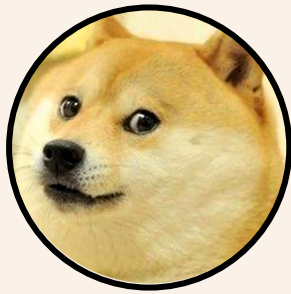
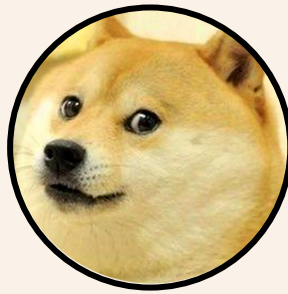


**CARBON GECKO**



**ANDREAS  
TSOUCHLOS**



**JANNIS  
TSOUCHLOS**

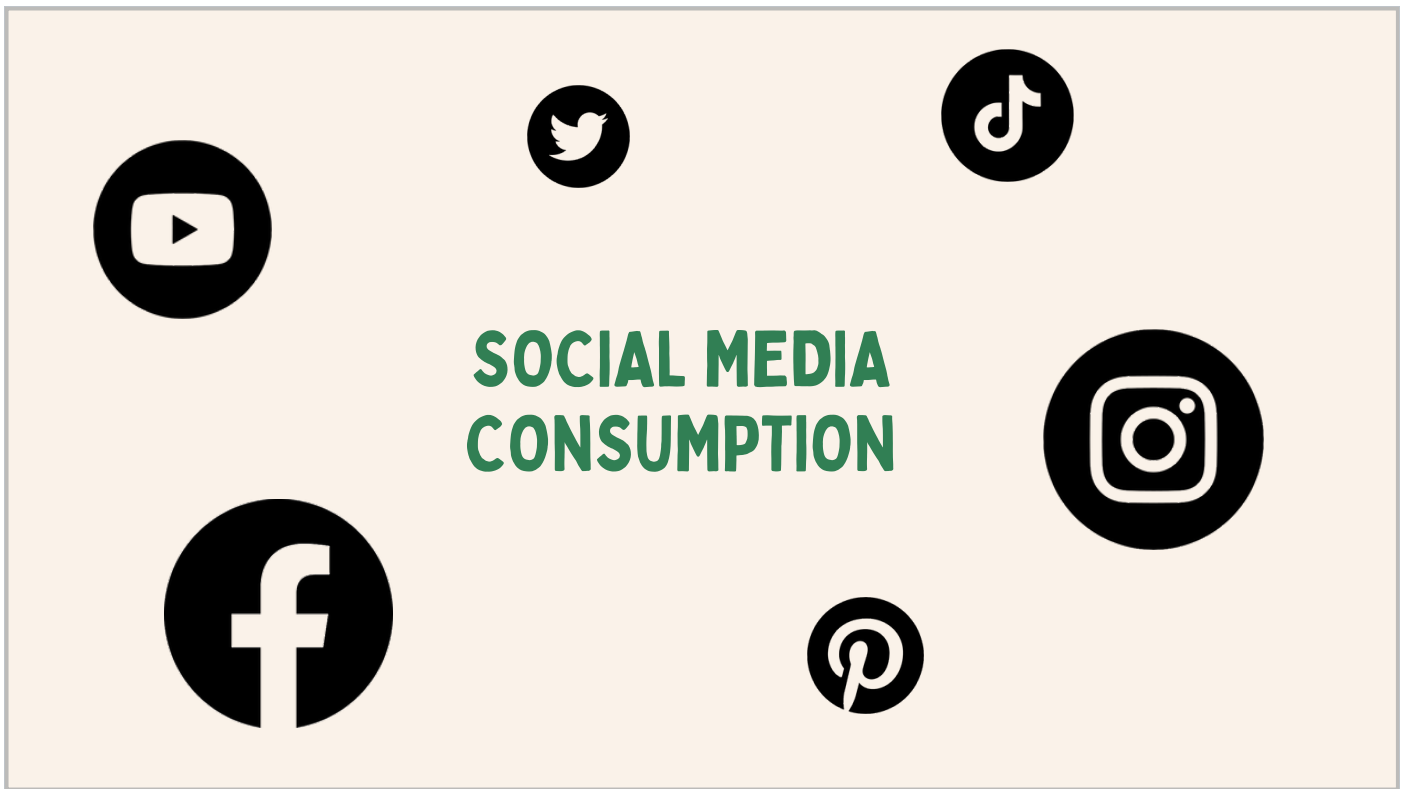


**HOANG NAM  
TO**

**CTRL-ALT-DEFEAT**

- welcome
- from ctrl alt defeat

working on google challenge: sustainable tomorrow



- everybody uses them daily



## SERVERS

- hosted on servers



every time somebody uses this app  
requests are sent to the servers  
sometimes millions or even billions per day

**LOGIN  
REFRESH  
UPLOAD**



- **PROCESSING  
UNITS**
- **COMPUTA-  
TIONAL TIME**

**REQUESTS**

**SERVERS**

**DEMANDS**

**LOGIN  
REFRESH  
UPLOAD**



**REQUESTS**

**A LOT OF SERVERS**

in order to face these challenges  
we need lots of servers

- NOT ENTIRELY POWERED WITH GREEN ENERGY
- CARBON EMISSION

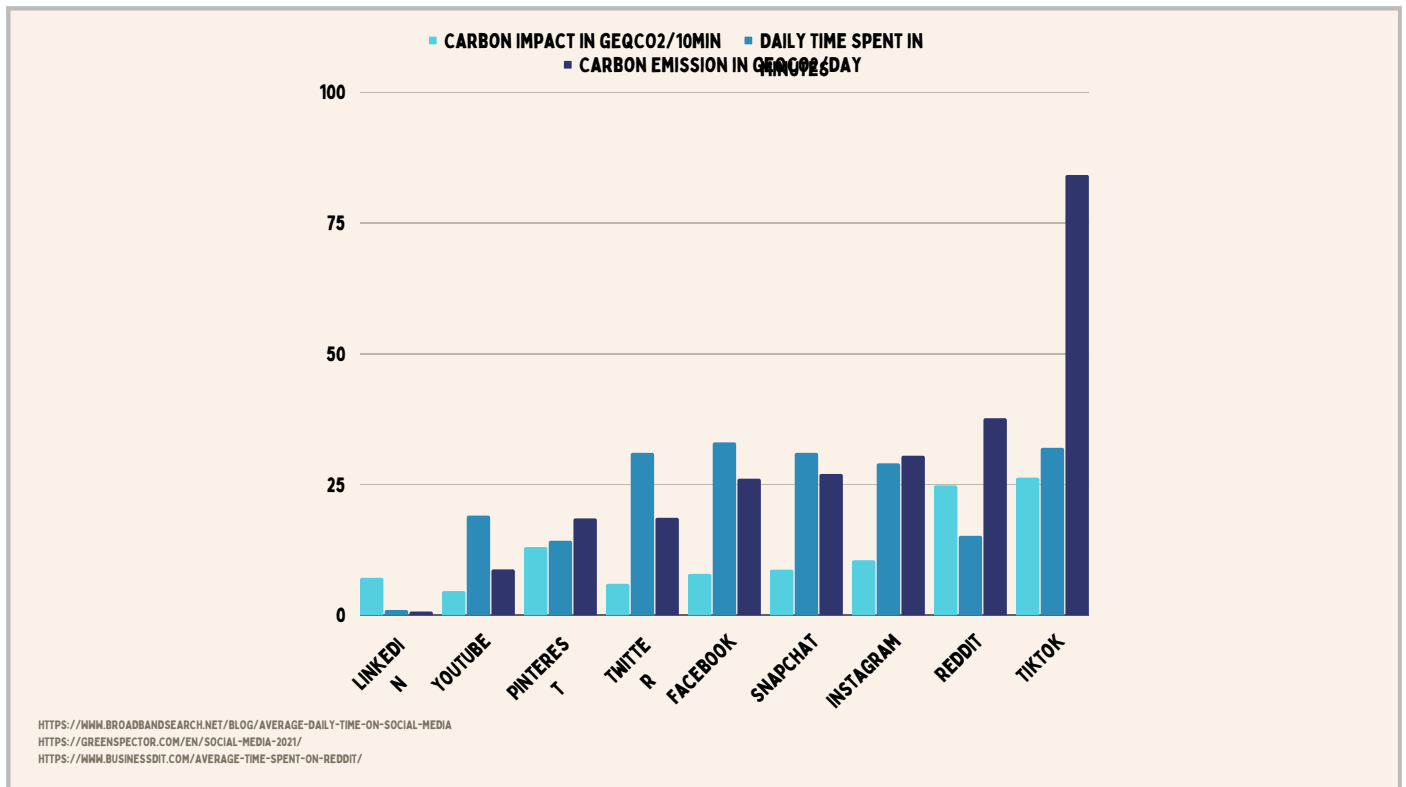
**ISSUES**



**A LOT OF SERVERS**

not every hosting company utilizes entirely green energy  
hence emitting carbon





so, let's see some numbers

just only a few grams per minute per social media

NEXT

**ANNUALLY**  
**92 KG CO<sub>2</sub>**  
**PER PERSON**

INCLUDES ONLY CERTAIN SOCIAL MEDIA PLATFORMS

but with respect to all platforms and a whole year  
this results

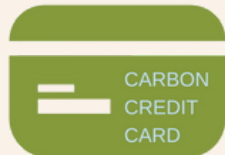
**ANNUALLY  
820 KM BY CAR  
PER PERSON**

[HTTPS://WWW.EPA.GOV/ENERGY/GREENHOUSE-GAS-EQUIVALENCIES-CALCULATOR#RESULTS](https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results)  
[HTTPS://GREENSPECTOR.COM/EN/SOCIAL-MEDIA-2021/](https://greenspector.com/en/social-media-2021/)

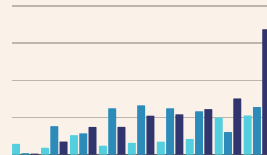
not too much  
but it is not nothing

easy way to decrease carbon footprint

**PERSONAL  
CARBON  
CREDITS**

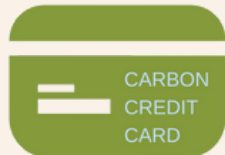


**SOCIAL  
MEDIA  
USAGE**



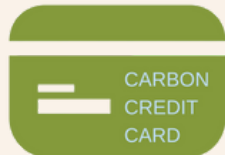
linking this behavior with credits

## PERSONAL CARBON CREDITS

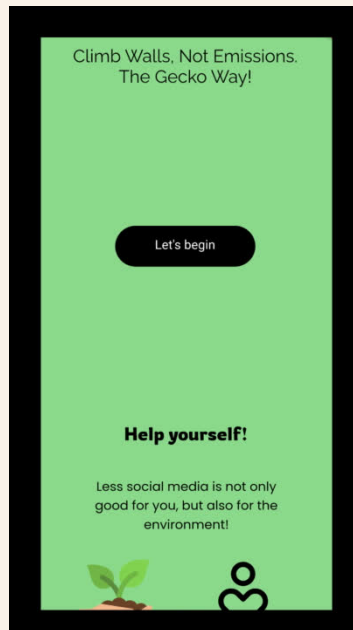


- **MONTHLY FROM THE GOVERNMENT**
- **AT THE END OF THE MONTH: PAY IF OVER-BUDGET**

## PERSONAL CARBON CREDITS



- **MONTHLY FROM THE GOVERNMENT**
- **AT THE END OF THE MONTH: PAY IF OVER-BUDGET**
- **OFFSET TO INCREASE BUDGET**



**DIGITAL  
CARBON  
FOOTPRINT**

**PERSONAL  
CARBON  
CREDITS**

**KEEP TRACK  
OF SOCIAL  
MEDIA USAGE**

**USER-  
FRIENDLY &  
EASY UI**



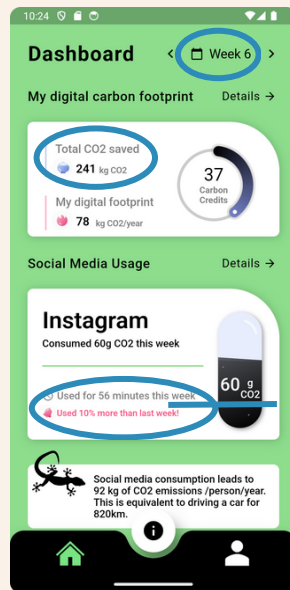


**TOTAL AMOUNT  
OF SAVED CO2**

**TRACK WEEK  
BY WEEK**

**STATS  
COMPARISON**

**FACTS ABOUT  
ENVIRONMENTALISM**



**ALL POWERED BY**












**Google Cloud**

to keep it also all things environmental-friendly

run our application on

## Carbon data across GCP regions

Google Cloud Region	Location	Google CFE%	Grid carbon intensity (gCO <sub>2</sub> eq/kWh)	Google Cloud net operational GHG emissions
europe-north1	Finland	97%	112	0  Low CO <sub>2</sub>
europe-southwest1	Madrid	67%	160	0  Low CO <sub>2</sub>
europe-west1	Belgium	80%	123	0  Low CO <sub>2</sub>
europe-west2	London	85%	166	0  Low CO <sub>2</sub>
europe-west3	Frankfurt	96%	413	0  Low CO <sub>2</sub>
europe-west4	Netherlands	57%	317	0  Low CO <sub>2</sub>
europe-west6	Zurich	85%	118	0  Low CO <sub>2</sub>
europe-west8	Milan	42%	323	0  Low CO <sub>2</sub>
europe-west9	Paris	87%	71	0  Low CO <sub>2</sub>

<https://cloud.google.com/sustainability/region-carbon>

google cloud

net zero



**ENVIRONMENT**

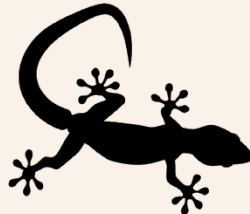


**DIGITAL WELLBEING**



**USER-FRIENDLY**

**STICK TO REALITY.  
THE GECKO WAY.**



**CARBON GECKO**