The Energy Kuznets Curve: Evidence from Developed and Developing Economies

Imad A. Moosa^a and Kelly Burns^b

The energy environmental Kuznets curve is effectively an environmental Kuznets curve augmented by adding one or more energy-related variables. We suggest that the energy Kuznets curve (EKC) can be estimated separately from the conventional environmental Kuznets curve as a quadratic function of income. It is demonstrated that the environmental Kuznets curve implies and is implied by the EKC. The empirical results show consistently that both the environmental and EKC are valid for developed (high income) countries but not so for developing (low income) countries where the relations are positive and monotonic. The importance of considering energy consumption in conjunction with the environmental Kuznets curve is that economic growth on its own does not put an end to environmental degradation unless the underlying country is on the downward-sloping sections of both the environmental and EKC.

a Faculty of Finance and Banking, Ton Duc Thang University, Vietnam.

b Corresponding author: Victoria Energy Policy Centre, Victoria University, Australia. E-mail: Kelly.burns@vu.edu.au