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2007 Greenhouse Gas Emissions Inventory Report

Prepared for:

Overseas Private Investment Corporation

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INTRODUCTION

Pace Global Energy Services, LLC ("Pace") performed an independent analysis to quantify the greenhouse gas ("GHG") emissions directly attributable to projects to which the Overseas Private Investment Corporation ("OPIC") is financially committed. GHGs are atmospheric compounds that trap the sun's infrared radiation or heat. In excess quantities, GHGs are linked to numerous impacts to global climate and the environment as a whole. Further, regulations are being developed and implemented at regional and local levels to limit and / or reduce GHG emissions from human caused sources that have the potential to impart compliance cost implications to major sources of these emissions. This analysis aims to assess the level of potential GHG emissions of projects determined to be significant sources of GHG emissions in terms of short tons of carbon dioxide ("CO2") emissions.

This emissions estimate included only those projects active in OPIC's portfolio as of June 30,2008 with annual emission levels exceeding 100,000 short tons of CO2 (major sources) and was produced using data available from project sponsors as supplied by OPIC. This estimate included only emissions from direct, on site sources from operations in the 2007 calendar year and not indirect emissions associated with purchased electricity or steam, chemical releases, or the past construction of facilities.

Initially, Pace conducted a screen of OPIC supported projects and developed a 'short list' of those projects likely to exceed an emissions threshold of 100,000 short tons CO2 per annum from direct fossil fuel combustion. Further analysis of environmental data and project descriptions narrowed this list to 27 projects. The maximum Potential to Emit ("PTE") was estimated for these 27 projects based on available project information which varied by project but included a combination of consumption data, throughput, generating capacity, relative project sizes, and an assumed operating capacity of 8,000 hours per year. In order to support the accuracy of the estimates and assumptions and to ascertain 2007 operational emissions data, OPIC solicited additional information and verification of Pace's estimates from the individual sponsors. OPIC's 2007 emissions inventory includes emissions from 24 projects and one fund. Actual 2007 emissions estimates and operating data received from project sponsors was used in the 2007 inventory where available. For projects where sponsor feedback and / or actual 2007 year operating data was unavailable, the PTE estimate was used to reflect 2007 emissions, in absence of actual operational data. The estimated total for OPIC's 2007 GHG Inventory is 50,358,219 short tons CO2.

This report presents the results of the 2007 year GHG emissions estimate for OPIC projects. Going forward, Pace will annually review and update the emissions attributable to projects to which OPIC is financially committed and identify and report differences from the emissions estimates presented in the initial inventory report herein.

METHODOLOGY

Initial Screen

Pace screened all of OPIC's affiliated projects from a complete project list provided by OPIC. Calendar year 2007 was selected as the "base" year rather than 2008 as it represented the latest complete year of emissions data available for analysis. The scope of the analysis included emissions from the direct combustion of fossil fuels that would result in over 100,000 short tons of CO2 emitted per year. Emissions associated with electricity usage, industrial processes, and/or refrigerants were excluded. Based on the criteria below, Pace developed a 'short list' of projects that warranted more detailed analysis to determine whether or not they exceeded the threshold for inclusion and to calculate the PTE emissions. The initial screen relied on the following criteria for inclusion. (See Appendix A, Table A-1 for the complete list of projects analyzed).

- Projects that were active as of June 30,2008;
- Projects in the energy, oil & gas, transportation, mining, manufacturing, and construction sectors as facilities in these sectors are of sufficient size to potentially directly emit over 100,000 short tons CO2 per year; and
- Projects in the finance/banking, insurance, and service sectors were omitted from further analysis because the majority of emissions from these sectors are attributed to electricity usage which is outside the scope of this study.

A total of 98 projects were included in the initial 'short list.' (See Appendix A, Table A-2 for the initial 'short list'). After discussing and reviewing project details with OPIC for additional information regarding specific projects, this list was shortened to around 50 projects that could potentially reach or surpass the emissions threshold for inclusion in the inventory. (See Appendix A, Table A-3 for the draft 'short list'). Of the 50 remaining projects, Pace analyzed available project specific environmental data and calculated a rough emissions estimate for each project. Those projects over or near the 100,000 short tons per year threshold were included in the final 'short list' of 27 projects. Pace vetted and finalized emission calculations for these projects and included them into the 2007 inventory.

Tier A (Power Generation) Facility Inventory Estimates

Pace segregated fossil fuel fired power generation projects on the final 'short list,' of which a total of 16 projects were identified and were referred to as "Tier A projects". The maximum PTE for Tier A projects were based on an operating capacity of 8,000 hours per year, consumption data (if available), facilities' power generating capacity (MW), and/or specific estimates of GHG emissions provided by the project sponsor if available. The most accurate emissions profile is that based on actual fuel consumption; however, this information was not available for most of the Tier A projects. Therefore, when calculating emissions based on generation capacity alone, Pace generated estimates by calculating emissions based on capacity (MW) and used a conversion efficiency factor obtained from the International Finance Corporation's Guidance Note 3. Other standard assumptions required to perform inventory calculations were primarily

sourced from The Climate Registry's General Reporting Protocol. A complete list of data sources relied upon for this analysis is included in the Annotated Bibliography in Appendix C.

Five of the Tier A projects' emissions estimates were calculated using actual annual fuel consumption data provided by the project sponsors and the remaining 11 projects' emissions estimates were based on power generation capacity / fuel throughput estimates. The data used in the calculations as well as the maximum PTE calculations are detailed in Appendix B.

Tier B Facility Inventory Estimates

Eleven projects on the 'short list' were identified as Tier B facilities, defined as facilities in the oil & gas, mining, transportation, manufacturing, or construction sectors with annual GHG emissions estimated to be above the threshold defining a major source for this analysis. Oil & gas sector projects' emissions were based on throughput, consumption data, and/or emissions data from similar facilities. Emissions from manufacturing projects were based on the energy requirements from similar facilities and/or processed volumes. All maximum PTE estimates assume an operating capacity of 8,000 hours per year. When emissions data from similar facilities was necessary to perform the calculation, the data was obtained from credible, publically available information sources such as the American Petroleum Institute ("API"), Energy Information Administration ("EIA"), and U.S. Environmental Protection Agency ("EPA"). Other assumptions required to perform inventory calculations were primarily sourced from The Climate Registry's General Reporting Protocol. A complete list of data sources relied upon for this analysis is included in the Annotated Bibliography in Appendix C. The data used in the calculations as well as the estimate calculations are detailed in Appendix B.

Annual Review of Inventory Estimates

Pace will review OPIC's portfolio annually and determine if projects should be removed or added to the inventory calculation and quantify the impacts of annual operational changes against the maximum PTE estimate. Pace will utilize the above methodology to screen these additional projects and estimate emissions going forward.

Project Sponsor Feedback and Estimate Revisions

To support the accuracy of the estimates, OPIC solicited additional information and verification of project specific assumptions from the individual sponsors. The project sponsors had 30 days to reply to the solicitation with additional project details and 2007 operational emissions estimates. This feedback reflects OPIC's 2007 emissions inventory which includes emissions from 24 of the 27 projects on the final short list. When sponsor feedback was unavailable, the PTE was used to reflect 2007 emissions.

Two projects, the West African Gas Pipeline and AES Jordan, were removed from the inventory because they were not operational in 2007 and emissions from construction were below the 100,000 short ton threshold. Details provided by the sponsor for RPK-Vysotsk (Lukoil II) required Pace to refine its methodology which resulted in project emissions below the threshold and therefore, RPK-Vysotsk (Lukoil II) was omitted from the inventory.

RESULTS

OPIC's 2007 GHG Inventory is 50,358,219 short tons CO2, based on sponsor feedback and maximum PTE when sponsor comments were unavailable.

Exhibit 1: 2007 OPIC GHG Emissions Inventory Estimate by Project

Tier	Project Name	Location	Description	Capacity / Throughput	Fuel Type	Maximum PTE (short tons CO2) [1]	Sponsor Reported Emissions (short tons CO2)	2007 Emissions (short tons CO2)
A	AES Nigeria Barge	Nigeria	Combined Cycle	270 MW	Natural Gas	1,603,307	1,116,398	1,166,398
A	Adapazari Elektrik Uretim	Turkey	Combined Cycle	777 MW	Natural Gas	2,706,499	2,106,754	2,106,754
A	AES Jordan	Jordan	Combined Cycle	370 MW	Natural Gas	1,288,809	-	- [2]
A	Doga Enerji	Turkey	Combined Cycle	180 MW	Natural Gas	816,057	740,756	740,756
A	Habibullah Coastal Power	Pakistan	Combined Cycle	140 MW	Natural Gas	487,658	447,880	447,880
A	Gebze Elektrik Uretim	Turkey	Combined Cycle	1554 MW	Natural Gas	5,412,998	4,121,923	4,121,923
A	Pakistan Water & Power Development Authority	Pakistan	Combined Cycle	150 MW	Natural Gas	522,490	-	522,490 [3]
A	Isagen SA	Colombia	Combined Cycle	300 MW	Natural Gas	1,044,980	2,030,109	2,030,109
A	Izmir Elektrik Uretim	Turkey	Combined Cycle	1554 MW	Natural Gas	5,412,998	4,694,380	4,694,380
A	Jorf Lasfar Energy	Morocco	Steam Boiler	1356 MW	Coal	14,268,496	-	14,268,496 [3]
A	Gaza Private Generating PLC	Gaza	Combined Cycle	136.4 MW	Natural Gas	487,657	293,804	293,804
A	NEPC Consortium Power	Bangladesh	Combined Cycle	110 MW	Natural Gas	383,159	245,795	245,795
A	Paiton Energy	Indonesia	Steam Boiler	1200 MW	Coal	7,938,380	9,553,044	9,553,044
A	Termovalle SCA	Colombia	Combined Cycle	199 MW	Natural Gas	693,170	-	693,170 [3]
A	Trakya Elektrik Uretim	Turkey	Combined Cycle	478 MW	Natural Gas	1,818,912	1,747,956	1,747,956

[1] Note that the maximum PTE was calculated for projects that had detailed data as well as for those with spare data. For those projects with minimal data available, the maximum PTE may be less than the 2007 emissions for which more information became available from the project sponsors.

[2] AES Jordan and West African Gas Pipeline projects were both under construction during calendar year 2007 and were not operational; therefore, since emissions from construction would be below the 100,000 short ton threshold they are excluded from the 2007 inventory.

[3] Sponsor feedback was not provided; therefore, the max PTE was used for the 2007 Inventory.

Tier	Project Name	Location	Description	Capacity / Throughput	Fuel Type	Maximum PTE (short tons CO2) [1]	Sponsor Reported Emissions (short tons CO2)	2007 Emissions (short tons CO2)
	ve Ticaret							
A	Grenada Electricity Services (WRB)	Grenada	Combined Cycle	18 MW	Diesel (Fuel Oil)	104,604	114,571	114,571
B	Accroven SRL	Venezuela	NGL facility	800 MMscfd	Natural Gas	998,677	-	998,677 [3]
B	Various Egypt Subsidiaries (Apache)	Egypt	Oil/Gas extraction & processing	29,934,702 bbl/yr & 89,910 MMscf/yr	Oil & Natural Gas	1,190,476	1,505,247	1,505,247
B	Baku-Tblisi-Ceyhan Pipeline	Azerbaijan	Crude Oil Pipeline	247 million bbl	Natural Gas & Diesel	699,034	707,672	707,672
B	E.P. Interoil	Papua New Guinea	Crude Oil Refinery	15,888 BPCD	Crude Oil	802,469	392,296	392,296
B	Foxtrot International	Cote d'Ivoire	Gas extraction & pipeline	1736 MMscf/yr	Natural Gas	270,804	104,484	104,484
B	Natural Gas Liquids II Financing	Nigeria	NGL facility	19.5 MMscfd	Natural Gas	390,806	244,048	244,048
B	Equate Petrochemical	Kuwait	Petrochemical facility	1540 MMBtu/hr	Natural Gas	720,573	-	720,573 [3]
B	West African Gas Pipeline	Ghana	Gas Pipeline	190 MMscfd	Natural Gas	244,728	-	- [2]
B	Wilpro Energy Services (El Furrial)	Venezuela	Gas Compression	60 MW	Natural Gas	289,106	289,106	289,106
B	Wilpro Energy Services (Pigap)	Venezuela	Gas Compression	100 MW	Natural Gas	507,923	571,090	571,090
N/A	Latin American Power III	Latin America	Fund	N/A	N/A	2,077,500	2,077,500	2,077,500 [4]
							Grand Total	**50,358,219**

[4] Per agreement between Latin American Power III and OPIC, the Fund agreed to "not make an investment in a Portfolio Company if after such investment, the assets and operations of all Portfolio Companies then held by the Fund would emit (in the aggregate and on a calendar year basis) in excess of 2,077,500 short tons CO2 as calculated in accordance with the IPCC".

APPENDIX A

Table A-1: OPIC's Project Portfolio, lists all active projects in OPIC's portfolio as of June 30, 2008 and analyzed by Pace during the Fall / Winter of 2008. Table A-2. Initial Short List, lists those 98 projects included in the initial 'short list,' based on their potential to generate emissions above the threshold for inclusion in OPIC's inventory. Table A-3. Draft Short List, lists those 50 projects included in the draft 'short list'.

Table A-1: OPIC's Project Portfolio

Project Name	Sector	Country
FINANCE		
TB-ANDREW & WILLIAMSON FRESH PRODUCE	AGRI	MEXICO
FLAMA DE ORO S.A.	AGRI	GUATEMALA
FLAMA DE ORO, S.A.	AGRI	GUATEMALA
BESCH INT'L, INC/SAN MARTIN FARMS CIA. LTDA.	AGRI	ECUADOR
BRUCH SIDE FARMS AGROPECUARIA DO BRAZIL LTDA	AGRI	BRAZIL
EL SALADERO UY S.R.L.	AGRI	URUGUAY
DMITROV DAIRY FARMS, CJSC	AGRI	RUSSIA
ROTA INTERNATIONAL EXPORTING, LLC.	AGRI	GUINEA-BISSAU
LA FUTURA, S.A.	AGRI	GUATEMALA
WBC-FORESTRADE, INC	AGRI	LATIN AMERICA REGIONAL
WBC-SOUTHERN VALLEY FRUIT & VEGETABLE, INC.	AGRI	MEXICO
WBC-MARICULTURA DEL NORTE, S.DE R.L. DE C.V.	AGRI	MEXICO
CSA-REY BANANO DEL PACIFICO C.A.	AGRI	ECUADOR
LEAWOOD INVESTMENTS INC/BARRIEFIELD LLC	AGRI	COLOMBIA
CELLCOM TELECOMMUNICATIONS INC.	COMM	LIBERIA
SABLE-CELLCOM TELECOMMUNICATIONS INC	COMM	LIBERIA
RURALFONE, INC.	COMM	BRAZIL
ZAO STAR NETWORKS	COMM	RUSSIA
CAFR-MIC TANZANIA LIMITED (TZS)	COMM	TANZANIA
CAFR-MIC TANZANIA LIMITED (USD)	COMM	TANZANIA
CASIA-PACIFIC BANGLADESH TELECOM LIMITED	COMM	BANGLADESH
CPAK-PAKISTAN MOBILE COMMUNICATION(PMCL)	COMM	PAKISTAN
AGROTERMINAL LTD.	CONS	RUSSIA
ATLANTIC GROUP (UGANDA) LTD.	CONS	UGANDA
CUSTOMIZED CONSTRUCTION, INC.	CONS	AFGHANISTAN
INTERNATIONAL DEVELOPMENT TRUST IRAQ	CONS	IRAQ
ROUMEL DEVELOPMENT CORPORATION 2	CONS	BOSNIA-HERZEGOVINA
INTERNATIONAL VILLAGE SH.P.K.	CONS	KOSOVO
GHP(HONDURAS)LLC/GLOBAL HOUSING DEVELOPMENT	CONS	HONDURAS
MASKAN, INC. (TRANCHE A)	CONS	AFGHANISTAN
AFCO-KANDAHAR VALLEY, LLC	CONS	AFGHANISTAN
ROUMEL DEVELOPMENT CORPORATION	CONS	BOSNIA-HERZEGOVINA
JOPA VILLAS, LLC	CONS	KENYA

Project Name	Sector	Country
AMEBRASIL CONSTRUCOES LIMITADA	CONS	BRAZIL
WBC-MONOLITHIC HOUSING S.A.	CONS	MEXICO
SIGMA INTERNATIONAL CONSTRUCTION LLC.	CONS	IRAQ
CENTRAL EAST AFRICA RAILWAYS COMPANY LIMITED	CONS	MALAWI
CONDOMINIOS RIVERSIDE ETAPA II, S.A.	CONS	COSTA RICA
SOUTH AFRICA FINANCING ENTERPRISE	CONS	SOUTH AFRICA
VISTAS BELIZE LTD	CONS	BELIZE
CORREDOR DE DESENVOLVIMENTO DO NORTE S.A.R.L	CONS	MOZAMBIQUE
SOCIEDAD CONCESIONARIA VESPUCIO NORTE EXPRES	CONS	CHILE
EMERGENCY LIQUIDITY FACILITY, L.P.	FIN	LATIN AMERICA REGIONAL
AEGIS INVESTMENT COMPANY	FIN	ALL OPIC COUNTRIES
CITIBANK, N.A.(RUSSIA/CIS LENDING FACILITY)	FIN	NIS REGIONAL
MIDDLE EAST INVESTMENT INITIATIVE,INC.	FIN	GAZA
CITIBANK, N.A.(PAKISTAN ON LENDING FACILITY)	FIN	PAKISTAN
HONDURAS HOMES, S.A.	FIN	HONDURAS
AFGHAN GROWTH FINANCE LLC	FIN	AFGHANISTAN
BANCO DE CREDITO CENTROAMERICANO, S.A.	FIN	NICARAGUA
BANCO DE CREDITO CENTROAMERICANO, S.A.	FIN	NICARAGUA
BANCO LAFISE HONDURAS, S.A.	FIN	HONDURAS
CMFI-K-REP BANK	FIN	KENYA
FIRST MORTGAGE COMPANY UCO, LLC	FIN	ARMENIA
HFA ZAMBIA LIMITED	FIN	ZAMBIA
INTER-MAC INTERNATIONAL, INC.	FIN	HONDURAS
IRAQ MIDDLE MARKET DEVELOPMENT FOUNDATION	FIN	IRAQ
MIDDLE EAST INVESTMENT INITIATIVE, INC.	FIN	GAZA
NHCAPSTONE HOLDING GROUP LIMITED	FIN	LEBANON
RUSSIAN ASSET MBS, S.A.	FIN	RUSSIA
TAMEER MICROFINANCE BANK LIMITED	FIN	PAKISTAN
THE COOPERATIVE HOUSING FOUNDATION LEBANON	FIN	LEBANON
W3-BANCO FINANCIERO DEL PERU	FIN	PERU
W3-RIZAL COMMERCIAL BANKING CORP	FIN	PHILIPPINES
W3-SEKERBANK A.S.	FIN	TURKEY
MEII-AL RAFAH BANK	FIN	WEST BANK
MEII-BANK OF PALESTINE	FIN	WEST BANK
COUNTERPART INTERNATIONAL, INC.	FIN	PHILIPPINES
CMFI-TAMWEELCOM	FIN	JORDAN
THE COOPERATIVE HOUSING FOUNDATION	FIN	MEXICO
CALVERT SOCIAL INVESTMENT FOUNDATION	FIN	ALL OPIC COUNTRIES
CMFI-FINANCIERA SOLIDARIA (FINSOL)	FIN	HONDURAS
CMFI-UGANDA FINANCE TRUST	FIN	UGANDA
CMFI-PRIDE UGANDA	FIN	UGANDA
CMFI-CENTER FOR AGRICULTURE & RURAL DEVELOP	FIN	PHILIPPINES
LIBERIAN ENTERPRISE DEVELOPMENT FINANCE CO.	FIN	LIBERIA
CMFI-UGANDA MICROFINANCE LIMITED	FIN	UGANDA
CONSERVATION INTERNATIONAL FOUNDATION	FIN	ALL OPIC COUNTRIES
NCB-DENIZBANK PURPOSE B	FIN	TURKEY
CMFI-APOYO INTEGRAL, S.A. DE C.V.	FIN	EL SALVADOR

Project Name	Sector	Country
CMFI-FUNDACION INTEGRAL COMUNITARIA (FINCA)	FIN	MEXICO
BANCO LAFISE HONDURAS, S.A.	FIN	HONDURAS
WBC-RABITABANK OJSC	FIN	AZERBAIJAN
THE COOPERATIVE HOUSING FOUNDATION	FIN	ROMANIA
SOA KREDIT NON-BANKING CREDIT ORGANIZATI LLC	FIN	AZERBAIJAN
THE COOPERATIVE HOUSING FOUNDATION	FIN	ROMANIA
MICROFINANCE SECURITIES XXEB SA JUNIOR	FIN	ALL OPIC COUNTRIES
PROCREDIT, S.A.	FIN	MOLDOVA
NCB-NBD BANK, JOINT-STOCK COMPANY	FIN	RUSSIA
CMFI-KAZMICROFINANCE LLC	FIN	KAZAKHSTAN
RKU FRANCHISING LIMITED	FIN	RUSSIA
W2-FINANSBANK A.S.	FIN	TURKEY
GLOBAL PARTNERSHIPS MICROFINANCE FUND2006LLC	FIN	LATIN AMERICA REGIONAL
CPAK2-KASHF FOUNDATION	FIN	PAKISTAN
PROCREDIT BANK (TRANCHE 2)	FIN	UKRAINE
W2-ANADOLUBANK	FIN	TURKEY
W2-AYSA FINANS	FIN	TURKEY
CHF/L-FRANSABANK S.A.L.	FIN	LEBANON
BANCO LAFISE, S.A. (TRANCHE 3)	FIN	COSTA RICA
BANCO DE CREDITO CENTROAMERICANO, S.A.	FIN	NICARAGUA
WBC-GEORGIAN LEASING COMPANY, LLC	FIN	GEORGIA
CSI LATINA FINANCIAL, INC.	FIN	MEXICO
GREENWICH FINANCIAL SERVICES, L.L.C.	FIN	RUSSIA
MICROFINANCE SECURITIES XXEB SA SENIOR	FIN	ALL OPIC COUNTRIES
EMERGING MARKETS CONSULTING (PRIVATE) LTD.	FIN	PAKISTAN
IRAQ MIDDLE MARKET DEVELOPMENT FOUNDATION	FIN	IRAQ
WBC-NBD BANK	FIN	RUSSIA
CHF/L-JAMAL TRUST BANK S.A.L.	FIN	LEBANON
WBC-OJSC COMMERCIAL BANK "SDM-BANK"	FIN	RUSSIA
CASIA-LANKA ORIX LEASING COMPANY LTD.	FIN	SRI LANKA
SOA KREDIT NON-BANKING CREDIT ORGANIZATI LLC	FIN	AZERBAIJAN
W3-CREDICORP BANK, S.A.	FIN	PANAMA
NCB-DENIZBANK A.	FIN	TURKEY
GHANA HOME LOANS (FUND 1) LIMITED	FIN	GHANA
W2-BANK CENTERCREDIT	FIN	KAZAKHSTAN
WBC-ZAO DELTALEASING	FIN	RUSSIA
WBC-BANK OF GEORGIA	FIN	GEORGIA
WBC-INDEPENDENT LEASING, LLC	FIN	RUSSIA
WBC-SOTSYALNIY GORODSKOY BANK (SOTSGORBANK)	FIN	RUSSIA
BANCO LAFISE S.A.	FIN	COSTA RICA
W-BANCO FINANCIERA COMERCIAL HONDURENA	FIN	HONDURAS
PROCREDIT BANK	FIN	UKRAINE
MICROFINANCE SECURITIES XXEB SA MEZZANINE	FIN	ALL OPIC COUNTRIES
W2-FIRST INVESTMENT BANK BULGARIA	FIN	BULGARIA
W2-TEKSTIL BANKASI, A.S.	FIN	TURKEY
UMBRALCAPITAL, S.A.P.I. DE C.V.	FIN	MEXICO
NCB2 -OYAK BANK A.S.	FIN	TURKEY

Project Name	Sector	Country
NCB2-TURK EKONOMI BANKASI A.S.(T.E.B.)	FIN	TURKEY
NCB2-BANK ASYA KATALIM, A.S.	FIN	TURKEY
W-FIRST INVESTMENT BANK	FIN	BULGARIA
CSA-BANCO REGIONAL, S.A.	FIN	PARAGUAY
NCB-OJSC SIBACADEMBANK	FIN	RUSSIA
CCA2-BANCA PROMERICA, S.A.	FIN	COSTA RICA
CCA2-BANCO IMPROSA, S.A.	FIN	COSTA RICA
CCA2-BANCO MERCANTIL, S.A.	FIN	HONDURAS
SMALL BUSINESS CREDIT BANK (TRANCHE A)	FIN	RUSSIA
SMALL BUSINESS CREDIT BANK (TRANCHE B)	FIN	RUSSIA
CSA-BANCO PROCREDIT ECUADOR	FIN	ECUADOR
NCB3-LOCKO BANK	FIN	RUSSIA
NCB3-TRANSCAPITAL BANK JSC	FIN	RUSSIA
W2-BANCO DEL PAIS, S.A.	FIN	HONDURAS
W2-PROBUSINESSBANK	FIN	RUSSIA
W3-BANCO PINE, S.A.	FIN	BRAZIL
W3-BANCO REFORMADOR, S.A.	FIN	GUATEMALA
CASIA-BRAC	FIN	BANGLADESH
CASIA-SKS MICROFINANCE PRIVATE LTD.	FIN	INDIA
CHOUS-BANCO DE LA PRODUCCION S.A.	FIN	NICARAGUA
NCB3-BANCO PINE S.A.	FIN	BRAZIL
W2-ALLIANCE BANK	FIN	KAZAKHSTAN
NCB3-CENTER-INVEST BANK JSC	FIN	RUSSIA
CPAK-ORIX LEASING PAKISTAN LIMITED	FIN	PAKISTAN
CLEB-BANQUE LIBANO-FRANCAISE S.A.L.	FIN	LEBANON
BAN-CREDITO INMOBILARIO S.A. DE C.V.	FIN	MEXICO
BANCO LAFISE, S.A. (TRANCHE 2)	FIN	COSTA RICA
NCB2-BANCO MERCANTIL DO BRASIL S.A.	FIN	BRAZIL
W2-SIBACADEMBANK	FIN	RUSSIA
W2-TURK EKONOMI BANK	FIN	TURKEY
CLOSED JOINT STOCK COMPANY DELTALEASING	FIN	RUSSIA
NCB3-ROSEUROBANK	FIN	RUSSIA
INTERNATIONAL MORTGAGE BANK	FIN	UKRAINE
NCB2-TURK EKONOMI BANKASI A.S. PURPOSE B	FIN	TURKEY
W-OYAK BANK	FIN	TURKEY
W3-TURKIYE GARANTI BANKASI AS	FIN	TURKEY
NCB3-BANK CENTER CREDIT JSC	FIN	KAZAKHSTAN
CNIS-JSC KAZKOMMERTSBANK	FIN	KAZAKHSTAN
CNIS-JSC HALYK BANK	FIN	KAZAKHSTAN
CHOUS-BANCO FINANCIERA COMMERCIAL HONDURENA	FIN	HONDURAS
NCB2 -BANK TURAN ALEM	FIN	KAZAKHSTAN
W2-OYAK BANK A.S.	FIN	TURKEY
NCB2-JSC PROMSVYAZBANK	FIN	RUSSIA
W2-BANCO ATLANTIDA	FIN	HONDURAS
PROCREDIT HOLDING A.G.	FIN	ALL OPIC COUNTRIES
W2-JSC BANK TURAN ALEM	FIN	KAZAKHSTAN
IRAQ MIDDLE MARKET DEVELOPMENT FOUNDATION	FIN	IRAQ

Project Name	Sector	Country
W2-AKBANK T.A.S.	FIN	TURKEY
ZAO EUROPLAN	FIN	RUSSIA
CHOUS-BANRURAL S.A.	FIN	GUATEMALA
CLEB2-BANK AUDI SAL-AUDI SARADAR GROUP	FIN	LEBANON
NCB3-ALLIANCE BANK JSC	FIN	KAZAKHSTAN
NCB3-ATF BANK JSC	FIN	KAZAKHSTAN
REFORMA BLN-BACKED I	FIN	MEXICO
CLEB-BANKMED S.A.L.	FIN	LEBANON
CLEB-BYBLOS BANK S.A.L.	FIN	LEBANON
BLUEORCHARD MICROFINANCE SECURITIES I LLC	FIN	ALL OPIC COUNTRIES
TRADE BANK OF IRAQ	FIN	IRAQ
ZAO COMMERCIAL BANK DELTACREDIT	FIN	RUSSIA
ZAO EUROPLAN	FIN	RUSSIA
HOUSING FOR HIV, INC.	FIN	SOUTH AFRICA
PT. PADI MURNI INDONESIA	MFR	INDONESIA
ELLICOTT DREDGES IRAQ, LLC	MFR	IRAQ
NAMGEM TRADING BVI LIMITED	MFR	NAMIBIA
PALCO SP.ZO.O.	MFR	POLAND
TB-WISENBAKER BUILDING SERVICES, LTD.	MFR	BRAZIL
ZAO SOLNTSE MEXICO	MFR	RUSSIA
PURPLE RHINO IMPORTS, INC.	MFR	SOUTH AFRICA
NATURA BEVERAGE LLC	MFR	CAMEROON
DESARROLLO DE RIO PACORA SA	MFR	PANAMA
DESARROLLO DE RIO PACORA SA	MFR	PANAMA
GOLDEN CYPRESS WATER CO. LTD.	MFR	PHILIPPINES
ZAO NUMOTECH-SPEKTR	MFR	RUSSIA
RAYMOND DE VENEZUELA, C.A.	MFR	VENEZUELA
WESTSTAR PRECISION, INC.	MFR	COSTA RICA
NATURA BEVERAGE, LLC	MFR	CAMEROON
MAGNUM MACHINING INCORPORATED	MFR	MEXICO
QWO JOINT STOCK COMPANY	MFR	AFGHANISTAN
ADOBERIA SAHEL, S.A.	MFR	MALI
V G ENTERPRISES, INC.	MFR	RUSSIA
CASAMAR MAURITIUS, LTD./CASAMAR INDIAN OCEAN	MFR	MAURITIUS
SERVICIO GRAFICOS QUIPUS	MFR	BOLIVIA
BAKU OIL TOOLS, LTD.	MFR	AZERBAIJAN
DOMES INTERNATIONAL, INC.	MFR	ASIA REGIONAL
SAFI APPAREL CORPORATION	MFR	AFGHANISTAN
CAMAS GHANA INC.	MFR	GHANA
CPAK2-ENGRO VOPAK TERMINAL LTD	MFR	PAKISTAN
NUMOTECH, INC.	MFR	RUSSIA
AFRICAN-AMERICAN TRADING COMPANY, INC.	MFR	GHANA
RAYMOND DE VENEZUELA, C.A.	MFR	VENEZUELA
PRODUCTORA DE PAPELES SA (SUBORDINATED DEBT)	MFR	COLOMBIA
WBC-PREFERRED BRANDS INTERNATIONAL, LLC	MFR	INDIA
ZAO NYPRO	MFR	RUSSIA
SWEETWATER PAKISTAN (PRIVATE) LIMITED	MFR	PAKISTAN

Project Name	Sector	Country
QWO JOINT STOCK COMPANY	MFR	AFGHANISTAN
ACAI DO AMAPA AGROINDUSTRIAL LTDA.	MFR	BRAZIL
SANTE GMT PRODUCTS LTD.	MFR	GEORGIA
WBC-PREFERRED BRANDS INTERNATIONAL, LLC	MFR	INDIA
LAGRAY CHEMICAL COMPANY LTD	MFR	GHANA
MOUNTAIN PASTURES HOLDINGS LLC	MFR	AFGHANISTAN
WBC-INTERFARMA TIBBI MALZEMELER SANAYI VE TI	MFR	TURKEY
CSA-CORPORACION JOSE R. LINDLEY, SA-2	MFR	PERU
WBC-CORPORATIVO PAPELERO Y DE SUMINISTROS BA	MFR	MEXICO
GOLDEN SIERRA PARTNERS, LLC	MFR	ESTONIA
WBC-DELTA PLASTIK ENDUSTRISI A.S.	MFR	TURKEY
WBC-KELLY GRAINS CORPORATION S.R.L.	MFR	MOLDOVA
ABI GROUP LTD.	MFR	AFGHANISTAN
WBC-SFC ENTEGRE ORMAN URUNLERI SANAYI VE TIC	MFR	TURKEY
WBC-JSC POLIGRAF LAND	MFR	RUSSIA
PREFABRICADOS Y MODULARES DE MONTERREY(PYMM)	MFR	MEXICO
PHYTO-RIKER PHARMACEUTICALS LTD.	MFR	GHANA
CPAK-LUCKY CEMENT LIMITED	MFR	PAKISTAN
PRODUCTORA DE PAPELES SA (PROPAL)	MFR	COLOMBIA
CPAK-D.G.KHAN CEMENT COMPANY LIMITED	MFR	PAKISTAN
CAFR-MIDDLE EAST COMPLEX FOR ENGINEERING	MFR	JORDAN
CSA-CORPORACION JOSE R. LINDLEY, S.A.	MFR	PERU
COMPANIA MINERA PIMENTON SA	MINE	CHILE
BRAZILIAN EMERALDS,INC.	MINE	BRAZIL
ADVANCED CENTRAL GAS COMPANY LIMITED	OIL	JORDAN
BRAVO ENERGY MEXICO SRL DE CV	OIL	MEXICO
PARKO SERVICES, S.A.	OIL	COLOMBIA
BRAVO ENERGY ARGENTINA SCA	OIL	ARGENTINA
PT. TUCAN PUMPCO SERVICES INDONESIA	OIL	INDONESIA
JOSHI TECHNOLOGIES INTERNATIONAL, INC.	OIL	COLOMBIA
BRAVO ENERGY MEXICO SRL DE CV	OIL	MEXICO
GOLDHAM PTY LTD.T/A KALAHARI GAS CORPORATION	OIL	BOTSWANA
E.P. INTEROIL, LTD.	OIL	PAPUA NEW GUINEA
RPK-VYSOTSK "LUKOIL-II"	OIL	RUSSIA
WILPRO ENERGY SERVICES (PIGAP II) LTD.	OIL	VENEZUELA
WILPRO ENERGY SERVICES (EL FURRIAL) LIMITED	OIL	VENEZUELA
ACCROVEN SRL	OIL	VENEZUELA
NATURAL GAS LIQUIDS (II) FINANCING COMPANY	OIL	NIGERIA
MATH HYDRO POWER (PVT) LTD.	POWER	SRI LANKA
E+CO, INC.	POWER	HONDURAS
TRIANGLE GENERAL CONTRACTORS, INC.	POWER	KOSOVO
AES JORDAN PSC	POWER	JORDAN
PAITON ENERGY COMPANY	POWER	INDONESIA
JORF LASFAR ENERGY COMPANY	POWER	MOROCCO
ADAPAZARI ELEKTRIK URETIM LTD. SIRKETI	POWER	TURKEY
TRAKYA ELEKTRIK	POWER	TURKEY
NEPC CONSORTIUM POWER LTD.(HARIPUR)	POWER	BANGLADESH

Project Name	Sector	Country
DOGA ENERJI	POWER	TURKEY
IZMIR ELEKTRIK URETIM LTD SIRKETI	POWER	TURKEY
GEBZE ELEKTRIK URETIM LTD SIRKETI	POWER	TURKEY
TERMOBARRANQUILLA, S.A.	POWER	COLOMBIA
PAITON ENERGY COMPANY	POWER	INDONESIA
AMERICAN WOOL-CASHMERE, INC.	SVC	AFGHANISTAN
INTERCOMP CJSC	SVC	RUSSIA
SUMMIT ASSOCIATES, LTD.	SVC	AFGHANISTAN
DEXTER SAFETY & INDUSTRIAL PRODUCTS, INC.	SVC	MEXICO
RAPID MAIL COMPANY LIMITED	SVC	BELIZE
GILBERTO J.M.GONZALEZ/DBA/FERRETERIA MORALES	SVC	NICARAGUA
GLOBAL DESIGN, S.A.	SVC	PANAMA
PRINCETON HEALTHCARE	SVC	BRAZIL
INSTITUTO CULINARIO SANTA LUCIA,S.A.	SVC	NICARAGUA
IBS HOLDINGS, LLC	SVC	AFGHANISTAN
SUBWAY RUSSIA, LLC	SVC	RUSSIA
LIVING WATER INTERNATIONAL	SVC	KENYA
ADMINISTRADORA DE INVERSIONES PEGGY, S.A.	SVC	GUATEMALA
ABAMEDIA, L.P.(TRANCHE A)	SVC	RUSSIA
MEDPHARM, INC.	SVC	ETHIOPIA
S&N PUMP AFRICA, LDA	SVC	ANGOLA
GEOSURVEY INTERNATIONAL LLC	SVC	KENYA
THREE PAPAS, INC.	SVC	RUSSIA
QSI INTERNATIONAL SCHOOL OF TBILISI	SVC	GEORGIA
NH SERVICOS DE SINALIZACAO LTDA.	SVC	BRAZIL
INTERNATIONAL COMMUNITY SCHOOL LIMITED	SVC	GHANA
ISTANBUL INTERNATIONAL COMMUNITY SCHOOL (B)	SVC	TURKEY
MAJESTIC GROUP KOREA, LTD.	SVC	KOREA (SOUTH)
TIS LTD.	SVC	UZBEKISTAN
INTERNET GABON, SA	SVC	GABON
AMERICAN EMBASSY SCHOOL OF LUSAKA	SVC	ZAMBIA
THREE PAPAS, LLC	SVC	RUSSIA
WESTWOOD INTERNATIONAL SCHOOL	SVC	BOTSWANA
WBC-ZAO AIRES	SVC	RUSSIA
WINNER GROUP UKRAINE, INC.	SVC	UKRAINE
AMERICAN INTERNATIONAL SCHOOL SYSTEMS, INC.	SVC	PAKISTAN
WBC-VALLARTA VISION Y MISION A.C.	SVC	MEXICO
AMERICAN WOOL-CASHMERE, INC.	SVC	AFGHANISTAN
RB-AMERICAN COOPERATIVE SCHOOL OF TUNIS	SVC	TUNISIA
SALVATIERRA DESARROLLOS URBANOS, S.A. DE C.V	SVC	MEXICO
AMERICAN INTERNATIONAL SCHOOL OF ABUJA	SVC	NIGERIA
WBC-COMERCIAL LAEISZ, S.A. DE C.V.	SVC	HONDURAS
NEW YORK PIZZA CO. LTD.	SVC	RUSSIA
ISTANBUL INTERNATIONAL COMMUNITY SCHOOL,INC.	SVC	TURKEY
WBC-ZAO AIRES	SVC	RUSSIA
WBC-ATLANTIC GROUP LIMITED	SVC	UKRAINE
CNIS-IKEA	SVC	RUSSIA

Project Name	Sector	Country
FIXED RATE FUNDING & LIQUIDITY LTD (HWD SPA)	SVC	ALGERIA
TAYL INVESTORS GROUP LIMITED	TOUR	AFGHANISTAN
MONGOLIAN RESORTS XXK	TOUR	MONGOLIA
MALIKA HOTEL BUKHARA, LLC	TOUR	UZBEKISTAN
DESARROLLOS DE LOS SUENOS, S.A.	TOUR	ARGENTINA
MERCURY INVESTMENTS LIMITADA	TOUR	MOZAMBIQUE
GAMETRACKERS MANAGEMENT LTD (NYATI LODGE)	TOUR	MOZAMBIQUE
HERMITAGE HOSPITALITY FRANCHISING LIMITED	TOUR	RUSSIA
M/N BUTLER MIMARLAR ARASTIRMA TASARI LTD.	TOUR	TURKEY
COMPANIA GENERAL DE COMERCIO E INDUSTRIA SA	TOUR	ARGENTINA
SOM OTELCILIK VE TURIZM TICARET A.S.	TOUR	TURKEY
TANRUSS INVESTMENT LTD	TOUR	TANZANIA
TANRUSS INVESTMENT LTD	TOUR	TANZANIA
ARMENIA HOTEL COMPLEX CLOSED JSC	TOUR	ARMENIA
JOINT STOCK COMPANY HOTEL TBILISI	TOUR	GEORGIA
IZMIR INTERNATIONAL HOTEL AS	TOUR	TURKEY
SOM OTELCILIK VE TURIZM TICARET A.S.	TOUR	TURKEY
MORUMBY HOTEIS LTDA.	TOUR	BRAZIL
AMERICAN MONOLITH LTD	TRAN	GEORGIA
RED CARRETERAS DE OCCIDENTE, S. DE RL DE CV	TRAN	MEXICO
TRANSNATIONAL AUTOMOTIVE GROUP-CAMEROON S.A.	TRAN	CAMEROON
PACIFIC SUBSEA SAIPAN 2	TRAN	THAILAND
PACIFIC SUBSEA SAIPAN 3	TRAN	THAILAND
PACIFIC SUBSEA SAIPAN, INC.	TRAN	THAILAND
DAYSTAR AIRWAYS LTD (DBA NEVIS EXPRESS)	TRAN	ST. CHRISTOPHER & NEVIS
DAYSTAR AIRWAYS	TRAN	ST. CHRISTOPHER & NEVIS
NORTH AMERICAN FLOAT PLANE SERVICE SAC	TRAN	PERU
LODOM SP.ZO.O-FACILITY B	TRAN	POLAND
PACIFIC INTERNATIONAL HOLDINGS, INC.	TRAN	GEORGIA
CORPORACION QUIPORT S.A.	TRAN	ECUADOR
TARSIAN & BLINKLEY LLC	N/A	AFGHANISTAN
ABC.R.O., INC	N/A	EUROPE/EURASIA
MASKAN, INC. (Tranche B)	N/A	AFGHANISTAN
BESCH INT'L, INC/SAN MARTIN FARMS CIA. LTDA.	N/A	ECUADOR
GLOBAL RAILROAD LEASING, LLC	N/A	BRAZIL
LIVING WATER INTERNATIONAL	N/A	KENYA
BAGRAM FRUIT PACKING COMPANY	N/A	AFGHANISTAN
GAMA LTD	N/A	GEORGIA
SPORTS INTERNATIONAL BILKENT FITNESS VE SPOR	N/A	TURKEY
BRAZILIAN EMERALDS,INC.	N/A	BRAZIL
COMPANIA GENERAL DE COMERCIO E INDUSTRIA SA	N/A	ARGENTINA
BIURO PROJEKTOWANIA SYSTEMOW CYFROWYCH S.A.	N/A	POLAND
BAJA TRANSPORTATION/BAJA SALT	N/A	EL SALVADOR
DARA SALAM REAL ESTATE DEVELOPERS	N/A	GHANA
UNIGESTION HOLDING S.A. (digicel Haiti)	N/A	HAITI
WEND-REY RESTAURANTS LTD	N/A	MEXICO
GLOBAL RAILROAD LEASING, LLC	N/A	BRAZIL

Project Name	Sector	Country
FARO DE AQUA SA DE C.V.	N/A	MEXICO
ASIAN CREDIT FUND CREDIT COOP LLC	N/A	KAZAKHSTAN
OOO AIR STRUCTURES AMERICAN TECHNOLOGIES	N/A	RUSSIA
V-TRAC HOLDINGS Ltd	N/A	VIETNAM
SHORE OVERSEAS AZERBAIJAN	N/A	AZERBAIJAN
THE POWERSOURCE GROUP LLC	N/A	PHILIPPINES
XTREME CINEMAS, SRL De C.V./iehc, Inc	N/A	MEXICO
CLOSED JOINT STOCK COMPANY shvydko-ukraine 2	N/A	UKRAINE
LEMNA DE MEXICO S.A. De C.V.	N/A	MEXICO
CLOSED JOINT STOCK COMPANY shvydko-ukraine 1	N/A	UKRAINE
CENTURY 21 RUSSIA	N/A	RUSSIA
PAKISTAN MORTGAGE GUARANTY TRUST	N/A	PAKISTAN
GAME VIEWERS LTD / GAME TRACKERS (botswana)ltd	N/A	BOTSWANA
TIGER MACHINERY COMPANY LLC	N/A	RUSSIA
INTERNATIONAL VILLAGE PRISTINA	N/A	KOSOVO
MICROFINANCE INTERNATIONAL CORPORATION	N/A	LATIN AMERICA REGIONAL
CNIS-OJSC RG BRANDS	N/A	KAZAKHSTAN
DEAMAR NIGERIA LLC	N/A	NIGERIA
TEKFENBANK	N/A	TURKEY
XTREME CINEMAS S.DE RI/XTREME DEL PONIENTE	N/A	MEXICO
BANCO UNO SA	N/A	PANAMA
BAN-FINANCIERA COMPARTAMOS S.A.	N/A	MEXICO
GLOBAL RAILROAD LEASING, LLC	N/A	BRAZIL
MEDYCYNA RODZINNA S.A.	N/A	POLAND
AFGHANISTAN RENEWAL FUND, LTD	N/A	AFGHANISTAN
ZAO MS-SPETSTELEKOM	N/A	RUSSIA
RIO VERDE, S.A.	N/A	NICARAGUA
ZAO ASTON	N/A	RUSSIA
GUATEMALA MORTGAGE CORPORATION	N/A	GUATEMALA
SIRIUS WIRELESS, LTD	N/A	NIGERIA
WBC-NEWCOM LTD	N/A	LATIN AMERICA REGIONAL
DODSON-LINDBLOM HYDRO POWER PRIVATE LTD	N/A	INDIA
NCB2-FINANSBANK A.S.	N/A	TURKEY
CAFR-MILLICOM GHANA LTD	N/A	GHANA
TECNOQUAT S.A.	N/A	GUATEMALA
ABSOLUT BANK	N/A	RUSSIA
CITIBANK N.A. (al-mansour automotive co)	N/A	EGYPT
CNIS-OAO NIZHEKAMSKNEFTEKHIM (nknk)	N/A	RUSSIA
TAVL LIMITED (hyatt regency kabul)	N/A	AFGHANISTAN
DENIZBANK ISTANBUL	N/A	TURKEY
LKI, INTERNATIONAL	N/A	NAMIBIA
CE LUZON GEOTHERMAL POWER CO	N/A	PHILIPPINES
HIDROELECTRICA RIO HONDO S.A.	N/A	GUATEMALA
PUERTO QUETZAL POWER LLC	N/A	GUATEMALA
EMPRESA DE TELECOMMUNICATIONS NUEVATEL SA	N/A	BOLIVIA
IRAQ MIDDLE MARKET FACILITY - Tranche B	N/A	IRAQ
CMS ENSENADA S.A.	N/A	ARGENTINA

Project Name	Sector	Country
LIMA AIRPORT PARTNERS S.R.L	N/A	PERU
LIVING WATER INTERNATIONAL (ghana)	N/A	GHANA
TNT PRODUCTIONS INTERNATIONAL INC	N/A	KAZAKHSTAN
INFINITY	N/A	NICARAGUA
FOURSAN	N/A	JORDAN
CEMACO	N/A	GUATEMALA
MILLICOM (CITIBANK)	N/A	TANZANIA
WBC-ICS PRIME CAPITAL	N/A	MOLDOVA
BANK POSITIF KREDIT	N/A	TURKEY
AL-QUDS BANK	N/A	WEST BANK
INDEPENDENT LEASING LLC	N/A	RUSSIA
CMFI (CITIBANK) PHILIPPINES	N/A	PHILIPPINES
STACK GROUP – SAFE DATA SERVICES	N/A	RUSSIA
SANGHVI MOTORS	N/A	INDIA
INSURANCE		
Inversiones Agropecuarias, S.A.	AGRI	NICARAGUA
Farmer George Limited	AGRI	GHANA
Granton Safaris CC	AGRI	SOUTH AFRICA
BAGRAM FRUIT PACKING COMPANY	AGRI	AFGHANISTAN
Finca La Cruz	AGRI	ARGENTINA
Ministry of Water Resources	AGRI	IRAQ
Bagram Fruit Packing Company	AGRI	AFGHANISTAN
International Foundation of Hope	AGRI	AFGHANISTAN
El Saladero, UY SRL	AGRI	URUGUAY
Seminole S.A.	AGRI	NICARAGUA
Siberian Farms L.L.C.	AGRI	RUSSIA
Finca Calle Larga, Calle Large Vieja	AGRI	ARGENTINA
El Saladero, UY SRL	AGRI	URUGUAY
N/A	AGRI	GUINEA-BISSAU
Best Value Zambia Limited	AGRI	ZAMBIA
ZAO VG Enterprises Inc	AGRI	RUSSIA
Desarrollo Industrial bioacuatico SA (dibsa)	AGRI	ECUADOR
Camanica SA	AGRI	NICARAGUA
VietnamNet Media Joint Stock Company	COMM	VIETNAM
Ministry of Interior Affairs of the Republic of Serbia	COMM	SERBIA
Brasil Telecom, S.A.	COMM	BRAZIL
KATEL Joint Venture	COMM	KYRGYZ REPUBLIC
teconvi SA	COMM	BRAZIL
Ministry of Interior	COMM	MACEDONIA
Ven World Telecom CA	COMM	VENEZUELA
Ruralfone do Brasil, Ltda.	COMM	BRAZIL
Ruralfone do Brasil, Ltda.	COMM	BRAZIL
Ruralfone do Brasil, Ltda.	COMM	BRAZIL
Ruralfone do Brasil, Ltda.	COMM	BRAZIL
Ruralfone do Brasil, Ltda.	COMM	BRAZIL
Ruralfone do Brasil, Ltda.	COMM	BRAZIL
AXS Bolivia S.A.	COMM	BOLIVIA

Project Name	Sector	Country
Netmaster Communications S.R.L.	COMM	ROMANIA
Caicos Television Holdings Ltd.	COMM	TURKS & CAICOS ISLANDS
VietnamNet Media Joint Stock Company	COMM	VIETNAM
AFCO - Kandahar Valley, LLC	CONS	AFGHANISTAN
Mutual Ventures Limited	CONS	TANZANIA
Administradora de Inversiones Peggy, S.A.	CONS	GUATEMALA
S.C. Empire Tower S.R.L.	CONS	ROMANIA
Open Joint Stock Company Terminal	CONS	RUSSIA
Southern Coastal Properties Nicaragua, S.A., c/o Fernando	CONS	NICARAGUA
Ministry of Water Resources	CONS	IRAQ
Ministry of Finance of the Democratic Republic of Congo	CONS	CONGO
Ministry of Finance of the Democratic Republic of Congo	CONS	CONGO
ARC Construction Company, LLC	CONS	AFGHANISTAN
Enterprise Homes Tanzania Limited, C/o Ishengoma, Masha	CONS	TANZANIA
Global Housing Development, S.A.	CONS	HONDURAS
General Directorate of Highways	CONS	TURKEY
American International School of Abuja	CONS	NIGERIA
Ministry of Finance of the Democratic Republic of Congo	CONS	CONGO
Alterra Partners LLC	CONS	PERU
NA	CONS	KENYA
Hrvatske Autoceste DOO	CONS	CROATIA
American International School of Abuja	CONS	NIGERIA
Financiera TFC, S.A.	FIN	PERU
OOO Morgan Stanley Bank	FIN	RUSSIA
Banco de Credito Centroamericano, S.A.	FIN	NICARAGUA
Morgan Stanley do Brasil Ltda.	FIN	BRAZIL
HSBC bank of brazil SA - Banco multiplo	FIN	BRAZIL
National Road Operating & Construction Co	FIN	JAMAICA
Proficio d.d.	FIN	CROATIA
Ghana Home Loans (Fund I) Limited	FIN	GHANA
Kompanion Financial Group	FIN	KYRGYZ REPUBLIC
Honduras Homes, S.A.	FIN	HONDURAS
Kompanion Financial Group	FIN	KYRGYZ REPUBLIC
Asya Katilim Bankasi A.S.	FIN	TURKEY
Banco Pine	FIN	BRAZIL
Merodent Zimbabwe (Pvt.) Ltd.	MFR	ZIMBABWE
Ministry of Water Resources	MFR	IRAQ
Nationwide Group of Companies, Inc.	MFR	LIBERIA
Merodent Zimbabwe (Pvt.) Ltd.	MFR	ZIMBABWE
Natura Beverage SARL	MFR	CAMEROON
Ministry of Water Resources	MFR	IRAQ
ZAO "ISP Optics, Saint-Petersburg"	MFR	RUSSIA
Merodent Zimbabwe (Pvt.) Ltd.	MFR	ZIMBABWE
Ministry of Water Resources	MFR	IRAQ
Ministry of Water Resources	MFR	IRAQ
A. Stucki - Rail	MFR	UKRAINE
Not applicable	MFR	AFGHANISTAN

Project Name	Sector	Country
Merodent Zimbabwe (Pvt.) Ltd.	MFR	ZIMBABWE
A. Stucki Rail	MFR	UKRAINE
A. Stucki - Rail	MFR	UKRAINE
SORWATHE S.A.R.L.	MFR	RWANDA
Acai do Amapa Agroindustrial Ltda.	MFR	BRAZIL
Instrum-Rand	MFR	RUSSIA
Afghanistan Natural Beverages	MFR	AFGHANISTAN
Minoterie du Congo, S.A.	MFR	CONGO
Afghanistan Beverage Industries (ABI Group, Limited)	MFR	AFGHANISTAN
Golden Cypress Water Co., LTD/Mrs Almera Guba-Gould	MFR	PHILIPPINES
Golden Cypress Water Co., LTD/Mrs Almera Guba-Gould	MFR	PHILIPPINES
Zao ISP Optics St. Petersburg	MFR	RUSSIA
Domes International Inc - India Manufacturing Division	MFR	INDIA
Cuirs Hawtan S.A.	MFR	HAITI
ISP Optics Sankt Petersburg	MFR	RUSSIA
Kimberly-Clark Peru SA	MFR	PERU
Kimberly-Clark Costa Rica	MFR	COSTA RICA
Colombiana Kimberly SA	MFR	COLOMBIA
molinos del ecuador CA	MFR	ECUADOR
Antarctica Empreendimentos e Participacoes Ltda.	MFR	BRAZIL
PSI Do Brasil Servicios de Seguranca LTDA	MFR	BRAZIL
ABI Group Ltd.	MFR	AFGHANISTAN
Afritrack Angola LDA	MFR	ANGOLA
KWABA - Sociedade Industrial e Comercial, S.A.R.L.	MFR	ANGOLA
Les Moulins d'Haiti S.E.M.	MFR	HAITI
Les Moulins D'Haiti S.E.M. (LMH)	MFR	HAITI
Instrum-Rand	MFR	RUSSIA
Lesotho Flour Mills Limited	MFR	LESOTHO
Minoterie de Matadi, S.A.R.L.	MFR	CONGO, DEM. REPUBLIC OF
Minoterie du Congo, S.A.	MFR	CONGO
Mobeira, SARL	MFR	MOZAMBIQUE
Minoterie de Matadi, S.A.R.L.	MFR	CONGO, DEM. REPUBLIC OF
Pakistan Water and Power Development Authority ("WAPDA")	MFR	PAKISTAN
Pakistan Water and Power Development Authority ("WAPDA")	MFR	PAKISTAN
Kimberly-Clark Vietnam Co., Ltd.	MFR	VIETNAM
National Milling Company Limited	MFR	ZAMBIA
Coca-Cola Nigeria Limited	MFR	NIGERIA
EQUATE Petrochemical Company K.S.C. (Closed)	MFR	KUWAIT
Colombiana Universal de papeles SA	MFR	COLOMBIA
Afritrack Angola LDA	MFR	ANGOLA
PT cabot Chemical	MFR	INDONESIA
Kimberly-Clark Thailand Limited	MFR	THAILAND
Colombiana Kimberly Colpapel SA	MFR	COLOMBIA
Kimberly-Clark Phillipines INC	MFR	PHILIPPINES
Maksan Manisa Mesrubat Kutulama Sanayi AS	MFR	TURKEY
White Star USA	MINE	RUSSIA
Sector Resources, Ltd. Branch	MINE	COLOMBIA

Project Name	Sector	Country
Empresa Minera Manquiri S.A.	MINE	BOLIVIA
Sociedad Minera Cerro Verde, S.A.A.	MINE	PERU
White Star USA	MINE	RUSSIA
N/A	OIL	NICARAGUA
MKJ Exploraciones Internacionales, S.A.	OIL	NICARAGUA
MKJ Exploraciones Internacionales, S.A.	OIL	NICARAGUA
N/A	OIL	NICARAGUA
PT Tucan Pumpco Services Indonesia	OIL	INDONESIA
West African Gas Pipeline Company Limited	OIL	BENIN
West African Gas Pipeline Company Limited	OIL	TOGO
Baku Oil Tools LTD	OIL	AZERBAIJAN
MKJ Exploraciones Internacionales, S.A.	OIL	NICARAGUA
Foxtrot International LDC	OIL	COTE DIVOIRE
West African Gas Pipeline Company Limited	OIL	GHANA
Various Apache Egypt concession subsidiaries	OIL	EGYPT
The Baku-Tbilisi-Ceyhan Pipeline Company	OIL	AZERBAIJAN
N/A	OIL	EGYPT
perforaciones western, CA	OIL	VENEZUELA
Pride Forasol SAS	OIL	CHAD
Israel electric corporation LTD	OIL	ISRAEL
Zeta Gas De Centro America S.A.	OIL	GUATEMALA
	POWER	PHILIPPINES
DV Technologies d.o.o. Belgrade	POWER	SERBIA
DV Technologies d.o.o. Belgrade	POWER	SERBIA
SEP Energy India Pvt. Ltd.	POWER	INDIA
SEP Energy Pvt. Ltd.	POWER	INDIA
Khozner HPP	POWER	KOSOVO
MaTH Hydro Power (Pvt) Limited	POWER	SRI LANKA
Puerto Cabezas Power S.A.	POWER	NICARAGUA
P.H. Rio Volcan,S.A.	POWER	COSTA RICA
Dominica Electricity Services Ltd. ("DOMLEC")	POWER	DOMINICA
Termovalle S.C.A. .E.S.P.	POWER	COLOMBIA
Fabmik Construction & Equipment Co Inc	POWER	PHILIPPINES
Tipitapa Power Company Ltd.	POWER	NICARAGUA
Gaza Power Generating Private Limited Company	POWER	GAZA
Kidwell International Power Vietnam Company Limited	POWER	VIETNAM
Grenada Electricity Services Limited	POWER	GRENADA
Habibullah Coastal Power (Private) Company	POWER	PAKISTAN
ContourGlobal Togo S.A.	POWER	TOGO
CE Casecnan Water and Energy Company, Inc.	POWER	PHILIPPINES
Gaza Power Generating Private Limited Company	POWER	GAZA
P.H. Don Pedro, S.A.	POWER	COSTA RICA
Doga Enerji Uretim Sanayi ve Ticaret L.S.	POWER	TURKEY
P.H. Rio Volcan, S.A.	POWER	COSTA RICA
Termovalle S.C.A. E.S.P.	POWER	COLOMBIA
CE Casecnan Water and Energy Company, Inc.	POWER	PHILIPPINES
Termobarranquilla S.A., Empresa de Servicios Publicos	POWER	COLOMBIA

Project Name	Sector	Country
AES Nigeria Barge Limited	POWER	NIGERIA
National Power Corporation ("NAPOCOR")	POWER	PHILIPPINES
the national power corporation	POWER	PHILIPPINES
Bhote Koshi private company pvt ltd	POWER	NEPAL
Tipitapa Power Company Ltd.	POWER	NICARAGUA
PT Energi Sengkang	POWER	INDONESIA
CBK power Company Limited	POWER	PHILIPPINES
Turboven Maracay company	POWER	VENEZUELA
Turboven Cagua company	POWER	VENEZUELA
Isagan SA ESP	POWER	COLOMBIA
The American Cooperative School of Tunisia	SVC	TUNISIA
N/A	SVC	LEBANON
Khudairi Trading Company Ltd.	SVC	IRAQ
Universal Star Co.	SVC	UKRAINE
N/A	SVC	UKRAINE
Hill Estates Limited, P.O. Box 31617	SVC	ZAMBIA
American University of Beirut	SVC	LEBANON
N/A	SVC	LEBANON
Total Artefactos S.A.	SVC	PERU
Samara Oblast	SVC	RUSSIA
Ministry of Health of Samara Oblast	SVC	RUSSIA
Hercules Liftboat Company Nigeria limited	SVC	NIGERIA
NA	SVC	IRAQ
Compexpo	SVC	HUNGARY
	SVC	RISK
Relief International Branch Office	SVC	AFGHANISTAN
Relief International Branch Office	SVC	PAKISTAN
Relief International Branch Office	SVC	BANGLADESH
Relief International Branch Offices	SVC	JORDAN
Relief International Branch Office	SVC	TAJIKISTAN
Relief International Branch Office	SVC	INDONESIA
The Asia Foundation	SVC	MONGOLIA
The Asia Foundation	SVC	EAST TIMOR
The Asia Foundation	SVC	FIJI
International Rescue Committee	SVC	COLOMBIA
The International Rescue Committee	SVC	JORDAN
International Rescue Committee	SVC	NEPAL
Directorate General Procurement	SVC	PAKISTAN
The Asia Foundation	SVC	BANGLADESH
Relief International Branch Offices	SVC	SRI LANKA
Gilberto Juan Morales Gonzalez, d/b/a Ferreteria Morales	SVC	NICARAGUA
The Asia Foundation	SVC	SRI LANKA
The Asia Foundation	SVC	PAKISTAN
Relief International Branch Office	SVC	AZERBAIJAN
Relief International Branch Office	SVC	SOMALIA
Relief International Hebron Center of Excellence	SVC	WEST BANK
Relief International Branch Offices	SVC	LEBANON

Project Name	Sector	Country
The Asia Foundation	SVC	VIETNAM
The Asia Foundation	SVC	CAMBODIA
International Rescue Committee, Inc. - Branch Offices	SVC	CHAD
The Asia Foundation	SVC	NEPAL
The Asia Foundation	SVC	PHILIPPINES
The Asia Foundation Branch Offices	SVC	THAILAND
International Rescue Committee - Eritrea	SVC	ERITREA
International Rescue Committee, Inc. Branch Offices	SVC	CENTRAL AFRICAN REPUBLIC
The Asia Foundation	SVC	KOREA (SOUTH)
International Community School, Limited	SVC	GHANA
IRC Branch Office	SVC	THAILAND
International Rescue Committee, Inc.	SVC	AZERBAIJAN
International Rescue Committee, Inc.	SVC	BOSNIA-HERZEGOVINA
International Rescue Committee, Inc.	SVC	CONGO
Asia Foundation	SVC	AFGHANISTAN
Jl. Adityawarman	SVC	INDONESIA
Colite Nicaragua S.A.	SVC	NICARAGUA
International Rescue Committee, Inc.	SVC	RUSSIA
International Rescue Committee, Inc.	SVC	RWANDA
Government of Antigua and Barbuda	SVC	ANTIGUA & BARBUDA
International Rescue Committee - Kenya	SVC	KENYA
International Rescue Committee - branch offices	SVC	ETHIOPIA
S&N Pump Africa LDA	SVC	ANGOLA
International Rescue Committee, Inc. - Guinea	SVC	GUINEA
International Rescue Committee - Pakistan	SVC	PAKISTAN
Union "QSI International School of Tbilisi"	SVC	GEORGIA
International Rescue Committee, Inc. - Branch Offices	SVC	UGANDA
Rio Verde Water Consortium, Inc.	SVC	PHILIPPINES
American Cooperative School of Tunis (ACST) Association	SVC	TUNISIA
Colite El Salvador S.A., c/o Rusconi -	SVC	EL SALVADOR
Sweetwater Pakistan (Private) Ltd.	SVC	PAKISTAN
International Rescue Committee	SVC	LIBERIA
International Rescue Committee - Jakarta	SVC	INDONESIA
International Rescue Committee, Inc. branch offices	SVC	TANZANIA
Tashkent International School	SVC	UZBEKISTAN
International Rescue Committee	SVC	BURUNDI
Colite Costa Rica, S.A.	SVC	COSTA RICA
Colite Guatemala, S.A.	SVC	GUATEMALA
International Rescue Committee, Inc.	SVC	AFGHANISTAN
International Rescue Committee, Inc. - Branch Offices	SVC	SIERRA LEONE
Wade Rain de Mexico, S. de R.L. de C.V.	SVC	MEXICO
Colite Panama, S.A.	SVC	PANAMA
Colite Honduras, S.A.	SVC	HONDURAS
International Rescue Committee, Inc. branch offices	SVC	CONGO, DEM. REPUBLIC OF
American International School System Private Limited	SVC	PAKISTAN
Colite Panama, S.A.	SVC	PANAMA
Colite El Salvador SA	SVC	EL SALVADOR

Project Name	Sector	Country
Colite Honduras, S.A.	SVC	HONDURAS
Colite Nicaragua S.A.	SVC	NICARAGUA
International Business Services	SVC	AFGHANISTAN
Kabul maskan Company LTD (KMC)	SVC	AFGHANISTAN
georgian leasing company LTD	SVC	GEORGIA
International Rescue Committee Inc	SVC	JORDAN
georgian leasing company LTD	SVC	GEORGIA
princeton healthcare do brazil ltd	SVC	BRAZIL
Medpharm Inc	SVC	ETHIOPIA
Fabmik Construction & Equipment Co Inc	SVC	PHILIPPINES
Lemna De Mexico, SA De CV	SVC	MEXICO
Hercules Liftboat Company Nigeria limited	SVC	NIGERIA
Compania General de Comercio e Industria S.A.	TOUR	ARGENTINA
Joint Venture Italkyr CJSC	TOUR	KYRGYZ REPUBLIC
Armenia Hotel Complex Closed Joint Stock Company	TOUR	ARMENIA
Seven Hills International Hotel, Tourism & Trade A.S.	TOUR	TURKEY
Tayl Limited	TOUR	AFGHANISTAN
Joint Venture Italkyr CJSC	TOUR	KYRGYZ REPUBLIC
M/N Butler Mimarlar Arastirma Tasari ve Yapi Ltd. Sti.	TOUR	TURKEY
M/N Butler Mimarlar Arastirma Tasari ve Yapi Ltd. Sti.	TOUR	TURKEY
Malika Barikhasi, LLC/Malika Hotel Bukhara	TOUR	UZBEKISTAN
M/N Butler Mimarlar Arastirma Tasari ve Yapi Ltd. Sti.	TOUR	TURKEY
Khiva Malikasi, LLC	TOUR	UZBEKISTAN
Seminole S.A.	TOUR	NICARAGUA
Malika Barikhasi, LLC/Malika Hotel Bukhara	TOUR	UZBEKISTAN
Khiva Malikasi, LLC	TOUR	UZBEKISTAN
Takoma LTD	TOUR	UZBEKISTAN
Consolidada de Ferrys C.A. (Conferry)	TRAN	VENEZUELA
Corporacion Quiport S.A.	TRAN	ECUADOR
Corporacion Quiport S.A.	TRAN	ECUADOR
Consolidada de Ferrys, C. A. (Conferry)	TRAN	VENEZUELA
Kwapa Trading Co	N/A	Liberia
St. Michael Enterprises	N/A	Yugoslavia
OTHER		
AMERICAN EQUIPMENT CO., FLUOR CORP	N/A	Iraq
MINISTRY OF WATER RESOURCES, BALTIMORE DREDGE	N/A	Iraq
IMMDF, CITIBANK	N/A	Iraq
TRADE BANK OF IRAQ, CITIBANK	N/A	Iraq
SIGMA IRAQ LLC, SIGMA INTERNATIONAL CONSTRUCT	N/A	Iraq
A. KHUDAIRI TRADING CO	N/A	Iraq
MINISTRY OF WATER RESOURCES, UNITED MARINE INT'L	N/A	Iraq
AL MANSOUR AUTOMOTIVE CO, CITIBANK	N/A	Iraq
NATIONAL HOUSEHOLD PRODUCTS CO., CITIBANK	N/A	Iraq
AL KHALIJ LABORATORIES-PHOTO SERVICES, CITIBANK	N/A	Iraq
TECHNOLOGY PARTNERS, CITIBANK	N/A	Iraq
AL-BAREEQ AIR CONDITIONING, CITIBANK	N/A	Iraq
FURAT WATER, CITIBANK	N/A	Iraq

Project Name	Sector	Country
BAZIAN BRICKS PRODUCTION COMPANY, CITIBANK	N/A	Iraq
HILAL AL KHAIR, CITIBANK	N/A	Iraq
AL MUHANAD PLASTICS, CITIBANK	N/A	Iraq
AL YOUSIF MODERN WHEAT FACTORIES, CITIBANK	N/A	Iraq
DARCO WOODWORKING, CITIBANK	N/A	Iraq
ROZHANO CO FOR GLASS MANUFACTURE, CITIBANK	N/A	Iraq
AL HARMOOSH FOR GENERAL TRADING TOURISM/TRAVEL, CITIBANK	N/A	Iraq
AL IHSAN AL DEEM, CITIBANK	N/A	Iraq
QASIM JAWHAR KAREEM COMPANY (KURDISTAN FLOUR MILL), CITIBANK	N/A	Iraq
KAIS PLANT FOR MINERAL WATER AND JUICE PRODUCTION, CITIBANK	N/A	Iraq
JASSIM ROCK CRUSHER GRAVEL AND SAND CATEGORIZATION FACTORY, CITIBANK	N/A	Iraq
RASUN COMPANY FOR POULTRY, CITIBANK	N/A	Iraq
BURJ AL FANAR FOR READY MIX CONCRETE CO	N/A	Iraq
STUDENT SOLIDARITY ORGANIZATION, CITIBANK	N/A	Iraq
AL-MANSOUR AUTOMOTIVE COMPANY, CITIBANK	N/A	Iraq
CINEMA SINBAD HOTEL COMPANY, ARCADD INC	N/A	Iraq
MINISTRY WATER RESOURCES, BALTIMORE DREDGES	N/A	Iraq
MINISTRY WATER RESOURCES, BALTIMORE DREDGES	N/A	Iraq
MINISTRY WATER RESOURCES, BALTIMORE DREDGES	N/A	Iraq
MINISTRY WATER RESOURCES, BALTIMORE DREDGES	N/A	Iraq
MINISTRY WATER RESOURCES, BALTIMORE DREDGES	N/A	Iraq
BEARING POINT IRAQ, BEARING POINT INC	N/A	Iraq
IRAQI MIDDLE MARKET FINANCING FACILITY (IMMFF) FRAMEWORK AGREEMENT, CITIBANK	N/A	Iraq
IRAQ MIDDLE MARKET DEVELOPMENT FOUNDATION	N/A	Iraq
TRADE BANK OF IRAQ II, CITIBANK	N/A	Iraq
ERBILL RESIDENTIAL DEVELOPMENT COMPANY, ERBIL HOUSING PROJECT	N/A	Iraq
SGV MANAGEMENT COMPANY, ERBIL RESIDENTIAL DEVELOPMENT	N/A	Iraq
AMERICAN EQUIPMENT CO, FLOUR ENTERPRISES INC	N/A	Iraq
REPUBLIC OF IRAQ MINISTRY OF ELECTRICITY, GE CAPITAL MARKETS SERVICES	N/A	Iraq
STATE OIL PROJECTS COMPANY, GENERAL ELECTRIC	N/A	Iraq
H&W HOLDINGS GROUP LLC	N/A	Iraq
H&W HOLDINGS GROUP LLC	N/A	Iraq
INTERNATIONAL DEVELOPMENT TRUST LTD	N/A	Iraq
INTERNATIONAL RESCUE COMMITTEE-IRAQ	N/A	Iraq
IRAQ RECOVERY FUND LLC, EXCALIBUR VENTURES LLC, PRINCE STREET CAPITAL MANAGEMENT LLC, POTOMAC PARTNERS LLC	N/A	Iraq
A. KHUDAIRI TRADING COMPANY LTD	N/A	Iraq
KHUDAIRI TRADING COMPANY LTD, AZIZ KHUDAIRI	N/A	Iraq
IRAQI MINISTRY OF WATER RESOURCES, LIQUID WASTE TECHNOLOGY LLC	N/A	Iraq
MENA INDUSTRIES INC., MID NATIONAL HOLDINGS	N/A	Iraq

Project Name	Sector	Country
YAPA MUHENDISLIK INSAAT VE DIS TICARET LTD., MERIDIAN INVESTMENT MANAGEMENT INC	N/A	Iraq
ORASCOM TELECOM IRAQ CORP, MOTOROLA CREDIT	N/A	Iraq
MORRIS & MCDANIEL COMPANY	N/A	Iraq
RELIEF INTERNATIONAL SCHOOLS ONLINE	N/A	Iraq
RHMK IRAQ FUND, L.P.	N/A	Iraq
SIGMA IRAQ, SIGMA INT'L CONSTRUCTION LLC	N/A	Iraq
MINISTRY OF WATER RESOURCES, UNITED MARINE INTERNATIONAL LLC	N/A	Iraq
ABDUL MAJEED AL-FRAIH GENERAL TRADERS/RAINIA WATERS, CITIBANK	N/A	Iraq
ADVANCED TECHNOLOGY SYSTEMS, CITIBANK	N/A	Iraq
AL AZZAWAI, CITIBANK	N/A	Iraq
AL BAREEQ AIR CONDITIONING, CITIBANK	N/A	Iraq
AL HARMOOSH GENERAL TRADING, CITIBANK	N/A	Iraq
AL IHSAN A-DAEEM GENERAL CONTRACTING, CITIBANK	N/A	Iraq
AL KHALIJ LABORATORIES-PHOTO SERVICES, CITIBANK	N/A	Iraq
AL MUHANAD CO FOR PLASTIC INDUSTRIES, CITIBANK	N/A	Iraq
AL RASHEED GYPSUM, CITIBANK	N/A	Iraq
AL YOUSIF MODERN WHEAT FACTORIES, CITIBANK	N/A	Iraq
ALIEDAD GENERAL CONSTRUCTION, CITIBANK	N/A	Iraq
ARABIAN AERATED WATER CO LTD, CITIBANK	N/A	Iraq
IMMDF-ARKAN HAMID FACTORY, CITIBANK	N/A	Iraq
BALAK FACTORY, CITIBANK	N/A	Iraq
BAZIAN BRICKS PRODUCTION CO, CITIBANK	N/A	Iraq
BECKER FOR MAKING SELLING ALL KINDS, CITIBANK	N/A	Iraq
BEZA FOR PREPARED CONCRETE LTD, CITIBANK	N/A	Iraq
BURJ AL FANAR FOR READY MIX CONCRETE, CITIBANK	N/A	Iraq
DARCO WOODWORKING COMPANY, CITIBANK	N/A	Iraq
DARZELOCK COMPANY/GENERAL TRADING & EXPORT	N/A	Iraq
FURAT WATER, CITIBANK	N/A	Iraq
GARA FACTORY, CITIBANK	N/A	Iraq
GEBALA CENTER COLLECT AND COOL MILK, CITIBANK	N/A	Iraq
HASSAN MOHAMMED EINAD FOR WATER, CITIBANK	N/A	Iraq
IRAQI METAL WEAVING COMPANY, CITIBANK	N/A	Iraq
JASSIM CRUSHER GRAVEL AND SAND, CITIBANK	N/A	Iraq
JIDA FOR IRON AND ALUMINUM INDUSTRIES LTD	N/A	Iraq
K1 GENERAL CONTRACTING CO LTD., CITIBANK	N/A	Iraq
KAIS PLANT MINERAL WATER, CITIBANK	N/A	Iraq
IMMDF-KHALAF BLOCK FACTORY, CITIBANK	N/A	Iraq
KURDISTAN FLOUR MILL, CITIBANK	N/A	Iraq
LOAY FACTORY FOR ASPHALT PRODUCTION, CITIBANK	N/A	Iraq
MUTTAHIDA ELECTRICAL BOARDS, CITIBANK	N/A	Iraq
NAMA GROUP, CITIBANK	N/A	Iraq
NATIONAL HOUSEHOLD PRODUCTS CO., CITIBANK	N/A	Iraq
RASUN COMPANY FOR POULTRY LTD, CITIBANK	N/A	Iraq
ROZHANO COMPANY FOR GLASS MANUFACTURING	N/A	Iraq
SAMAN MA-RUF ABDULKARIM BARZNJI, CITIBANK	N/A	Iraq

Project Name	Sector	Country
SARQALA COMPANY FOR GENERAL CONTRACT, CITIBANK	N/A	Iraq
SMAG LOAN, CITIBANK	N/A	Iraq
STUDENT SOLIDARITY ORGANIZATION, CITIBANK	N/A	Iraq
STUDENT SOLIDARITY ORGANIZATION, CITIBANK	N/A	Iraq
TECHNOLOGY PARTNERS, CITIBANK	N/A	Iraq
YAFA CO FOR FOOD INDUSTRIES, CITIBANK	N/A	Iraq
FUNDS		
ACTIS SOUTH ASIA FUND, NILGIRI FRANCHISE	N/A	India
RUSSIA PARTNERS II, ISKRA TELECOM	N/A	Russia
RUSSIA PARTNERS II, PSL	N/A	NIS REGIONAL
SEEF II, SERBIA BROADBAND	N/A	Serbia
ECP AFRICA, SPENCON	N/A	East Africa regional
ACTIS SOUTH ASIA FUND, NAT'L DEVELOPMENT BANK	N/A	Sri Lanka
DARBY-BBVA LATIN AMERICA PRIVATE EQUITY FUND, GRUPO EMPRESARIAL METROPOLITANO (GEMET)	N/A	Mexico
ECP AFRICA, ECOBANK	N/A	West Africa Regional
ECP AFRICA, BANK OF AFRICA	N/A	Africa regional
ECP AFRICA, INTERCONTINENTAL BANK	N/A	Nigeria
ECP AFRICA, CONTINENTAL REINSURANCE	N/A	Nigeria
ETHOS FUND V, KANDERLANE	N/A	South Africa
ETHOS FUND V, ALEXANDER FORBES	N/A	South Africa
ETHOS FUND V, OCEANIC BANK	N/A	Nigeria
RUSSIA PARTNERS II, APR BANK MOSCOW	N/A	Russia
ACTIS SOUTH ASIA FUND, CEYLON OXYGEN	N/A	Sri Lanka
AQUA INT'L PARTNERS FUND, GRUPO ROTOPLAST	N/A	Mexico
ASIAN DEV'T PARTNERS FUND II, PROJECT GREEN	N/A	India
ISRAEL GROWTH FUND, APAX PARTNERS&CO	N/A	Israel
RUSSIA PARTNERS COMPANY LP, SIGULER GUFF & CO	N/A	Europe/Eurasia
AIG BRUNSWICK MILLENNIUM FUND, AIG MILLENIUM GP	N/A	Europe/Eurasia
AIG BRUNSWICK MILLENNIUM FUND, AIG MILLENIUM GP	N/A	Europe/Eurasia
EMERGING EUROPE FUND, TEMPLETON ADVISORS	N/A	Europe/Eurasia
RUSSIA PARTNERS COMPANY LP, SIGULER GUFF & CO	N/A	Europe/Eurasia
POLAND PARTNERS, LANDON BUTLER & CO	N/A	Poland
DRAPER INT'L INDIA FUND, DRAPER INTERNATIONAL	N/A	India
INDIA PRIVATE EQUITY FUND, CIBC WORLD MARKETS	N/A	India
AGRIBUSINESS PARTNERS INT'L, AMERICA FIRST CO	N/A	Europe/Eurasia
AGRIBUSINESS PARTNERS INTERNATIONAL (BALTICS), AMERICA FIRST COMPANIES	N/A	Europe/Eurasia
BANCROFT EASTERN EUROPE FUND	N/A	Europe/Eurasia
NEW CENTURY CAPITAL PARTNERS LP, NCH ADVISORS	N/A	Europe/Eurasia
NEW CENTURY CAPITAL PARTNERS LP, NCH ADVISORS	N/A	Europe/Eurasia
NEW AFRICA OPPORTUNITY FUND LP, ZEPHYR SOUTHERN AFRICA PARTNERS LLC	N/A	Africa/MidEast
AQUA PARTNERS LP, TARRANT PARTNERS	N/A	All Opic
GLOBAL ENVIRONMENT EMERGING MARKETS FUND LI, GEF MANAGEMENT CORP	N/A	All Opic
ASIA DEVELOPMENT PARTNERS LP, SOUTH ASIA CAPITAL LTD C/O OLYMPUS CAPITAL HOLDINGS	N/A	Asia/Pacific

Project Name	Sector	Country
NEWBRIDGE ANDEAN PARTNERS LP, ACON PARTNERS	N/A	LatinAmerica/Caribbean
MODERN AFRICA GROWTH AND INVESTMENT COMPANY, CITICORP VENTURES / LAND & MITTENDORF / OTHER	N/A	Africa/MidEast
AFRICA GROWTH FUND, EQUATOR HOLDINGS LTD	N/A	Africa/MidEast
MODERN AFRICA GROWTH AND INVESTMENT FUND 2, MODERN AFRICA FUND MANAGERS LLC	N/A	Africa/MidEast
SOUTHEAST EUROPE EQUITY FUND LTD, BEDMINSTER CAPITAL MANAGEMENT LLC	N/A	Europe/Eurasia
GREAT CIRCLE FUND LP (MISF), GREAT CIRCLE CAPITAL	N/A	All Opic
RUSSIA PARTNERS LI O SERIES LP, SIGULER GUFF & CO	N/A	Europe/Eurasia
ASIA PACIFIC GROWTH FUND, HAMBRECHT & QUIST ASIA PACIFIC LTD	N/A	Asia/Pacific
DARBY-BBVA LATIN AMERICAN HOLDINGS LLC, DARBY OVERSEAS PARTNERS LTD	N/A	LatinAmerica/Caribbean
PALADIN REALTY LATIN AMERICA INVESTORS LI LP, PALADOR REALTY I GP, LLC	N/A	LatinAmerica/Caribbean
EMP AFRICA FUND LI INVESTMENTS LLC, EMP AFRICA MANAGEMENT LP	N/A	Africa/MidEast
ETHOS PRIVATE EQUITY FUND V, ELIGIBLE US INVESTORS	N/A	Africa/MidEast
ACTIS SOUTH ASIA FUND 2 LP, ELIGIBLE US INVESTORS	N/A	Asia/Pacific
ASIA DEVELOPMENT PARTNERS LI LP, OLYMPUS ADP II GP, LLC	N/A	Asia/Pacific
CLEARWATER CAPITAL PARTNERS INVESTMENTS II LP	N/A	Asia/Pacific
SOUTHEAST EUROPE EQUITY FUND LTD, BEDMINSTER CAPITAL MANAGEMENT LLC	N/A	Europe/Eurasia
BARING MEXICO PRIVATE EQUITY LI FUND, BARING MEXICO II (GP) INC/BARING LATIN AMERICAN HOLDINGS	N/A	LatinAmerica/Caribbean
ECP MENA GROWTH INVESTMENTS LLC, EMERGING CAPITAL PARTNERS LLC	N/A	Africa/MidEast
GLOBAL ENVIRONMENT EMERGING MARKET FUND, GEF MANAGEMENT CORP	N/A	All Opic
DARBY PROBANCO LI FUND, DARBY OVERSEAS PARTNERS LTD	N/A	LatinAmerica/Caribbean
LATIN POWER TRUST LII, CONDUIT CAPITAL PARTNERS	N/A	LatinAmerica/Caribbean
DARBY BBVA, GRUPO BAJA CERO	N/A	Mexico
ACTIS SOUTH ASIA FUND, PARAS PHARMACEUTICALS	N/A	India
AQUA INT'L PARTNERS FUND, SPRINGS OF EDEN BV	N/A	Poland
ASIAN DEV'T PARTNERS FUND II, SANJHVI MOVERS	N/A	Korea
DARBY BBVA LATIN AMERICA PRIVATE EQUITY FUND, SATELITE DISTRIBUIDORA DE PETROLEO	N/A	Brazil
ETHOS FUND V, MORESPORT	N/A	South Africa
ETHOS FUND V, PLUMBLINK	N/A	South Africa
RUSSIA PARTNERS II, SOK	N/A	Russia
RUSSIA PARTNERS II, UKRAINE INSURANCE	N/A	Ukraine
SEEF II, HEDEF	N/A	Turkey
GREAT CIRCLE CAPITAL, OVERSEAS LOGISTIC (RLS)	N/A	Russia
GREAT CIRCLE CAPITAL, BALNAK LOGISTICS GROUP	N/A	Turkey
GREAT CIRCLE CAPITAL, STS LOGISTICS	N/A	Russia
ZAO AIST	N/A	Russia
Kujtesda	N/A	Kosovo
Hiperdia	N/A	Romania

Project Name	Sector	Country
Health Management System	N/A	Bulgaria
West Call Communications	N/A	Russia
Russia Partners Direct Insurance	N/A	Ukraine
Helios PT Africa	N/A	Netherlands
Helios First City Monument Bank	N/A	Nigeria
EMP Africa Fund II	N/A	Algeria
Planor Capital	N/A	Mauritius
Blue Financial	N/A	South Africa
SAWHF	N/A	South Africa
ECP Mena – Societe d'Articles Hygieniques	N/A	Tunisia
Helios Towers	N/A	Nigeria
Equity Bank	N/A	Africa
UniversALB	N/A	Albania
Clearwater Capital Partners	N/A	Asia
Insun – Project Green	N/A	South Korea
BIS EOOD – New Europe Directories	N/A	Bulgaria
Diamant – Kontakt Insurance	N/A	Ukraine

Table A-2. Initial Short List

Project Name	Sector	Country
Global Housing Development, S.A., GHP Honduras LLC	CONS	HONDURAS
General Directorate of Highways, Dillingham Const Int'l	CONS	TURKEY
Alterra Partners LLC, Nat'l Union Fire Insurance Co of Pitt, PA	CONS	PERU
NA, Jopa Villas LLC, Jopa Villas LLC	CONS	KENYA
Hrvatske Autoceste DOO, Eligible US Bondholders	CONS	CROATIA
Foxtrot International LDC, Mondoil Enterprises	OIL	COTE DIVOIRE
West African Gas Pipeline Company Limited, Steadfast Insure	OIL	GHANA
Various Apache Egypt concession subsidiaries, Apache Corp	OIL	EGYPT
The Baku-Tbilisi-Ceyhan Pipeline Company, BTC Pipeline	OIL	AZERBAIJAN
N/A, APACHE, Apache Corp	OIL	EGYPT
Tipitapa Power Company Ltd., El Paso Energy Int'l	POWER	NICARAGUA
Gaza Power Generating Limited Company, Morganti Dev't	POWER	GAZA
Kidwell International Power Vietnam Company, GE Rentals	POWER	VIETNAM
Grenada Electricity Services Limited, WRB Enterprises	POWER	GRENADA
Habibullah Coastal Power (Private) Company, El Paso Corp	POWER	PAKISTAN
CE Casecnan Water and Energy, Inc., Mid American Holding	POWER	PHILIPPINES
Gaza Power Generating Limited Company, Morganti Dev't	POWER	GAZA
Doga Enerji Uretim Sanayi ve Ticaret L.S., Edison Mission	POWER	TURKEY
P.H. Rio Volcan, S.A., GE Capital Corp	POWER	COSTA RICA
Termovalle S.C.A. E.S.P., Termovalle Invest	POWER	COLOMBIA
CE Casecnan Water and Energy, Inc., Mid American Holding	POWER	PHILIPPINES
Termobarranquilla Empresa de Servicios Publicos, Los Amigos	POWER	COLOMBIA
AES Nigeria Barge Limited, AES Nigeria Holdings	POWER	NIGERIA
National Power Corporation ("NAPOCOR"), US Bank Nat'l Ass	POWER	PHILIPPINES
perforaciones western, CA, Pride Int'l	OIL	VENEZUELA

Project Name	Sector	Country
Pride Forasol SAS, Pride Int'l	OIL	CHAD
Israel electric corporation LTD, Citibank	OIL	ISRAEL
Zeta Gas De Centro America S.A., Texas Overseas gas Corp	OIL	GUATEMALA
Bhote Koshi private company pvt ltd, Loudon Reinsurance	POWER	NEPAL
Tipitapa Power Company Ltd., Coastal power	POWER	NICARAGUA
PT Energi Sengkang, El Paso Corp	POWER	INDONESIA
CBK power Company Limited, New Hampshire Insurance	POWER	PHILIPPINES
Turboven Maracay company, PS EG Americas	POWER	VENEZUELA
Turboven Cagua company, PS EG Americas	POWER	VENEZUELA
Isagan SA ESP, Eligible Bondholders	POWER	COLOMBIA
Instrum-Rand, Ingersoll Rand Co	MFR	RUSSIA
Pakistan Water and Power Development Authority ("WAPDA")	MFR	PAKISTAN
Pakistan Water and Power Development Authority ("WAPDA")	MFR	PAKISTAN
Kimberly-Clark Vietnam Co., Ltd.	MFR	VIETNAM
National Milling Company Limited, Seaboard Overseas	MFR	ZAMBIA
Coca-Cola Nigeria Limited	MFR	NIGERIA
EQUATE Petrochemical Company K.S.C., Union Carbide	MFR	KUWAIT
PT cabot Chemical, Cabot Corp	MFR	INDONESIA
Kimberly-Clark Thailand Limited	MFR	THAILAND
Colombiana Kimberly Colpapel SA	MFR	COLOMBIA
Kimberly-Clark Phillipines INC	MFR	PHILIPPINES
Maksan Manisa Mesrubat Kutulama Sanayi AS, Bank of NY	MFR	TURKEY
Sector Resources, Ltd. Branch	MINE	COLOMBIA
Empresa Minera Manquiri S.A., Coeur D Alene Mines	MINE	BOLIVIA
Sociedad Minera Cerro Verde, S.A.A., Phelps Dodge Corp	MINE	PERU
White Star USA	MINE	RUSSIA
Corporacion Quiport S.A., American Home Assurance	TRAN	ECUADOR
Corporacion Quiport S.A., American Home Assurance	TRAN	ECUADOR
Consolidada de Ferrys, C. A. (Conferry), Caterpillar Finance	TRAN	VENEZUELA
WBC-MONOLITHIC HOUSING S.A.	CONS	MEXICO
SIGMA INTERNATIONAL CONSTRUCTION LLC.	CONS	IRAQ
CENTRAL EAST AFRICA RAILWAYS COMPANY LIMITED	CONS	MALAWI
SOUTH AFRICA FINANCING ENTERPRISE	CONS	SOUTH AFRICA
CORREDOR DE DESENVOLVIMENTO DO NORTE S.A.R.L	CONS	MOZAMBIQUE
SOCIEDAD CONCESIONARIA VESPUCIO NORTE EXPRES	CONS	CHILE
WBC-KELLY GRAINS CORPORATION S.R.L.	MFR	MOLDOVA
ABI GROUP LTD.	MFR	AFGHANISTAN
WBC-SFC ENTEGRE ORMAN URUNLERI SANAYI VE TIC	MFR	TURKEY
WBC-JSC POLIGRAF LAND	MFR	RUSSIA
PREFABRICADOS Y MODULARES DE MONTERREY(PYMM)	MFR	MEXICO
PHYTO-RIKER PHARMACEUTICALS LTD.	MFR	GHANA
CPAK-LUCKY CEMENT LIMITED	MFR	PAKISTAN
PRODUCTORA DE PAPELES SA (PROPAL)	MFR	COLOMBIA
CPAK-D.G.KHAN CEMENT COMPANY LIMITED	MFR	PAKISTAN
CAFR-MIDDLE EAST COMPLEX FOR ENGINEERING	MFR	JORDAN
CSA-CORPORACION JOSE R. LINDLEY, S.A.	MFR	PERU

Project Name	Sector	Country
CNIS-OAO Nizhnekamskneftekhim (nknk)	MFR	RUSSIA
LKI, International	MINE	NAMIBIA
BRAVO ENERGY MEXICO SRL DE CV	OIL	MEXICO
GOLDHAM PTY LTD.T/A KALAHARI GAS CORPORATION	OIL	BOTSWANA
E.P. INTEROIL, LTD.	OIL	PAPUA NEW GUINEA
RPK-VYSOTSK "LUKOIL-II"	OIL	RUSSIA
WILPRO ENERGY SERVICES (PIGAP II) LTD.	OIL	VENEZUELA
WILPRO ENERGY SERVICES (EL FURRIAL) LIMITED	OIL	VENEZUELA
ACCROVEN SRL	OIL	VENEZUELA
NATURAL GAS LIQUIDS (II) FINANCING COMPANY	OIL	NIGERIA
AES JORDAN PSC	POWER	JORDAN
PAITON ENERGY COMPANY	POWER	INDONESIA
JORF LASFAR ENERGY COMPANY	POWER	MOROCCO
ADAPAZARI ELEKTRIK URETIM LTD. SIRKETI	POWER	TURKEY
TRAKYA ELEKTRIK	POWER	TURKEY
NEPC CONSORTIUM POWER LTD.(HARIPUR)	POWER	BANGLADESH
DOGA ENERJI	POWER	TURKEY
IZMIR ELEKTRIK URETIM LTD SIRKETI	POWER	TURKEY
GEBZE ELEKTRIK URETIM LTD SIRKETI	POWER	TURKEY
TERMOBARRANQUILLA, S.A.	POWER	COLOMBIA
PAITON ENERGY COMPANY	POWER	INDONESIA
Puerto Quetzal power llc	POWER	GUATEMALA
CMS Ensenada S.A.	POWER	ARGENTINA
CORPORACION QUIPORT S.A.	TRAN	ECUADOR
Lima Airport Partners S.R.L	TRAN	PERU

Table A-3. Draft Short List

Project Name	Sector	Country
General Directorate of Highways, DILLINGHAM CONSTRUCTION INTERNATIONAL INC	CONS	TURKEY
Hrvatske Autoceste, Eligible US Bondholders	CONS	CROATIA
Foxtrot Int'l, MONDOIL ENTERPRISES L L C	OIL	COTE DIVOIRE
West African Gas Pipeline, STEADFAST INSURANCE CO	OIL	GHANA
Various Egypt Subsidiaries, APACHE CORP	OIL	EGYPT
Baku-Tbilisi-Ceyhan Pipeline, B T C PIPELINE	OIL	AZERBAIJAN
Zeta Gas De Centro American TEXAS OVERSEAS GAS CORP	OIL	GUATEMALA
Israel Electric Corp., Citibank NA	OIL	ISRAEL
Gaza Private Generating Power, MORGANTI DEVELOPMENT L L C	POWER	GAZA
Kidwell Int'l Power, G E ENERGY RENTALS INC	POWER	VIETNAM
Grenada Electric Services, W R B ENTERPRISES INC	POWER	GRENADA
Habibullah Coastal Power, EL PASO CORP	POWER	PAKISTAN
P.H. Rio Volcan, GENERAL ELECTRIC CAPITAL CORP	POWER	COSTA RICA
TERMOVALLE SCA	POWER	COLOMBIA
A E S NIGERIA BARGE LTD	POWER	NIGERIA
NAPOCOR, U S BANK NATIONAL ASSOCIATION	POWER	PHILIPPINES

Project Name	Sector	Country
Isagen SA, Eligible US Bondholders	POWER	COLOMBIA
Pakistan Water and Power Development Authority, GE	MFR	PAKISTAN
Pakistan Water and Power Development Authority, GE	MFR	PAKISTAN
KIMBERLY CLARK CORP	MFR	VIETNAM
National Milling Co., SEABOARD OVERSEAS LIMITED	MFR	ZAMBIA
COCA COLA CO	MFR	NIGERIA
Equate Petrochemical Co, UNION CARBIDE CORP	MFR	KUWAIT
SECTOR RESOURCES LTD	MINE	COLOMBIA
Empresa Minera Manguiri, COEUR D ALENE MINES CORP	MINE	BOLIVIA
Sociedad Minera Cerro Verde, PHELPS DODGE CORP	MINE	PERU
Consolidada De Ferrys, CATERPILLAR FINANCIAL SERVICES	TRAN	VENEZUELA
SIGMA INTERNATIONAL CONSTRUCTION LLC.	CONS	IRAQ
SOCIEDAD CONCESIONARIA VESPUCIO NORTE EXPRES	CONS	CHILE
WBC-SFC ENTEGRE ORMAN URUNLERI SANAYI VE TIC	MFR	TURKEY
PRODUCTORA DE PAPELES SA (PROPAL)	MFR	COLOMBIA
CAFR-MIDDLE EAST COMPLEX FOR ENGINEERING	MFR	JORDAN
LKI, International	MINE	NAMIBIA
E.P. INTEROIL, LTD.	OIL	PAPUA NEW GUINEA
RPK-VYSOTSK "LUKOIL-II"	OIL	RUSSIA
WILPRO ENERGY SERVICES (PIGAP II) LTD.	OIL	VENEZUELA
WILPRO ENERGY SERVICES (EL FURRIAL) LIMITED	OIL	VENEZUELA
ACCROVEN SRL	OIL	VENEZUELA
NATURAL GAS LIQUIDS (II) FINANCING COMPANY	OIL	NIGERIA
AES JORDAN PSC	POWER	JORDAN
PAITON ENERGY COMPANY	POWER	INDONESIA
JORF LASFAR ENERGY COMPANY	POWER	MOROCCO
ADAPAZARI ELEKTRIK URETIM LTD. SIRKETI	POWER	TURKEY
TRAKYA ELEKTRIK URETIM VE TICARET	POWER	TURKEY
NEPC CONSORTIUM POWER LTD.(HARIPUR)	POWER	BANGLADESH
IZMIR ELEKTRIK URETIM LTD SIRKETI	POWER	TURKEY
GEBZE ELEKTRIK URETIM LTD SIRKETI	POWER	TURKEY
American Home Assurance Co ; Corporacion Quiport SA	TRAN	ECUADOR
Doga Enerji	POWER	TURKEY

APPENDIX B

This Appendix contains the inputs, sources of those inputs, and calculations utilized to estimate the maximum Potential to Emit (PTE) for each of the projects in OPIC's 2007 GHG Inventory. If sponsor feedback was submitted, the 2007 operational emissions estimate was also included.

Tier A Projects – Based on Sponsor Provided Throughput

AES Nigeria Barge

Maximum Potential to Emit Estimate

AES Nigeria Barge's emissions estimate of **1,603,307 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	270 MW	Project Description
Consumption	80 Mcf/day	Project Description
Heat Content Natural Gas	1,029 Btu/scf	The Climate Registry, Table 12.1
Emission Factor	53.06kg CO2/MMBtu	The Climate Registry, Table 12.1

Consumption based maximum potential to emit = 1,603,307 short tons CO2 per year

$$\frac{80\text{Mcf}}{\text{day}} * \frac{333\text{days}}{\text{yr}} * \frac{1029\text{Btu}}{\text{scf}} * \frac{53.06\ \text{kgCO2}}{\text{MMBtu}} * \frac{0.0011023\ \text{short tons}}{\text{kg}}$$

2007 Operational Estimate Based On Sponsor Feedback

AES Nigeria Barge's 2007 operational emissions of **1,166,398 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	270 MW	Project Description
Consumption	58.165 Mcf/day	Project Sponsor
Emission Factor	53.06kg CO2/MMBtu	The Climate Registry, Table 12.1

Consumption based emissions = 1,166,398 short tons CO2 per year

$$\frac{58.165\text{Mcf}}{\text{day}} * \frac{333\text{days}}{\text{yr}} * \frac{1029\text{Btu}}{\text{scf}} * \frac{53.06\ \text{kgCO2}}{\text{MMBtu}} * \frac{0.0011023\ \text{short tons}}{\text{kg}}$$

Doga Enerji

Maximum Potential to Emit Estimate

Doga Enerji's emissions estimate of **816,057 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	180 MW	Project Description
Consumption	48,000 m3/hour	Project Description
Heat Content Natural Gas	1,029 Btu/scf	The Climate Registry, Table 12.1
Emission Factor	53.06kg CO2/MMBtu	The Climate Registry, Table 12.1
Conversion Factor	251.98 cal/Btu	Perry's Chemical Engineering Hand Book, Table 1-7

Consumption based maximum potential to emit = 816,057 short tons CO2 per year

$$\frac{48000\text{m3}}{\text{hr}} * \frac{8000\text{hr}}{\text{yr}} * \frac{\text{scf}}{0.02832\text{m3}} * \frac{1029\text{Btu}}{\text{scf}} * \frac{\text{MMBtu}}{1000000\text{Btu}} * \frac{53.06\ \text{kgCO2}}{\text{MMBtu}} * \frac{0.0011023\ \text{short tons}}{\text{kg}}$$

2007 Operational Estimate Based On Sponsor Feedback

Doga Enerji's 2007 operational emissions of **740,756 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	180 MW	Project Description
Annual Fuel Consumption	347,644,124 Sm3	Project Actual Data 2007
Heat Content Natural Gas	9180 kcal/Sm3	Agreement with local Natural Gas supplier (BOTAS)
Emission Factor	53.06kg CO2/MMBtu	The Climate Registry, Table 12.1

Consumption based emissions = 740,756 short tons CO2 per year

$$\frac{347644124\ \text{Sm3}}{\text{yr}} * \frac{9180\ \text{kcal}}{\text{Sm3}} * \frac{1\ \text{Btu}}{951.98\ \text{cal}} * \frac{1000\ \text{cal}}{\text{kcal}} * \frac{\text{MMBtu}}{1000000\text{Btu}} * \frac{53.06\ \text{kgCO2}}{\text{MMBtu}} * \frac{0.0011023\ \text{short tons}}{\text{kg}}$$

Jorf Lasfar Energy

Maximum Potential to Emit Estimate

Jorf Lasfar Energy's emissions estimate of **14,268,496 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Coal	Project Description
Capacity	1,356 MW	Project Description
Consumption	630,000 kg/hr	Additional Project Description Details from OPIC
Coal Type	Bituminous	IEA, Coal in Morocco in 2006
Heat Content Coal	24.93 MMBtu/short ton	The Climate Registry, Table 12.1
Emission Factor	93.46 kg CO2/MMBtu	The Climate Registry, Table 12.1

Consumption based maximum potential to emit = 14,268,496 short tons CO2 per year

$$\frac{630{,}000\text{kg}}{\text{hr}} * \frac{8000\text{hr}}{\text{yr}} * \frac{0.0011023\text{short tons}}{\text{kg}} * \frac{24.93\text{MMBtu}}{\text{short ton}} * \frac{93.46\text{kgCO2}}{\text{MMBtu}} * \frac{0.0011023\text{short tons}}{\text{kg}}$$

Paiton Energy

Maximum Potential to Emit Estimate

Paiton Energy's emissions estimate of **7,938,380 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Coal	Project Description
Capacity	1,200 MW	Project Description
Consumption	4,300,000 short tons/yr	Project Description
Coal Type	Sub-Bituminous	IEA, Coal in Indonesia in 2006
Heat Content Coal	17.25 MMBtu/short ton	The Climate Registry, Table 12.1
Emission Factor	97.09 kg CO2/MMBtu	The Climate Registry, Table 12.1

Consumption based maximum potential to emit = 7,938,380 short tons CO2 per year

$$\frac{4{,}300{,}000\text{ short tons}}{\text{yr}} * \frac{17.25\text{ MMBtu}}{\text{short ton}} * \frac{97.09\text{ kgCO2}}{\text{MMBtu}} * \frac{0.0011023\text{ short tons}}{\text{kg}}$$

2007 Operational Estimate Based On Sponsor Feedback

Paiton Energy's 2007 operational emissions of **9,553,044 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Coal	Project Description
Capacity	1,200 MW	Project Description
Consumption	4,694,238,000 kg	Project Sponsor
Coal Type	Sub-Bituminous	IEA, Coal in Indonesia in 2006
Heat Content Coal	17.25 MMBtu/short ton	The Climate Registry, Table 12.1
Emission Factor	97.09 kg CO2/MMBtu	The Climate Registry, Table 12.1

Consumption based emissions = 9,553,044 short tons CO2 per year

$$4{,}694{,}238{,}000\ \text{kg} * \frac{\text{short ton}}{907.18\ \text{kg}} * \frac{17.25\ \text{MMBtu}}{\text{short ton}} * \frac{97.09\ \text{kg CO2}}{\text{MMBtu}} * \frac{\text{short ton}}{907.18\ \text{kg}}.$$

Trakya Elektrik Uretim ve Ticaret

Maximum Potential to Emit Estimate

Trakya Elektrik Uretim ve Ticaret's emissions estimate of **1,818,912 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	478MW	Project Description
Consumption	20 kg/s	Project Description
Density of Natural Gas	23.8 scf per lb	EPA AP 42, p.A-7
Heat Content Natural Gas	1,029 Btu/scf	The Climate Registry, Table 12.1
Emission Factor	53.06kg CO2/MMBtu	The Climate Registry, Table 12.1

Consumption based maximum potential to emit = 1,818,912 short tons CO2 per year

$$\frac{20\text{kg}}{\text{sec}} * \frac{3600\text{sec}}{\text{hr}} * \frac{8000\text{hr}}{\text{yr}} * \frac{2.2046\text{lb}}{\text{kg}} * \frac{23.8\ \text{scf}}{\text{lb}} * \frac{1029\ \text{Btu}}{\text{scf}} * \frac{\text{MMBtu}}{1000000\text{Btu}} * \frac{53.06\text{kgCO2}}{\text{MMBtu}} * \frac{0.0011023\text{short tons}}{\text{kg}}$$

2007 Operational Estimate Based On Sponsor Feedback

Trakya Elektrik Uretim ve Ticaret's 2007 operational emissions of **1,747,956 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	478MW	Project Sponsor
Consumption	568,912,217 kg	Project Sponsor
Density of Natural Gas	20.8 scf per lb	Project Sponsor
Heat Content Natural Gas	1,120 Btu/scf (HHV)	Project Sponsor
Emission Factor	54.18 kg CO2/MMBtu	Project Sponsor
2007 Operating Emissions	1,585,746 metric tonnes	Project Sponsor

Consumption based emissions = 1,747,956 short tons CO2 per year

$$1{,}585{,}746\ \text{metric tonnes} * \frac{\text{short tons}}{0.9072\ \text{metric tonnes}}.$$

Tier A Projects – Based on Capacity (Throughput not Available)

Adapazari Elektrik Uretim

Maximum Potential to Emit Estimate

Adapazari Elektrik Uretim's emissions estimate of **2,706,499 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	777 MW	Project Description
Emission Factor for Emissions Estimate from Capacity	395 g CO2/kWh	International Finance Corporation, Guidance Note 3, Annex A section A-(i)

Capacity based maximum potential to emit = 2,706,499 short tons CO2 per year

$$777\text{MW} * \frac{1000\text{kW}}{\text{MW}} * \frac{8000\text{hr}}{\text{yr}} * \frac{395\text{gCO2}}{\text{kWh}} * \frac{0.0000011023 \text{ short tons}}{\text{g}}$$

2007 Operational Estimate Based On Sponsor Feedback

Adapazari Elektrik Uretim's 2007 operational emissions of **2,106,754 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	777 MW	Project Description
2008 Emissions	1,911,247.2 metric tonnes	Project Sponsor

For the purpose of this baseline calculation, we are assuming 2007 operating year was similar to the 2008 operating year for which emissions were provided; therefore 2007 operational emissions = 2,106,754 short tons CO2 per year

$$1{,}911{,}247.2 \text{ metric tonnes} * \frac{\text{short ton}}{0.9072 \text{ metric tonnes}}.$$

AES Jordan

Maximum Potential to Emit Estimate

AES Jordan's emissions estimate of **1,288,809 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	370 MW	Project Description
Emission Factor for Emissions Estimate from Capacity	395 g CO2/kWh	International Finance Corporation, Guidance Note 3, Annex A section A-(i)

Capacity based maximum potential to emit = 1,288,809 short tons CO2 per year

370MW * 1000kW * 8000hr * 395gCO2 * 0.0000011023 short tons
MW yr kWh g

2007 Operational Estimate Based On Sponsor Feedback

AES Jordan was under construction and not operational during 2007. Since emissions from construction would be below the 100,000 short ton threshold this project is omitted from the 2007 inventory.

Habibullah Coastal Power

Maximum Potential to Emit Estimate

Habibullah Coastal Power's emissions estimate of **487,658 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	140 MW	Project Description
Emission Factor for Emissions Estimate from Capacity	395 g CO2/kWh	International Finance Corporation, Guidance Note 3, Annex A section A-(i)

Capacity based maximum potential to emit = 487,658 short tons CO2 per year

140MW * 1000kW * 8000hr * 395gCO2 * 0.0000011023 short tons
MW yr kWh g

2007 Operational Estimate Based On Sponsor Feedback

Habibullah Coastal Power's 2007 operational emissions of **447,880 short tons CO2** was calculated using the following information.

Data	Value	Source
Emissions from CH4	406,311.5 metric tonnes	Project Sponsor
Emissions from High Speed Diesel	5.7 metric tonnes	Project Sponsor
2007 Emissions	406,317 metric tonnes	Project Sponsor

For the purpose of this baseline calculation, we are assuming 2007 operating year was similar to the 2007 fiscal year for which emissions were provided; therefore 2007 operational emissions = 447,880 short tons CO2 per year

406,317 metric tonnes * short ton .
0.9072 metric tonnes

Gebze Elektrik Uretim

Maximum Potential to Emit Estimate

Gebze Elektrik Uretim's emissions estimate of **5,412,998 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	1554 MW	Project Description
Emission Factor for Emissions Estimate from Capacity	395 g CO2/kWh	International Finance Corporation, Guidance Note 3, Annex A section A-(i)

Capacity based maximum potential to emit = 5,412,998 short tons CO2 per year

$$1554\text{MW} * \frac{1000\text{kW}}{\text{MW}} * \frac{8000\text{hr}}{\text{yr}} * \frac{395\text{gCO2}}{\text{kWh}} * \frac{0.0000011023 \text{ short tons}}{\text{g}}$$

2007 Operational Estimate Based On Sponsor Feedback

Gebze Elektrik Uretim's 2007 operational emissions of **4,121,923 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	1554 MW	Project Description
2008 Emissions	3,739,408.4 metric tonnes	Project Sponsor

For the purpose of this baseline calculation, we are assuming 2007 operating year was similar to the 2008 operating year for which emissions were provided; therefore 2007 operational emissions = 4,121,923 short tons CO2 per year

$$3{,}739{,}408.4 \text{ metric tonnes} * \frac{\text{short ton}}{0.9072 \text{ metric tonnes}}.$$

Pakistan Water & Power Development Authority

Maximum Potential to Emit Estimate

Pakistan Water & Power Development Authority's emissions estimate of **522,490 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	150 MW	Project Description
Emission Factor for Emissions Estimate from Capacity	395 g CO2/kWh	International Finance Corporation, Guidance Note 3, Annex A section A-(i)

Capacity based maximum potential to emit = 522,490 short tons CO2 per year

$$150\text{MW} * \frac{1000\text{kW}}{\text{MW}} * \frac{8000\text{hr}}{\text{yr}} * \frac{395\text{gCO2}}{\text{kWh}} * \frac{0.0000011023 \text{ short tons}}{\text{g}}$$

Isagen SA

Maximum Potential to Emit Estimate

Isagen SA's emissions estimate of **1,044,980 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	300 MW	Project Description
Emission Factor for Emissions Estimate from Capacity	395 g CO2/kWh	International Finance Corporation, Guidance Note 3, Annex A section A-(i)

Capacity based maximum potential to emit = 1,044,980 short tons CO2 per year

$$300\text{MW} * \frac{1000\text{kW}}{\text{MW}} * \frac{8000\text{hr}}{\text{yr}} * \frac{395\text{gCO2}}{\text{kWh}} * \frac{0.0000011023 \text{ short tons}}{\text{g}}$$

2007 Operational Estimate Based On Sponsor Feedback

Isagen SA's 2007 operational emissions of **2,030,109 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	300 MW	Project Description
2007 Emissions	1,841,715 metric tonnes	Project Sponsor

Capacity based emissions = 2,030,109 short tons CO2 per year

$$1{,}841{,}715 \text{ metric tonnes} * \frac{\text{short tons}}{0.9072 \text{ metric tonnes}}.$$

Izmir Elektrik Uretim

Maximum Potential to Emit Estimate

Izmir Elektrik Uretim's emissions estimate of **5,412,998 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	1554 MW	Project Description
Emission Factor for Emissions Estimate from Capacity	395 g CO2/kWh	International Finance Corporation, Guidance Note 3, Annex A section A-(i)

Capacity based maximum potential to emit = 5,412,998 short tons CO2 per year

$$1554\text{MW} * \frac{1000\text{kWh}}{\text{MWh}} * \frac{8000\text{hr}}{\text{yr}} * \frac{395\text{gCO2}}{\text{kWh}} * \frac{0.0000011023 \text{ short tons}}{\text{g}}$$

2007 Operational Estimate Based On Sponsor Feedback

Izmir Elektrik Uretim's 2007 operational emissions of **4,694,380 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	1554 MW	Project Description
2008 Emissions	4,258,741.3 metric tonnes	Project Sponsor

For the purpose of this baseline calculation, we are assuming 2007 operating year was similar to the 2008 operating year for which emissions were provided; therefore 2007 operational emissions = 4,694,380 short tons CO2 per year

$$4{,}258{,}741.3 \text{ metric tonnes} * \frac{\text{short ton}}{0.9072 \text{ metric tonnes}}.$$

Gaza Private Generating PLC

Maximum Potential to Emit Estimate

Gaza Private Generating PLC's emissions estimate of **487,657 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	140 MW	Project Description
Emission Factor for Emissions Estimate from Capacity	395 g CO2/kWh	International Finance Corporation, Guidance Note 3, Annex A section A-(i)

Capacity based maximum potential to emit = 487,657 short tons CO2 per year

$$140\text{MW} * \frac{1000\text{kW}}{\text{MW}} * \frac{8000\text{hr}}{\text{yr}} * \frac{395\ \text{gCO2}}{\text{kWh}} * \frac{0.0000011023\ \text{short tons}}{\text{g}}$$

2007 Operational Estimate Based On Sponsor Feedback

Gaza Private Generating PLC's 2007 operational emissions of **293,804 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	136.4 MW	Project Sponsor
2007 Emissions	266,539 metric tonnes	Project Sponsor

Capacity based emissions = 293,804 short tons CO2 per year

$$266{,}539\ \text{metric tonnes} * \frac{\text{short ton}}{0.9072\ \text{metric tonnes}}.$$

NEPC Consortium Power

Maximum Potential to Emit Estimate

NEPC Consortium Power's emissions estimate of **383,159 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	110 MW	Project Description
Emission Factor for Emissions Estimate from Capacity	395 g CO2/kWh	International Finance Corporation, Guidance Note 3, Annex A section A-(i)

Capacity based maximum potential to emit = 383,159 short tons CO2 per year

$$110\text{MW} * \frac{1000\text{kW}}{\text{MW}} * \frac{8000\text{hr}}{\text{yr}} * \frac{395\text{gCO2}}{\text{kWh}} * \frac{0.0000011023\ \text{short tons}}{\text{g}}$$

2007 Operational Estimate Based On Sponsor Feedback

NEPC Consortium Power's 2007 operational emissions of **245,795 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	110 MW with average dispatch of 70.565 MW	Project Sponsor
2007 Emissions	222,985 metric tonnes	Project Sponsor

Capacity based emissions = 245,795 short tons CO2 per year

$$222{,}985 \text{ metric tonnes} * \frac{\text{short ton}}{0.9072 \text{ metric tonnes}}.$$

Termovalle SCA

Maximum Potential to Emit Estimate

Termovalle SCA's emissions estimate of **693,170 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	199 MW	Project Description
Emission Factor for Emissions Estimate from Capacity	395 g CO2/kWh	International Finance Corporation, Guidance Note 3, Annex A section A-(i)

Capacity based maximum potential to emit = 693,170 short tons CO2 per year

$$199\text{MW} * \frac{1000\text{kW}}{\text{MW}} * \frac{8000\text{hr}}{\text{yr}} * \frac{395\ \text{gCO2}}{\text{kWh}} * \frac{0.0000011023 \text{ short tons}}{\text{g}}$$

Grenada Electricity Services (WRB)

Maximum Potential to Emit Estimate

Grenada Electricity Services (WRB)'s emissions estimate of **104,604 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Diesel (Fuel Oil)	Project Description
Capacity	18 MW	Project Description
Emission Factor for Emissions Estimate from Capacity	659 g CO2/kWh	International Finance Corporation, Guidance Note 3, Annex A section A-(i)

Capacity based maximum potential to emit = 104,604 short tons CO2 per year

18MW * 1000kW / MW * 8000hr / yr * 659 gCO2 / kWh * 0.0000011023 short tons / g

2007 Operational Estimate Based On Sponsor Feedback

Grenada Electricity Services (WRB)'s 2007 operational emissions of **114,571 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Diesel (Fuel Oil)	Project Description
Fuel Consumption	10,821,042 gallons	Project Sponsor
Heat Rate	8013 Btu/kWh	Project Sponsor
Diesel LHV	70302 Btu/kg	Project Sponsor
Energy Generated	117,323,661 kWh	Project Sponsor
Emissions Factor	73.15 kg CO2/MMBtu	The Climate Registry, Table 12-1
2007 Emissions	114,571 short tons	Project Sponsor

Capacity based emissions = 114,571 short tons CO2 per year

Tier B Projects

Accroven SRL

Maximum Potential to Emit Estimate

Accroven SRL's emissions estimate of **998,677 short tons CO2** was calculated by utilizing a representative complete calculation of GHG emissions for a natural gas liquids (NGL) facility sourced from the American Petroleum Institute's (API) Compendium on GHG Emissions. The API example had a capacity of 800 MMscfd for annual emissions of 906,000 metric tonnes CO2; the same capacity as Accroven SRL. Below is the information used in the estimate.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Capacity	800 MMscfd	Project Description
"Emissions Factors"	906,000 metric tonnes CO2 per year for a facility with capacity of 800 MMscfd	API Compendium, Table 7-14
Multiplication Factor	1	Factor applied to account for approximate size discrepancy between Accroven and example

Maximum potential to emit = 998,677 short tons CO2 per year

906,000 metric tonnes CO2e / yr * short ton / 0.9072 metric tonnes * 1

Various Egypt Subsidiaries (Apache)

Maximum Potential to Emit Estimate

Various Egypt Subsidiaries (Apache)'s emissions estimate of **1,190,476 short tons CO2** was calculated by utilizing an example from API for a similar oil and gas extraction and processing facility. The API example produced 6100 barrels oil per day and 30 MMscf natural gas per day for annual emissions of 108,000 metric tonnes CO2; approximately $1/10^{th}$ the size of Various Egypt Subsidiaries (Apache). Below is the information used in the estimate.

Data	Value	Source
Fuel Type	Oil and Natural Gas	Project Description
Production Volumes	29,934,702 barrels oil per year 89,910 MMscf natural gas per year	Project Description
"Emissions Factors"	108,000 metric tonnes CO2 per year for a facility that produces 6100 barrels oil per day and 30 MMscf natural gas per day	API Compendium, Table 7-4
Multiplication Factor	10	Factor applied to account for approximate size discrepancy between Apache and example

Maximum potential to emit = 1,190,476 short tons CO2 per year

$$\frac{108{,}000 \text{ metric tonnes CO2}}{\text{yr}} * \frac{\text{short ton}}{0.9072 \text{ metric tonnes}} * 10$$

2007 Operational Estimate Based On Sponsor Feedback

Various Egypt Subsidiaries (Apache)'s 2007 operational emissions of **1,505,247 short tons CO2** was calculated using the following information.

Data	Value	Source
2007 Emissions	1,365,560 metric tonnes	Project Sponsor

2007 Operational Emissions = 1,505,247 short tons CO2 per year

$$1{,}365{,}560 \text{ metric tonnes} * \frac{\text{short ton}}{0.9072 \text{ metric tonnes}}.$$

Baku-Tblisi-Ceyhan Pipeline

Maximum Potential to Emit Estimate

The Baku-Tblisi-Ceyhan Pipeline's emissions estimate of **699,034 short tons CO2** was calculated for emissions related to the combustion of natural gas and diesel in the transportation of crude oil through the pipeline. We assume that the 180 Btu per short ton of crude transport

per mile energy requirement is evenly split between natural gas and diesel. Below is the information used in the estimate.

Data	Value	Source
Fuel Type used for Transport	Natural Gas and Diesel (dual fuel)	Project Description
Pipeline Throughput	1 million barrels crude oil	Project Description
Pipeline Length	1,760 km	Project Description
Conversion Factors	1.6093 km/mile 7.3 lbs/gal (density of crude)	EPA AP 42, p.A-7
Energy Required for Pipeline Transport (Crude)	180 Btu/short ton crude oil per mile (for ~40in. diameter pipeline)	Trans Alaska Pipeline EIS, p. 4.9-2
Emissions Factors	53.06 kg CO2/MMBtu (natural gas) 73.15 kg CO2/MMBtu (diesel)	The Climate Registry, Table 12.1

Maximum potential to emit = 699,034 short tons CO2 per year

$$\frac{1000000\text{barrels}}{\text{day}} * \frac{333\text{day}}{\text{yr}} * \frac{7.3\text{lbs}}{\text{gal}} * \frac{42\text{gal}}{\text{barrel}} * \frac{\text{short ton}}{2000\text{lbs}} = 51{,}048{,}900 \text{ short tons crude/yr}$$

$$\frac{51048900\text{short tons crude}}{\text{yr}} * \frac{1760\text{km}}{} * \frac{\text{mile}}{1.6093\text{km}} * \frac{180\text{Btu}}{\text{short ton-mile}} * \frac{\text{MMBtu}}{1000000\text{Btu}} = 10{,}049{,}271 \text{ MMBtu/yr}$$

$$\frac{10049271\text{MMBtu}}{\text{yr}} * \frac{73.15\text{ kg CO2}}{\text{MMBtu}} * \frac{0.0011023\text{ short tons}}{\text{kg}} * 0.5 = 405{,}153 \text{ short tons CO2/yr from diesel}$$

$$\frac{10049271\text{MMBtu}}{\text{yr}} * \frac{53.06\text{ kg CO2}}{\text{MMBtu}} * \frac{0.0011023\text{ short tons}}{\text{kg}} * 0.5 = 293{,}881 \text{ short tonsCO2/yr from nat. gas}$$

2007 Operational Estimate Based On Sponsor Feedback

The Baku-Tblisi-Ceyhan Pipeline's 2007 operational emissions of **707,672 short tons CO2** was calculated using the following information.

Data	Value	Source
2008 Emissions	642,000 metric tonnes	Project Sponsor

For the purpose of this baseline calculation, we are assuming 2007 operating year was similar to the 2008 operating year for which emissions were provided; therefore 2007 operational emissions = 707,672 short tons CO2 per year

$$642{,}000 \text{ metric tonnes} * \frac{\text{short ton}}{0.9072 \text{ metric tonnes}}.$$

E.P. Interoil

Maximum Potential to Emit Estimate

E.P. Interoil's emissions estimate of **802,469 short tons CO2** was calculated by utilizing an example from API for a refinery with a throughput of 250,000 barrels crude oil per day for annual emissions of 5,600,000 metric tonnes CO2. E.P. Interoil is approximately 13% the size of the example. Below is the information used in the estimate.

Data	Value	Source
Fuel Type	Crude Oil	Project Description
Throughput Volumes	32,500 barrels crude oil per day	Project Description
"Emissions Factors"	5,600,000 metric tonnes CO2 per year for a facility with throughput of 250,000 barrels crude oil per day	API Compendium, Table 7-25
Multiplication Factor	0.13	Factor applied to account for approximate size discrepancy between E.P. Interoil and example

Maximum potential to emit = 802,469 short tons CO2 per year

$$\frac{5600000 \text{ metric tonnes CO2}}{\text{yr}} * \frac{\text{short ton}}{0.9072 \text{ metric tonnes}} * 0.13$$

2007 Operational Estimate Based On Sponsor Feedback

E.P. Interoil's 2007 operational emissions of **392,296 short tons CO2** was calculated using the following information.

Data	Value	Source
2007 Average Throughput	15,888 BPCD	Project Sponsor
2007 Emissions	355,891 metric tonnes	Project Sponsor

2007 Operational Emissions = 392,296 short tons CO2 per year

$$355{,}891 \text{ metric tonnes} * \frac{\text{short ton}}{0.9072 \text{ metric tonnes}}.$$

RPK-Vysotsk (Lukoil II)

Maximum Potential to Emit Estimate

RPK-Vysotsk (Lukoil II)'s emissions estimate of **140,388 short tons CO2** was calculated by utilizing an example from API for a petroleum terminal with heated product storage/transport. The API example throughput was 300,000,000 gallons per year of petroleum products for annual emissions of 19,900 metric tonnes CO2; approximately 6.4 times smaller than the size of RPK-Vysotsk (Lukoil II). Below is the information used in the estimate.

Data	Value	Source
Fuel Type	Petroleum Products	Project Description
Throughput Volumes	6.8 million short tons per year [1,920,900,000 gallons petroleum product per year]	Project Description and [Calculated]
"Emissions Factors"	19,900 metric tonnes CO2 per year for a facility with throughput of 300,000,000 gallons petroleum products per year	API Compendium, Table 7-22
Multiplication Factor	6.4	Factor applied to account for approximate size discrepancy between Lukoil II and example

Maximum potential to emit = 140,388 short tons CO2 per year

$$\frac{19900 \text{ metric tonnes CO2}}{\text{yr}} * \frac{\text{short ton}}{0.9072 \text{ metric tonnes}} * 6.4$$

2007 Operational Estimate Based On Sponsor Feedback

RPK-Vysotsk (Lukoil II)'s 2007 operational emissions of **70,767 short tons CO2** was estimated with the following information.

Data	Value	Source
Fuel Type	Petroleum Products	Project Description
Throughput Volumes	11,700,000 tons	Project Sponsor
2007 Emissions	64,200 metric tonnes	Project Sponsor

2007 Operational emissions = 70,767 short tons CO2 per year

$$64{,}200 \text{ metric tonnes} * \frac{\text{short ton}}{0.9072 \text{ metric tonnes}}.$$

Sponsor feedback for RPK-Vysotsk (Lukoil II) resulted in operational emissions below the 100,000 short ton threshold; therefore the project is omitted from the inventory.

Foxtrot International

Maximum Potential to Emit Estimate

Foxtrot International's emissions estimate of **270,804 short tons CO2** was calculated accounting for both combustion emissions from the compression and transmission of natural gas as well as fugitive emissions using the following information. Additionally, an estimate of platform emissions was provided in the project description and incorporated into the emissions total.

Data	Value	Source
Fuel Type	Natural Gas	Project Description

Pipeline Throughput	100 MMscfd	Project Description
Platform Emissions	142,000 short tons CO2e	Project Description
Emissions Factors	3439 lbs CO2 per MMscfd from combustion 4297 lbs CO2 per MMscfd from fugitive	U.S. EIA and EPA GHG Inventory, Tables 3-34 & 3-36

Maximum potential to emit = 270,804 short tons CO2 per year

$$\frac{100\ \text{MMscf}}{\text{day}} * \frac{333\ \text{day}}{\text{yr}} * \frac{3439\ \text{lbs CO2}}{\text{MMscf}} * \frac{\text{short ton}}{2000\ \text{lbs}} = 57{,}259\ \text{short tons CO2/yr (combustion)}$$

$$\frac{100\ \text{MMscf}}{\text{day}} * \frac{333\ \text{day}}{\text{yr}} * \frac{4297\ \text{lbs CO2}}{\text{MMscf}} * \frac{\text{short ton}}{2000\ \text{lbs}} = 71{,}545\ \text{short tons CO2/yr (fugitive)}$$

142,000 short tons CO2 = 142,000 short tons CO2/yr (platform)

2007 Operational Estimate Based On Sponsor Feedback

Foxtrot International's 2007 operational emissions of **104,484 short tons CO2** was calculated using the following information.

Data	**Value**	**Source**
Fuel Type	Natural Gas	Project Description
2008 Consumption	1530 MMscf/yr from flaring, power generation, and re-boiler offshore; 206 MMscf/yr from onshore heaters	Project Sponsor
Emissions Factor	0.0546 kg CO2/scf	The Climate Registry, Table 12.1

For the purpose of this baseline calculation, we are assuming 2007 operating year was similar to the 2008 operating year for which emissions were provided; therefore 2007 operational emissions = 104,484 short tons CO2 per year

$$\frac{1736\ \text{MMscf}}{\text{yr}} * \frac{1000000\ \text{scf}}{\text{MMscf}} * \frac{0.0546\ \text{kg CO2}}{\text{scf}} * \frac{\text{short ton}}{907.18\ \text{kg}}$$

Natural Gas Liquids II Financing

Maximum Potential to Emit Estimate

Natural Gas Liquids II Financing's emissions estimate of **390,806 short tons CO2** was calculated using gas consumption rates provided in the project description and the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Pipeline Throughput	19.5 MMscfd	Project Description
Heat Content Natural Gas	1029 Btu/scf	The Climate Registry, Table 12.1
Emissions Factors	53.06 kg CO2/MMBtu	The Climate Registry, Table 12.1

Maximum potential to emit = 390,806 short tons CO2 per year

$$\frac{19.5\ \text{MMscf}}{\text{day}} * \frac{333\ \text{day}}{\text{yr}} * \frac{1029\ \text{Btu}}{\text{scf}} * \frac{53.06\ \text{kg CO2}}{\text{MMBtu}} * \frac{0.0011023\ \text{short tons}}{\text{kg}}$$

2007 Operational Estimate Based On Sponsor Feedback

Natural Gas Liquids II Financing's 2007 operational emissions of **244,048 short tons CO2** was calculated using the following information.

Data	Value	Source
2007 Emissions	221,400 metric tonnes	Project Sponsor

2007 Operational Emissions = 244,048 short tons CO2 per year

$$221{,}400\ \text{metric tonnes} * \frac{\text{short ton}}{0.9072\ \text{metric tonnes}}.$$

Equate Petrochemical

Maximum Potential to Emit Estimate

Equate Petrochemical's emissions estimate of **720,573 short tons CO2** was based on a typical petrochemical facility in the Middle East with 850 MMBtu/hr natural gas equivalent power and 690 MMBtu/hr off gas equivalent power, total energy requirements of approximately 250 MW of natural gas fired power. These average specs were determined by Pace experts and referencing the April 2006 CEC/EPRI report. Below is the information used to perform the calculation.

Data	Value	Source
Fuel Type	Natural Gas	CEC, EPRI, p.4-6
Energy Requirements	850 MMBtu/hr (natural gas equivalent power) 690 MMBtu/hr (off gas equivalent power)	CEC, EPRI, p.4-6
Emissions Factors	53.06 kg CO2/MMBtu	The Climate Registry, Table 12.1

Maximum potential to emit = 720,573 short tons CO2 per year

$$\frac{850\text{MMBtu} + 690\ \text{MMBtu}}{\text{hr}} * \frac{8000\text{hr}}{\text{yr}} * \frac{53.06\ \text{kg CO2}}{\text{MMBtu}} * \frac{0.0011023\ \text{short tons}}{\text{kg}}$$

West African Gas Pipeline

Maximum Potential to Emit Estimate

The West African Gas Pipeline's emissions estimate of **244,728 short tons CO2** was calculated accounting for both combustion emissions from the compression and transmission of natural gas as well as fugitive emissions using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Pipeline Throughput	190 MMscfd	Project Description
Emissions Factors	3439 lbs CO2 per MMscfd from combustion 4297 lbs CO2 per MMscfd from fugitive	U.S. EIA and EPA GHG Inventory, Tables 3-34 & 3-36

Total emissions estimate = 244,728 short tons CO2 per year

$$\frac{190\ \text{MMscf}}{\text{day}} * \frac{333\ \text{day}}{\text{yr}} * \frac{3439\ \text{lbs CO2}}{\text{MMscf}} * \frac{\text{short ton}}{2000\ \text{lbs}} = 108{,}792\ \text{short tons CO2/yr (combustion)}$$

$$\frac{190\ \text{MMscf}}{\text{day}} * \frac{333\ \text{day}}{\text{yr}} * \frac{4297\ \text{lbs CO2}}{\text{MMscf}} * \frac{\text{short ton}}{2000\ \text{lbs}} = 135{,}936\ \text{short tons CO2/yr (fugitive)}$$

2007 Operational Estimate Based On Sponsor Feedback

The West African Gas Pipeline was under construction and not operational during 2007. Since emissions from construction would be below the 100,000 short ton threshold this project is omitted from the 2007 inventory.

Wilpro Energy Services (El Furrial)

Maximum Potential to Emit Estimate

Wilpro Energy Services (El Furrial)'s emissions estimate of **289,106 short tons CO2** was based on capacity values and heat rates derived from the compressor depiction in the project description and from the manufacturer, Nuovo Pignone. Both combustion and fugitive emissions were included in the calculation. Below is the information used in the estimate. Pace experts estimated the energy requirements for the required compression of natural gas based on specifications included in the project description.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Number of Compressors	4	Project Description
Capacity	60 MW	Project Description/Pace and Nuovo Pignone unit specs (Nye Thermodynamics Corporation)
Heat Rate	9,976 Btu/kWh	Nuovo Pignone unit specs (Nye Thermodynamics Corporation)
GWP for CH4	21	The Climate Registry, Appendix B
Emissions Factors	53.06 kg CO2/MMBtu (combustion) 0.0122 tonnes CH4/hr (fugitive)	The Climate Registry, Table 12.1 and API GHG Compendium, Table 6-5

Maximum potential to emit = 289,106 short tons CO2 per year

$$\frac{60\text{MW}}{\text{yr}} * \frac{8000\text{hr}}{\text{MW}} * \frac{1000\text{kW}}{\text{kWh}} * \frac{9976\text{Btu}}{1000000\text{Btu}} * \frac{\text{MMBtu}}{\text{MMBtu}} * \frac{53.06\text{kgCO2}}{\text{kg}} * \frac{0.0011023\text{short tons}}{} = 280{,}069 \text{ short tons CO2 (combust)}$$

$$\frac{0.0122 \text{ tonnes CH4}}{\text{hr}} * \frac{\text{short ton}}{0.9072 \text{ metric tonne}} * \frac{8000\text{hr}}{\text{yr}} * 4 \text{ compressors} * \frac{21 \text{ tonnes CH4}}{\text{tonnes CO2e}} = 9{,}037 \text{ short tons CO2 (fugitive)}$$

2007 Operational Estimate Based On Sponsor Feedback

Wilpro Energy Services (El Furrial)'s 2007 operational emissions of **289,106 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Number of Compressors	4 centrifugal compressors	Project Description
Capacity	60MW	Project Description and Coopers
Heat Rate	9976 Btu/kWh	Coopers Data
GWP for CH4	21	The Climate Registry, Appendix B
Emissions Factors	53.06 kg CO2/MMBtu (combustion) 0.0122 tonnes CH4/hr (fugitive)	The Climate Registry, Table 12.1 and API GHG Compendium, Table 6-5

2007 Operational emissions = 289,106 short tons CO2 per year

$$\frac{60\text{MW}}{\text{yr}} * \frac{8000\text{hr}}{\text{MW}} * \frac{1000\text{kW}}{\text{kWh}} * \frac{9976\text{Btu}}{1000000\text{Btu}} * \frac{\text{MMBtu}}{\text{MMBtu}} * \frac{53.06\text{kgCO2}}{\text{kg}} * \frac{0.0011023\text{short tons}}{} = 280{,}069 \text{ short tons CO2 (combust)}$$

$$\frac{0.0122 \text{ tonnes CH4}}{\text{hr}} * \frac{\text{short ton}}{0.9072 \text{ metric tonne}} * \frac{8000\text{hr}}{\text{yr}} * 4 \text{ compressors} * \frac{21 \text{ tonnes CH4}}{\text{tonnes CO2e}} = 9{,}037 \text{ short tons CO2 (fugitive)}$$

Wilpro Energy Services (Pigap)

Maximum Potential to Emit Estimate

Wilpro Energy Services (Pigap)'s emissions estimate of **507,923 short tons CO2** was based on capacity values and heat rates derived from the compressor depiction in the project description and from the manufacturer, Nuovo Pignone. Both combustion and fugitive emissions were included in the calculation. Below is the information used in the estimate. Pace experts estimated the energy requirements for the required compression of natural gas based on specifications included in the project description.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Number of Compressors	8	Project Description
Capacity	100 MW	Project Description/Pace and Nuovo Pignone unit specs (Nye Thermodynamics Corporation)
Heat Rate	10469 Btu/kWh	Nuovo Pignone unit specs (Nye Thermodynamics Corporation)
GWP for CH4	21	The Climate Registry, Appendix B
Emissions Factors	53.06 kg CO2/MMBtu (combustion) 0.0122 tonnes CH4/hr (fugitive)	The Climate Registry, Table 12.1 and API GHG Compendium, Table 6-5

Maximum potential to emit = 507,923 short tons CO2 per year

$$\frac{100\text{MW}}{\text{yr}} * \frac{8000\text{hr}}{\text{MWh}} * \frac{1000\text{kWh}}{\text{kWh}} * \frac{10469\text{Btu}}{1000000\text{Btu}} * \frac{\text{MMBtu}}{\text{MMBtu}} * \frac{53.06\text{kgCO2}}{\text{kg}} * \frac{0.0011023\text{short ton}}{} = 489{,}849 \text{ short tons CO2 (combust)}$$

$$\frac{0.0122 \text{ tonnes CH4}}{\text{hr}} * \frac{\text{short ton}}{0.9072 \text{ metric tonne}} * \frac{8000\text{hr}}{\text{yr}} * 8 \text{ compressors} * \frac{21 \text{ tonnes CH4}}{\text{tonnes CO2e}} = 18{,}074 \text{ short tons CO2 (fugitive)}$$

2007 Operational Estimate Based On Sponsor Feedback

Wilpro Energy Services (Pigap)'s 2007 operational emissions of **571,090 short tons CO2** was calculated using the following information.

Data	Value	Source
Fuel Type	Natural Gas	Project Description
Number of Compressors	8 centrifugal compressors	Project Description
Capacity	100MW	Project Description and Nuovo Pignone data
Heat Rate	11819 Btu/kWh	Nuovo Pignone Data
GWP for CH4	21	The Climate Registry, Appendix B
Emissions Factors	53.06 kg CO2/MMBtu (combustion) 0.0122 tonnes CH4/hr (fugitive)	The Climate Registry, Table 12.1 and API GHG Compendium, Table 6-5

2007 Operational emissions = 571,090 short tons CO2 per year

$$\frac{100\text{MW}}{\text{yr}} * \frac{8000\text{hr}}{\text{MW}} * \frac{1000\text{kW}}{\text{kWh}} * \frac{11819\text{Btu}}{1000000\text{Btu}} * \frac{\text{MMBtu}}{\text{MMBtu}} * \frac{53.06\text{kgCO2}}{\text{kg}} * \frac{0.0011023\text{short tons}}{} = 553{,}016 \text{ short tonsCO2(combust)}$$

$$\frac{0.0122 \text{ tonnes CH4}}{\text{hr}} * \frac{\text{short ton}}{0.9072 \text{ metric tonne}} * \frac{8000\text{hr}}{\text{yr}} * 8 \text{ compressors} * \frac{21 \text{ tonnes CH4}}{\text{tonnes CO2e}} = 18{,}074 \text{ short tons CO2 (fugitive)}$$

Conversion Factors and Sources

Below are additional emission factors, conversions, and other factors used in the emission estimates and sources.

Value	Unit of Measure	Source
8,000	Hours per Year	Conservative Operating Assumption – EIA Form 923 data, 2007
333	Days per Year	Calculated from Hours per Year
1,000	kWh per MWh	The Climate Registry, Appendix C
1,000,000	Btu per MMBtu	The Climate Registry, Appendix C
0.001	metric tonnes per kg	The Climate Registry, Appendix C
0.0011023	Short Tons per kg	The Climate Registry, Appendix C
1,000,000	scf per Mcf	The Climate Registry, Appendix C
0.02832	m3 per scf	The Climate Registry, Appendix C
0.9072	metric tonnes per short ton	The Climate Registry, Appendix C
0.000001	metric tonnes per g	The Climate Registry, Appendix C
0.0000011023	short tons per g	The Climate Registry, Appendix C
907.18	kg per short ton	The Climate Registry, Appendix C
2.2046	lbs per kg	The Climate Registry, Appendix C
2204.62	lbs per metric tonne	The Climate Registry, Appendix C
2,000	lbs per short ton	The Climate Registry, Appendix C
42	gallons per barrel	The Climate Registry, Appendix C
53.06	kg CO2 per MMBtu natural gas	The Climate Registry, Table 12.1
73.15	kg CO2 per MMBtu diesel (fuel oil)	The Climate Registry, Table 12.1
93.46	kg CO2 per MMBtu coal (bituminous)	The Climate Registry, Table 12.1
97.09	kg CO2 per MMBtu coal (sub-bituminous)	The Climate Registry, Table 12.1
74.54	kg CO2 per MMBtu crude oil	The Climate Registry, Table 12.1
0.0546	kg CO2 per scf natural gas	The Climate Registry, Table 12.1
1029	Btu per scf natural gas	The Climate Registry, Table 12.1
5.825	MMBtu per barrel diesel (fuel oil)	The Climate Registry, Table 12.1
24.93	MMBtu per short ton coal (bituminous)	The Climate Registry, Table 12.1
17.25	MMBtu per short ton coal (sub-bituminous)	The Climate Registry, Table 12.1
5.8	MMBtu per barrel crude oil	The Climate Registry, Table 12.1
893	g CO2 per kWh generated using coal	IFC Guidance Note 3, Annex A section A-(i)
659	g CO2 per kWh generated using oil	IFC Guidance Note 3, Annex A section A-(i)
395	g CO2 per kWh generated using nat. gas	IFC Guidance Note 3, Annex A section A-(i)

APPENDIX C

Annotated Bibliography

American Petroleum Institute. Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Gas Industry. February 2004. <http://www.api.org/ehs/climate/new/upload/2004_COMPENDIUM.pdf>

> For those projects in Tier B [Accroven SRL, Various Egypt Subsidiaries (Apache), EP Interoil, RPK-Vysotsk (Lukoil II)] for which there were no consumption volumes or other data to base an emissions estimate from, examples from API were used. The size of operations for these examples was compared to the size of the projects in Tier B resulting in a multiplication factor which was applied to the API example's emissions estimate to arrive at an approximate estimate for the Tier B project. Additionally, a methane fugitive emissions factor for compression was used for the Wilpro Energy Services projects as this factor was sourced from the API Compendium of Greenhouse Gas Emissions, Table 6-5.

California Energy Commission, Electric Power Research Institute. Implementing Advanced Control and Power Technologies to Improve Energy Efficiency and Reduce Operating Costs for U.S. Petroleum Refining and Petrochemical Manufacturing. CEC-500-2006-055. April 2006.

> No information was provided in the project description for the Equate Petrochemical facility indicating its size or energy consumption. The average size of petrochemical facilities in the Middle East, of ~850,000 tpy, was sourced from the Oil and Gas Journal. Specific energy requirements and generation sources expected from a petrochemical facility of this size were sourced from the CEC report. This data enabled the qualified estimation of emissions from this facility.

The Climate Registry. General Reporting Protocol Version 1.1. May 2008. <http://www.theclimateregistry.org/downloads/GRP.pdf>

> The Climate Registry is the broadest reaching registry in North America with participation from all Canadian provinces, six Mexican states, and forty U.S. states. The Climate Registry's General Reporting Protocol is based on the WRI/WBCSD GHG Protocol, the "gold" standard in GHG Accounting and Reporting. Emission, heat content, and conversion factors from this document were used in the analysis (Table 12.1 and Appendix C).

Energy Information Administration (EIA) U.S. Natural Gas Consumption by End Use. 2003-2007. <http://tonto.eia.doe.gov/dnav/ng/ng_cons_sum_dcu_nus_a.htm>

Emissions from natural pipeline transport are very segment specific, varying with pipeline infrastructure, compression energy source, and segment distance. In order to define the related emissions for representative pipeline hauls in the absence of system specifications, Pace assumed pipeline fuel consumption and both combustion and non-combustion CO2e emissions based on EIA natural gas consumption data and data from the U.S. GHG Inventory released by EPA in 2008. This data yielded an average fugitive emission loss rate of 1.7% (per unit volume), and fugitive emissions factor of 4,297 lbs CO2 per MMscfd. The emissions associated with combustion required to move natural gas was calculated to be3,439 lbs CO2 per MMscd.

International Energy Agency. Coal in Indonesia in 2006.
<http://www.iea.org/Textbase/stats/coaldata.asp?COUNTRY_CODE=ID>

The coal profile for Indonesia in 2006 specifies the type of coal consumed and what it was combusted for. The table provided by IEA, details the volume of coal used in electricity plants as being 100% sub-bituminous. This information was necessary to calculate the emissions for Paiton Energy as each coal type has a different emissions factor and heat content value.

International Energy Agency. Coal in Morocco in 2006.
<http://www.iea.org/Textbase/stats/coaldata.asp?COUNTRY_CODE=MA>

The coal profile for Morocco in 2006 specifies the type of coal consumed and what it was combusted for. The table provided by IEA, details the volume of coal used in electricity plants as being 100% bituminous. This information was necessary to calculate the emissions for Jorf Lasfar Energy as each coal type has a different emissions factor and heat content value.

International Finance Corporation. Guidance Note 3: Pollution Prevention and Abatement. July 31, 2007. <http://www.ifc.org/ifcext/sustainability.nsf/Content/GuidanceNotes>

This guidance note by the IFC provides suggested GHG emissions estimation methodologies for the energy and industrial sectors. The table in Annex A provides the capacity for electric generating technologies (oil = 25MW, coal = 18MW, gas = 41MW) that would emit 100,000 metric tonnes of CO2e per year. The table also provides the emissions factor which was applied to the electric generation projects for which no throughput or consumption volumes were available.

Nye Thermodynamics Corporation. Gas Turbine Specifications by Manufacturer. Nuovo Pignone turbine specifications.
<http://www.gas-turbines.com/specs/manuf.htm>

The project descriptions for Wilpro Energy Services (Pigap) and Wilpro Energy Services (El Furrial) indicate that the compression if driven by Nuovo Pignone Gas Turbines. Pace estimated energy requirements from compression levels depicted for each project and consulted specifications of the appropriately sized Nuovo Pignone gas turbines. Efficiency and other specifications of these turbines were collected from the Nye

Thermodynamics Corporation website documenting gas turbine specifications by manufacturer.

Oil and Gas Journal. "Special Report: Worldwide Ethylene Capacity Increases 2 Million TPY in 2007," Volume 106, July 28, 2008.

No information was provided in the project description for the Equate Petrochemical facility indicating its size or energy consumption. The average size of petrochemical facilities in the Middle East, of ~850,000 tpy, was sourced from the Oil and Gas Journal. Specific energy requirements and generation sources expected from a petrochemical facility of this size were sourced from the CEC report. This data enabled the qualified estimation of emissions from this facility.

Trans Alaska Pipeline Environmental Impact Statement Document, Energy Requirements for Conservation Potential. February 15, 2001.
<http://tapseis.anl.gov/documents/docs/Section_4_9_May2.pdf>

Energy demand factors for crude pipeline transport were sourced from documents associated with the Environmental Impact Statement for the Trans Alaska Gas pipeline in order to calculate GHG emissions for the Baku-Tblisi-Ceyhan Pipeline.

United States Environmental Protection Agency.(EPA). AP 42: Compilation of Air Pollutant Emission Factors, Volume 1 Stationary Point and Area Sources. "Appendix A: Miscellaneous Data & Conversion Factors". September 1985. <http://www.epa.gov/ttn/chief/ap42/>

Conversion factors not provided by The Climate Registry were obtained from U.S. EPA's AP 42 document, specifically for the density of natural gas and crude oil and the conversion of kilometers to miles.

United States Environmental Protection Agency.(EPA). Inventory of U.S. GHG Emissions and Sinks, 1990-2006. Tables 3-34 and 3-36.
<http://www.epa.gov/climatechange/emissions/downloads/08_CR.pdf>

Emissions from natural pipeline transport are very segment specific, varying with pipeline infrastructure, compression energy source, and segment distance. In order to define the related emissions for representative pipeline hauls in the absence of system specifications, Pace assumed pipeline fuel consumption and both combustion and non-combustion CO2e emissions based on EIA natural gas consumption data and data from the U.S. GHG Inventory released by EPA in 2008. This data yielded an average fugitive emission loss rate of 1.7% (per unit volume), and fugitive emissions factor of 4,297 lbs CO2 per MMscfd. The emissions associated with combustion required to move natural gas was calculated to be 3,439 lbs CO2 per MMscd.