

Addressing youth climate anxiety with city Climate Action Plan

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1

About myself

Aug 2020: Orange skies over Bay Area compelled me to do something.

Summary: Climate anxiety → Climate action

5+ years of research in climate impact mitigation and climate resilience

FindMySpace: Affordable AI/ML based method to **reduce** idling emissions caused by drivers looking for parking in cities. (Synopsys award, IEEE, Patent, City Recognition)

EcoSat: Affordable AI/ML based method to accurately estimate CO2 emissions from satellite images of power plant chimneys. (Synopsys award, IEEE, City Recognition)

MIT/BWSI: Coursework and project to build most efficient routing of relief supplies in hurricane impacted region.

UCSD/INC: Research intern in a multi-university effort on neuromorphic computing with a goal to build chips that are 2X more energy efficient for AI workloads. (Nature publication pending)

Climate anxiety: Research youth climate anxiety and ways to address.

2

POST MEETING MATERIAL

Youth climate anxiety is a real and growing concern

Study after study shows **>50% of youth** are **highly** concerned about climate change and its impact.

Climate anxiety is characterized by a feeling of **lack of control and helplessness**. It can manifest as a **mental health concern**. symptoms can include **depression**.

California wildfires are especially a huge factor contributing to local youth climate anxiety.

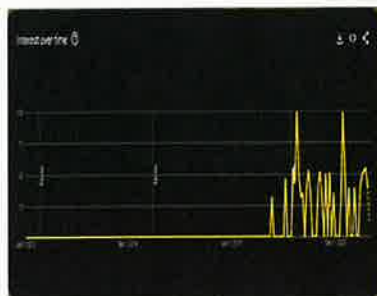


Pictures taken by my cousins

3

Google search trends in California (2010:2025)

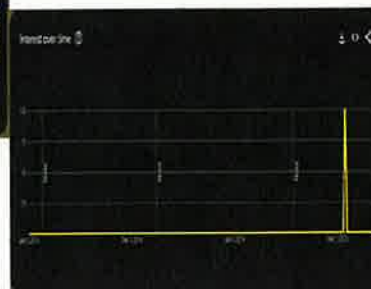
climate anxiety vs. climate disaster vs climate progress



Climate anxiety



Climate disaster



Climate progress

Concern and worry about climate and **climate disaster** far **outweighs** curiosity about **climate progress**

4

Recommended Solutions

1. Take action: reduce impact on climate
2. Connect with nature: nature walks, conservation projects
3. **Balance negative news with climate progress updates. Be real and balanced.**
4. Learn about climate resilience through courses like one offered by UC.
5. Engage with local community

I focused on #3.

California Air Emissions Board(CARB) provides detailed transportation emissions data since 2000. I took some of this data and generated some insights that show the progress we've made.

<https://ww2.arb.ca.gov/our-work/programs/msei/on-road-emfac>

5

Santa Clara county and California have made progress (2000:2024)

Analyzed GHG and population dataset: custom analytics tool



43 out of 58 counties reduced GHG emissions between 2000 and 2024.



54 out of 58 counties reduced per capita GHG emissions between 2000 and 2024

6

Santa Clara county and California have made progress (2000:2024)

Analyzed GHG and population dataset

Year	GHG Emissions	Per person GHG	Population
2000	7,509,119 MT	4.46 MT	1685000
2024	5,724,622 MT	2.97 MT	1926325
Change	-23.76%	-33.4%	+14.32%

Santa Clara county reduced net emissions by 23.7% and per capita GHG by 33% between 2000 and 2024

Year	GHG Emissions	Per person GHG	Population	GDP
2000	165031500 MT	4.87 MT	33871648	1.8 Trillion
2024	153077200 MT	3.88 MT	39431263	4.1 Trillion
Change	-7.2%	-20.3%	+16.41%	+128%

California reduced its net emissions by 7.2% between 2000 and 2024 while GDP increased by > 100%

7

Proposals

1. Sections in green **newsletter around climate progress**
 - a. I already have an Op Ed written with these insights.
2. Update the city's **Climate Action Plan** with a goal for **reducing climate anxiety**.
3. Make an **accessible analytics tool/website** that shows local **climate progress**.
 - a. I am developing a website with the insights I showed and more.

Thank you for listening!

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8