

# LARGEST SUSTAINABLE HOUSING PROJECT IN PAKISTAN-BOT MODEL TO DRIVE COUNTRY FROM CIRCULAR DEBT TO CIRCULAR ECONOMY

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Pakistan is the 6<sup>th</sup> largest populated country in the world with current population of about 19.7 million with an annual growth rate of about 2%. Currently, there is an extreme shortage of housing units in Pakistan. According to an estimate, current demand of housing units in Pakistan is about 9 million with a growth rate of 0.4 to 0.7 million houses per annum. Economic constraint limited the public sector to meet this barrier alone. In view of these constraints, largest sustainable housing project of Pakistan has been developed and submitted to Department of Housing, Urban Development and Public Health Engineering, Lahore, Pakistan. The project has proposed 30 new cities, each covering an area ranging from 100,000 to 300,000 kanals (1 kanal equal 586 m<sup>2</sup>). During the town planning special emphasis is given to sustainable perspectives e.g. rain water collection system, Sewage collection and disposal system, waste water treatment plants with reuse and recycling of water, waste collection system, reuse, recovery and recycling of waste, waste to energy, composting etc. Moreover, features of circular economy are stars of this project. The houses developed in this project will be built in view of recovery and reuse of material in the end of their life cycle. The paper describes an extra ordinary example of industrial symbiosis, in which, various private partners are hand in hand with public actors for the success of this unique project in the history of south Asia.

Key Words: Sustainability, Industrial symbiosis