University of Notre Dame

Department of Electrical Engineering

**MATLAB Simulink Challenge**

**Techno-Economic Assessment of Green Hydrogen Production**

Evaristo Campos de Abreu Ribeiro

August 2025

**Index**

1. Introduction
2. Methodology
3. Key Assumptions
4. Results
5. Discussion
6. Conclusion

**Introduction**

Aaa

**Bibliography**

[1] Solargis, “Solar resource maps & GIS data for 200+ countries,” [Online]. Available: https://solargis.com/resources/free-maps-and-gis-data (accessed Aug. 1, 2025).

[2] Solargis s.r.o., “Global Solar Atlas 2.0 Technical Report,” prepared for the World Bank, Bratislava, Slovakia, Nov. 2019. [Online]. Available: https://documents1.worldbank.org/curated/en/529431592893043403/pdf/Global-Solar-Atlas-2-0-Technical-Report.pdf (accessed Aug. 1, 2025).

[3] World Bank Group, “Global Solar Atlas,” [Online]. Available: https://globalsolaratlas.info (accessed Aug. 1, 2025).

[4] World Population Review, “Bottled Water Cost by Country 2025,” WorldPopulationReview.com. https://worldpopulationreview.com/country-rankings/bottled-water-cost-by-country (accessed Jul. 30, 2025).

[5] World Population Review, “Cost of Electricity by Country 2025,” WorldPopulationReview.com. https://worldpopulationreview.com/country-rankings/cost-of-electricity-by-country (accessed Jul. 30, 2025).

[6] J. V. C. Silva, “How solar panels are made,” YouTube, Jul. 30, 2025. [Online]. Available: https://www.youtube.com/watch?v=pBWKnPo6Q4k (accessed Jul. 30, 2025).

[7] Green Energy Explained, “Solar energy basics,” YouTube, Jul. 30, 2025. [Online]. Available: https://www.youtube.com/watch?v=cpttz8Q7jww (accessed Jul. 30, 2025).

[8] Global Water Intelligence (GWI), "Water Tariff Survey," [Online]. Available: https://www.globalwaterintel.com/documents/tariff-survey-2024 (accessed Aug. 1, 2025).