

## **The Building of Green Communities to Fight Global Warming**

### The Overview of Global Warming

With the development of the human society, the human civilization has reached a new record. However, the global warming issue is one of the most important and urgent presentations of these problems.

Global warming has been defined as the continuous trend of increase in the average temperature of the Earth's near-surface air and oceans since the mid-20<sup>th</sup> century. Generally speaking, the cause of the global warming, according to the studies of many scientists over the years, and be attributed to the growing concentration of greenhouse gases, which are mainly the results of human activities, such as the burning of fossil fuels and the deforestation. These human activities have produced a great amount of carbon dioxide, which can lead to the increased temperatures. According to United States Environmental Protection Agency (2009), over the past 200 years, the overall amount of CO<sub>2</sub> has increased by 140%.

The negative effects of the greenhouse gases can be detrimental upon the planet and the entire human race. It can also lead to the melting down of the Arctic, and subsequently cause the rise of the sea-level. This can be particularly dangerous for the coastal cities around the world. Global warming can also be associated with the species extinctions, and the reduction of the agricultural productions, and the treat of glacier.

### The Current Situation in China

As an emerging economic giant in the world, China has been glorified by its economic growth during the last decades. China has invested enormously in the past decade to strengthen its industrial capacity by constructing factories and encouraging urbanization. Currently, there are around 50 cities with more than 1 million inhabitants, and five ones with more than 10 millions. However, given the current speed of

urbanization, there would be around 10 cities with more than 10 million residents by, and 125 one with more than 1 million residents the year 2025 (McGee and McGee, 2007).



*Figure 1 The Urbanization of China*

It has become a heated questions whether this kind of jumble cities are able to hold so many people and afford their life. Since 2005, China has been experiencing a series of extreme weathers and natural disasters, many of which the scholars believe to be the results of global warming. For example, Southern China has been suffering from severe droughts since 2005, which has led to sharp reduction in agricultural yields. By contrast, many parts of China are troubled by excessive amount of rains. In addition to that, in the nation-wide, the entire country is struggling to solve the water problem, which is intended to provide enough water for its residents.



*Figure 2 Droughts in Southern China*



*Figure 3 Floods in China*

The Building of Green Community

Given the fact that the urbanization of China is inevitable, it is proposed that the Green Community should be adopted by the Chinese government and the ordinary citizens in order to preserve the environment as well as make their life more comfortable and sustainable.

Green Community is based on the concept that the individual families and local government should collaborate together to build an environmentally friendly community for its residents to live sustainably and greenly. The concept believes that it would be much more quick and efficient to reduce global warming if ordinary people can take their initiatives to contribute to the preservation of environment. The construction of Green community takes the cooperation of the family and government together to accomplish.

#### Initiatives of the Families

It is believed that individual efforts are extremely important and essential in the fight against global warming, because there are so many people, and their contribution, when combined together, will definitely have tremendous impact on the current situation of the environment.

In order to build the Green Community, it is proposed that the residents within the small community should try to accomplish the following things, based on their own initiatives, to reduce and slow the global warming:

- Take public transportation

Generally speaking, cars produce huge amount of carbon dioxide emission to the environment. Therefore, it would be of great help if one can choose to take public transportation, instead of driving one's private car. In spite of the little inconvenience it can lead to, taking public transportation can be a huge personal effort to fight global warming.

- Choose clean energy

If one has to, in some circumstances, drive a car, there is still something can be done to

reduce global warming. By driving cars that have hybrid engine or use electricity, the emission of carbon dioxide can also be reduced. In addition to that, every household cannot live without electricity, now. but by switching from using electricity produced by coals, which are not renewable energy, people can choose to use that produced by renewable energy, such as solar power and wind. This would also be a enormous contribution to reduce carbon emission.

- Use CFL bulbs

Lights at home also matter. The Compact Fluorescent Light bulb (CFL), by average standards, can save around 25% of the energy than the an incandescent bulb (2009). Therefore, if every household can use CFL bulbs, the overall electricity consumption of China can be cut by at least 35% annually.



*Figure 4 CFL bulbs*

- Use solar-absorbent material to heat bathwater

Usually, bathwater are heated by natural gas or electricity. Considering the fact that almost 45% of the people in China take a shower everyday, it can be very helpful if the bathwater can be heated by solar power. By filling up a tank on the top of the roof, the solar-absorbent material will be able to absorb enough energy to heat the water for shower. This method is particularly helpful in summer. However, when winter comes, switching to electricity and natural gas to heat bathwater and reducing the number of baths will also help to reduce global warming.



*Figure 5 Solar-absorbent materials to heat bathwater*

- Simple life-style

Simple life-style is also very important to slow global warming. By reducing the entertainment based on energy consumption, such as TV, one can contribute to reduce carbon dioxide. In addition to that, it is encouraged that people should plant trees or other plants at home or in their garden, which would be of use to absorb carbon.

- Promote environmental education

The building of Green Community takes the efforts of everyone. Therefore, by promoting environmental education and influence everyone around will have more people join this difficult and time-consuming task.

#### Initiatives of the Local Governments

The role of the governments, particularly locals ones, are also essential in building Green Community. Local governments, by taking their initiatives, can do the following things to promote Green Community.

- Legislative power

Legislative power can be of extreme help in promoting efforts to reduce global warming. For example, local governments can reinforce regulations to subsidize those who take public transportations, and cut the taxes of those who buy a car with hybrid engine. This regulation, intended to encourage and promote personal initiatives to fight global warming, will make enormous contributions to the environment.

- Strengthen infrastructure

Infrastructure will have tremendous impact on the ecology of the community. Local

governments should plant trees at the places where planting is possible. Trees can help to absorb carbon dioxide and make the environment more healthy and comfortable for living. In addition to that, establishing an integrated and convenient transportation system is also important in encouraging people to take public transportation.

### Conclusion

These solutions mentioned above are intended to help ordinary residents within small communities to fight against global warming in China. However, it is believed that, by popularizing the solutions, all urban communities can contribute to the more greener, healthier, and more sustainable environment in which human race can flourish.

### References

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Change Your Bulbs to CFLs. (2009). Retrieved on July 15, 2010, from:

<http://www.globalwarmingsolutions.org/personal-action/>

## **Sources of Illustrations**

- Figure 1 The Urbanization of China

<http://image.baidu.com/i?ct=503316480&z=0&tn=baiduimagedetail&word=%B4%F3%B3%C7%CA%D0&in=27021&cl=2&cm=1&sc=0&lm=-1&pn=4&rn=1&di=29540619480&ln=2000&fr=&ic=0&s=0&se=1&sme=0>

- Figure 2 Droughts in Southern China

<http://image.baidu.com/i?ct=503316480&z=0&tn=baiduimagedetail&word=%BA%B5%D4%D6&in=27455&cl=2&cm=1&sc=0&lm=-1&pn=0&rn=1&di=20392467960&ln=2000&fr=&ic=0&s=0&se=1&sme=0>

- Figure 3 Floods in China

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- Figure 4 CFL bulb

[http://www.ucsusa.org/global\\_warming/what\\_you\\_can\\_do/ten-personal-solutions-to.html](http://www.ucsusa.org/global_warming/what_you_can_do/ten-personal-solutions-to.html)

- Figure 5 Solar-absorbent materials to heat bathwater

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