



RESFinance II – Mobilising citizen financing for renewables
5 May 2022

Solar Photovoltaic Communal Farm Scheme



Ing. Sandro Lauri – Energy and Water
Agency
Dr. Ing. Charles Yousif – University of
Malta



**Interreg
Europe**



European Union | European Regional Development Fund



Challenge & Benefits Addressed

Challenge

- Residential sector having no right of use of roof for PV installations
- Many residences in the Island of Malta (60%) are flatted dwellings with no access to roof, which is usually owned by the top floor apartment

Main Benefits

- Improved energy performance certification of participating dwellings towards decarbonisation targets
- No PV farm maintenance fees charged to dwellings
- Enhance PPP entrepreneurship
- Makes use of redundant space on large roofs

Project Description

- Main stakeholders: The Energy and Water Agency (EWA) formulated the scheme
- Installation size: 999 kWp communal rooftop solar photovoltaic farm
- Location: Tal-Fiddien Water Reservoir Rooftop, Rabat
- Site size: $\approx 16,000 \text{ m}^2$ (4,000 PV panels)
- Application Limit: Total aggregate of 999kWp
- Pricing: €1,500/ kWp with each dwelling having an option to purchase 1, 2 or 3 kWp.
-
- Units Credited: 1,550 units per kWp purchased
- Maintenance fees to co-owners: 0
- Contract term: 20 years
- Feed-in tariff allocated: 15c/unit for first six years, 10.5c/unit for remaining years – credited directly towards the household's electricity bill. This is similar to the FiT applicable to household PV installations, albeit slightly lower
- Transferability: Yes, when changing address and in case of death (to heir).

Project Description

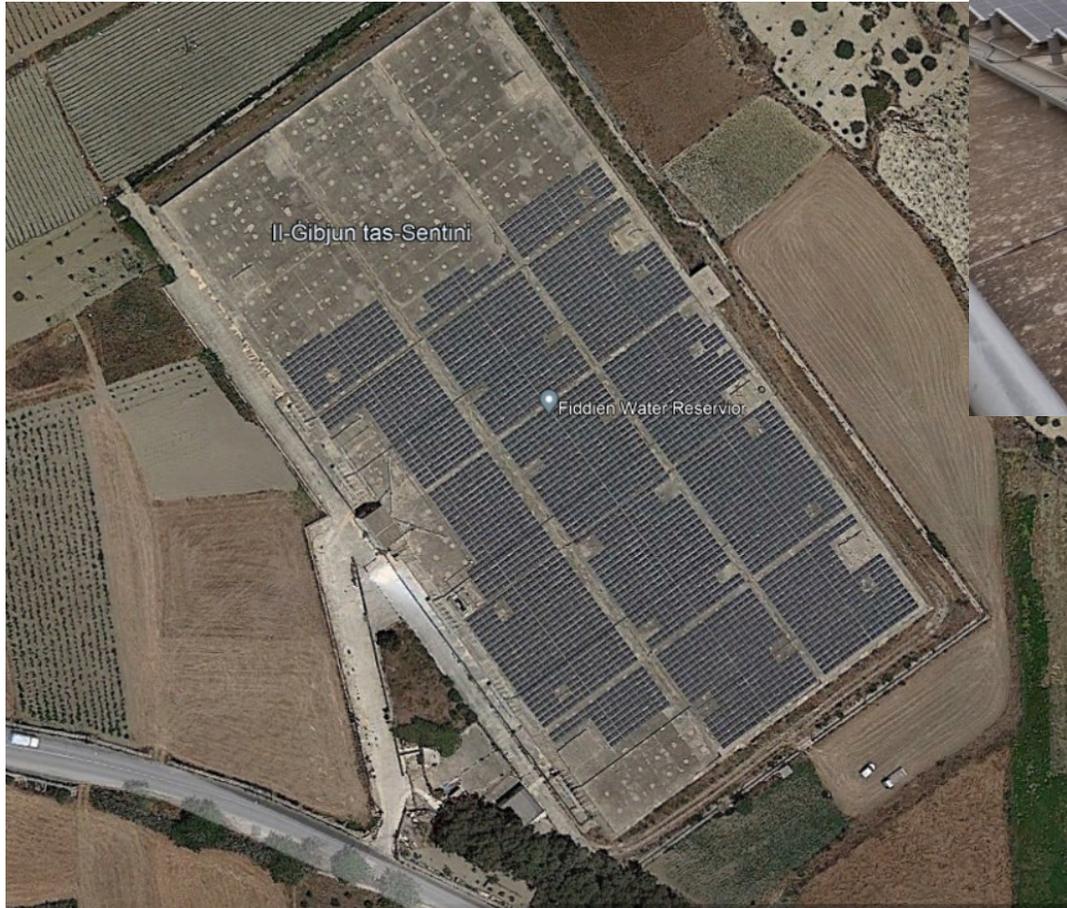


Photo taken from Google Earth



Planning Process

- Planning Authority applications for permits to install PVs on the water reservoir
- Application for electrical grid studies (Enemalta Corporation).
- Application for FiT to responsible authority (REWS).
- Award Writing of tenders and evaluation of tenders (public procurement).
- Following a public procurement process, the project was awarded to a private company to procure, install and maintain the PV farm.
- Processing of applications received, and contract compilation to investors.
- Project investment cost circa €1.46 million Euro



Highlights

- The scheme is a win-win proposal for the 3 parties involved
 - 1) Government to achieve the RE target.
 - 2) Private contractor for job creation in green markets.
 - 3) The general public (dwellings) for achieving lower carbon footprint and a financial benefit, equivalent to 5% return on investment.
- The scheme was fully subscribed in less than 9 months (24 Oct 2016 - 22 June 2017).
- Number of beneficiaries: 366 households



Other Opportunities

- Such scheme can also be extended to cater for households that have a rooftop but cannot install PVs due to shading obstructions such as shading from nearby households.
- It can also be extended to commercial sectors (such as restaurants), most of which do not have access to a rooftop.
- Given that such communal farm scheme was a success in Malta, an island where land is scarce, the idea can be implemented in other regions and cities in Europe. Communal PV farms can fulfil the requirement for new buildings in cities to achieve nearly zero energy status after 2020, especially for those that do not have sufficient space in their immediate vicinity to install sufficient capacity to achieve the NZEB status.



Ing. Sandro Lauri (EWA):
sandro.lauri@gov.mt

<https://www.energywateragency.gov.mt/>

Dr. Ing. Charles Yousif University
of Malta:

charles.yousif@um.edu.mt

<https://www.um.edu.mt/ise>

Thank you!



**Interreg
Europe**



European Union | European Regional Development Fund