

# Carbon Emission Optimization Using Linear Programming

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## Abstract

In this fast-growing modernization, excess carbon emission plays a crucial role in climate change. Targeting and experimenting with sustainable ways of Carbon neutrality and management is the pathway toward a greener society. Data show that factories and industries take a high market stake in carbon emission and management. In actions, governments defined a limit for carbon emissions to each organization which is called carbon credit. Every organization must focus on reducing carbon emissions. This is a critical task for each organization, In some cases, it is still not possible to explore other sustainable options. An innovative solution proposed for the above scenario is to implement a real-time platform that can provide insights into the most up-to-date emission statistics of the organization. This paper provides advanced analytics and precise proactive planning and actions in the simplest form and a discussion on future elaborations and insights about conclusions. By finding the minimum optimal emission values of each emission source, organizations can maintain carbon emissions without exceeding their carbon credit. Also, industries and factories can create a smart carbon optimization system which can create an even greener society.

## Keywords

Carbon Emissions, Carbon Credit, Emission Constraints, Emission Sources, Optimization