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# Estimation of Carbon Footprint for Home and Industry using Machine Learning

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Abstract: Carbon footprint has become a popular in recent years among Meteorologist's. The existing system predicts the carbon footprint using sparse regression algorithm. But it has the problem in subset selection and correlation between responder and predictor, so the system uses decision tree algorithm. Decision Trees are a sort of supervised machine learning in which the training data is continually segmented based on a particular parameter, with you describing the input and the associated output. Decision nodes and leaves are the two components that can be used to explain the tree. The choices or results are represented by the leaves .The decision tree divides the nodes .So the algorithm the system use is very efficient and time saving and both in accurate .So from this it can calculate the carbon footprint of home and industry in particular region .When it implement this can find the emitters who have huge amount of carbon Emission which will have huge impact on environment. Already scholars have raised hands on this carbon footprint.

Keywords: Carbon footprint, Decision tree, Sparse regression, Subset selection

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8

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