

Doppelmayr Worldwide



World market leader with production locations in Austria, Italy, France, Switzerland, Canada, USA and China.

Manufacturing under license in Japan – Nippon Cable.

Doppelmayr Worldwide



Doppelmayr Facts and Numbers*

14 600

installations
worldwide

89

export
countries

42

countries having a
subsidiary / representation

1892

a family-owned
company

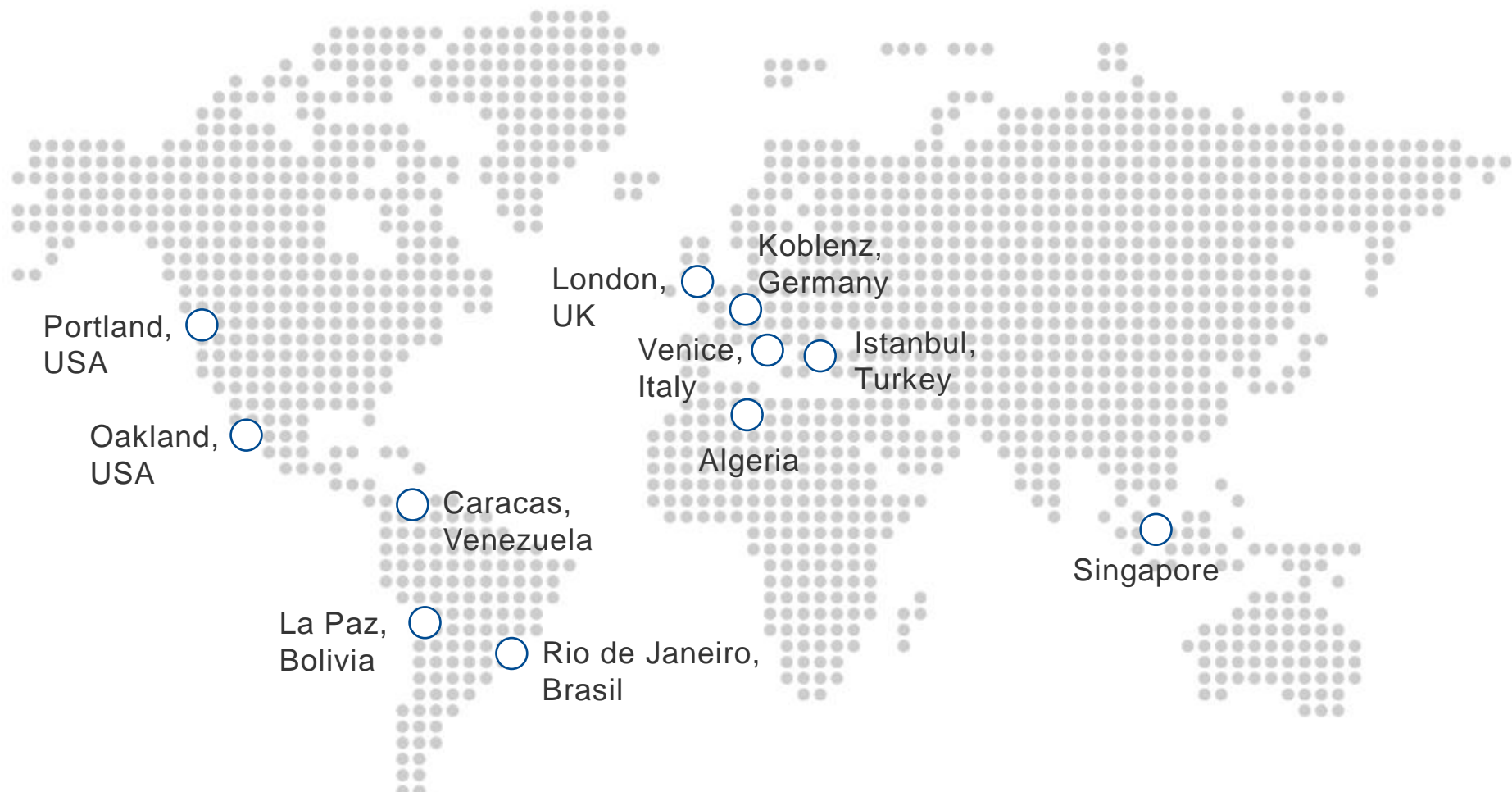
2 546

employees
worldwide

794

million euro
turnover

*by 2015



Urban Ropeways

Portland | USA

78-ATW, 2007



Constantine | Algeria

15-MGD, 2008



Caracas | Venezuela

8-MGD, 2010



Source and Photo: Doppelmayr

London | UK

10-MGD, 2012



Singapore

8-MGD, 2010



Source and Photo: Doppelmayr

La Paz | Bolivia

10-MGD, 2014



Source and Photo: Doppelmayr

Koblenz | Germany

35-TGD, 2010



Source and Photo: Doppelmayr

Caracas | Venezuela

232-CLS, 2012



Source: dmi/Photo: Doppelmayr

TECHNICAL SESSION 10
ELECTRIC MOBILITY FOR CITY'S SUSTAINABILITY
URBAN CABLE TRANSPORT



Dr. Johannes Fiedler, Doppelmayr Urban Solutions, Austria
Ahmedabad, November 10th, 2016

E-Mobility



Sustainable transport = public transport, walking and cycling



More than a car with an electric motor...

E-mobility includes electrically driven rail transport, E-busses, E-rikshaws, E-bicycles andropeways!



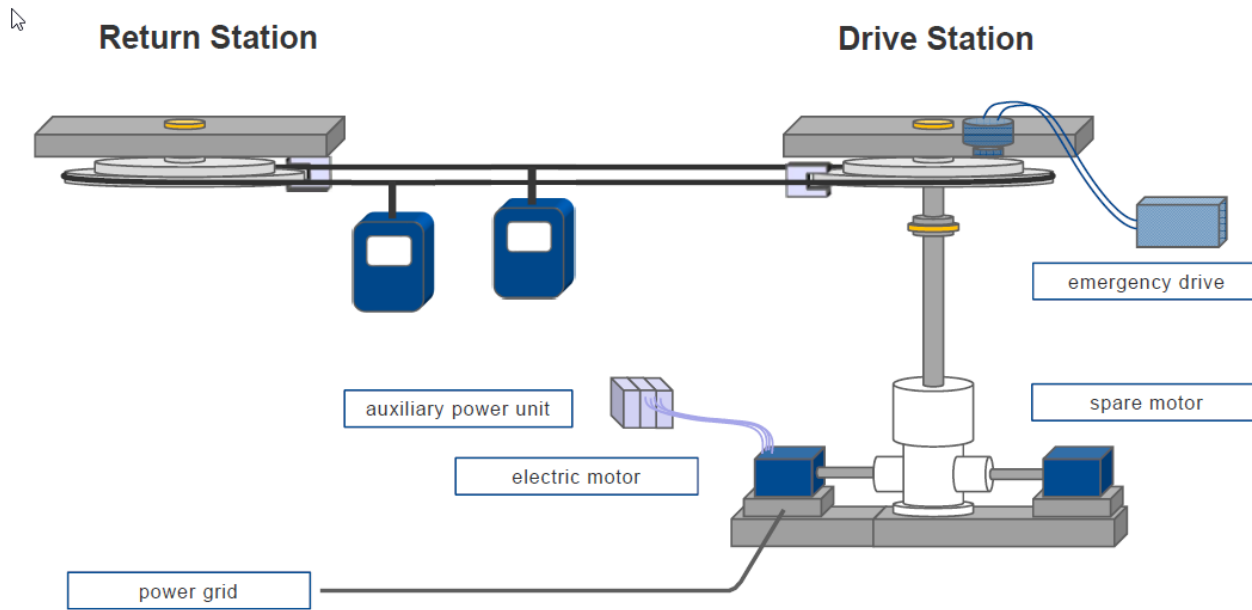
Sustainable only if electric energy is produced in a clean way

Today, 76% of all electric power is still produced from fossile sources.



cable systems are driven by electric motors

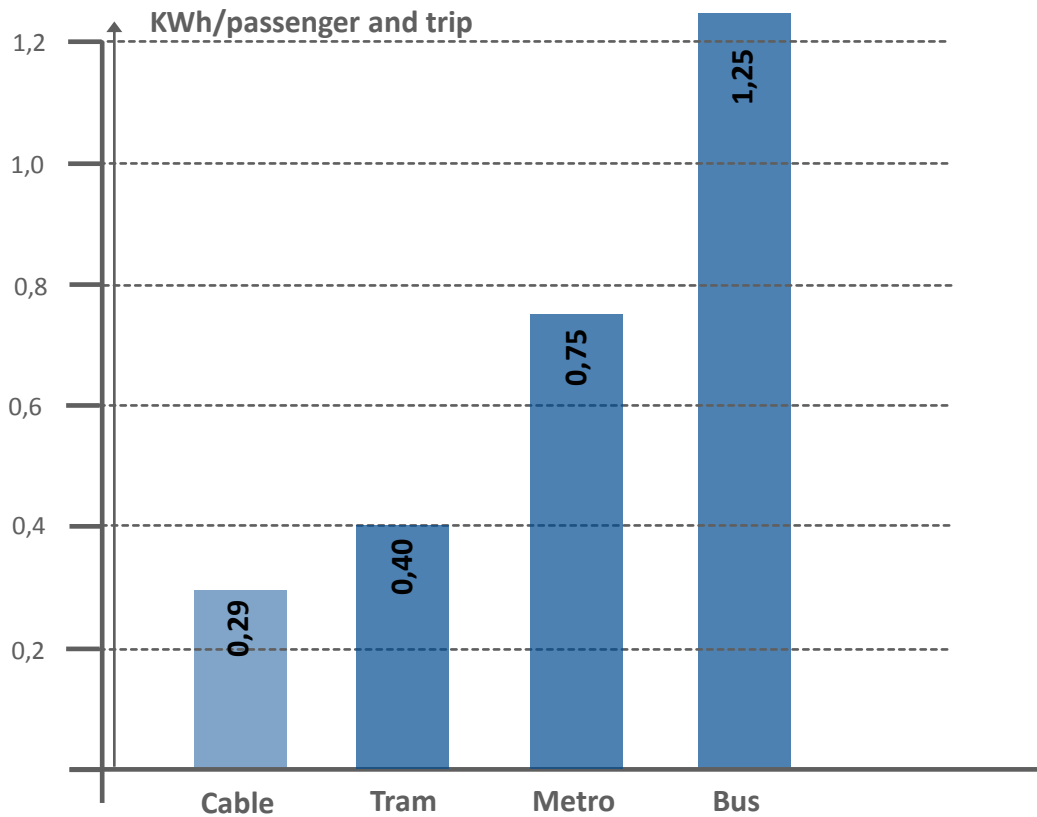
E-Mobility



motors are placed in stations, not in the vehicles



Urban Cable – energy consumption

...lower than with other means of public transport.



* Including consumption of supporting infrastructure

Sources:

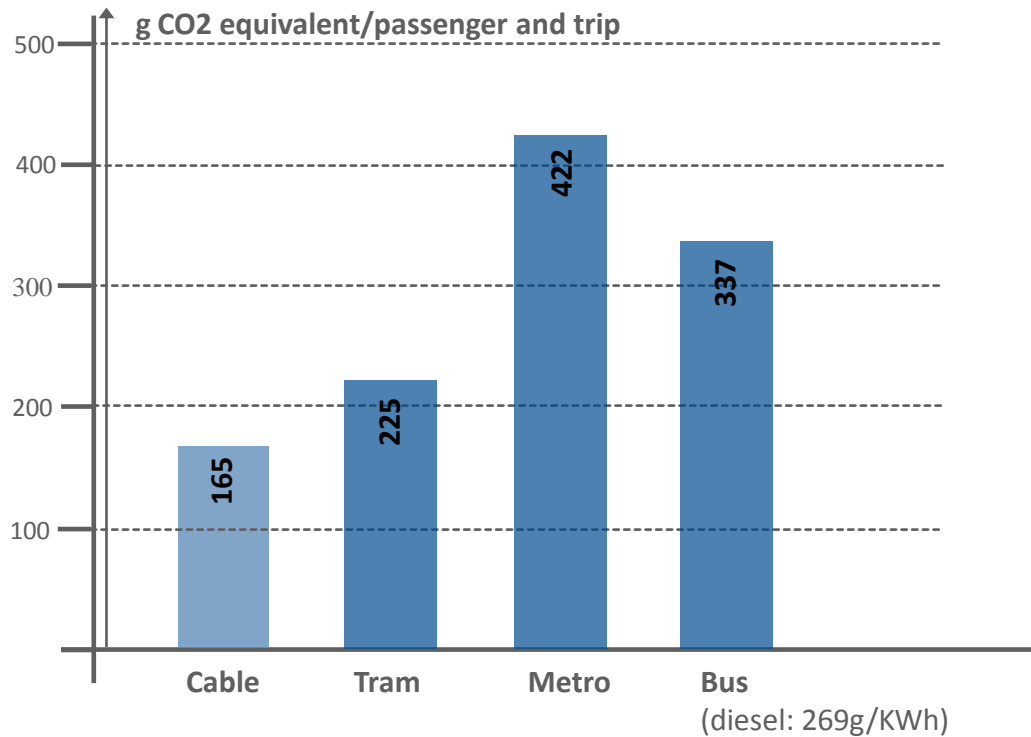
-  Vienna Transport 2012 (1)
-  Doppelmayr (2)

(1) Wiener Linien (2012) in : FREY et al. (2014): *Energieeffiziente Neue Mobilität in Wien*, TU Wien, Institut für Verkehrswissenschaften (p. 53, fig. 35);

(2) Evaluation of the ropeway operations in La Paz (2014), Venlo (2012) and Koblenz (2011 to 2013)



Urban Cable – CO2 impact

...lower than with other means of public transport.



-based on electric power production mix in Germany 2012 (562 g/KWh)

Sources:

-  Vienna Transport 2012 (1)
-  Doppelmayr (2)

(1) Wiener Linien (2012) in : FREY et al. (2014): *Energieeffiziente Neue Mobilität in Wien*, TU Wien, Institut für Verkehrswissenschaften (p. 53, fig. 35);

(2) Evaluation of the ropeway operations in La Paz (2014), Venlo (2012) and Koblenz (2011 to 2013)



Vidalia, Georgia (USA)

1 MW solar plant

production (India): 1,4 MWh/year
area required: 12.000 m² *
requirements:
a) grid connection for continuity
b) auxiliary power unit for backup

* IIT Mumbai plant, 2014



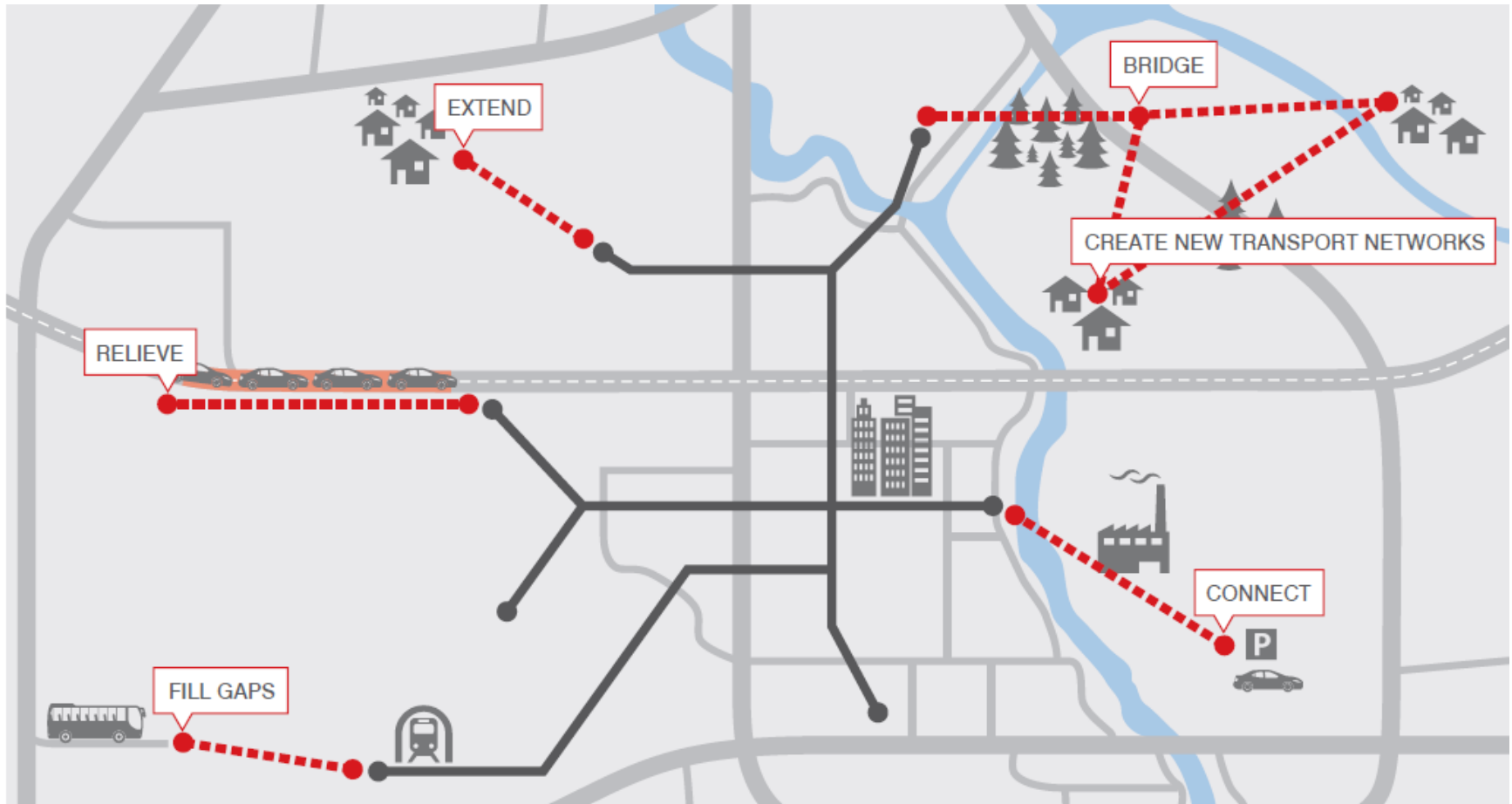
Koblenz, Germany

1 km 3S ropeway

consumption: 0,5 MWh/year
3.500 p/h/direction
8,5 hours/day **

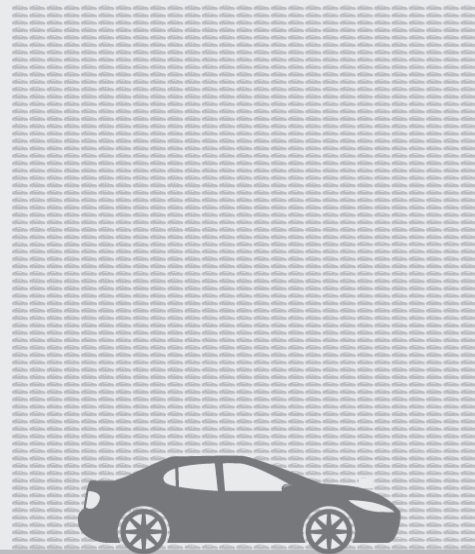
** TGD Koblenz (2012)

Mobility Functions of Urban Ropeways

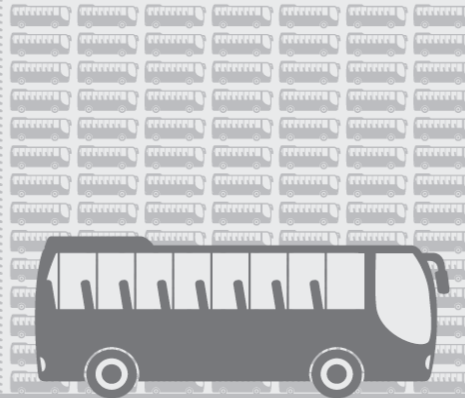


Capacity of Urban Ropeways

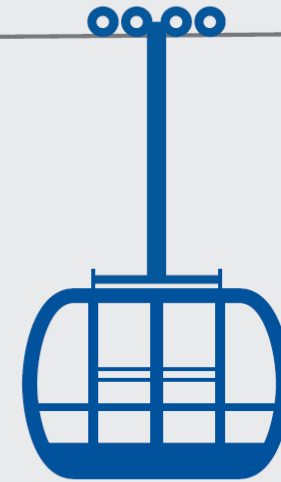
To transport 10 000 passengers/hour
(5 000 in each direction), you need:



2 000

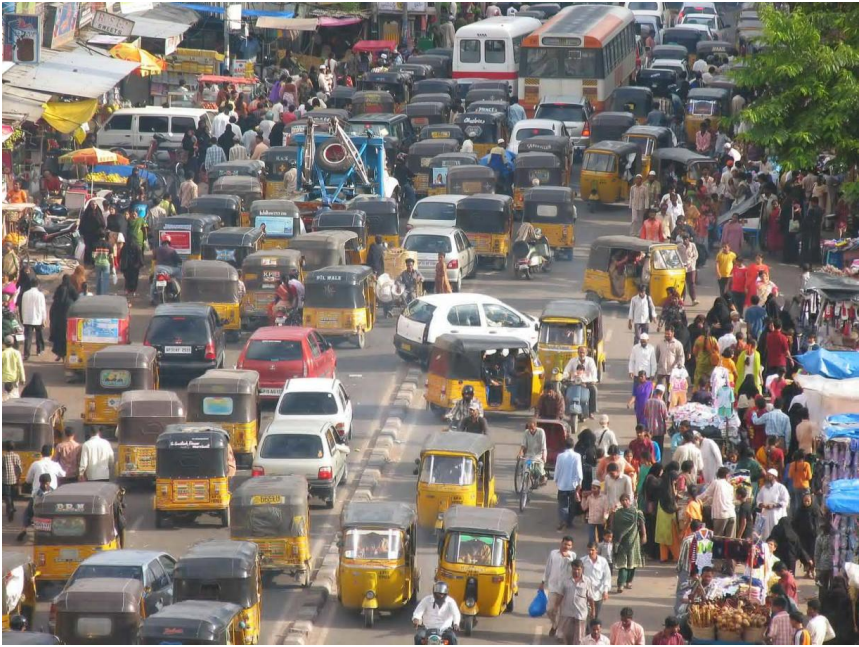


100



1

What can Cable Transport do for Indian cities?



congestion....

What can Cable Transport do for Indian cities?



difficult topography...

What can Cable Transport do for Indian cities?



informal urbanization...

What can Cable Transport do for Indian cities?



car dependency...

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