Thesis Title	**CNG Health & Safety for fueling stations**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Process Engineering
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Short Description	This master thesis addresses the imperative need for innovation and action in the transport sector to achieve a low-carbon economy, as directed by European directives. One significant initiative involves integrating compressed natural gas (CNG) into existing petrol stations, as CNG stands as the cleanest fossil fuel compared to petrol and oil, emitting fewer CO2 emissions and being environmentally friendly. The compression process reduces natural gas to less than 1% of its original volume, enabling convenient storage and transportation. However, the lack of refueling stations in Cyprus has hindered CNG usage despite growing consumer demand. This dissertation focuses on exploring the potential health and safety risks associated with CNG stations and establishing guidelines for ensuring health and safety during the storage and distribution of compressed natural gas. The study involved a thorough literature review, examination of relevant standards, health and safety laws, and regulations concerning natural gas storage and refueling operations. Additionally, it assessed health and safety risks resulting from non-compliance with preventive measures. The findings contribute valuable insights into promoting safe and efficient integration of CNG as a cleaner fuel alternative in Cyprus' transport sector.