4. Conclusions

This paper has summarized the state of the art of the problem we want to face: quantifying the impact of renewable energy (specifically solar PV) in the electricity consumption and billing of university campuses.

To the best of the authors knowledge, no previous studies have already analysed electricity consumption data of several campuses of a university, then renovate some of its buildings to include a renewable energy source for self-consumption and, finally, compared the new real data with the previous ones to assess the improvements that this operation may lead to.

Due to 1) the announcement of the Spain's Official Gazette [7], 2) the recording of previous electricity data and 3) the possibility of recording new data for the same buildings using renewable energies, UCLM is in a privileged position for quantifying the impact of solar PV in several types of buildings. These types of buildings are, amongst others, engineering schools, medicine schools, administrative buildings, research centres and libraries.

5. Future work

This paper establishes the base for future research, where the electricity consumption data of UCLM is going to be thoroughly analysed. During the timespan that these future investigations are conducted, solar PV installations are going to be constructed and started up. Buildings that will have them installed will get its electricity consumption measured and a comparison with the previous state will be able to be carried out. For future work, electric consumption data and invoices are available from 45 Universal Supply Point Code.

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