Climate change, the increase in human population and the decrease in natural resources have alerted many governments in the world to start taking serious actions towards a sustainable future. This is demonstrated by the 2030 agenda for sustainable development set by the United Nations in order to meet the various challenges facing the world. Construction is often necessary in order to meet the need for the growing population. This includes building, road, bridges and tunnels. This special issue will focus on producing building and construction materials in a sustainable manner. Utilisation of waste, recycled, local and natural materials will serve the purpose of this special issue. It is expected the research submitted to this issue will consist of efficient production process materials and efficient design through the use lightweight materials. This will include an economic way to produce the materials and the reduction in the quantities of materials used. Papers related to the innovative use and production of construction and building materials will be welcome.