

Master Thesis Brief Description

Thesis Title	Energy Modelling for Manufacturing Sector Development in Nepal
Programme of Studies	MSc in Energy Systems and the Built Environment
Course	MES 580 Master Thesis
Area of Study	Energy Policy
Student's Name	Sangrila Phuyal
Students Reg. Number	11758
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christos Themistos, Assoc. Professor, Electrical Engineering Department Dr. Nicholas Christofides, Ass. Professor, Electrical Engineering Department
Semester	Fall Semester 2016
Short Description	<p>The project "Energy Modeling for Industrial Sector Development in Nepal" is focused on the objectives of SE4ALL, i.e. Renewable Energy. This research will present an overview of the status of consumption associated emissions and their modeling in industrial sector of Nepal. It will critically examine the efficient utilization of the existing resources to reduce further burden of energy demand. For this purpose, a computer based energy model Long Range Energy Alternatives Planning System (LEAP) will be used to project the future energy demands.</p> <p>The base year 2014 will be extrapolated till year 2050 for calculating the future energy projections. In alternative scenarios the feasibility of future scenarios based on the potential and use of resource will be analysed with the aim of determining their possible impacts on the energy system. The research will describe some simplified renewable technologies that will be used to formulate policies for sustainable development, effect of energy efficiency and to limit the future demand for energy as well as to reduce air pollution from industries in Nepal.</p>