



# News Release

TSX-V: IFOS

## ITAFOS COMPLETES UPDATED FEASIBILITY STUDY FOR THE FARIM PHOSPHATE PROJECT

**HOUSTON, TX – May 17, 2023** – Itafos Inc. (TSX-V: IFOS) ("Itafos" or the "Company") is pleased to announce the results of the updated Feasibility Study ("FS" or "feasibility study") for the Farim Phosphate Project (the "Farim Project"), a high-grade phosphate mine project located in Guinea-Bissau, West Africa.

### Farim Project 2023 FS Highlights:

- **After-tax net present value ("NPV") (10%) of \$572 million at a base case life-of-mine ("LOM") average rock price of US\$197.5 per tonne concentrate.**
- **After-tax internal rate of return ("IRR") of 34.9% and after-tax payback on pre-production capital expenditures of 4.2 years.**
- **High-grade, free-dig open-pit mine with an average run-of-mine ("ROM")  $P_2O_5$  grade (dry basis) of 30.0% and an overall ROM strip ratio of 10.09 bank cubic meters (bcm) per tonne of ROM phosphate matrix.**
- **LOM production of approximately 2.19 million tonnes per annum ("Mt/a") of ROM phosphate matrix on an as-received basis (at approximately 20% moisture) or 1.75 Mt/a ROM phosphate matrix on a dry basis.**
- **The process plant is designed to achieve an annual throughput of 1.75 Mt/a. The material from the south and north pits are expected to produce 1.36 Mt/a and 1.30 Mt/a of dried concentrate product annually, respectively.**
- **Estimated pre-production capital expenditures ("CAPEX") of \$308 million, yielding after-tax NPV:CAPEX ratio of 1.9:1**
- **LOM all-in Operating Cost of \$70.9/tonne rock concentrate loaded Free on Board ("FOB") basis.**
- **Proven and Probable Mineral Reserves of 43.8 million tonnes at 30.0%  $P_2O_5$ .**

David Delaney, the Company's CEO commented, "The updated feasibility study confirms that the Farim Project has robust economics and demonstrates that the Farim Project has the potential to be an important phosphate producing asset. Additional new phosphate capacity and capital investment are required to meet projected phosphate global demand growth over the medium- to long-term, which bodes well for the Farim Project, as we believe it is one of the highest-grade undeveloped deposits in the world."

### Farim Project Feasibility Study

A technical report, entitled "Farim Phosphate Project – NI 43-101 Technical Report and Feasibility Study," (the "Farim Technical Report"), was prepared for the Company by Ausenco Engineering Canada Inc. ("Ausenco") in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101"). The Report was prepared to summarize the results of the Feasibility Study and consolidate all project de-risk work conducted between 2015 and 2022. Ausenco was supported by KEMWorks Technology, Inc., WSP/Golder, Knight Piésold Consulting, WF Baird and Kristal Font Inc.

### Data Verification

The Mineral Resource Qualified Person ("QP"), Jerry DeWolfe, P.Geo. considers sample preparation, analytical, and security protocols employed by the Farim Project to be acceptable. The QP has reviewed the QA/QC procedures used by the Company including the use of certified reference materials, blank, duplicate, and umpire data, and considers the assay database to be adequate for Mineral Resource estimation. The QP also carried out data verification both on site and on the database. This included a review of the assay database and collar locations. The QP considers the assay database to be acceptable for Mineral Resource estimation. In addition, there are no identified significant factors or concerns regarding the accuracy and reliability of the results from the exploration programs in the Project area.

### Farim Project Mineral Resource Estimate

The Farim Project's current Mineral Resource estimate, as shown in Table 1, was completed by WSP/Golder and has an effective date of September 30, 2022. The QP is not aware of any material changes between the September 30, 2022, effective date of the Mineral Resource estimate and the May 17, 2023 publication date of this News Release that would affect the resource model or Mineral Resource estimate. The Mineral Resource estimate forms the basis for the FS and are reported inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability at this time.

### Farim Project Mineral Reserve Estimation

The assessment of mineable phosphate matrix reserves within the project area was based on the 25-year mine plan and corresponding open pit design. The pit design was developed based on a pit optimization exercise that delineated the most economical 43.75 Mt of ROM material to feed a 25-year plan at a rate of 1.75 Mt/a on a dry basis. The Mineral Reserve Estimate is shown in Table 2 and concerns

the decarbonized phosphate unit (“FPA”) only, as the calcareous phosphate member (“FPB”) was previously deemed to be uneconomic. No additional mineralization outside the modelled deposit was considered in the Mineral Resource and Reserve estimates. The Mineral Reserve estimate has an effective date of September 30, 2022. The QP is not aware of any material changes between the September 30, 2022, effective date of the Mineral Reserve estimate and the May 17, 2023 publication date of this News Release that would affect the Mineral Reserve estimate.

As per the Mineral Resource estimation methodology, a 20% P<sub>2</sub>O<sub>5</sub> technical cut-off grade was applied to target the in-situ Mineral Resource grade requirements that would subsequently meet the plant feed and product grade requirements. This technical cut-off grade did not change in the Mineral Reserve estimation.

*Table 1: Global Mineral Resource Statement, Farim Phosphate Deposit, September 30, 2022.*

Class	Block	Tonnage, Dry Basis (Mt)	FPA (m)	P <sub>2</sub> O <sub>5</sub> , Dry Basis (%)	Al <sub>2</sub> O <sub>3</sub> , Dry Basis (%)	CaO, Dry Basis (%)	Fe <sub>2</sub> O <sub>3</sub> , Dry Basis (%)	SiO <sub>2</sub> , Dry Basis (%)	Overburden (Mbcm)	Stripping Ratio (bcm/t)
Measured	North of River	102.5	2.91	28.53	2.69	39.71	5.65	11.28	1,162.30	11.34
	South of River	-	-	-	-	-	-	-	-	-
	<b>Subtotal</b>	<b>102.5</b>	<b>2.91</b>	<b>28.53</b>	<b>2.69</b>	<b>39.71</b>	<b>5.65</b>	<b>11.28</b>	<b>1,162.30</b>	<b>11.34</b>
Indicated	North of River	-	-	-	-	-	-	-	-	-
	South of River	-	-	-	-	-	-	-	-	-
	<b>Subtotal</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Measured + Indicated	North of River	102.5	2.91	28.53	2.69	39.71	5.65	11.28	1,162.30	11.34
	South of River	-	-	-	-	-	-	-	-	-
	<b>Subtotal</b>	<b>102.5</b>	<b>2.91</b>	<b>28.53</b>	<b>2.69</b>	<b>39.71</b>	<b>5.65</b>	<b>11.28</b>	<b>1,162.30</b>	<b>11.34</b>
Inferred	North of River	6.8	2.30	25.17	2.99	39.08	4.86	10.46	119.62	17.63
	South of River	24.4	2.21	29.06	5.32	36.21	4.97	11.62	236.18	9.70
	<b>Subtotal</b>	<b>31.1</b>	<b>2.23</b>	<b>28.08</b>	<b>4.73</b>	<b>36.94</b>	<b>4.94</b>	<b>11.32</b>	<b>355.80</b>	<b>11.42</b>

**Notes:** 1. Mineral resources are reported on a dry in-situ basis and are inclusive of Mineral Reserves. 2. The statement of estimates of Mineral Resources has been compiled by Mr. Jerry DeWolfe, who is a full-time employee of WSP Canada Inc. (formerly WSP Golder) and a professional geologist (P.Geol.) with the Association of Professional Engineers and Geoscientists of Alberta (APEGA). Mr. DeWolfe has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity that he has undertaken to qualify as a Qualified Person (“QP”) as defined in NI 43-101. 3. All Mineral Resources figures reported in the table above represent estimates at September 30, 2022. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies. 4. Mineral Resources are reported in accordance with NI 43-101 and CIM Definition Standards for Mineral Resource and Mineral Reserves (2014) and CIM Estimation of Mineral Resource and Mineral Reserve Best Practices (2019). 5. The reported Mineral Resource estimate was constrained by a conceptual Mineral Resource optimized pit shell for the purpose of establishing reasonable prospects of economic extraction based on potential mining, metallurgical and processing grade parameters identified by mining, metallurgical and processing studies performed to date on the project. Key inputs in developing the Mineral Resource pit shell included a mining cost of US\$1.69/tonne for mineralization and US\$1.41/tonne for waste, plus processing costs of US\$31.72/ ROM tonne, phosphate recovery of 76%, pit slope angle of 20°, and a concentrate selling price of US\$147/tonne. In addition, a minimum FPA P<sub>2</sub>O<sub>5</sub> grade of 20%, a minimum FPA thickness of 1 m as well as a restriction on any FPA within 50 m of River Cacheu was applied.

*Table 2: Proven and Probable Reserves*

Category	ROM (Plant Feed) FPA Tonnes, Dry Basis (Mt)	Mean ROM P <sub>2</sub> O <sub>5</sub> , Dry Basis (%)	Mean ROM Al <sub>2</sub> O <sub>3</sub> , Dry Basis (%)	Mean ROM CaO, Dry Basis (%)	Mean ROM Fe <sub>2</sub> O <sub>3</sub> , Dry Basis (%)	Mean ROM SiO <sub>2</sub> , Dry Basis (%)
Proven	43.8	30.0	2.6	41.1	4.8	10.6
Probable	-	-	-	-	-	-
<b>Total</b>	<b>43.8</b>	<b>30.0</b>	<b>2.6</b>	<b>41.1</b>	<b>4.8</b>	<b>10.6</b>

**Notes:** 1. Mineral Reserves are reported on a dry in-situ basis. 2. The statement of estimates of Mineral Reserves has been compiled by Mr. Terry Kremmel, who is a full-time employee of WSP USA Inc. (formerly WSP Golder) and a professional engineer (P.E.) and registered member with the Society for Mining, Metallurgy, and Exploration. Mr. Kremmel has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity that he has undertaken to qualify as a QP as defined in NI 43-101. 3. All Mineral Reserve figures reported in the table above represent estimates at September 30, 2022. Mineral Reserve estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies. 4. Mineral Reserves are reported in accordance with NI 43-101. 5. The reported Mineral Reserve estimate was constrained by the River Cacheu, the Rio de Bunja, and surface encumbrances including the two ex-pit waste dumps, tailings storage facility, and processing plant.

## Mining Methods

The FPA matrix is mined by a free-dig, multiple-bench, open-pit, haul-back mine using excavators and trucks. Mining will be accomplished using conventional loader, excavator and truck materials handling with an average strip ratio of 10 bcm/t of ROM phosphate matrix. Overburden excavation will advance ahead of the matrix extraction in maximum 10 m height production benches. The overburden thickness ranges from 26 to 68 m within the 25-year pit, multiple overburden stripping benches will be developed and maintained in advance of the matrix extraction. The matrix thickness ranges between 1.5 m and 6.25 m within the 25-year pit.

The most critical design element of the proposed mining plan is water management. All mining areas must be dewatered in advance of mining activities to allow sufficient depressurization and dissipation of pore water pressure and to accommodate dry mining of the deposit. Dewatering pump test data indicates that dry open-pit mining will be feasible. The proximity of the mine site to the River Cacheu will require the construction of a protective water control berm (bund) to prevent in-pit flooding. In addition to advanced dewatering, in-pit water management is critical and has been accounted for in the feasibility study.

## Metallurgy and Processing

At the process plant, the objective is to remove impurities to achieve the required minor element ratio and phosphate grade in the concentrate. Impurity removal is achieved by concentrating the -20 µm to +1,180 µm particle size fraction of the ROM ore and rejecting the remainder. ROM ore is processed through drum and attrition scrubbing stages, and classified by cyclones, vibrating screens, and hydro separators. The -20 µm size fraction is thickened and pumped to the TSF. The +1,180 µm material is rejected and trucked to a waste stockpile. The resulting fine concentrate stream is thickened and filtered in a vertical plate and frame filter press. The coarse concentrate stream does not require thickening and is sent directly to two vertical plate-and-frame filter presses operating in parallel. The concentrate filter cakes are combined and conveyed to a covered filtered concentrate stockpile at the truck load-out area. The filtered concentrate is then reclaimed and trucked to the Mineral Terminal.

The process objective at the Mineral Terminal site is to dry the concentrate to a moisture content suitable for transport after which it is loaded on to ships. Filtered concentrate is received at the Mineral Terminal site in a covered stockpile building. The material is then reclaimed and dried in a diesel fired rotary dryer. Dry concentrate is then stockpiled in a covered building, prior to reclamation and ship loading.

The process plant is designed to achieve an annual throughput of 1.75 Mt/a. The material from the south and north pits are expected to produce 1.36 Mt/a and 1.30 Mt/a of concentrate annually, respectively. The process developed for the beneficiation of Farim phosphate ore is robust, continuous, and reliable, rendering reproducible metallurgical results. The flowsheet is based upon unit operations that are proven in industry. Continuous pilot plant tests indicate most likely results of yield (mass recovery) of 77.5%, P<sub>2</sub>O<sub>5</sub> recovery of 81.8%, and likely P<sub>2</sub>O<sub>5</sub> grade of 33.6% for the South pit. The phosphate rock produced is a high-grade, high-quality product that will attract a premium price.

## Project Infrastructure

Local mining infrastructure is limited and must be upgraded, or in some cases, designed and built as part of the initial construction plan. Although the government of Guinea-Bissau is advancing infrastructure improvements across the country, this study assumes the following key infrastructure works:

- Hybrid power plants (solar and diesel generator) are located at Ponta Chugue and north-east of the Farim process plant.
- Truck loading facility on the south side of River Cacheu. Concentrate will be transported from the plant (north side of the River), via a conveyor over the River Cacheu. These facilities are all within the mining lease.
- Upgraded access road from Ponta Chugue to Mansoa (remainder of road to the truck loading site is approved and acceptable for truck haulage and access).
- Mineral Terminal at Ponta Chugue to load and ship the dried concentrate. Ponta Chugue will also be used to accept diesel fuel into holding tanks for delivery to Farim. The channel design has been assessed against PIANC channel design guidelines and with desktop and real-time navigation simulations. The channel alignment, including through the Bernafel section, is suitable for the water depths, design depths and prevailing currents. The navigation fairway surrounding the Ponta Chugue Marine Terminal is suitable and provides a generous maneuvering area for inbound and departing vessels.
- Tailings storage facility ("TSF") adjacent to the beneficiation plant to store fines generated from the process facility. This TSF will be developed in stages as individual cells over the life of mine.
- Waste overburden storage piles for permanent storage of overburden. A cell within one of the waste storage piles will be designed to store potentially acid generating ("PAG") material based on the mining sequence and expected PAG volumes.
- Temporary topsoil storage piles sufficient to manage development of waste piles, roads, TSF cell construction, and for use in closure plans.
- Water management system including supply wells, dewatering wells, water diversion channels, flood prevention berms, and settlement ponds. The site will continuously discharge water throughout the operation.
- Camp facilities already built will be supported by local contractors and be secure.

All associated infrastructure costs are captured in the construction and operating plans. All future infrastructure development by the Government of Guinea-Bissau is considered as opportunities to enhance the Farim Project.

## Capital Cost Estimate

Table 3 provides a summary of the project capital cost estimate, with costs grouped into major scope areas, expressed in Q4 2022 US dollars. The estimate conforms to Class 3 guidelines for a feasibility study level estimate with a  $\pm 15\%$  accuracy according to the Association of the Advancement of Cost Engineering International (AACE International). Major cost categories (permanent equipment, material purchase, installation, subcontracts, indirect costs, and Owner's costs) were identified and analyzed. A percentage of contingency was allocated to each of these categories on a line-item basis based on the accuracy of the data. An overall weighted contingency amount was derived in this fashion.

*Table 3: Project Capital Cost Estimate*

Description	Initial Capital (US\$M)	Sustaining Capital (US\$M)	Total Capital (US\$M)
Mining	32.243	265.348	297.591
Process Plant and Infrastructure	68.934	-	68.934
Ponte Chugue Infrastructure (Mineral Terminal & Drying)	99.728	12.050	111.778
Tailings Storage Facility & Water Management	14.049	57.722	71.771
South Pit Dewatering	4.420	12.737	17.157
North Pit Dewatering	-	20.995	20.995
Resettlement and Livelihood Restitution	11.985	5.635	17.620
EPCM	27.452	-	27.452
Indirects	6.057	-	6.057
Owners' Cost	11.637	-	11.637
Contingency	31.765	-	31.765
Progressive Closure and Rehabilitation (TSF)	-	58.817	58.817
Progressive Closure and Rehabilitation (Pits & WDs)		21.169	21.169
Total Site Closure		33.997	33.997
Salvage Value – Mine		-12.893	-12.893
Salvage Value – Port	-	-8.433	-8.433
<b>Total</b>	<b>308.270</b>	<b>467.142</b>	<b>775.413</b>

## Operating Cost Estimate

The operating cost estimate includes mining, processing, ship loading, environmental, fuel, and general and administration (G&A) costs. A summary of the average annual operating costs is presented in Table 4. The estimate conforms to Class 3 guidelines for a feasibility study level estimate with a  $\pm 15\%$  accuracy according to the Association of the Advancement of Cost Engineering International (AACE International). The capital and operating cost estimates were reviewed by the respective QP's. See section titled "Technical Report and Qualified Persons" below for further details.

*Table 4: Operating Cost Estimate Summary - Average Costs per pit*

Description	Life-of-Mine Operating Cost			South Pit			North Pit		
	US\$M	US\$/t Feed	US\$/t Conc.	US\$M/a	US\$/t Feed	US\$/t Conc.	US\$M/a	US\$/t Feed	US\$/t Conc.
Mining	661.4	15.1	20.1	31.3	17.9	23.1	24.6	14.0	18.9
Process	343.0	7.8	10.4	13.9	7.9	10.3	13.6	7.8	10.5
Ship loading	111.3	2.5	3.4	4.5	2.5	3.3	4.5	2.5	3.4
Tailings, Environment, Water	15.7	0.4	0.5	0.6	0.4	0.5	0.6	0.4	0.5
G&A	186.8	4.3	5.7	7.5	4.3	5.5	7.5	4.3	5.7

Fuel	952.3	21.8	28.9	35.4	20.2	26.1	39.1	22.4	30.1
<b>Total</b>	<b>2,270.5</b>	<b>51.9</b>	<b>69.0</b>	<b>93.2</b>	<b>53.2</b>	<b>68.7</b>	<b>89.9</b>	<b>51.4</b>	<b>69.1</b>

Note: Fuel is itemized separately and is not included in mining, processing, ship loading or G&A costs.

## Economic Analysis

The results of the economic analyses in this report represent forward-looking information as defined under Canadian securities law. The results are subject to several known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those presented here. See the section titled "Forward-Looking Information" below for further details. Salient financial data of the Farim Project is shown in Table 5.

*Table 5: Financial Data (US\$, Millions)*

Description	Life-of-Mine (US\$M)
Revenue	6,497.2
Total Preproduction Capital	308.3
Total All-in LOM Operating Costs (see below)	2,332.1
Total Sustaining Capital (including Progressive Closure and Final Closure Costs – See Below)	467.1
Operating Margin Ratio (Operating Revenue / Operating Cost)	2.8
Royalties	129.9
Income Taxes	714.8
Pre-Tax Cumulative Cash Flow	3,259.8
After-Tax Cumulative Cash Flow	2,545.0
<b>Detail of Expenditures</b>	
Total Operating Costs	2,270.5
Total Other Costs (Corporate Overhead)	61.7
Total All-in LOM Operating Costs	2,332.1
Sustaining Capital Cost	374.5
Sustaining Capital Cost – Progressive Closure	80.0
Closure Capital Cost	12.7
Total Sustaining Capital (including Progressive Closure and Final Closure Costs)	467.1

A sensitivity analysis was conducted on the post-tax NPV, IRR and payback period of the project using the following variables: revenue (P<sub>2</sub>O<sub>5</sub> rock price), operating cost, total capital cost, and fuel. The analysis revealed that the project is most sensitive to changes in P<sub>2</sub>O<sub>5</sub> rock price. The after-tax NPV, IRR and Payback sensitivities to rock price is shown in Table 6.

*Table 6: After-Tax NPV, IRR and Payback Sensitivities to Rock Price assumptions*

	Units	Change in Rock Price				
		-20%	-10%	Base case	+10%	+20%
Average Rock Price	US\$/t	\$158.0	\$177.7	<b>\$197.5</b>	\$217.2	\$237.0
Net Present Value						
Discounted at 5%	US\$M	\$643	\$896	<b>\$1,149</b>	\$1,402	\$1,655
Discounted at 8%	US\$M	\$391	\$570	<b>\$749</b>	\$929	\$1,108
Discounted at 10%	US\$M	\$280	\$426	<b>\$572</b>	\$718	\$864
Discounted at 15%	US\$M	\$114	\$207	<b>\$301</b>	\$394	\$488
Internal Rate of Return	%	22.6%	28.9%	<b>34.9%</b>	40.5%	46.0%
Payback Period	years	5.4	4.7	<b>4.2</b>	3.9	3.6
After tax NPV <sub>10</sub> /Initial Capex	ratio	0.9	1.4	<b>1.9</b>	2.3	2.8
Undiscounted cumulative net cashflow	US\$M	\$1,535	\$2,040	<b>\$2,545</b>	\$3,050	\$3,555

## Environmental and Permitting Considerations

The Farim Phosphate Project lies within Mining Lease License No. 004/2009 ("Mining Lease 004/2009"), covering 30,625 hectares ("ha"), granted by the Government of Guinea-Bissau on May 28, 2009 to GB Minerals AG ("GBMAG"). GBMAG is registered in Switzerland and is a wholly owned subsidiary of Itafos Farim Holdings, which is registered in the Cayman Islands. Itafos Farim Holdings is 100% owned by Itafos Guinea-Bissau Holdings, also registered in the Cayman Islands. Itafos Guinea-Bissau Holdings is 100% owned by Itafos Inc., a corporation headquartered in Delaware.

A Mining Agreement was negotiated and signed between the Ministry of Energy and Natural Resources and GBMAG on May 1, 2009. The Mining Agreement allowed for the subsequent issuance of the following:

- Mining Lease 004/2009 was granted by the Government of Guinea-Bissau to GBMAG for the exploration and extraction of mining substances within the License Area with the objective of commercializing them. The exclusive right of GBMAG to perform mining operations within the license area is subject to the payment of an annual license fee to the Government of Guinea-Bissau and to reporting requirements.
- In addition to Mining Lease 004/2009, GB Minerals AG was granted on May 28, 2009, a mining license, Mining License No. 001/2009 ("Mining License 001/2009"), for a period of 25 years, giving it the exclusive right to; (i) execute its mining operations within the License Area; (ii) erect the equipment, installations and buildings necessary for the extraction, transportation and treatment of minerals; (iii) commercialize the minerals, inside or outside the national territory; (iv) undertake prospecting activities; and (v) store or discharge any mining product or waste.
- Since the initial mining license term of 25 years is from 2009, Itafos is in the process of filing a request with the Minister of Natural Resources of Guinea-Bissau for a 25-year mining license term extension which effectively provides a 25-year term from the issue of the request. A mining license and a mining lease may be renewed repeatedly by the holder according to the 2000 Mining Law.

GBMAG is in good standing on both the mining lease and mining license.

Comprehensive environmental and social baseline studies were conducted for the project from 2011 through 2015, supporting an ESIA published by Knight Piésold in September 2015. The 2015 ESIA for the project, as well as a subsequent ESIA for the Buredanfa Resettlement Village, were approved by the Government of Guinea-Bissau, according to a Declaração de Conformidade Ambiental (Declaration of Environmental Compliance) issued to Itafos on September 14, 2018.

Additional baseline studies were conducted from 2016 to 2019 in the areas of meteorology, air quality, noise, groundwater resources, and groundwater and surface water quality to establish an additional and contemporary pre-development baseline record that can be used for comparison in future monitoring programs.

## Closure and Reclamation Considerations

A preliminary Mine Reclamation and Closure Plan (MRCP) and closure cost estimate has been prepared that meets the requirements under Guinea-Bissau's Mining and Minerals Law 1/2000. The MRCP adopts the International Finance Corporation's closure objectives in terms of protecting future public health and safety; ensuring the after-use of the site is beneficial, sustainable, and appropriate for the affected communities in the long-term; minimizing adverse socioeconomic impacts; and maximizing benefits.

The MRCP contemplates the progressive rehabilitation of several facilities at the mine, including the TSF, overburden waste dumps and the north and south open pits. The south pit and most of the north pit will be backfilled with waste overburden as part of operations.

At the Ponte Chugue Mineral Terminal, buildings, machinery and equipment will be decommissioned and removed from the site. Remediation will be undertaken, as required, so that the Mineral Terminal site will be compatible with future commercial or industrial land use.

Post-closure monitoring and maintenance will take place for a period of at least 15 years to verify that the site has been returned to a physically and chemically stable state that is compatible with and capable of sustaining the agreed-upon final land uses. Furthermore, the MRCP commits to developing post-closure social management plans to address potential adverse socioeconomic impacts of closure as part of the Company's Community Development Plan.

## Social and Community Considerations

Key social impacts that require management include:

- Community health, safety, and security – The project will interrupt the current flow of mostly pedestrian and bicycle traffic between the regional service center of Farim to villages and the west and north of the mine. In addition, the presence of the mine and project traffic to and from the mine will present safety hazards. Traffic safety and other community health and safety risks will extend along the transport route to the Mineral Terminal site.
- Risk of influx and associated impacts – The presence of the mine may result in an influx of people into the region, which will require management in conjunction with the regional and national governments. The effects can be far-reaching in terms of social unrest, overloading of available public services and infrastructure, and causing increased pressures on ecological

resources. A Community Health, Safety and Security Management Plan identifies these issues and proposes preliminary mitigation measures that can be discussed with the appropriate authorities.

- Involuntary resettlement – The project will require the acquisition of approximately 3,000 ha of land resulting in the physical and/or economic displacement of an estimated 175 households in villages in the mine area. Candidate host sites were identified, and a preferred site was selected at Buredanfa, immediately northwest of the mine. A livelihoods baseline and restoration strategy and resettlement action plan (“RAP”) was also prepared in 2017. Because time has passed since this work was completed, the communities that require resettlement may have grown, and it will be necessary to conduct another land and asset survey to update the RAP.
- Livelihood restoration – Other mine project components, such as the truck loadout facility, highway bypass around the town of Mansoa, and Mineral Terminal facility and associated access road, will be positioned on lands held by others. Compensation is planned as part of securing land tenure for these areas, although no household resettlement is required.
- Cultural Heritage – Development of the project will result in direct and unavoidable physical impacts on the following cultural heritage resources:
  - three cemeteries (one of high and two of low sensitivity);
  - two mosques (both of high sensitivity);
  - three sacred sites (one of high and two of low sensitivity); and
  - six archaeological sites (two of medium and four of low sensitivity).

### **Risks and Opportunities**

Project risks have been outlined in the feasibility study along with mitigation plans to de-risk the project. Costs have been estimated to a level of accuracy suitable for a feasibility study. Overall economic risks include financing, price escalation, inflation, commodity sales price variability, and general global economic conditions. General technical risks include project construction timeline, dewatering and water management, mining productivity, achieving optimum P<sub>2</sub>O<sub>5</sub> grade and recovery, and waste management.

Geopolitical risk of operating in a relatively underdeveloped region must be managed through ongoing local engagement and responsible social practices.

Opportunities exist to de-risk the project or improve economics which will be investigated further during the detailed design stage. This includes connecting to the planned Guinea-Bissau electrical grid and the option to trans-ship dried concentrate using barges to offshore ships.

### **Recommendations**

The financial analysis of the feasibility study demonstrates that the Farim Project has robust economics, and it is recommended to continue developing the project through detailed engineering and de-risking, to support a construction decision. Analysis of the results of the feasibility study suggests numerous recommendations for further investigations to mitigate risks and/or improve the base case designs. Costs associated with future recommendations are included within the detailed design initial capital costs or operating costs.

Recommended work for the next phase, based on the feasibility study, include:

- Confirm that the dry density values used are representative for future resource and reserve estimations. Additional density measurements should be taken to verify these values.
- A lack of geotechnical samples in the vicinity of the East highwall of the South pit (“Area 4”) has prevented a thorough evaluation of the liquefaction susceptibility in this Area. Samples in Area 4 should be collected and screened prior to excavation to evaluate the soil’s liquefaction susceptibility.
- An important component of the slope development will be to monitor the degree of pore pressure reduction that has been achieved in the bench face that is being excavated. This can be achieved by installation of piezometers or pushed probes with pressure transducers into critical areas along the pit slopes. Supplemental pumping wells or horizontal drains will be needed where isolated pressurized zones are encountered. Further studies should be done to advise the precise locations of these piezometers for optimized performance.
- Conduct continuous phosphoric acid plant tests to assess likely performance in an industrial plant. Results from this test work will be used in product off-take negotiations and is independent of the investment decision.
- Further evaluate tailings thickening and dewatering to maximize achievable underflow density and optimize thickener sizing.
- Complete additional tailings characterization and settling test work to improve Tailings Storage Facility design, including tailings settled dry density and tailings entrainment among other design parameters.
- Additional closer spaced drilling and testing of boreholes to determine the depth to bedrock, continuity of clay and sandstone lenses with installation of more vibrating wire piezometers (VWP) to monitor pressure heads in different units, particularly in the vicinity of the pit walls closest to planned infrastructure (Tailings Storage Facility, overburden dumps).
- Update the transshipping trade-off study to evaluate barge loading to offshore ships. This includes updating the costs from the previously performed work, re-evaluating barge, vessel requirements and throughput, updating the social impacts, and overall project benefits.
- The Resettlement Action Plan should be updated following completion of an updated land and asset survey.
- The Biodiversity Management Plan should be updated based on updated biodiversity surveys.
- The project should seek the renewal of the Declaration of Environmental Compliance from the Competent Environmental Assessment Authority.

Each recommendation is independent and is not contingent on the other recommendations.



## Farim Technical Report and Qualified Persons

The Farim Technical Report, prepared in accordance with NI 43-101, will be filed on SEDAR ([www.sedar.com](http://www.sedar.com)) within 45 days. Readers are encouraged to read the Farim Technical Report in its entirety once it is available, including all qualifications, assumptions and exclusions that relate to the feasibility study. The Farim Technical Report is intended to be read as a whole, and sections should not be read, or relied upon, out of context.

Scientific and technical information contained in this news release was reviewed and verified by:

- Tommaso Roberto Raponi, P. Eng, Ausenco Engineering Canada Inc., Processing, infrastructure, hybrid power plans and truck loadout facility
- Dr. Francisco J. Sotillo, P.E., KEMWorks Technology Inc., Metallurgy
- Jerry DeWolfe, P.Geo, WSP Canada Inc. (formerly WSP Golder), Geology and Mineral Resource
- Terry L. Kremmel, P.E. WSP USA Inc. (formerly WSP Golder), Mineral Reserve and mining methods
- Alex Duggan, P.Eng, Kristal Font, Economic Analysis and review of capital and operating cost estimates
- Ed Liegel, P.E., Baird, Mineral Terminal
- Richard Michael Elmer, C.Eng. MIMMM MCSM, Knight Piésold Ltd., Geotechnical and all other infrastructure but excluding the hybrid power plants, truck loadout facility and the Mineral Terminal
- Richard Cook, P.Geo, Knight Piésold Ltd, Environmental and permitting, closure and reclamation plans, and social and community considerations.

Each of these persons is a "Qualified Person" as defined by NI 43-101 for this Project and have the ability and authority to verify the authenticity and validity of the data and is independent from the Company. Each of these QP's has reviewed and verified the respective scientific and technical disclosure contained in this news release.

Further information about the Farim Project, including a description of the key assumptions, parameters, description of sampling methods, data verification and QA/QC programs, methods relating to resources and reserves and factors that may affect those estimates will be contained in the Farim Technical Report.

## About Itafos

The Company is a phosphate and specialty fertilizer company. The Company's businesses and projects are as follows:

- Conda – a vertically integrated phosphate fertilizer business located in Idaho, US with production capacity as follows:
  - approximately 550 kt per year of monoammonium phosphate ("MAP"), MAP with micronutrients ("MAP+"), superphosphoric acid ("SPA"), merchant grade phosphoric acid ("MGA") and ammonium polyphosphate ("APP"); and
  - approximately 27 kt per year of hydrofluorosilicic acid ("HFSA");
- Arraias – a vertically integrated phosphate fertilizer business located in Tocantins, Brazil with production capacity as follows:
  - approximately 500 kt per year of single superphosphate ("SSP") and SSP with micronutrients ("SSP+"); and
  - approximately 40 kt per year of excess sulfuric acid (220 kt per year gross sulfuric acid production capacity);
- Farim – a high-grade phosphate mine project located in Farim, Guinea-Bissau;
- Santana – a vertically integrated high-grade phosphate mine and fertilizer plant project located in Pará, Brazil; and
- Araxá – a vertically integrated rare earth elements and niobium mine and extraction plant project located in Minas Gerais, Brazil.

In addition to the businesses and projects described above, the Company also owns Mantaro (Junin, Peru), a phosphate mine project that is in the process of being wound down.

The Company is a Delaware corporation that is headquartered in Houston, TX. The Company's shares trade on the TSX Venture Exchange ("TSX-V") under the ticker symbol "IFOS". The Company's principal shareholder is CL Fertilizers Holding LLC ("CLF"). CLF is an affiliate of Castlelake, L.P., a global private investment firm.

For more information, or to join the Company's mailing list to receive notification of future news releases, please visit the Company's website at [www.itafos.com](http://www.itafos.com).

## Forward-Looking Information

Certain information contained in this news release constitutes forward-looking information ("FLI"). Except for statements of historical fact relating to the Company, information contained herein may constitute FLI, including any information related to: the successful development of the Farim Project; capital expenditures; operating costs; sustaining capital requirements; after-tax NPV and sensitivity analyses; cash flows and IRR; estimates of mineral resources and mineral reserves; development of mineral resources and mineral reserves; government regulation of mining operations and treatment under governmental and taxation regimes; future price of



commodities, including phosphate; realization of mineral resources and mineral reserves estimates, including whether mineral resources will ever be developed into mineral reserves and information and underlying assumptions related thereto; timing and amount of future production; currency exchange and interest rates; expected outcome and timing of environmental surveys and permit applications and other environmental and social matters; expected expenditures to be made by the Company; timing, cost, quantity, capacity and product quality of production at the Project; and the ability to achieve capital cost efficiencies. The use of any of the words "intend", "anticipate", "plan", "continue", "estimate", "expect", "may", "will", "project", "should", "would", "believe", "predict" and "potential" and similar expressions are intended to identify forward-looking information.

The FLI contained in this news release is based on the opinions, assumptions and estimates of management set out herein, which management believes are reasonable as at the date the statements are made. Those opinions, assumptions and estimates are inherently subject to a variety of risks and uncertainties and other known and unknown factors that could cause actual events or results to differ materially from those projected in the FLI. These include the Company's expectations and assumptions with respect to the following: commodity prices; operating results; safety risks; changes to the Company's mineral reserves and resources; risk that timing of expected permitting will not be met; changes to mine development and completion; foreign operations risks; changes to regulation; environmental risks; the impact of adverse weather and climate change; general economic changes, including inflation and foreign exchange rates; the actions of the Company's competitors and counterparties; financing, liquidity, credit and capital risks; the loss of key personnel; impairment risks; cybersecurity risks; risks relating to transportation and infrastructure; changes to equipment and suppliers; adverse litigation; changes to permitting and licensing; loss of land title and access rights; changes to insurance and uninsured risks; the potential for malicious acts; market volatility; changes to technology; changes to tax laws; the risk of operating in foreign jurisdictions; and the risks posed by a controlling shareholder and other conflicts of interest. Readers are cautioned that the foregoing list of risks, uncertainties and assumptions is not exhaustive.

Although the Company has attempted to identify crucial factors that could cause actual actions, events or results to differ materially from those described in FLI, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that FLI will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. The reader is cautioned not to place undue reliance on FLI. The Company undertakes no obligation to update forward-looking statements if circumstances or management's estimates, assumptions or opinions should change, except as required by applicable securities law. Risks and uncertainties affecting the FLI contained in this news release are described in greater detail in the Company's current Annual Information Form and current Management's Discussion and Analysis available under the Company's profile on SEDAR at [www.sedar.com](http://www.sedar.com) and on the Company's website at [www.itafos.com](http://www.itafos.com). The FLI included in this news release is expressly qualified by this cautionary statement and is made as of the date of this news release.

NEITHER THE TSX-V NOR ITS REGULATION SERVICES PROVIDER (AS THAT TERM IS DEFINED IN THE POLICIES OF THE TSX-V) ACCEPTS RESPONSIBILITY FOR THE ADEQUACY OR ACCURACY OF THIS NEWS RELEASE.

For further information, please contact:

Matthew O'Neill  
Itafos Investor Relations  
[investor@itafos.com](mailto:investor@itafos.com)  
713-242-8446

#### **Cautionary Note Regarding Mineral Resource and Mineral Reserve Estimates**

This press release uses Mineral Reserve and Mineral Resource classification terms that comply with reporting standards set forth in NI 43-101 for all public disclosure of scientific and technical information concerning mineral projects by Canadian registered issuers. NI 43-101 standards differ significantly from standards set forth by the United States Securities and Exchange Commission ("SEC"). Therefore, information regarding mineralization presented herein may not be directly comparable to similar information disclosed by companies in accordance with SEC standards. For instance, Mineral Reserve estimates contained in this presentation may not qualify as "reserves" under SEC standards. The reader is cautioned not to assume that any part or all of the Mineral Resources identified as "Mineral Resources," "Measured Mineral Resources," "Indicated Mineral Resources" and "Inferred Mineral Resources" in this presentation will ever be converted into Mineral Reserves as defined in NI 43-101, be upgraded to a higher category, or be economically or legally mineable.