

# Project Finance Advisors, LLC



*Financial and Technical Consultants for Emerging Markets  
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## *Introduction*

Project Finance Advisors (“PFA”) is a technical and financial consulting firm specializing in advising clients about how best to structure domestic and overseas projects for commercial bank debt, multilateral and bilateral institutional support, equity fund investment and credit enhancement. PFA has special expertise in emerging markets in Russia, the former Soviet Union and Central Asia, the Caucasus, Eastern Europe, Africa, Latin America and Asia. PFA is a privately owned and financed limited liability Delaware company.

PFA’s core competencies include applied economic and financial analysis and modeling, project research, market assessments, due diligence analysis, and negotiation of comprehensive terms for debt and equity financing from a variety of capital sources. PFA provides companies with quantitative and qualitative analysis that enable sound decision making by corporate management about new lines of business, expansions, strategic exits as well as mergers and acquisitions. In many instances, PFA is hired by US based and multilateral institutions to perform financial and technical diligence studies. These studies are often the first step in successfully implementing greenfield projects overseas.

PFA brings a unique blend of technical expertise with a transactional history of working closely with a number of leading multilateral institutions in the developing world. These institutions include the World Bank (WB), the International Finance Corporation (IFC), the Overseas Private Investment Corporation (OPIC), the European Bank for Reconstruction and Development (EBRD), the United States Export Import Bank (US EXIM), the United States Agency for International Development (USAID), and the United States Trade and Development Agency (USTDA). In addition, PFA brings working relationships with regional development banks such as the African Development Bank (AfDB), the Development Bank of South Africa (DBSA) and the Industrial Development Corporation of South Africa (IDC).

PFA’s clients have included state owned utilities, US based export credit agencies such as OPIC and US EXIM, ECAs, US companies and grant making agencies.

## *Overview of PFA Staff*

**Mr. Richard Rubin**, Managing Director of PFA, is an economist and finance specialist with over twenty years of consulting and banking experience working for private consulting firms, investment banks and OPIC, an United States export credit agency, in New York and Washington, D.C., respectively. Mr. Rubin has traveled extensively in North and Sub-Saharan Africa, Russia, the former Soviet Union, Central America performing economic diligence and loan negotiations with a number of enterprises as well as government entities and state owned companies.

PFA has strong sectoral experience in telecommunications, IT, power, natural resources, manufacturing, operations, technologies and other key areas. PFA has on staff a number of

senior technical experts and junior associates to best fit the needs and goals of the client. Furthermore, through a network of resources, PFA provides a diverse range of financial and sectoral capabilities.

**Mr. Martin Morell**, PFA's Senior Advisor and Telecom/IT Expert, has twenty-five years' experience in telecom and IT industries, including extensive project work in emerging and developing economies, notably in North Africa, Eastern Europe and the Latin American region. He has a broad background in project identification, planning, technical/commercial evaluation and financing, in both the public and the private sectors. His expertise also includes regulatory, marketing and commercialization aspects of ICT/telecom initiatives.

Additionally, Mr. Morell has extensive experience with international procurement procedures in telecom and IT, including RFP preparation, vendor response evaluation, negotiation and contracting.

In the past Mr. Morell had primary responsibility for the planning, design, cost-justification and implementation of large-scale voice and data networks, including a global network for an international hotel chain consisting of 125 hotels and ten major reservations centers outside the United States. Prior to that he was Telecom Manager for North and Central America for a major international airline.

Mr. Morell has worked in more than 40 countries, with particular depth of experience in Central/Eastern Europe and former Soviet Union; Latin America; and North Africa and the Middle East. He is proficient in Russian, Spanish, French and Italian.

**Mr Nicholas Cheremisnoff, PhD:** Dr. Cheremisnoff is PFA's Senior Chemical Process Expert specializing in the safe handling and management of chemicals and hazardous materials. He has advanced degrees in chemical engineering, and his career spans more than twenty years in both the private and public sectors. While with PFA, Dr. Cheremisnoff performed diligence related to a pollution abatement fund in Donetsk, Ukraine funded by the World Bank.

Dr. Cheremisnoff has more than 30 years of industry and applied research experiences in energy and environment across a broad spectrum of industry sectors, including oil and gas, organophosphates pesticide and animal feed supplement manufacturing, plastics, metals fabrication and alloying, machine building, and fine chemicals production. Dr. Cheremisnoff has extensively published and served as an expert witness in class action and toxic tort litigations involving boiler operations and waste to energy systems. Dr. Cheremisnoff has been engaged on a range of international assignments on environment and energy from waste related projects by the USTDA, WBO, EU, and USAID, as well as consulted for the USDOE and USDOD. Regions of the world where he has conducted long-term assignments include Ukraine, Jordan, Nigeria, Venezuela, Korea, Romania, Bulgaria, Macedonia, Serbia, Uzbekistan, Tatarstan, and Russia.

**Mr. Giorgi Sharabidze**, - Mr. Sharabidze acts as PFA's EDN Coordinator and Associate. Prior to his work at PFA, he served as a team member for a Georgian-based financial consulting company. Mr. Sharabidze is involved with financial and political and economic country

diligence for a variety of projects in Georgia including general demographic, geographic and socio-political analysis for loan submissions to OPIC.

### *Sector and Industry Experience*

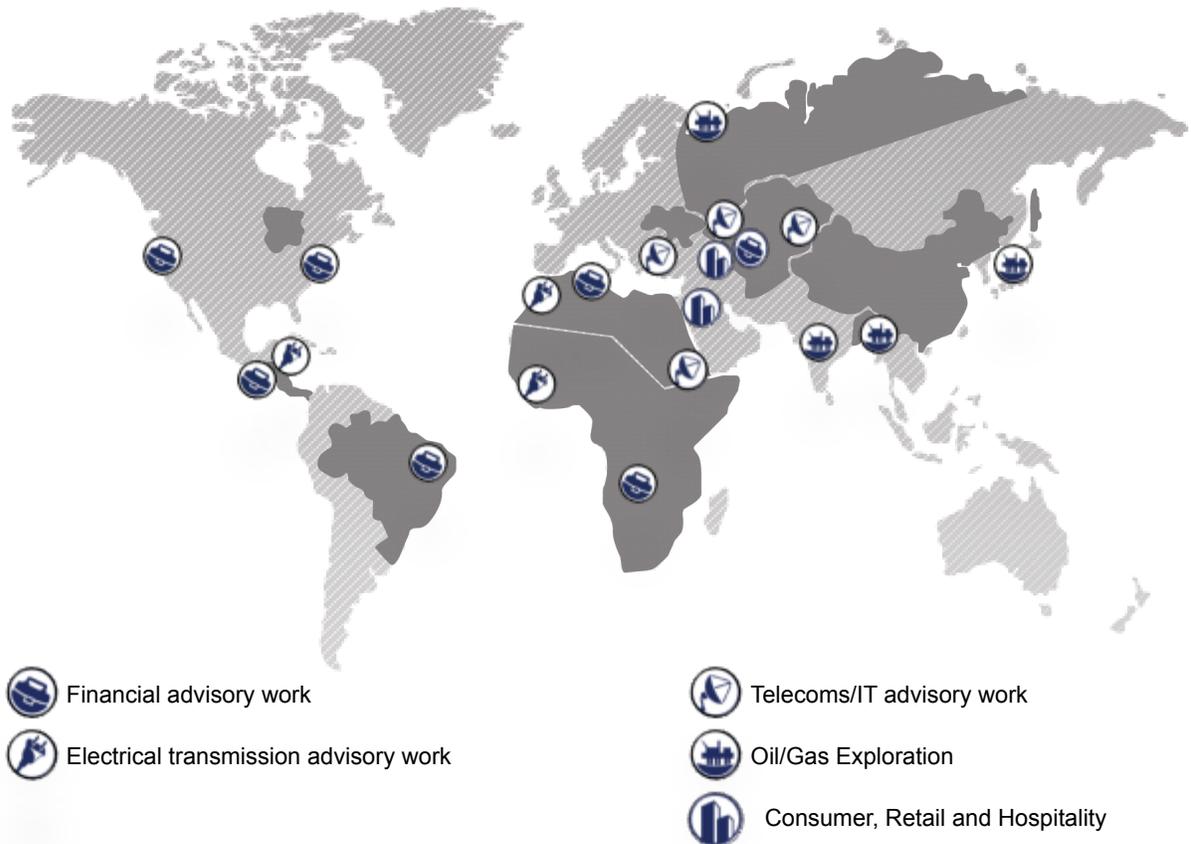
PFA and its network of senior consultants possess project finance expertise in the following sectors in emerging markets worldwide:

- Financial Institutions and Advisory
- Telecommunications and Information Technology (IT)
- Power and Utilities
- Renewable Energy
- Oil and Gas Exploration and Development
- Metals and Mining
- Hospitality and Tourism
- Consumer Goods and Retail

PFA's approach to providing technical expertise in each of these sectors is unique. In each instance, technical experts are used within the framework of integrating and translating information into financial analysis commonly used by Export Credit Agencies (ECAs) to review and approve funding. PFA is adept at knowing what aspects of any project require further financial analysis and structuring to qualify for each ECA's unique program requirements.

## *Geographic Expertise*

### PFA's Primary Experience and Expertise



PFA has worked extensively in a number of countries representing different regulatory and business climates. In each of these situations, PFA has successfully implemented complex tasks to best evaluate business opportunities for multilateral lending institutions or on behalf of private enterprises.

## *Core Competencies*

PFA provides an integrated array of services for companies or investors seeking financial support for investment opportunities in developing economies wishing to leverage programs available from the multilateral community.

PFA provides up-front financial structuring advice that typically includes:

- Economic and technical analysis
- Provision of industry-specific and/or region-specific analysis and insight into business plans, feasibility studies, risk mitigation strategies and other specific elements of the project proposal.
- Comprehensive and sophisticated economic modeling of the investment opportunity and the delivery of quantitative tools to aid companies and lenders measure risk and negotiate terms with sources of capital or borrowers.
- Market analysis of the investment sector that includes both long-term and short-term competitive threats to the proposed venture, economic factors or macro-economic conditions in emerging markets worldwide, pricing analysis, cost analysis and other relevant factors.
- In-depth sector analysis including market data relevant for companies seeking to strategically position themselves in emerging markets.
- The ability to simulate lender diligence reviews especially for multilateral and other export credit assistance programs.
- Recommendations regarding viability of proposed projects for lending institutions.
- Financial structuring advice for start ups and investors on how best to provide maximum rates of return for the investor or company.

PFA has substantial experience working with project finance lending institutions and is sensitive to each program's unique requirements. Specifically, PFA has the following capabilities:

- Management of the underwriting process with all sources of capital, including multilateral export credit agencies (such as OPIC, EBRD, US EXIM) or other investor groups as the project may warrant.
- PFA can productively work with commercial banks, multilateral export credit agencies or other sources of capital, as your company may desire through review of salient aspects of its economic model during negotiations with identified sources of funding.
- PFA often works closely with your legal counsel during negotiations to present economic scenarios and proposed financing structures. PFA can also streamline the legal diligence process.

## *Representative Clients and Assignments*

### *Financial Institutions and Advisory*

In a number of capacities, PFA has provided financial advisory services on behalf of export credit agencies and grant making agencies to identify and solicit financial interest in new and existing projects. These advisories have also been conducted for US companies seeking to secure debt financing from these institutions themselves. Some of these assignments include the following:

- PFA was chosen to be a Loan Originator under the \$100 million Enterprise Development Network (EDN) Program of the Overseas Private Investment Corporation (OPIC). The EDN Loan Origination Program, administered through OPIC's Small and Medium Enterprise Finance Department, is intended to facilitate OPIC financing for Small and Medium Size Enterprise (SME) projects. The program focuses specifically on structuring transactions undertaken by SMEs in developing countries and capital markets around the world. As a Loan Originator, PFA is responsible for identifying qualified borrowers, supporting them in drafting business plans, completing necessary loan documentation, and assisting with due diligence as required.
- PFA was chosen as an EDN Advisor to OPIC in November 2008. The EDN Advisor program provides OPIC with credit, financial and due diligence analyses on a project specific basis. Upon request, EDN Advisors provide recommendations, propose methods, conduct on-site due diligence and become deeply involved in the loan structuring process to support specific projects. All advisory services are done in compliance with OPIC standards and guidelines.
- On behalf of OPIC's Finance and Investment Funds group, PFA is currently acting as an independent financial and technical expert for an approved loan to Wananchi Holdings Group, an integrated business and retail media and communications provider in six East African countries with primary operations in Kenya, Uganda and Tanzania. In 2012 PFA assisted OPIC to structure a \$72 million loan that was subsequently committed in June and disbursed in January 2013. PFA provided rapid, high-quality feedback to OPIC regarding the credit worthiness of the Borrower's business plan and application, as well as an assessment of the nature, scope and impact of the Borrower's ongoing operations in East Africa.

The OPIC loan will be used to expand Wananchi's pay TV, broadband Internet and voice offerings ("Triple Play" services) provisioned through a combination of terrestrial hybrid fiber-coax cable ("HFC") and satellite direct-to-home ("DTH") platforms.

PFA's work related to a review of the technology platform (integrated HFC/GPON fiber deployment in metropolitan areas coupled with satellite DTH transmission) and business model as well as distribution network for the venture. PFA recommended the integration of Key Performance Indicators (KPI's) into the loan disbursement mechanism for OPIC that provide important financial and credit safeguards. Wananchi is a leading provider of

broadband Internet and Pay-TV services to residential and corporate customers in East Africa. The deal is OPIC's largest telecommunications financing in Africa and Middle East in the 40-year history of the U.S. government agency.

- PFA structured and arranged a new credit facility for 3M Corporation for a proposed \$200 million trade receivable financing vehicle using commercial bank debt and credit enhancement through the political risk insurer COFACE. The facility operates primarily in the former Soviet Union and Central Asia, concentrating for the most part on the import, export, and internal trade in fibers, textiles, textile auxiliaries, and related products. In this engagement, PFA successfully negotiated a trade receivable credit risk rating program through COFACE and then integrated the use of the program with 3M's internal credit guidelines. The COFACE program is in place and 3M expects to be negotiating dedicated lines of credit with multilateral agencies to further grow emerging market sales within 3M.

PFA's work represents a first time use of third party debt for 3M in order to augment emerging market sales. PFA applied state of the art innovative financing techniques for 3M in the design and implementation of the program.

- PFA acted as OPIC's financial advisor for Teliani Valley's (a wine maker and beverage distributor in Republic of Georgia) for a \$7 million loan to support expansion of wine production and distribution facilities, and strengthening of Teliani Valley's distribution operations. As OPIC's advisor, PFA reviewed Teliani Valley's application and credit submission and assisted throughout the internal-review process. The project entails analysis of the consumer product supply chain in Georgia and the construction of additional equipment for production and distribution of juices, wine and associated product. PFA is provided all credit and financial analysis for the project and structured the loan in coordination with OPIC staff.
- For OPIC, PFA provided technical and financial diligence related to expansion of services for a CATV/Internet provider in Odessa Ukraine ("Black Sea Telecom"). Diligence encompassed a review of the sponsors' management track record and business plan; associated financial model; a review of the applicant's strategy and a limited market assessment of the company's existing and proposed addressable customer base. Our Market Assessment reviewed potential competitors using Fiber-to-the-Building (FTTB) and other technology platforms.
- PFA assisted Tbilisi Aircraft Manufacturing (TAM) in the Republic of Georgia to raise funding from various MLAs and private lenders for the construction of dedicated facilities for the manufacture, operation and maintenance of the VLJ Elite, a very light business jet. This project will allow TAM to convert from military production to a civilian based aeronautics based operation with global reach. PFA will also be conducting a company wide reorganization study to restructure TAM along functional lines more aligned with its areas of engineering competency and profitability that will lead to full conversion to civilian purposes.

### Selected Other Financial Advisories

- PFA provided financial advisory services for a credit enhancement facility to Varian's Proton IMPT business (NYSE:VAR). The advisory entailed the creation of the financing structure, requisite drafting of agreements with selected multilateral organizations and ongoing business forecasting and planning services to support sales of its IMPT business. The advisory team included legal assistance from DLA Piper out of its Project Finance and Infrastructure Group.
- PFA performed financial and credit due diligence on behalf a client that is a major GSM operator in Liberia for financing from OPIC. PFA successfully committed a \$20 million loan from OPIC as well as with a number of commercial banks in Liberia. The project sponsor used the proceeds to expand its current offerings to voice and data services for residential and business customers, as well as to increase its penetration of the residential Internet market and deliver services to the rural market. PFA provided expertise in risk mitigation strategies, loan structuring and corporate finance to the GSM provider.
- In July 2007, PFA conducted a Definitional Mission for the U.S. Trade and Development Agency (USTDA) to four countries in Sub-Saharan Africa to assess potential projects in the areas of securities exchange development and IT related projects, projects and technical assistance for banks, parastatals with infrastructural mandates and related non-financial intermediaries, electronic trading systems and assistance to facilitate the issuance of government, municipal and parastatal securities either through debt or equity instruments. The work was completed in February 2001 and was conducted with commercial banks, private equity funds and regional development institutions with funding programs in Africa. PFA identified an extensive network of funding institutions for projects in Africa as a result of this study.
- PFA acted as financial advisor to the Deamar Group to OPIC for a flour mill in Akwa Ibom State, Nigeria. Deamar is a small business that is privately owned and actively engaged in merchandising raw cotton, cotton waste, and soybean oil products in the global marketplace.

The Akwa Ibom Flour Mill project involves the construction and installation of a state of the art flour mill for distribution of bread flour and offal in the region. The flour mill will be the fourth regional producer of bread flour and will help provide food to a population which has excess demand.

The engagement culminated in a commitment of \$6.7 million from OPIC.

- PFA, as sub-contractor to Booz Allen Hamilton, provided USAID with financial expertise relating to the design and implementation of a guaranty fund for water and transport projects in South East Europe and the Balkans.
- PFA represented a US company, Ayres Corporation, in the light aircraft sector for a merger recapitalization transaction in the Czech Republic. The project involved

multilateral support for a light aircraft and cargo operation between an U.S. company and a major Czech aircraft company, Let a.s. in Kunovice. PFA represented the client in discussions for refinancing with OPIC and the EBRD.

### **Consumer Goods and Retail**

- PFA represented JSC Iberia Refreshments in the Republic of Georgia for a \$12 million loan from OPIC for the expansion and the creation of the country's first mineral bottled water facility. Iberia Refreshments is PepsiCo's primary bottler and distributor of beverage products in Georgia with additional agreements with PepsiCo to export PepsiCo brands to Armenia, Azerbaijan and Turkmenistan.

The new mineral water would be available in both sparkling and still varieties. The bottling plant will be located near the Maqarta spring in the South Caucasus Mountains of the Dusheti Region. In addition to the new bottled water, proceeds of the OPIC loan will be used by the Company to increase the production capacity of its Pepsi branded products as well as to capture market share in its retail and wholesale channels. JSC Iberia Refreshments has already secured the necessary rights and licenses from the Georgian government for the project implementation.

- PFA provided ongoing financial advisory services to The Land Jordan, a commercial and residential real estate development firm, for greenfield construction of a 55,000 sq. meter development in Zarqa, Jordan. A \$70 million loan was approved by the Overseas Private Investment Corporation's (OPIC's) Board of Directors in March, 2010. The Madina Commercial Complex will be the first modern mixed-use commercial space in Zarqa.

Construction of the Madina Mall entails the development of retail shops, cinema, food court, parking and other social amenities in a building of 173,800 square meters of "built up" space occupying a footprint area of 36,000 square meters. The Mall is located near the Zarqa City's commercial district and is currently in the final stages of design process. The Mall is expected to open in 2013 and will accommodate roughly 150 small shops, 17 anchor shops, 6 movie theatres and 16 food outlets as well as Carrefour, one of the world's leading retailer and distribution groups as anchor tenant.

- PFA prepared a market assessment and credit diligence to assist McDonalds in the Republic of Georgia for a \$12 million loan from OPIC. McDonalds currently operates three restaurants in Tbilisi and has plans to double the number of restaurants, expand operations outside of Tbilisi and refit its existing restaurant base

### **Hospitality, Food Services and Tourism**

- PFA conducted financial advisory and placement services for a loan to Betsy's Hotel in the Republic of Georgia for \$3.75 million. Betsy's hotel offers amenities equal to four or five star rated hotel and caters to a brand loyal segment of the market. The loan was subsequently disbursed in August 2010 and its proceeds were used to finance Betsy's expansion to a 57 room hotel and to provide property improvements. Additional

financing of \$834,000 for the hotel resulted in significant upgrades to the property and construction of conference facilities that greatly enhance and secured Betsy's niche among small boutique hotels.

PFA had been actively involved with management of the hotel and how to better improve and integrate hotel operations. In 2012 PFA conducted an IT needs assessment for integration of PMS and POS systems in a real time accounting platform.

Betsy's successful financing with the help of PFA's financial advisory represents OPIC's small and medium sized business loan to an entity in the Republic of Georgia that is owned almost exclusively by US nationals.

- PFA undertook a credit diligence and market assessment on behalf of Populi, the only branded multi-format integrated grocer chain in the Republic of Georgia with over forty one stores of varying size formats. Financial diligence in support of a \$21 million loan was provided and OPIC committed the loan in September 2011 to generally support Populi's expansion of stores throughout Georgia.

As part of this work, Populi in conjunction with PFA developed a strategy to increase its profitability and market share by implementing several measures such as closure of unprofitable stores and rollout of smaller size format stores. The expansion plan also involved implementation of computerized Management Information System (MIS) and inventory control systems along with the construction of state of the art warehouse and logistical center.

- PFA acted as outside financial counsel to the Overseas Private Investment Corporation for a \$140 million Project to build a Hyatt Park Hotel with residential apartments, spa and conference facilities. PFA is provided all credit and financial analysis for the project and structured the loan in coordination with OPIC staff.
- PFA provided to OPIC financial and credit diligence as well as a Market Assessment for a new five star Radisson Blu brand spa hotel to be constructed in the town of Tsinandali in the Kakheti region of the Republic of Georgia. PFA's analysis relates to a loan of \$10 million with total costs of \$22 million. The proposed hotel will offer a number of amenities catering to MICE related events, wine-related tourism, as well as business and leisure oriented guest demand. The Radisson Tsinandali Resort will be located on property contiguous to the historical Chavchavadze estate and museum.
- PFA acted as financial advisor for the Overseas Private Investment Corporation for a hospitality project in Sao Paulo, Brazil. Hyatt International had approached OPIC for a loan of up to \$61 million for construction of a five star hotel (the Grand Hyatt Sao Paulo). The hotel is situated close to the Sao Paulo International Airport. Marginal Pinheiros, the location of the site, is strategically situated in the path of recent and anticipated future development of the city.

### *Telecommunications and IT*

PFA has performed technical consulting studies for proposed new telecommunications ventures, triple play and Internet related projects, many related to nation-wide networks using alternative infrastructures. For much of this work, PFA has formed important relationships with US hardware and software suppliers and vendors.

Some of these projects include:

- PFA performed a multi-disciplinary feasibility study on behalf of United Telecom Group (UTG), the major fixed-line telecom operator in the Republic of Georgia under a cost share arrangement with the U.S. Trade and Development Agency (USTDA). The study assisted UTG to plan the completion of a national fiber-optic backbone network and the deployment of advanced services, in particular high-speed Internet access, in those areas where UTG has existing copper distribution infrastructure. The study also included a detailed Market Assessment on telecoms demand in Georgia, the first of its kind to be undertaken by any telecoms operator.

One of the primary aspects of the feasibility study addresses the vulnerability of UTG's current national fiber-optic infrastructure. In addition, PFA aimed to assist UTG to properly assess, prioritize and respond to demand for Internet access and allocate resources in a coordinated program to make affordable basic telephone service on a nationwide basis. This especially concerns rural areas, of which a substantial proportion currently remains either unserved or underserved.

The Study yielded deliverables of value and importance both for UTG and for the telecom sector in Georgia. The Study also includes a legal and regulatory review of the as well as documentation and business plan to solicit support from various MLAs to fund the expansion.

- PFA conducted a multi-country Definitional Mission for USTDA, the purpose of which was to examine project opportunities in IT and communications in the countries currently included in Central Asian Infrastructure Integration Initiative (CAIII), namely Kazakhstan, Kyrgyzstan, Tajikistan and Afghanistan. The aim of the CAIII, which was announced by Secretary of State Condoleezza Rice in October 2005, is to facilitate development of needed infrastructure to foster regional cooperation and economic development.
- In December 2004 PFA completed a Telecommunications Feasibility Study on behalf of Empresa Nacional de Energía Eléctrica (ENEE) (the Honduran power generation, transmission and distribution company) under a \$300,000 cost share arrangement with U.S. Trade and Development Agency. ENEE was considering the possibility of deploying advanced fiber-optic facilities along its nationwide Rights of Way (ROW). ENEE is responsible for almost all of Honduras' energy activities including planning, generation, system administration, transmission and distribution, with the Energy Commission of Honduras holding responsibility for regulating the sector.

With a view to liberalization of the Honduran telecoms market in 2005, PFA examined important technical, market-related, legal/regulatory, organizational, commercial structure, financial and business planning as well as environmental issues associated with the deployment of an “Open Access” connection regime using ENEE’s ROW. PFA’s work provided ENEE with a “blueprint” for deployment, and eventual commercialization, of fiber-optic infrastructure in a manner that would bring maximum benefit to ENEE and to the larger Honduran economy.

- PFA worked directly with Empresa de Transmisión Eléctrica, S.A. (ETESA) (the national electricity transmission company of Panama) to develop a comprehensive feasibility study for an alternative broadband telecommunications network in Panama. ETESA was considering entering the telecommunications sector in some form, and in such a manner as to derive value from its nation-wide Rights of Way (ROW). PFA defined how ETESA could enter the market and monetize its ROW in the most economical and feasible manner given its organizational profile and needs. PFA worked with the law firm DLA Piper LLP to provide regulatory and legal analysis for the feasibility study.
- In 2001, PFA completed a \$500,000 study in Morocco for the National Electricity Authority, Office National de l’Electricité (ONE), under a USTDA cost-share arrangement. ONE wished to enter the commercial telecoms field but faced uncertainties as a result of untested consumer demand, technical obstacles, legal constraints and organizational challenges. For that client, PFA effectively carried out a multi-disciplinary analysis for a national fiber optic backbone network with wireless local distribution. The study recommended a market entry strategy after the performance of an empirical demand and market assessment (the first of its kind in the country), a legal/regulatory analysis that clarified the most viable structure, and an organizational review. In addition, PFA developed a sophisticated financial model and bid package to assist with business planning, project financing and selection of partners.

In the conduct of this study, PFA worked closely with 3M Corporation to determine potential sales for its Network Solutions group. PFA also worked closely with 3M to determine their level of interest in forming an operating consortium for management and the sale of the commercial fiber optic network.

- PFA worked with Bulgarian State Railways (BDZ), to plan, implement and exploit a state-of-the-art telecommunications transmission infrastructure for BDZ, utilizing the BDZ rights of way. Mr. Morell, Senior Telecommunications Specialist, was responsible for the subsequent preparation of a Business Plan for the commercialization of this infrastructure, and was actively involved in discussions with potential financial backers (sources of private capital, commercial banks, and multilateral development agencies).
- In 2002, PFA participated in the REACH 3.0 Telecom Infrastructure Workshop 2002 in Amman, Jordan (speaker and leader of Working Group on Enabling Environment).

### *Renewable Energy*

- In April 2009, PFA was chosen by the United States' Department of Energy to provide financial expertise to analyze and evaluate domestic energy projects under the DOE's Title XVII renewable energy and energy efficiency limited recourse lending program. The Title XVII loan guarantee program was authorized by Congress to provide financing to domestic renewable, nuclear and advanced fossil energy projects. PFA partnered with PERI, a sustainable energy engineering firm, and ScottMadden, a market energy consulting firm, for DOE.

### *Oil and Gas Exploration*

PFA brings specific expertise in assisting US companies borrow funds at OPIC, EBRD and US EXIM for projects in the oil and gas exploration field.

- Under a USTDA grant, PFA and Parsons Chemicals of Houston, Texas provided financial and economic expertise to the Bangladesh Government for the Western Region Integrated Project (WRIP). The WRIP comprises construction of a 24-inch natural gas pipeline, a production sharing gas field project as well as a number of captive natural gas fired power stations. PFA's work entailed reviewing all project documents for legal and financial consistency and fairness and providing alternative structures to Bangladesh's Ministry of Energy and Mineral Resources (MEMR). PFA's review for MEMR included a quantification of damages and penalties in underlying Power Purchase Agreements, Fuel Purchase Agreements and a Gas Transportation Agreement. PFA also provided analysis relating to determining political, financial and pricing risk among the parties and guaranteeing ministries of the government. PFA's recommendations then focused on how to allocate those risks best among parties qualified and capable of bearing them. In so doing, PFA also recommended a transparent gas pipeline tariff that would result in a more fair allocation of risk between the developer of the project, UNOCAL, and the MEMR.
- Mr. Rubin is an expert in the oil and gas sector especially as it relates to Russia and the former Soviet Union. As Senior Investment Officer at OPIC, Mr. Rubin committed, structured and negotiated financial terms for a \$116 million loan to the Sakhalin II production sharing consortium among Marathon Oil, Mitsubishi, Mitsui, Royal Dutch Shell and Sakhalinneftegas. The loan was a co-financing among OPIC, the EBRD and the Japan Export-Import Bank.

Mr. Rubin also structured and negotiated financial terms for a \$125 million loan to an oil and gas condensate recovery project in Northern Russia between Bechtel Enterprises and Gazprom. He also structured a loan to a joint venture for the Maykop field in Russia and analyzed a gas recovery project in Georgia.

Mr. Rubin has also analyzed and structured several oil production ventures in Siberia and other regions in Russia. Mr. Rubin developed a sophisticated computer model to analyze

such projects incorporating the most recent tax and regulatory changes under the new Russian Production Sharing Law.

### ***Power and Utilities***

PFA has worked closely with power utilities in a number of capacities to increase their generating efficiency and to assess their needs. Some of these assignments include the following:

- PFA, in partnership with Electrotek Concepts Inc. (Electrotek), of Arlington, VA, prepared a multi-disciplinary study for the Comité Maghrébin de l'Electricité (COMELEC) for a Feasibility Study concerning the reinforcement of the interconnection of the national electric grids of Algeria, Morocco and Tunisia. The Feasibility Study was financed by a grant from the United States Trade and Development Agency (USTDA).

The objective of the study was to assist COMELEC with the development of a management and investment plan for the expansion of the interconnected power transmission networks of Algeria, Morocco and Tunisia. The Study also included a comprehensive financial, legal and regulatory review of the electricity sector in each country in order to generate a Management and Investment Plan to support COMELEC in dealing with lending institutions, sovereign entities and sources of private equity.

- PFA performed economic diligence on behalf of US EXIM for a loan to a Turkish gas fired power plant. The project is sponsored by Intergen, a Bechtel affiliate, Enka and the Government of Turkey. The plant will entail construction of a 1,561 MW gas fired combined cycle plant for an approximate cost of \$871 million and is part of three project initiative with total costs amounting to close to \$2 billion.

### ***Chemical Engineering and Pollution Abatement***

- PFA in conjunction with Booz Allen Hamilton provided technical and financial expertise for a World Bank funded pollution abatement fund for industrial enterprises in Ukraine. PFA analyzed the financial viability of a number of chemical recovery and methane extraction projects.