Thesis Title	**Calculation of the potential of Cyprus for the promotion and implementation of floating photovoltaic parks in dams**
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 MSc Thesis
Area of Study	Sustainable Energy Technologies – Photovoltaics
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Short Description	The depletion of fossil fuels and increasing environmental concerns have necessitated the development of large-scale solar photovoltaic (PV) projects worldwide. To meet the 2025 target of generating 22.9% of its energy from renewable sources, Cyprus has sought to explore the feasibility of a pilot floating photovoltaic (FPV) plant in Kouris Dam. This thesis presents a comprehensive feasibility study, analyzing the potential of implementing FPV technology in Cyprus due to its favorable environmental and weather conditions. The study leveraged a literature review, a conducted database, and site-specific scaled layout information to obtain essential data for calculations. A solar PV placement area of 1.95 km2 was used, and design optimization simulations were conducted using Pvsyst software. The results revealed that the projected annual energy production amounted to 620966.37 MWh/year. This research provides valuable insights into the viability and benefits of deploying FPV technology, contributing to the advancement of renewable energy initiatives in Cyprus. The findings offer valuable guidance for stakeholders and policymakers in achieving the country's sustainable energy goals.