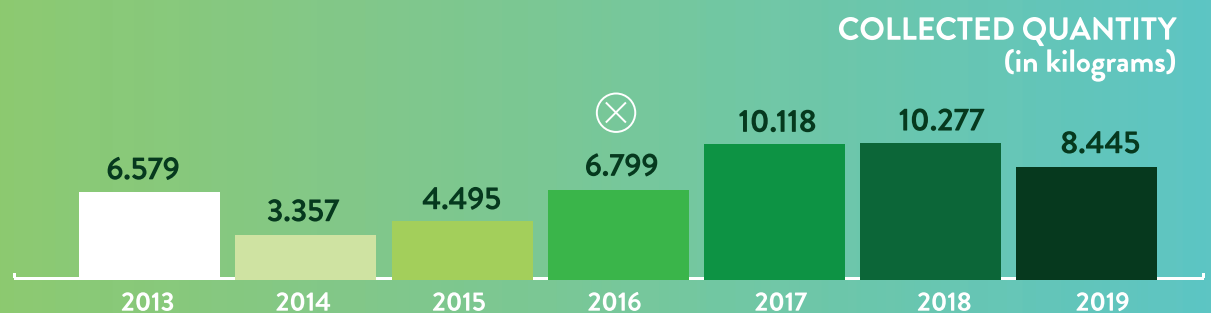
## SMALL HOUSEHOLD APPLIANCES



## TV AND MONITORS



## LAMPS



! The quantity decreased in 2016 due to the Rulebook on revoking the Rulebook.

The presented handovers are performed via requests/acceptance orders via the website [www.zeos.ba](http://www.zeos.ba)

## E-waste management in 2019



**2.430.612 kg**  
COLLECTED QUANTITY OF E-WASTE

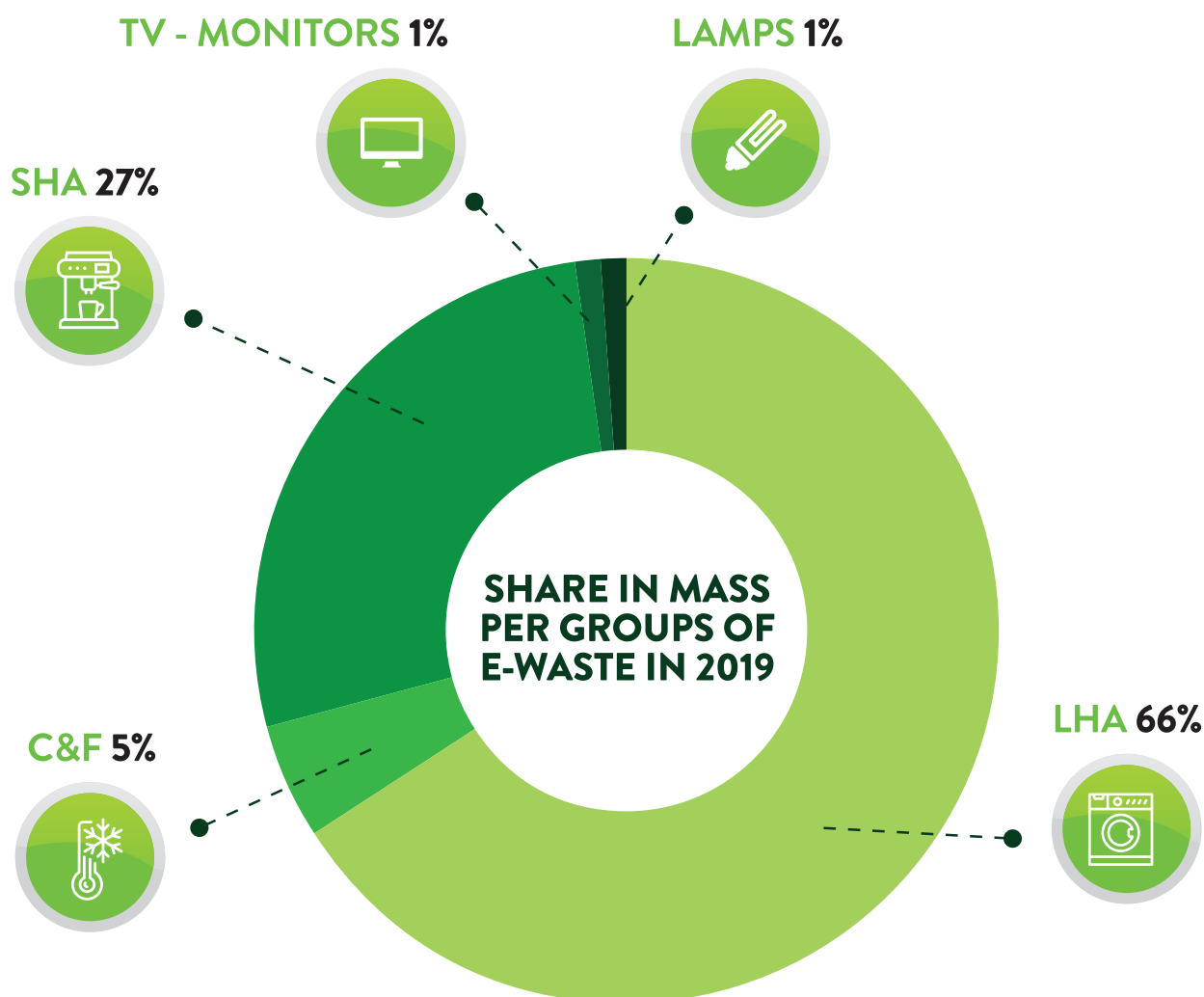
PRESCRIBED  
LEGAL TARGET

**30%**

FULFILLED



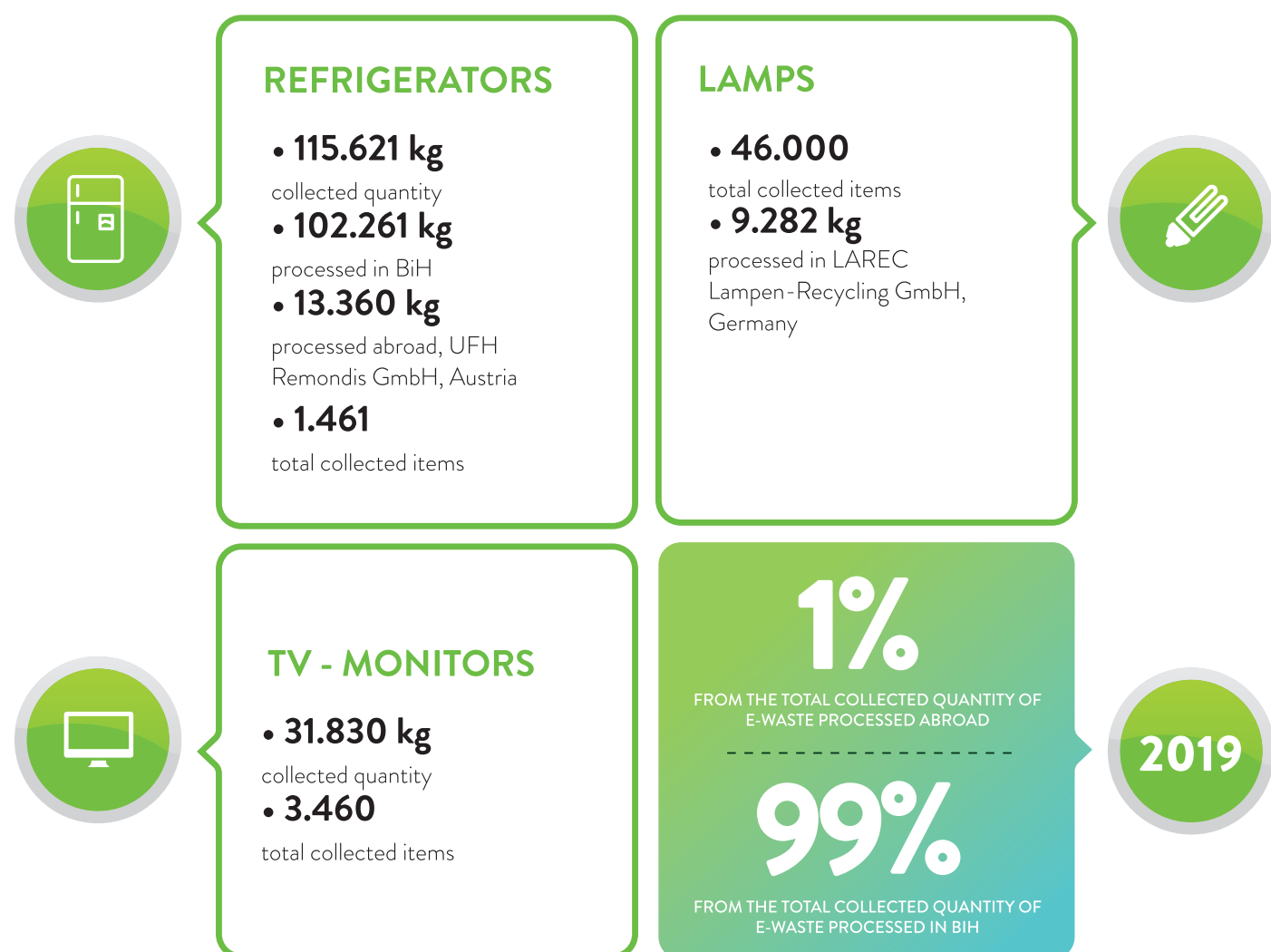
Increase in collected quantity of e-waste is the result of collaboration with a large number of companies and the local authorities, many projects and activities have enabled for the households to participate in proper disposal, which directed large quantities of e-waste toward the recycling process. Also, in 2019 we have collaborated with utility companies.



## Hazardous e-waste in 2019

The business management of our company is dedicated to handling e-waste through an established collection network, responsibly in order to protect the environment, but also the health of the worker in the process. For this reason, we pay special attention to hazardous e-waste.

Hazardous e-waste categories, due to lack of infrastructure in our country, are exported abroad for processing. Processing refrigerators not containing hazardous gases is performed in BiH, along with the first degree of processing TV and monitors, in which the cathode tubes are afterwards stored to be exported for recycling. It is very important to underline that this hazardous waste is specifically handled due to gases in refrigerators, lead glass in TV and monitors and mercury in lamps.



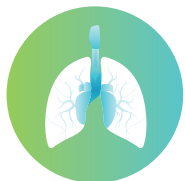
## Reasons to recycle your e-waste

E-waste is not garbage, because it contains highly toxic substances that upon burning generate additional toxins such as halogenated dioxin and furan – some of the most hazardous toxic substances known to mankind.

Toxic substances in e-waste may cause carcinoma, reproductive difficulties, endocrine disorders and numerous other health problems.



The mental development of children may be decreased if the child is exposed to influence of lead.



Beryllium causes chronic illnesses with lethal consequences and that **NEGATIVELY** influence lungs.



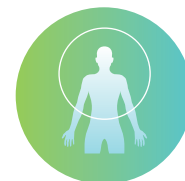
Hexavalent compounds of chromium damage the kidneys, liver and the DNA. Asthmatic bronchitis is one of the **NEGATIVE** consequences.



Brome flame retardants cause damages to the fetus and problems with the thyroid gland.



Cadmium causes carcinoma, and long term exposure causes damage to the bones and kidneys.



While burning, the PVC produces dioxin that **NEGATIVELY** affects the immune system, reproduction, development, causes hormonal disorders and carcinomas.



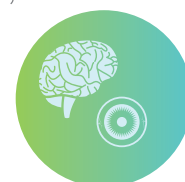
Barium influences swelling of the brain after short exposure. It can cause muscle weakness, damage to the heart, liver and spleen.



Arsenic influences the occurrence of carcinoma, diabetes and cardiovascular illnesses.



Lead deposited in the body affects the nervous and reproductive system **NEGATIVELY**, as well as on the kidneys.



Mercury is known for its harmful influence to fetus development, but also the health of adults. It causes damage to the eyes, skin, brain and kidneys.

Source: [www.causesinternational.com](http://www.causesinternational.com)



## Projects, activities and educations

The experience we have with further sharing of knowledge is a crucial part of our business. Namely, we are aware of the fact that the wider public needs to be educated for the purpose of indicating the proper handling of e-waste, i.e. selective separating of e-waste, the advantages of recycling and threats caused by improper handling of e-waste. In accordance with the above mentioned, every communication with the public is of great importance, and therefore we strive for our information to reach as many citizens in BiH as possible, with the aim of instigating a change in their habits, as well as establishing a long term sustainable e-waste management system.

The previous 2019 was characterized by a great number of participants, who took part in activities of collecting e-waste, as well as collaboration with schools. Over 44,000 participants from 48 schools that participated in activities of education, e-waste workshops, quiz shows and e-waste recycling process.

Educational programs in schools aim to extend the knowledge of students about e-waste categories, introducing them with new e-waste disposal containers, as well as proper sorting and recycling.



## International collaboration

### International E-Waste Day

Under the WEEE Forum initiative and together with 100 worldwide organizations, Bosnia and Herzegovina on October 14, with over 4,500 participants and 19 participating schools, celebrated this important date for ecology. We are aware that vast quantities of e-waste that are in households are doomed to be neglected. Therefore, we have provided an opportunity to all citizens to bring their waste to one of the provided locations. All activities that were realized from October 7 to 25 have been documented online under the unique hashtag #ewasteday.



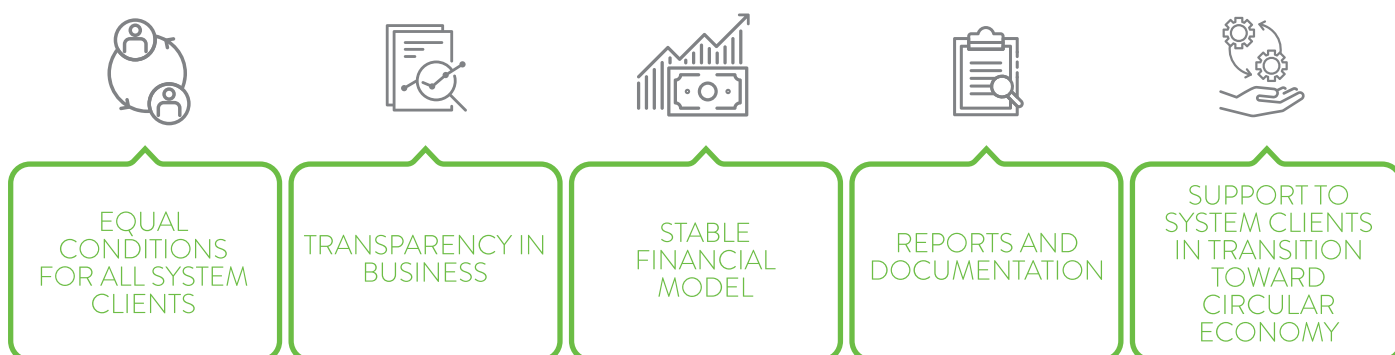
## Community of the greatest

For the past seven years, we have been fulfilling prescribed criteria on behalf of our System clients and enabling them the most favorable conditions under their “extended responsibility”. Considering the continuous inspection implemented by authorized institutions, we invite all importers, distributors and producers of e-equipment placed on the market, to transfer their obligation of extended responsibility to ZEOS eko-sistem and become a part of the greatest community in FBiH.

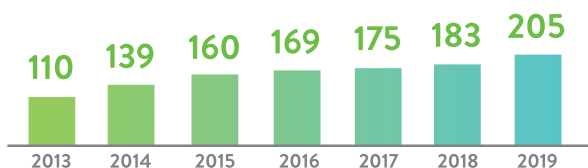
## REASONS TO TAKE PART IN THE SYSTEM



Contact us and schedule free-of-charge consultations.



OUR  
ECO-FAMILY  
COUNTS **205**  
MEMBERS!





## Share the information further

The role of the community is extremely important and the education on proper waste disposal is available to all those who want to protect their environment, but it is important for us to acquire habits since early age.

For the purpose of informing the wider community on the obligation of disposing e-waste, proper recycling, successful results and new educational information, we use numerous methods of transferring information. All materials are available via website [www.zeos.ba](http://www.zeos.ba), and our associates, partners and all citizens are licensed to use our material for sharing information to their friends, colleagues and families.

DID YOU KNOW THAT ONLY **20%** OF THE GLOBAL E-WASTE IS RECYCLED ANNUALLY, WHICH MEANS THAT **40 MILLION TONS** OF E-WASTE ARE ANNUALLY DISPOSED TO WASTE DISPOSAL SITES, BURNED OR ILLEGALLY RESOLD AND TREATED NON-ECOLOGICALLY?



### FOLLOW US VIA:



TELEVISION



RADIO

**1.015**  
press releases



FLYERS AND  
POSTERS



SOCIAL NETWORKS

**7.808**

followers on our  
social media  
communities



WEB PORTAL ARTICLES



NEWSLETTER

PUBLIC OPINION  
SURVEY



WEBSITE

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ANNUAL REPORTS



## CONTACT INFORMATION

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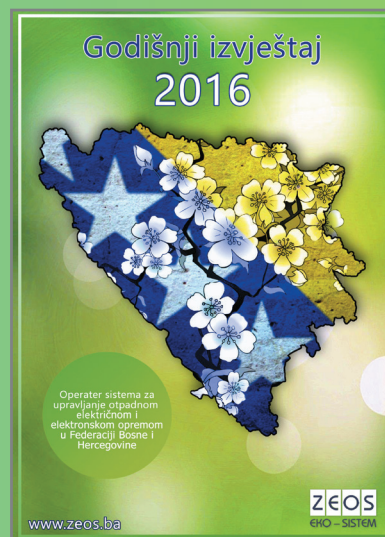
mahir.bjelonja@zeos.ba

We are pleased to annually provide to our associates, as the authorized System operator, transparent information and examples in business with quality service in the field of e-waste management in our country.

**System clients**

ABIAS d.o.o., AGRAMSERVIS d.o.o., AGROMECHANIKA-KOMERC d.o.o., ALARM AUTOMATIKA d.o.o., ALFA CAR d.o.o., ALFA THERM d.o.o., ALLIED VTM d.o.o., ALPEKS d.o.o., AMD SCOTTO d.o.o., AMDŽ-ELEKTRON d.o.o., AN-GO FRIGO ELECTRIC d.o.o., AN-KA D.O.O., ANNOA d.o.o., ARCHITEKTENGRUPPE S 71 d.o.o., ARGON SISTEMI d.o.o., AT STORE d.o.o., ATOM DISTRIBUTION d.o.o., AUDIO TEAM d.o.o., AUTOMATING ATC d.o.o., AVACOM GROUP d.o.o., AVTERA BH d.o.o., AX SOLING d.o.o., B & G d.o.o., BBS d.o.o., BIASCO d.o.o., BILI BRIG d.o.o., BINGO d.o.o., BIOMEDICA d.o.o., BIRO COMMERCE d.o.o., BLITZ-CINESTAR d.o.o., BOSNALIJEK D.D., BOSNAMEDIC d.o.o., BROTHERS d.o.o., BS TS d.o.o., CARLSBERG BH d.o.o., Coca-Cola HBC B-H d.o.o., CLIMA-TRADE d.o.o., COMMERCE ENGINEERING d.o.o., COMPLEX d.o.o., COMTRADE DISTRIBUTION d.o.o., CONFIG d.o.o., CPU d.o.o., CROM BH d.o.o., DARA d.o.o., DEICHMANN OBUČA d.o.o., DELING d.o.o., DELTRON d.o.o., DEMA & S EXPORT-IMPORT d.o.o., DENTA DE d.o.o., DIAMEDIC d.o.o., DIMOTEL d.o.o., DISTI d.o.o., DM DROGERIE MARKT d.o.o., DREAM-SAT d.o.o., DŽANIĆ KOMERC d.o.o., EINHELL BIH d.o.o., EL PHARMA d.o.o., ELEKTRO CENTAR d.o.o., ELEKTRO-JURIĆ d.o.o., ELEKTRO-MILAS d.o.o., ELKO-MARIĆ d.o.o., ELMARK GROUP d.o.o., ELSA TRADE d.o.o., ELUMATEC MASCHINEN d.o.o., EMANET IT ACADEMY d.o.o., ENERGOINVEST-SUE D.D., FARMAVITA d.o.o., FAXY d.o.o., FERRO-PACK d.o.o., FMI 2001 d.o.o., FRIGOTERM d.o.o., GAMA-ELECTRONIC d.o.o., GASTRO TEHNIKA d.o.o., GEMMA BH d.o.o., GENERAL ENGINEERING d.o.o., GENERAL SERVIS d.o.o., GORENJE COMMERCE d.o.o., GRAFOTISAK d.o.o., GRIČ d.o.o., HENKEL BH d.o.o., HILTY SYSTEMS BH d.o.o., HKB NET d.o.o., I-CRNI d.o.o., IMTEC d.o.o., INEL BH d.o.o., INEL d.o.o., INEL-MED d.o.o., INFO-KOD d.o.o., INFONET d.o.o., INTER-COM d.o.o., INTERSPORT BH d.o.o., ISKRAEMECO d.o.o., ITD d.o.o., JULIUS MEINL BH d.o.o., JUMO BH d.o.o., JYSK d.o.o., KABLOVSKA TELEVIZIJA HS, KAMER COMMERCE d.o.o., KB d.o.o., KID ZONE d.o.o., KODEKS d.o.o., KONICA MINOLTA POSLOVNA RJEŠENJA BH d.o.o., KONZUM d.o.o., KUPI TEHNIKU d.o.o., LATEX d.o.o., LEDO d.o.o., LIBELA ELSI BIH d.o.o., LIGHTING TECHNOLOGY d.o.o., LINDAB d.o.o., LOGOSOFT d.o.o., LUK d.o.o., LUMINOS d.o.o., M.A.L. GRIZELJ d.o.o., MACLINE d.o.o., MALIŠIĆ EXPORT-IMPORT d.o.o., MANEDRA-COMPANY d.o.o., MARCAFFE d.o.o., MARS - 97 d.o.o., MASTER-H d.o.o., MASTERLINE d.o.o., MB FRIGO KLIMA I HLADENJE d.o.o., MEDICAL d.o.o., MEDICAL INTERTRADE d.o.o., MEGA CENTAR d.o.o., M-ELECTRIC d.o.o., MERCATOR BH d.o.o., MES d.o.o., MESC d.o.o., MI-ADRIATIC d.o.o., MIBO KOMUNIKACIJE d.o.o., MICOM BH d.o.o., MIDDLE POINT ELECTRONICS d.o.o., MIDNES d.o.o., MIVIKO d.o.o., MLJEKARA d.o.o., MOBIS ELECTRONIC d.o.o., MOJIT d.o.o., MTEL, A.D., NEONETX d.o.o., NETWORK d.o.o., NEW YORKER BH d.o.o., NEX STUDIO d.o.o., NOBEL CORPORATION d.o.o., NUIČ d.o.o., OLYMPUS BH d.o.o., OMEGA PANELI d.o.o., OPUS d.o.o., ORACLE BH d.o.o., ORBICO d.o.o., ORBITER G d.o.o., OSMIJEH d.o.o., P.Z.VINO-DUHAN-VOĆE P.O., PAYTEN d.o.o., PC PLUS d.o.o., PENNY PLUS d.o.o., PLANET d.o.o., PLANKOS ALATI d.o.o., PORIN d.o.o., PRINTEX d.o.o., PRIZMA BL d.o.o., PROMA d.o.o., PROMET-TEHNO d.o.o., RIF d.o.o., ROX d.o.o., SALON BANKARSKO OPREME d.o.o., SARAJEVSKI KISELJAK D.D., SARTORIUS LIBRA ELEKTRONIK d.o.o., SATTRAKT d.o.o., SCHACHERMAYER d.o.o., SCHRACK TECHNIK BH d.o.o., SERVIS JELIĆ d.o.o., SHIMADZU d.o.o., SICON SAS d.o.o., SILK TRADE d.o.o., SOFTNET d.o.o., SONRA d.o.o., STUDIO-MODERNA d.o.o., SYS COMPANY d.o.o., SYSTECH d.o.o., ŠPICA SYSTEMS d.o.o., TC-LINK d.o.o., TEHNO-MAG d.o.o., TELEMACH d.o.o., TELEPLUS d.o.o., TEVE VARNOST ELEKTRONIKA d.o.o., TIPTEH d.o.o., TOOL EXPERTS d.o.o., TRGOŠPED d.o.o., TRING d.o.o., TVIN-KOMERC d.o.o., UNATEL d.o.o., UNIBOX d.o.o., UNIKOMERC d.o.o., UNIOR TEHNA d.o.o., UNIS TELEKOM D.D., UNIVERZALNO d.o.o., VELUX BH d.o.o., VERSO d.o.o., VIDIAMOBIL d.o.o., WIDEX SA d.o.o., WURTH BH d.o.o., XENON FORTE d.o.o., YIMOR d.o.o., ZEKA-COMERC d.o.o., ŽANA-COMMERCE d.o.o.





For more information on our business, refer to our annual reports for 2014, 2015, 2016, 2017, 2018 and 2019, available on our website [www.zeos.ba](http://www.zeos.ba).

All information, graphs and images are for your information and may not be used in other purposes.

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