METHOD AND SYSTEM FOR OPTIMIZING ENERGY UTILIZATION IN A WASTE-WATER TREATMENT PLANT

ABSTRACT

Embodiments of the present disclosure disclose a method **(500)** and system **(150)** for operating a waste-water treatment plant (WWTP). The method includes receiving, by a processor **(202)**, waste-water treatment plant related data and solar data. The method includes obtaining, by the processor **(202)**, one or more data prediction models comprising at least one of: a solar profile prediction model, an energy profile prediction model, an effluent profile prediction model, and a water demand prediction model. The method includes determining, by the processor **(202)**, an optimized usage of the WWTP **(110)** using one or more objective functions **(310, 340)** derived based, at least in part, on the one or more data prediction models. The method includes determining, by the processor **(202)**, one or more control parameters for operating the WWTP (**110)** based, at least in part, on the optimized usage of the WWTP (**110**).

FIG. 2