

trolley:2.0

for smart cities

Decarbonization of the city bus system in Klagenfurt

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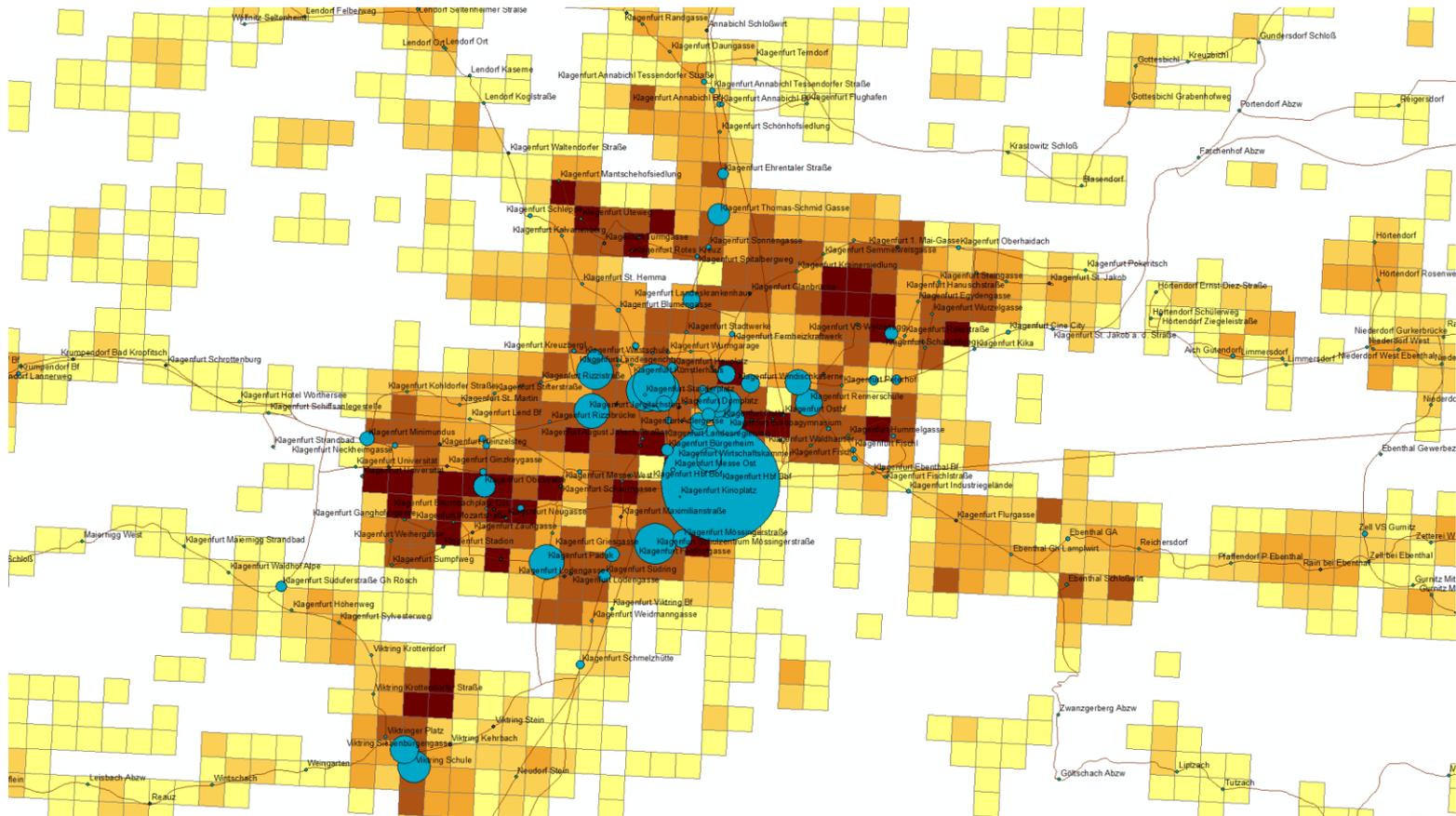


Klagenfurt is located in the southern part of Austria
approx. 100.000 inhabitants, 850/km²
most employees in the service sector



Customers trips are strongly oriented to the city center and the main railway station.

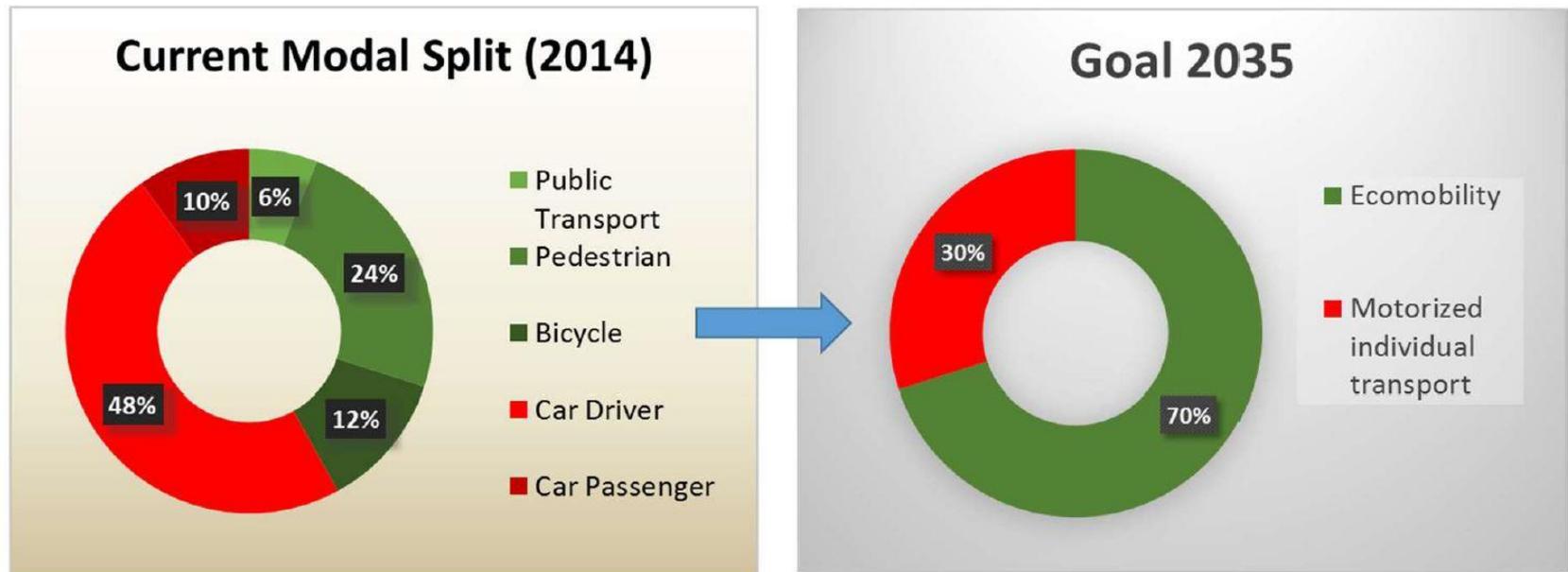
There are no strong suburban developments in Klagenfurt



Existing bus system-vessels are propelled by combustion engines
connection with regional bus system is unsatisfying:
amount of cars in the town ist high and traffic is not very sustainable

motorized individual transport should be very reduced!

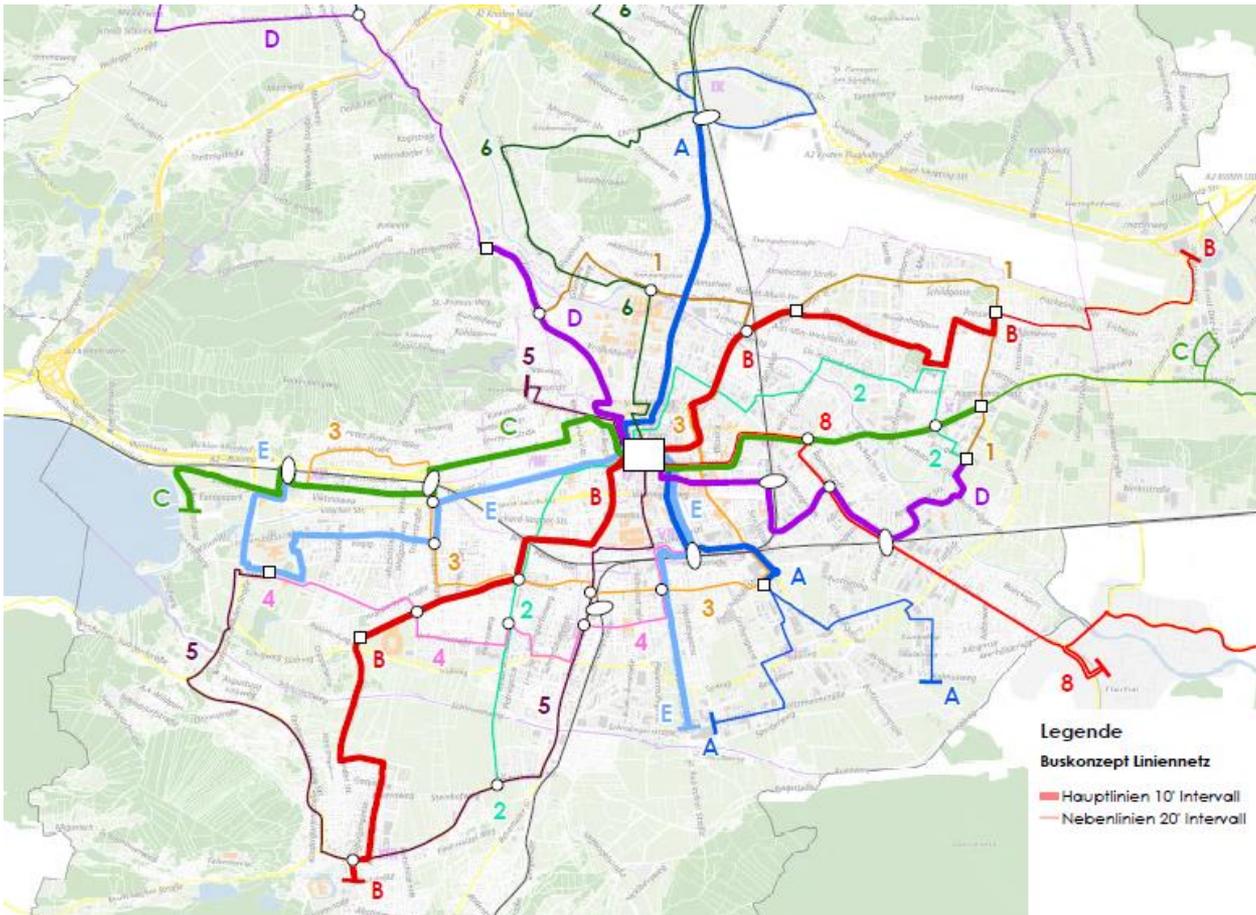
Modal Split Goal 2035



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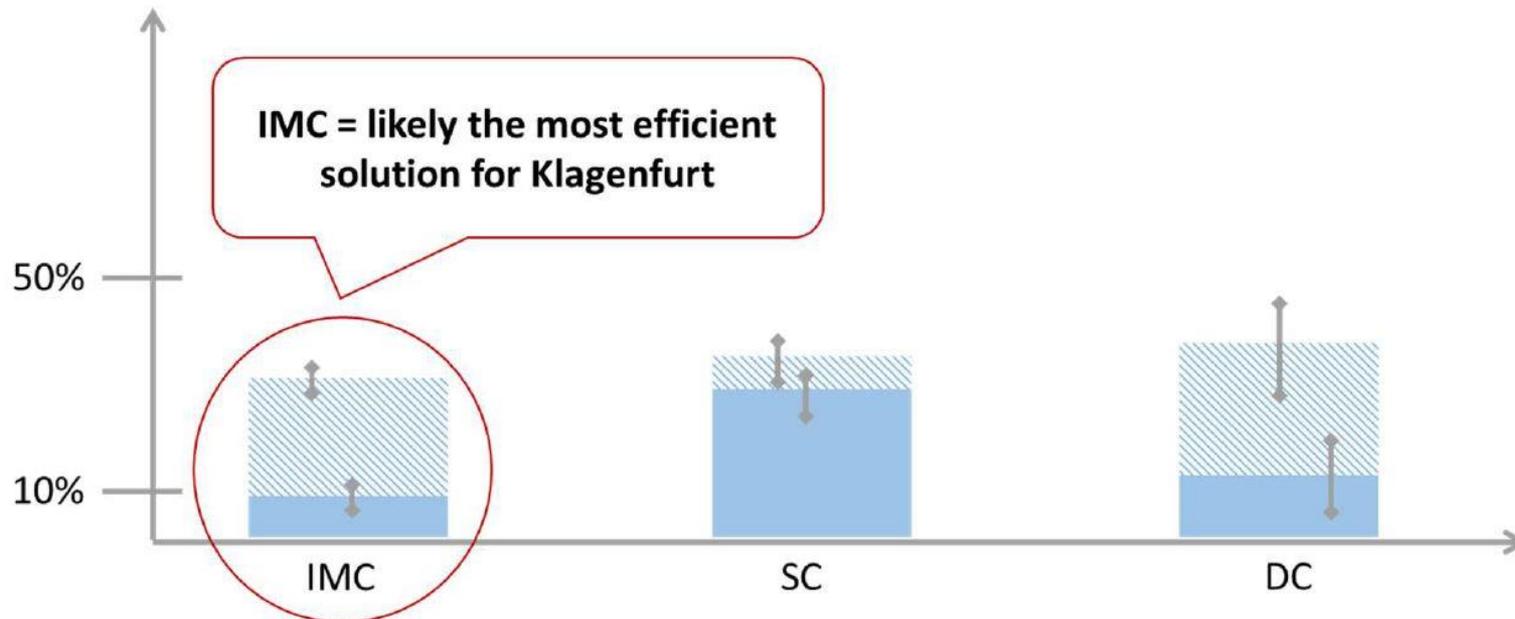
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proposed public transport network consists of
3 - 5 main axes (cross-city routes), operation of innovative electric
buses with in motion charging (IMC), intervall: 10 min.
linked with regional railway/bus service
additional supplying routes (visualized as thinner lines)



Comparison of Additional Costs

Costs depending on E-bus types, network characteristics and cost prognosis scenarios (as of 2035)

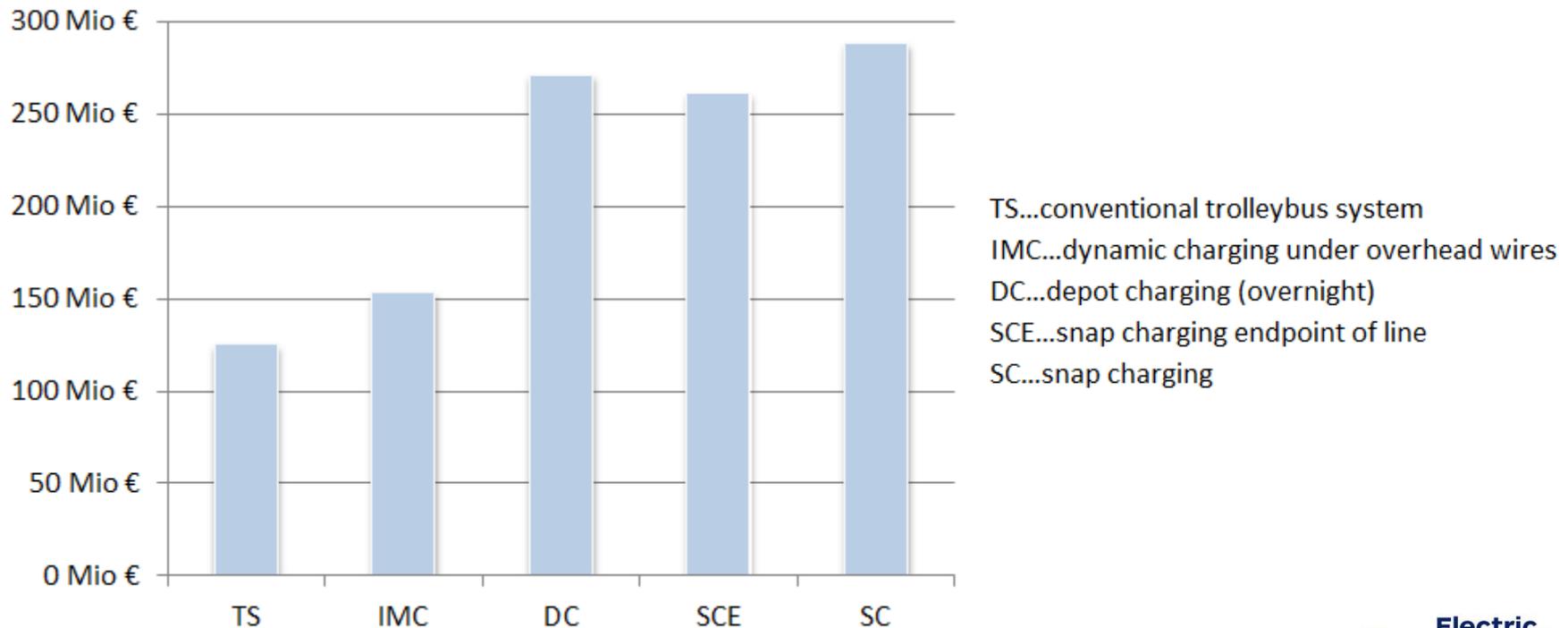


Bars represent percentage of additional full costs including vehicles and infrastructure, for 12 m buses, compared to conventional Diesel buses

IMC: dynamic charging under overhead wires; SC: snap charging; DC: depot charging

Source: KCW (Berlin), calculations based on own market intelligence and literature data; June 2018

Based on a case study for the city of Klagenfurt, full costs (operating service – vehicles, infrastructure, remise, battery packs, power supply and management services,...) over the timepanel of 40 years of different Trolley-Bus-Systems are compared.



Thank You For Your Attention!