



**A STUDY OF EMISSION INVENTORY OF CO₂e IN
MANUFACTURING PRINTING COMPANY
(CASE STUDY: PT. XYZ)**

UNDERGRADUATE FINAL PROJECT

**Submitted as one of the requirements to obtain
Sarjana Teknik**

By:

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**FACULTY OF ENGINEERING
ENVIRONMENTAL ENGINEERING STUDY PROGRAM
CIKARANG
AUGUST 2023**

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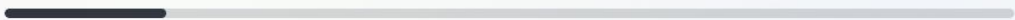
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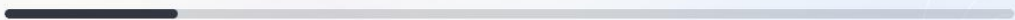
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ABSTRACT

As one of Indonesia's printing companies, PT XYZ strives to meet consumer demand by producing as many as they can. They consistently give us large quantities of completed goods each day along with huge emissions and trash. Looking at that situation, it is clear that the industrial process might have an effect on the environment. In light of this, the goal of this study is to determine and estimate the possible effects of emissions from the energy supply on the printing manufacturing process and environmental impact on land based on volatile organic compound materials. The method of measuring the amount of emissions is called emission inventory. ReCiPe 2016 is a method that will use to analyse the impact through manual calculation based on Green House Gases Protocol. Based on the above data it can be concluded that the total emissions produced by PT. XYZ in 2021 and 2022 are 1,616 tons of CO₂e and 1,722 tons of CO₂e based on electricity purchases paid annually by PT. XYZ. However, calculations from the emission inventory modeling carried out show that the total emissions produced by PT. XYZ in 2021 and 2022 is 1,405 tons of CO₂e and 1,389 tons of CO₂e.

Keywords: *Printing Process, Emission Inventory, Volatile Organic Compunds, Green House Gases Protocol.*

ACKNOWLEDGMENT

Since the author was able to finish the current Final project period by learning a great deal of new information that will be very helpful for author future career development, the author wishes to express his sincere gratitude to God the Almighty for His mercy and grace. Without a lot of support, this report is unlikely to be completed. Consequently, the author would like to thank the following:

1. Author's lovely family. Thank you for always believing and loving the author.
2. Mr. Yosef Barita Sar Manik, S.T., M.Sc., Ph.D as the Head of Environmental Engineering Study Program and Mr. Rijal Hakiki as the Final project advisor who gave author a lot of insight, motivation, enlightenment, and his time to guide the author's Final project progress.
3. All Lecturers of Environmental Engineering at President University for all the knowledge that has been given so that the author can reach this stage.
4. All the staff from PT. XYZ who has provided guidance and direction to carry out the data collection
5. Future Leader. Big thanks to Jihan CP, Ine Nurliani, Nabila Santika, Galih Bhara, Bima Ramadhan, and Reni Dwi for all of your prayers, support, and also jokes that make the author feel loved and happy in his Final project time.
6. ENVINITE19. Thank you for all the support. Let's fight and support each other until we can hold a bachelor's degree
7. Families of Environmental Engineering. We appreciate your many prayers and words of encouragement for the author.
8. Angel and Kak Rizti who always be the support system and the best team

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