## Powerpuff Girls: Battle Against the Blazing Crisis!

Tagline: Fighting Fire, Fighting Pollution, Fighting for Earth Group Members: Breeha Qasim, Ashbah Faisal, Murtaza Ali and Ehtisham Ali Khan

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Ghaffarzadegan N. A cyclical wildfire pattern as the outcome of a coupled human natural system. Sci Rep 12, 5280 (2022)

[2] Collins KM, Penman TD, Price OF. Some Wildfire Ignition Causes Pose More Risk of Destroying Houses than Others. PLoS One. 2016 Sep 6:11(9)

[3] Ayars, J., Kramer, H. A., & Jones, G. M. (2023). The 2020 California megafires and their impacts on wildlife habitat. Proceedings of the National Academy of Sciences of the United States of America, 120(48). e2312909120

[4] Manuel Bailera, Pilar Lisbona, Begoña Peña, Luis M. Romeo, A review on CO2 mitigation in the Iron and Steel industry through Power to X processes, Journal of CO2 Utilization. Volume 46. 101456. ISSN 2212-9820





Wildfires are becoming a more frequent and severe threat due to the intensifying effects of climate change. Increasing temperatures, deforestation, and emissions from industry are worsening fire dangers, affecting ecosystems and human communities. [1] All these causes for wildfire are caused by humans and it is troubling humans only indicating a cycle betweer



you're I won't let you unless human Ecosystems can be significantly altered by wildfires, impacting As a result of climate change, wildfires are occurring more often and with greater intensity. This leads to a growing risk of destruction for cities, biodiversity and animal populations. Many species may be putting residences and businesses in danger. The destruction caused by such threatened by the increased frequency and intensity of fires fires not only disrupts ecosystems but also forces communities to relocate, resulting from climate change, which can cause habitat loss and



The industries are one of the largest CO2 emitters among carbon-intensive sectors, for example iron and steel industries are responsible for approximately 7–9% of global CO2 emissions. [4] These human activities like burning fossil fuels contribute to the increased intensity and frequency of wildfires [5], by releasing greenhouse gases that adds up to climate change. This results into hotter and drier conditions that make wildfires more likely to occur and spread.



aggravating the socio-economic implications of these incidents. [2]



long lasting ecological effects. [3]

..to prevent future disasters, we must take action: incorporate sustainable land management, reduce industrial emissions, and enhance fire prevention policies. [6] We can also use strategic stripping between trees to prevent wildfires from spreading Climate change is increasing wildfire risks, and it's up to all of us to protect our planet!



Scene 4 (Use of AI): I acknowledge the use of AI technology to generate the images for the comic strip. I entered the following prompt: "Create a comic style scene showing a city with buildings on fire, people evacuating, and Blossom fighting a fire monster." I used the output to depict a dramatic scene of wildfires affecting the city, with Blossom heroically fighting the wildfire monster to protect the city and its citizens.

Scene 5 (Use of AI): I acknowledge the use of AI technology to generate the images for the comic strip. I entered the following prompt: "Create a comic scene showing Bubbles from Powerpuff Girls rescuing wildlife from a wildfire." I used the output to highlight the role of Bubbles in saving animals during a wildfire, showing her compassion and heroism in protecting wildlife from the devastation caused by the fire.

[5] Jones, M. W., Veraverbeke, S., Andela, N., Doerr S. H., Kolden, C., Mataveli, G., Pettinari, M. L., Ouéré, C. L., Rosan, T. M., Van Der Werf, G. R., Van Wees, D., & Abatzoglou, J. T. (2024). Global rise in forest fire emissions linked to climate change in the extratropics. Science, 386(6719)

[6] Jones, M. W., Abatzoglou, J. T., Veraverbeke, S., Andela, N., Lasslop, G., Forkel, M., Smith A. J. P., Burton, C., Betts, R. A., Van Der Werf, G R., Sitch, S., Canadell, J. G. Santín, C., Kolden, C., Doerr S. H., & Quéré, C. L. (2022), Global and regional trends and drivers of fire under climate change, Reviews of Geophysics,