

Review of: "[Review] Optimizing Wastewater Treatment Performance System and Achieving Greater Efficiency to Improve Water Quality for Sustainability — A Review"

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Potential competing interests: No potential competing interests to declare.

I would like to thank Qeios for inviting me to this review. I hope that my suggestions will help to improve the quality of work.

The work deals with a very important and very neglected topic, the wastewater and Wastewater Treatment Plants (WWTP). Water-related problems are already a reality, and tend to get worse in the coming years. I congratulate the authors for addressing such an important topic.

It is clear that the authors have carried out in-depth research on the subject, but some errors in the work make it difficult to understand the proposed theme, which is the optimisation of WWTPs in relation to sustainability.

The text needs to be revised. Many sentences are isolated in the text and don't make sense in context. There are some grammatical errors in the text.

Some examples of what needs to be improved:

- **"38.354 million liters of sewage are generated per day"**. Where is this volume of wastewater generated?
- **"In wastewater treatment, several problems arise in the primary phase due to the clogging of solid particles that accumulate in the wastewater, so primary pre-treatment is carried out to reduce these solid particles."** The reader gets the idea, but the sentence is "lost" in the text.
- **"Wastewater management is important to reduce the depleting level of fresh water, and many countries, such as Africa, America, and Asia"**. Africa, America and Asia are not countries." Africa, America and Asia are not countries. In the cited source the sentence is correct.
- **"...average MSW tip..."**. The abbreviation is not defined.
- **"In America, they treat only about 10% of the water from wastewater for cooking, drinking, and other purposes, spending billions of dollars to recycle the water due to more water crises, climatic changes, and overexploitation"**. Confusing information. Given that America is a continent and not a country, the correct would be the United States of America.

It is not clear what methodology was used to choose the works cited in the review. Given that there are thousands of works related to WWTPs, this information is important.

Sustainability is a broad concept, covering social, economic and environmental aspects. The text presents a very limited approach to sustainability.

The Text needs to be improved before it can be published. Many adjustments are still needed.

I hope that these suggestions help to improve the quality of this work that addresses such an important topic.