



Work from Home Models Predicted to Cause 34.3 Million Tons of Greenhouse Gas Emissions

Alliance Virtual Offices





Work from Home Models Predicted to Cause 34.3 Million Tons of Greenhouse Gas Emissions Study Methodology

The goal of this analysis was to investigate the ways in which working from home impacts the environment.

Extant literature was reviewed for relevant content. Findings were presented in the linked literature review article with references presented in this document.

The literature review was conducted by searching out both scholarly and popular sources on remote versus office work. Research topics were sought out regarding emissions, carbon footprint, waste management, employee wellbeing, and any positive or negative impacts to businesses.

This study is highly relevant, as businesses, governments, and individuals worldwide are seeking to lessen their environmental impact to slow climate change.



Work from Home Models Predicted to Cause 34.3 Million Tons of Greenhouse Gas Emissions References

- Arun, T. (2021). Understanding the environmental benefits of remote work. Zoho. <u>https://www.zoho.com/people/hrknowledgehive/Understanding-</u> <u>the-environmental-benefits-of-remote-work.html</u>
- Bernstein, A. (2021). Center for climate, health, and the global environment. Harvard T. H. Chan School of Public Health. Retrieved 8/9/2021 from <u>https://www.hsph.harvard.edu/c-change/subtopics</u> /coronavirus-and-climate-change/
- Chen, J. (2020). *Is remote work greener? We calculated Buffer's carbon footprint to find out*. Buffer. <u>https://buffer.com/resources/ carbon-footprint/</u>
- Citrix x Quartz Creative. (2020). What if remote work is our best hope to stop climate catastrophe? Retrieved 8/13/2021 from <u>https://qz.</u> <u>com/1923485/what-if-remote-work-is-our-best-hope-to-stop-climatecatastrophe/</u>
- Cone Communications. (2017). CSR study. <u>https://www.conecomm.</u> <u>com/2017-cone-communications-csr-study-pdf</u>
- CoPilot. (2020). Cities that gained the most time back from their commutes. <u>https://www.copilotsearch.com/posts/cities-that-gained-the-most-time-back-from-their-commutes/</u>
- Crabtree, S. (2010). Well-being lower among workers with long commutes: Back pain, fatigue, worry all increase with time spent commuting. Gallup. <u>https://news.gallup.com/poll/142142/ wellbeing-lower-among-workers-long-commutes.aspx</u>



- Cruickshank, A. (2020). COVID-19 pandemic shows telecommuting can help fight climate change. Scientific American. <u>https://www.</u> <u>scientificamerican.com/article/covid-19-pandemic-shows-telecommutingcan-help-fight-climate-change/</u>
- Demsas, J. (2021). Covid-19 caused a recession. So why did the housing market boom? Vox. <u>https://www.vox.com/22264268/covid-19- housinginsecurity-housing-prices-mortgage-rates-pandemic-zoning-supplydemand</u>
- EPIC: Energy Policy Institute at the University of Chicago. (2021). Impact of COVID-19 on electricity consumption and particulate pollution: United States. Retrieved 8/13/2021 from <u>https://epic.uchicago.edu/area-of-focus/covid-19/</u>
- Gössling, S. & Humpe, A. (2020). The global scale, distribution and growth of aviation: Implications for climate change. *Global Environmental Change*. 65(2020).
- Green Car Congress. (2008). Sun Microsystems study finds open work program reduces energy consumption, saves time and money. <u>https://www.greencarcongress.com/2008/06/sun-microsystem.html</u>
- inRiver. (2019). *Sustainability, transparency, and the voice of UK buyers*. <u>https://www.inriver.com/resources/sustainability/</u>
- Masanet E., Shehabi, A., Lei, N., Smith, S., & Koomey, J. (2020). Recalibrating global data center energy-use estimates. *Science*, *3*67(6481). 984-986.
- Mazareanu, E. (2021). Carbon dioxide emissions from commercial aviation worldwide from 2004 to 2021. Statista. <u>https://www.</u> <u>statista.com/statistics/1186820/co2-emissions-commercial-aviation-</u> <u>worldwide/</u>
- Obringer, R., Rachunok, B., Maia-Silva, D., Arbabzadeh, M., Nateghi, R., & Madani, K. (2021). The overlooked environmental footprint of increasing internet use. *Resources, Conservation and Recycling, 167*(105389).
- Onley, D. S. (2015). How telecommuting helps the environment. Society for Human Resource Managements. <u>https://www.shrm.org/</u> <u>resourcesandtools/hr-topics/technology/pages/how-telecommuting-</u> <u>helps-the-environment.aspx</u>



- Recover USA. (2017). Industrial waste management: Waste stream statistics. https://recoverusa.com/industrial-waste-management/
- Reynolds, B. W. (2021). The environmental impacts of remote work: Stats and benefits. Flexjobs. Retrieved 8/13/2021 from https://www.flexjobs.com/blog/post/telecommuting-sustainability-howtelecommuting-is-a-green-job/
- Statista Research Department. (2021). Resident Population in the United States in 2020, by Generation. https://www.statista.com/statistics/ 797321/us-population-by-generation/
- Thompson, J. (2021). The Impact of Remote Work: A Look at Telecommuting and Business Waste Management. Waste Advantage Magazine. https://wasteadvantagemag.com/ the-impact-of-remote-worka-look-at-telecommuting-and-business-waste-management/
- Waste 360. (2020). Weathering the essential: A look inside the COVID-19 impact on the waste and recycling industry. https://www.waste360 .com/business/weathering-essential-look-inside-covid-19-impact-wasteand-recycling-industry
- Wild, M. (2017). Is renting or buying a home more eco-friendly? Earth Talk. https://earthtalk.org/renting-or-buying-home-eco-friendly/