China Straddling Bus: The Future Transportation Concept

Direction: Complete the transcript below by filling in the blanks.

What you can see from the video is traffic jams, what you can hear is noise, and there is also invisible air pollution. At present, there are mainly 4 types of public transits in China: subway, light-rail train, BRT, and (1) _____. They have advantages and disadvantages, for example, subway costs a lot and takes long time to build; BRT takes up road spaces and produces noises as well as (2) _____ to the air. How to develop environmental-friendly public transportation? Straddling bus provides a solution.

Let's watch a demonstration. This is what the interior looks like: it has huge skylight that will eliminate passengers' sense of (3) _____ when enter. The straddling bus combines the advantages of BRT, it is also a substitution for BRT and subway in the future. As you all know, the majority vehicles on the road are cars, the shortest vehicles are also cars. Normally our (4) _____ is 4.5-5.5 m high.

The highlight innovation of straddling bus is that it runs above cars and under overpass. Its biggest strength is saving road spaces, efficient and high in (5) _____. There are also two ways in dealing with station platform. One is to load/unload through the (6) _____; the other is using the built-in ladder so that passengers can go up and to the overpass through the (7) _____.

There are two parts in building the straddling bus. One is remodeling the (8) _____, the other is building station (9) _____. Two ways to remodel the road: we can go with laying rails on both sides of car lane, which save 30% energy; or we can paint two white lines on both sides and use auto-pilot technology in the bus, which will follow the lines and run stable.

Another strength of straddling bus is its short construction life cycle: only (10) _____ to build 40 km. Whereas building 40-km subway will take (11) _____ at best. Also the straddling bus will not need the large parking lot that normal buses demand. It can park at its own stop without affecting the passage of cars.

Straddling bus is completely powered by municipal electricity and (12) _____ energy system. In terms of electricity, the setting is called relay direct current electrification. The bus itself is electrical conductor, two rails built on top to allow the charging post to run along with the bus, the next charging post will be on the rails before the earlier one leaves, that is why we call it relay charging. The set here is super (13) _____, a device that can charge, discharge and store electricity quickly. The power it stores during the stop can support the bus till the next stop where another round of charging takes place, achieving (14) _____ throughout the process.

Nowadays many big cities have remodeled their traffic signaling system, to prioritize public buses, that is to say when a bus reaches a crossing, (15) _____ on the other side of the fork will turn on automatically to give buses the right of way.

Our straddling bus can learn from this BRT method. The bus is 6 m in width and 4-4.5 m high. How will people get off the bus if an (16) _____ happens to such a huge bus? Here I introduce the most advanced (17) _____ system in the world. In the case of fire or other emergencies, the escaping door will open automatically. I believe many of you have been on a (18) _____. Planes are equipped with inflated ladder so people can slide down on it in emergency. I put the escaping concept into the straddling bus.

The bus can save up to 860 ton of fuel per year, reducing (19) _____ ton of carbon emission. Presently we have passed the first stage demonstration and will get through all of the technical invalidation by the end of August. Beijing's Mentougou District is carrying out an eco-community project, it has already planned out (20) _____ km for our straddling bus. Construction will begin at year end. Thank you.

Transcript **(http://www.youtube.com/watch?v=Hv8_W2PA0rQ)**

Note:

BRT = Bus Rapid Transit