Cyprus gravity energy storage

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Cyprus will begin accepting applications from commercial producers to construct energy storage facilities on the island in January, Energy Minister George Papanastasiou said on Friday.

Addressing the Energy symposium in Nicosia, he said the government aims to be able to store a total of 150 megawatts of energy, all of which will be generated by renewable sources.

These comments come off the back of his speech to the House finance committee regarding his ministry"s budget, in which he said Cyprus now has the capacity to produce a total of 950 megawatts of energy from renewable sources, with 1,500 megawatts of installed capacity from conventional production.

However, he said, only 20 per cent of Cyprus" energy consumption is from renewable sources, given the lack of available storage systems, and added that this figure "could be much higher" if the requisite storage infrastructure existed

Greek Energy Minister Theodoros Skylakakis also centred his recorded address to the symposium on the matter of renewable energy, saying, "this period of energy transition, with very big disturbances, comes at the same time as the climate crisis, and is full of challenges."

He added that his country is expanding its renewable energy production, utilising solar panels, hydroelectric power, and wind power, and is also making "significant investments in energy storage".

He also made reference to the electricity interconnector between Cyprus and Greece, saying that relations between the two countries "will become even closer as the construction of the cable progresses".

To this end, he expressed his belief that both countries" investment in renewable energy and the interconnector project will "lead in the coming years to much lower energy prices, and this will favour both Greece and Cyprus".

Cyprus is among the EU member states with the lowest share of renewable energy in its electricity mix, accounting for only around 15 per cent in 2021. The rest of the electricity supply in Cyprus is based exclusively on heavy fuel oil and diesel power plants, which are harmful to the environment and climate. There is also very limited space available to install photovoltaic and wind power plants.

As there are about 110 reservoirs in Cyprus, floating photovoltaic plants are a possible solution to this problem. Some of these reservoirs could also serve as pumped-storage plants, making it possible to store renewable energy. Cyprus has significant potential to harness green energy at sea - for example, offshore wind energy, meaning through wind power plants at sea, or ocean energy. However, projects using these

technologies have not yet been implemented in Cyprus.

The project examines the feasibility and potential of floating photovoltaic plants in Cyprus. It also advises the Cyprus Government on developing national strategies for pumped-storage plants and renewable offshore energy. To this end, the project is drafting contract templates and technical specifications in order to implement corresponding projects. In addition, it is supporting the development of a legal framework and appropriate funding instruments.

The project communicates knowledge and relevant experience from other countries with Cyprus, including through training courses. With its Cypriot partners, it identifies obstacles and drafts recommendations for developing floating photovoltaics, pumped-storage plants and offshore renewable energy. In this way, it contributes to protecting the climate and expanding green energy in Cyprus.