

**OPEN AI:  
REDUCING CARBON  
FOOTPRINT WHILE  
GROWING FOR THE  
FUTURE**



# AI'S IMPACT ON CLIMATE

Data centres produce 2.5-3.7% of global greenhouse gas emissions, which OpenAI is a part of (Columbia Climate School), which contributes to climate change

As AI models grow, the reliance on fossil-fueled electricity accelerates CO<sub>2</sub> emissions, worsening the environmental impact





# WHAT WE CAN DO

Harness renewable energy with solar panels, reduce environmental impact, and optimize data center costs (United Nations) while using AI to improve generating efficiency

Using AI technology, develop eco-friendly AI models that minimize carbon emissions (Science Direct)

Investing in employee development and training ensures ethical AI training and innovation (Lumen)





# THE PROCESS



## 1 Renewable energy

Installing solar panels on data centers reduces costs, supports sustainability, which boosts the brand name



## 2 Employee Training

Invest more time into employee training and feedback to improve AI usage and prompts



## 3 AI Development

Quicken feedback loop in developing AI and assisting in AI training

# CUSTOMER IMPACT

## 1 Transparency

By prioritizing sustainability, we demonstrate and show ethical practices, highlight our goals, ensure transparency, and build customer trust

## 2 Fulfillment

Target customers are satisfied knowing they are supporting sustainable businesses, making a difference

## 3 Better Services

Training employees creates better AI, while AI development improves accuracy and speed



# COMPANY IMPACT

## 1 Cost Savings and Efficiency

Efficient models use less power, and the power used is more efficiently generated

## 2 Enhanced brand appeal

Eco-friendly practices improve brand reputation and attract environmentally conscious consumers and employees

## 3 Long-term Growth

Sustainability creates innovation, helps meet goals, and ensures inexpensive resources for future success



# WORLD IMPACT

## 1 Pollution & Waste Reduction

Lessen the environmental impact by using eco-friendly generating methods and using less electricity

## 2 Ethical Development

Following sustainable trends ensures responsible growth, transparency, and positive societal impact

## 3 Improve Tools

Creates a better tool used to find solutions to current and future problems





# WORKS CITED

**Cho, Renee. "AI's Growing Carbon Footprint." State of the Planet, Columbia Climate School, 9 June 2023, [news.climate.columbia.edu/2023/06/09/ai-growing-carbon-footprint/](https://news.climate.columbia.edu/2023/06/09/ai-growing-carbon-footprint/).**

**Franklin, Wade. "Secure Your Future: The Benefits of Ethical AI Governance." Lumen Blog, 21 Nov. 2024, [blog.lumen.com/secure-your-future-the-benefits-of-ethical-ai-governance/](https://blog.lumen.com/secure-your-future-the-benefits-of-ethical-ai-governance/).**

**United Nations. "Renewable Energy – Powering a Safer Future." United Nations, United Nations, [www.un.org/en/climatechange/raising-ambition/renewable-energy](https://www.un.org/en/climatechange/raising-ambition/renewable-energy).**

**Gaur, Loveleen, et al. "Artificial Intelligence for Carbon Emissions Using System of Systems Theory." Ecological Informatics, vol. 76, 1 Sept. 2023, p. 102165, [www.sciencedirect.com/science/article/abs/pii/S1574954123001942](https://www.sciencedirect.com/science/article/abs/pii/S1574954123001942), <https://doi.org/10.1016/j.ecoinf.2023.102165>.**