#### ASSIGNMENT #3: REFLECTIONS ON URBAN SUSTAINABLE DEVELOPMENT IN YOUR CITY

# Introduction and overview of city

Melbourne is a vibrant cosmopolitan city, located on the magnificent Port Phillip Bay area. It is the state capital of Victoria State. It is the second most livable city in the World, and used to be the first. From scenery to culture, there are a lot of wonderful things that settlers and visitors can enjoy. The leadership programme gave us a wonderful journey to learn and experience the city through lectures and projects discussion. It is a great experience that I will never forget. I also gained a lot of lessons on sustainable development which have great potential to be applied in the context of China. The reflections I got from those lectures and experience can be summarized as follows.

# • Discussion of Target 11.1 within city

As one of the most populous cities in the world, Beijing has incredible high housing price and crowded living space. The low-income population then choose to live in the poor quality living spaces. It is very tough live in a sprawling city like Beijing. Almost all of the housing available in the Beijing city centre is in apartment form, and most of these are not particularly spacious. The average salary of Beijingers is around CNY 8000, and a  $60m^2$  apartment in the city centre will cost CNY 6 million. If a couple wants to buy an apartment like this will take them about 60 years to pay the money back. This is for an average population, but as we know there are more poor members of the population in Beijing whose salaries are much lower than CNY 8000 per month. It means that it is actually impossible for them to afford to buy an apartment. Last year, Beijing city authorities found 400 people living underground in Beijing. Those people lived in a slum that cannot be seen. For a very long time, I did not see many homeless people in China. But seeing this news, I was shocked. There are so many people living in a shelter without any secure facilities. Most of those underground dwellings renters came from countryside. They cannot afford to rent a normal apartment. The average renting fee is about 1.2 times the average monthly salary.

There are definitely many things should be done to improve the livability of Beijing. The incredible housing price and poor quality of living space are making the whole city a terrible place to live. It is true that lower the housing price can be extremely tough, not only because it is difficult to control housing price but also due to the fact that there are so many people in Beijing want to buy a place to live. When demand is high, the price can be even tougher to decrease. The government has taken some actions to control the price. The measures include speeding up housing development plan, providing precise housing supply, adjusting land and housing supply structure, developing small- and medium-sized condominiums to be sold at low and medium price levels and tightening capital control to effectively reduce financial leverage and prevent market risks. First, the government should build more governmental subsidized apartments for poor and qualified people to have a place to live in with relatively low price. Second, a satellite city can mitigate the pressure of megacities such as Beijing and Shanghai. Then people can have more choice to live in a city with similar working opportunities with much lower living cost. Last, cities cannot manage themselves all the time in a free market. Thus, a top-down planning is essential and imperative. New residents should be limited. Even though it is unequal, but it is no other better way to control the size of a city without squeezing the poor outside the expensive city center. The government needs to minimize the gap between the rich and the poor. The less inequality, the more vibrant of a city will be. People can have more choices to live to different cities and areas.

### • Discussion of Target 11.2 within city

Beijing is the most important transportation hub in China. Beijing has the biggest rail hub in the whole country. Due to the large population, Beijing has built its advanced public transportation, including subway, bus, taxi, railway train and sharing bikes. There are 22 subway lines (including one airport express line) have been in operation with a total mileage of 608 kilometers (378 miles) in the city nowadays. Due to the frequent traffic jams, especially during rush hours, subway is probably the most time-saving transport means in the city. Besides bicycles, public buses are the cheapest way to get around Beijing. It is one of my favorite public transport since it is cheap and also offers travelers sightseeing experience. Over 1,200 bus routes are running in Beijing, including regular downtown lines, suburban lines, night lines and intercity lines. Payment by both cash and the Transportation Smart Card can be accepted. 86,000 public bicycles at the docking stations and 2.35 million dockless sharing bikes are good supplement to the mass transit of Beijing city buses and subways.

To be honest, I feel public transit system in Beijing is quite advanced and convenient. The only problem is that during the rush hour, the public transport can be really crowded. This is also a challenge for both the government and transport department. There are very limited countermeasures can be implemented, since the main cause of this problem is large population of the residents in Beijing. I would recommend to offer more comfortable public transport vehicles for the residents, so that they can use public transport more than driving private vehicles. Then it will be more beneficial for relieving the traffic jam in Beijing and mitigate the air pollution from the transport sector.

# • Discussion of Target 11.6 within city

There are quite a few policies being implemented in Beijing, such as waste separation and waste incineration. However, the fact is very frustrating. There are several aspects that hinder the waste management. Most of people do not realize the importance of waste classification. Second, even though residents separate the garbage, the waste collectors put all of them altogether which means the first classification is useless. Third, solid waste in China is quite special because it contains a lot of the kitchen waste and oily leftovers. Those waste are difficult to be fully burnt in incinerators. Air pollution is another daunting issue that makes both the public and government concern a lot. Last year, China has managed to achieve its clean air target by implementing the most forceful policies. However, the fruitful results did not last long. The air pollution in Beijing and many cities in China suffer grey sky for weeks in the beginning of winter season this year.

Pursuing GDP growth is one of the main reasons that drives the high emissions and energy consumption. Without changing the attitude of government to the GDP, very few things can be done to sustain the clean air target. If the government wants to see clean sky, it is quite simple – shutting down all those highly polluted factories. However, it is not the sustainable way to deal with air pollution. With the right attitude to pollution control, then China and Beijing need to upgrade the technology for producing products and improve efficiency. Third, the government needs to give the local factories the right sign that improving efficiency of production can actually bring you benefits. Incentives for the local government should be given and the central government should stop asking them to show the nice GDP numbers. Fourth, individuals should also avoid using private vehicles. Avoid unnecessary consumptions. Fifth, government should also improve green areas of the cities. Last, cities should work together to deal with the pollution since the air pollutants can travel from regions far away.

# • Discussion of Target 11.7 within city

Due to the fast urbanization, China was forced to reconsider its urban landscape and address environmental issues to preserve natural resources. Many cities including Beijing are still dealing with the repercussions of their fast development through natural land loss, pollution and loss of biodiversity. Early this year, Beijing planned to create 600 hectares of urban green space to improve living conditions. The cities green coverage rate will increase to 48%. In 2018, Beijing will build five urban forests, 21 small green spaces, 10 leisure parks and 100 km of healthy green ways. As of 2012, Beijing's roof greening area had already amounted to more than 1.2 million square meters, about 1 percent of the total area of Beijing urban roofs, according to the Beijing Rooftop Association. The government informed the local governments to build up natural green spaces. The amount of green, arable land China's cities must preserve hasn't changed for decades, but the ability and willingness of local authorities to comply fluctuates constantly.

Although the green space in Beijing has covered more than 40% of the land use, the benefits of those green are spaces are very limited. First, green space is built without careful planning. Many man-made forests have very limited capability to mitigate micro climate. Some forest only has one or several species of plants, thus the ecosystem is very fragile and weak. For long-term maintaining, it also costs a lot of money and resources to sustain the forests or parks. Second, the parks are very small and has limited effects. Third, the green spaces consume a lot of water. Beijing is a very dry northern city, and the green spaces that are not well built demand a lot of water resource to maintain the lives of those plants. Instead of bring green spaces for residents, they are actually competing with people for water resources. Suggestions on green space is to well plan the green space before start the construction; vertical green space should be built without taking too much urban living spaces; increase the biodiversity of parks and forests; enhance well-being of local people and tourists; local species should be used and avoid alien plants intrusion.

#### Conclusion

Beijing is one of the biggest cities in China, and it has a long history being a capital city. However, the environmental and social issues in the city make it an uncomfortable place to live in. There are many things can be done and I really hope the experience I learnt from ProSPER.net can be used in the context of Beijing. I hope to see a beautiful charming Beijing in the future, and this needs many of us to work together.