

CARBON NEUTRAL PROJECT – MASDAR CITY

Prepared by: Lee Jian Ming

ABSTRACT

“The trend of the world keeps on changing from a decade to another. The trend of competing which nation has the highest high rise building is slowly coming to an end due to the hiking of steel price and global warming issues. United Arab Emirates (UAE), being one of the richest countries on earth is now trying to set the new trend with its latest civil engineering wonder. Building one of the most sustainable city on this planet, a city called Masdar City”.

The paragraph above is quoted from my project brief, it is the starting point of my research. This report is about the research in green technologies that does not cause any impact to environment. The target city of my research is Masdar City which is an undergoing project that build to be a Carbon Neutral city. Masdar City is in desert area, as a result the technology used in extracting, preserving and reusing this precious source of nature is very detailed studied by the builders of Masdar City. Apart from that, due to the desert weather that Masdar city has, a lot of way to cool down the city has been mentioned especially passive cooling/natural cooling which does not requires energy at all.

Becoming a zero carbon emission country is not easy, a lot of changes has to be made when conventional fossil fuel burning electric generation cannot be used in the city. So, instead of using fossil fuel, electricity generated in Masdar City are all from renewable sources and from all the sources of energy, solar power is the one that contribute the most to electricity in Masdar City.

Last but not least, the guidance from my supervisor is sincerely appreciated. Miss Susan Chong provide me with the basic information of Masdar City that has become the additional support for my research. Without the title given by her, such a great engineering wonder like Masdar city might not be noticed and without the exposure to new thing, knowledge of an individual will not be able to expand and grow.