A study on the Correlation of GHGs and Economic Development in Metropolition Areas in Taiwan

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ABSTRACT

In this study,we use decoupling analysis to explore the characteristics and relationships among several indicators for GHGs and economic development in metropolition area.At first,we understanding the industry characteristic of the city,use decoupling analysis to explore that Taiwan main industry indicator analyse on later. In addition,OECD decoupling indicator analyses were used to find the interrelationships among industre transpor residential and commercial sector.Finally,we can discuss urban industry to will influence on greenhouse gas.There are four kinds of decoupling indicator analysis method way at present.This research utilizes OECD decoupling analysis indicator analytical method to analyse,the characteristic, in order to analyse the environmental pressure and economic driving force change annual to the base period in final year.Can be regarded as OECD decoupling indicator indicator of a kind of "rate of increase".So the income number value of the result of calculation is comparatively steady,and difficult to present and change by a large margin.OECD decoupling indicator possesses decompositon,so it is very convenient to make policy with the policy communicating. This research is to regard Taipei, Kaohsjung, Hsinchu, Taichung and Tainan of Taiwan as the target of assessing,and will urban greenhouse gas discharge source divide industre,residential and commercial ,transpor,agriculture and forest,waste sector.The greenhouse gas discharges the source mainly in industre,residential and commercial ,transpor sector.So three major value of industrial output , commercial output value, family income, total floor floor area and masses that department correlated is the economic driving force.In order to calculate every department OECD decoupling indicator. Results of OECD decoupling indicator analysis revealed that the relationship of Taiwan industry sector display the trend of increasing.In Hi-Tech industry,show that lowers the trend;In the urban industrial department,each of metropolition appear relative decoupling in recent years,but the decoupling factor show that lowers the trend;In residential and commercial sector,Regard commercial output value as economic driving force to see,its most CO_2 decoupling factors increase the trend,but regard family income and total floor floor area as economic driving force to see,the CO_2 decoupling factors show that lowers the trend;In transpor sector,only Taipei that CO_2 decoupling factors increase the trend,other city how that lowers the trend. Can obtain the following conclusion via originally researching and analysing:(1)OECD decoupling factor increases the trend in recent years in the industrial department of Taiwan, it show greenhouse gas discharge relation with output value appear greenhouse gas lasting decrement and trend that the value of industrial output grows up continuously.(2)Hi-Tech industry(For example the output value and emission of greenhouse gas present the semiconductor that the high multiple grows up and liquid crystal panel industry in recent years) To knowing the impact that the city has brought the gas of the greenhouse and discharged, but according to intensive view of degree of carbon, favorable to march toward low carbon direction of density go on urban industry development.(3)Person who live department greenhouse gas is it watch from different angle emission and commercial relation of output value its appear greenhouse gas lasting decrement but commercial trend that output value grows up continuously to stand, but the relation with family income and area of total floor floor presents the gas of the greenhouse to increase with development in economy, can can know city department greenhouse gas of living decrement must from general family side to set about.(4)Taibei city from transportation sector, because masses transport victory transport system become people main means of transportation in recent years, so masses is it open development is it is it take care of will able to bear curve " the environment raise" the situation to march toward to begin to transport, can is it is it will strengthen regional transportation sector greenhouse main direction, gas of decrement development that masses transport actively to find out to clear from " Taipei experience" .

Keywords : GHGs ; decoupling indicator ; industrial development

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