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.

This review article deals with the interesting subject of optimizing wastewater treatment performance. However, it needs curtain revisions in order to improve its scope and impact.

As the authors' origin is from India and the article contains plenty of information on how wastewater is been treated there, one suggestion to the authors would be to amend their manuscript and focus on reviewing what is done in India on wastewater treatment and how this is compared to what is done in the rest of the word. However, if the authors are not interested in following this path they could consider the following suggestions:

To fulfill the current title's scope the authors are suggested to make both structural and content improvements to their manuscript.

The authors need to limit the information that is well-known on the subject and elaborate with a critical view on data available from existing optimization studies.

The trade-off between energy consumption and effluent quality can be addressed through optimization. This review lacks to refer to literature studies that deal with mathematical model-based approaches and their limitations. Moreover, no references are made to measurement-based optimization technique found in the literature as real-time optimization techniques.

Care should also be given to the accuracy of the information that the authors include in their manuscript, for instance, the authors state that *"…" pretreatment," which is carried out in constructed wetlands, which are built to remove the suspended large solid particles in the wastewater for a quicker purification process".* This statement creates the false impression that constructed wetlands are only used for the removal of suspended solids while constructed wetlands are alternative wastewater treatment systems made of aquatic plants, substrate and microorganisms for the removal of conventional wastewater pollution parameters such as suspended solids, organic matter, phosphorus, nitrogen, and pathogen.

Care should also be given to avoid grammar and syntax errors in the manuscript and improve the manuscript's overall readability, e.g. *"A model is Sweden, where the City of Boras has created a project in which wastewater treatment plant waste will be gathered with the neighbourhood power plant and will contribute sustainable fuel for a city power plant."*

Could be rephrased and revised to:

“Sweden serves as an example, where in the city of Boras the new wastewater treatment plant will be co-located with the local power plant. By using their unique recycling model, they aim to convert the energy of the city´s waste streams into renewable valuables, and create a city free from fossil fuels.”