

Invibes Advertising publishes an assessment of its energy performance and announces ambitious goals

London, 14 November 2022 – Invibes Advertising, an advanced technology company specialising in digital advertising, publishes the results of an assessment of its energy performance and announces a set of ambitious goals for the coming years.

In a context of heightened concerns about climate change on a global scale, the environmental impact of digital activities is increasingly being scrutinised. Indeed, it is estimated that the digital ecosystem was responsible for 3.8% of the world's greenhouse gas emissions in 2019*. This proportion is growing rapidly and could reach 5% to 8% by 2025. In comparison, global aviation accounted for less than 2% of greenhouse gas emissions in 2016.

While 44% of digital greenhouse gas emissions are related to the manufacturing of equipment, 56% are related to service usage (energy consumption of servers, the network and end-user devices)ⁱ. Since a significant part of that usage is related to digital advertising, the sector has a role to play in reducing global greenhouse gas emissions.

In order to contribute to this important effort, Invibes Advertising has launched an internal programme to assess and improve its energy performance, notably the impact of its digital ad campaigns.

Overall assessment of Invibes Advertising's energy mix

The Group's direct energy consumption in its various offices is only a small part of its total consumption. The most significant part is related to its outsourced servers.

The Company's servers are housed by two main service providers that represent 99% of its servers' average load. One of them is operating on 100% green electricity and the other one on 78% renewable energy.

In addition, Invibes Advertising runs some of its applications using carbon neutral cloud services.

Impact of Invibes Advertising's campaigns

The Company made an assessment of the average carbon footprint of its advertising campaigns in September 2022.

The first step was to calculate the carbon footprint of Invibes Advertising's technology platform for each ad impression:

- The load and idle wattage characteristics of each of our outsourced servers as well as the cloud services we use allowed us to evaluate the platform's total energy consumption in September 2022.
- Using environmental performance information from the service providers housing our servers, we were able to calculate the carbon footprint of the platform's energy consumption in September 2022.
- Knowing the number of ad impressions powered by the platform in September 2022, we calculated its carbon footprint per 1,000 ad impressions.

The second step was to estimate the carbon footprint of an ad impression on the end-user side:

- We collected the number of ad impressions for each type of device used to view our ads in September 2022.
- Based on the average load time per ad impression and average wattage of each type of device (computer, tablet, or mobile phone), we estimated the power consumption of our September 2022 ad impressions on the end-user side.
- Knowing the location of our ad viewers, we used data published by each country to calculate the carbon footprint of the electricity consumption related to our September 2022 ad impressions on the end-user side.

Finally, we estimated the carbon footprint of the network between our servers and the end-user:

- Knowing the size of the format for each of our ad impressions, we determined the total amount of data associated with our September 2022 campaigns.
- Estimates of the energy intensity of the internet (kWh/GB) vary between studies. We based our calculation on a study published by the Energy Research and Cleantech Division of the Swiss Federal Office of Energy (Coroama, June 2021).
- This allowed us to evaluate the power consumption of our September 2022 ad impressions related to network traffic.
- Using again the location of our ad viewers and official data about the sources of electricity in the corresponding countries, we calculated the carbon footprint of the power consumption of our September 2022 ad impressions related to network traffic.

This overall calculation resulted in an average energy consumption of 0.22kWh per 1,000 ad impressions in September 2022, corresponding to an average of 26.1 grams CO₂ emissions per 1,000 ad impressions. In comparison, an average Display campaign has been estimated to emit 30 grams CO₂ per 1,000 ad impressionsⁱⁱ.

We believe that, to a large extent, the lower carbon footprint of Invibes' campaigns results from the fully integrated nature of its technology platform that allows for efficient processes, as well as the low carbon footprint of the Company's servers. In addition, the fact that many of our ad viewers are located in France has a positive impact as the electricity's carbon footprint of that country is relatively low.

Besides the carbon footprint of individual ad impressions, the total number of impressions per campaign is a fundamental driver of its overall impact. In that respect, Invibes Advertising's smart targeting allows its campaigns to achieve great effectiveness with an optimised number of impressions, carefully tracked through KPIs, thus minimising their carbon impact. This is especially important as the largest contributor to the carbon footprint of an Invibes campaign is related to the network traffic energy consumption. It should be noted that most of the Company's traffic is done through content delivery networks (CDNs), which are run locally, reducing the length of our campaigns' data traffic.

Technological independence allows Invibes Advertising to improve its performance

Since its inception, Invibes Advertising's proprietary technology platform has been designed with process optimisation in mind, initially to improve its technical performance and reduce associated costs. This set-up now also brings benefits in terms of energy efficiency. For example, the Company's system automatically selects the ad format best adapted to the viewer's device and mode of connection, improving the user experience while reducing the bandwidth and energy consumption of the corresponding ad impression.



Taking advantage of the full control it has over its technology platform, Invibes Advertising is able to constantly evolve and improve. For example, the performance of front-end servers is under constant review.

A large part of the Company's R&D effort aims to achieve higher efficiency to ensure scalability, which also has advantages in terms of energy consumption. For example, earlier this year, a revision of the programme coding for entry traffic analysis has allowed the R&D team to improve the algorithm's efficiency, reducing the energy consumption of that part of the process by 25%.

Invibes Advertising's ambitious targets

In line with its core value of always innovating in all aspects of its activity, Invibes Advertising has launched several initiatives to lower the carbon footprint of its campaigns. They fall into two categories:

- Actions to reduce the carbon footprint of processes directly within Invibes' control, by decreasing the platform's energy consumption and prioritising green sources of electricity.
- Actions to reduce our campaigns' energy consumption outside Invibes' realm, at the network and end-user level, bearing in mind that the carbon footprint of the electricity used there is not within the Company's control. In particular, the differences in electricity's carbon footprint across countries could have a distorting effect as Invibes audience grows internationally. However, since most of Invibes' ad viewers are located in Europe, that region's ongoing efforts to move towards greener energy will be beneficial.

The Company has defined a series of goals it aims to achieve:

- Half-yearly tracking and publication of the carbon footprint of Invibes' ad campaigns.
- 99% green energy for outsourced servers by the end of 2023.
- 10% annual reduction of the energy consumption associated with Invibes' ad campaigns for the next 3 years

This will allow Invibes Advertising to deliver Excellence to its clients in the ever more important aspect of their advertising activities' carbon impact.

About Invibes Advertising

Invibes Advertising is an international technology company specializing in digital advertising innovation. Founded in 2011 by co-CEOs Kris Vlaemynck and Nicolas Pollet, Invibes Advertising has developed an integrated technology platform designed to strengthen the relationship between brands and consumers through in-feed ads.

At Invibes Advertising we believe in the power of connections.

- The power of connecting brands directly with consumers to enable more meaningful interactions.
- The power of connecting big data, innovative in-feed formats, wide reach and extensive intelligence services in a single, holistic platform to bring brands and consumers together seamlessly and efficiently.



- The power of connecting a unique pull of passionate, dynamic and knowledgeable in-feed specialists from across the globe to make up the extraordinary team that is Invibes Advertising.

In order to partner with some of the greatest brands in the world, like Amazon, Bacardi, Volkswagen, Dell, IKEA and Toyota, we rely on even greater people to share our innovations with the world. Along with our unwavering belief in technological potential, more fundamentally, we believe in the potential of our people. At Invibes Advertising we actively strive to maintain an energetic, open environment that fosters a culture of ideation, growth and #GoodVibes, that shines straight through to our clients.

Want to hear more about Invibes Advertising? Visit: www.invibes.com

Invibes Advertising is listed on the Euronext Stock Exchange (Ticker: ALINV – ISIN: BE0974299316)

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ⁱ The environmental footprint of the digital world - September 2019 - GreenIT.fr

ⁱⁱ The Carbon Footprint of Media Campaigns, March 2022, fifty-five