

## INFORMATION SUMMARY FOR THE PUBLIC

Host Country	Egypt
Name of Borrower(s):	Tahrir Petrochemicals Corporation, S.A.E.
Project Description:	The development, construction, commissioning and operation of a greenfield petrochemicals complex in Ain Sokhna, Egypt (the northwest Gulf of Suez.) The facility will comprise a naphtha cracker unit, associated derivatives units, three polyethylene units, and associated offsites and utilities. TPC will be the largest petrochemical complex in Egypt. It will produce and export basic and intermediate petrochemicals, which provide essential materials for the specialty chemical and manufacturing sectors. It has the potential to generate a critical mass of petrochemical inputs to further the development of Egyptian manufacturing throughout the value chain.
Proposed OPIC Loan:	Up to \$400,000,000
Total Project Costs:	Approximately \$7,226,000,000
U.S. Nexus:	General Electric Company; Vinmar International, Ltd.; Trammo, Inc.; Univation Technologies; and Bechtel International, Inc.
Foreign Sponsor:	Carbon Holdings Limited, Egypt.
<b>Policy Review</b>	
U.S. Economic Impact:	The Project is not expected to have a negative impact on the U.S. economy. U.S. procurement associated with this Project has not been determined at this time. The Project is expected to have a net negative five-year impact on the U.S. balance of payments impact.
Developmental Effects:	This Project involves the construction and operation of a petrochemical plant in Suez, Egypt, which is expected to support thousands of permanent and construction jobs in a country struggling with high unemployment, particularly among the country's youth. At completion, this will be the largest petrochemical plant in Egypt, and the only one in the country that will utilize a naphtha cracking unit producing ethylene. The Project will generate substantial foreign exchange earnings through the export of petrochemical products in the global market.

<p>Environment:</p>	<p>Clearance is in process.</p> <p><b>Screening:</b> The Project has been reviewed against OPIC’s categorical prohibitions and determined to be eligible. The Project has been screened as Category A because: it involves a major manufacturing complex that has potential impacts which are diverse and potentially irreversible; direct, gross greenhouse gas emissions from the Project that are estimated to be 1.2 million tons of carbon dioxide equivalent per year; the potential to impact local infrastructure; and the potential for accidental releases of variety of volatile organic compounds (VOC) including benzene. In addition there are also impacts and risks commonly associated with new construction and civil works (e.g., noise, dust, vehicle and equipment emissions, solid and hazardous waste management, occupational health and safety, housing, and sewage management). Other issues of concern during construction include marine impacts from both dredging undertaken during jetty construction and from the disposal of dredged materials. The main environmental and social impacts of the Project during operations are associated with: the accidental releases of toxics such as benzene; accidents and process upsets resulting in fire and explosion; air emissions of VOCs, particulate matter, nitrogen oxides, and sulfur oxides which may have impacts beyond the Project boundaries; wastewater discharges; solid and hazardous wastes disposal; occupational health and safety risks associated with the handling of hazardous materials (including benzene); and potential risks to community health, safety, and security.</p> <p><b>Applicable Standards:</b> OPIC’s environmental and social due diligence indicates that the Project will have impacts that must be monitored and managed in a manner consistent with the following International Finance Corporation’s (IFC) 2012 Performance Standards (PS) where applicable:</p> <ul style="list-style-type: none"> <li>-PS 1: Assessment and Management of Environmental and Social Risks and Impacts;</li> <li>-PS 2: Labor and Working Conditions;</li> <li>-PS 3: Resource Efficiency and Pollution Prevention;</li> <li>-PS 4: Community Health, Safety and Security;</li> <li>-PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources;</li> <li>-PS7: Indigenous Peoples; and</li> <li>-PS 8: Cultural Heritage.</li> </ul>
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	<p>All construction activities will be undertaken in an existing developed industrial complex, and the Borrower represents that impacts to ethnic minorities (Bedouin) are unlikely due to the location. However, to ensure potentially impacted ethnic minorities are adequately engaged where relevant, OPIC will apply PS 7.</p> <p>In accordance with PS 3, the IFC’s Guidelines applicable to the Project include: General Environmental, Health, and Safety (EHS) (2007); Large Volume Petroleum-based Organic Chemicals Manufacturing (2007); Petroleum-based Polymers Manufacturing (2007); Thermal Power (2008); Crude Oil and Petroleum Product Terminals (2007); Ports, Harbors, and Terminals (2007); and Water and Sanitation (2007).</p> <p>Workers’ accommodation both during construction and operations will be required to meet the recommendations of “Workers’ accommodation: process and standards” (a guidance note by IFC and the EBRD).</p> <p><b>Site Visit:</b> OPIC conducted a visit the Project sites near Ain Sokhna (Suez) in Egypt May 16-20, 2015. Meetings were held with the nearby communities and local and national regulators.</p> <p><b>Environmental and Social Risks and Mitigation:</b> The nearest residences to the Project are located approximately 5 kilometers from the Project site. Air dispersion modeling of a potentially harmful vapor cloud resulting from an accidental benzene release indicates that hazardous concentrations of benzene will be limited to a 3 kilometer radius around the point of release. Therefore all residences will be outside of the zone of critical impact. To further mitigate this unique community safety risk, an exclusion zone will be established around the facility. In the event of a major fire or explosion, damage may be expected to other industrial facilities within the industrial area and some injuries may occur to facility personnel. A detailed hazard analysis will be undertaken to identify opportunities to reduce the potential for accidental release of benzene and other VOCs, fire, and explosion.</p> <p>The cumulative impacts associated with the Project will be managed by analyzing the impact of the Project on existing industries. Similarly, the impact of existing industries will be assessed on the Project. Preliminary studies indicated that these cumulative effects will be at manageable levels and detailed</p>
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	<p>analysis is currently being undertaken to ensure that cumulative impacts are acceptable.</p> <p>The Project is currently establishing an environmental and social management system that will be consistent with the requirements of the IFC's Performance Standards. OPIC will require that the Project put in place procedures consistent with international best practices to address both construction safety and occupational and community risks associated with the accidental release of benzene and other VOCs, fire and explosion.</p> <p>The Project's greenhouse gas (carbon dioxide equivalent) emissions are estimated to be about 1.2 million tons of carbon dioxide equivalent (CO<sub>2eq</sub>) per year.</p> <p>The Project will follow internationally recognized best practices in construction safety, provide adequate housing to construction personnel, and properly manage the sewage generated from the construction camps. The Project will develop and implement a detailed Environmental and Social Action Plan (ESAP) which will address: construction safety; accidental VOCs releases, fire and explosions; air emissions; wastewater discharges; and solid and hazardous waste disposal.</p> <p>The Project will also adopt detailed procedures relating to the safety of facilities' operations, including any recommendations resulting from the hazard analysis. Detection equipment located within the facilities will monitor VOC releases. These monitors will detect any accidental release of benzene and other VOCs and automatically shut down the relevant manufacturing facility. The Project will be required to develop and implement an Emergency Preparedness and Response Plan to ensure that appropriate emergency response measures are in place including the complex having its own emergency service vehicles and responders. The Project will also be required to develop and implement an Occupational Health and Safety Plan and a Fire Prevention and Control Plan both of which will be designed to ensure workplace safety.</p> <p>Employees will be trained on emergency response measures in addition to being trained on safety and environmental and social impacts management. The Project has submitted the ESIA to the Ministry of the Environment for undertaking construction and the environmental permitting shall be granted by the end of</p>
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	<p>2015, which requires that the Project maintain community safety.</p> <p>The Project will treat and re-use all of its process wastewaters and storm water in its own waste water treatment facility. During construction sewage generated from worker camps will be treated in on-site septic tanks and trucked to waste water treatment facilities in the Suez Governorate. Particulate matter, sulfur oxides, and nitrogen oxide emissions from furnaces and generators will comply with the IFC's Thermal Power Plant and General EHS Guidelines. Process emissions of VOCs will comply with the recommended air emission levels in IFC's Guidelines. Spent catalysts will be sent to the original manufacturer for metal recovery and subsequent disposal of residues as hazardous wastes. Other process residues will be treated to reduce the toxicity of contaminants present and the treated residues disposed in a manner to prevent significant environmental releases. The Project will be required to monitor other infrastructure impacts and take corrective actions when necessary.</p> <p>The Borrower will be required to continue implementing its overarching environmental and social policy that will be used to guide the Project's environmental and social performance, including the implementation of the Independent Consultant's recommendations to ensure compliance with the IFC's 2012 Performance Standards and EHS Guidelines.</p> <p>The Project will be required to: (i) submit annual reports on its environmental and social performance; (ii) develop and implement its Environmental and Social Action Plan, Occupational Health and Safety Plan, Fire Prevention and Control Plan, and an Emergency Response Plan; (iii) hold public consultations at least on a quarterly basis and address community concerns; and (iv) conduct an independent audit.</p> <p><b>Community Consultations:</b> The Project held two public hearings in 2014 and also conducted several information sharing sessions during the scoping phase of the ESIA development (in 2014) and after issuance of the ESIA in 2015. The public hearing was attended by the representatives of the nearby communities. The Ministry of Environment has confirmed that the Project has met all national requirements for public consultation and disclosure. In addition, the Project is establishing a grievance mechanism and has assigned a Manager to address any community concerns as they may arise.</p>
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	<p>The Project has committed to quarterly reporting on Project status to concerned citizens and community groups.</p>
<p>Workers Rights:</p>	<p>In accordance with OPIC’s Environmental and Social Policy Statement, this Project has been classified as <i>Special Consideration</i> due to the large-scale utilization of temporary contract labor during the construction phase; political instability and restrictions on workers ability to join independent unions, to strike, and to bargain collectively; and the risk of adverse impacts on workers related to security and occupational safety and health during both the construction and operational phases of the Project.</p> <p>Under <i>Special Consideration</i>, the Project will be required to demonstrate compliance with the OPIC labor requirements set forth in the loan agreement including: 1) labor-specific compliance site monitoring by a third-party during the construction period; and 2) labor-specific compliance reporting, at least annually, that summarizes general working conditions including non-compliance issues, grievances, and actions taken to improve the worker-management relationship. A site visit was conducted May 16-20, 2015.</p> <p>OPIC’s statutorily required standard worker rights language will be supplemented with provisions concerning the rights of association, organization and collective bargaining, minimum age for employment, hours of work, the timely payment of wages and hazardous work situations. Standard and supplemental contract language will be applied to all workers of the Project. The Project will be required to operate in a manner consistent with the International Finance Corporation’s Performance Standard 2 on Labor and Working Conditions; to fully align its human resource policies and those of its EPC contractors with the requirements of the Performance Standards; to develop a grievance mechanism accessible to all workers of the Project, including contractors and subcontractors; to develop an internal labor monitoring and compliance system for contractor and subcontractor oversight; and to develop a recruitment and training program to maximize local labor at the Project.</p> <p>During construction, the Project expects to employ up to 25,000 workers. The vast majority of the Project workers will comprise Egyptian construction labor; a significant portion will come from the nearby city of Suez. Once operational, the</p>

	<p>Project expects to employ in excess of 900 employees; at least 90% of the labor will be Egyptian.</p> <p>The Project will also be required to conduct a Security Risk Assessment and to develop and implement a Security Management Plan in accordance with the IFC Performance Standard 4 (Community, Health and Safety), the International Code of Conduct for Private Security Providers, ANSI/ASIS PSC 1 and the Voluntary Principles on Security and Human Rights.</p>
Human Rights:	<p>The human rights clearance for this Project is pending consultation with the Department of State.</p>