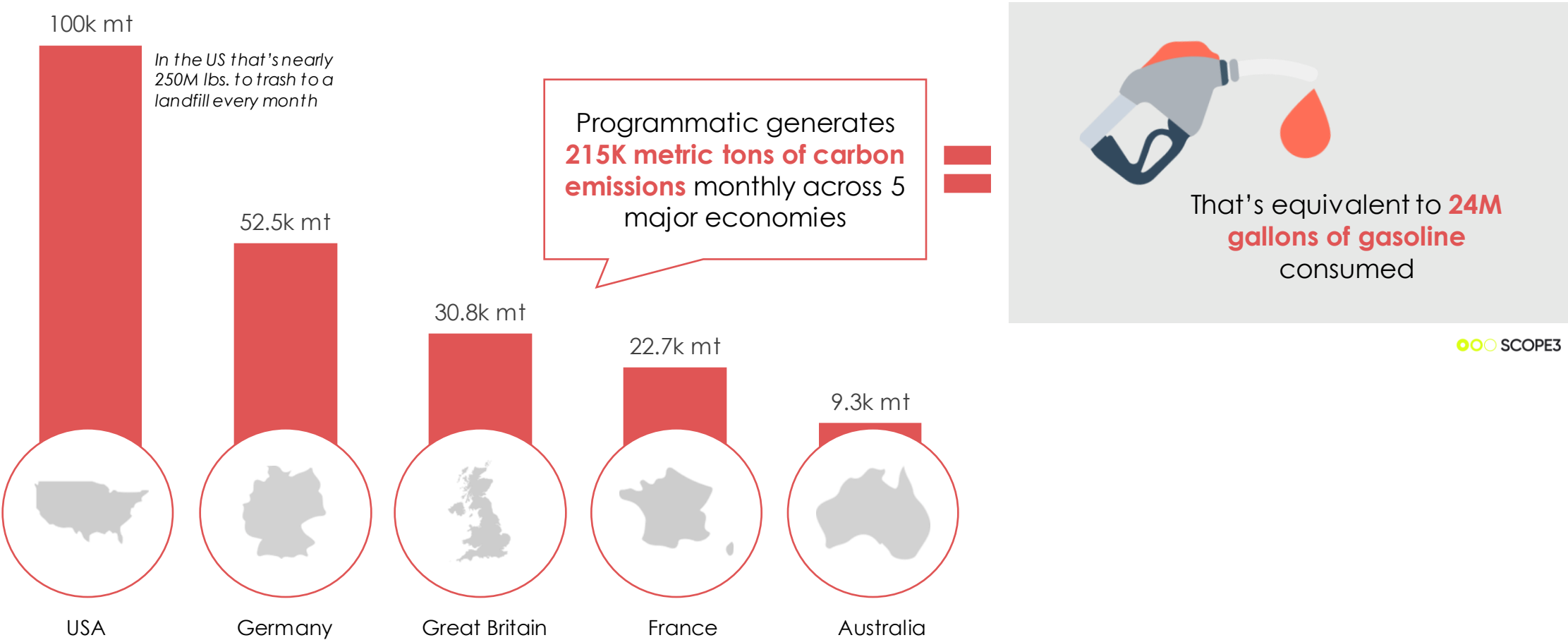


# ATTENTION $\times$ SUSTAINABILITY

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**

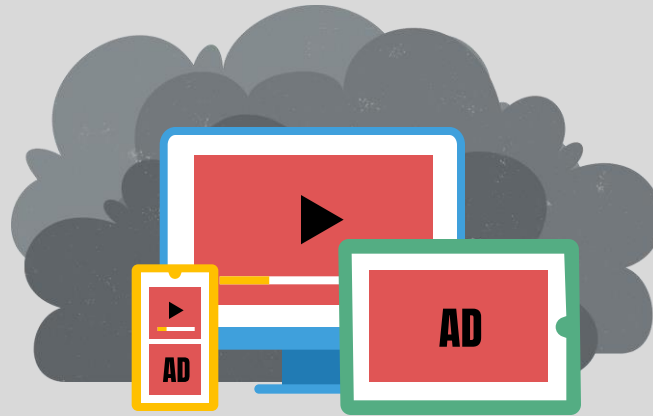


**RESEARCH WAS  
CONDUCTED**



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

# Our approach

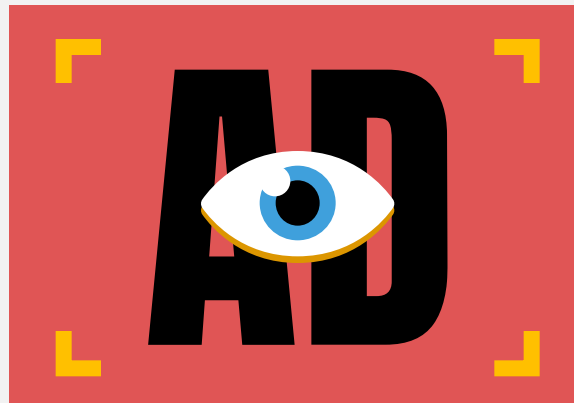


## Live Campaign Tracking

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

○○○ SCOPE3

### gCO<sub>2</sub>e:

Total grams of carbon dioxide released from digital impression delivery

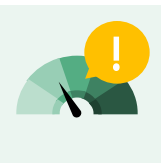


## MOAT METRICS



### 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



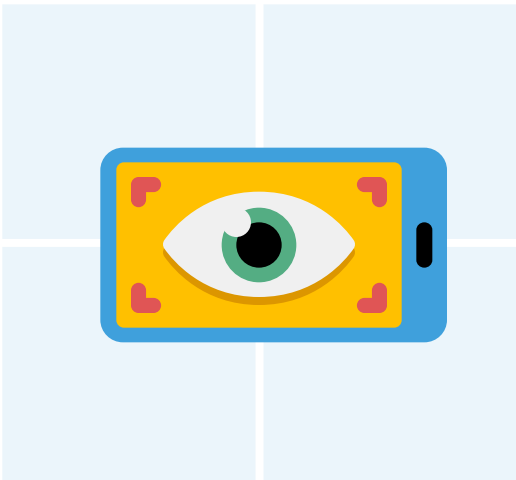
### Engagement Score:

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

## AI BASED, PREDICTIVE EYE-TRACKING

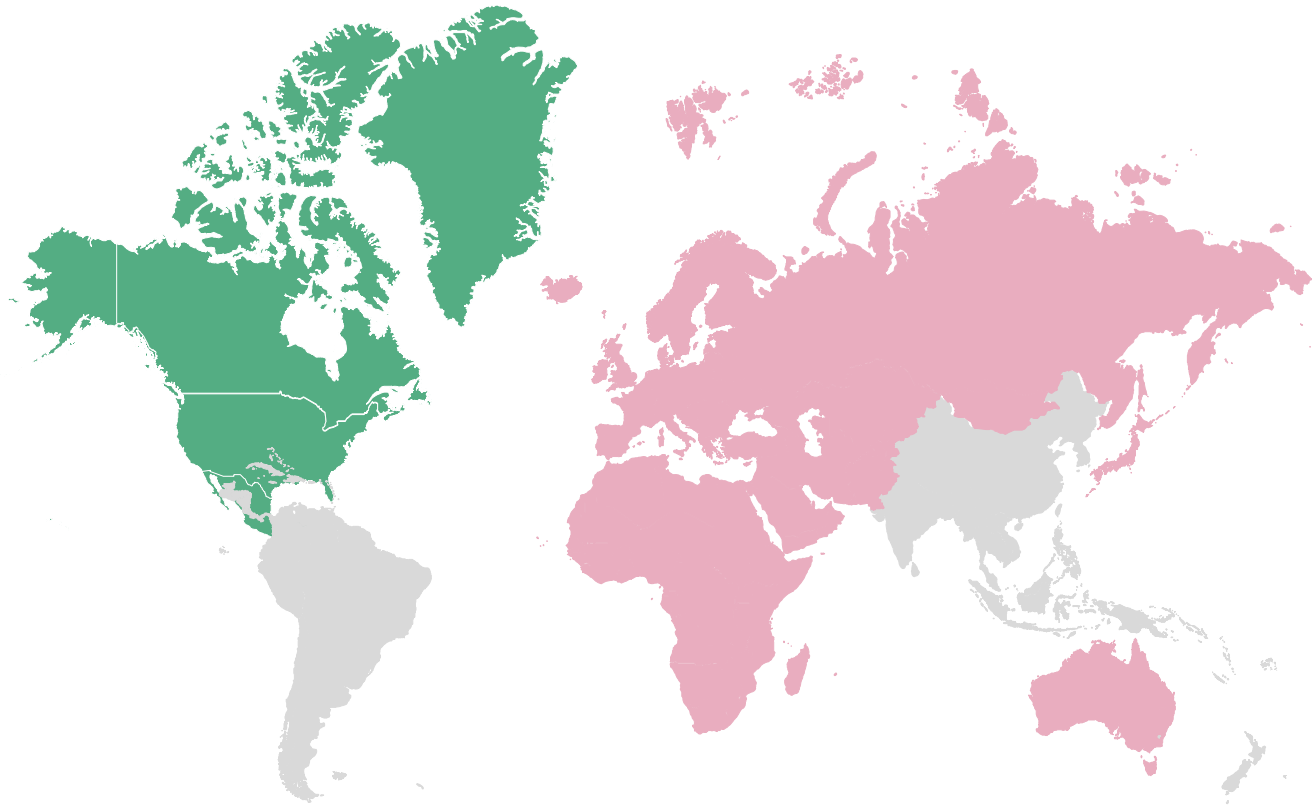
### Visual Attention:

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



# Expansive scope

Total of 55 countries



## Verticals

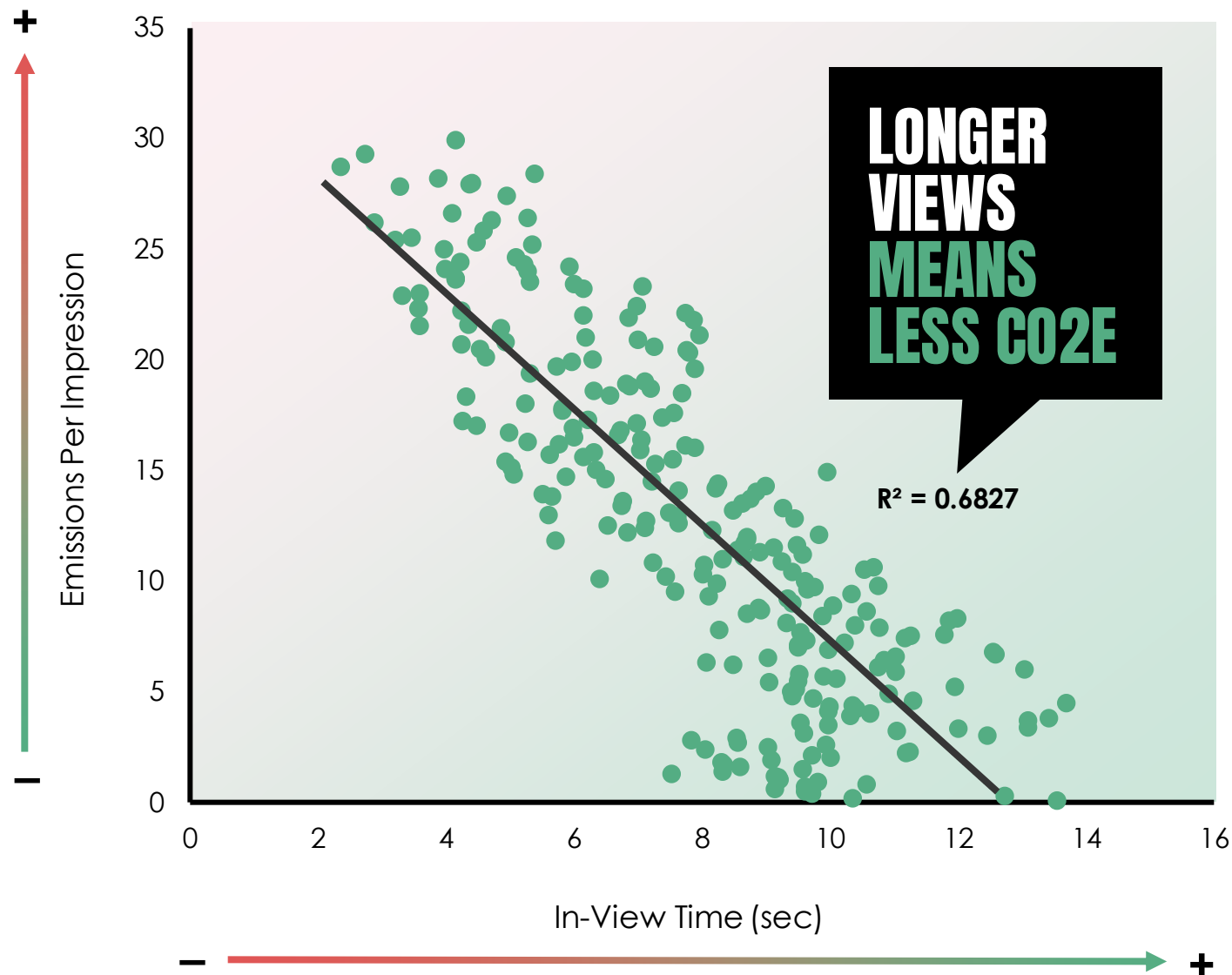
-  Tech
-  Apparel
-  Casual Dining
-  Financial Services
-  Travel
-  Entertainment

# 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 (gCO<sub>2</sub>e)

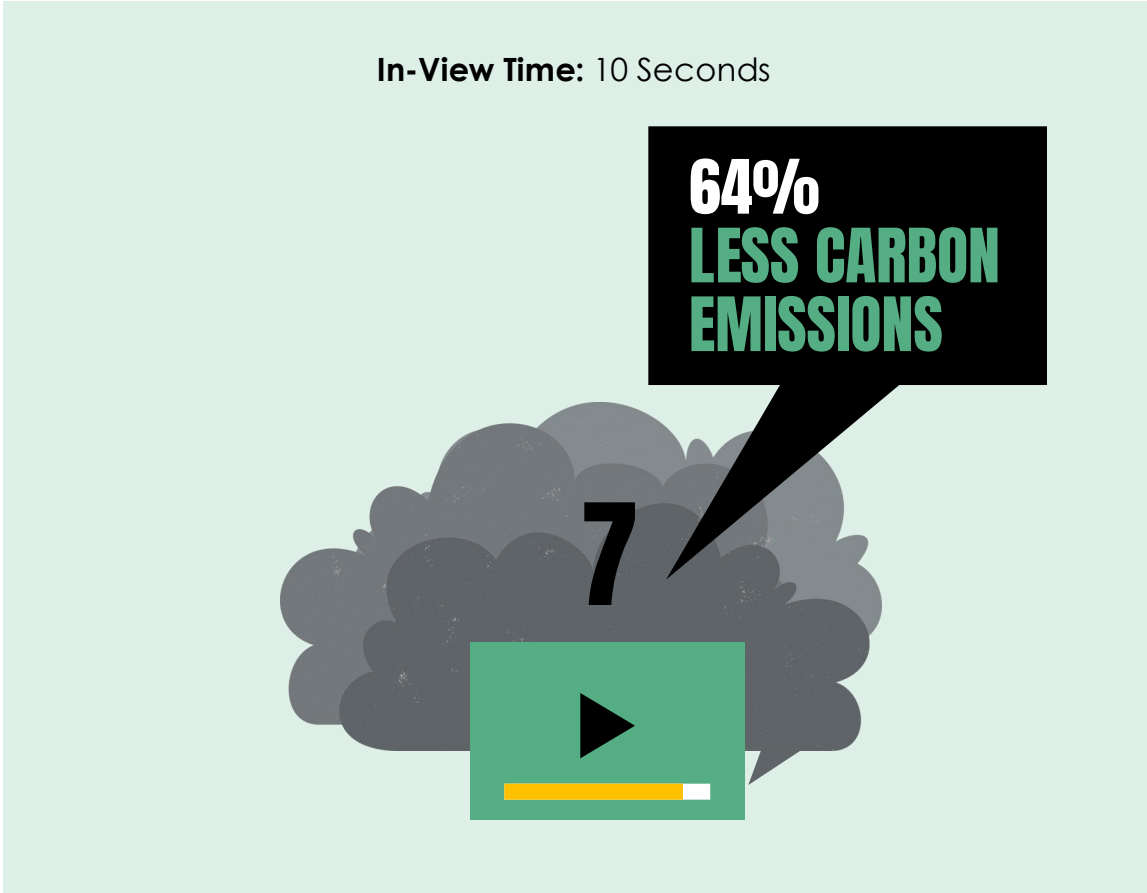
○○○ SCOPE3



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

Carbon emissions (gCO<sub>2</sub>e) by ad in-view time

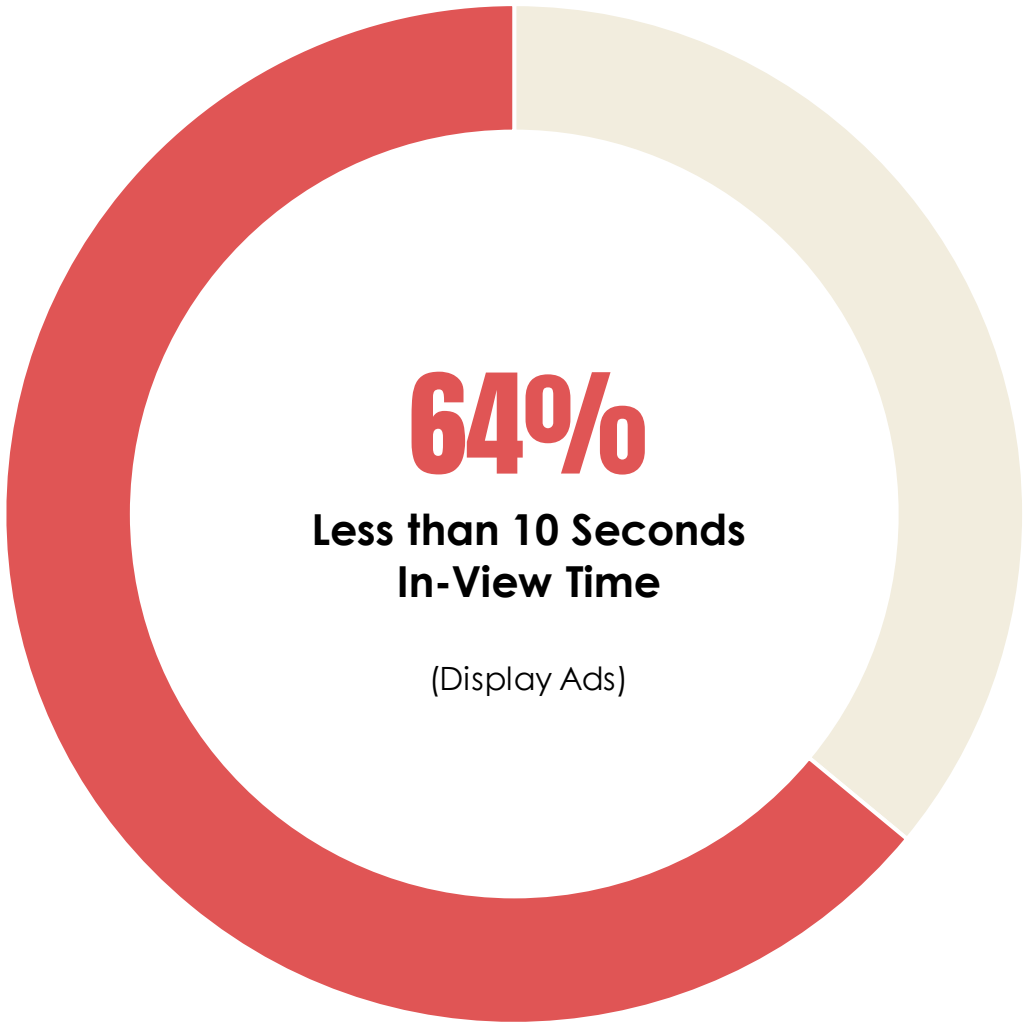
●●● SCOPE3





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

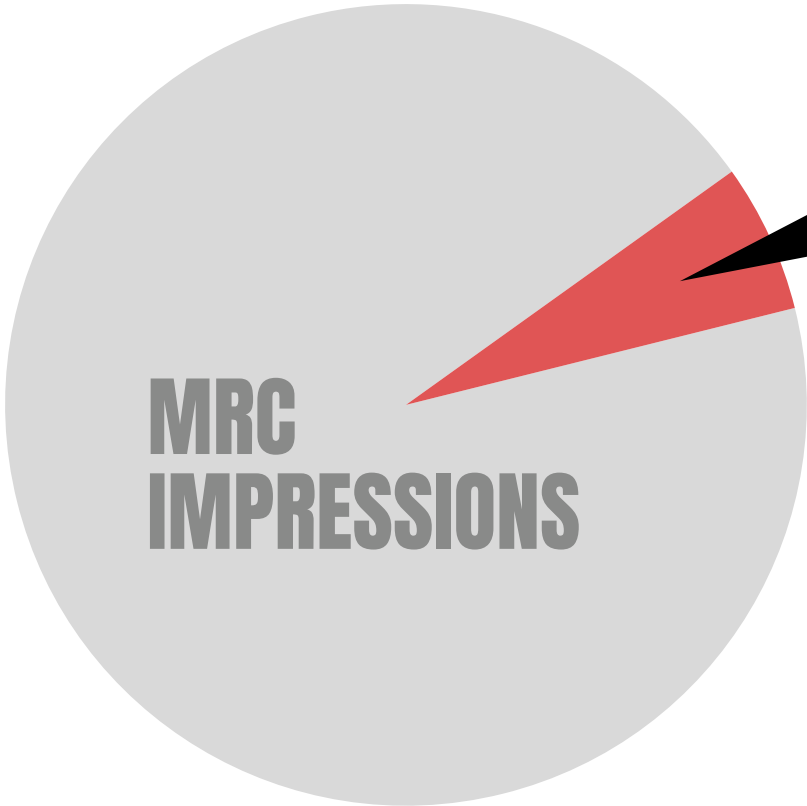
% of display ads by in-view time



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

% of carbon emissions (gCO<sub>2</sub>e) due to Non-MRC impressions

● SCOPE3



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

**= 157 MM METRIC TONS OF CO<sub>2</sub>E/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

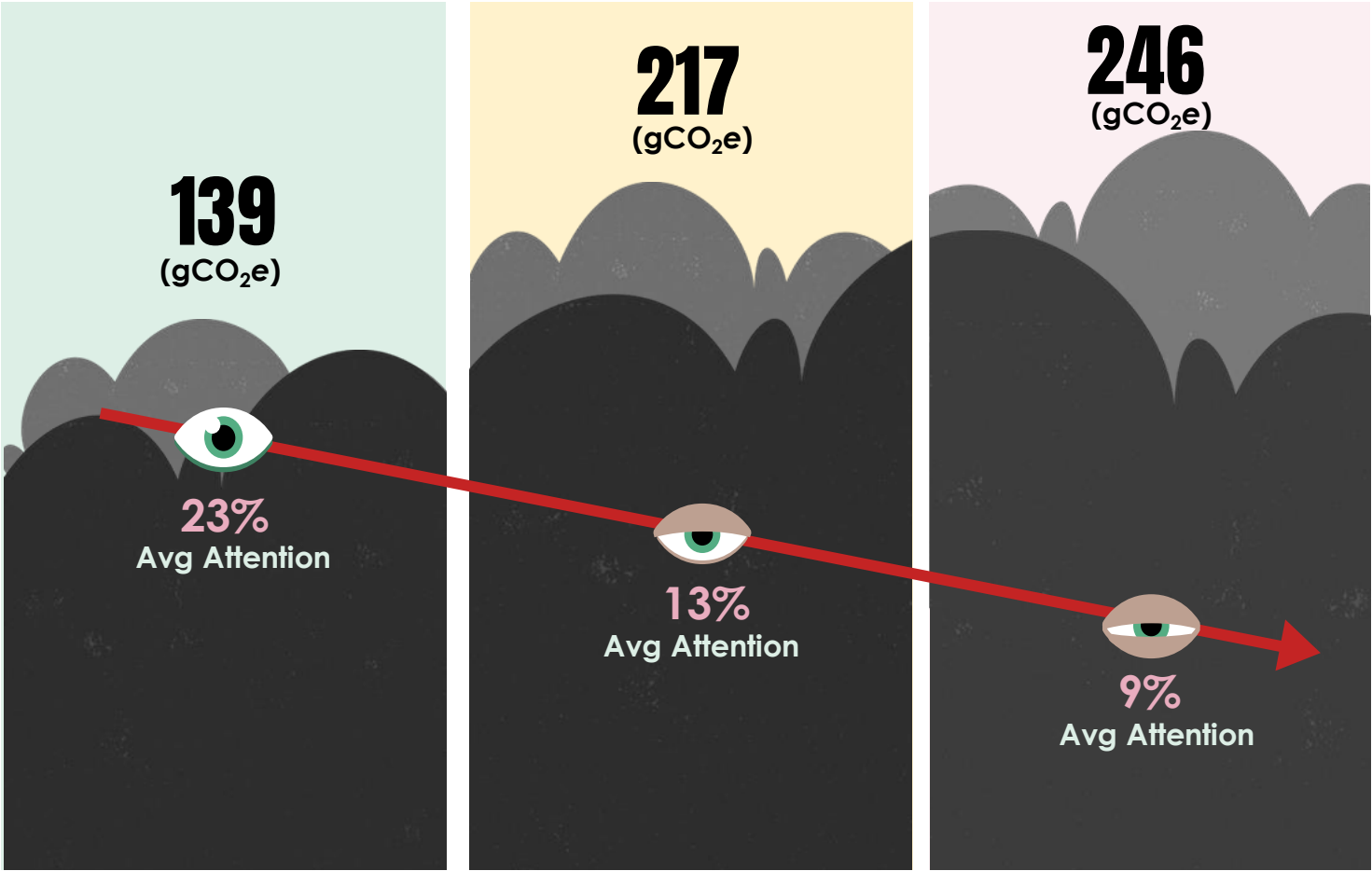
Source: According to Statista, in 2021, there were approximately 5.81 trillion display ad impressions served in the United States <https://www.statista.com/statistics/269874/number-of-display-ad-impressions-in-the-us/>

# 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 (gCO<sub>2</sub>e) by number of ads above the fold  
●●● SCOPE3



One ad above the fold

Two ads above the fold

Three ads above the fold

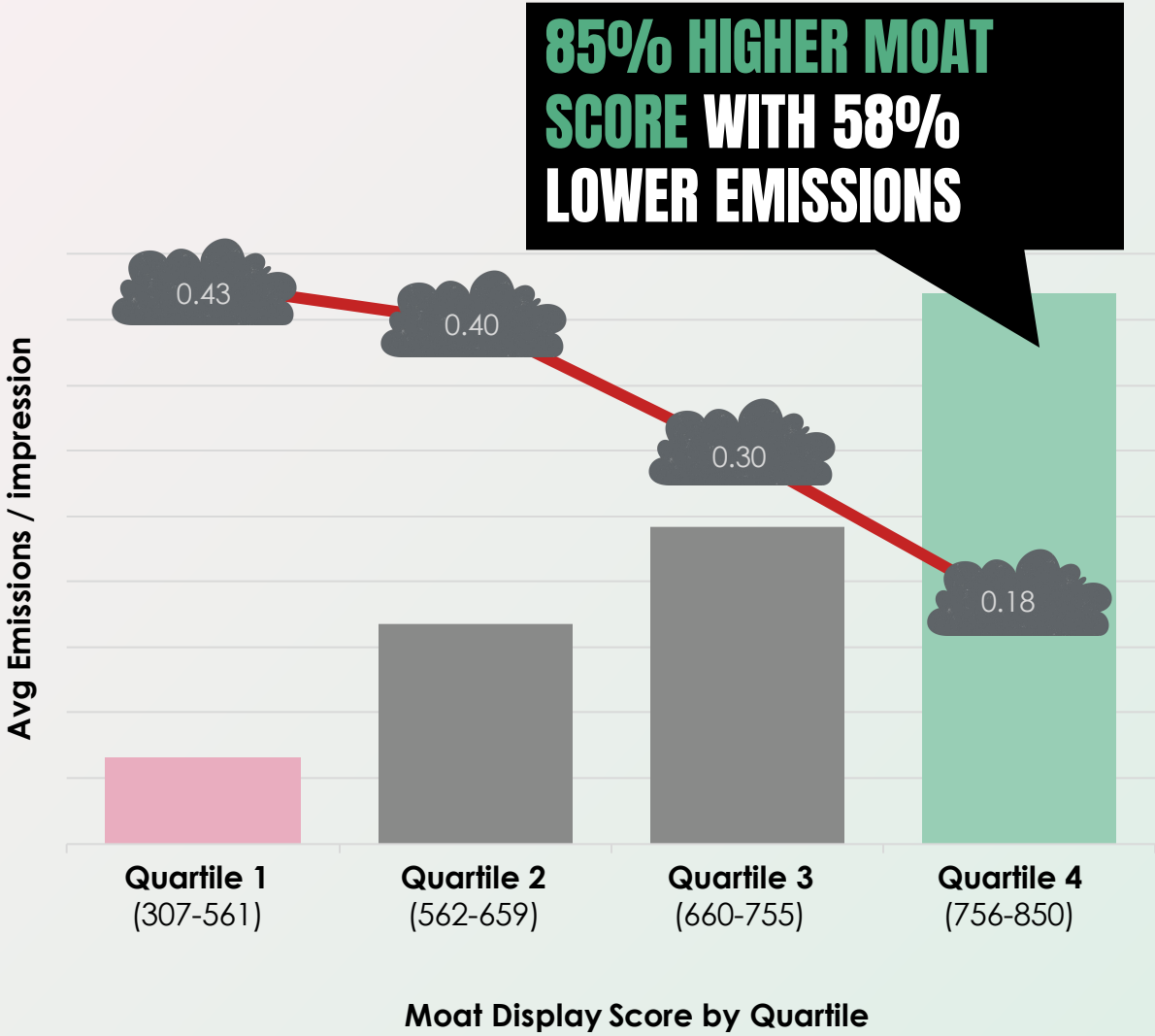
# Higher quality metrics strongly correlated to generating lower carbon emissions

## 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 (gCO<sub>2</sub>e) by Moat display score

●●● SCOPE3



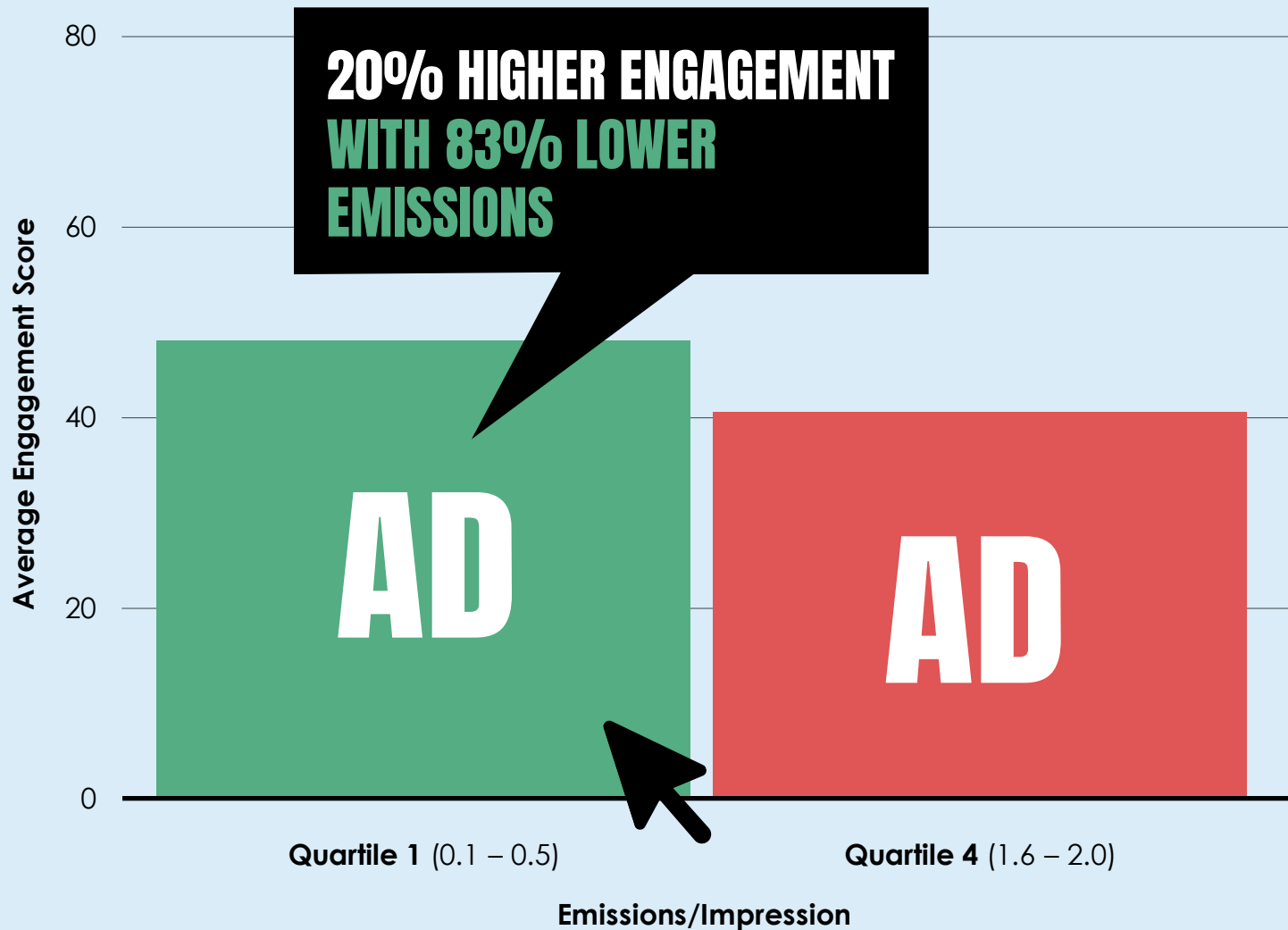
# Higher engagement had lower carbon emissions

**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 (gCO<sub>2</sub>e)

●●● SCOPE3

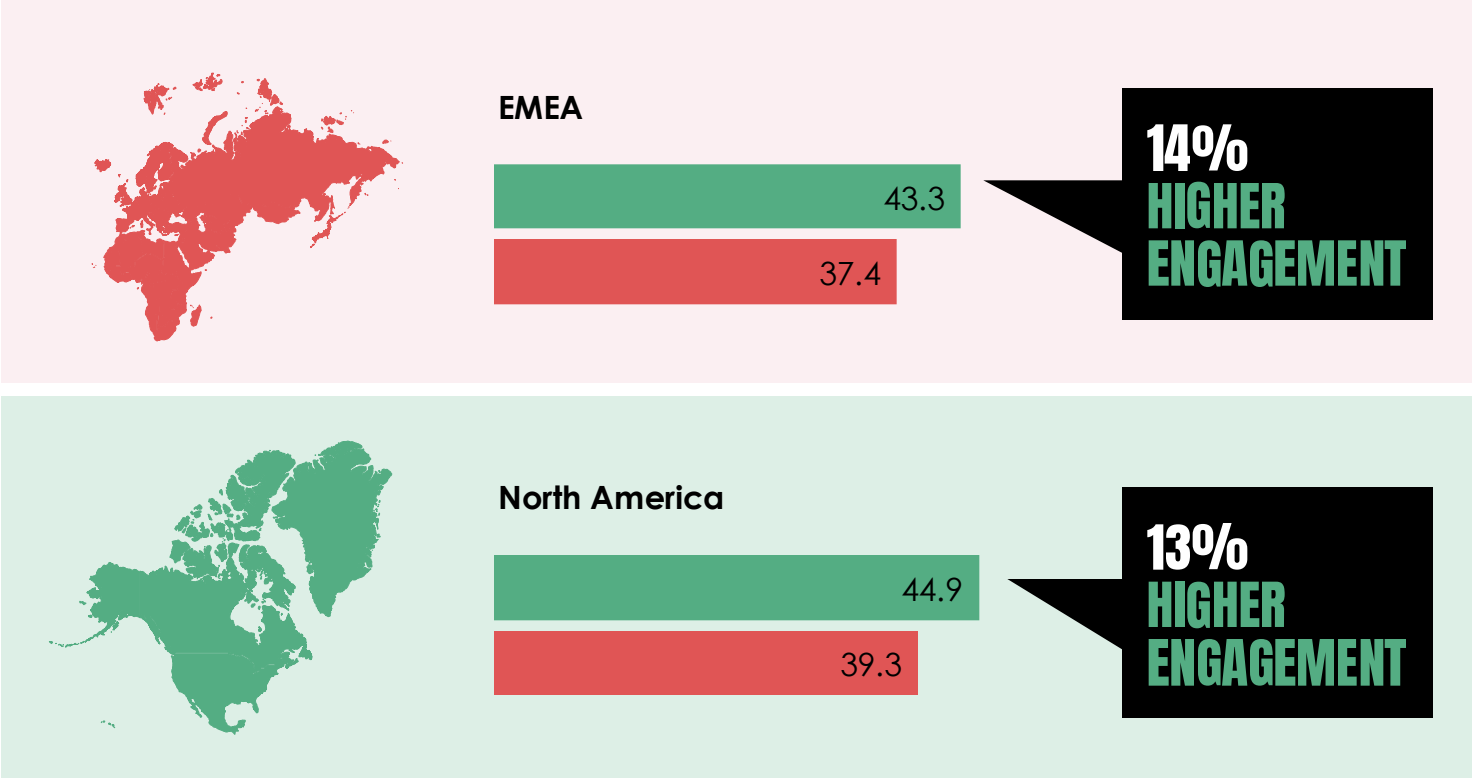


# Higher engagement tied to lower carbon emissions is consistent across markets

Average engagement score  
by carbon emissions (gCO<sub>2</sub>e)

○○○ SCOPE3

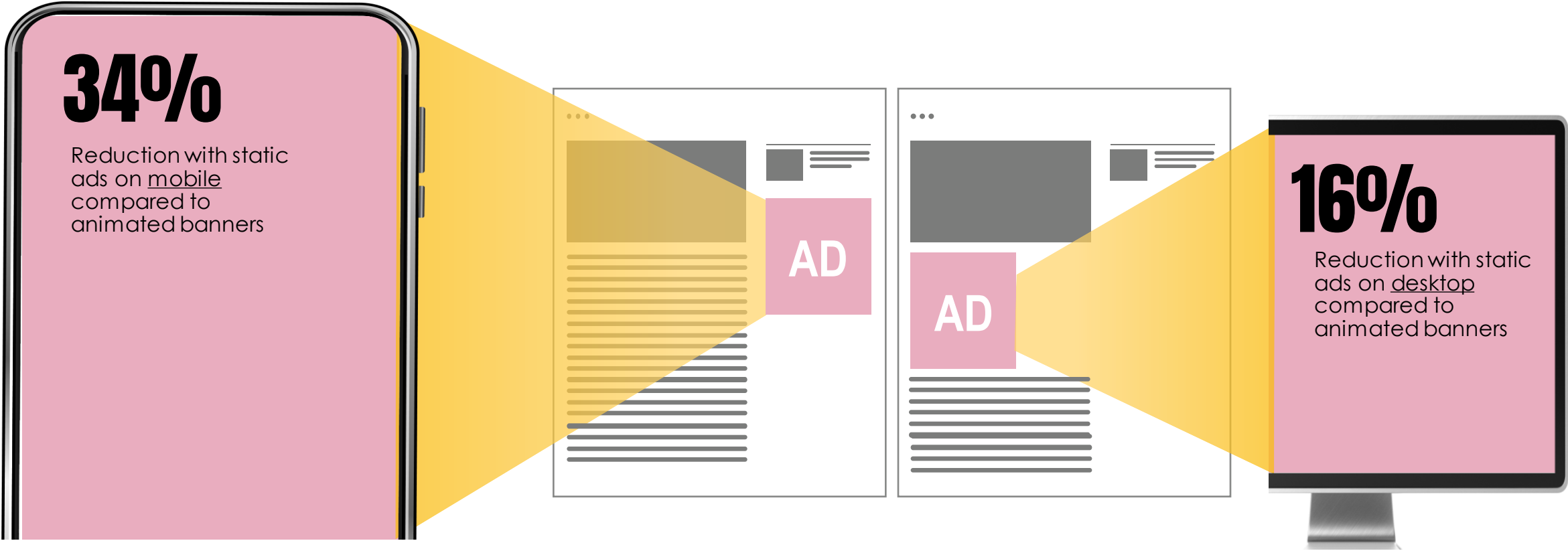
- Quartile 1 (0.1 – 0.5)
- Quartile 4 (1.6 – 2.0)



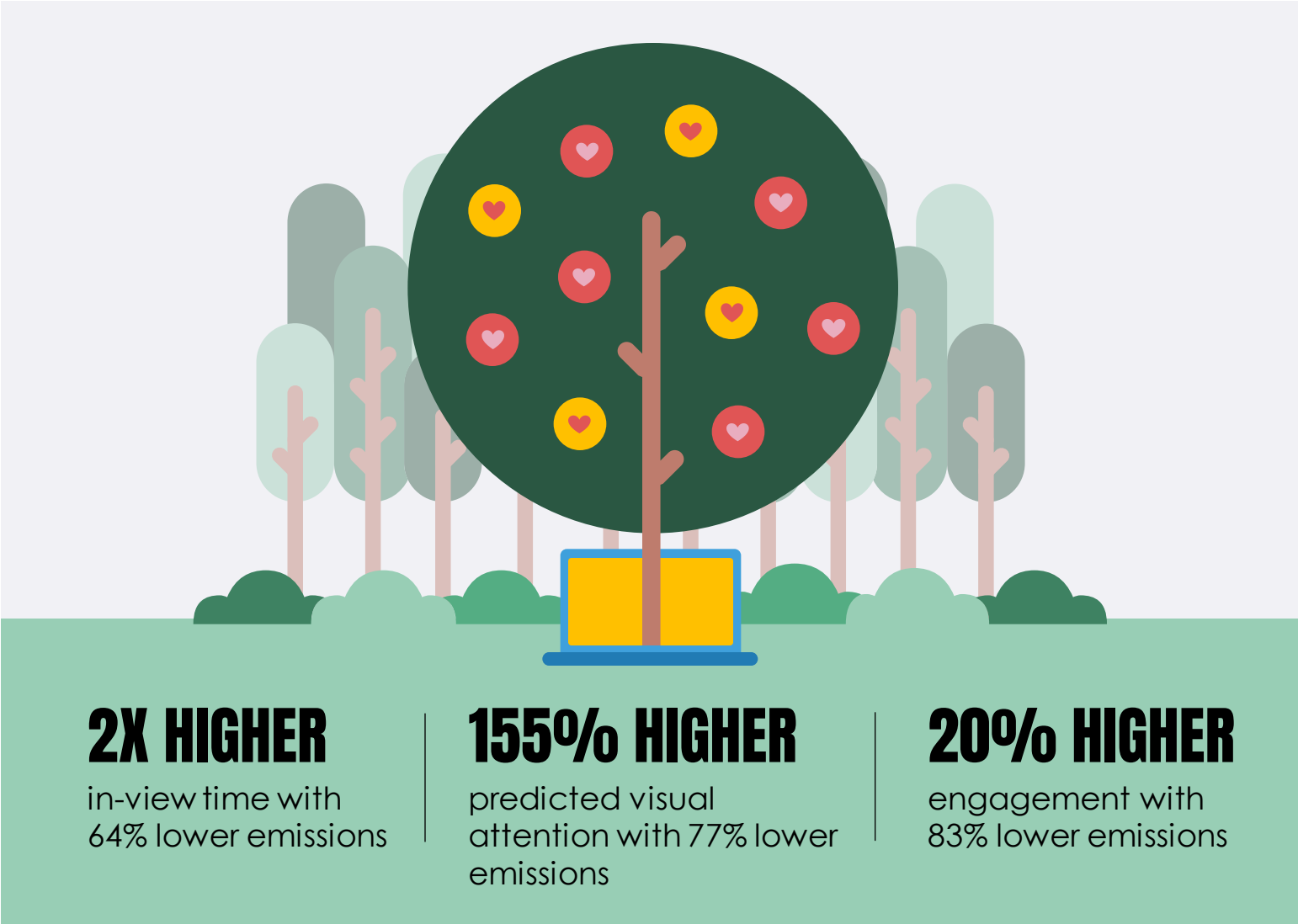
# Regardless of device, static banners produce less carbon emissions

% Reduction in carbon emissions (gCO<sub>2</sub>e) using static instead of animated banners

SCOPE3



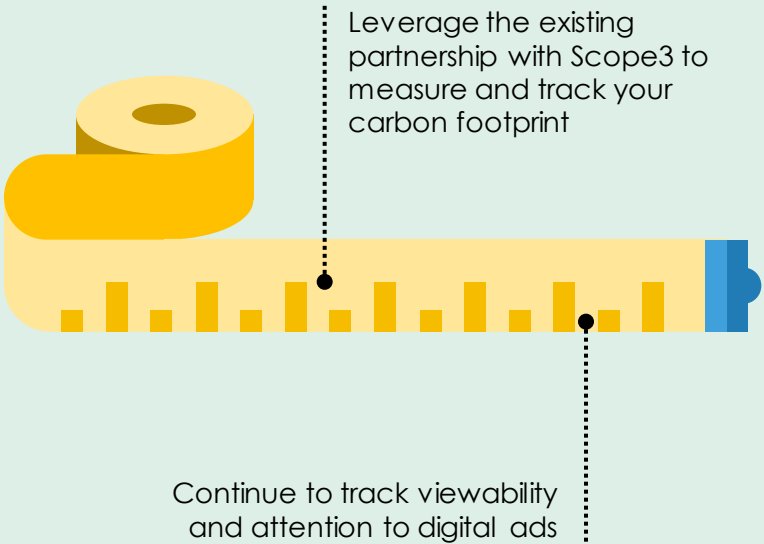
It's within reach to be both, purposeful and profitable



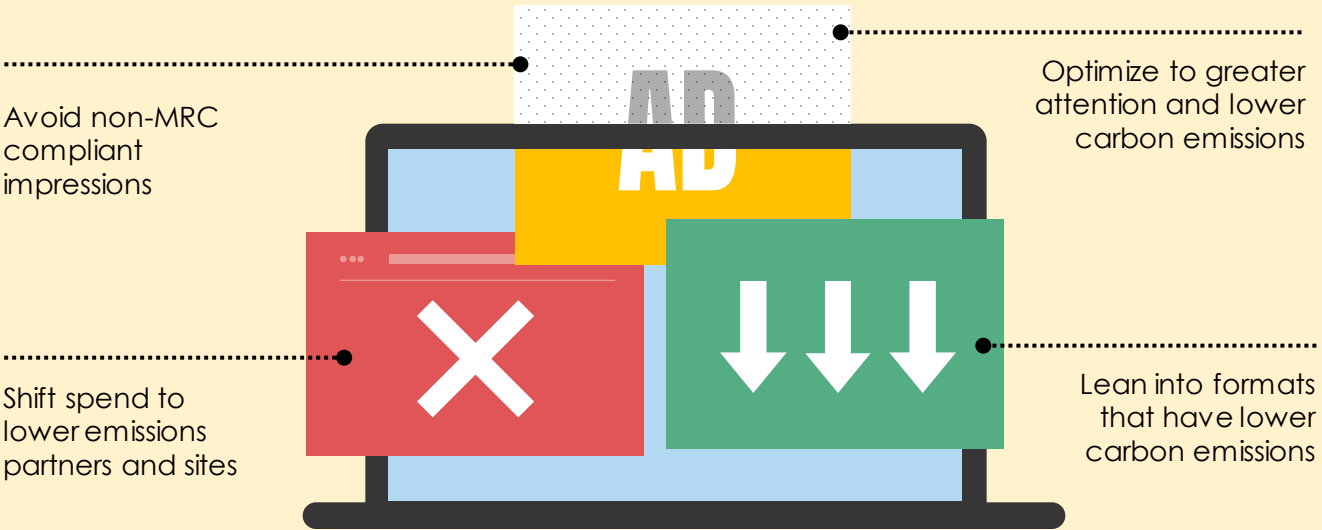


# What next?

## MEASURE



## ACT



# THANK YOU

