

Examples of Existing Surface Recreation Centers Incorporating Sustainable Design Principles

There are many examples of existing surface recreation centers around the world that have incorporated sustainable design principles into their architecture in order to reduce their environmental impact while still providing enjoyable recreational experiences for visitors. One example is The Wave located in Bristol Bay, England, which utilizes solar panels on its roof as well as wind turbines on its grounds to generate electricity for its operations while also reducing its carbon footprint significantly compared to traditional power sources. Another example is The Wave located in San Diego, which incorporates green roofs with native plants and trees, which provide insulation from heat during summer months while also helping reduce pollution levels by absorbing airborne pollutants from nearby highways and other sources. Finally, The Wave located in Tokyo incorporates a variety of renewable materials such as bamboo flooring throughout its interior spaces along with efficient lighting designs, which help reduce energy consumption significantly compared to traditional lighting sources while still providing adequate illumination levels throughout its spaces.

In conclusion, it is clear that sustainable development goals should be taken into consideration when designing surface recreation centers due to their potential environmental impact if not implemented correctly from the outset. By incorporating renewable materials such as bamboo or recycled wood along with green roofs or walls, efficient lighting designs, passive solar heating systems, water-saving fixtures, and flexible structures, architects are able to create structures, which not only provide enjoyable recreational experiences for visitors but also minimize their environmental impact over time. Additionally, examples like those mentioned above demonstrate how existing surface recreation centers have successfully incorporated these principles into their architecture resulting in successful projects, which both benefit users and protect the environment.

THE MAIN PROBLEMS OF TRANSPORT DEVELOPMENT IN LARGE CITIES

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Large cities usually have most of the transportation problems that come with population and traffic growth. Over the past few decades, the development of the transportation system has not responded to these needs, leading to significant environmental problems, traffic delays, and a poor quality of life for city residents.

This paper will discuss the main problems of transport development in large cities and ways to solve them.

The problem of traffic congestion

One of the biggest transportation problems in big cities is traffic congestion, which arises from the large number of cars on the road. Traffic jams can be very long and costly for city dwellers who spend significant time on the road. This problem can be solved by widening roads and imposing traffic restrictions during peak times, as well as introducing traffic light synchronization and improving the quality of public transportation.

The problem of parking

Large cities often face a parking problem because there is limited space for parking cars. This leads to drivers parking on sidewalks, along roads, and in other unsuitable places, which makes it difficult for pedestrians and other vehicles to move. One possible solution to this problem is to increase the number of multi-story parking garages and parking restriction zones in the city center. It is also possible to use special measures that reduce the number of private cars in cities, such as car-sharing programs or promoting the use of public transport. The problem of road safety

Another problem facing transportation in large cities is road safety. Ensuring road safety is very important, especially in places with high traffic flow. This problem can be solved by introducing stricter rules on the roads and raising the level of driver awareness of road safety. Technologies such as automatic braking and traffic control systems can also be used to reduce the number of accidents on the road.

The problem of noise pollution

Traffic in large cities also causes noise pollution. Noise from cars and other vehicles can affect the health and quality of life of city residents. This problem can be solved by imposing restrictions on traffic at night and installing special noise barriers. Soundproofing can also be installed on buildings and roads where noise pollution is most severe.

The problem of air pollution and the environment

Air pollution is one of the biggest problems of transportation in big cities. A large number of cars and other vehicles running on gasoline or diesel fuel emit harmful substances into the atmosphere, which leads to air pollution and negative impact on the health of city residents. This problem can be addressed by introducing legislation that restricts the use of diesel vehicles in cities, as well as by promoting the use of electric vehicles and other environmentally friendly vehicles. More effective vehicle emission control systems can also be used, and the use of public transportation and bicycles can be promoted.

The problem of accessibility to public transportation

Most large cities have a developed public transportation system, but accessibility can be a problem. Often, transportation routes do not cover all areas of the city, making it inaccessible to certain residents. To solve this problem, you

can expand the public transportation network and use technology, such as mobile apps and e-tickets, to make it easier to access. Thus, transportation development is an important factor in the development of large cities, but it must be done with due regard to the environmental and social problems that arise from its lack of efficiency. Different approaches can be used to address these problems, such as increasing the number of public transport, improving its accessibility, using more environmentally friendly modes of transport, supporting infrastructure for cyclists and pedestrians, and reducing car traffic in the city center.

In particular, increasing public transportation can reduce the number of cars on the road and improve accessibility for residents, which has a positive impact on the environment and public health. The use of more environmentally friendly modes of transportation, such as electric and hybrid cars, can also help reduce emissions of harmful substances into the atmosphere.

It is likewise important to support infrastructure for cyclists and pedestrians, which allows people to choose more environmentally friendly modes of transportation and reduce car traffic in the city center. This also improves the physical health of citizens and reduces traffic congestion.

Therefore, to achieve more efficient and sustainable transport development in large cities, it is necessary to combine different approaches and take into account the needs of citizens to reduce the negative impact on the environment and improve the quality of life of residents.

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GROWING TREND TOWARDS SUSTAINABLE AND ECO-FRIENDLY CONSTRUCTION PRACTICES

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In recent years, there has been a growing trend towards sustainable and eco-friendly construction practices [1], driven by a range of environmental, economic,