



Success Stories

**SUNREF PALESTINE
PROJECTS**

SUNREF, AFD's green finance label

SEIZING THE OPPORTUNITIES OF THE ECOLOGICAL TRANSITION

Environmental integration offers significant economic development potential. Green growth provides a number of opportunities to households and companies, including small and medium sized enterprises and to energy professionals, strengthening markets especially in the fields of:



Energy management

Sustainable natural resources management

Environmental protection

Palestine's energy constraints and its exposure to climate change make it essential to mainstream green growth. The Agence Française de Développement (AFD) contributes to tackling this challenge, in partnership with the European Union, the Palestine Energy and Natural Resources Authority (PENRA), Bank of Palestine and Cairo Amman Bank.

SUNREF: A GREEN FINANCE LABEL FOR BUSINESSES

In Palestine, where the price of electricity is the highest in the region and energy security remains a major concern, the development of reliable, affordable green energies and technologies is critical to the territory's sustainable economic growth. Committed to Palestine's ecological transition, SUNREF was designed to support businesses and households in building up renewable energy, energy efficiency and environment projects while scaling up the Palestinian green market. Fully aligned with the Paris Agreement, the SUNREF programme is part of a worldwide initiative developed by AFD to mobilize public and private banks to finance private sector investments involving green technologies and sustainable energy.

SUNREF Palestine aims at helping private actors to seize the opportunities of energy and environmental transition via facilitated access to green finance. In partnership with the European Union, PENRA, Bank of Palestine and Cairo Amman Bank, SUNREF Palestine provides households and companies with an innovative, tailor-made financial tool that allows them to acquire higher quality equipment, make cost savings and become more competitive while managing energy more efficiently and respecting the environment.

The programme is built on three axes co-financed by AFD (€ 25 million) and the European Union (€ 8 million):

- **A credit facility for the two partner banks (€ 25 million)** This credit line enables the banks to grant loans to project developers willing to invest in the sector of renewable energies and energy efficiency.
- **Investment premiums (€ 5 million)** The EU financial support to SUNREF Palestine provides further incentives to project developers, considering green investments under the form of investment grants ranging from 15% to 30% of the loan amount once investment projects are completed.
- **Technical Assistance (€ 3 million)** Thanks to EU support, SUNREF Palestine makes available tailored technical assistance, free-of-charge, for both banks and borrowers to reduce risks and maximise the impact of green investments.

IMPACTS

- Promote energy efficiency measures and the use of renewable energies in Palestine.
- Support the role of the private sector in structuring and financing green projects.
- Strengthen the capacities of the different stakeholders.

SUNREF PALESTINE

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Ritz Leasing

Electric vehicles and charging infrastructure

In an effort to increase the use and availability of electric vehicles in Palestine, Ritz Leasing benefited from an AFD / Bank of Palestine SUNREF loan and an EU investment grant to implement this truly novel project – the first of its kind in Palestine. The objective of the project is to offer battery-powered electric vehicles to clients and enable further uptake of electric vehicles in Palestine by developing a network of charging stations.

THE ROLE OF AFD AND THE EU

AFD's green finance label allowed Ritz Leasing to expand its portfolio of offerings at an affordable cost. SUNREF Palestine covered both the cost of 57 plug-in electric vehicles (EVs) intended to be on-leased to final clients as well as the development cost of 9 fast charging stations, thus allowing Ritz Leasing to not only boost the volume of EV sales in Palestine but to also pioneer the development of public fast charging stations across the country.

With the support of the SUNREF Palestine Technical Assistance funded by the EU, the loan was disbursed to Ritz Leasing by Bank of Palestine.

"Traditional banking does not finance clean energy projects without extra guarantees which raises the cost of borrowing. This is where SUNREF Palestine helped by providing the funds and subsidies to make that possible"

Sami Abu Yousef,
General Manager,
Ritz Leasing

PROJECT AND SOLUTIONS

Ritz Leasing, the leasing arm of one of the leading car dealers in Palestine, aimed to expand its business by including plug-in electric vehicles to its portfolio. A total of 57 Peugeot Partner Tepee EVs were imported and onleased to final clients. In order to further enhance the EV market development in Palestine, Ritz Leasing decided to invest in a network of fast charging stations. The SUNREF loan and investment grant covered the cost of the imported EVs as well as the installation of 9 charging stations in 5 different locations in Palestine (Ramallah, Bethlehem, Nablus, Jericho and Jenin).

IMPACTS

Ritz Leasing secured two separate SUNREF loans for a total of EUR 1,746,720 and benefited from an investment grant amounting to EUR 524,016.

The project allowed a number of Ritz Leasing end clients (mostly corporate customers) to add electric vehicles to their business fleets. The existence of a network of charging stations across Palestine will undoubtedly promote the uptake of electric vehicles, which will help Ritz Leasing to grow its EV business.

Project in Figures Year 2019



West
Bank



Investment type:
Environmental
project



Total investment:
EUR 2,183,400



Loan amount:
EUR 1,746,720



**Investment grant
amount: EUR**
524,016



Emission savings:
71.6 t eqCO₂/y



Paltel

Building the region's most energy efficient data centre

While energy efficiency is key both to preserving the environment and enhancing companies' competitiveness, improving energy consumption through concrete energy efficiency measures is still little explored in Palestine. In this context, Paltel took advantage of an AFD / Cairo Amman Bank SUNREF loan and an EU investment grant to ensure that its new data centre in Al-Bireh was built to the highest energy efficiency standards. The objective was to optimize the operational costs of the data centre by investing in highly-efficient technical design and equipment.

THE ROLE OF AFD AND THE EU

AFD's green finance label allowed Paltel to achieve highest international energy efficiency standards of operation for its data centre. SUNREF Palestine covered the investment in high-end electrical and electro-mechanical equipment. With this project supported by Cairo Amman Bank in coordination with the technical assistance team, SUNREF has contributed to setting up the most efficient data centre in the entire region.

PROJECT AND SOLUTIONS

Palestinian Telecommunications Company, the leading telecoms provider in Palestine, decided to invest in a modern and highly-energy efficient data centre in Al-Bireh/Ramallah to meet the growing demand for high-quality data storage and management services in the country. The total cost of the project was USD

"We knew from the very first day that our partnership with SUNREF would add a great value and impact to our Data Center and would boost our ability to reduce costs and maximize efficiency. This strategic partnership allowed us to invest in the most efficient technologies available and meet the international standards of energy consumption. Today we are honored to announce that our Data Center uses less than 30% energy consumption compared to an average Data Center of its size anywhere in the world."

Rami Azem,
Head of Infrastructure Development,
Paltel

10 million, including municipal fees, excavation and construction works. The SUNREF loan and investment grant covered the cost of electrical and mechanical equipment to increase energy efficiency in the data centre, including chillers, computer room air handlers (CRAH), containment, lighting systems, transformers, bus duct systems, energy management system (EMS), data centre infrastructure management (DCIM), uninterruptible power supply (UPS), raised floor, variable refrigerant flow (VRF) cooling units and air handling unit (AHU).

IMPACTS

Paltel benefited from a SUNREF loan for a total amount of EUR 2,862,443 (USD 3,291,810) and from an investment grant of EUR 572,488,60, which allowed the company to invest in most efficient technologies available. Ultimately, the project enabled Paltel to offer its clients high-quality data storage and management services at competitive prices thanks to its lower operational costs. The data centre now meets the highest international technology standards and uses 30% less energy than an average data centre of its size anywhere in the world.

Project in Figures Year 2019



West
Bank



Investment type:
Energy Efficiency/Best
Available Technologies



Total investment:
EUR 8,636,000



Loan amount:
EUR 2,862,443



**Investment grant
amount:** EUR 572,488.60



Energy savings:
1,892 MWh/y



Emission savings:
1,415 t eqCO₂/y



Metro Market

Solar power for a Supermarket in Gaza

Over the past years, the Gaza Strip has suffered from a chronic electricity deficit, which undermined already dire living and business conditions. The ongoing power shortage is severely impacting Gaza's fragile economy, rendering the cost of doing business too high. Metro Market is a major food and consumer goods retailer in Gaza, dependent on electricity to light, heat and cool its shops. Steep energy bills and frequent power cuts hampered its competitiveness. The AFD / Bank of Palestine SUNREF credit facility and the EU investment grant enabled the company to secure an affordable and reliable electricity supply for daily business operations in one of its largest Metro Markets, in Gaza City.

THE ROLE OF AFD AND THE EU

In face of the harsh energy crisis that has been hindering the living conditions of people in the Gaza strip, AFD has been keen to facilitate the access to green energy investments in Gaza in order to improve electricity supplies.

The SUNREF loan made available by Bank of Palestine with the support of the technical assistance team and the EU investment grant allowed Metro Market to secure uninterrupted, affordable and "green" energy for its operations. SUNREF Palestine covered the investment in a rooftop solar photovoltaic system to supply electricity to the Metro Market in Gaza City.

"Thanks to the support from SUNREF we did not only achieve huge cost savings, but reliable and uninterrupted supply that is allowing Metro Market to offer fresh and durable goods to its clients".

Mohammed Ahmad Alyazeji,
General Manager,
Metro Market

PROJECT AND SOLUTIONS

For its Gaza City Metro Market, the company decided to invest in an on-grid hybrid diesel/solar photovoltaic system with total installed capacity of 196 kWp. Installing a hybrid system is essential for businesses in Gaza to be able to continue uninterrupted operations during the dark part of the day, when the solar component does not produce electricity. A controlling system coordinates the grid-connected solar PV and the existing diesel generator to work in tandem, giving the supermarket reliable access to energy as well as cutting electricity and fuel costs. The SUNREF loan and investment grant covered the cost of the key components of the system, including solar PV panels, solar inverters, hybrid controller, mounting structure, cabling and communication equipment.

IMPACTS

Metro Company used its SUNREF loan of EUR 168,165 to invest in its own electricity generation facility and was granted a premium amounting to EUR 50,449.50. Thanks to the project, Metro Company is now less exposed to electricity service disruptions and outages in Gaza and has been able to minimize use of expensive, polluting diesel fuel. The supermarket can now rely on its own energy source and has lowered substantially its utility bills.

Project in Figures

Year 2020

GAZA



Investment type:
Renewable Energy



Total investment:
EUR 168,165



Loan amount:
EUR 168,165



Investment grant amount: EUR 50,449.50



Green energy generated:
329.4 MWh/y



Emission savings:
246.4 t eqCO₂/y



Fruit Top Company

Soft drinks producer shifts to renewables

Thanks to two AFD / Cairo Amman Bank SUNREF loans and EU investment grant, Fruit Top was able to install fixed-tilt solar photovoltaic (PV) systems on its factory rooftop, which helped the company reduce operating costs, improve its financial standing and become more competitive.

THE ROLE OF AFD AND THE EU

SUNREF Palestine gave Fruit Top Company the opportunity to invest in two photovoltaic solar systems at its Tulkarem production facilities. SUNREF Palestine covered the two-stage investment in a rooftop solar PV system that now meets over 60% of the electricity needs of the Fruit Top factory.

PROJECT AND SOLUTIONS

With a view to radically reduce operational costs, Fruit Top Company, one of Palestine's leading soft drink producers, decided to begin producing electricity on-site from renewable sources and gradually phase out use of electricity purchased from the municipal grid. The first step towards energy independence

"We would like to thank SUNREF Palestine for the easy and straightforward process leading to improving the cost and energy efficiency of our business".

*Mustafa Majadleh,
General Manager,
Fruit Top Company*

was taken in early 2019 with the installation of a solar PV system that was able to generate 52 kilowatts at peak capacity. A system expansion in 2020 brought capacity up to 82 kWp. The SUNREF loans covered the cost of the key system components, including solar PV panels, solar inverters, hybrid controller, mounting structure, cabling and communication equipment.

IMPACTS

Fruit Top Company benefited from two SUNREF loans totalling EUR 103,700 together with an investment grant amounting to EUR 20,740. Thanks to these investments, the company can now cover over 60% of its electricity needs. SUNREF has also been contributing to raising energy awareness in Palestine. Ample evidence of this is the decision of the company owners to benefit from SUNREF loans as households and have solar PV systems installed in their homes.

Lower electricity bills mean reduced production costs and ultimately, increased competitiveness. Having experienced the benefits of renewable energy production first-hand, Fruit Top is planning to further expand the stalled capacity so as to cover 100% of its energy needs independently.

Project in Figures

Year 2019/2020



West
Bank



Investment type:
Renewable Energy



Total investment:
EUR 129,646



Loan amount:
EUR 103,700



Investment grant amount: EUR 20,740



Green energy generated:
216.8 MWh/y



Emission savings:
162.4 t eqCO₂/y



Valley Trading Company

Green energy for Palestinian agriculture

Valley Trading Company, part of the Al Wadi Farms Group, used AFD / Bank of Palestine SUNREF loan and EU investment grant to reduce the running costs of its farms by installing a solar photovoltaic system to generate the electricity needed for its wells and irrigation facilities.

With the support of the SUNREF technical assistance, the company chose a powerful solar plant with total installed capacity of 999 kWp, aiming both to improve operating costs and to reduce reliance on the electricity grid.

THE ROLE OF AFD AND THE EU

Thanks to SUNREF, Palestine Valley Trading Company was able to access affordable long-term financing to invest in a 999 kWp solar power plant, near the Al Wadi Group palm plantation in Jericho. The company is farming more than 5,000 dunum (5 million sq.m.) of land in the Jordan River Valley. The SUNREF Palestine technical assistance was mobilized from the beginning in order to validate the quality of the technical project design and the quality of the proposed equipment on behalf of both the company and the bank financing the investment. Bank of Palestine disbursed the SUNREF loan.

PROJECT AND SOLUTIONS

Valley Trading Company is part of Al Wadi Farms Group, which is the leading producer of dates in Palestine. Its investment in a 999 kWp solar PV plant was designed primarily to supply the Al

"SUNREF allowed us to not only optimize the operational costs but to farm and preserve a new 500 dunum plot and create new jobs."

*Dr. Ismail Daik,
General manager,
Valley Trading Company*

Wadi Group water wells and irrigation systems with affordable electricity. The plant connects to the Jerusalem District Electricity Company (JDECO) grid on a wheeling basis to enable energy to be used far from where it is produced. The company is using the grid of JDECO to transport the electricity produced by its own solar PV plant to the actual point of consumption: the irrigation systems and water pumps of its dates plantation. The SUNREF loan and investment grant covered the costs associated with setting up the plant, including civil works and land preparation, mounting structure, solar PV panels, solar inverters, cabling and communication equipment.

IMPACTS

The SUNREF loan of EUR 958,000 combined with an investment grant of EUR 191,600 enabled Al Wadi Farms Group to optimize running costs and improve its operating margins. The Jordan Valley is suffering from water shortages, making it hard for local farmers to maintain their businesses. Thanks to this SUNREF financed project, Valley Trading Company is now producing most of the electricity needed by Al Wadi group companies which is transported via the wheeling contract. With this operation, the Valley Trading Company has been able to lower its operational costs and improve its margins while pumping more water to a new land plot of 500 dunums (500,000 sq.m.) planted with over 10,000 new date trees, thus creating more than 13 new jobs in the region. The optimization of water resources combined with cost production savings makes Al Wadi dates more environmentally sustainable and a deliciously affordable option.

Project in Figures Year 2019



West
Bank



Investment type:
Renewable Energy



Total investment:
EUR 1,071,412



Loan amount:
EUR 958,000



Investment grant amount: EUR 191,600



Green energy generated:
1,761 MWh/y



Emission savings:
1,317 t eqCO₂/y



Mrs Elham Ya'qoub

Solar energy for Palestinian households

Elham Ya'qoub and her husband, Saber Aref, decided to invest in rooftop solar PV to cut their electricity bills and asked Cairo Amman Bank to finance the investment. An AFD / Cairo Amman Bank SUNREF loan and EU investment grant was arranged to install a fixed-tilt solar PV system on the roof of their home in the village of Shufa Village, Tulkarem Governorate.

THE ROLE OF AFD AND THE EU

Thanks to SUNREF Palestine, Mrs Elham Ya'qoub could afford to install a 4.9 kWp photovoltaic rooftop solar system, with the loan covering 85% of the total turn-key investment and the investment grant amounting to 20% of the loan.

PROJECT AND SOLUTIONS

Elham Ya'qoub is from Northern West Bank. For some time, she and her husband, Saber, had been following the development of the Solar PV market for residential buildings as they considered rooftop solar panels on their home as a way to become more self-reliant and to cut their energy bills. Finally, they decided to go ahead and invest in a solar PV system of their own.

The EPC company that the family hired to install the solar PV system had been trained by the SUNREF technical assistance team and presented the program to Mrs. Ya'qoub and her husband as an opportunity to obtain long term affordable financing and optimize the project costs. The SUNREF loan and investment grant enabled them to turn their dream into reality: it covered the entire installation cost, including the mounting structure, solar PV panels, solar inverters and cabling. The system is connected to the Shufa Village council grid through net metering, which implies that during the day excess electricity is exported to the grid, and at night, when the solar system is not working, the family takes it back from the grid.

IMPACTS

Mrs Elham Ya'qoub's EUR 5,000 SUNREF loan enables her to generate almost enough clean electricity to cover her family's daytime energy needs.

Electricity prices are very high in Palestine, which induces a lot of Palestinian households to invest in their own solar systems. Ms. Ya'qoub's family was paying EUR 0.16 (NIS 0.65) per kWh of electricity from the grid of Shufa council. Ultimately, producing its own electricity rather than using expensive power from the grid has enabled the household to increase its disposable income while becoming active players of Palestine's energy transition.

Project in Figures

Year 2019



West
Bank



Investment type:
Renewable Energy



Total investment:
EUR 5,900



Loan amount:
EUR 5,000



**Investment grant
amount:** EUR 1,000



Green energy generated:
8.0 MWh/y



Emission savings:
6.0 t eqCO₂/y

Institutional Partners

SUNREF Palestine

benefits from the support of local authorities.



PENRA (Palestinian Energy and Natural Resources Authority), as a major local actor in the promotion of renewable energy and energy efficiency, has been a key partner in the implementation of the technical assistance programme through its Palestinian Energy and Environment Research Center (PEC).



About the European Union

The EU consists of 27 countries and has the world's largest economy and its third largest population, after China and India. Though richly diverse, the countries that make up the EU (its 'Member States') are all committed to the same basic values: peace, democracy, the rule of law and respect for human rights. They have set up common institutions so that decisions on matters of joint interest can be made democratically at European level. By creating a frontier-free single market and a single currency (the euro), which has been adopted by 19 Member States, the EU has given a significant boost to trade and employment. It is also at the forefront of policies on sustainability.

The EU is founded on a set of principles and values that put the emphasis on the respect for human dignity and human rights. European partners in Palestine, the EU and EU Member States, are committed to ensuring that these values are translated into their partnership with Palestinians and reflected in the European Joint Strategy in support of Palestine. European partners recognise that sustainable development in Palestine hinges on "achieving a two-state solution based on parameters set out in the Council Conclusions of July 2014 that meets Israeli and Palestinian security needs and Palestinian aspirations for statehood and sovereignty, ends the occupation that began in 1967, and resolves all permanent status issues in order to end the conflict".

http://eeas.europa.eu/delegations/palestine-occupied-palestinian-territory-west-bank-and-gaza-strip_en

Partner Banks

Local banks are key private sector actors and play a crucial role in financing the ecological transition and green investments. With SUNREF, local partner banks finance private development projects that are more innovative than those usually financed.

SUNREF Palestine Partner Banks



"The number of applications and the eagerness of enterprises and individuals to benefit from the program shows that we made the right decision in participating to the program. This would have never been achieved without the support from AFD and EU, the skilled employees and the wide-ranged expertise and professionalism of the technical assistance. The well-structured program and the investment grant component also played key role for the successful implementation. We are proud of our partnership with all parties within the project and looking forward to implementing the second phase of SUNREF Palestine".

Firas Najjab
Deputy Regional Manager- business group,
Cairo Amman Bank



"Our partnership with SUNREF has greatly boosted our ability to help enterprises to reduce their operating costs through reduction in power bill and electricity costs.

Bank of Palestine confirms that the profitable growth of our institution depends on the economic, environmental, and social sustainability of our communities across the world."

Feras AbuShaban
Credit Analyst - Social and Environmental Officer,
Bank of Palestine



For more information about the SUNREF Palestine loan conditions and application procedures, please reach us directly

TECHNICAL ASSISTANCE SUNREF Palestine Team

Contact: Nabil Barghouthi
Phone: +972 599299988 - sunrefpalestine@econoler.com

PARTNER BANKS Bank of Palestine

Contact: Shaker Alsafadi
Phone: +972 599856338 - ssafadi@bankofpalestine.com

Cairo Amman Bank

Contact: Lama Al Malki
Phone: +970 22977123 - lama.almalki@CAB.ps

Towards a World In Common

AFD Group implements France's policy in the areas of development and international solidarity. The Group includes Agence Française de Développement (AFD), which finances the public sector and NGOs, as well as research and education in sustainable development; its subsidiary Proparco, which is dedicated to private sector financing; and soon, Expertise France, a technical cooperation agency. The Group finances, supports and accelerates transitions towards a fairer, more resilient world.

With our partners, we are building shared solutions with and for the people of the Global South. Our teams are at work on more than 4,000 projects in the field, in the French Overseas Departments and Territories, in 115 countries and in regions in crisis. We strive to protect global public goods – promoting a stable climate, biodiversity and peace, as well as gender equality, education and healthcare. In this way, we contribute to the commitment of France and the French people to achieve the Sustainable Development Goals (SDGs). Towards a world in common.



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Twitter : @AFD_en - Facebook : AFDOfficiel - Instagram : afd_france

5, rue Roland-Barthes -75598 Paris cedex 12 -France

Tél. : +33 1 53 44 31 31

<https://www.afd.fr/en/sunref-afd-group-green-finance-label>