

# **Sustainable programmatic:**

**Working towards a cleaner future**

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# Part 01: **THE PROGRAMMATIC ADVERTISING INDUSTRY**

# The programmatic advertising industry

Like everyone in the programmatic industry, we're aware of the impact our advertising has on the environment. And, as a company, we're committed to becoming more sustainable.

With real-time bidding, huge data transfers and targeted ad placement, the energy used for programmatic advertising has a significant impact on carbon emissions worldwide.

Our own initial assessment has identified two key areas to focus on; the impact of our own infrastructure and technology, and the impact of the partners and suppliers we use to deliver our advertising campaigns.

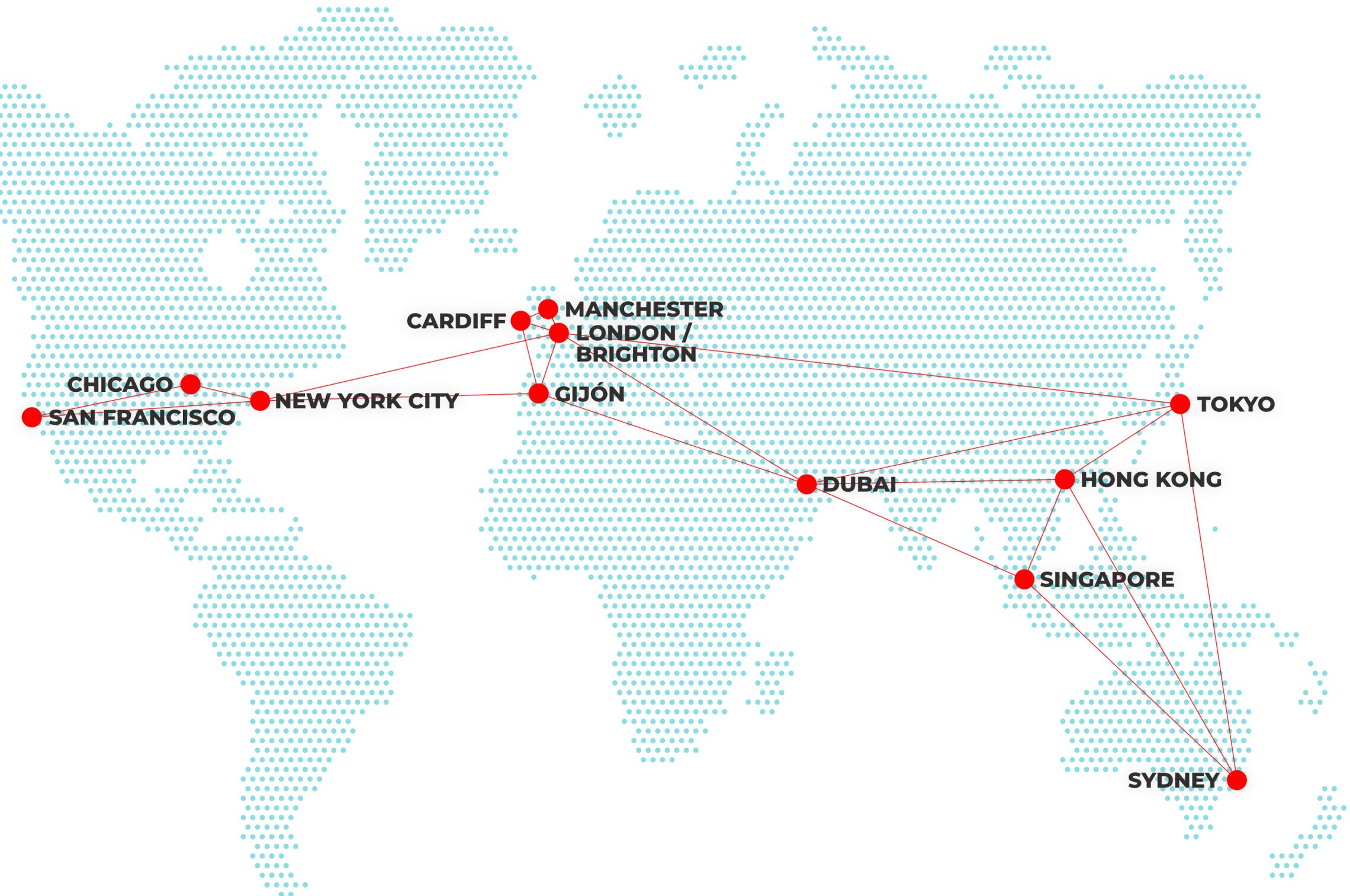
When we founded Crimtan, we founded it with a mission. To be a trusted partner to brands. To make the complex world of programmatic simple. To respond and adapt to the constantly changing digital world.

And as we move into a cleaner future, we want to address the impact of this digital world, ensuring our tech, partners, suppliers and own ways of working are all as sustainable as possible.

Today, we have offices across the world, including London, New York, Dubai, Singapore, Sydney and Tokyo. And our global footprint means we need to take our environmental responsibilities seriously, both for our clients and the programmatic industry as a whole.

We've got a way to go; we're just starting out on our journey. So, in this guide, we'll be walking through the approaches we can all take, from agencies and advertisers, to companies and brands, to help support a cleaner future, without compromising on campaign results.

Smarter, more sustainable programmatic.





**DID  
YOU  
KNOW?**

- A single digital campaign can generate more than 70 tons of CO<sub>2</sub>eq, about the same amount as the annual carbon footprint of seven people.
- Three-quarters of marketers believe that our industry should do more to tackle its environmental impact.
- Through using sustainable best practices, marketers and advertisers can reduce emission output by up to an impressive 70%.

Part 02:  
**BEST PRACTICE  
CREATIVE STRATEGY**

# Best practice creative strategy

Did you know that the creative you use and the ad formats you select can have an impact on the carbon emissions of your campaigns?

By carefully recommending, selecting and delivering environmentally-friendly creative strategies to our clients, we ensure their campaigns are as sustainable as possible.

**Here are some of the ways you can reduce the carbon footprint of your creative...**



# REDUCE LOAD TIME

01.

Some creative formats and sizes have a longer load time. This can be due to compression type, frame rate, view length, screen sizes, and so on. Each type can impact the weight of the file, the amount of data transfer needed and, therefore, the overall carbon emissions of the ad.

To reduce the load time of your ads, use display rather than video; a 15-second video ad can produce 85% higher carbon emissions than display due to the load times and the amount of data needed to process the ad.

When using video, keep your ads as short as possible and consider reducing their resolution, frame rate or bit rate. Using video compression codecs like H.264 can also help reduce file size.

## **COMPRESS DISPLAY ADS**

# 02.

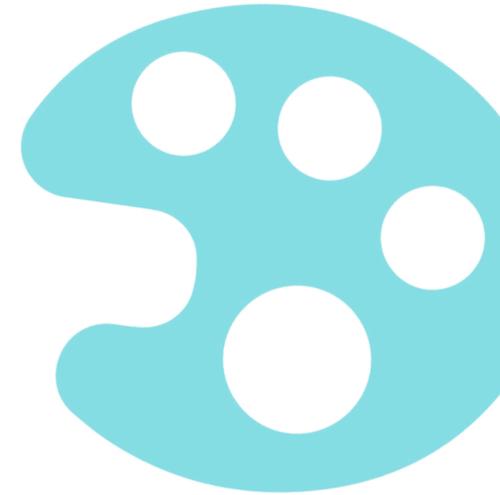
For display ads, consider using smaller display formats. For example, a billboard produces 1508% more emissions than a 300x50 mobile banner.

You can also convert display ads into a more compressed format and use compression file types that preserve the image quality.



# 03.

## **CHOOSE THE RIGHT COLOUR**



Creative colour also makes a difference. The heavier the colour, the more data is needed to process it, so consider using lighter colours in your ads.

The number of colours used can also impact emissions, so use one or two colours rather than multiple shades. And adding a black border to display ads can decrease emissions by up to 16%.

# KEEP YOUR ASSETS LIGHT

# 04.

Where possible, use SVGs or HTML/CSS rather than image files for all assets and images, including icons, logos, buttons and backgrounds to ensure file sizes are kept to a minimum.

You can also optimise images by compressing and resizing them, and saving them in smaller formats like JPEG rather than PNG or TIFF.

Use web-safe fonts or use font subsets that only include the characters required in the ad to reduce the file size of font resources. And compress and optimise code: minify HTML, CSS, and JavaScript files by removing unnecessary spaces, comments and redundant code.



# Part 03: **FUTUREPROOF CAMPAIGN STRATEGIES**

# Futureproof campaign strategies

In addition to alternative creative approaches to reduce carbon emissions, there are also programmatic strategies and tools you can use to help the planet too.

## **Utilise our attention time tool**

Our attention time tool helps you optimise and measure metrics such as viewability, time-view, creative time and engagement rate, rather than just relying on viewability as a lone metric that doesn't paint the full picture. Recent studies have shown that by removing advertising from domains where [attention time is below 0.5 seconds](#), carbon emissions were reduced by up to 63%.

## **Use the correct frequency capping**

Bombarding consumers not only creates a bad consumer/brand relationship, but creates unnecessary carbon footprint. By implementing the correct frequency capping, you will not only ensure your customers are getting timely and relevant comms that do not overwhelm them, but also limit your carbon emission output.



## **Go above the fold**

Did you know that standard display ads that are above the fold can improve emission efficiency, per click, by as much as 12- 13%? It's also best practice for capturing the attention of your target audience, so for your next campaign, make sure you consider this placement.

## **Improve audience targeting**

With more accurate targeting you can prioritise the most qualified and relevant audience, and benefit in two ways. Firstly, you will achieve a higher ROI and optimise every penny of your advertising budget, but you will also drastically reduce pointless impressions that needlessly generate carbon emissions. It's a win-win.

## **Streamline the bidding process**

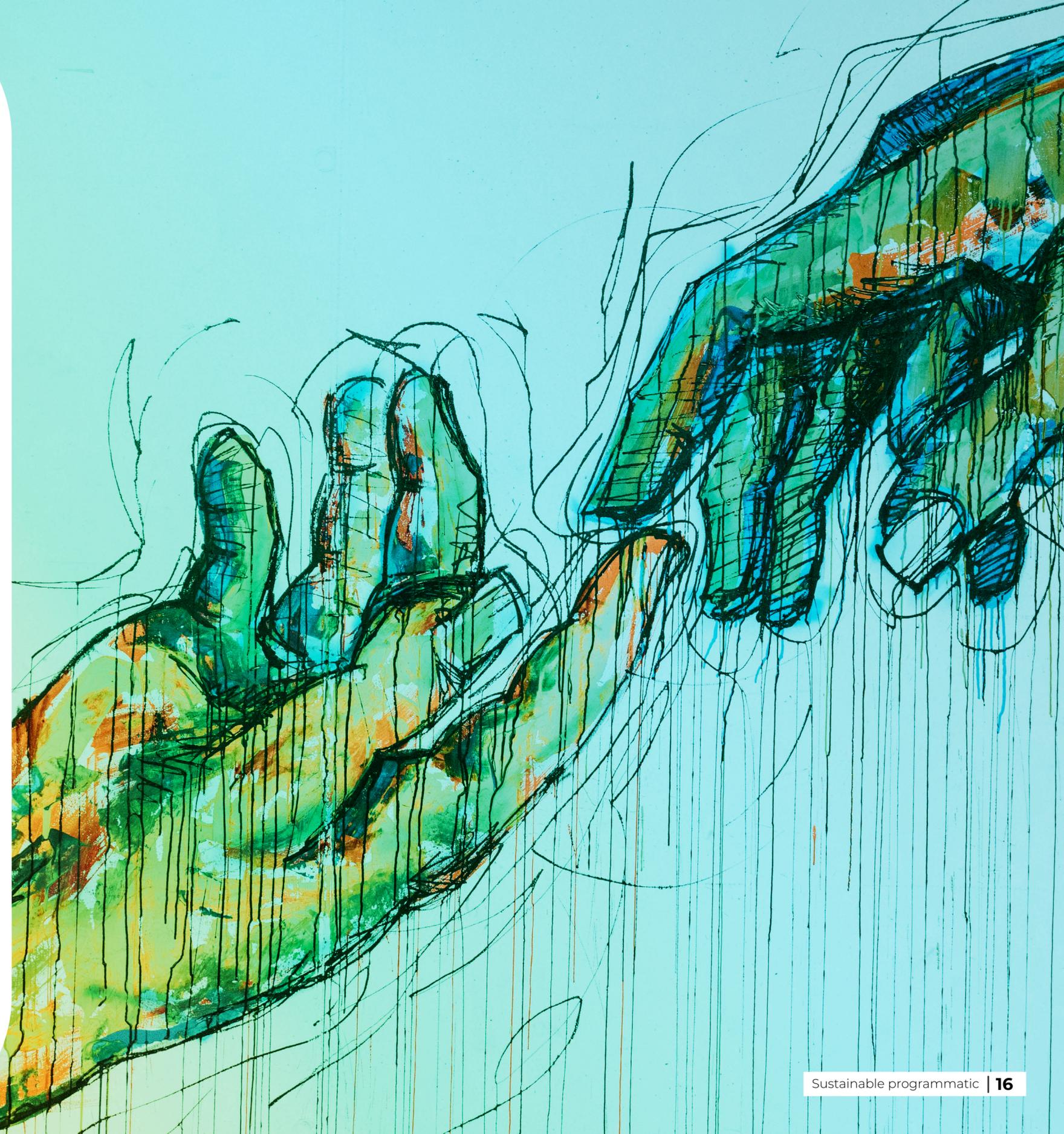
The more auctioning and middlemen that exist in the programmatic bidding process, the more calculations become necessary, leading to higher carbon emissions. When a publisher implements an impression on several marketplaces simultaneously, these marketplaces also use resellers, who can also use other resellers, and so on, generating extra carbon emissions. Reducing the number of stakeholders involved in the auction process minimises overall carbon emissions.

# Part 04: **CHOOSING GREEN SUPPLY PARTNERS**

# Choosing green supply partners

So, we've looked at optimising and adjusting your creative strategy as well as your programmatic approach to reduce your carbon footprint as much as possible, but you can also look at the supply partners you're working with to add to your efforts.

At Crimtan, through direct integration with each of our SSP partners, we reduce the number of hops an ad takes to be served, minimising the carbon emissions emitted per ad. And what does this mean for you? You can reduce or offset your carbon emissions by opting for one of our green packages via a few supply partners. Let's take a look at who's offering what...



# Magnite

## **ENVIRONMENTALLY-FOCUSED CONTENT**

Magnite and Primis have teamed up to launch the Sustainable Stream, a video marketplace that connects environmentally-conscious content creators with publishers and advertisers. It's a mutually beneficial partnership that creates a continuous cycle of support for content creators, focusing on climate awareness, which can then be amplified through respected publishers. This makes it easier than ever before for you to dedicate your programmatic budget to a platform that contributes to the green cause.

# ■ PubMatic

## **POWERED BY 100% RENEWABLE ENERGY**

Pubmatic is part of the Ad Net Zero group, offering carbon-efficient packages through utilising ads.txt and cutting out publishers with complex and long supply chains. What's more, all of Pubmatic's global data centres are now powered by 100% renewable energy.

# Index<sup>1</sup> Exchange

## **ONGOING RESEARCH AND INVESTMENT IN GREEN INNOVATION**

Index Exchange is also part of Ad Net Zero, having joined the group this year. Since 2022, they've had a global partnership with Scope3, offering Green Inventory Packages (IVP) for display, video and CTV. These Green IVPs measure the carbon footprint of every impression running through the deal ID and then Index Exchange contributes to the carbon removal projects run by Scope3.

# sharethrough

## **NO EXTRA COST, LOW-EMISSION INVENTORY**

Sharethrough is the first ad exchange to remove Made For Advertising sites which tend to be in high carbon emission environments. They will also be making low-emission private marketplaces available at no extra cost for advertisers, both of which lower carbon emissions from ad campaigns while providing you with an even cleaner advertising ecosystem.

# Part 05: **SUSTAINABLE ADTECH**

# Sustainable adtech

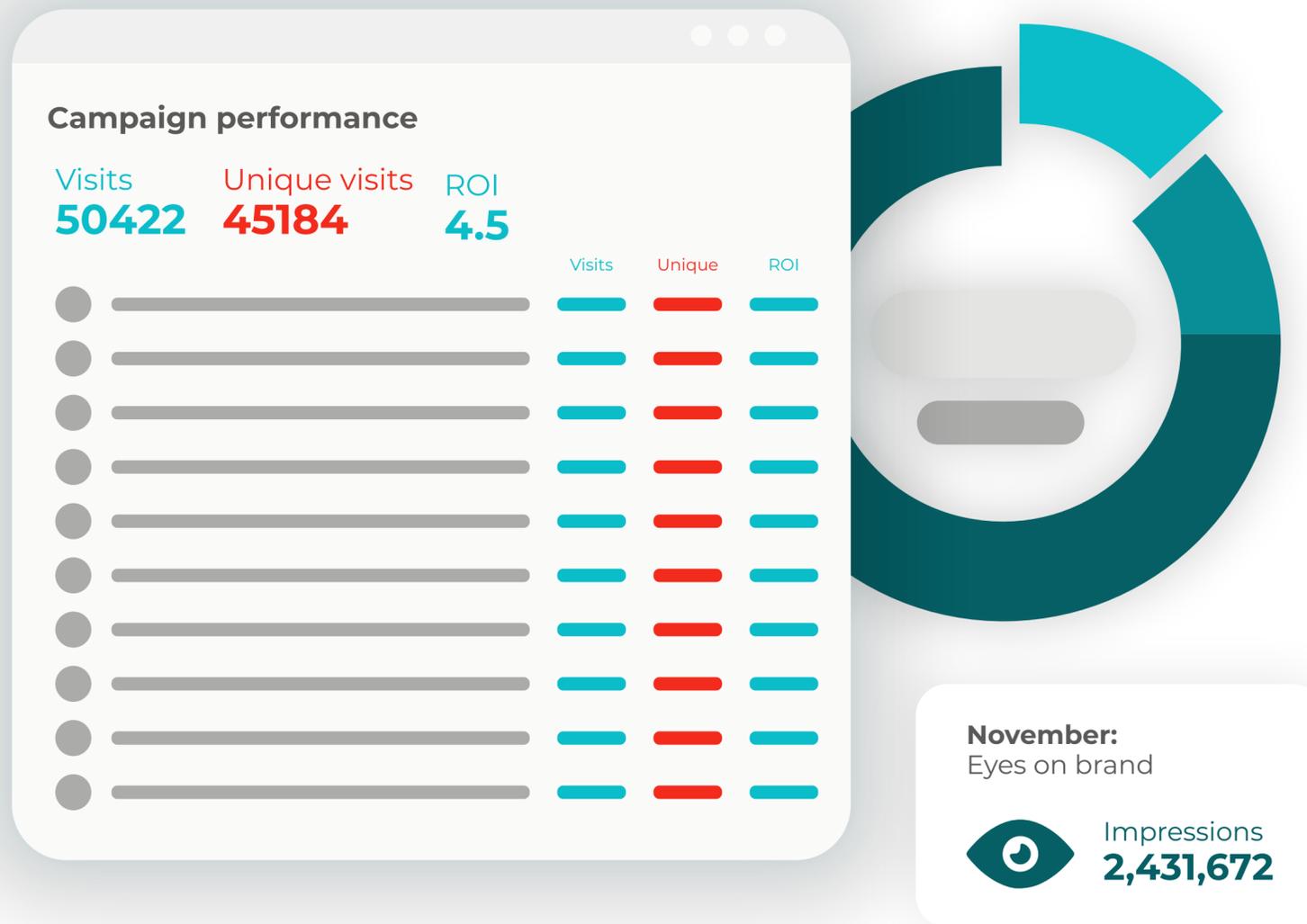
The tech we use as advertisers has a huge impact on the environment. A single ad display can come via hundreds of servers, all consuming energy and increasing carbon emissions.

As programmatic specialists, Crimtan operates several racks of servers in data centres for real-time bidding, serving ads, processing data and reporting, all of which generate a heavy server load. Real-time bidding alone produces hundreds of thousands of requests per second and, as a result, requires constant uptime and use of resources.

But there are ways to make programmatic adtech more sustainable. For example, by choosing greener options when selecting suppliers and hardware and by investing in upgrades to ensure your technology is as environmentally-friendly as possible.

We, too, are striving to make better, greener choices. In April 2023, we selected Dell as our main server vendor for their commitment to improving energy efficiency, use of sustainable materials and their Design for the Environment (DfE) philosophy. And, we've accelerated the transition to their energy-efficient R650 servers, which will enable us to improve the environmental impact of our tech stack by 35%.





And regarding innovation when it comes to our technology, we do things a little differently. Usually, for a programmatic campaign to work, brands use a DSP to decide where their banners will be shown, a DMP to help identify their target audience and a DCO platform to ensure the most relevant creative is delivered to the target audience. As most programmatic vendors tend to only provide one or two of the platforms, the different platforms have to integrate with each other to make the process work. However, this results in data leakage and media wastage, creating more unnecessary emissions.

At Crimtan, we've built and developed the ArchiTECH platform, which is our single tech stack that integrates our DSP, DMP and DCO capabilities all in one place, making us a one-stop destination for our clients. ArchiTECH then gives us the ability to increase the efficiency of our client's media budget and campaign performance, all while minimising data leakage and media wastage. It's beneficial for the campaign, the client and the planet.

# Part 06: **OUR PROMISE FOR THE FUTURE**

# Our promise for the future

Here at Crimtan, we are committed to becoming as sustainable as possible and, as well as advising on best practice and ways of working for our clients and campaigns, we're taking steps to become more environmentally-conscious in the way we work as a company.

## This is what we're already doing:

- Ensuring our client campaigns are as efficient as possible, both improving campaign efficiency and reducing unnecessary impressions using our own proprietary tech.
- Choosing the right partners and suppliers to work with, and the most sustainable hardware wherever possible.
- Investing in infrastructure upgrades to greener tech.
- Minimising waste by evaluating our operations and ensuring they're as efficient as possible, through opting for sustainable products and merchandise and recycling all that we can.
- Actively promoting sustainable practices, both internally and among our customers and suppliers.
- Meeting, or preferably exceeding, environmental laws in all the markets we operate in.
- Reducing the impact of our activities on the environment wherever possible.

**This is an ongoing journey, and we're committed to improvement in this area by measuring the impact of what we do and setting regular targets for change.**

When we think about our environmental impact, and how we minimise the mark we leave on this planet, we're considering both the short-term and long-term implications.

We're working hard to reduce our long-term carbon footprint, helping to minimise the issues that jeopardise the future of humanity and our planet, and we're serious about acting now to provide a better chance for future generations.

And in the short term? We are committed to building an organisation that is careful in how we use and spend resources, and which understands the impact of our operations on the environment. It's a long journey ahead, but we're serious about taking the necessary steps forward, and learning along the way.

## OUR FOUNDERS



**Paul**  
Goad



**Yuri**  
Staroselskiy

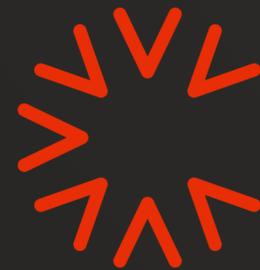
# THE NEXT STEP

With these sustainable approaches, we can work together towards a cleaner future without compromising on your marketing results.

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If you'd like to know more about improving the sustainability of your programmatic campaigns, get in touch

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