

## References

1. A guide for carbon footprint assessment (2016), Climate Change Secretariat Ministry of Mahaweli Development and Environment, Sri Lanka.
2. Andrews J. and Envirocare T. (2021), Carbon accounting guidelines for wastewater treatment, Water New Zealand.
3. Arceivala S. J. (1981), Wastewater treatment and disposal, Engineering and ecology in pollution control, Marcel Dekker, Inc, New York.
4. Arceivala S. J. (2008), Wastewater treatment for pollution control and reuse (3<sup>rd</sup> edition).
5. Arthur J.P. (1983), Notes on the design and operation of waste stabilization ponds in warm climates of developing countries. The World Bank, Washington. <http://www-wds>, accessed 18 Oct 2013.
6. Badaza M. (2023), Waste Stabilization Ponds | PDF | Systems Ecology, Scribd. <https://www.scribd.com/presentation/4-Waste-Stabiliz>.
7. BAHY Y., AKHSSAS A., KHAMAR M., BAHY L., and SOUIDI H. (2020), Estimation of greenhouse gas (GHG) emissions from natural lagoon wastewater treatment plant, Case of Ain Taoujdate-Morocco. Civil Engineering and Environment Laboratory (LGCE), *ResearchGate*, DOI:10.1051/e3sconf/202015001012.
8. Butler E., Yung-Tse Hung, Ahmad M. S. A., Ruth Yu-Li Yeh, Robert Lian-Huey Liu, and Yen-Pei Fu (2017), Oxidation Pond for municipal wastewater treatment. *Apply Water Sci* (2017) 7, pages 31–51 DOI 10.1007/s13201-015-0285-z.
9. Cakir F. Y. and Stenstrom M. K. (2005), Greenhouse gas production: a comparison between aerobic and anaerobic wastewater treatment technology. *Water Research*, Volume 39, pages 4197-4203. <https://doi.org/10.1016/j.watres.2005.07.042>
10. Campos J. L., Valenzuela-Heredia D., Pedrouso A., Val del Río A., Belmonte M., and Mosquera-Corral A. (2016), Review Article Greenhouse Gases Emissions from Wastewater Treatment Plants: Minimization, Treatment, and Prevention. *Hindawi Publishing Corporation, Journal of Chemistry*, Volume 2016, Article ID 3796352, 12 pages. <http://dx.doi.org/10.1155/2016/3796352>
11. Chai C., Yanling Yu, Feng Y., and Wong M. S. (2015), Carbon footprint Analyses of Mainstream Wastewater Treatment Technologies under Different Sludge Treatment Scenarios in China. *Water*, 7, pages 918-938. doi:10.3390/w7030918.
12. Chandran K. (2010), Greenhouse Nitrogen Emission from Wastewater Treatment Operations: Interim Report. Water Environment Research Foundation (WERF), Report No. U4R07a.
13. Chandran K. (2013), Greenhouse Nitrogen Emissions from Wastewater Treatment Operation: Phase I, *ResearchGate*. DOI: <https://doi.org/10.2166/9781780404813>.

14. Choubert J. M., Marquot A., Stricker A. E., Racault Y., Gillot S., and Héduit A. (2009), Anoxic and aerobic values for the yield coefficient of the heterotrophic biomass: determination at full-scale plants and consequences on simulations. *Water SA* vol.35 n.1 Pretoria. <http://www.scielo.org.za> > scielo > pid=S1816-7950200.
15. Das S. (2011), University of Windsor, Estimation of Greenhouse Gases Emissions from Biological Wastewater Treatment Plants at Windsor. *Electronic Theses and Dissertations*. <https://scholar.uwindsor.ca/etd/77>.
16. De Haas D. and Andrews J. (2022), Nitrous oxide emissions from wastewater treatment - Revisiting the IPCC 2019 refinement guidelines. *Environmental Challenges*, New Zealand Volume 8, 100557 <https://doi.org/10.1016/j.envc.2022.100557>.
17. El-Fadel M. and Massoud M. (2001), Methane Emissions from Wastewater Management. *Environmental Pollution* 114 (2001), pages 177-185. <https://journals.sagepub.com> > doi
18. U.S. EPA. 2016. Climate change indicators in the United States, 2016. <https://www.epa.gov/climate-indicators/downloads-indicators-report>.
19. Fernando J. T. Q. (2011), Waste Stabilization Ponds for Waste Water Treatment, Anaerobical pond. *Iowa State University*, pages 23.1–23.11. <https://home.engineering.iastate.edu> > tge > Ferna.
20. FOOD BALANCE SHEET (2013-2017), Department of Census and Statistics, Ministry of Economic Reform and Public Distribution, Sri Lanka.
21. Forster P., Ramaswamy V., Artaxo P., and Berntsen T. (2007), Changes in Atmospheric Constituents and in Radiative Forcing. ResearchGate, the Physical Science Basis. Cambridge, United Kingdom and New York, NY, USA, Cambridge University Press. <https://www.researchgate.net> > publication > 22498838.
22. Glaz P., Bartosiewicz M., Laurion I., Reichwaldt E. S., Maranger R., and Ghadouani A. (2016), Greenhouse gas emissions from waste stabilization ponds in Western Australia and Quebec (Canada), IWA page 19. DOI: [10.1016/j.watres.2016.05.060](https://doi.org/10.1016/j.watres.2016.05.060).
23. Griffith D.R., Barnes R.T., Raymond P.A. (2009), Inputs of fossil carbon from wastewater treatment plants to U.S. rivers and oceans. *Environ. Sci. Technol.* 2009, 43, pages 5647–5651. doi: [10.1021/es9004043](https://doi.org/10.1021/es9004043).
24. Hernandez-Paniagua I.Y., Ramirez-Vargas R., Ramos-Gomez M.S., Dendooven L., Avelar-Gonzalez F.J., and Thalasso F. (2014), Greenhouse gas emissions from stabilization ponds in subtropical climates. *Environmental Technology*, vol 35, pages 727–734. <http://dx.doi.org/10.1080/09593330.2013.848910>. 27 December 2014.
25. Inventory of U.S. (1990-2018), Greenhouse Gas Emissions and Sinks, (PDF). US Environmental Protection Agency. 2020-04-13. Archived (PDF) from the original on 2020-04-14. Retrieved 2020-07-01.

26. IPCC (2006), 2006 IPCC (Intergovernmental Panel on Climate Change) *Guidelines for National Greenhouse Gas Inventories*, V5, cha 6. Waste. Report and associated Excel waste model <http://www.ipcc-nggip.iges.or.jp/public/2006gl/vol5.html>.
27. IPCC Fourth Assessment Report (2007)
28. IPCC (2014), *Climate Change* (Leo Meyer Rajendra and K. Pachauri). <https://www.ipcc.ch>.
29. IPCC (2019), 2019 Refinement to the 2006 Intergovernmental Panel on Climate Change (IPCC). 2019 IPCC Guidelines for National Greenhouse Gas Inventories, V5, cha 6. Waste. Report and associated Excel waste model <https://www.ipcc-nggip.iges.or.jp/public/vol5>
30. ISO 14064-1:2019: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.
31. Kayombo S., Mbwette T.S.A., Katima J.H.Y., Ladegaard N., and Jorgensen S.E. (2010), Waste stabilization ponds and constructed wetland design manual, pages 16,17. UNEP International Technology Center. [https://sswm.info/files/reference\\_attachments](https://sswm.info/files/reference_attachments).
32. Kyoto Protocol (1997), Conference of the Parties (1998). "Methodological issues related to the Kyoto Protocol". Report of the Conference of the Parties on its third session, UNFCCC.
33. Kyung D., Kim M., Chang J., and Lee W. (2015), Estimation of greenhouse gas emissions from a hybrid wastewater treatment plant, pages 117-123, *Journal of Cleaner Production*. *Science direct.com*. <https://www.sciencedirect.com/article/abs/pii>
34. Mara D, Pearson H, (1998), Design manual for waste stabilization ponds in Mediterranean countries. *Lagoon Technology International*, ISBN: 0951986929. <https://www.researchgate.net>
35. Maktabifard M., Alexis Awaitey, Elina Merta, Henri Haimi, Ewa Zaborowska, Anna Mikola, and Jacek Małkinia (2022), Comprehensive evaluation of the carbon footprint components of wastewater treatment plants located in the Baltic Sea region. *Science of the Total Environment* 806 (2022) 150436. <https://www.sciencedirect.com/science/article/pii>
36. Maktabifard M., Hussein E., Al-Hazmi, Paulina Szulc, Mohammad Mousavizadegan, Xianbao Xu, Ewa Zaborowska, Xiang Li d, and Jacek Małkinia (2023), Net-zero carbon condition in wastewater treatment plants: A systematic review of mitigation strategies and challenges. *Renewable and Sustainable Energy Reviews*, Volume 185, October 2023, 113638. <https://doi.org/10.1016/j.rser.2023.113638>.
37. Metcalf and Eddy (2003), *Wastewater Engineering: Treatment and Reuse*. McGraw-Hill, New York.
38. Monteith H. D., Sahely, H. R., MacLean, H. L., and Bagley, D. M. (2005), A rational procedure for estimation of greenhouse-gas emissions from municipal

- wastewater treatment plants. *Water Environment Research. Water Environment Research*, 77(4), pages 390-403. DOI:[10.2175/106143005X51978](https://doi.org/10.2175/106143005X51978)
39. Muller A., Wentzel M.C., Loewenthal R.E., and Ekama G.A. (2003), Heterotroph anoxic yield in anoxic aerobic activated sludge systems treating municipal wastewater. *Water Research* 37(10), pages 2435–2441. DOI:[10.1016/S0043-1354\(03\)00015-0](https://doi.org/10.1016/S0043-1354(03)00015-0).
  40. Munz G., Gori R., Cammil L., and Lubello C. (2008), Characterization of tannery wastewater and biomass in a membrane bioreactor using respirometry analysis. *Bioresource Technology* 99(19), pages 8612–8618. DOI:[10.1016/j.biortech.2008.04.004](https://doi.org/10.1016/j.biortech.2008.04.004).
  41. Orner K., Thor-Axel Stenstrom and Mihelcic J. (2021), Global Water Pathogen Project Part Four. Management of Risk from Excreta and Wastewater composting and dry desiccating toilets (latrines). ResearchGate. [https://www.researchgate.net > Home > Projection](https://www.researchgate.net/Home/Projection).
  42. Paraviccini V., Svardal K., and Krampe J. (2016), Greenhouse gas emissions from wastewater treatment plants. *Science Direct, Energy Procedia* 97, pages 246 – 253, DOI:[10.1016/j.egypro.2016.10.067](https://doi.org/10.1016/j.egypro.2016.10.067).
  43. Realá A., Garcia-Martinez A. M., Pidre J. R., Coello M. D., and Aragon C. A. (2017), Environmental assessment of two small-scale wastewater treatment systems: *Water Practice & Technology*, Vol 12 No 3 pages 549-556. doi: [10.2166/wpt.2017.066](https://doi.org/10.2166/wpt.2017.066)
  44. Ramadan H. and Ponce V. M. (2023), Design and Performance of Waste Stabilization Ponds. San Diego State University, Version 050203. [https://ponce.sdsu.edu > ramadan > stabilizationponds](https://ponce.sdsu.edu/ramadan/stabilizationponds)
  45. Research Triangle International (RTI) (2010), DRAFT report for Greenhouse Gas Emissions Estimation Methodologies for Biogenic Emissions from Selected Source Categories. United States Environmental Protection Agency (USEPA) (.gov), Chapter 3. [https://www3.epa.gov > ttncchie1 > efpac > ghg](https://www3.epa.gov/ttnchie1/efpac/ghg).
  46. Shahabadi, M. B. (2008), Estimation of greenhouse gas emissions from industrial wastewater treatment plants. MASc. Thesis. Concordia University. Montreal, Quebec, Canada. Concordia University. <https://spectrum.library.concordia.ca>
  47. Silva J. P., Caicedo F., Lubberding H. J., Peña M. R., and Gijzen H. J. (2016), GHG emissions from algal facultative ponds under tropical conditions. *11<sup>th</sup> IWA Specialist Group Conference on Wastewater Pond Technology*, University of Leeds. [https://www.aquaenviro.co.uk > uploads > 2017/05](https://www.aquaenviro.co.uk/uploads/2017/05).
  48. Singh S. K. and Gupta D. (2012), Greenhouse Gas Emissions from Wastewater Treatment Plants: A Case Study of Noida. *Journal of Water Sustainability*, Volume 2, pages 131–139. <https://www.researchgate.net/publication/267554945>
  49. Singh V., Harish C. Phuleria and Munish K. Chandel (2017), Estimation of greenhouse gas emissions from municipal wastewater treatment systems in India. *Water and Environment Journal*, Print ISSN pages 1747-6585. [https://onlinelibrary.wiley.com > doi > wej](https://onlinelibrary.wiley.com/doi/wej)

50. Sri Lanka energy balance 2020, Sustainable Energy Authority.
51. Testing 100-year global warming potentials: Impacts on compliance costs and abatement profile, "Climatic Change" Retrieved March 16, 2018.
52. Vijayan G., Saravanane R., and Sundararajan T. (2017), Carbon Footprint Analyses of Wastewater Treatment Systems in Puducherry. *Computational Water, Energy, and Environmental Engineering*, pages 281-303. <http://www.scirp.org/journal/cweee>.
53. Wang D., Weili Ye, Guangxue Wu, Ruoqi Li, Yuru Guan, Zhang W., Wang J., Shan Y., and Hubacek K. (2022), Greenhouse gas emissions from municipal wastewater treatment facilities in China from 2006 to 2019. *Review Article number: 317*. <https://www.nature.com/scientific-data/data-descriptors>.
54. Yapıcıoğlu P. (2020), Minimization of greenhouse gas emissions from extended aeration activated sludge process. *Water Practice & Technology*, Vol 16 No 1 pages 96-107. doi: [10.2166/wpt.2020.100](https://doi.org/10.2166/wpt.2020.100)
55. Zhan X., Zhenhu Hu and Guangxue Wu (2018), Greenhouse Gas Emission and Mitigation in Municipal Wastewater Treatment Plants, 27, IWA Publishing. <https://doi.org/10.2166/9781780406312>
56. Zimmo O. (2003), Nitrogen Transformation and Removal Mechanisms in Algal and Duckweed Waste Stabilization Ponds pages 11, A. A. Balkema Publishers, Lisse. <https://edepot.wur.nl>.