

## **Research Strand: Environmental Impact of Immersive Technology**

This is a comprehensive list of references exploring research into the environmental impact of Immersive Technology. This is by no means an exhaustive list but it gives an indication of the many references considered by specialists and participants throughout the Accelerate project. Sources are organised alphabetically.

Abbas, Ali E. (ed.) (2020). Next-generation ethics: engineering a better society. New York, NY: Cambridge University Press.

Bayar, Y. (2021). Handbook of research on Institutional, economic, and social impacts of globalization and liberalization. Hershey, Pennsylvania (701 E. Chocolate Avenue, Hershey, Pennsylvania, 17033, USA): IGI Global.

Fox, J., J. McKnight, Y. Sun, D. Maung, and R. Crawfis (2020). Using a serious game to communicate risk and minimise psychological distance regarding environmental pollution. Telematics and Informatics 46, 101320.

Gabrys, J. (2011). Digital Rubbish: A Natural History of Electronics. University of Michigan Press.

Gere, C. (2006). Art in Real Time. In Art, Time and Technology. Oxford

Gere, C. (2009) Digital Culture. [edition unavailable]. Reaktion Books.

Glasson, J. and Riki Therivel (2019). Introduction to environmental impact assessment. New York: Routledge.

Halit Eren MBA (2022). Impact of Technology on Environment: Climate Change and Instrumentation. Xlibris AU

Heinberg, R. and Lerch, D. (2010). The post carbon reader : managing the 21st century's sustainability crises. Healdsburg, Calif.: Watershed Media ; Santa Rosa, Calif.

Nelson, K. M., E. Anggraini, and A. Schluter (2020, 04). "Virtual reality as a tool for environmental conservation and fundraising. PLOS ONE 15(4)

Voinea, C.L., Roijakkers, N. and Ooms, W. (2021). Sustainable Innovation. Routledge.

## **Journal Articles**

Andrae, A.S.G. (2017). Life Cycle Assessment of a Virtual Reality Device. Challenges, 8(2), p.15. doi:10.3390/challe8020015.

Breves, P. and Schramm, H. (2021). Bridging psychological distance: The impact of immersive media on distant and proximal environmental issues. Computers in Human Behavior, 115, p.106606. doi:10.1016/j.chb.2020.106606.



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Buljat, B. Environmental policy and immersive technologies. Journal of Behavioral Economics for Policy, Vol. 6, Special Issue 1, 41-47, 2022

Chen, X. *et al.* (2021) <u>Implications of virtual reality on environmental sustainability in</u> <u>manufacturing industry: A case study</u> *Procedia CIRP*, 104, pp. 464–469. Available at: https://doi.org/10.1016/j.procir.2021.11.078.

El Gamal, M., Wilson, A. E., Schuett, K., & Courneya, D. (2014, April). What do people mean by going green? Understanding lay perceptions of pro-environmental action. Paper presented at the Earth Day Colloquium, University of Western Ontario, London, ON. Fauville, G., J. N. Bailenson, and A. C. M. Queiroz (2020). Chapter 5 Virtual reality as a promising tool to promote climate change awareness, pp. 91–108.

Fiore, S. M., G. Harrison, C. E. Hughes, and E. E. Rutstrm (2009). Virtual experiments and environmental policy. Journal of Environmental Economics and Management 57(1), 65–86. Husidic, N. (2022) *Immersive technology applications in the museum environment Challenges and opportunities* dissertation.

Keilbach, Judith; Pabiś-Orzeszyna, Michał: <u>Green(ing) Media (Studies).</u> In: *NECSUS\_European Journal of Media Studies*. #Futures, Jg. 10 (2021-12-13), Nr. 2, S. 105–112. DOI:

Marks, L.U. (2020). Let's Deal with the Carbon Footprint of Streaming Media. Afterimage, 47(2), pp.46–52. doi:10.1525/aft.2020.472009

Mirković, I.B. (2010) <u>*Carbon Footprint - Application in Graphic Art Technology*</u> - dissertation. Sneed, J.C., Deringer, S.A. and Hanley, A. (2021). Nature Connection and 360-Degree Video: An Exploratory Study With Immersive Technology. Journal of Experiential Education, p.105382592110015. doi:10.1177/10538259211001568.

Soliman, Monica & Peetz, Johanna & Davydenko, Mariya. (2017). The Impact of Immersive Technology on Nature Relatedness and Pro-Environmental Behavior. Journal of Media Psychology. 29. 8-17. 10.1027/1864-1105/a000213.

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