

# **Koncept exportního financování v Německu: Případová studie – Siemens v Ománu**

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## **Abstrakt**

Mnoho stavebních a technologických firem svou expanzí již překonalo hranice domácího trhu, jelikož domácí trhy nestačily uspokojit jejich rostoucí produkční kapacity. Stejně tak orientace na specifické segmenty trhu nutí firmy k mezinárodní expanzi za účelem udržení objemu tržeb, udržení jejich specializace a vytváření hodnoty pro jejich akcionáře. Díky neustálé rostoucímu konkurenčnímu prostředí na světovém trhu, tradiční předpoklady nemusí vést k úspěchu v mezinárodních tendrech. K dosavadním předpokladům, jako jsou držení nezbytného know-how, dlouhodobé zkušenosti, kvalita produkce a nákladová efektivita se jako stěžejní ukazuje zajištění projektového financování, které může ve výběrových řízeních hrát podstatnou roli. Sdružení firem vedená společností Siemens získalo v mezinárodní konkurenci zakázku na výstavbu dvou paroplynových elektráren v Ománu pro nadnárodního investora. Projektové financování strukturované německou státní KfW IPEX-Bank se ukázalo jako zásadní argument pro úspěch německého exportéra v mezinárodním tendru. Společnost Siemens a její korejský alianční partner úspěšně dokončili výstavbu obou elektráren v souladu s požadavky investora. Tato případová studie demonstruje rostoucí a nezbytnou roli státních exportních agentur a bank pro dosažení úspěchu exportérů v mezinárodním obchodu.

## **Export financing concept in Germany: Case study of Siemens in Oman**

### **Abstract**

Many construction and technological firms grew beyond borders of their countries since their market size couldn't absorb their growing production capacities. Similarly orientation to certain market segments forces these firms to go abroad in order to sustain their revenues, further improve their specialization and expand shareholders value. Due to increasing competition on the world market, traditional prerequisites do not necessarily have to lead to success in international bids. In addition to technological excellence, long-lasting experience, quality and cost leadership, securing project financing can play the crucial role in project bids. International Joint Venture (IJV), lead by Siemens, gained order in international bid for delivery of two power plants with combined cycle to Oman, because of securing project financing for multinational investor. Project financing, arranged by German state-owned KfW IPEX-Bank, has showed to be the turning point in this international bid. Siemens and its Korean partner successfully delivered both power plants in full conformance to investor's requirements. This case study demonstrates increasing and necessary role of government export oriented agencies and banks for reaching exporters' success in international business.

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## **Introduction**

Exporting is considered by governments around the world as a central strategy for economic prosperity in the new global landscape. The focus on exporting, as an engine of economic growth, has taken hold in almost in every country, even in nations with large domestic demand. This focus is not surprising since national governments have discovered that outward-bound international activities generate jobs and taxes at home and that export revenues are instrumental to the enhanced welfare of its citizens [3]. Although many studies have sought to discover the main aspects of export performance, export risks and their hedging, far less attention was given to sources of competitive advantage or the way to build up competitive advantage at export markets. Several studies came to conclusion that essential for export success is access to financial resources [4][5][6]. Other study argues that the working capital and financial liquidity requirements of export operations mean that access to financial resources is essential [7]. Recently, there were just few studies focused on gaining access to export financing [2].

For running business in international context, there must be a large degree of mutual trust and support. Such a trust is giving confidence to exporter, that buyer will pay for the goods and services received. In addition to that, exporters are recently forced to assist buyers in getting access to credit with competitive credit terms. Delivering project construction together with secured project financing proved to be the key success factor in developing markets which enables these firms to succeed in highly competitive international bids [8].

There is a lack of research examining contribution of governments' export programs and incentives for export stimulation. Export oriented countries have their own strategies on national level, which are being turned into praxis due to support of export credit agencies and export-oriented banks. For this academic research was selected case study of Siemens, delivering power technologies to Sultanate of Oman. The company is a pioneer in application of export financing concept and taking advantage of government incentives.

## **Oman**

The Sultanate of Oman, one of the most progressive countries in the Middle East. The country has achieved remarkable growth in all sectors of economy during the past years and is well on its course for excellent growth. Crude oil remains single most important source of the state revenues and it's expected to make the growth and development process of Oman more sustainable in the long run. The Sultanate encourages foreign capital that will enhance the overall development of the country. It should supplement local investment in utilizing its untapped resources, facilitate transfer of technology, know-how, managerial skills, and getting benefit from the worldwide connections of multinational corporation in opening new markets for Oman products.

Oman is committed to a policy of open market economy based on free competition in which the private sector is encouraged and facilitated to play leading role. Developed infrastructure, incentive packages, attractive corporate tax and tax holidays and simplified business procedures made Oman to become attractive destination for investment. The government is continuously engaged in making the investment climate as conducive and investor-friendly as possible. Oman's foreign capital investment law has been liberalized, permitting 70% foreign participation in companies automatically in most of the sectors and even 100% foreign capital investment is permitted for projects of national importance [16].

Country's economy has shown ability to counter and confront the consequences of the large decline in oil prices. Country's economy depends on oil market prices, which suffered

from high volatility during the last years. Despite the market situation driven by development of world economy, country reports solid GDP growth of 5 % in 2012, resp. 5.4 % in 2011.

Together with economy growth, even power consumption is dramatically rising. The less efficient power technologies are penalized through a very high gas prices. Efficiency is thus the key leading to success in this market in order to meet environmental criteria. In addition to that, limited natural gas resources have to meet increasing power demand in the country. Oman's power consumption is growing at nearly 10 % a year, which is a driving force for building new power sources.

## **KfW IPEX-Bank**

The KfW is a German government-owned development bank. It was formed in 1948 after World War II as a part of the Marshall Plan. KfW is dedicated to the sustainable improvement of economic, social and ecological living conditions. Its statutory functions are those of a promotional bank for the domestic economy and a development bank for the developing countries [1]. Nowadays, KfW banking group covers over 90 % of its borrowing needs in the capital markets, mainly through bonds that are guaranteed by the federal government. This allows KfW to raise funds at advantageous conditions. Together with its exemption from corporate taxes due to its legal status as a public agency and unremunerated equity provided by its public shareholders, KfW is able to provide loans for purposes prescribed by the KfW law at lower rates than commercial banks.

KfW IPEX-Bank GmbH (KfW IPEX), as a largest subsidiary of KfW is in charge of project finance and corporate finance related to German or European exports. Its prime focus is on medium and long-term lending to boost the export economy, develop economic and social infrastructure and support environmental and climate protection projects. It also promotes foreign investments in Germany. Unlike KfW banking group itself, it is in direct competition with commercial banks. Therefore, and in response to concerns voiced by the European Commission concerning unfair competition, IPEX Bank has become legally and financially independent in 2008. IPEX Bank's main sectors of activity are ports, airports, toll roads, bridges and tunnels, railways, ships, planes, telecommunications, energy and manufacturing. It plays a major role in fulfilling the promotional mission of KfW. It is represented in the key economic and financial centers around the globe. In 2012 the volume of new commitments generated by KfW IPEX-Bank totaled EUR 13.4 billion [12].

## **Euler Hermes – Export Credit Agency (ECA)**

Euler Hermes Deutschland AG (Euler Hermes) is the world-leading credit insurer and provider of trade-related credit insurance solutions. It is a subsidiary of Allianz Group and it is the largest credit insurance underwriter in the world with 34% market share. The Federal Government's export credit guarantee, so called Hermes Cover, protects companies from the risk of bad debt losses in connection with export transactions. These export credit guarantees are mainly targeted at exports to developing countries and emerging markets. Budgetary responsibility is borne by German state. The two companies, Euler Hermes and PricewaterhouseCoopers, support the government in implementing and managing this scheme [10]. The Federal Republic of Germany provides guarantees against commercial and political risks in connection with export transactions and against the political risks of foreign direct investments as well as political risk cover for projects which secure the supply of raw materials to Germany. With Hermes Cover government supports the activities of German companies abroad by means of its foreign trade and investment promotion scheme and in doing so maintains their competitiveness, contributes to job security and promotes exports thus acting as an important growth factor. In such circumstances German exporters are able to build or maintain their market position with the assistance of state export credit guarantees.

Export credit guarantees support German firms in their efforts to open difficult markets and expand in traditional markets in unfavorable times. By taking out Federal guarantees, German exporters and banks protect themselves from the country and buyer risks involved in export transactions. In addition to non-payment risks, which exist also at home such as insolvency or unwillingness to pay, political non-payment risks also loom abroad, which may result in a complete loss of the trade receivables in extreme cases. These risks include for example the confiscation of goods or the unfair calling of contract bonds. Economic or political reasons may even force an early stop during manufacture. In such a case the exporter will normally be left with the production costs incurred so far on his hands.

### **Hermes Cover includes commercial and political risks:**

- Political risks
  - Bad debt losses due to legislative or administrative measures, war, civil commotion or revolution abroad (the general political risk)
  - Losses due to non-conversion and non-transfer of amounts paid by the debtor in local currency due to restrictions in the international payment system (in the past the most frequent cause of loss)
  - Loss of the right to receive payment due to frustration of contract for political reasons
  - The loss of goods before the risk has passed to the foreign buyer due to political circumstances (e.g., the goods were confiscated, destroyed etc. before reaching the buyer).
- Commercial risks
  - Loss of receivables due to non-payment after a certain period (protracted default)
  - Loss of receivables due to the bankruptcy of the buyer, a composition settlement in or out of court, an unsuccessful judgment execution or suspension of payments by the buyer [9].

### **Characteristics of KfW-IPEX financing program:**

- For exports of capital goods and services from Germany to developing countries (respectively for foreign investors) according to the List of Official development assistance (ODA) Recipients of the OECD Development Assistance Committee valid at the time
- Exported has to be German legal entity, even joint venture with leading German entity
- Granting of Euler Hermes cover by the Federal Republic over a loan term, max. 95% coverage of credit volume, uninsured portion can be shared by exporter and financing bank
- Loans are granted in EUR or USD.
- The Commercial Interest Reference Rate (CIRR) applicable for the respective currency at the time of signing the loan agreement.
- Insurance of buyer's credit by Hermes covers credit risk resulting from loan repayment via receivables from the credit provided; protects financing bank against the risk resulting from unsettled receivables from foreign investor or his bank due to territorial risks.
- Repayments in equal semi-annual installments, depending on the loan term covered by Hermes, the first repayment installment is due 6 months after the delivery date. [13]

## **Siemens in Oman**

For the German export industry, particularly the construction and energy sector represents Arabian fast growing region important market. German agencies and institutions such as Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Euler Hermes and KfW IPEX monitor the region and maintain contact with government and economic institutions to identify business opportunities for German exporters. Siemens takes advantage of cooperation with these institutions as a channel for gaining the access to the bids.

Siemens has played an important part in many of Oman's key infrastructure projects since entered the market in 1974 and remained further committed to the region's economic progress [15]. In 2011, Siemens set up its branch and Oman became one of its home markets. Due to increasing power consumption in Oman, government was seeking for new power sources in order to satisfy growing demand. GDF Suez is the leading power generator in Oman. This multinational company holds dominant position in the entire Gulf region with overall operation capacity of 25,000 MW. In June 2009, consortium of investors led by GDF Suez, authorized by the Oman government, opened tender for delivery of Barka III and Sohar II, two gas-fired power plants with combined cycle and total annual capacity of 1,500 MW. For Oman's sustained economic development, it was crucial that new plants are commissioned on time before the hot summer season when electricity demand soars. Siemens already delivered several facilities for GDF Suez in the past and thus had necessary know-how and number of related reference projects.

There are just a few firms able to design and build such a complex facilities with high requirements on technological excellence, innovation, quality and reliability. Besides Siemens, companies from United States, France, Saudi Arabia and Japan joined the bid. International tender for delivery of both plants had multi-criteria ranging from project price, technological solution as well as delivery terms. In order to offer turn-key solution, Siemens as a purely technological firm entered into IJV with Korean GS Engineering & Construction Corp.. Project financing facility was structured by KfW IPEX jointly by the two national ECAs - German Euler Hermes and Korea Eximbank (KEXIM). Both government agencies arranged syndicated buyer's credit with appropriate credit cover under attractive terms in order to support IJV of Siemens and its Korean partner.

In case of project failure, country would be suffering from shortage of power, thus the projects of Barka III and Sohar II reached strategic character and gained political support. Oman Ministry of Oil and Gas committed itself in terms of gas supplies for both plants. Similarly, Oman Power and Water Procurement Company (OPWP), single wholesale buyer of electricity in the country, signed purchase agreement with GDF Suez for plants' production capacity for a period of 15 years. For project scheme see Figure 2.

In March, Siemens submitted its advanced technological solution together with offer for project financing. Due to subsidized loans from the German KfW IPEX, consortium came out with attractive conditions for investors. Proposed technology, delivery terms, financing offer with interest rates below commercial market level were finally by investors evaluated as excellent. In June 2010, as a result of joint effort, consortium led by Siemens won this lucrative bid for delivery of the two 744 MW green-field power plants. GS Engineering & Construction Corp. was responsible for civil construction work, supplied the heat recovery steam generators, electrical transformers as well as equipment installation. Siemens supplied the main components comprising two gas turbines, one steam turbine, three generators [14].

### **Siemens – EPC Contractor**

Siemens carried out the project of Barka III and Sohar II under EPC contract. EPC stands for Engineering, Procurement and Construction. It is a prominent form of contracting

agreement in the construction industry. Siemens AG and GS Engineering & Construction corp. worked out the detailed engineering design of the project, procured all the equipment and materials necessary, and then constructed and delivered functioning facility to investors led by GDF Suez. Companies that deliver EPC Projects are commonly referred to as EPC Contractors.

**Financing Structure**

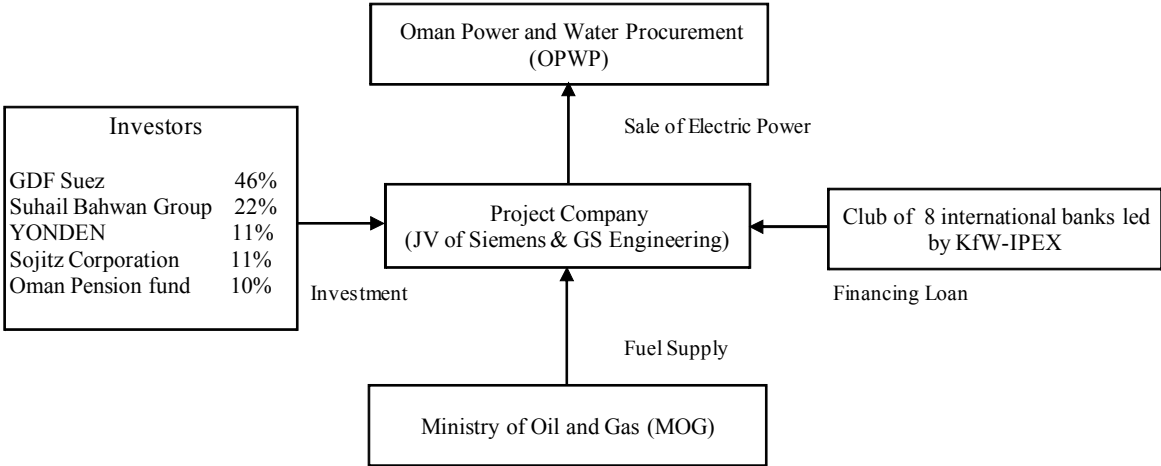
The financing facility was structured and negotiated at the bid submission stage of 2009 when financial markets were still recovering from the financial crisis. IJV partners strived to bring competitive financing and attractive financing conditions, which finally led to grating of this power project. The project was financed through a blend of equity, early generation revenues and a senior debt facility involving ECA’s Euler-Hermes and Korea Eximbank (KEXIM), and a club of eight international banks: Natixis, KfW-IPEX, Credit Agricole, HSBC, Bayerische Landesbank, Europe Arab Bank, CIC, and Standard Chartered Bank. KfW IPEX contributed around \$ 380 million to the total investment volume as well as part of the interest rate hedging. The bank provided fixed-interest loans on CIRR basis (Commercial Interest Reference Rate) over a 17 year period at attractive conditions as part of the promotion of German power plant technology. KfW IPEX was mandated lead arranger and Euler Hermes main coordinator of the financing agreement.

In connection with this transaction, credit guarantees against commercial and political risks were issued by Euler Hermes and KEXIM. The share of their involvement was equal to engagement of Siemens and its Korean partner. Insurance covers 95 % of credit volume, uninsured portion is shared by exporters and banks. For export financing model see Figure.2.

Due to volume of financing equaling to \$1.3 bn, exceeding limits of KfW IPEX, also another banks were invited to participate in this transaction. Another motivation was to pool banking know-how, different product specialization and experience with such large transactions. Besides investment credit, wide range of banking products were required such as issuance of performance bonds, warranty bonds, letters of credits, FX transactions, interest rate hedging, FX hedging, etc. All these services were provided by members of the bank syndicate.

This transaction marked the first involvement of the German ECA Euler Hermes in Oman's power sector projects. Euler-Hermes provided comprehensive credit cover of more than USD 600 million for both projects [9]. German KfW IPEX has continued support of the region's power sector spanning almost a decade.

**Figure 1. Project scheme**



# Case study: Barka III and Sohar II –combined cycle power plants in Oman

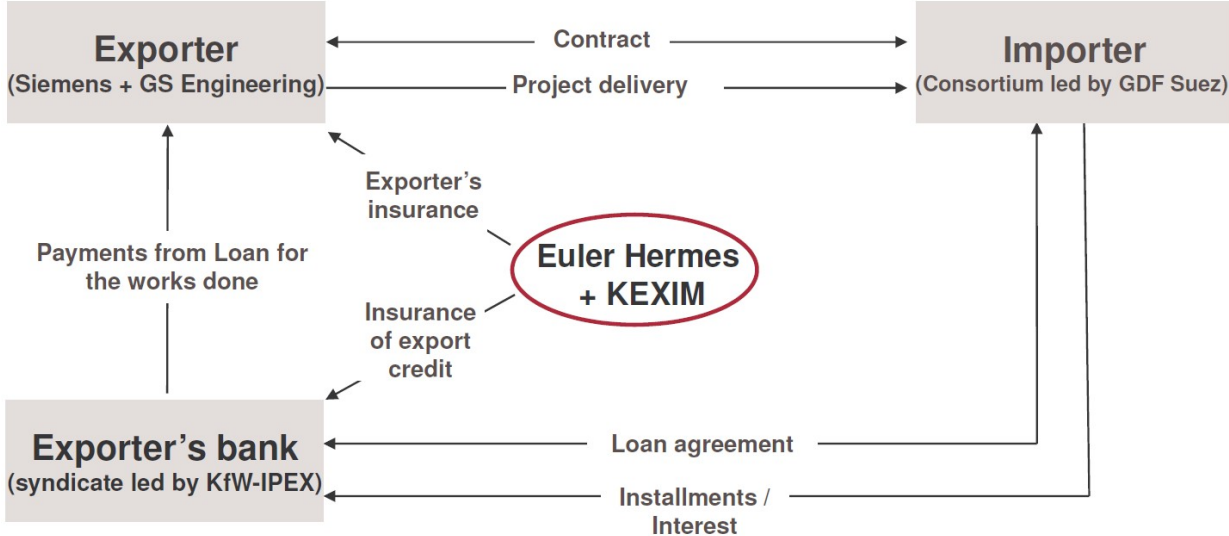
Project: Combined cycled power plants  
 Production capacity: 2x 744 MW  
 Territory: Sultanate of Oman  
 Contract price: \$ 1700 million  
 Importer/Investor: Consortium led by GDF Suez S.A. (46 % )  
 Exporter: IJV-Siemens AG and Korean GS Engineering & Constr. corp.  
 Role: EPC Contractor  
 Technical advisor: Mott McDonald  
  
 Financing banks: A club of 8 international banks – KfW IPEX (Lead Arranger), Natixis, Credit Agricole, HSBC, Bayerische Landesbank, Europe Arab Bank, CIC and Standard Chartered Bank  
 Insurers / ECAs : Euler Hermes, KEXIM  
 Term of delivery: 09/2010 – 04/2013 (full operation as of 06/2013)

**Structure of financing:**

Total volume: \$ 1700 million  
 Exporting buyer’s credit: \$ 1300 million (76.5 % of contract volume)  
 Investor’s equity: \$ 400 million (23.5 % of contract volume)  
 Drawing period: 30 months  
 Tenor: 17 years, 6 months grace period  
 Technology: Siemens AG (gas fired combined cycle gas turbines)

Characteristics of export financing: Syndicated buyer’s credit with signs of project financing – the whole project is assessed and evaluated according to the risk related to importer itself, not the stand alone project only.

**Figure 2. Syndicated Buyer’s credit with Hermes and KEXIM insurance**



**Figure 3. Siemens SGT5-4000F gas turbine, as supplied to Sohar II and Barka III**



Source: [www.energy.siemens.com](http://www.energy.siemens.com)

**Figure 4. Combined cycle power plant – Sohar II 744 MW**



Source: [www.energy.siemens.com](http://www.energy.siemens.com)

**Figure 5. Combined cycle power plant – Barka III 744 MW power plants**



Source: [www.energy.siemens.com](http://www.energy.siemens.com)



## **Hypothesis:**

Based on literature review, current state of knowledge and case study presented, the following hypothesis were formulated:

- H1: Strategic character of project and support of foreign country government are essential for successful project execution.
- H2: Participation of Export Credit Agencies increases confidence and mutual trust among project stakeholders.

## **Conclusion:**

The Siemens turn-key combined-cycle power plants Barka III and Sohar II were delivered on time and ahead of peak summer demand in accordance to agreed price and required quality measures. Exporting program of German KfW IPEX enabled advanced Siemens' power technologies to be exported, ensured that vast majority of supplies, services and equipment installed come from German contractors and thus jobs and employment in home country was secured. This mechanism enables to tap into new markets. Germany further profited through project contribution to country's GDP growth and taxes being paid there. On the other side, with 57.6 %, Siemens executed construction of Oman's most efficient combined-cycle power plants, reflecting the country's focus on advanced technologies with low lifecycle costs. Thanks to advanced German technology, millions of tons of carbon dioxide will be saved. Such projects lead to the firm's further technological improvement and access to other power-engineering bids worldwide and thus drive German export-oriented economy forward. Without state guarantees, neither investor nor financing banks, wouldn't have enough confidence for participation in the project.

Based on above mentioned case study, we identified exporter's key success factors when delivering the project under export financing concept:

- Cooperation with German institutions and agencies monitoring market opportunities in the region
- Close cooperation with KfW IPEX and Euler Hermes
- Strategic character of the project – KfW IPEX as a lead arranger supports power sector as well as projects for infrastructure development on the long term basis.
- Guarantees and support of Oman government due to projects' strategic character for the country, leading to increase of confidence of all project stakeholders.
- Possession of advanced and highly efficient technologies
- Wide range of reference projects and international experience
- IJV Partnering with GS Engineering of South Korea
- Cooperation with investor on the long-term basis

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