## World Academy of Science, Engineering and Technology International Journal of Environmental and Ecological Engineering Vol:13, No:02, 2019

## Waste Prevention and Economic Policy: Policy Tools for Increasing Resource Efficiency and Savings

Authors: Sylvia Graczka

**Abstract :** Waste related environmental problems are not only exploding but are also spotlighted for capacity shortages in recycling, as China announced its ban on waste imports. According to the waste hierarchy, prevention is the primary solution for waste, and also the cheapest. Waste related environmental pollution as externality puts an ever-growing burden on communities bearing the social costs. Economic policies often claim to be pro-environment, this often appears only theoretically, or at the level of principles. There are few concrete occurrences of tools in economic policies, such as green taxes, that are truly effective in stimulating the shift towards waste reduction. The paper presents theoretical economic policy tools based on literature review, and case studies on applied economic policy tools by analyzing policy papers, strategies in force, in line with 'polluter pays' and 'extended producer responsibility' principles. The study also emphasizes the differences between the broader notion of waste reduction and that of waste minimization, parallel to the difference between resource efficiency and resource savings. It also puts the issue in the context of neoclassical environmental economics and ecological economics, to present alternatives in approach. The research concludes in identifying effective economic policy tools that support the reduction of material use, and the prevention of waste. Consumer and producer awareness of waste problems and consciousness related to their choices are inevitable to make economic policy tools work effectively.

Keywords: economic policy, producer responsibility, resource efficiency, waste prevention

Conference Title: ICWMRE 2019: International Conference on Waste Management, Recycling and Environment

**Conference Location :** Barcelona, Spain **Conference Dates :** February 11-12, 2019