Development that is sustainable requires an operational, efficient and safe transportation system fueled by clean, low-carbon, secure and affordable energy. The energy used in road passenger transport enables social and economic development and is the target of interventions to fight pressing urban environmental problems, energy security concerns and dangerous climate change. This review explores a systematic approach to describe interactions documented in the literature, between policies targeting energy use in road passenger transport to reduce petroleum consumption and greenhouse gas emissions and sustainable development goals. Essential, uncertain and limited interactions are mapped out as a result, their overview indicates that a full reconciliation between these policies and sustainability goals is not always attainable. The careful alignment and contextual examination of interactions between measures and goals as exemplified in this approach can help inform practical transport energy policy that better match an agenda for sustainable development.