

**References List (2003 onwards)**  
*Phosphoric Acid, Phosphate Fertilizers and  
Derivatives Industry*

<u>CLIENT/PROJECT</u>	<u>COUNTRY</u>	<u>SCOPE OF SERVICES</u>	<u>CONTRACT AWARD</u>
<b>Verdant Minerals</b> New phosphoric acid plant - DH process (1600 TPD P <sub>2</sub> O <sub>5</sub> )	Australia	Definitive feasibility study	<b>2021</b>
<b>Industries Chimiques du Sénégal</b> Third P <sub>2</sub> O <sub>5</sub> concentration unit (500 TPD P <sub>2</sub> O <sub>5</sub> )	Senegal	Basic and detail engineering, procurement services, site supervision and commissioning	<b>2021</b>
<b>Eurochem</b> Audit of Sulphuric acid, Phosphoric acid and Fertilizer complex (MAP)	Confidential	Technical audit	<b>2021</b>
<b>Prayon</b> New plant for Sodium Hexametaphosphate (SHMP) Production	Belgium	FEL3 Study – Basic Engineering	<b>2021</b>
<b>Bagfas</b> Existing NPK granulation plant	Turkey	Technical audit	<b>2021</b>
<b>Paradeep – PPL</b> Ammonium sulfate production from phosphogypsum	India	Feasibility study	<b>2020</b>
<b>OCP – Safi</b> Phosphoric acid concentration revamping	Morocco	Basic and Detail Engineering	<b>2019</b>
<b>Prayon – OCP Safi</b> OCP-P Process	Morocco	Audit and pre-feasibility study	<b>2019</b>
<b>Prayon – Arianne Phosphate</b> Phosphoric acid plant	Canada	Audit and pre-feasibility study	<b>2019</b>
<b>Yara - Salitre</b> Phosphoric acid plant	Brazil	Review of process design package	<b>2018</b>
<b>Prayon - OCP</b> Purified phosphoric acid plant	Morocco	Conceptual study with CAPEX estimate	<b>2018</b>

<b>Prayon – Manaseer</b> New phosphoric acid plant	Jordan	Engineering services	<b>2018</b>
<b>Acron - Dorogobuzh</b> Fertilizer complex including a sulfuric acid plant, a phosphoric acid plant and NPK granulation	Russia	FEED	<b>2017</b>
<b>Prayon - OCP – Jorf Lasfar</b> Phosphoric acid desulfatation unit	Morocco	Technical audit	<b>2017</b>
<b>Ma’aden MPC</b> Phosphoric acid plant filters revamping	Saudi Arabia	Detail engineering	<b>2016</b>
<b>Prayon - OCP - Laayoune</b> Phosphoric acid plant	Morocco	Conceptual study	<b>2016</b>
<b>Prayon - OCP – Safi – Phosphate Hub</b> Phosphoric acid plant – CPP / OCP-P process	Morocco	CAPEX / OPEX Estimate	<b>2016</b>
<b>ZimPhos</b> Phosphoric acid plant	Zimbabwe	Audit	<b>2016</b>
<b>Prayon</b> CPP test for Wengfu Co. Ltd	China	Technical audit	<b>2015</b>
<b>Sojitz Corporation</b> Phosphoric acid and ammonium phosphate production plants for Turkmenhimiya Pilot test of Karatau phosphate	Turkmenistan	Pilot test	<b>2015</b>
<b>Confidential</b> New phosphoric acid plant	Brazil	Scoping study	<b>2015</b>
<b>Groupe Chimique Tunisien - GCT</b> Review of flue gas emissions and proposal of solutions	Tunisia	Technical assistance	<b>2015</b>
<b>Confidential</b> New MCP & DCP plant	Saudi Arabia	Feasibility study	<b>2015</b>

<b>Elandsfontein</b> Phosphoric acid production - New Greenfield PAP – Pilot test with beneficiation	South Africa	Feasibility study	<b>2015</b>
<b>Sunkar</b> DAP production complex including phosacid and sulfuric acid production	Kazakhstan	Update 2010 Detailed feasibility study	<b>2015</b>
<b>ICL - Rotem</b> Modification of a DH PAP plant to DA-HF process	Israel	Audit	<b>2014</b>
<b>Foskor</b> 4 <sup>th</sup> phosphoric acid concentrator	South Africa	Detailed engineering	<b>2014</b>
<b>Hanwha Engineering &amp; Construction</b> PA defluorination plant for Ma'aden	Saudi Arabia	FEED	<b>2014</b>
<b>Cengiz Holding</b> Balance of plant	Turkey	Basic & detailed design, engineering services	<b>2014</b>
<b>Cengiz Holding</b> Greenfield phosphoric acid plant	Turkey	Basic & detailed design, engineering services	<b>2014</b>
<b>Foskor</b> Location of new attack tank	South Africa	Technical audit	<b>2014</b>
<b>Hanwha Engineering &amp; Construction</b> Phosphoric acid plant for Ma'aden	Saudi Arabia	Engineering services	<b>2014</b>
<b>ICL Fertilizers Europe</b> NPK plant capacity increase	Netherlands	Feasibility study	<b>2013</b>
<b>OCP</b> Dedusting cyclones (TSP/DAP)	Morocco	Engineering, procurement, construction management	<b>2013</b>
<b>Indo Maroc Phosphore (IMACID)</b> Revamping to feed phosphate pulp to reaction	Morocco	Engineering, procurement, construction management	<b>2013</b>
<b>LLNP – Namibia Phosphates</b> Marine phosphate project	Namibia	Engineering, procurement, construction management	<b>2013</b>

<b>Ministère des Mines et de l'Energie</b> Carbonate phosphate	Togo	Technical assistance	<b>2013</b>
<b>Adventz Group/Zuari (Globex)</b> AS, DAP, MAP	U.A.E.	Pre-feasibility study	<b>2013</b>
<b>Ammophos</b> Phosphoric acid plant	Russia	Audit	<b>2012</b>
<b>Foskor</b> Phosphoric acid Asset replacement program	South Africa	Basic & detailed design, engineering services	<b>2012</b>
<b>OCP – Jorf Lasfar</b> Air treatment of phosphoric acid plant  Wet scrubbing package for reaction, digestion and filtration gases	Morocco	Engineering, procurement, and construction	<b>2012</b>
<b>Vinachem – Lao Cai</b> Phosphoric acid plant (DAP 2)	Vietnam	Basic engineering, proprietary equipment and technical assistance services	<b>2012</b>
<b>Bunge Maroc Phosphore</b> Revamping to feed phosphate pulp to reaction	Morocco	Basic engineering	<b>2012</b>
<b>Foskor</b> Phosphoric acid plant	South Africa	Technical audit	<b>2011</b>
<b>Metachim</b> Phosphoric acid	Russia	Technical audit	<b>2011</b>
<b>LLNP – Lev Leviev Namibia Phosphates</b> Marine phosphate project	Namibia	Engineering support services	<b>2011</b>
<b>Foskor</b> MAP-DAP revamping/increasing capacity	South Africa	Technical audit & feasibility study	<b>2011</b>
<b>OCP – Maroc - Phosphore</b> Modernisation and adaptation to phosphate slurry feeding of MP3 & MP4 (5400 MTPD P <sub>2</sub> O <sub>5</sub> )	Morocco	Engineering, procurement, construction management	<b>2010</b>

<b>IJC - Indo Jordan Company</b> Assistance to the operation capacity increase (900 MTPD)	Jordan	Assistance to the operation and feasibility of larger revamping works	<b>2010</b>
<b>Sunkar</b> DAP production complex including phosacid and sulfuric acid production	Kazakhstan	Detailed feasibility study	<b>2010</b>
<b>PVFCCo - Petrovietnam Fertilizer and Chemical Corporation</b> New P <sub>2</sub> O <sub>5</sub> production plant (1500 MTPD)	Vietnam	Detailed feasibility study	<b>2010</b>
<b>PVFCCo - Petrovietnam Fertilizer and Chemical Corporation</b> New DAP plant (3000 MTPD)	Vietnam	Detailed feasibility study	<b>2010</b>
<b>JIFCO</b> New P <sub>2</sub> O <sub>5</sub> production plant (1500 MTPD)	Jordan	Engineering, procurement, construction management	<b>2010</b>
<b>Eurochem (Belorechensk)</b> Phosphoric acid plant capacity increase	Russia	Technical audit	<b>2009</b>
<b>CAPGEMINI Consulting</b> Energetic needs of OCP till 2020	Morocco	Technical audit	<b>2009</b>
<b>Foskor</b> New P <sub>2</sub> O <sub>5</sub> concentration plant	South Africa	Basic and detailed engineering	<b>2009</b>
<b>JPMC</b> Revamping of phosphoric acid plant	Jordan	Technical audit	<b>2009</b>
<b>Fosfertil - Salitre</b> Phosphoric acid plants (2 x 900 MTPD P <sub>2</sub> O <sub>5</sub> )	Brazil	Basic engineering, detailed engineering supervision, supply of proprietary items	<b>2009</b>
<b>Ammophos</b> Revamping of Phosphoric acid plant	Russia	Supply of proprietary items	<b>2008</b>
<b>Gomel</b> Phosphoric acid plant capacity increase	Belarus	Technical audit	<b>2008</b>

<b>JPMC</b> DAP plant capacity increase	Jordan	Engineering, procurement, construction management	<b>2008</b>
<b>JPMC</b> Uranium recovery	Jordan	Conceptual study	<b>2008</b>
<b>Fosfertil - Uberaba</b> Phosphoric acid plant (900 MTPD P <sub>2</sub> O <sub>5</sub> )	Brazil	Basic and detailed engineering, supply of proprietary items	<b>2008</b>
<b>JPMC</b> DAP plant capacity increase	Jordan	Feasibility study	<b>2007</b>
<b>Tata</b> Phosphoric acid plant revamping into Central Prayon process	India	Basic engineering	<b>2007</b>
<b>Foskor</b> Phosphoric acid plant revamping New pre-condenser installation	South Africa	Basic and detailed engineering	<b>2007</b>
<b>Coromandel</b> Phosphoric acid plant capacity increase	India	Basic engineering	<b>2007</b>
<b>Sasol Nitro</b> Production of NPK	South Africa	Conceptual study	<b>2007</b>
<b>Phosagro / Ammophos</b> Production of NPK	Russia	Technical audit	<b>2006</b>
<b>Bagfas</b> Modernisation of existing NPK plant	Turkey	Technical audit	<b>2006</b>
<b>IEFC</b> New 1500 MTPD phosphoric acid and 4500 MTPD sulfuric acid plant	Egypt	Feasibility study	<b>2006</b>
<b>Agropolychim</b> Supply of a new phosphoric acid concentration and filtration unit (400 MTPD)	Bulgaria	Supply of equipment	<b>2006</b>

<b>CE-LIA – Haiphong</b> New phosphoric acid plant of 540 t/d. New concentration unit. DAP project	Vietnam	License, basic engineering, supervision of detail engineering and plant start-up, supply of proprietary equipment	<b>2005</b>
<b>IMACID</b> Capacity increase of the phosphoric acid production from 1200 MTPD to 1400 MTPD	Morocco	License, basic and detail engineering	<b>2005</b>
<b>OCP - Maroc Phosphore</b> New phosphoric acid production of 1200 MTPD	Morocco	License, basic and detail engineering	<b>2005</b>
<b>OCP Bunge</b> New fertilizer production unit	Morocco	Feasibility study	<b>2005</b>
<b>Ma'aden - Al Jalamid</b> New fertilizer complex including a 4500 MTPD phosphoric acid plant	Saudi Arabia	Feasibility study	<b>2005</b>
<b>Foskor – Richards Bay</b> 1100 and 1300 MTPD phosphoric acid units	South Africa	Technical audit and analysis	<b>2004</b>
<b>Hindalco</b> Transformation of a 600 t/d dihydrate phosphoric acid unit into a Central Prayon Process plant.	India	Technical audit and conceptual study	<b>2004</b>
<b>Arya - Mahshahr</b> New Phosphoric Acid unit and New concentration unit (400 MTPD P <sub>2</sub> O <sub>5</sub> )	Iran	License, basic engineering, supervision of detail engineering, plant start-up and testing. Supply of imported equipment, spare parts and instrumentation.	<b>2004</b>
<b>PFI</b> Extension of a phosphoric acid plant (350 MTPD P <sub>2</sub> O <sub>5</sub> )	Greece	License, basic and detailed engineering	<b>2004</b>
<b>Ma'aden/Saudi Oger</b> Grass roots complex including: phosphate mine, beneficiation unit, sulfuric acid unit,	Saudi Arabia	Feasibility and conceptual study for the phosphoric acid unit for a SNC-Lavalin/Jacobs	<b>2004</b>

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phosphoric acid unit and DAP unit		Consortium	
<b>Bagfas</b> Extension of a phosphoric acid plant (400 MTPD P <sub>2</sub> O <sub>5</sub> )	Turkey	Site visit, technical audit, reporting, conceptual and budget study	<b>2003</b>
<b>Profile / Groupe Chimique Tunisien</b> Revamping of a phosphoric acid plant in Gabes	Tunisia	Technical assistance for starting up a Profile tilting pan filter	<b>2003</b>
<b>IMACID</b> Expansion of the 1050 MTPD P <sub>2</sub> O <sub>5</sub> Prayon phosphoric acid plant	Morocco	Technical audit and feasibility study	<b>2003</b>
<b>BR Ifco</b> New sulfuric and phosphoric acid units using Togo phosphate rock	Togo	Feasibility and conceptual study	<b>2003</b>