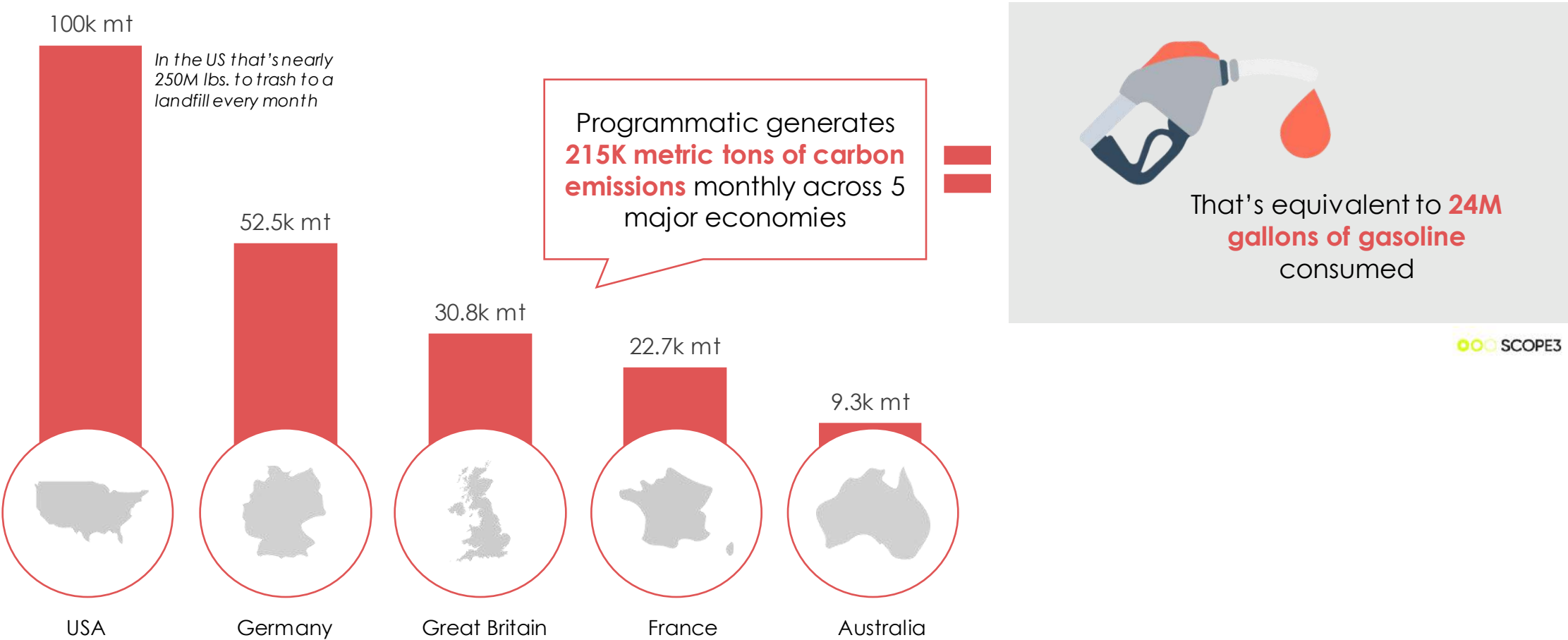


ATTENTION **x** SUSTAINABILITY

The Benefits Of A Smaller Carbon Footprint In Media



Programmatic generates carbon emissions equivalent to 24M gallons of gasoline on a monthly basis

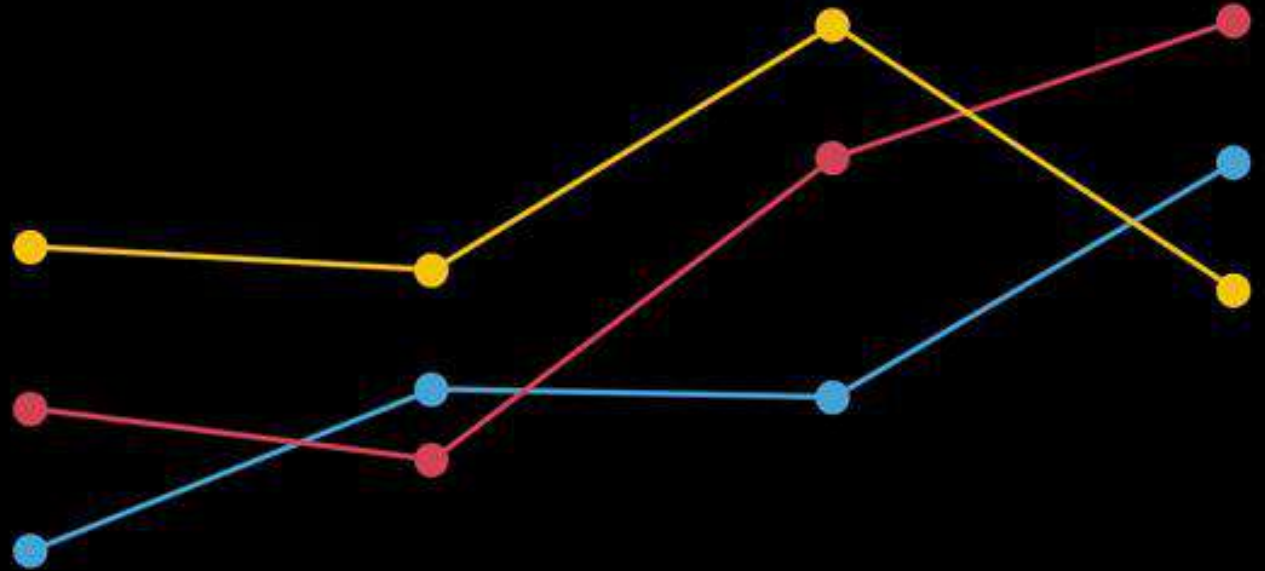


We need to start thinking about...

**How we can reflect
sustainability in our
advertising practices**

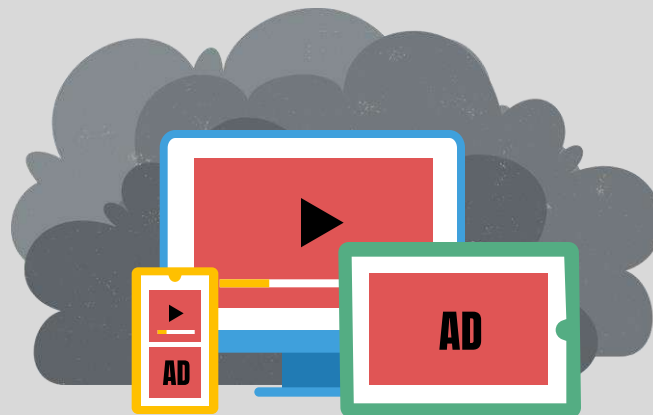


**RESEARCH WAS
CONDUCTED**



**...TO EXPLORE THE RELATIONSHIP
BETWEEN KEY METRICS AND
CARBON EMISSIONS**

Our approach

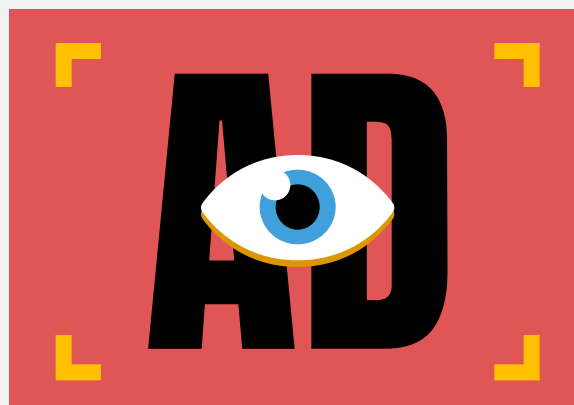


Live Campaign Tracking

Measured the effectiveness of display and video campaigns globally, along with carbon emissions

of impressions = **Over 1 Billion**

of countries = **55**



AI Based, Predictive Eye-tracking

Used predictive eye-tracker to measure attention to ads across a wide range of US websites

of ads tracked = **350**

of websites = **100**

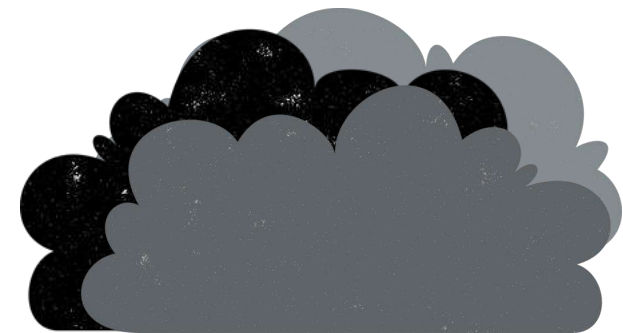
Our metrics

SCOPE3 CARBON EMISSIONS



gCO₂e:

Total grams of carbon dioxide released from digital impression delivery

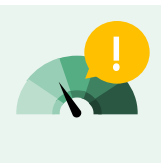


MOAT METRICS



Time In-View:

The average time in seconds the ad met the requirement for an in-view impression



Moat Display Score:

A score (300-850) based on in-view rate, in-view time, universal interaction rate, and universal interaction time, among other factors



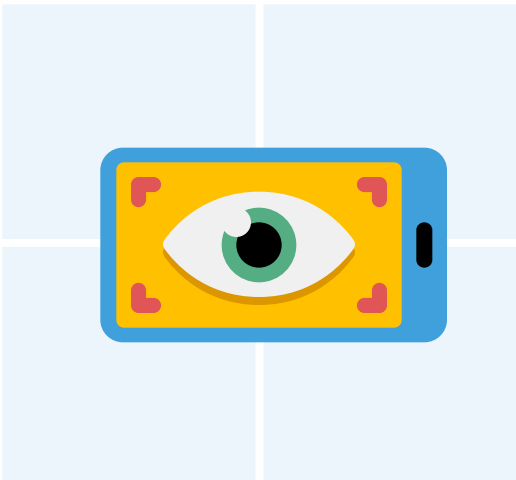
Engagement Score:

A score (0-100) based on the average time spent on the page, average interaction time, among other factors

AI BASED, PREDICTIVE EYE-TRACKING

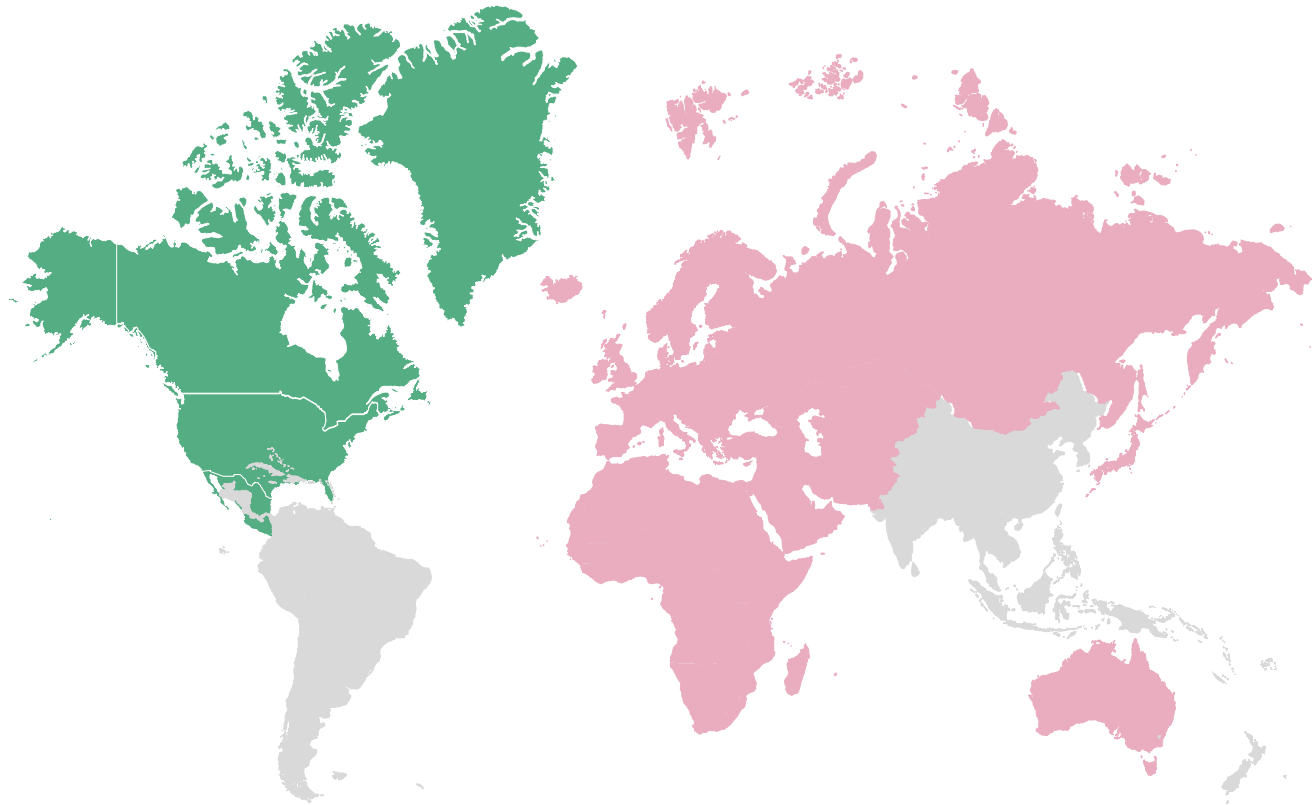
Visual Attention:

% of total predicted time spent looking at an ad on a webpage



Expansive scope

Total of 55 countries



Verticals

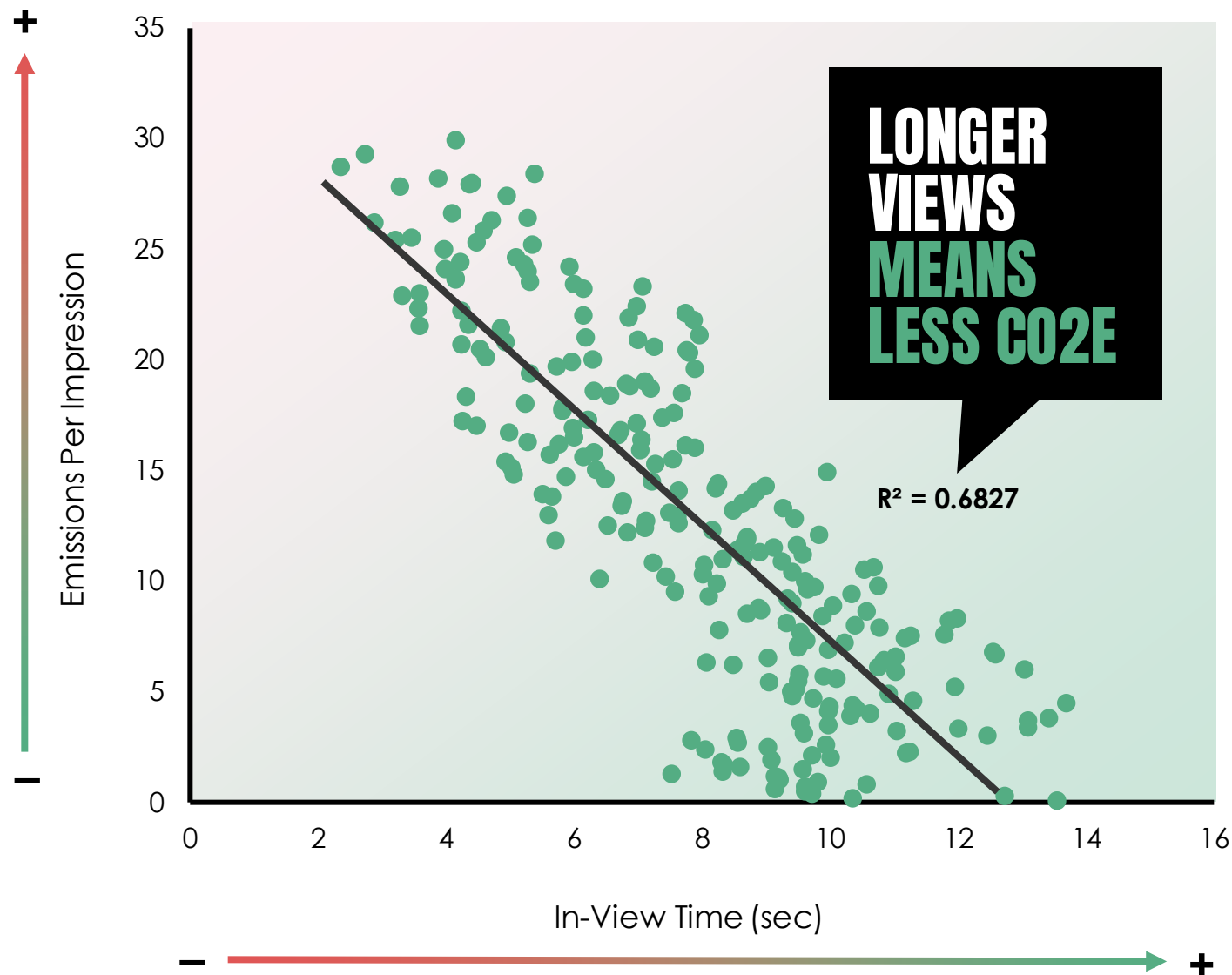
-  Tech
-  Apparel
-  Casual Dining
-  Financial Services
-  Travel
-  Entertainment

Strong correlation between longer in-view time and lower carbon emissions

This is maybe related to the total ad load on each page. Naturally, more ads loading result in higher emissions. At the same time, pages with many ads are less likely to have high viewability for all placements

Correlation between in-view time & carbon emissions (gCO₂e)

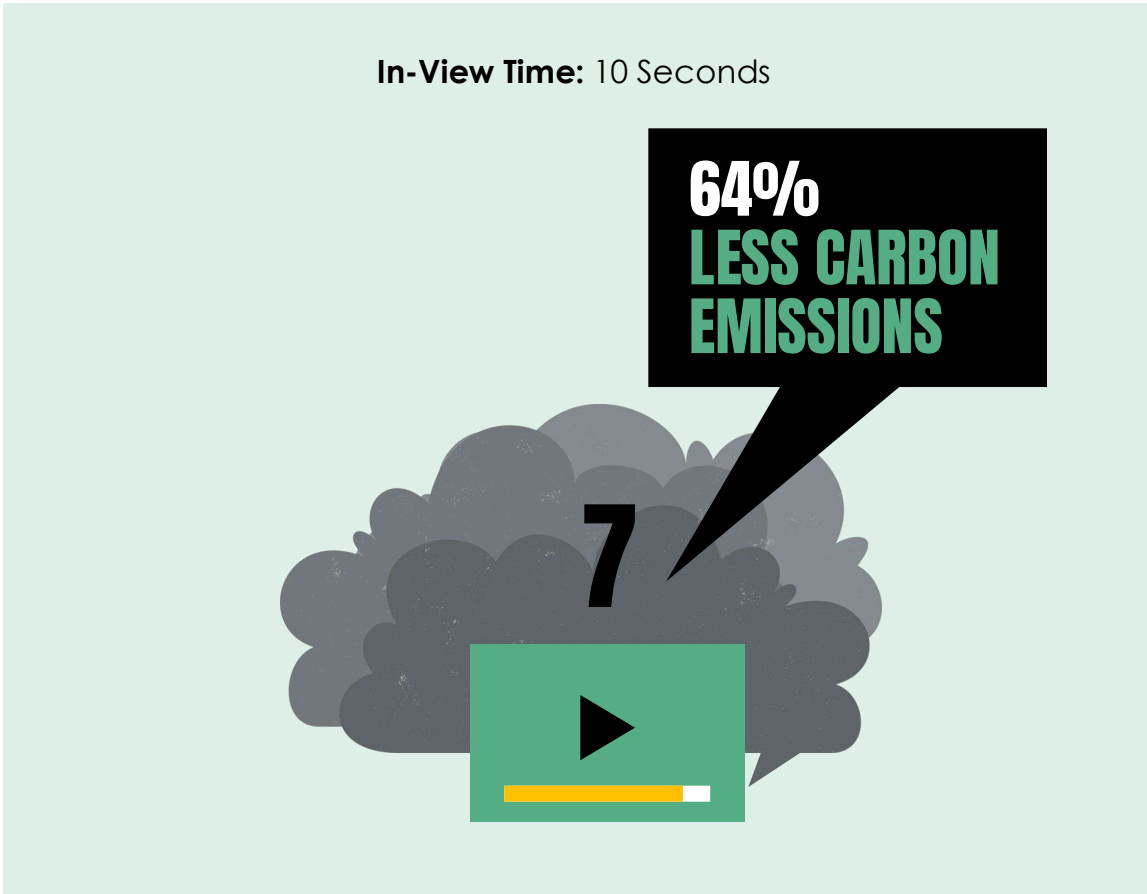
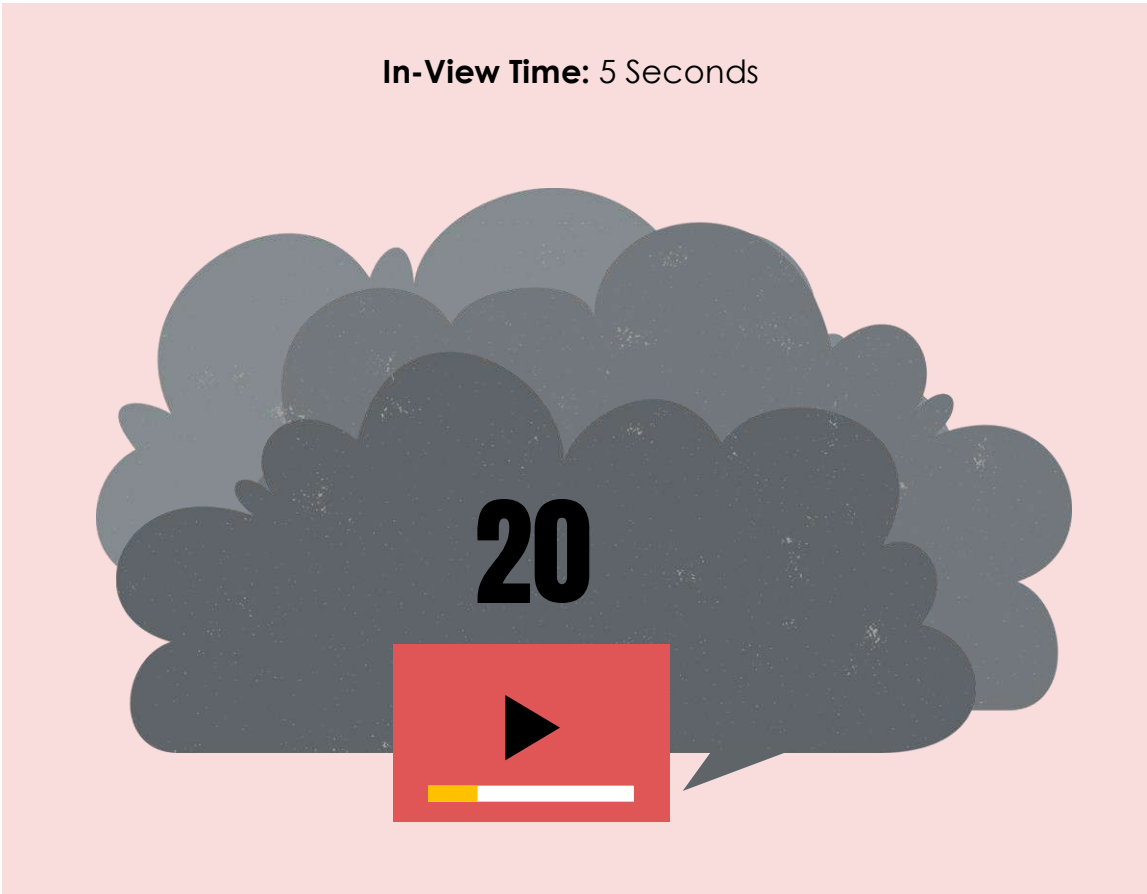
○○ SCOPE3



In fact, ads in view twice as long can have 2/3rd less emissions

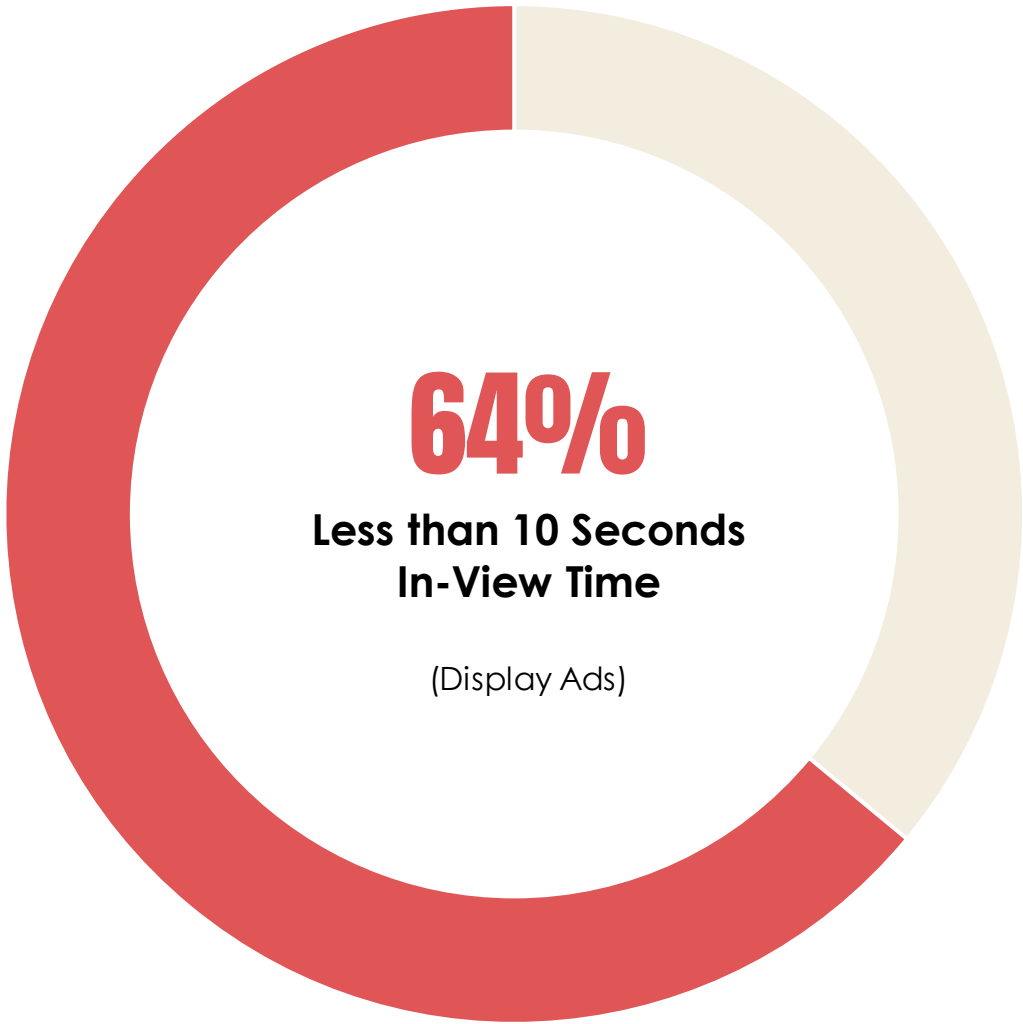
Carbon emissions (gCO₂e) by ad in-view time

SCOPE3



However, most ads don't achieve 10 second in-view time

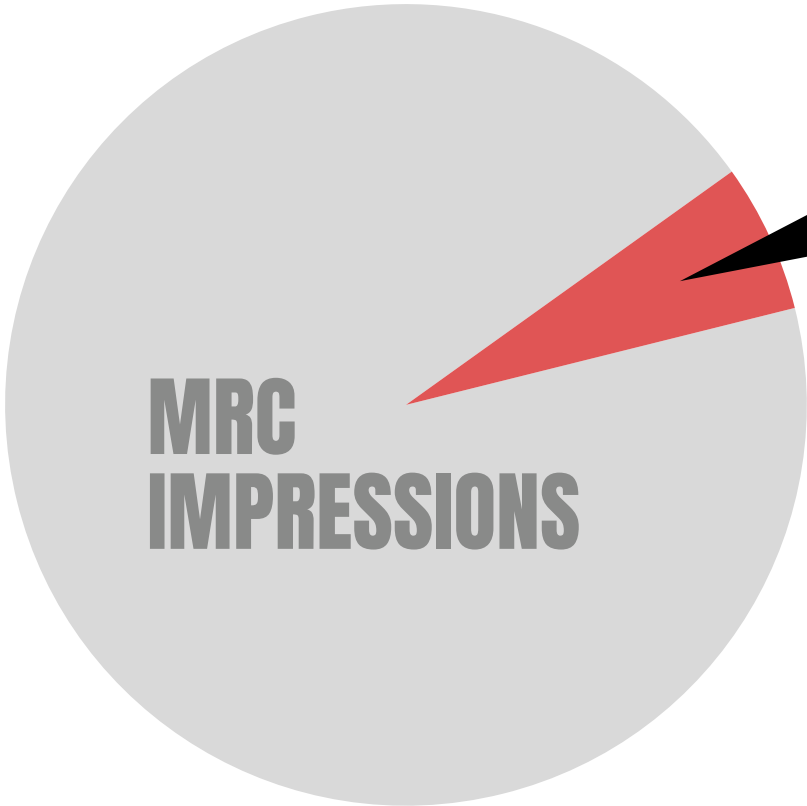
% of display ads by in-view time



Non-MRC compliant impressions don't cost the brand, but they cost the planet

% of carbon emissions (gCO₂e) due to Non-MRC impressions

○○○ SCOPE3



**6% OF CARBON EMISSIONS
CAME FROM NON-MRC
COMPLIANT IMPRESSIONS**

**= 157 MM METRIC TONS OF CO₂E/YEAR
= 34,144 CARS/YEAR**

Based on the number of display ads served in the US in 2021



NON-MRC Impressions (Display and Video) n= 55,155,406
MRC Impressions (Display and Video) n=841,064,924

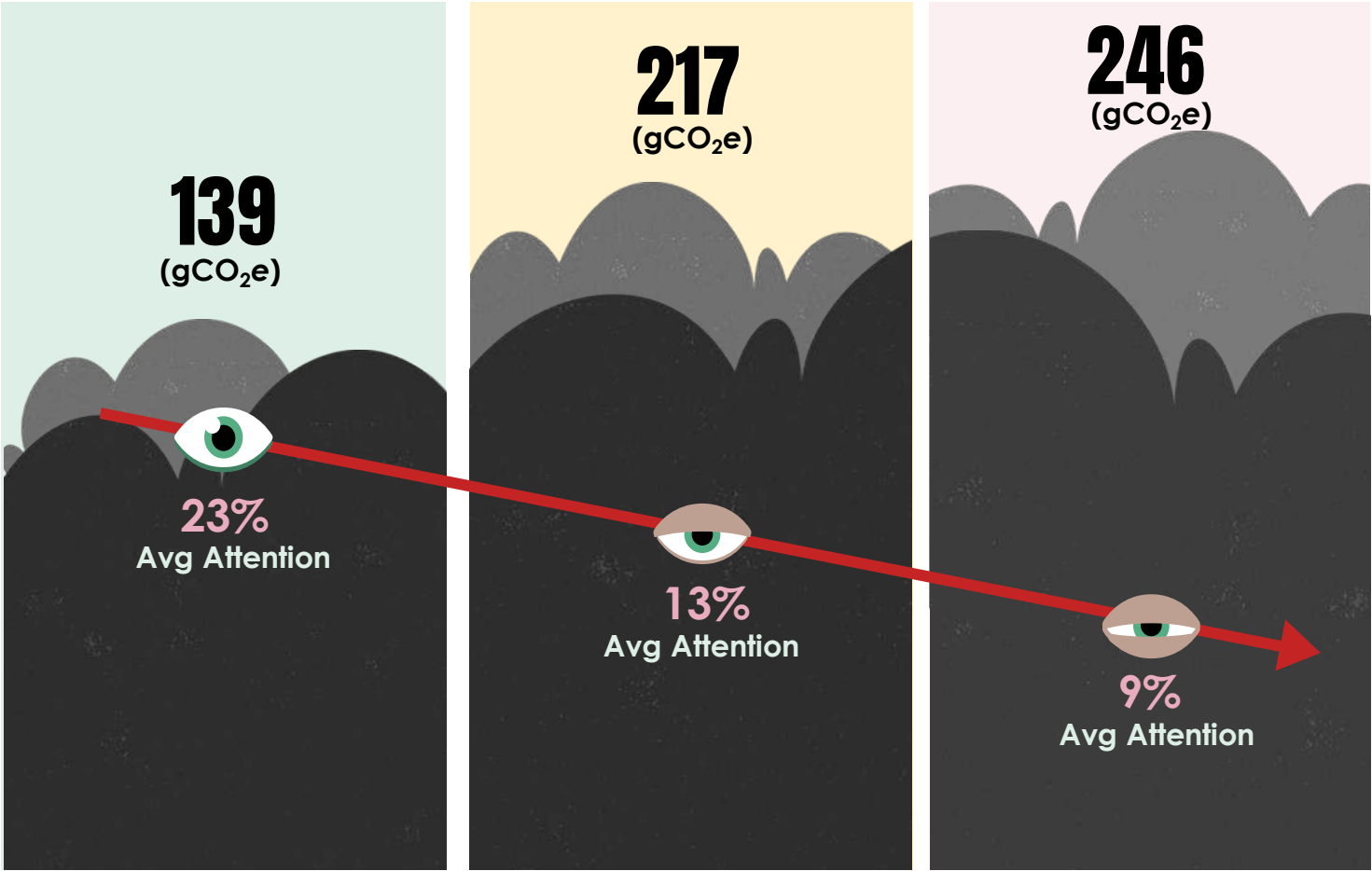
Source: According to Statista, in 2021, there were approximately 5.81 trillion display ad impressions served in the United States <https://www.statista.com/statistics/269874/number-of-display-ad-impressions-in-the-us/>

Webpages with fewer ads above the fold garnered more attention and generated fewer emissions

Visual attention (AI based, Predictive eye-tracking):

% of total predicted time spent looking at an ad on a webpage

Average visual attention & carbon emissions (gCO₂e) by number of ads above the fold
○○○ SCOPE3



One ad above the fold

Two ads above the fold

Three ads above the fold

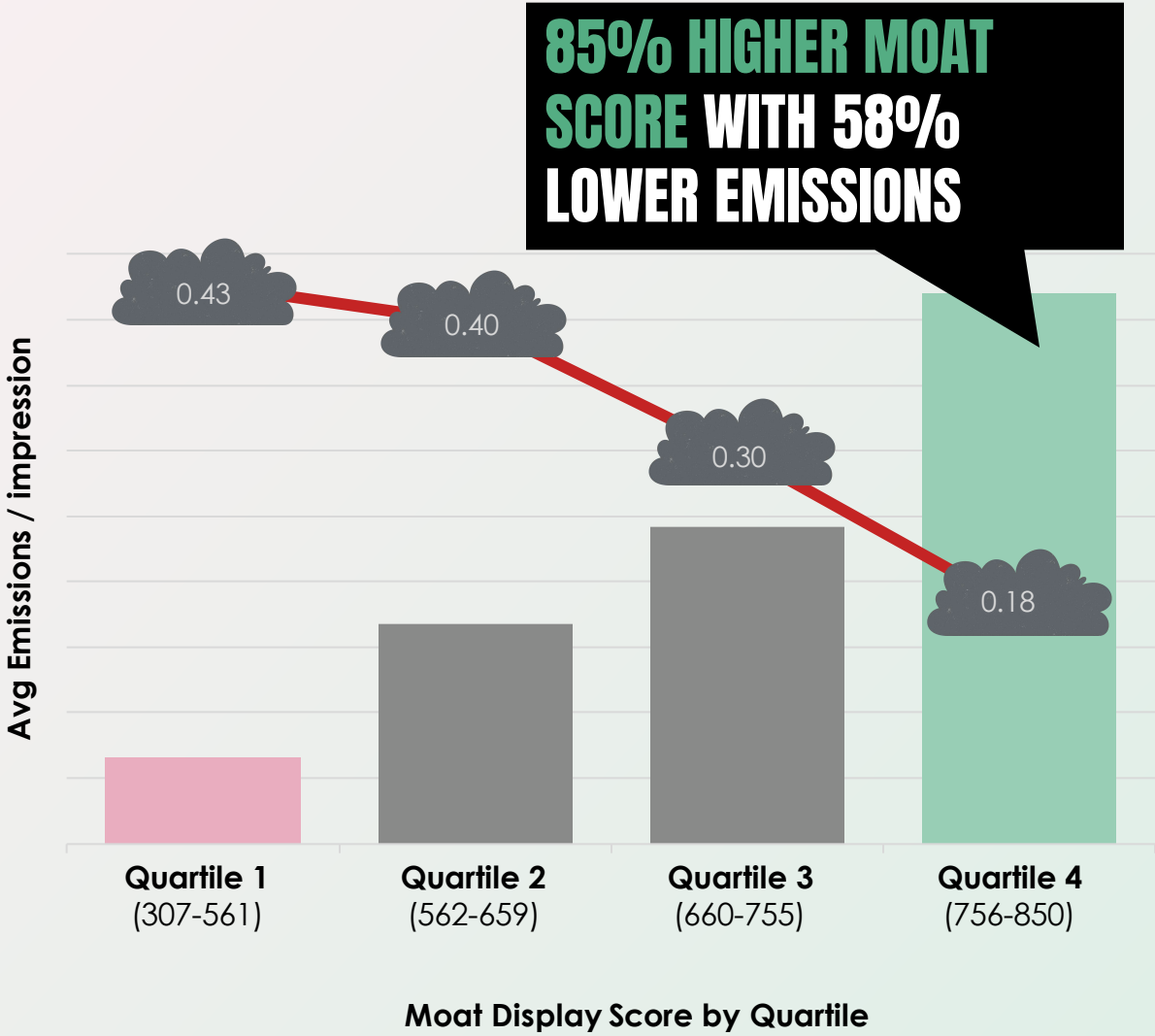
Higher quality metrics strongly correlated to generating lower carbon emissions

Moat display score:

A score (300-850) based on in-view rate, in-view time, universal interaction rate, and universal interaction time, among other factors

Average Emissions Per Impression (gCO₂e) by Moat display score

○○○ SCOPE3



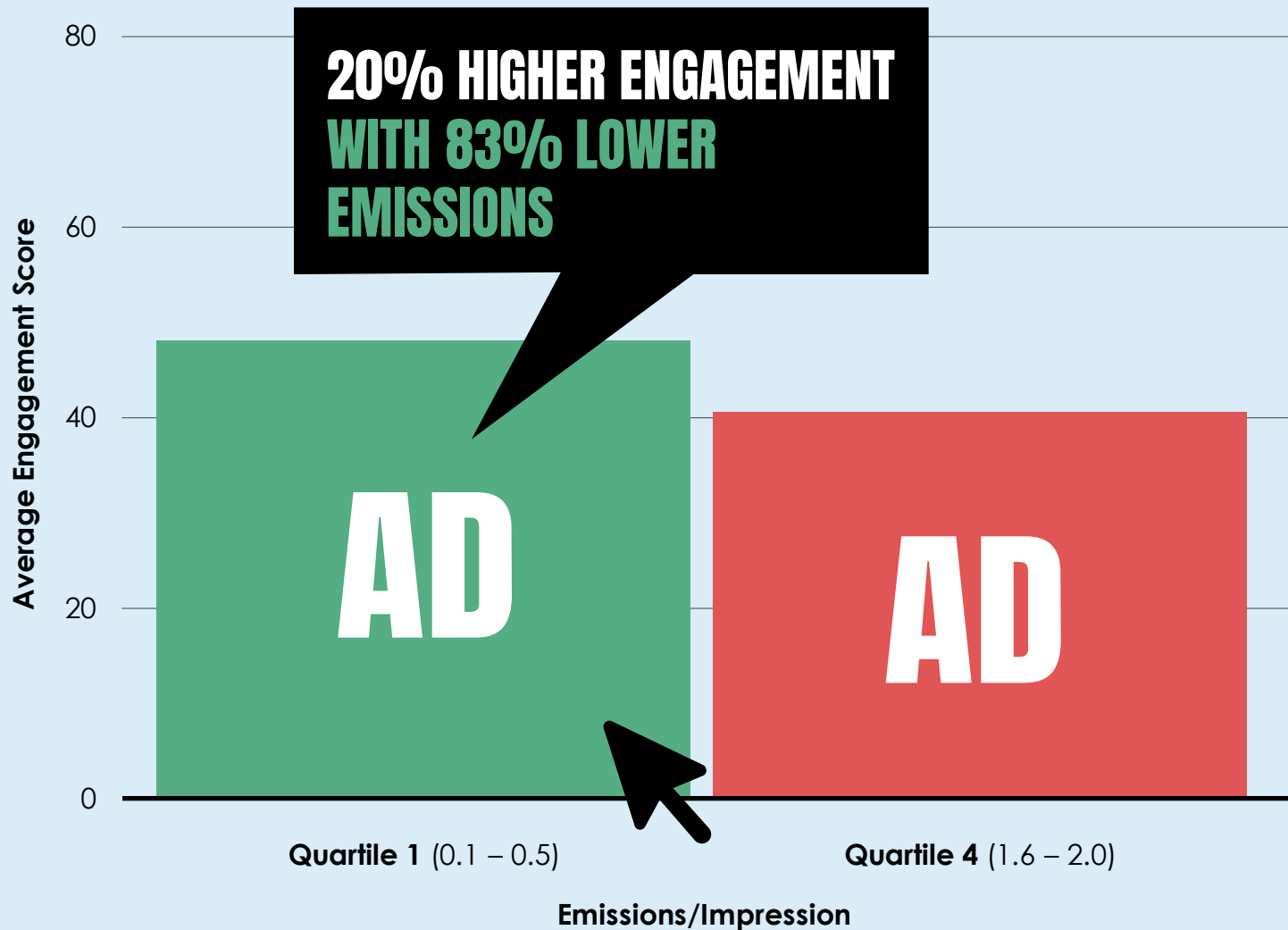
Higher engagement had lower carbon emissions

Engagement score:

A score (0-100) based on the average time spent on the page, average interaction time, among other factors

Average engagement score by carbon emissions (gCO₂e)

○○○ SCOPE3

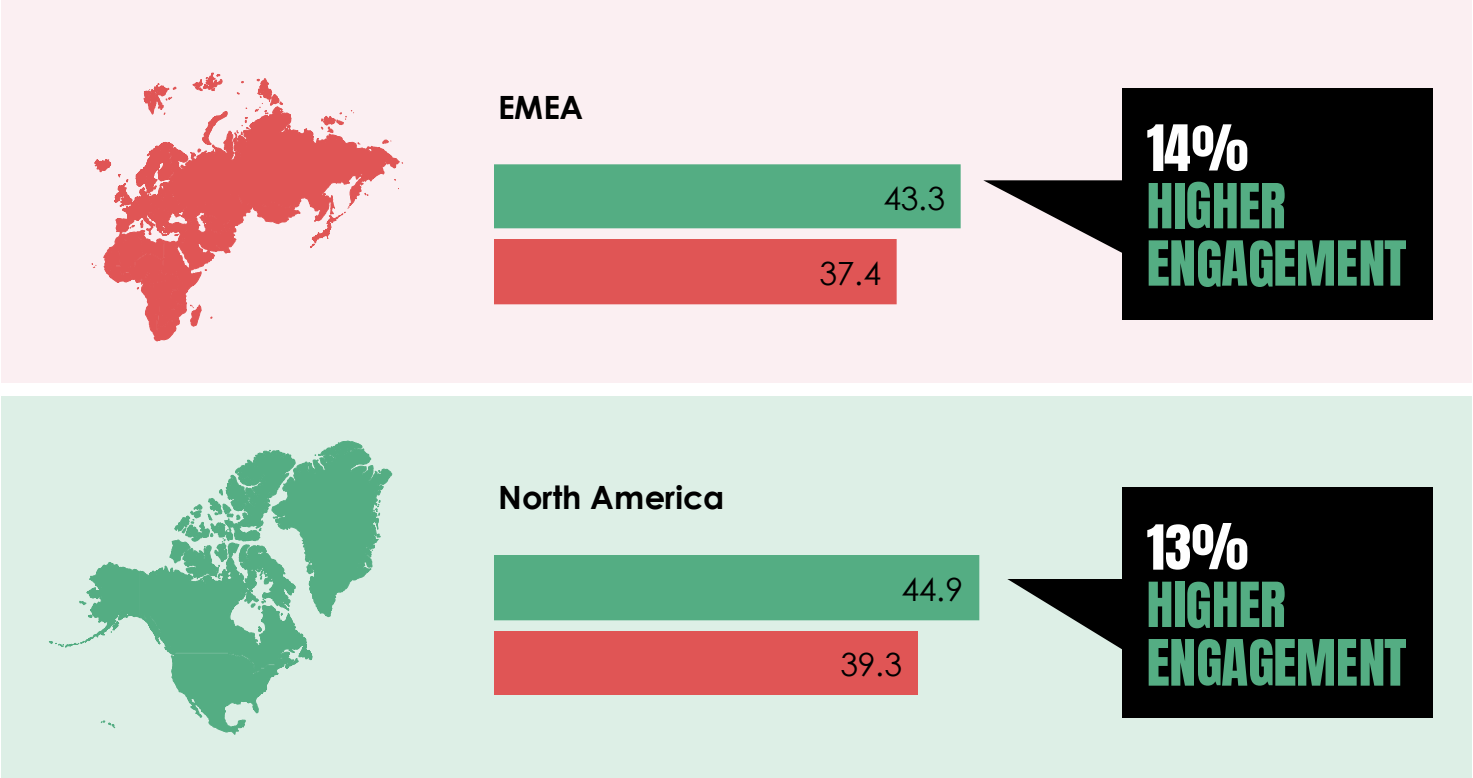


Higher engagement tied to lower carbon emissions is consistent across markets

Average engagement score
by carbon emissions (gCO₂e)

○○○ SCOPE3

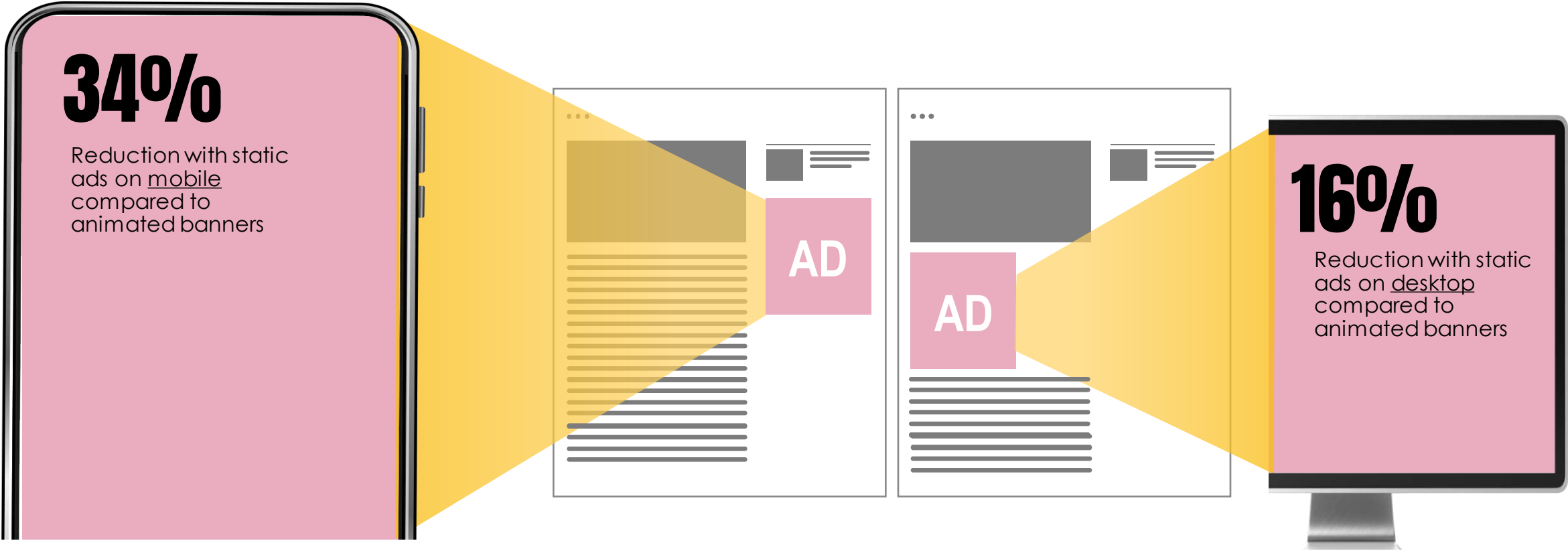
- Quartile 1 (0.1 – 0.5)
- Quartile 4 (1.6 – 2.0)



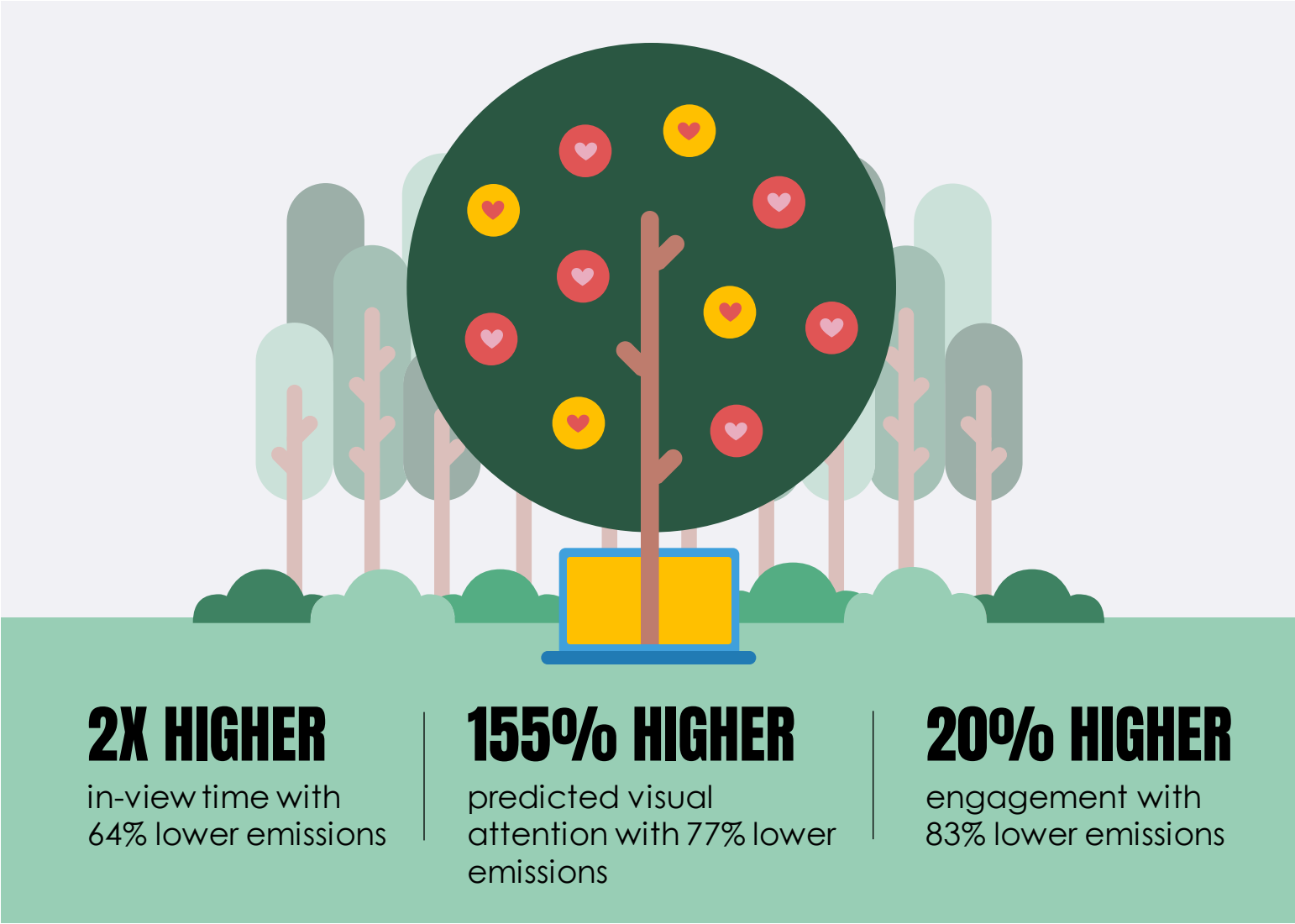
Regardless of device, static banners produce less carbon emissions

% Reduction in carbon emissions (gCO₂e) using static instead of animated banners

SCOPE3

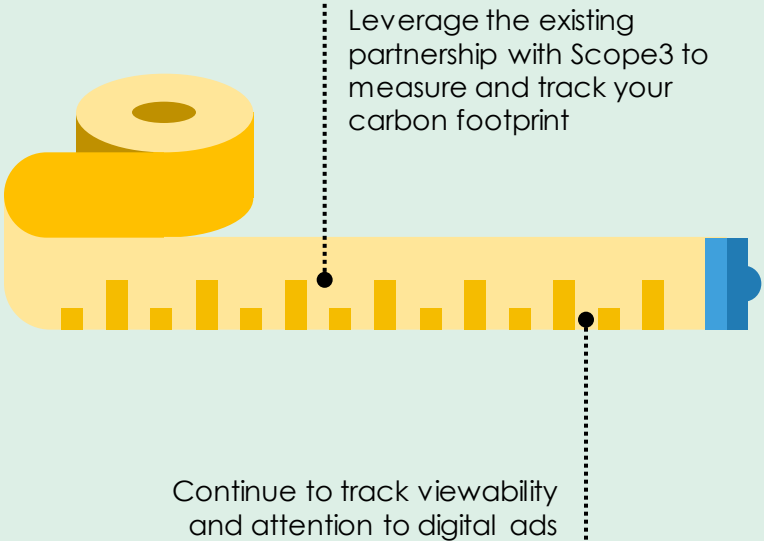


It's within reach to be both, purposeful and profitable

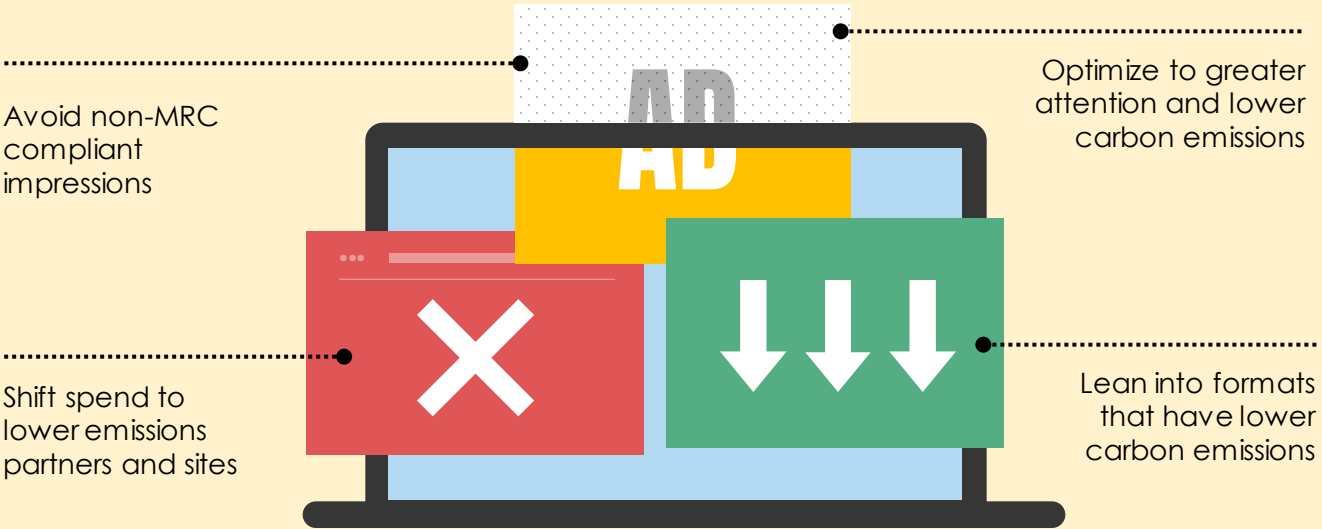


What next?

MEASURE



ACT



THANK YOU

