



CATALYST MENA CLEAN ENERGY FUND (CMCF)
Presentation

August 2017

C A T A L Y S T
MENA Clean Energy Fund

INVESTMENT HIGHLIGHTS

Why Catalyst MENA Clean Energy Fund?

COMPELLING MARKET OPPORTUNITY

- ▶ Over the next 25 years, the MENA region will invest USD 189 billion into 224GW of utility scale solar PV
- ▶ The region also has huge growth potential for SMEs that serve renewable energy, efficiency and desalination sectors
- ▶ **Low risk countries such as Jordan offer bankable agreements for solar projects with non-recourse financing, overlaid with sovereign guarantees, political risk insurance, currency hedging and other mitigants while returns are attractive**

FIRST-MOVER ADVANTAGE

- ▶ **Established in Jordan in 2006, Catalyst is the first MENA region fund manager specialising in renewable energy and efficiency and one of a very limited number of players with a track record of investment**

TEN-YEAR TEAM TRACK RECORD & PREDECESSOR FUND

- ▶ **Catalyst has over 10 years track record and experience in these sectors in the MENA region and was also one of the first developers of a solar PV independent power producer (IPP)**
- ▶ Most of Catalyst's core team have been together for over 10 years and are building on the experience of CMCF's predecessor fund CPEF, which deployed over USD 17 million in clean energy and efficiency in the MENA region since 2007 through a combination of equity and debt investments

INITIAL PORTFOLIO SECURED AND COMPELLING PIPELINE

- ▶ **CMCF has secured its first four solar PV IPP projects amounting to over 81 MW in total (USD 13-20 million equity investment), locking in equity IRRs of approximately 20% (85-100% tariff indexation to the dollar). The first project is already in operation and will begin distributing dividends in 2017**

LEADING REGIONAL INVESTMENT PLATFORM

- ▶ **CMCF held a First Close in July 2016 with USD 48 million of commitments from blue chip institutional investors EIB GEEREF, FMO, DEG and FinnFund. Additional investors are OeEB and Olayan Group bringing the commitments to 57 million.**

INVESTMENT HIGHLIGHTS

MENA clean energy opportunity

224_{GW}
NEW CAPACITY

\$57_M
CURRENT FUND SIZE

NEW INVESTMENT
\$189_{BN}

SECURED PORTFOLIO
81_{MWp}

MENA MARKETS WILL INSTALL 224 GW
OF UTILITY SOLAR IN NEXT 25 YEARS

MENA UTILITY SOLAR INVESTMENT TO
2040 WILL BE \$189 BILLION

CMCF HAS SECURED \$57 MILLION OF
COMMITMENTS TO DATE

CMCF HAS SECURED ITS FIRST FOUR
PROJECTS TOTTALLING 81MW

Sources: Bloomberg New Energy Finance, New Energy Outlook 2016

EXECUTIVE SUMMARY

CMCF investment strategy and deal pipeline

INVESTMENT STRATEGY

Primary focus: Mostly solar PV projects (>80%)

- ▶ CMCF will prioritise **investment in solar PV projects in Jordan (70+%)**, with scope for Egypt, Morocco and Tunisia on an opportunistic basis.
- ▶ These markets are expected to add over 4GW of solar PV in the next five years

Minority focus: Clean energy & water SMEs (<20%)

- ▶ CMCF **will potentially invest in one or two SMEs** that address the renewable, clean energy and clean water markets (eg EPC and/or O&M) in MENA.
- ▶ Over the next two decades, the region will see very significant expenditure on products and services in these sectors and there are very few local players to capitalise on this market.
- ▶ These gaps in the regional supply chain create many opportunities for growth and to build a strategic market position.

INVESTMENT OPPORTUNITY

MENA regional energy market drivers

STRUCTURAL GROWTH

- ▶ MENA populations are growing 1.9% pa from 665 million in 2016 to 730 million in 2021
- ▶ GDP is set to grow 6.5% pa from USD 2,867 billion to USD 3,937 billion in the same period

ELECTRICITY DEMAND

- ▶ Deregulation / liberalization of energy markets
- ▶ Peak demand rising 9% pa with increasing penetration of ventilation and A/C systems
- ▶ Increasing demand for water and decreasing groundwater resources mean that electricity demand for desalination will triple to 122 TWh in 2030

RENEWABLE ENERGY

- ▶ Diversification of energy mix (away from imported fossil fuels) and removal of fossil fuel subsidies
- ▶ Cost competitiveness with oil and gas plants
- ▶ International agreements to reduce CO2 emissions

OPPORTUNITY FOR SOLAR PV

- ▶ MENA markets have highest levels of solar irradiation (average 2,199 kWh/m²)
- ▶ LNG importing countries can now generate baseload electricity more cheaply from PV than from CCGT
- ▶ Solar is the fastest technology to install and has lowest environmental impact

INVESTMENT STRATEGY

CMCF investment focus

CRITERIA	PARAMETERS	RATIONALE
Technology	<ul style="list-style-type: none"> ▶ Solar PV ▶ Energy efficiency ▶ Wind 	<p><i>Solar PV is the leading technology for many of these markets</i></p> <p><i>Focus on core competences</i></p> <p><i>Leverage global relationships to deliver international opportunities</i></p>
Size	<ul style="list-style-type: none"> ▶ 10MWac to 50MWac, average 30MW for projects ▶ USD 3M to USD 15M equity invested 	<p><i>Ideal investment size given fund portfolio targets</i></p>
Stage	<ul style="list-style-type: none"> ▶ Projects: primarily development, some brownfield ▶ SMEs: growth capital 	<p><i>Minimise development risk and optimise investment timeline (9 months construction period targeted); ensure bankability from outset</i></p> <p><i>Relevant level of participation with investment</i></p>
Ownership	<ul style="list-style-type: none"> ▶ Majority control 	<p><i>Full oversight of construction and financing</i></p> <p><i>Determine investment period and exit</i></p>
Revenue model	<ul style="list-style-type: none"> ▶ Long-term contractual revenue through PPA ▶ Sales of products and services 	<p><i>Ensure high quality cash flows through life of project</i></p>
Leverage	<ul style="list-style-type: none"> ▶ Debt/equity 75:25 for projects 	<p><i>CMCF will construct projects with optimal capital structure in place</i></p>

INVESTMENT STRATEGY

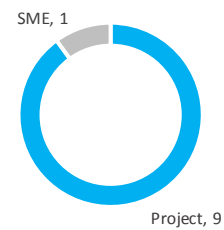
Portfolio construction

PORTFOLIO CONSTRUCTION (INDICATIVE)

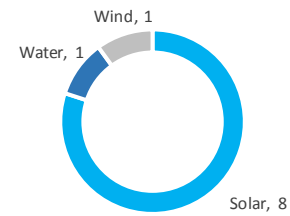


COUNTRY	MIN	MAX	TARGET
JORDAN	60%	100%	80%
EGYPT, MOROCCO & TUNISIA	0%	40%	20%

BY TYPE OF INVESTMENT



BY SECTOR





Thank you

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