



SHIP Egypt

Bankable Proposals

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AEE INTEC & ConPlusUltra

Terms used

- **Feasibility** – degree to which the project fits the requirements of the company/investor
- **Eligibility** in this context refers to the degree to which the project fits the criteria of the specific fund in question.
 - financial soundness
 - cost-effectiveness
 - emissions reductions potential
 - national ownership
- **Bankability** – meeting the requirements of the bank/investor
 - = Credit worthiness

Credit worthiness of the company

Balance sheet & profit loss

International Financial Reporting Standards (IFRS)

Debt to equity ratio / leverage

DSCR / cash flow coverage

Financial performance

What is the main question of the bank?

risk management

Bankers Quote:

- ⇒ *First, we look at the customer's realistic business model and calculate whether it adds up. Then, we think about factors which could worsen a customer's income situation.*

How many variables influence the return of financing?

How sensitive is each variable?

- ⇒ *In case of a thermal plant, I could think of calculating a year with extremely low radiation, as this is precisely the factor which varies from year to year. On the other hand, we could calculate the influence of increasing interest or exorbitant maintenance costs because of increased wear and tear of mechanical parts. This means that the stress test offers theoretical possibilities, which nevertheless could occur. And if the worst case is there, the DSCR (Debt Service Coverage Ratio) should still be at least 1.*

DSCR – Debt Service Coverage Ratio

DSCR ~ cash flow coverage

(how big is the reserve in free cash flow for repayments of the loan)

Minimum Debt Service Cover Ratio (DSCR)

1.2 x for PV

1.2 x for Wind (P75)

1.3 x for Hydro

1.3 x for Biogas and Biomass plants

1.4 x for Geothermal plants

⇒ Banker: *The greater the seasonal effect in cash flow and the greater the variations expected over the years, the higher we set the DSCR.*

Personally, I'd place solar thermal in the middle at 1.3.

Types of investments

1. Out of the books - from its own cash flow
 1. Internal rate of interest
 2. average cost of capital
2. Loan financing
 1. National commercial banks
 2. National development banks / funds / facilities
 3. International project financing
3. Special Purpose Vehicle/Company (SPV, SPC) = ESCO
 1. Green field investment
 2. The Project Company is carrier of all rights and duties in connection with the project and its financing. It is a legally and economically separate entity
4. Leasing

Cash Flow Based Project Financing versus Corporate Financing

Project Finance / Cash Flow Based Lending / Non-Recourse

- Financing exclusively based on the project
- Debtor is a ring-fenced SPV
- No guarantor
- Financing duration defined by tariff
- Technical risks must be mitigated

Corporate Based Lending / Full Recourse

- Debtor is a business with other assets
- Financing volume and duration depending on the credit standing
- Plant integrated into investor business or SPV + guarantee
- For industry majors and utilities or small projects (<2 MEUR)
- Technical risk may be assumed by the Lessee (credit standing?)

Qualification of RES Projects Principles of Non-Recourse Transactions

Typical Risk Considerations

- Stress-test output
- Reliability and Durability
- Track Record and References
- Cost of Component Exchanges (Stress Test)
- Guarantees by Component Suppliers
- Guarantees by EPC / O&M Contractors

Typical Project Killers

- Incomplete project information, unfinished project development
- Negative track record of developer, investor or technical partners
- Open legal issues, lack of legal documentation
- Wrong permitting (shortcuts of any kind)

Stages of project preparation

Very general stages of international project financing

Lots of
Questions
From
Bank

1. Enabling environment

- Designing legislation and regulatory approaches
- Reforming policy and institutions
- Building capacity and consensus to support the project

2. Project definition

- Prioritising projects
- Identifying project outputs and project champions
- Conducting pre-feasibility studies
- Preparing action plans and terms of reference

3. Project feasibility

- Conducting environmental, technical, social, and economic studies
- Performing financial modelling

4. Project structuring

- Structuring project finance
- Designing legal entities
- Evaluating public versus private options
- Marketing the project and assessing private-sector interest

5. Transaction

- Designing legislation and regulatory approaches
- Reforming policy and institutions
- Building capacity and consensus to support the project

6. Project implementation

- Monitoring and evaluating project performance
- Conducting tariff reviews
- Renegotiating or refinancing project

Project
Teaser
To Bank

Financial
proposal

Investment environment

National Bank of Egypt

ECO Program



اتحاد الصناعات المصرية

برنامج الالتزام البيئي

- **Purpose:** Finance complied equipment and machineries (not including customs and duties)
- **Eligible Sectors:** all private sector companies that are members in EFI
- **Loan Amount:** minimum EGP 80K, and max. EGP 3 Mn.
- **Interest Rate:** 2.5% + 0.1% HDBM
- **Repayment Period:** max 5 years including 1-year grace period
- **Self contribution:** 5 : 30%
- **Loan contribution:** 70 : 95%
- **الغرض:** المساهمة في تمويل شراء الآلات والمعدات اللازمة للمشروع وأية أغراض أخرى متعلقة بالالتزام البيئي للصناعة عدا ما يفرض من ضرائب أو جمارك.
- **القطاعات المستهدفة:** مشروعات القطاع الخاص المشتركة باتحاد الصناعات المصرية.
- **قيمة التمويل:** الحد الأدنى للتمويل ٨٠ ألف جم، والحد الأقصى ٣ مليون جم.
- **سعر العائد:** ٢.٥% سنوياً وعمولة ٠.١% شهرياً.
- **فترتي السماح والسداد:** فترة السداد حد أقصى ٥ سنوات + ١٢ شهر فترة سماح.
- **هيكل التمويل:**
 - مساهمة ذاتية ما بين ٥ : ٣٠%.
 - التمويل المقدم ما بين ٩٥ : ٧٠%.

RE & EE LoC

خط مشروعات كفاءة استخدام الطاقة

- **Eligible projects:** existing private sector Egyptian companies
- **Loan amount:** USD 300K for LEME, and USD 5 Mn. for supported projects.
- **Grant:** 10% of finance amount
- **Interest Rate**
 - For EGP: Corridor Lending + 3% (floor 12%) no commissions
 - For \$ or €: Libor/ Euribor 6M + 4% (no commissions)
- **Repayment Period:** 5 years including 1-year grace period.

- **الانشطة المستهدفة:** مشروعات القطاع الخاص المصرية القائمة.
- **الحد الأقصى للتسهيل:** ٣٠٠ ألف \$ للتمويل عن طريق قائمة المواد والمعدات المعتمدة، ويصل الى ٥ مليون \$ بالنسبة للمشروعات المساندة.
- **قيمة المنحة:** ١٠ % من قيمة القرض.
- **سعر العائد:**
 - الجنيه المصري: اقراض الكوريدور + ٣ % (بدون عمولة) بحد ادنى ١٢ %.
 - الدولار الامريكى أو اليورو: ليبور/ يوريبور ٦ شهور + ٤ % (بدون عمولة).
- **فترتى السماح والسداد:** بحد اقصى ٥ سنوات متضمنة فترة سماح حدها الأقصى سنة.

إيجيبتسيف

EgyptSEFF

Egypt Sustainable Energy Financing Facility
البرنامج المصري لتمويل مشروعات الطاقة المستدامة



European Bank
for Reconstruction and Development

البنك الأهلي المصري
NATIONAL BANK OF EGYPT

MWH

BUILDING A BETTER WORLD

RCREEE

Regional Center for Renewable Energy and Energy Efficiency
المركز الإقليمي للطاقة المتجددة وكفاءة الطاقة



<https://ebrdgeff.com/egypt/>



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Where finance and green technologies meet

The Facility

In Egypt, GEFF provides finance and advice for **private sector businesses** to improve competitiveness, through high performance technologies and practices.

The facility supports Egypt's green economy transition with €140 million of financing for energy efficiency and small-scale renewable energy investments.

Companies can request from banks participating in the facility:

- technical support to develop of a green investment project,
- the finance to implement it; and
- a grant for successful completion (see [eligibility](#)).

The technical support is provided by a [local GEFF team](#) for various stages of project origination, investment appraisal and project implementation. This helps identify the best solutions and ensure quality green economy projects are successfully financed.

The Facility in Egypt is a product of the [European Bank for Reconstruction and Development](#) (EBRD), working in cooperation with the [Agence Française de Développement](#) (AFD) and the [European Investment Bank](#) (EIB).

GEFF's partnership with donors is central to promoting the green economy. Donors provide critical support to GEFF projects that mitigate or build resilience to the effects of climate change and other environmental threats. The Facility in Egypt is supported by the [European Union Neighbourhood Investment Facility](#) and the [EBRD Shareholders Special Fund](#).

The Facility operates through [participating financial institutions](#) in Egypt.



Benefits

Services

How to apply

Contact us

SOURCES OF FINANCING DEBT INSTRUMENTS -TAX SHIELD

EBITDA: Earnings Before Interest, Taxes, Depreciation and Amortization

EBIT: EarningsBeforeInterestand Taxes

	Debt financed company Debt: 1800 @ 8%, Equity : 200 @ 8%	Equity financed company Equity: 2000 @ 8%
Revenues	2000	2000
Operating costs	-1000	-1000
EBITDA	1000	1000
Depreciation	-400	-400
EBIT	600	600
Interest expense	-144	0
Profit before tax	456	600
Taxes (30%)	-136	-180
Net income	320	420
Dividends	-16	-160
Total cost of financing	144+16 = 160	160

SOURCES OF FINANCING

WACC

The WACC (weighted average cost of capital) of a company takes into account the capital structure of a company, i.e. the relative weights of each component of its capital structure, and the respective financing costs. For the debt component the tax shield is considered:

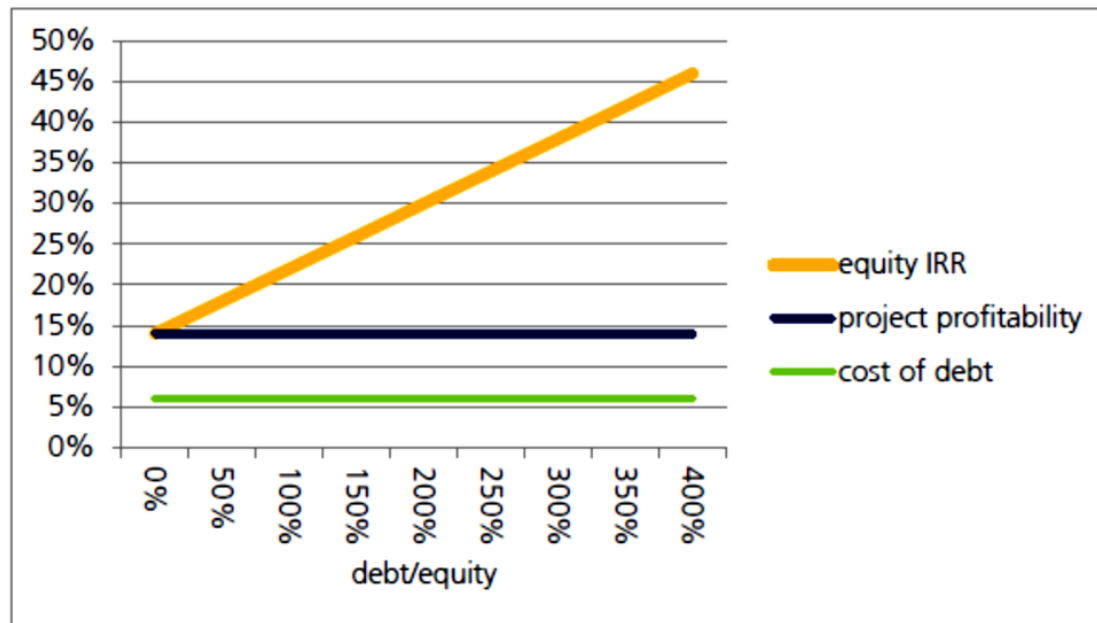
$$WACC = w_d \times c_{d,pretax} \times (1 - t) + w_e \times c_e$$

w_d	weight of debt, i.e. the proportion of debt in the capital structure (debt/(equity+debt))
$c_{d,pretax}$	cost of debt (pre tax)
t	profit taxrate
w_e	weight of equity (equity/(equity+debt))
c_e	cost of equity, i.e. return expectations of equity investors

Leverage effect

The leverage effect describes the positive effect of an increasing debt component in the overall financing structure on total financing costs

$$c_e = WACC + \frac{\text{debt}}{\text{equity}} * (WACC - (c_{d,pre-tax} * (1 - t)))$$





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