



وَأَمَّا الطَّاقَةُ وَالشَّرْوَةُ الْمَعْدِنِيَّةُ
الْمَمْلُوكَةُ الْأَرْضِيَّةُ فَهِيَ شَيْءٌ



J R E E E F

Jordan Renewable Energy & Energy Efficiency Fund
صندوق تشجيع الطاقة المتجددة وترشيد الطاقة

MINISTRY OF ENERGY AND MINERAL RESOURCES
وزارة الطاقة والثروة المعدنية

JREEEF Milestones

United Nations Economic and Social Commission for Western Asia - ESCWA

**LEADING NATIONAL EFFORTS TO OPTIMIZE THE
UTILIZATION OF ENERGY CONSUMPTION
THROUGH EE & RE**

Overview

The Renewable Energy and Energy Efficiency Fund was established under the Renewable Energy and Energy Efficiency Law No. (13) of 2012, and its own bylaw No. (49) was issued in the year 2015, where it actually started its work as an executive arm of the Ministry of Energy and Mineral Resources. The fund works to provide the necessary financing to implement energy conservation and renewable energy programs and projects.

Where the Fund has designed a package of programs and projects that include various sectors and that are implemented through several financing windows, and the strategic plan and implementation programs of the Fund stem from the general strategic plan of the Ministry of Energy and Mineral Resources and the national strategy for the energy sector to achieve national goals, and contribute to achieving Jordan's commitments International Conference on Climate Change and the Paris Agreement.

Minister of Energy chairs the Fund Management Committee formed according to the law, which consists of six members, three of them from the public sector and three from the private sector: This is an example of effective partnership between the public and private sectors.

Financial mechanisms & windows

Financial Mechanisms

- Grants
- Interest Rate Subsidy
- Banks Loans Guarantees
- Cost sharing With International Donors

Financial windows

- Banks
- Microfinance companies
- Local NGOS /CBOs

JREEEF Polices

- Gender Policy
- Evaluation Policy
- Environment & Social Policy
- Data Policy

JREEEF Objectives

Reducing the financial burdens on consumers and the economy resulting from energy sector.

Support RE and EE projects and programs that open up new markets and are replicable and scalable.

Increase the private sector's economic resilience and competitiveness through deploying EE/RE applications.

Support development of a domestic industry that can deliver the projects and services necessary to scale-up utilization of RE and EE in Jordan.

Develop a network of partnerships for developing and implementing RE and EE projects of all sizes.

Engage with donor agencies and other funds to establish a continuing flow of funding for renewable energy and energy efficiency investments.

Fund programs and projects



Schools

Household sector

Tourism sector (hotels)

Industry sector

Non profit entities with public objectives (accommodation)

Agriculture sector

health sector

Awareness training &

Municipalities

worship places

JREEEF programs for the household sector

Installing heaters and solar cells and replacing energy-saving lamps for citizens' homes.

Funding Mechanism:

- A full grant for the homes of poor families, chaste families, and the homes of the High Royal support, which are chosen in cooperation with the Royal Court, the Ministry of Social Development and the National Aid Fund.

Funding values :

- A full Grant for poor and chaste families.
- Support 50%, 30% of systems cost.

Program achievements till the end of the year 2020:

program	Number of installed systems
SWH	30,000
PV	3,500
Efficient LED	220,000 Units

Total cost of home sector projects:

17,480,087 Jordanian dinars

Targeted 2021

solar water heater 2500

solar photovoltaic cells 1,250

Funding windows:

- Local Associations: 250 local associations in various governorates of the Kingdom work with the Fund to implement programs.
- Commercial banks.
- The civil institution.
- Foundation for retired military personnel.
- Various donors.



PROJECT PERFORMANCE / IMPACT INDICATORS



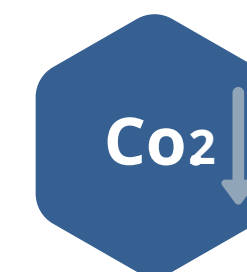
212,389

The estimated number of citizens Beneficiaries of energy efficiency and renewable energy applications



5,801,131

Expected savings on your household bill Jordanian Dinar



30,850

The expected decrease in carbon dioxide emissions by tonnes. annually



48,431

Expected decrease in electrical energy consumption (MWh) annually

JREEEF program for Non profit entities with public objectives (accommodation)



Supporting the installation of solar cell systems for institutions, associations and centers that deal with orphans, people with disabilities and the elderly.

Funding Mechanism:

Full (100%) grant from the Energy Fund to install the system.

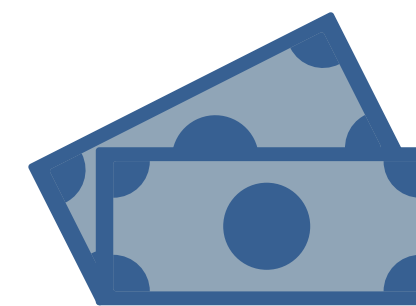


Program achievements for the end of the year 2020:

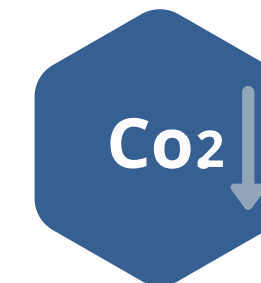
Photovoltaic cell systems were installed and commissioned for 11 enterprises.

Targeted during 2021: 20 charities, with a maximum of 10 kilowatts

PROJECT PERFORMANCE / IMPACT INDICATORS



850,137
Expected savings on your household bill
Jordanian Dinar

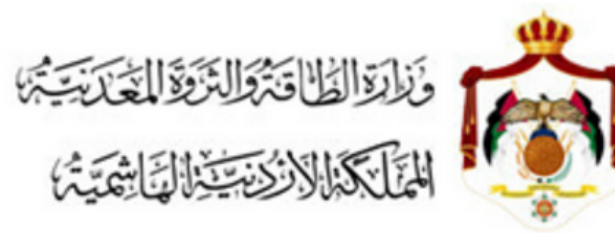


290
The expected decrease in carbon dioxide emissions by tonnes. annually



433.3
Expected decrease in electrical energy consumption (MWh) annually

Industrial sector



Supporting and financing energy audit studies and implementing energy-saving measures in small and medium-sized factories.

Funding Mechanisms:

- Fund energy audit studies by 50%.
- Supporting bank interests and guaranteeing loans for the loan granted to the factory to implement the project, with a ceiling of 350,000 dinars.

Program achievements:

For the end of the year 2020

Number of completed energy audit studies	Number of participating factories
27	79
Number of factories obtaining loans and implementing procedures	Number of energy audit studies underway
10	52

The number of factories that implemented the procedures with self-financing
13

The total cost of the project to date
5,500,260 JD

Targeted for 2021

factories / energy audit study 20



PROJECT PERFORMANCE / IMPACT INDICATORS



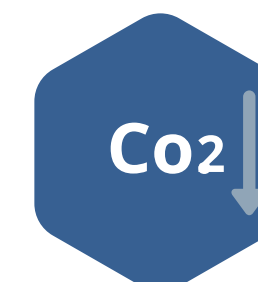
823

The estimated number of citizens Beneficiaries of energy efficiency and renewable energy applications



872,842

Expected savings on your household bill
Jordanian Dinar



4,176

The expected decrease in carbon dioxide emissions by tonnes. annually



2,488

Expected decrease in electrical energy consumption (MWh) annually

Tourism sector / hotels



Fund the implementation of energy audit studies and implementing energy efficiency and rationalization measures in four-star hotels or less. In regions outside the capital.

Funding Mechanisms:

- Grant support (100%) to conduct the hotel energy audit study.
- Supporting the implementation of energy conservation measures emanating from the study.

Program achievements for the end of the year 2020:

The number of hotels benefiting from its history is
16 hotels in Petra and Madaba

The total cost of the project to date:

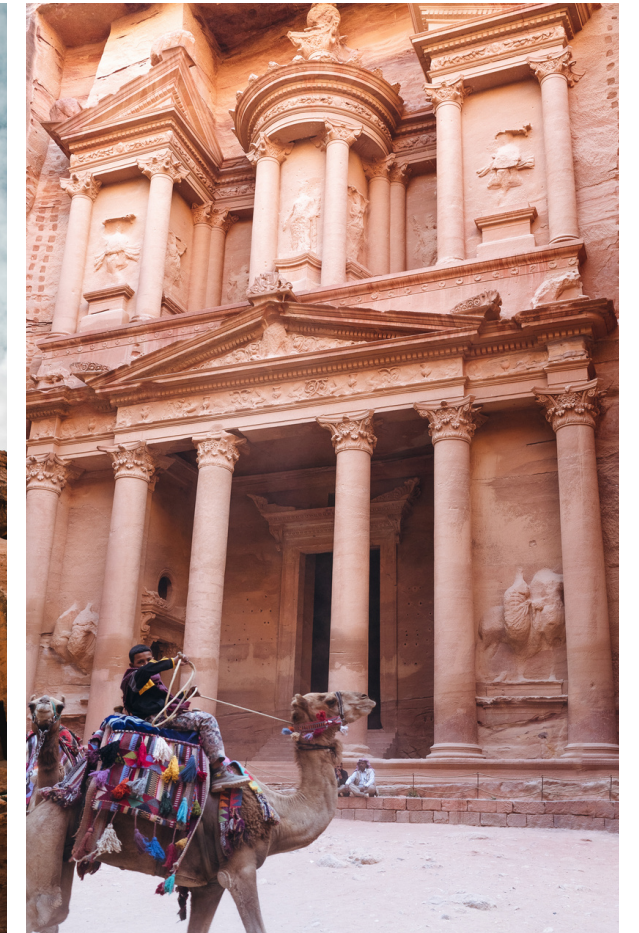
6,657,540 JD

Targeted for 2021

Executing an energy audit study for hotels of four-star category or less to include 10 hotels in Aqaba during the year 2021 and implementing the outputs of these studies for the participating hotels at a total cost of 2.7 million dinars.

PERFORMANCE INDICATORS RESULTS

Performance Index	Results Achieved 2015-2020
implemented applications of energy efficiency	12
Number of energy audit studies conducted.	18
Number of LEDs replaced.	5,908
Solar heaters capacity (liters).	9,150



PROJECT PERFORMANCE / IMPACT INDICATORS



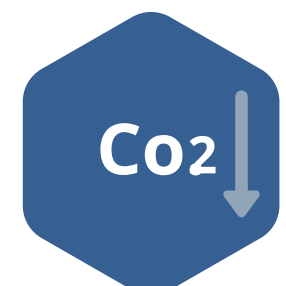
213,321

The estimated number of citizens Beneficiaries of energy efficiency and renewable energy applications



474,300

Expected savings on your household bill Jordanian Dinar



1018

The expected decrease in carbon dioxide emissions by tonnes. annually



2,818.7

Expected decrease in electrical energy consumption (MWh) annually

Public schools program

Implementing procedures for rationalization, conservation, energy efficiency and renewable energy for public schools.

Funding Mechanisms:

100% grant from the Renewable Energy Fund and donor partners participating in the program.

Program procedures:

Implementation of energy efficiency measures, installation of air conditioning systems, general maintenance of classrooms, installation of solar heaters systems, installation of photovoltaic systems that cover the entire electrical consumption of the school, in addition to installing central control systems and implementing comprehensive awareness campaigns for students, teachers and the local community about energy conservation and renewable energy applications .

Number of schools completed	Total cost by the end of 2020
136	11. 804 Million
Targeted for 2021	schools with an 20 estimated cost of one million dinars



PROJECT PERFORMANCE / IMPACT INDICATORS



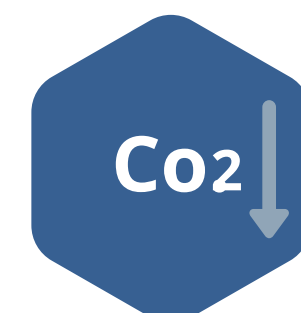
74,208

The estimated number of citizens Beneficiaries of energy efficiency and renewable energy applications



505,786

Expected savings on your household bill Jordanian Dinar



2,101

The expected decrease in carbon dioxide emissions by tonnes. annually



3,299

Expected decrease in electrical energy consumption (MWh) annually

Municipalities program



- Fund the installation of solar cell systems on the rooftops of major municipal buildings, with the aim of reducing the electricity bill costs on them.
- The project is implemented in cooperation with the Ministry of Local Administration.

Support Mechanism:

100% grant for the cost of the system for renewable energy through a grant provided to the Energy Fund by the Italian Ministry of Environment, and allocated by the fund to support municipalities in the Kingdom.

- **Program achievements for the end of the year 2020:**
- Building two renewable energy stations with a capacity of (1 megawatt) per station, for the municipalities of Deir Alla and Maadi, at a cost of (1.5 million dinars), with a grant through the Economic Development and Sustainable Energy (SEED) program supported by the Canadian government and the Energy Fund.
- Building a renewable energy system with a capacity of (50 kW) for Ajloun municipality to establish an electric vehicle charging station for citizens.

The total cost of the Deir Alla and Ajloun projects: 1.6 million dinars.

Targeted project, starting from 2021:

First	30 municipalities for the year 2021. (The bid was Issued)
Second	municipalities for the year 2022 30
Third	.municipalities for the year 2023 40

The total cost of the project for the next three phases:
3.5 million dinars

Health centers program



Installing solar cells and air conditioning systems for health centers. With the aim of improving the work environment in these centers and creating a better environment for the auditors.

Funding Mechanism:

100% grant from the fund

Implementation mechanism:

The program is implemented in cooperation with the Ministry of Health to select the health centers that are most occupied, especially in remote areas. (Outside the capital)

Program achievements for the end of the year 2020:

Installing solar cells, air conditioning systems and energy-saving lamps for five (5) health centers in Ajloun and Deir Alla through the Economic Development and Sustainable Energy (SEED) program supported by the Canadian government and the Energy Fund.

- **Targeted for 2021**

25 health centers at an estimated cost of 750,000 dinars, distributed over the Kingdom's governorates.



Sustainable energy worship places



Supporting the installation of solar cell systems for places of worship in all governorates of the Kingdom.

How the program works:

The program is implemented in cooperation and partnership with the Ministry of Endowments, where the fund contributes 25% of the cost and the Ministry of Endowments contributes a similar rate, in which the bodies responsible for mosques and churches contribute 50%.

PROGRAM ACHIEVEMENTS BY THE END OF THE YEAR 2020

Performance Index	Achieved results by the end of 2020
Number of houses of worship that participated in the program (completed)	570
Systems Capacity (kW. Peak)	9,152
Production Capacity (MWh)	14,275

The total cost of the project is 6.6 million Jordanian dinars

Target for 2021: 100 houses of worship

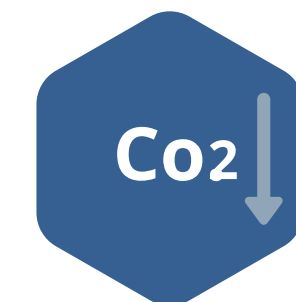
PROJECT PERFORMANCE / IMPACT INDICATORS



580,000
 The estimated number of citizens Beneficiaries of energy efficiency and renewable energy applications



3,453,842
 Expected savings on your household bill Jordanian Dinar



9,095
 The expected decrease in carbon dioxide emissions by tonnes. annually



14,275
 Expected decrease in electrical energy consumption (MWh) annually

Agricultural sector

Supporting the installation of solar cell systems for small farms, in cooperation with the Agricultural Credit Corporation.

Support Mechanism:

Providing support (grant) benefits and services resulting from the loan provided to these farms from the Agricultural Credit Corporation, with a ceiling of 15,000 dinars, to install a system with a capacity of up to 30 kilowatt peak.

ACHIEVEMENTS FOR THE END OF THE YEAR 2020:

Photovoltaic cell systems were installed and commissioned for 90 farms.

The total cost of the project: 2,344,125 JD

Targeted in 2021: 80 new farms



PROJECT PERFORMANCE / IMPACT INDICATORS



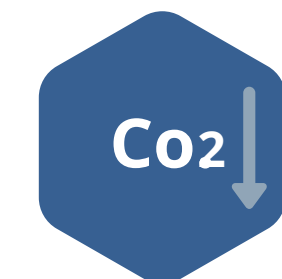
4,394

The estimated number of citizens Beneficiaries of energy efficiency and renewable energy applications



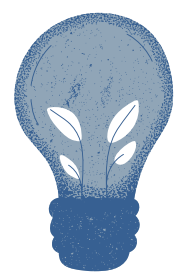
128,960

Expected savings on your household bill Jordanian Dinar



1,513

The expected decrease in carbon dioxide emissions by tonnes. annually



2,375

Expected decrease in electrical energy consumption (MWh) annually

Solar power for Vulnerable Families



Provide Solar power for Vulnerable Families or they registered at the National Aid Fund, the project is financed 100% from "Files al reef".

Objectives:

- Help the most Vulnerable communities in Jordan gain energy access.
- Reducing the electricity consumption for low-income families.
- Reduce costs from fuel imports and energy.
- Reduce the significant burden on the economy and the National Electric Power Company (NEPCO) from large energy subsidies of this demographic.

Target group & Target

Residential; and the family monthly power consumption should not exceed 300kWh, The target is to Cover the power needs of as many as possible from vulnerable communities in Jordan, namely the low-income families registered with the National Aid Fund (NAF) about 5000 families every year.

Achievements

During the first year of implementation, the Fils Al Reef has successfully financed the installation of 2,225 solar systems and currently financing 3,315 more systems for homes of Vulnerable families distributed across the 12 governorates.



Replacing conventional street lighting units with energy-saving lighting units (LED)

The project support replacing un-efficient street lighting to LED efficient lighting to help municipalities reduce the running cost of street lighting.

Objectives:

- Reducing the electricity consumption for municipalities.
- Reduce costs from fuel imports and energy.
- Reduce the significant burden on the economy and the National Electric Power Company (NEPCO) .

Target group & Target

Municipalities, Replace all traditional street lighting units in all municipalities of the Kingdom with 410,000 energy-saving units.

Partners

- Municipalities
- Contractors



JREEEF & The local community



JREEEF & The local community



Partners

The Renewable Energy and Energy Efficiency Fund built successful partnerships that contributed to the success of its programs and projects, which included local and international partners. And he won regional and international Donors.

Relevant ministries

Commercial banks

Local associations

