





71% of people working in advertising are worried about the negative impact our industry has on the environment

(Source, Ad Net Zero)



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The Problem

2022 is the <u>sixth-hottest year on earth</u>, in the 143-year global climate record. The other five years have all occurred since 2016. In fact since the industrial revolution, global temperatures are on average <u>1.1° Celsius</u> (1.9° Fahrenheit) warmer, guaranteed to melt <u>110 trillion tonnes</u> of the Greenland ice cap.

From <u>deadly heat waves</u> to <u>devastating flash floods</u> -every day we are reminded of just how grave the
consequences are, as our society continues to pump
greenhouses gasses into the atmosphere. The world is on
fire and the only way we're going to put it out is if every
single person, in every single industry, takes responsibility
for their impact on the planet.

Turning Pledge Into Action

The good news is that the past 18 months have seen a flurry of activity as global businesses commit to take action. Apple has committed to be 100% carbon neutral by 2030, Unilever's Climate Transition Action Plan sets out a pathway to net zero emissions across their supply chain by 2039 and Volvo intends to become net zero by 2040. Even the US Government has committed to becoming a net zero economy by 2050.

Meanwhile, <u>Ad Net Zero</u> was launched by a trio of trade bodies in the UK in November 2020, with a mission to get the ad industry to net zero carbon emissions within the next decade. It has since signed up hundreds of vendors publishers, advertisers and agencies including WPP, Publicis, Dentsu and Omnicom.

We have intent and momentum. Now we need <u>a unified</u> <u>methodology for accelerated media decarbonization</u> - with multiple organisations working together to address each element of the advertising supply chain.



Advertising's Responsibility

Within our industry, <u>71% are worried</u> about the negative impact advertising has on the environment. As a significant driving force within the global economy, and an important point of influence and engagement for the public, the advertising industry can play a key part in supporting the charge to a net carbon zero future.

Not only can our industry effect change through what we communicate, but we also must turn our attention to our own consumption - considering the media we purchase and the platforms we invest in. Indeed, WPP recently announced that over 98% of their emissions are Scope 3, with media buying accounting for more than 50% of WPP's total emissions.





Our Online Footprint



The industry is making impressive headway in identifying the environmental impact across the media supply chain, creating <u>a</u> <u>robust carbon calculator</u> addressing all channels - from local press ads to global TV campaigns.

However, digital channels leave a substantial carbon footprint around the globe but are often overlooked. The internet <u>represents almost</u> 4% of global emissions -- more than the global aviation industry -- and is reportedly on track to double by 2025.

Advertising percolates through every faucet of our online lives and the energy required to power these digital campaigns leaves a hefty footprint behind. Significant computing power is required to fuel the trillions of real time auctions taking place across the length and breadth of the programmatic ecosystem. This means that a typical programmatic ad campaign emits **5.4 tonnes** of carbon dioxide - a third of what an average US consumer produces in a year, while 1M video impressions has the same carbon footprint as someone flying from Boston to London and back.



GOOD-LOOP'S GREEN MEDIA TECHNOLOGY

Good-Loop has developed our Green Media Technology focused specifically on digital display and video. Using a robust, open-source methodology our goal is to provide a clear, transparent understanding of advertising's *digital* carbon footprint, empowering agencies and clients to offset their impact in the short term and to implement positive climate action in the long term.



DECARBONISING DIGITAL MEDIA IN 4 SIMPLE STEPS:

Measure



Good-Loop uses our proprietary open-source methodology to measure the carbon cost of serving your digital advertising.

Good-Loop's



Your bespoke dashboard will clearly & simply show

the real-world impact of your advertising, broken

down by time of day, publisher, device type and more - to provide granular insight.

Green Media Technology

Learn & reduce

The information and insights from our dashboard empower your agency and client teams to optimise for the planet - making improvements to planning, asset creation and delivery.

Offset & invest in the future

For the emissions that can't be prevented,
Good-Loop offers Gold Standard offsetting
credits, as well as the opportunity to support
global reforestation projects, to invest in
future generations.



THE GOOD-LOOP GREEN SUITE

How It Works

Good-Loop's Green Ad Tag is like a viewability tag, for the planet. It's a 1x1 tracking pixel which can be appended to any digital campaign. Alternatively our Green Technology can be integrated into the DSP or ad server. Our methodology can also be applied to past or current DSP data logs.

Good-Loop's technology wraps your ad tags with our proprietary data transfer tracker. This enables us to measure the carbon output of your advert (and the surrounding adtech) in real-time. This bandwidth usage is then combined with data on the climate impact of the local electricity grid, combined with other relevant data points such as device type, time of day and cached data enabling brands and agencies to gain an accurate picture of how much CO2 was released up into the atmosphere as a result of serving that campaign.

Our Green Technology tracks the carbon output of your entire digital campaign in real time, accounting for:

- Region e.g. UK electricity is greener than Poland, but not as green as Iceland. In the USA, there are variances state to state
- Day of week / time of day which affects the mix of electricity sources, especially solar power
- **Device** efficiency varies for mobile vs desktop
- The full **bandwidth** use
- Adtech layers on the publisher side eg their SSP
 - This is provided via an API into the Scope3 database

Our algorithms evolve and adjust to give a best-in-class estimate of power consumption and as such, carbon emission over the course of the campaign. A simple version of this methodology (not accounting for adtech infrastructure, device and other info from our pixel) has been open-sourced here.



THE GREEN MEDIA DASHBOARD

The results are delivered into a bespoke Green Media
Dashboard, so clients and agency teams can optimise their
buying based on sustainability goals while seeing the
environmental impact of their work.

With breakdowns by device, time of day, creative and more -- the Green Media Dashboard is designed to be an educational tool to help digital advertising become more energy- efficient over time, rather than simply carbon offsetting our bad habits.

At the end of your campaign, you'll have a complete overview on how each element of your digital output has contributed to the total footprint.

Going forward you'll be able use these insights to plan more efficiently next time, by taking steps to reduce the weight of your files, adjusting the fonts you're using, the publisher mix, buying strategy, failed bids and more. These improvements can be tracked, and celebrated, within the dashboard, creating a helpful feedback loop and reinforcing positive action.



THREE PRICING TIERS, THREE LAYERS OF IMPACT

Our Green Media Technology is bought on a tech fee CPM.

We can empower brands and agencies to:

- 1. Measure, to understand and reduce your emissions
- Measure, reduce AND offset your emissions, for carbon neutral campaigns.
- 3. Measure, reduce, offset **AND invest** in climate positive initiatives such a tree planting or coral reef restoration. This means that not only is the campaign fully carbon offset, your digital advertising will also be investing in a greener future for generations to come.

Volume pricing is available.



YOUR OWN IMPACT HUB

Alongside the Green Media Dashboard, each client also has an impact overview within the platform, to track measure and celebrate the conservation and sustainability projects that each campaign has invested in.



CARBON OFFSETTING AND TREE PLANTING

Carbon offsetting isn't the solution to this problem. But it is a step in the right direction and we believe it's important connect our advertisers with high quality, high impact projects which allow them to be carbon neutral in the short term, whilst we work to change media consumption habits and reach Ad Net Zero.

Through Good-Loop, advertisers can support the transition to a low-carbon future by offsetting unavoidable emissions with high-impact carbon credits from <u>Gold Standard</u>-certified projects.

Good-Loop is also an official partner of the <u>Eden</u>
<u>Reforestation Projects</u> as well as other global
conservation efforts, to empower our advertisers to not
only be carbon neutral but to also invest in the planet for
future generations.

These partners will be reviewed on a 6 monthly rolling basis and are subject to change, to ensure we offset in the most effective way.







Our Methodology

KEY ASSUMPTIONS & SOURCES

Good-Loop's proprietary methodology includes data transfer over the wire, plus behind-the-scenes ad-exchange costs, and device electricity consumption. The data transferred is usually the largest contributor to the energy footprint.

Data transfer can be increased by adding layers of ad tech on top of the asset, or decreased by repeat viewers who may have assets cached on their devices - so our methodology also accounts for these types of variations. We have a media lab that evaluates advert delivery across a range of devices. We have an <u>API into the Scope3 database</u> to help us understand with detail granularity, the carbon footprint of each publisher and their SSPs that your campaign touches.

We use a data-to-electricity conversion rate of 1.8kWh/GB, modelled on calculations from the internationally recognised Website Carbon Calculator. Their figures are from the 2017 report On Global Electricity Usage of Communication Technology: Trends to 2030, divided by the total amount of energy used by the web. More information on their workings can be found here.

Our electricity to emissions conversion rate considers the carbon intensity of grid electricity, as reported via Scope 3.

























COLLABORATING WITH THE INDUSTRY

The climate crisis is bigger and more important that the success of any individual business or organisation. Good-Loop is committed to collaborating with the wider industry, to create a unified methodology for accelerated media decarbonization. That is why we have open sourced much of our methodology and that is why we work closely with other innovators in this space, such as Scope3.

Good-Loop is a founding member of the <u>Conscious</u> <u>Advertising Network</u> and a member of <u>Ad Net Zero</u>, we hold a seat on the <u>IAB Sustainability Group</u> and chaired the <u>BIMA Sustainability Council</u>.

We also continuously work to ensure the internal integrity of our business. Good-Loop has been externally verified as a <u>B Corporation</u> and has been certified as Net Carbon Negative since 2019. We publish our social impact annually <u>here</u>.

ERRING ON THE SIDE OF CAUTION

To sense check these calculations, we look to <u>DIMPACT</u>, a collaborative project led by The University of Bristol. This model considers "emissions per minute of video streamed online" and, according to the <u>IEA</u>, streaming 1 hour of Netflix is less than half of our current data-to-electricity conversion rate, suggesting our approach is generous and errs on the side of caution.





Good-Loop & GroupM's Journey So Far - Australia

As part of GroupM's digital sustainability initiative (DSI), offsetting and climate-positive activities, as default, across

As part of their 'Project Alpha' sustainability strategy, GroupM agencies in Australia, including Mindshare, Wavemaker, MediaCom and Essence are now using our Green Ad Tag to decarbonise the programmatic media supply chain.

Since launching in late July 2022, over 85 million impressions have been tracked through our partnership with GroupM Australia. This is an in-progress campaign, so the numbers are still moving but we are currently estimating a carbon footprint of 120 tonnes of CO2e. The figures are finalised and, in some cases offset, on a quarterly basis.









GroupM & Good-Loop partnership to



A FINAL NOTE...

New Zealand.

Climate science is relatively new and always evolving. Good-Loop does not claim to have the absolute right answer. However, our team will endeavour to:

- Use the most up-to-date and reliable sources of information available;
- Be open and transparent about our assumptions;
- Commit to constantly reviewing & updating our methodology as new information becomes available;
- Collaborate openly with any other industry groups, companies or agencies who are working to reduce the carbon impact of advertising.
- Always be fully transparent about our impact and publish annual impact reports here.



they have partnered with Good-Loop to become the first agency holding group in Australia to offer carbon

display and online video.



Early adopters have included: SodaStream, Jenny Craig, Volvo, University of South Carolina, Queensland Gov, Mitsubishi, Honda, Bridgestone, KFC and more. Foxtel has had its own separate instance created, in order to allow them to create and service their campaigns in-house. So far, our technology has recorded that the time between 8am-10am and 3pm-7pm are the 'peak' emission windows.

Our industry-leading partnership has been covered by the

likes of Mumbrella, Australian Financial Review, Mediaweek, VideoWeek and Adnews - and due to the success of our

partnership in Australia, we are now expanding the

"It has opened our eyes to something we hadn't really considered... We as Volvo want to be part of the sustainability leaders, not lag behind. GroupM has uncovered somewhere we can start making positive changes. Now the pressure is on to do something about it. That's exciting... What this Group-Good-Loop work has done is allow us to focus on another part of the business"



