The reliance on fossil fuels has been considered a major environmental threat for half a century. The evidence emerging in the recent decades, often based on epidemiology, has proven direct health risks of air pollution from fossil fuels combustion and global risks to health and the environment of climate changes due to greenhouse gases emission. Results of epidemiological studies and health impact assessment are being used in the developmental and policy discussions, and often affect financial interests of very powerful industries. The proposed Symposium will illustrate major aspects of health consequences of fossil fuel combustion and the reactions of the industry trying to influence epidemiological research. We will also discuss to challenges in Low-Medium Income countries regarding energy policies and prospects for major global alliances to apply climate agreements. The discussion will focus on the way epidemiologists should continue providing essential support to health policies avoiding corporate interests while encouraging industry and other stakeholder involvement as a part of the solution to the problem.