OUTDOOR ADVERTISING

From year to year, AMS becomes more and more involved in pro-environmental activities, creating such advertising solutions that are combined with the spirit of ecology. Since 2018, the company has shown that such solutions are expected by residents and that they are a natural step towards building environmentally friendly cities.

ENERGY

Non-renewable energy

The following types of energy are used in AMS operations:

- liquid fuels (petrol and diesel, LPG) – used to power company cars and forklifts;
- electricity used to illuminate or backlight advertising space.

Table: The amount of energy used by AMS from non-renewable energy

	2019	2020
Heat energy* [GJ]	No data	40 485
Electrical energy ** [MWh]	8 719	8 427

Data comes from invoices
** electricity used to illuminate or illuminate advertising spaces*
*** liquid fuels (gasoline and diesel oil, LPG) - used to power the engines of company cars and forklifts;*

Renewable energy

9.26

MWh energy used from non-renewable sources in 2020

In 2020, due to the pandemic period and nearly 40% reduction in revenues compared to 2019, AMS's efforts to reduce non-renewable energy consumption had to be optimised but were continued consistently.

In most cases, the pro-ecological operation involved the replacement of traditional fluorescence sources (fluorescent tubes) with energy efficient LED lamps.

In 2020, AMS replaced:

- 273 fluorescent sets in Citylights with LED lighting, thus limiting the total power of devices by **51.05 kW**;
- 20 fluorescent sets in 18 m2 backlights with LED lightning, thus limiting the total power of devices by **11.36 kW**.

In total, **1.412 fluorescent** tubes with a power of **58W** each were replaced with energy-efficient LED lighting.

Moreover, the Company put another **2 solar-powered advertising poles**, which means that **880 kWh** of electricity was saved on the lighting of the advertisements displayed on these poles.

In addition, AMS, after the period of tests, introduced into urban space **ECO bus/tram shelters** with **green roofs and with glazing with special printing preventing collisions with birds**. The printing used has been certified by the **The Polish Society for the Protection of Birds** and the **Szklane Pułapki Foundation**. The indicated shelters with printing which is safe for birds were created in Warsaw (one) and Lublin (one). On the other hand, the whole ECO system of bus/tram shelters with green roofs is currently made up of shelters in Poznań, Krakow, Warsaw and Lublin.

Green carpets were installed on the roof of each of them, which have very favourable features for the urban area*:

- **retention of rainwater** up to 200 L of water per rain episode;
- **CO_2 reduction** by approx. 7 kg of CO_2/year;
- **temperature reduction** on hot days in the bus/tram shelter – 2-5 °C;
- **reduction of dust** in the area of the bus/tram shelter – 15-20%;
- creation of an **oasis for insects** – long flowering period, high nectar source.

AMS's bus/tram shelters look naturally and introduce greenery into the urban space in places where it would otherwise be practically impossible to do so.

The following were used to calculate energy savings:

- for **Citylights** prior to the replacement of the light source (**4 fluorescent tubes** of **58 W** each) – **232 W**; replaced with LED lighting of **45 W**. The saving effect for one lightbox is **0.7854 MWh** per year;
- for 18 m^2 **Backlights** prior to the replacement of the light source (16 fluorescent tubes of **58 W** each) – 928 W; replaced with LED lighting with a power of **360 W**. The saving effect for one lightbox is **2.3856 MWh** per year.

**Data from the Company's documents and practical tests*

EMISSIONS

The above-described AMS activities are part of the company's activities for CO_2 emission reduction. They consist in:

- the progressive **replacement of light sources with the energy-efficient LED technology**;
- the construction of advertising media **powered by photo-voltaic cells**;
- the **installation of "green carpets"** on the roofs of the bus/tram shelters;

- **the promotion of the idea of a green approach to the environment, and reduction of carbon footprint** – by selling the Eco-offer based on renewable energy advertising media, bus/tram shelters with green roofs, and low-emission urban transport vehicles.

MATERIALS AND RAW MATERIALS CONSUMPTION

Because of their specific nature, AMS carries out all printing orders through external printing businesses, and thus the company is not directly responsible for and does not calculate the consumption of materials and raw materials in the production process.

WATER AND EFFLUENTS

As part of its activities, AMS consumes water only for social purposes – all consumption takes place on the premises leased as office and storage space, and its quantity is not recorded – flat-rate settlements.

WASTE

The main waste generated as a result of AMS activity is production waste, posters used for the implementation of advertising campaigns (**219.68 tonnes**) and parts of used or damaged advertising media (**258.56 tonnes**).

Table: The weight of all waste generated in AMS's operations with breakdown in relation to how it is segregated:

[Tonnes]	2019	2020	Disposal method
Production waste *,**	277.66	478.45	Handover of waste to companies that professionally deal with the disposal / recycling of a given type of waste

[Tonnes]	2019	2020	Disposal method
Hazardous waste ***	No data	0.21	Stored in metal containers at the place of their production and periodically transferred to companies professionally dealing with their disposal

Waste data register kept in the BDO system
** paper posters mounted in citilight media and glued on billboards, with organic glue (with the Hygienic certificate of the National Institute of Hygiene No. EC, the product is not classified as a hazardous mixture)*
*** vinyl posters, mounted in backlight and frontlight carriers - classified by companies collecting waste as "Plastic packaging";*
**** these are mainly fluorescent lamps replaced with energy-saving LED sources*

Percentage decrease/increase in weight of waste in the production process y/y:

Compared to the previous year, the total amount of waste products generated by AMS **increased by 72% – 478.45 tonnes** in 2020 vs. **277.66 tonnes** in 2019.

It should be noted that this increase resulted from a very large, periodic stock management campaign. Metal parts and structures of the advertising media with a total weight of **176.02 tonnes** were scrapped, and **81.94 tonnes** of concrete foundations coming from scrapped advertising media were removed.

In view of the above, without taking into account the metal and concrete waste in the bill (in 2019 AMS did not generate such waste), **production waste production y/y decreased by 26%** (**220.49 Mg** in 2020 vs. **277.66 Mg** in 2019)*.

** Data from the Company's documents*

Methods for disposal of specified waste groups:

- **paper posters mounted on Citilights and glued on billboards with organic adhesive** (*having a hygienic approval of the National Institute of Hygiene (PZH) No: B – BK – 60211 – 1282/19 of 14.11.2019, according to the classification rules included in Directive 1999/45/EC, the product is not classified as a dangerous mixture).* In 2020, AMS has produced **219.68 Mg** of such waste by handing it over to companies professionally involved in the collection of such waste;
- **vinyl posters, mounted on Backlights and Frontlights** – classified by the waste collecting companies as “plastic packaging”. In 2020, AMS has produced **0.6 Mg** of such waste;
- **hazardous waste** is stored in metal containers at the place of its production and

periodically transferred to companies professionally involved in its disposal. In 2020, AMS has produced **0.21 Mg** of such waste.

Recycled or reused waste:

- **metal elements** of the advertising media – classified by waste collection companies as **"Iron and steel"**. In 2020, AMS has produced **176.02 Mg** of such waste;
- **foundations of advertising media** – classified by waste collection companies as **"Concrete waste and demolition concrete debris"**. In 2020, AMS has produced **81.94 Mg** of such waste; this material is recycled for construction purposes.

Measures taken to prevent the production of waste resulting from AMS's activities:

- developing digital media networks;
- limiting traditional media networks;
- searching for and replacing traditional materials with recycled materials.

ACHIEVING 2020 ENVIRONMENTAL GOALS IN AMS

Despite the ongoing pandemic in 2020, resulting in drastic reductions in operating income AMS:

- has **consistently made pro-environmental investments**. It has launched the **Eco-offer** based on low-carbon media that have a positive impact on the environment or that use solar energy;
- continued to **replace high-energy light sources with energy-efficient ones;**
- In view of the need to strive to reduce waste generation, AMS is developing digital advertising systems by **reducing paper and plastic waste, adhesive, and fuel in transport**;
- seeing the degradation of the environment related to the development of civilisation, which is particularly evident in urbanised areas, is introducing good practices, demonstrating in concrete examples that in cities filled with concrete there is room for green oases – (green roofs of bus/tram shelters) ensuring **water retention**, **purifying air from CO_2 and dust**, **lowering the temperature** in their outline by several degrees on hot days, **favouring insects**, including bees, and not being invasive for birds.

ENVIRONMENTAL AMS PLANS FOR 2021

				
Further development of **smart city green projects in Polish cities**, including promotion of smart and eco solutions among municipal authorities and residents;	**Expansion of the network of digital media** in Citylight and Cityscreen formats.	Construction of additional **bus/tram shelters with green roofs** and with glazing preventing collisions with birds;	Continuation of replacing standard light sources (advertising media lighting) with **energy-efficient LED lighting**.	**Promotion of the Eco offer on AMS media** among our customers as part of a unique offer.