

New-born City Design for Carbon Emission Reduction

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Nowadays, urban dwellers are suffering a lot from various kinds of urban diseases which are mostly triggered by excess carbon emission. Therefore, an effective new city design for carbon emission reduction is significantly expected and urgent. In this essay, our group chooses four aspects of the city construction for investigation, which were embedded with the most advanced technologies as well as our creative ideas.

1) Transportation design

In order to avoid high concentration of carbon dioxide enriched in a certain areas of a city, a new design of urban transportation is shown. In this new design, main roads and public facilities are intentionally located outside central area and put in park zones. A new road line planning system, which provides a better way to lessen carbon dioxide emission in a city, is also introduced in this part.

2) Explorations of building walls

Although energy-saving glass is widely used in high-rise office building, it hasn't yet come into play in the apartment constructions because of its relatively expensive price. It is observed that the application of energy-saving glass is not only a choice that can decrease the energy consumption but also an economic option in long term run.

3) Improvements of garbage incineration treatment method

Rubbish recycling is an effective way to increase the energy efficiency and reduce carbon emission. However, for some inevitable reasons (especially the toxic substance in incineration ashes), a lot of energy was consumed to decompose those harmful substances which polluted the environment in a large scale. In this part, we develop an effective way to reduce the quantity of the toxic substance, and save energy from decomposing the rubbish, which can largely reduce the emission of carbon dioxide and toxic gases.

4) New methods about running business models and public facilities

According to a survey, the consumption of "residential, commercial and other



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sources" holds 10.3% of the total amount of carbon emission, which indicates that there is considerable space to improve the reduction of carbon emission. In this part, we develop kinds of new methods to optimize each step of the commercial processes in details, which includes product design, product distribution, physical distribution, promotion, sales and after-sales segments.

In conclusion, we hope that our ideas can provide some new thoughts for you great scientists, and be a part of the process of carbon emission reduction, which is really a serious problem for everyone in our world. Environment improvement will be implemented by every tiny dedication.