TELEPRESENCE

As the Covid-19 pandemic has shown, it is possible for many people whose jobs take place primarily at a desk to work from anywhere. It is predicted that telecommuting will likely remain common even after the pandemic subsides.¹ People have also adapted to socializing, learning, worshipping, and even conducting medical appointments from their homes via video conferencing.

Economists estimate that 37% of jobs in the U.S. can be done full-time from home.² Telecommuting has many side benefits, including cost savings from avoided travel, cost savings to employers as a result of reduced building costs, time savings for employees who no longer have to commute, and enhanced interpersonal connection across geographies. Many employees experience a boost in productivity when working from home, but this is not the case for everyone, and experts say that offering employees a choice of working remotely or in an office is likely the best approach.³

The GHG emission reductions benefits of teleworking vary. Remote work shifts the use of electricity and heating/cooling emissions from offices to homes; the implications of this shift must be taken into account when quantifying climate gains.⁴ The GHG emissions reduction potential of teleworking generally depends on how such practices alter the mix of energy use (e.g., transportation energy versus stationary energy) undertaken for work purposes and the mix of energy resources that are prevalent a particular area (e.g., clean/renewable versus fossil energy). Teleworking is likely to have the biggest climate-related benefits in areas where most employees tend to commute by car. Teleworking may have fewer benefits, and could even increase GHG emissions, in areas where residential electricity is powered by fossil fuels, especially coal. Experts point to Los Angeles as an example of an area with a lot to gain from telecommuting: prior to Covid-19, 70% of people employed in the city drove alone to work, and the area's mild climate means that homes do not require much energy for heating and cooling.⁵

If the option to telecommute leads employees to move further away from cities in search of lower costs of living, it can increase GHG emissions and other environmental impacts associated

¹ Guyot, Katherine and Sawhill, Isabel V. (April 6, 2020). "Telecommuting will likely continue long after the pandemic." *Brookings*. https://www.brookings.edu/blog/up-front/2020/04/06/telecommuting-will-likely-continue-long-after-the-pandemic/

² Dingel, Daniel and Neiman, Brent (2020). *How many jobs can be done at home?* National Bureau of Economic Research. https://www.nber.org/system/files/working_papers/w26948/w26948.pdf

³ Guyot, Katherine and Sawhill, Isabel V. (April 6, 2020). "Telecommuting will likely continue long after the pandemic." *Brookings*. https://www.brookings.edu/blog/up-front/2020/04/06/telecommuting-will-likely-continue-long-after-the-pandemic/

⁴ Holder, Sarah (March 29, 2021). "The environmental implications of the return to the office." *Bloomberg City Lab*. https://www.bloomberg.com/news/articles/2021-03-29/is-telecommuting-really-greener-it-depends

⁵ Cruickchank, Ainslie (July 22, 2020). "COVID pandemic-19 shows telecommuting can help fight climate change." *Scientific American*. https://www.scientificamerican.com/article/covid-19-pandemic-shows-telecommuting-can-help-fight-climate-change/

with urban sprawl. Termed "the donut effect," this pattern has been shown to occur during Covid-19 in the 12 densest U.S. metropolitan areas.⁶ Although the emissions benefits of telecommuting may vary, one area where remote interaction can certainly make a big contribution to GHG emission reductions is when teleconferencing is used a substitute for flying.⁷

Additional investments in broadband internet access can help ensure that everyone has the ability to work from home if they choose. For employees who do better in an office environment but wish to avoid long commutes, co-working spaces close to home provide another option.

- Fishery friendliness: Telepresence is a fishery friendly practice without any likely impacts to fishery ecosystems and resources.
- Co-benefits: Telepresence can help commuters save money, and can reduce traffic congestion.
- Environmental externalities: Telepresence can improve air quality by taking cars off the road.
- Policy catalysts: Telepresence can be promoted through expansion of broadband infrastructure and incentives to employers and employees.
- More information:
 - o <u>Drawdown: Telepresence</u>
 - <u>Demsas, Jerusalem (January 4, 2022). "3 ways remote work could remake</u> <u>America." Vox.</u>
 - <u>German, Ben (May 6, 2020): "The push for post-coronavirus telework to help</u> <u>fight climate change." Axios.</u>

Continue reading at <u>https://fisheryfriendlyclimateaction.org/solutions</u>

⁶ Ramani, Arjun and Bloom, Nicholas (May 2021). *The donut effect of Covid-19 on cities*. National Bureau of

Economic Research. https://www.nber.org/system/files/working_papers/w28876/w28876.pdf

⁷ Demsas, Jerusalem (January 4, 2022). "3 ways remote work could remake America." *Vox.* https://www.vox.com/22839563/remote-work-climate-change-house-prices-cities