Summary of poster presentation at the 21st AIM International Workshop

"LOW CARBON SCENARIOS FOR CITIES IN VIETNAM

- A CASE OF HO CHI MINH CITY -"

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The main objective of this research is to develop a methodology in order to support the design of Low Carbon City in developing countries based on the top-down and bottom-up approaches. Firstly, this research aims to estimate the energy consumption and GHG emissions in base year 2013 and target year 2020. Secondly, the potential of GHG emissions reduction is projected based on the top-down approach (using Extended Snapshot tool and IPCC guidelines). Thirdly, mitigation measures are proposed and integrated with the proposed projects in the Climate Change Action Plan (CCAP) based on the bottom-up approach.

In 2020BaU, under the increase of population (1.16 times) and GDP (1.92 times) compared to 2013, the passenger and freight transport demands increase 1.44 times and 1.76 times, respectively. These driving forces lead to the increase of 1.76 times in total energy consumption and 1.75 times in GHG emissions.

In 2020CCAP, by implementing the mitigation actions/projects, the total GHG emissions reduction potential of Ho Chi Minh City is 19.1% in 2020 by implementing the CCAP's projects. In which, with the internal effort, Ho Chi Minh City can reduce 10.5% of its GHG emissions in 2020BaU. Moreover, Ho Chi Minh City can achieve additionally 2.6% reduction potential under international support, and 6.1% is potential from grid power.