

# Lowest carbon footprint & greenest public transport, commuters want more of Metro

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**Hyderabad:** As the city's air quality worsens and traffic congestion escalates, the demand has surged for the public transport that can move large number of people with least amount of environmental impact.

When it comes to public transport, Hyderabad Metro's carbon footprint analysis for the fiscal year 2023 highlights its eco-friendly benefits. According to the report, a 30km metro journey emits 97% less CO2 than a car and 98% less than a bus, making it as the greenest transportation option for city residents.

The analytical study revealed that a single metro coach consumes 210 kilowatt hours of energy to transport a person over 30 kilometres, result-

## CUTTING EMISSIONS & EASING TRAFFIC

REGENERATIVE ENERGY UNITS FOR HYD METRO	Year	Regenerative braking units
	FY21	19 million
	FY22	27 million
	FY23	36 million

Carbon footprint				
Mode of transport	Metro	Bus	Car	Motorbike
Capacity per vehicle	975	50	4	2
Vehicles for 975 people	1	20	244	488
Travel time for 30km	50m	1h40m	1h20m	1h5m
Energy for one vehicle	210 KWh	7.5 ltr	2.14 ltr	0.65 ltr
CO2 emission (kg)	0.91kg per KWh	2.7 kg per ltr	2.3 kg per ltr	2.3 kg per ltr



ing in CO2 emissions of 190 kg for a coach which can carry 975 passengers. This is significantly lower compared to the 1,200 kg emitted by a car with four occupants and the 730kg by a motorbike with two riders. Metro authorities assert that this has saved 88

million kg of CO2 emissions, equivalent to planting over 88 million trees.

They credit the use of regenerative braking technology and the integration of solar panels on station roofs for helping the metro achieve its climate goals.

The metro's regenerative braking systems, installed in both coaches and elevators, capture 40% of used traction energy and feed it back into the grid. Additionally, an 8.35-megawatt peak captive solar power plant installed across all depots and on the rooftops

of 28 stations generates 10% of the metro's total power requirement.

However, regular metro users have long called for an increase in the number of coaches. At the Ameerpet metro station, software engineer Avinash Karram expressed his concerns, stating, "Hyderabad is getting polluted day by day due to increasing vehicles, and I feel metro is the only solution. If more coaches are added, we will also encourage more people to travel by this mode."

Another commuter, Vikas Goud, said, "Coaches are getting cramped during peak office times, so I tend to take the metro only at odd times to avoid being shoved around. Metro transport should be encouraged more with a more coaches, especially on the blue line, as it is safer and faster."