

The Application of Biomimicry

Geng, Yong^{1*}; Fujita, Tsuyoshi²

National Institute for Environmental Studies, Japan

^{1*}*e-mail: gengyong@hotmail.com*

²*e-mail: fujita77@nies.go.jp*

Abstract

Biomimicry studies nature's models and imitates or takes inspiration from these designs and processes to solve human problems. It uses an ecological standard to judge the rightness of humankind's innovation. By mimicking nature's best and brightest, humans have a chance to blend in and become more like what humans admire. Therefore, biomimicry presents a promising strategy to promote sustainable development. This paper presents some case studies in order to show readers how biomimicry supports the goal of approaching sustainable development. The first case deals with agricultural issue; it shows human how to feed themselves. The second one will be in the energy area, which shows human how to harness energy. The third one will be in the medical field, which shows human how to heal themselves. The fourth one will be in the business field, which shows human how to conduct business. Such natural metaphor could be applied more broadly in the human economic system, through avoiding over consumption of virgin materials and reduction of total wastes; system optimization is thus achieved.

