# **Legend International Holdings, Inc.**

(OTC.BB: LGDI)

January 31, 2011



 Price (US\$):
 0.85

 Target Price (US\$):
 3.35

 Beta:
 0.81

 Price/Book Ratio:
 2.89

 Debt/Equity Ratio:
 0.00

 Listed Exchange:
 OTC.BB



#### **Recent News**

January 4, 2011- Legend announces that Mt Isa Phosphate Project has not been effected by floods in Queensland, Australia

October 4, 2010- The Company announced project update for the Paradise Phosphate Project

August 13, 2010- Legend announced grant of mining lease and project update

July 23, 2010- The Company announced positive and robust results from Wengfu's feasibility study for Legend's Paradise Phosphate Project

May 10, 2010- Legend announced significant milestones achieved and project update for the Georgina Basin Phosphate Project

#### Shares in Issue

226.4 M

## Market Cap

US\$ 192.4 M

52 Week High: US\$ 1.39

52 Week Low: US\$ 0.60

# Primary Focus to Produce Value-Added Fertilizer Products by 2013

Legend International Holdings, Inc. ("Legend" or "Company") is a development and exploration stage company. The Company is engaged in mineral exploration and development activities. Legend primarily focuses on the development of its phosphate interests in the Georgina Basin of Queensland, Australia. The Legend landholdings, prospective for phosphate, diamonds and base metals, cover 493,750 acres in Queensland, Australia, and 3.88 million acres in the Northern Territory, Australia. Following a change of ownership in November 2004, Legend developed a new plan of operations for fiscal 2006 to engage in mineral exploration activities. Legend's current business plan calls primarily for the development of its flagship phosphate project.

Legend's primary purpose is to maximize shareholder value by addressing the opportunity created by a burgeoning global population and inequities in food supply. Legend is working aggressively to develop and mine its phosphate deposits, with a phased implementation plan to become one of the world's leading suppliers of Phosphate and Fertilizer products.

## **Investment Arguments**

- Key Strategic Alliance with Market Leaders Aimed to Facilitate the Development of the Phosphate Deposits: Legend's primary focus is to become one of the world's leading producers of high quality phosphate and fertilizer products by working with its international partners to develop and mine its phosphate interests in the Georgina Basin. Strong strategic relationships with market leaders in China and India serve to facilitate the development of the phosphate deposits in line with the expertise of the world's most significant fertilizer markets and developing economies
- Alternative Use of Phosphate Production Operations: The Company aims to begin phosphate production operations with the mining of known high grade material at Paradise North deposit which require little or no beneficiation (i.e., mineral processing). This high grade material, although currently planned to be used in the first 5 years of operation in the Company's own Fertilizer Complex in Mt. Isa for producing export quality DAP and MAP, could also be used to make other simpler fertilizer products such as the non ammoniated phosphate fertilizers Simple Super Phosphate (SSP) and Triple Super Phosphate (TSP) for local markets within Australia and New Zealand. Strong demand for phosphate rock will also allow export quality Rock Phosphate Concentrate to be sold in the international and domestic markets through the construction of a Phosphate Rock Beneficiation Plant.
- Significant Further Value to its Phosphate Project: The feasibility study conducted by Wengfu Group Ltd. of China ("Wengfu") at the Company's Paradise Phosphate Project has confirmed that development of the project is technically and economically viable. The value addition involved with the development of a 15ktpa aluminium fluoride plant is significant for Legend.
- Strong Management Team: The Company has a strong management team with a particular focus on mining exploration and development in Australia. This would assist the Company in raising the funding required for carrying out and completing major exploration for minerals and precious metals. Additionally, the management team has a history of executing a significant number of mining exploration and development transactions including capital raisings; M&A; joint ventures and financings. The Company is managed by Mr Gutnick, a leading mining industry entrepreneur. He is the

President and Chief Executive Officer of numerous public listed companies in the mining sector in both Australia and North America. Mr Gutnick was responsible for overseeing the discovery of the Plutonic gold deposit, and the discovery, development and operation of the world class Bronzewing and Jundee gold mines in Australia. Mr Gutnick is also a Fellow of the Australasian Institute of Mining and Metallurgy, a Fellow of the Australian Institute of Management, a Member of the Institute of Company Directors in Australia, and was a Director of the World Gold Council. Mr Gutnick was awarded the prestigious Diggers award at the 1997 Diggers and Dealers Industry Awards

Partner Assessment and Transaction Process Underway: The Company has appointed Nomura as its financial advisor to advise on potential strategic transactions related to its phosphate mining and refining business in the Georgina Basin in Queensland, Australia. The transaction will involve assessing interested industry partners, who wish to form a strategic alliance with Legend and invest in the project. Nomura is one of the world's leading global investment banks with an international network of offices spanning 30 countries. Nomura has advised on numerous high profile cross-border transactions in addition to having a leading global capital markets franchise. Nomura was ranked #1 M&A adviser in Asia Pacific in 2009, according to Thomson Financial. Nomura is currently running a formal process to assess interested strategic partners. This process is due for completion in Q2 2011.

## **Legend International Holdings Overview**

Legend is registered as a foreign corporation in Australia and was incorporated on January 2, 2001 in the State of Delaware. It is listed on the Over the Counter Bulletin Board market.

The Company is primarily engaged in development of its phosphate deposits in the Georgina Basin in Queensland, Australia. It is in the planning stage to build a Phosphate Fertilizer Complex in Mt Isa, Australia to provide highly nutritious fertilizers globally.

The Company has a strategic partnership with IFFCO from India, Wengfu in China, Xstrata Zinc and Coogee Chemicals in Australia. The Company's tie-up with IFFCO, would assist it to enter into a new domain and capture the Indian market. Wengfu Group has undertaken a feasibility study for the Company's Paradise Phosphate Project which gave positive and robust results. Legend's strategic association with Wengfu would enable the Company to procure expert advice in developing phosphate deposits and thus capture new markets, as Wengfu currently markets their products to over 20 countries worldwide. The Company has signed a Memorandum of Understanding to enter into a joint venture agreement with Coogee Chemicals for the production of sulfuric acid, phosphoric acid storage and sulfuric acid storage for the Company's phosphoric acid plant situated in Mt Isa. The Company has also signed a Memorandum of Understanding with Xstrata Zinc regarding the supply of sulfuric acid to the Company's future phosphoric acid plant in Mt Isa.

Legend has signed a Memorandum of Understanding with P&O Trans Australia (POTA) for haulage and handling services associated with Legend's Georgina Basin Phosphate project. POTA's services are to include-

- Road cartage from D-Tree and Paradise North tenements, both located approximately 160 kilometers from the deposit to the rail head in Mount Isa;
- Rail haulage from Mount Isa to Port of Townsville, approximately 1,000 kilometers; and,
- Various storage and material handling tasks.

The size and quality of the Company's deposits, managed by an expert development panel, combined with excellent strategic relationships and a strong financial outlook places Legend in a prime position to produce value-added fertilizer products by 2013.

The Legend landholdings, prospective for phosphate, diamonds and base metals cover 493,750 acres in Queensland, Australia and 3.88 million acres in the Northern Territory,

Australia. In Queensland, Legend's holdings are historical phosphate deposits located in the Mt. Isa district, along the margin of the Georgina Basin which is host to major base metal and phosphate deposits.

Legend's mining and exploration tenements are divided into the following project areas (See Exhibit 1 below):

## Phosphate Projects:

- Paradise Phosphate Project, Queensland
- D-Tree Phosphate Project, Queensland
- King Eagle Phosphate Project, Queensland

## Diamond and Phosphate Projects:

Barr Creek Project, Queensland

## Diamond Projects:

- Glyde River, Northern Territory
- Foelsche, Northern Territory
- Abner Range, Northern Territory
- Cox, Northern Territory
- Gravity Project, Northern Territory

## Diamonds and Base Metals:

McArthur River, Northern Territory

DARWIN MATARANKA BING BONG BORROLOOLA DALY WATERS TENNANT CREEK King Eagle: Lily and Sherrin Creek Project MOUNT ISA King Eagle: Quita Creek Project Legend LEGEND ABN 82 120 855 352 Unpaved roads **Legend Projects** Mine Sites Legend Projects

Exhibit 1: Projects in Northern Territory and Queensland, Australia

Source: Company Reports



Exhibit 2: Key Transactions to Date

Raises US\$15 million through private placement to Atticus Capital
Releases phosphate project scoping study from British Sulfur (CRU International)
Raises \$105 million through private placement to various institutions at \$2.50 per share
IFFCO exercises 5 million options at \$2.50 per share in the Company, increasing its stake to 8.84%
Soros Fund Management increases stake to 10.2%
Legend announces JV with Mt Isa Metals; enhances D-Tree project and increases phosphate resource potential
Legend announces exploration results for the D-Tree deposit, the full drilling and assay results are consistent with historical records and confirm phosphate deposits
Legend hosts special visit from the Secretary to the Government of India (Ministry of Fertilizers) and the Managing Director of IFFCO
Legend announces rail capacity of 3.5Mtpa available for its phosphate project
Legend announces the maiden resource estimate for the D-Tree phosphate deposit
Legend granted exploration permit for Paradise North
Legend announces transport services MOU with P&O Trans Australia to service North Queensland operations
Legend announces 100% ownership of the D-Tree phosphate project in Queensland, Australia
Legend announces strategic relationship with Wengfu Group Ltd.; one of China's largest fertilizer producers
Wengfu group to undertake feasibility study for Legend's phosphate project
Legend present at the FMB Asia Fertilizer conference in Beijing, China
Legend announces positive initial findings from the Wengfu Group feasibility study
Legend signs MOUs with Xstrata Zinc and Coogee Chemicals in regard to potential phosphoric acid production
Legend announces significant resource upgrades and project milestones
Legend announces positive and robust Wengfu Group feasibility study
Legend Appoints Nomura as Financial Advisor

Source: Company

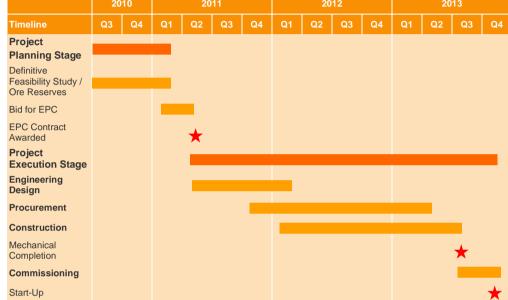
## **Phosphate Project Overview**

## **Paradise Phosphate Project**

## Implementation Schedule

The strategy of the project implementation reflects development under an Engineering, Procurement and Construction (EPC) contract. The timeline of the whole implementation schedule is presented below and may vary depending upon requirements of any potential partner that eventuates from the current process being run by Nomura.

Exhibit 3: Execution Schedule – Legend Georgina Basin Phosphate Project
2010 2011 2012



Source: Company

The Georgina Basin, host to the Legend phosphate project, is one of the largest under-developed phosphate deposits in the world. Legend has historically defined phosphate deposits of approximately 1.2 billion tons at  $16\% P_2 O_{5.}$ 

Past feasibility studies, conducted by BH South Ltd (later acquired by WMC), at the Paradise South deposit (formerly Lady Annie) in 1974 demonstrated that the project was technically and economically feasible.

The adjacent D-Tree deposit was also subject to positive feasibility studies conducted by IMC Corporation (later acquired by Mosaic) in the early 1970s.

In 1973 a pilot plant constructed at Paradise South produced international quality phosphate rock. The pilot plant operated for 1 year and produced approximately 100 tons per day of high quality  $34\%~P_2O_5$  beneficiated phosphate rock.

In conjunction with Chinese phosphate experts, Wengfu Group, Legend has recently completed a new feasibility study based on present economic parameters to identify the most efficient and profitable form of production with which to proceed. This study was positive and robust.

Legend also has a strong relationship with the Indian Farmers Fertilizer Cooperative, the largest fertilizer enterprise in India, which represents over 50 million farmers and their families. IFFCO currently holds a 15.2% equity stake in Legend.

Legend has assembled a highly professional team of geology and mining managers in addition to leading industry service providers and consultants to ensure the successful development of its phosphate deposits and in turn generate maximum shareholder return.

The Company recently announced positive and robust results from the recently completed feasibility study for its Paradise Phosphate Project conducted by Wengfu Group Ltd. of China ("Wengfu"). The results of the feasibility study have confirmed that the development of the project is technically and economically viable. The management considers that studies currently being conducted on project expansion will add significant further value.

The summary of Paradise Phosphate Project below is based on a 100% project basis (ungeared).

**Exhibit 4: Project Summary** 

Mineral Resource*	81Mt @ 18.1% P2O5
Mine Life	+30 yrs
Total DAP Production - 30 yrs	18Mt
Nominal Annual Production (DAP/MAP/AIF3)	640Kt MAP/DAP, 15Kt AIF3
Development Capital	US\$808M

Source: Company, \* Currently being converted to Reserves due for completion Q1 2011.

#### **Project Overview**

The project base case is described as follows:

- Mining of 1,250ktpa of high grade ore from Paradise North at an average head grade of 27.5% P<sub>2</sub>O<sub>5</sub> for the first 5 years of operation before utilizing a beneficiation plant located at Paradise South for the remaining +25 years of the +30 years total current mine life.
- Dry screen ore to remove SiO<sub>2</sub> and upgrade P<sub>2</sub>O<sub>5</sub> content to give approximately 1,000ktpa of >29% P<sub>2</sub>O<sub>5</sub>. Paradise North ore may also be utilized earlier in the schedule as Direct Shipping Ore (DSO) but would require market prices to be approximately US\$150/t FOB Townsville
- Transport upgraded ore by road from Paradise North to Mt Isa Fertilizer Complex
- Direct acidulation in Legend's phosphoric acid plant of upgraded ore to produce 300ktpa phosphoric acid using approximately 800ktpa of sulfuric acid (200ktpa sourced from local smelters and 600ktpa produced in Legend's sulfuric acid plant, using imported sulfur)
- Import of approximately 100ktpa of liquid ammonia (NH<sub>3</sub>) to combine with phosphoric acid in the ammonium phosphate plant to enable granulation of MAP and DAP in a ratio dependent on market conditions
- Production of 15ktpa of aluminium fluoride (AIF<sub>3</sub>) through Wengfu's proprietary technology for their self-developed dry process. This marketable chemical product is used in the aluminium industry which currently has a strong demand both locally in Australia and in overseas markets
- Water for the phosphoric acid plant will be sourced from the Lake Julius water allocation.
   Water will be transferred from Lake Julius to Lake Moondarra via the existing transfer pipeline.
- Power for phosphoric acid plant will come from the Ergon Energy eastern transmission line near the Mica Creek Power Station
- Transport 600ktpa of MAP/DAP and 15ktpa aluminium fluoride in containers on flat bed rail wagons from Mt Isa to the Port of Townsville using 2 train sets

#### **Mineral Resources**

The Company has previously reported its Australian JORC compliant mineral resources and as of May 10, 2010 they total 392 million tons at 15.7%  $P_2O_5$  across the Paradise and D-Tree deposits. This represents revalidation work conducted by Legend over the past 2 years on

only approximately 25% of the known phosphate deposits which have been historically reported at 1,329 million tons at 16.2%  $P_2O_5$  (Refer to Table 5 below).

For the Paradise feasibility study, only the resources at Paradise North and Paradise South have been included in the study. All other resources at D-Tree; Lily & Sherrin Creek; Quita Creek; and Highland Plains have been excluded from this feasibility study and will be available for future expansion plans.

At Paradise North, to achieve the required head grade of 27.5%  $P_2O_{5}$ , before screening, a cut-off grade of 25%  $P_2O_5$  would be used which reports 9 million tons at 27.6%  $P_2O_5$ .

Current reported JORC resources for Paradise South stand at 72 million tons at 16.9%  $P_2O_5$  and historically reported resources are 293 million tons at 16.6%  $P_2O_5$ . Legend's initial drilling program at Paradise South was designed to target 40 million tons of historical resource to delineate sufficient feed for the beneficiation plant for at least the first 10 years of operation. Legends most recent drilling at Paradise South is aimed at delineating Reserves for the full 30 year mine life and the estimate is due for completion by Q1 2011. The results of the drilling program were better than expected with higher tonnages achieved as compared to historical estimates. The recent drilling has also found that many historical drill holes did not fully penetrate the whole phosphate layer at Paradise South. Legend's recent drilling has extended the thickness of the known phosphate layer thereby also increasing the resource tonnage when compared to the historical estimate

Legend's previous test work on flotation that culminated in the successful operation of a pilot plant in 2009 has allowed the resource to be modeled as a bulk mining operation with thick (average 10m) continuous seams of phosphate mineralization amenable to recovery through flotation and able to produce a rock concentrate highly suitable for world market quality MAP/DAP manufacture.

Given the highly successful drilling and beneficiation results Wengfu and Legend have confidence that a 30 year mine life is conservative and that 50 years is a more likely scenario. For financial modeling purposes, and until Ore Reserves are estimated in Q1 2011, a 30 year mine life was used in the feasibility study. Table 5 below summarizes the resource figures used in the Paradise feasibility study and the global resources controlled by Legend.

Exhibit 5: Mineral Resources

	Historic estima	tes	Current estimates (Australian JORC 2004 indicated & inferred mineral resources)				
Deposit	Classification	Estimated million tons	% P2O5	Estimated million tons	% P2O5	% Historic covered	
Paradise South	Non-reserve mineralized material	293	16.6	72	16.9*	Approx. 10%	
Paradise North	Non-reserve mineralized material	193	17.6	15	23.9*	Less than 5%	
D-Tree	Non-reserve mineralized material	339	16	305	15.0**	Approx. 90%	
Lily Creek	Non-reserve mineralized material	191	14.9	New estimate pending future drilling result			
QuitaCreek	Non-reserve mineralized material	54	17.3	New estimate per	nding future	drilling results	
SherrinCreek	Non-reserve mineralized material	175	16.5	New estimate pending future drilling result			
Highland Plains	Non-reserve mineralized material	84	13.4	New estimate pending future drilling result			
Total		1,329	16.2	392	15.7	Approx. 25%	
* Grade reported at 12% P2O5lower cut-off							
** Grade reported at 10% P2O5lower cut-off							

Source: Company



## Mining

Mining of the Paradise deposits, including sourcing the mining equipment and its operation, would be contracted to an international mining company. Legend and Wengfu have calculated open pit mining scenario models to estimate the costs and mine life used in the feasibility study. The base scenario considers using a combination of excavators for removing overburden and scrapers for removing ore layers.

**Exhibit 6: Paradise North Mining Parameters** 

Mineral Resource	9Mt @ 27.6% P <sub>2</sub> O <sub>5</sub>
Potential Reserve Conversion	~90%
Tons Ore Mined	1250ktpa
Average Strip Ratio Over Mine Life (waste t:ore t)	2:1
% Recovery (Dry Screening)	80%
Tons Feed for phosphoric acid plant	1000ktpa@ 29.5% P <sub>2</sub> O <sub>5</sub>

Source: Company

Five years of operation at Paradise North is included in the feasibility study before a beneficiation plant starts producing rock concentrate for the phosphoric acid plant in 2017.

Paradise South mining is due to commence during year 5 of the project in 2017. Legend and Wengfu have conducted open pit mining scenario models to estimate the costs and mine life used in the feasibility study. The mining method is the same as Paradise North and the mining parameters are summarized in Table 7 below.

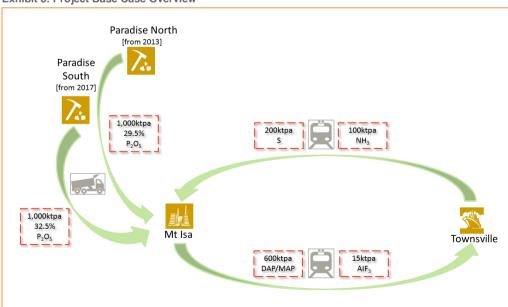
**Exhibit 7: Paradise South Mining Parameters** 

Mineral Resource	72Mt @ 16.9% P <sub>2</sub> O <sub>5</sub>
Potential Reserve Conversion	~90%
Tons Ore Mined	2500ktpa
Average Strip Ratio over mine life (waste t:ore t)	1.25:1
% Recovery (Flotation)	40%
Tons Feed for phosphoric acid plant	1000ktpa@ 32.5% P <sub>2</sub> O <sub>5</sub>

Source: Company

#### **Processing & Logistics**

**Exhibit 8: Project Base Case Overview** 



Source: Company

## **Phosphate Rock**

The phosphate ore would be dry screened at Paradise North for silica removal. Approximately 1,000ktpa of phosphate concentrate at 29.5%  $P_2O_5$  would then be trucked to the Mt Isa phosphate fertilizer complex for the first 5 years of operation. In the 5<sup>th</sup> year ore would be mined at Paradise South and processed through a flotation beneficiation plant located on site. Approximately 1,000ktpa of phosphate concentrate at 32.5%  $P_2O_5$  would then be trucked to the Mt Isa phosphate fertilizer complex for the remainder of the +25 year mine life.

## Mt Isa Phosphate Fertilizer Complex

The phosphate fertilizer complex is expected to be located on 650 acres of land south of Mt Isa which is bordered to the east by the Mt Isa to Townsville railway line and adjacent to the Mica Creek Power Station. A 'first right of refusal' over this land package has been granted to Legend by the Queensland Government's Department of Infrastructure and Planning (DIP), and Legend and DIP are currently negotiating the land sale contract. The general layout would cover the 600ktpa sulfuric acid plant; 300ktpa phosphoric acid plant; 600ktpa DAP/MAP plant; 15ktpa aluminium fluoride plant; and all associated auxiliary facilities and corresponding utilities.

#### Sulfuric Acid Plant

The 600ktpa sulfuric acid plant would be a single production train that burns sulfur in air to produce sulfur dioxide ( $SO_2$ ), combines the  $SO_2$  with oxygen to form sulfur trioxide ( $SO_3$ ), and then combines the  $SO_3$  with water to form sulfuric acid ( $H_2SO_4$ ). This process is highly exothermic so a heat recovery system would capture the heat to be utilized for power generation and heating in the phosphoric acid concentration process. The sulfuric acid is then used as an input to the phosphoric acid plant.

## **Phosphoric Acid Plant**

The 300ktpa phosphoric acid plant will use the dihydrate wet process as developed by Prayon which has proven to be a mature, reliable and efficient process for phosphoric acid reaction. This process has the advantage of improving phosphorus recovery and reducing phosphorus in the by-product gypsum. The process in the plant will include rock grinding; phosphate rock reaction with sulfuric acid to produce phosphoric acid; filtering; acid storage; and acid concentration. The acid will then be used as an input into the ammonium phosphate plant (DAP/MAP).

## **Ammonium Phosphate Plant**

The 600ktpa ammonium phosphate plant will utilize the pre-neutralizer and pipe reactor process as developed by Incro. This process is an advanced international technology which features stable operation, high flexibility and adaptability to the phosphoric acid grade input. The process involves neutralization of the acid; ammoniation; granulation; drying; screening; dust and fume collection and scrubbing; then final product weighing and bagging. The plant area would include a liquid ammonia unloading station, liquid ammonia tank farm and a finished product conveyance system.

#### AHF & AIF<sub>3</sub> Plant

The value addition involved with the development of a 15ktpa aluminium fluoride plant is significant for the Company. The production of aluminium fluoride has environmental and economic benefits for the project. The process takes typically rejected by-product pollutants from the phosphoric acid process and turns it into a marketable product which is currently in strong demand by the aluminium industry.

#### **Product Transport**

The bagged products of DAP,MAP and AIF<sub>3</sub> will be transported in containers on flat bed rail wagons from Mt Isa to the Port of Townsville via two train sets. In 2009, Legend signed a Memorandum of Understanding with P&O Trans Australia (POTA) for haulage and handling

services associated with Legend's Georgina Basin Phosphate project. POTA's services are to include:

- Road cartage from Paradise North and South tenements, both located approximately 160 kilometers from the deposit to the rail head in Mount Isa
- Rail haulage from Mount Isa to Port of Townsville, approximately 980 kilometers
- Various storage and material handling tasks.

#### Infrastructure

The mine site is readily accessible by the sealed gazetted heavy vehicle Barkly Highway from Mt Isa (67km) and then via the McNamara Highway which had been used by Lady Annie Operations for hauling copper concentrate. The majority of the workforce is expected to be sourced from the Mt Isa region and existing camp facilities in the Paradise area can be used as well.

Power demand for the Mt Isa Fertilizer Complex is expected to be 24MW which will be offset by 8MW of cogeneration on site. The remaining 16MW of required power will be sourced from CS Energy's Mica Creek Power Station and distributed through the existing Ergon Energy transmission lines. The proposed beneficiation plant at Paradise South is expected to have 8MW power demand which again will be sourced through Mica Creek Power Station and distributed via Ergon Energy's nearby Century Zinc 220 kV transmission line.

Water for the Mt Isa Fertilizer Complex will be sourced from a Lake Julius water allocation and provided by the Mt Isa Water Board. Water for the Paradise South beneficiation plant is available through an existing groundwater allocation license. An option for future expansion is also being considered via the construction of a new dam near the beneficiation plant.

Transport related infrastructure required, apart from the above mentioned haul road upgrades, include an ammonia storage terminal at the port and associated specialized rail equipment. All other transport infrastructure is currently available for the base case scenario presented in this feasibility study.

## Marketing

Wengfu has conducted a detailed market analysis for worldwide supply and demand for ammonium phosphate fertilizer and aluminium fluoride (AIF<sub>3</sub>). Wengfu has utilized their own extensive international experience in marketing fertilizer and specialty chemical products in conjunction with data sourced from the International Fertilizer Association (IFA) to assess supply, demand and pricing factors over the long term.

Conclusions are that new capacity supplies of ammonium phosphates are expected to be absorbed over the medium to long term by worldwide demand for phosphorus which is expected to grow at over 4.5% per annum. DAP prices on average are expected to remain close to current levels and a 10 year long term average of US\$445/t fob US Gulf (Tampa, FL) has been used in this feasibility study. This estimate is within 2% of British Sulfur Consultants' 10 year forecast average. From 2019 onwards, phosphate prices are estimated to continue rising due to strong demand and depleting worldwide resources. Legend has used the 10 year average price as its base case scenario.

## **SWOT Analysis of Legend**

**Exhibit 9: SWOT** 



Source: RB Milestone Research

## **Strengths**

Alternative Use of Phosphate Production Operations- The Company aims to begin phosphate production operations with the mining of known high grade material at Paradise North deposit which require little or no beneficiation (i.e., mineral processing). This high grade material, although currently planned to be used in the first 5 years of operation in the Company's own Fertilizer Complex in Mt. Isa for producing export quality DAP and MAP, could also be used to make other simpler fertilizer products such as the non ammoniated phosphate fertilizers Simple Super Phosphate (SSP) and Triple Super Phosphate (TSP) for local markets within Australia and New Zealand. Strong demand for phosphate rock will also allow export quality rock phosphate concentrate to be sold in the international and domestic markets through the construction of a phosphate rock beneficiation plant.

Legend has also discovered that high grade phosphate rock from both its Paradise deposit and D-Tree deposit is highly soluble in citric acid making it a quality product as direct application rock or Reactive Phosphate Rock ("RPR") as it is known in the industry. This type of rock has a large market in South East Asia for palm oil plantations and in New Zealand for sheep pasture.

The price Legend receives for the phosphate rock would ultimately determine any production. Given recent (2008/09) low international prices, the Company decided to pursue a strategy beginning with value addition products such as the production of DAP and MAP. This alternate strategy is attractive given the suitability of the rock for high analysis fertilizer manufacture and potential supplies of sulfuric acid in the future. The fact that Legend owns the raw phosphate rock material means value addition would achieve greater profit margins and make the project less susceptible to the volatility of the phosphate rock market.

Strong Management Team with Sound Project Management Expertise- The Company has a strong management team with a particular focus on mining exploration and development in Australia. In particular, Mr. Gutnick's highly successful development track record would assist the Company in raising the funding required for carrying and completing

major exploration and mine development for minerals and precious metals. The management team has a history of executing a significant number of mining exploration and development transactions including capital raisings; M&A; joint ventures; and financings.

100% Owned Properties on Flagship Projects- The Company's current phosphate interests are located in the Georgina Basin, Queensland, Australia. They include Paradise (North & South; formerly Lady Jane & Lady Annie); D-Tree; Lily Creek; Quita Creek; Sherrin Creek; and Highland Plains. These interests have combined historical deposits of approximately 1.2 billion tons averaging 16%  $P_2O_5$ . At present, the Company has a 100% interest in the sole and exclusive rights to all mineral exploration and development on the Paradise and D-Tree deposits and is currently earning an 80% interest through a Farm-In Joint Venture Agreement on the Lily, Sherrin and Quita Creek and Highland Plains deposits (Collectively known as the King Eagle Phosphate Project).

**Strong Constructive Relationship-** The Company's strategic vision remains to produce value-added fertilizer products by 2013. The Company's primary focus is to become one of the world's leading producers of high quality phosphate and fertilizer products by working with its international partners to develop and mine its phosphate interests in the Georgina Basin. Strong strategic relationships with market leaders in China and India serve to facilitate the development of the phosphate deposits in line with the expertise of the world's most significant fertilizer markets and developing economies.

## Weaknesses

**No Major Revenue Generation Till Date-** The Company has not generated any major revenue till date. If the trend continues over a long period, it runs a threat of experiencing substantial operating losses leading to a sizeable accumulated deficit. Failing to generate revenue for a prolonged time can also hamper its reputation in the market which might also hinder its funding requirement.

**Early Stage Company-** Legend is primarily focused on developing its significant phosphate deposits in the Georgina Basin of Queensland, Australia to become a major Australian phosphate rock and phosphate fertilizer producer. These deposits are in the advanced stages of development with non reserve mineralized material having already been defined and feasibility studies currently underway. Thus assessment of the project's viability is at an early stage. The quantities of contained metal, the metallurgical recovery and the costs of reprocessing are still to be determined. Legend would soon publish its reserves.

## **Opportunities**

**Encouraging Feasibility Studies Reports-** Positive results from feasibility studies on the Georgina Basin Phosphate Project give the Company an extra avenue for growth. Legend's management has had good association with the Australian mining industry, which could lead to the creation of further opportunities.

**Economies of scale-** Legend has an opportunity to up-size plant to produce up to 1.2Mtpa of DAP/MAP per annum. This will realize economies of scale in Capital Investment and would lower Operation Costs by approximately \$40/ton (savings predominantly achieved as Ammonia would be produced at the Mt Isa Fertilizer Complex).

Attractive Market- The Australian market for ammonium phosphates is seen as an attractive market for Legend due to the limited number of domestic suppliers (only one other Monoammonium phosphate (MAP) / Diammonium phosphate (DAP) producer in Australia) and the current volume of fertilizer that is imported. Over 1.2 million tons of MAP/DAP is currently consumed within Australia with over 0.75 million tons being imported. For this reason Legend has chosen an import parity pricing mechanism for DAP to use in the projects' financial evaluation.

For aluminium fluoride, Australia's aluminium smelting industry currently imports all of its needs from overseas. Most aluminium fluoride plants in the world have been using fluorspar as an input and due to the increasing shortage of fluorspar approximately 1/3 of all plants are closed or due to be closed. Australia's aluminium smelting industry currently consumes approximately 20ktpa of AIF3 providing Legend with an excellent opportunity to utilize Wengfu's technology to potentially supply a large portion of Australia's domestic needs through the development of a 15ktpa plant.

Price Development of Phosphate (fertilizer)- According to estimates, the global phosphate shipments climbed to a record level of 57.0 million tons in calendar 2010 and will increase to 59 to 61 million tons in calendar 2011. The actual phosphate price is mainly influenced by the increasing demand for phosphate fertilizer. Since the year 2007, the current production capacity of mines, beneficiation and fertilizer plants are working at their maximum capacity. On other hand, there is no substitute for phosphate in agriculture and, accordingly, the price elasticity of phosphate demand is very low. So, phosphate prices are expected to increase as long as demand increases and no new plant capacity will be in operation. The lack of production capacity is the main reason for the price increase. For the last few years, the price for energy increased due to the high oil price. In the phosphate price development, a long term slow price increase can be forecasted on the basis of the increasing fertilizer demand and the increasing efforts needed on the supply side to meet this demand. The more difficult accessibility and the decreasing quality of the reserves leads to higher processing costs that enhance the price increase – leading to phosphate prices of about 100 US\$/t (without energy plants) or 120 US\$/t (with aggressive energy plant cultivation) in the year 2030.

- According to CRU estimates, worldwide phosphate demand is expected to grow at 3.1% per annum over the next 5 years
- Phosphate prices are forecasted to continue rising due to strong demand and depleting worldwide resources from 2019 onwards

## **Threats**

**Environmental Regulations-** According to estimates of the OECD, the annual average growth rate of the environmental goods and services industry is around 10% in developing countries. Unquestionably, the mining industry is following this trend, considering that exploitation of mineral resources generates a high impact on the environment through the movement of materials, the consumption of water and power resources and the generation of gases, liquid effluents and massive solid wastes (waste rock, low grade ore, leached material, tailings, slags, etc.).

Due to increasing international concern over global warming, environmental regulations the world over have become more rigid in the recent years. In 2005, the Kyoto Protocol called on the industrialized countries to reduce their greenhouse gas emission levels during 2008-12. There are different programs that deal with different areas including technical, organizational and tax issues. These regulations may impose new liabilities or increase operating expenses, either of which would result in a material decline in profitability for the Company.

Mining Closure- Exploration and mining involve a high degree of risk. Few exploration properties end up going into production. There can be no assurance that the expenses incurred by the Company to explore its properties will result in the discovery of a commercial quantity of ore. With no revenue generation till date, any one or more existing exploration failures at any stage of the mining life may result in huge sunk cost with respect to capital expenditure losses. In the absence of future pipeline of projects, there are possibilities of an unstable revenue flow for the Company in the foreseeable future.

## **Industry Overview**

## **Phosphate Industry**

Chemical compounds of Phosphorus are known as Phosphates. These are mostly chemical compounds related to phosphoric acid  $(H_3PO_4)$  and salts containing the phosphate ion  $(PO_4^{3-})$ ; the hydrogen phosphate ion  $(H_2PO_4^{--})$ ; or the dihydrogen phosphate ion  $(H_2PO_4^{--})$ . Phosphate chemicals are basically found in rocks in sedimentary and igneous deposits. Phosphate rock resources occur principally as sedimentary marine phosphorites. Currently, there are no alternatives available to phosphate rock in the market.

Most of the global phosphate production is used in agriculture, primarily as fertilizers, animal feeds and pesticides. The large amounts and high quality of food obtained worldwide today is largely due to the use of phosphate fertilizers; phosphorus-based herbicides; insecticides; and plant hormones.

The chemical industry, primarily comprising manufacture of detergents and high tech products, uses a very small portion of the global production of phosphate rock. Phosphate-based products play an important role and have a key function in everyday life. Phosphorus compounds have prospects of increased demand in other sectors including in the pharmaceutical and food industries, in household applications as well as in new high tech applications such as sensors, lasers, etc.

The largest sedimentary deposits of phosphate rocks are situated in northern Africa; China; the Middle East; and the United States. Significant igneous occurrences are found in Brazil; Canada; Russia; and South Africa. Large phosphate resources have been identified on the continental shelves and on seamounts in the Atlantic Ocean and the Pacific Ocean.

The United States is the world's leading producer and consumer of phosphate rock which is used to manufacture phosphate fertilizers and industrial products.

World phosphate rock capacity is estimated to increase by an overall 20%, from 190 Mt in 2009 to 228 Mt in 2014. This growth in potential production would result from a combination of expansions at existing operations, new mines opened by current producers and new capacity added by emerging suppliers.

2002 2003 2004 2005 2006 2007 2008 2008 2009 2010F 2010F 2013F 2013F 2014F 2014F

**Exhibit 10: Global Phosphate Demand** 

Source: IFA June 2010

## **Agriculture Growth**

While the increase in population is challenging the world's resources, countries are expanding their gross domestic product and average life expectancy has increased, enriching their diets and improving their family income. The world requires increasing agricultural production every year in order to meet the global demand for food, feed, fiber and bio energy. Yield gains are

expected to contribute to most of the output growth, as scope for expanding cultivated land in the next five years is limited.

While the factors that have created the food crisis are multiple and complex, one of the necessary components of the solution is the use of fertilizers to further increase the efficient and environmentally sensitive and responsible production of food for the world.

Exhibit 11: World Cereal Production and Utilization (Mt)

Source: FAO

After two consecutive bumper crops, the 2010 global cereal output is anticipated to reach 2.28 billion metric tons (Bt), according to The Food and Agriculture Organization of the United Nations (FAO), or 2.26 Bt reported by the United States Department of Agriculture (USDA). This implies an annual growth in the range of about 1.5% to 2.0%. World cereal utilization, at about 2.25 Bt, is expected to grow by 2.0% to 2.5%.

## **Fertilizer Market**

Fertilizer is an integral part of global food security strategy. It is among the most effective strategies to increase crop yields. It increases the nutritional content of foods and also helps to conserve land safeguarding recreational land and wildlife habitats.

The economic and financial situation is expected to impact fertilizer demand in several ways. A return to more stable commodity prices makes it less risky for farmers to invest in fertilizers than a year ago. This results in a more rapid recovery in phosphate (P) and potassium (K) fertilizer demand than had been foreseen.

With the progressive economic recovery, world fertilizer demand began to rebound in 2009-10. It has grown about 3.7% in this period, to 162.5 Mt, with increases of 3.1% and 8.8% for N and P fertilizers, respectively, and a 1.2% decline for K fertilizers. Demand is expected to grow in all the regions except Latin America, Oceania and Eastern Europe and Central Asia. It is anticipated to remain strong in South Asia and would rebound in East Asia, North America and Western and Central Europe.

Global fertilizer demand in 2010-11 is estimated to grow by 4.8% to 170.4 Mt. Demand for N, P and K fertilizers is expected to rise by 1.9%, 4.5% and 18%, respectively. Fertilizer consumption would increase in all the regions except West Asia, where a small drop of 0.8% would mostly be due to early purchases of fertilizers in the last two months of 2009 in Turkey. East Asia, South Asia and Latin America would be the major contributors to the increase in world demand. The highest growth in demand for both P and K fertilizers would occur in East Asia. Significant growth in demand for K fertilizer is also expected in North America and Latin America.

However, the global fertilizer growth is subject to varied uncertainties. Among these are the evolution of the financial and economic context; the evolution of policy priorities in China; the

evolution of the fertilizer subsidy scheme in India; the outcome of current discussions on the environmental impact of biofuels; the evolution of crop prices; and currency exchange rates.

Demand prospects for fertilizer in the medium term are quite positive, with global fertilizer consumption expanding at an annual rate of 3.5% between 2009 and 2014. The strength of this growth is partially due to a recovery that would last until mid-2010, when the level of consumption in 2007 would be fully regained. Between 2010 and 2014, world fertilizer consumption is anticipated to grow at an average annual rate of 2.3%, which is in line with the historical growth rate of 2.1% in the past decade.

**Exhibit 12: World Fertilizer Consumption (Calendar Year Basis)** 

Mt nutrients	2009	2010	2014	2009/14 variation
Nitrogen N	101.8	103.9	111.7	2.00%
Phosphorus P <sub>2</sub> 0 <sub>5</sub>	36	38.6	43.7	4.50%
Potassium K <sub>2</sub> O	22.1	26.6	31.9	8.20%
Total	159.8	169.1	187.3	3.50%

Source: P. Heffer, IFA, June 201

Demand increases are projected for all three major nutrients. Since consumption of potash and phosphate was severely depressed in 2008, the recovery of demand for these nutrients is expected to register important growth in 2010 and 2011. Beyond 2011, demand for P and K fertilizers would then increase at an average annual rate of 3.0% and 4%, respectively.

Global trade would recover its 2007 level within the next two years, as world fertilizer demand rebounds quickly and registers sustained growth through 2014. In the short term, world supply/demand conditions are anticipated to include resilient annual potential surpluses of phosphate rock, potash and urea due to the emergence of large capacity in the main exporting regions. Over the next five years, market conditions for phosphate fertilizers, notably DAP; merchant phosphoric acid; merchant ammonia; and sulfur are seen as relatively balanced on the back of firm demand growth and a gradual increase in capacity.

200 150 100 50 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 Fertilizer Other Uses

Exhibit 13: World Fertilizer and Raw Materials Uses

Source: IFAPIT Committee, 2010

Over the period 2009 to 2014, global trade is projected to expand by 15.0% to 33.0%, depending on the nutrient products and regions.

West Europe is seen as experiencing an increasing import reliance on nitrogen, urea and phosphate products while maintaining a stable potash surplus. The bulk of the increase in urea demand would come from the industrial sector, which would account for more than half of total urea consumption in 2014

- Central Europe would continue to experience a deficit in phosphate and potash, while maintaining a slight nitrogen surplus
- EECA is expected to remain a major exporting region for all three major nutrients but would have an expanding surplus of potash and urea
- North America is expected to register a massive increase in its potential potash surplus due to emerging capacity in Canada. However, this region would increase its imports of nitrogen products, especially urea, while stabilizing its phosphate surplus
- Latin America would remain one of the world's major importing regions with increasing requirements for urea, potash and phosphate fertilizers through 2014. However, the region's nitrogen balance shows a rising surplus due to new capacity expected in Peru and Venezuela
- South Asia (essentially Bangladesh, India and Pakistan) would become the world's leading importing region, with expanding import demand through 2014 for urea and phosphate products (DAP). It would rank as the world's second largest potash importing region, with imports exceeding 5 Mt K<sub>2</sub>O in 2014

On Supply side, China and Morocco have highest Phosphate reserves. China and Morocco hold about 36% and 32% respectively, followed by South Africa with 8% and the United States of America with 6%. According to Geoscience Australia, Australia's economic demonstrated resources of phosphate rock comprise less than 1% of the world's resources. The USGS estimated world production to have totaled 161MMt in 2008 with China producing 50.7MMt; the United States of America 30.2MMt; Morocco and Western Sahara 25MMt; and Australia 2.8MMt.

**Exhibit 14: World Resources** 

	Mine Pr	Mine Production		
	2008	2009e		
China	50,700	55,000	3,700,000	
United States	30,200	27,200	1,100,000	
Morocco and Western Sahara	25,000	24,000	5,700,000	
Russia	10,400	9,000	200,000	
Tunisia	8,000	7,000	100,000	
Other Countries	7,440	7,000	950,000	
Jordan	6,270	6,000	1,500,000	
Brazil	6,200	6,000	260,000	
Syria	3,220	3,000	100,000	
Israel	3,090	3,000	180,000	
Egypt	3,000	3,300	100,000	
Australia	2,800	2,500	82,000	
South Africa	2,290	2,300	1,500,000	
Canada	950	900	15,000	
Togo	800	800	60,000	
Senegal	700	700	80,000	
World Total (rounded)	161,000	158,000	16,000,000	

Source: US Geological Survey, Mineral Commodity Summaries, January 2010

On a regional basis, future rock supply is projected to increase in almost all regions although additions would mainly be in Africa, West Asia and East Asia. Productive capacity is projected to decline in North America. New supply from emerging suppliers would add about 17 Mt, of which more than half would be available for exports. However, most new suppliers have plans for downstream processing in the longer term.

Exhibit 15: World Phosphate Rock Supply Outlook to 2012

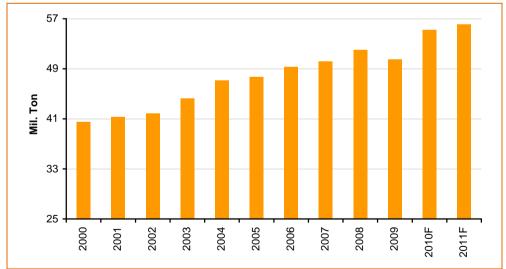
Source: British Sulphur Consultants

The Development Prospects Group of the World Bank, in its Commodity Markets Review, has reported annual prices of phosphate rock based on full Calendar years: US\$44.2/Mt (2006); US\$70.9/Mt (2007); US\$345.6/Mt (2008); and US\$121.7/Mt (2009).

## **Phosphate Supply in Australia**

Australian phosphate rock production is primarily sourced from the Phosphate Hill-Duchess Mine in Queensland, the phosphate mine on Christmas Island and several small operations near Bendleby in South Australia.

Australia has another phosphate deposit at Mt Weld in Western Australia. It is remote (25 km south of Leonora but less than 100 km east of Murrin Murrin) and 260 million tons of the rock (particularly hard) which contains about 18.0% P as  $P_2O_5$  (a carbonatite deposit).



**Exhibit 16: Global Processed Phosphate Shipments** 

Source: Fertecon and Mosaic

About 75.0% of the Australian market for phosphates (as phosphorus) is supplied by locally manufactured superphosphate and the balance by imports of ammonium phosphates. The Australian market for phosphate fertilizer is around 350,000 tons as phosphorus - equivalent to 4 million tons of superphosphate. Imports of phosphate fertilizer have been increasing at about 14.0% per year to 1 million tons, almost entirely as ammonium phosphates.

- Australia imports all its phosphate raw material which has been converted (solubilized) to superphosphate using locally sourced sulfuric acid
- Approximately 60.0% of the world market of 40 million tons of high analysis (high phosphorus content) fertilizer is represented by the diammonium phosphate and 10.0% by the monoammonium form
- All world regions forecast to have steady or higher demand going forward, following a rebound from the current economic downturn – growth is expected be led by Brazil and Asia
- Growth in ethanol/bio-fuels, particularly in the US and the Euro-zone, is expected to boost demand there, though modestly
- The phosphate (P<sub>2</sub>O<sub>5</sub>) and the phosphate rock markets are rebounding after two consecutive years of decline
- Longer-term, both phosphate fertilizer and phosphate rock demand are expected to trend upward with an average growth of around 3% per annum during the ten-year forecast (2009 to 2019)
- IFA forecasts indicate global phosphate demand climbing to 40.0 million tons in 2011 and to 43.7 million tons in 2014
- Phosphate rock demand from captive P<sub>2</sub>O<sub>5</sub> converters would grow faster than those who purchase rock

## **Growth Drivers**

- Population growth over the next 15 years would lead to increased food production, thereby boosting demand for phosphate fertilizers
- Income growth is accelerating, particularly as large Asian populations are rising with rapid economic development, thus increasing demand for food grains

Although arable land is expected to continue rising slowly, arable land per person would continue to fall, thus heightening requirement for increased productivity per unit of land and boosting demand for fertilizers.



## **Recent Results**

**Exhibit 17: Quarterly Income Statement** 

A\$	FQ3 2011	FQ2 2011	FQ1 2011	FQ4 2010	FQ3 2010	QoQ %	YoY %
Revenue	0	0	0	0	0	0.00%	0.00%
Cost of Revenue	349,600	349,600	0	0	233,084	0.00%	49.99%
Gross Profit	-349,600	-349,600	0	0	-233,084	0.00%	49.99%
Selling, General & Admin Expense	8,571,600	10,571,900	12,560,400	14,552,800	11,680,812	-18.92%	-26.62%
Operating Income	-8,921,200	-10,921,500	-12,560,400	-14,552,800	-11,913,896	-18.32%	-25.12%
Interest Expense	13,500	3,900	27,400	13,500	17,896	246.15%	-24.56%
Foreign Exchange Losses (Gains)	861,000	-648,900	291,500	454,700	1,285,275	NM	-33.01%
Net Non-Operating Losses (Gains)	-268,200	-439,900	-633,900	-596,500	-3,269,548	-39.03%	-91.80%
Pretax Income	-9,527,500	-9,836,600	-12,245,400	-14,424,500	-9,947,519	NM	-4.22%
Income Tax Expense	0	0	0	0	0	0.00%	0.00%
Income Before Extra-ordinary Items	-9,527,500	-9,836,600	-12,245,400	-14,424,500	-9,947,519	-3.14%	-4.22%
Extraordinary Loss Net of Tax	0	0	0	0	0	0.00%	0.00%
Minority Interests	-558,400	-1,260,300	-1,647,500	-1,375,900	-362,784	-55.69%	53.92%
Net Income	-8,969,100	-8,576,300	-10,597,900	-13,048,600	-9,584,735	4.58%	-6.42%
Total Cash Preferred Dividends	0	0	0	0	0	0.00%	0.00%
Other Adjustments	0	0	0	0	0	0.00%	0.00%
Net Income Available to Common Shareholders	-8,969,100	-8,576,300	-10,597,900	-13,048,600	-9584,735	4.58%	-6.42%
Basic EPS	-0.0396	-0.0379	-0.0468	-0.0577	-0.0423	4.57%	-6.45%
Basic Weighted Average Shares	226,399,700	226,385,800	226,333,400	226,333,500	226,333,392	0.01%	0.03%

Source: Company, RB Milestone Research

The Consolidated Entity's cost of revenue rose 50% for the third quarter ended September 30, 2010, compared to the same period last year, due to rise in amortization charges. The Company's net non-operating gains decreased by 39.0% on a quarterly basis, after interest received on cash in the bank reduced, as funds have been used for operational purposes. The Consolidated Entity's interest expenses surged 246.2% from the previous quarter for the quarter ended September 30, 2010, while the Company's costs and expenses for the third quarter ended September 30, 2010, decreased by 25.1% to A\$8,934,740 from the same period last year, mainly due to the reduction in the exploration expenditure by A\$2 million. Cost cutting in areas such as legal; accounting and professional expenditure; aircraft maintenance costs; interest expense; and administrative costs also proved beneficial for the Company. The Company's net loss widened by 4.6% to A\$9.0 million on a quarterly basis for the third quarter ended September 30, 2010, while its basic loss widened by 4.6% to A\$0.04 per share from the last quarter.

Exhibit 18: Consolidated Income Statement for the Year Ended 31 December

A\$	For the y	cember 31,	YoY %	
	2007	2008	2009	change
Revenues:				
Sales	-	-	-	
Less cost of sales	-	-	-	
Gross Profit	-	-	-	
Other income	-	49,931	81,503	63%
Interest income – related entity	22,183	3,669,440	3,338,315	-9%
Interest income – other	-	6,534	403,266	6072%
Other	22,183	3,725,905	3,823,084	3%
Costs and Expenses:				
Legal, professional and accounting	213,063	707,444	880,851	25%
Exploration expenditure	5,132,000	8,780,037	25,608,743	192%
Aircraft maintenance	-	278,826	1,014,986	264%
Stock based compensation	375,740	5,185,743	4,259,903	-18%
Interest expense	62,196	32,715	64,831	98%
Impairment of investment	-	326,526	-	
Amortization of mineral rights	-	-	582,710	
Administration expenses	2,756,935	8,096,798	8,217,286	1%
Total costs and expenses	-8,539,934	-23,408,089	-40,629,310	74%
(Loss) from operations	-8,517,751	-19,682,184	-36,806,226	87%
Adjustment to fair value on stepped acquisition (note 6)	-	-	2,200,620	
Gain on trading securities	-	70,874	113,739	60%
Foreign currency exchange gain/(loss)	-120,378	5,389,750	-4,661,096	NN
(Loss) Before Income Taxes and Equity in Losses of Unconsolidated Entities	-8,638,129	-14,221,560	-39,152,963	175%
Provision for income taxes	-	-	-	
Loss before equity in losses of unconsolidated entities	-8,638,129	-14,221,560	-39,152,963	175%
Equity in losses of unconsolidated entities (note 6)	-	-	-345,707	
Net (loss)	-8,638,129	-14,221,560	-39,498,670	178%
Net (loss) attributable to non-controlling entities (note 6)	-	-	1,612,599	
Net (loss) attributable to Legend stockholders	-8,638,129	-14,221,560	-37,886,071	166%
Basic and diluted loss per common shares	-0.06	-0.07	-0.17	
Weighted average number of common shares used in per share calculations	146,739,872	204,500,520	226,327,933	11%

Source: Company, RB Milestone Research

Legend International Holdings, Inc. is an exploration and mining stage company. The Company's sales will occur once it commences production. The Company's source of income is interest received on its investment. The Consolidated Entity's interest income from other sources increased substantially to A\$0.4 million for the year ended 31 December 2009. The increase of 87% in the operating loss was due to amortization of mineral rights; a rise in exploration expenditure; aircraft maintenance; and interest charges for the year ended 31 December 2009. The Company acquired a stake in North Australian Diamonds Limited in July 2009 and recognized mineral rights of A\$18,873,000. These mineral rights are being amortized over the term of the licenses and contributed to the increase in operating losses. The Company's net loss widened by 178% for the year ended 31 December 2009, mainly due to losses incurred in foreign currency exchange transactions that amounted to A\$4.7 million, while basic and diluted loss of the Company widened to A\$0.17 per share despite issuing 18,000 equity shares in the year 2009.

## **Valuation & Investment View**

We have valued the Legend's Paradise Phosphate Project based on the recently completed feasibility study conducted by Wengfu Group Ltd of China ("Wengfu"). The results of the feasibility study have confirmed that development of the project is technically and economically viable. The feasibility report on the Paradise Phosphate Project released in July 2010 contains the following observations:

Exhibit 19: Summary of the Paradise Feasibility Study Results

Summary	
Mineral Resource	81Mt @ 18.1% P <sub>2</sub> O <sub>5</sub>
Mine Life	+30 yrs
Total DAP Production – 30 yrs	18Mt
US\$11,046M Revenue Generated (30 yrs)	US\$11,046Mn
Total Free Cash Flow (after tax and capital, 30 yrs)	US\$2,647Mn
Nominal Annual Production (DAP/MAP/AIF3)	640Kt MAP/DAP, 15Kt AIF <sub>3</sub>
Development Capital	US\$808Mn

Source: Company

We have valued the Company using the future free cash flow projections of the project and discounting them using the weighted average cost of capital to arrive at a present value and evaluate the potential for investment.

The Company foresees incurring the following capital expenditure at its Paradise Phosphate Project:

**Exhibit 20: Capital Cost Estimate** 

Item	Capital Cost (US\$ Mn)
Mining infrastructure	7.7
Beneficiation plant	121.1
Transportation infrastructure	39.6
Mt Isa Phosphate Fertilizer Complex	585.53*
Working capital	54.29
Total Capital Cost	808.16

Source: Company

The following table shows the timeline for the above capital expenditure planned by the Company:

**Exhibit 21: Planned Capital Expenditure** 

Year	2011	2012	2013	2014	2015	2016	2017	Total
Capex (US\$ Mn)	150	330	208	0	0	60	60	808

Source: Company

The operating cost estimate for the Paradise feasibility study is summarized in table below:

**Exhibit 22: Operating Cost Estimate** 

Item	US\$/t DAP
*Phosphate Rock	58.2
*Sulfur	48.1
*Ammonia	68.1
Conversion Costs	87.3
Production Transport	59.6
Total Operating Cost (US\$)	321.3

Source: Company

<sup>\*</sup>Estimate does not include costs to be covered by other parties through potential Joint Venture arrangements

<sup>\*</sup>Includes any relevant mining, processing, handling and transport costs and also includes costs related to AIF3 production

We assume that the Company operates at its resources at Paradise North for a period of five years starting FY2014, before a beneficiation plant starts producing rock concentrate for the phosphoric acid plant in 2017. Paradise South mining is due to commence during year 5 of the project in 2017.

The following table shows the production of  $P_2O_5$  and aluminium fluoride (AIF<sub>3</sub>) expected from the project. We assume production starting in 2014. Based on the output, the First Year Revenue would be around \$348.6 million.

**Exhibit 23: Production** 

Tons	tn	tn
	@18.1 P <sub>2</sub> O <sub>5</sub>	AIF <sub>3</sub>
81,000,000		
Yearly	640,000	15,000
Price Per Ton \$	\$500.00	
Revenue	\$318,600,000	\$28,550,000
Annual Price Increase	4%	
First Year Revenue (\$)		\$320,000,000
Total Estimated DAP Production		18 Million Tons
Total Years of Production		30 years

Source: Company, RB Milestone Research

We have assumed that a growth factor of 4% per annum in the DAP/MAP price, while a similar growth in the Operating Cost per annum. Depreciation is calculated using the Diminishing Value Rate (DVR) 200% method over 20 years, which is an ATO accepted method of depreciating assets. Based on the above assumptions, we have arrived at the following cash flow streams. We use a discount rate of 8.4% to arrive at the fair value.

Exhibit 24: Cash flows Until the Start of Production at Paradise South

Fiscal Year	2011	2012	2013	2014	2015	2016	2017
(Mn)							
Capex & Working Capital	150.00	330.00	208.00	0.00	0.00	60.00	60.00
Asset Value		480.00	688.00	688.00	688.00	748.00	808.00
Depreciation (using DVR 200% method over 20years)		42.08	38.39	35.03	31.96	29.15	26.60
Base Value		480.00	437.92	399.53	364.50	332.54	303.39
Revenue	0.00	0.00	0.00	348.55	362.49	376.99	392.07
Cost	0.00	0.00	0.00	205.63	213.86	222.41	231.31
EBITDA	0.00	0.00	0.00	142.92	148.63	154.58	160.76
No of Year	0	1	2	3	4	5	6
Discount Rate	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%
Average Tax Rate	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
Tax	0.00	0.00	0.00	32.37	35.00	37.63	40.25
Post Tax Cash Flows	-150.00	-330.00	-208.00	110.55	113.63	56.95	60.51
Discounted Cash Flows	-150.00	-304.37	-176.95	86.74	82.24	38.02	37.26

Source: Company, RB Milestone Research

Exhibit 25: Cash Flows After the Start of Production at Paradise South for the Next 25 Years of Mine Life

Fiscal Year	2018	2042
(Mn)		
Capex & Working Capital	0.00	0.00
Asset Value	808.00	808.00
Depreciation	24.27	2.45
Base Value	276.79	27.92
Revenue	407.75	1,087.01
Cost	240.56	641.29
EBITDA	167.19	445.71
No of Year	7	32
Discount Rate	8.4%	8.4%
Average Tax Rate	30.0%	30.0%
Tax	42.88	132.98
Post Tax Cash Flows	124.32	312.73
Discounted Cash Flows	70.60	23.54

Source: Company, RB Milestone Research

**Exhibit 26: Calculation of WACC** 

Cost of Equity			
Risk Free Rate	3.3%		
Stock Premium	6.3%		
Beta	0.81		
Expected Return	8.4%		
Cost of Debt			
Average Borrowing Rate (Before tax)	0.0%		
Tax Rate	30.0%		
Cost of Debt	0.0%		
Capital Structure			
Book Value of Equity (As of September 30, 2010)	81,202,129		
Book Value of Debt (As of September 30, 2010)	0		
Total Capital (excl deferred tax liability)	81,202,129		
WACC	8.4%		

Source: RB Milestone Research

Exhibit 27: Calculation by Discounted Cash Flow Method

	US\$
PV of Cash Flow	716,641,596
Add Cash	41,353,972
Less debt	0
Valuation for the Properties	757,995,568
Shares Issued	226,399,674
Value Per Share (in \$)	3.35
Current Market price (\$)	0.85
Upside Potential	293.9%

Source: RB Milestone Research

We value the Company based on PV of cash flow which is expected to be generated from its Paradise Phosphate project. Assuming discounting factor of 8.4% and a production span of 30 years, we have arrived at a target price of \$3.35, which provides an upside of 294% to the current market price.

Though the project offers substantial returns, there is high level of uncertainty associated with its production and anticipated cash flows. In light of this, the investment is of the nature of a high risk investment.

## **Key Risk Factors**

Legend faces certain financial and non-financial risks to its operations including the following:

The Company Lacks an Operating History and Has Incurred Losses Which it Expects to Continue into the Future: To date the Company has neither material source of revenue nor any operating history as a mineral exploration or mining company upon which an evaluation of its future success or failure can be made. The Company's ability to achieve and maintain profitability and positive cash flow is dependent upon:

- Exploration and development of any mineral property that it identifies
- Its ability to locate economically viable mineral reserves in any mineral property that it identifies
- Its ability to generate revenues and profitably operate a mine on any mineral property that it identifies

**Exploration & Production Risk:** Exploration for phosphate, base metals and diamonds is a highly speculative venture necessarily involving substantial risk. There is no certainty that the expenditures to be made by the Company in pursuing the proposed exploration program would result in the discovery of commercial quantities of phosphate, base metals and other precious minerals. The exploration and mining business involves a high degree of risk as few exploration activities end up going into substantial production.

The Company may encounter seismic activity, unfavorable ground conditions or may face other mining accidents. This will reduce the production of the Company, affecting its profitability.

**Encounter Delays due to Regulatory and Permitting Delays:** The Company could face delays in obtaining mining permits and environmental permits. Such delays could jeopardize financing, if any, in which case it would have to delay or abandon work on the properties.

Global Economic Conditions Could Adversely Affect Results of Operations and Financial Condition: During 2008 and 2009, world economic conditions have experienced a downturn due to the sequential effects of the subprime lending crisis; general credit market crisis; the general unavailability of financing; collateral effects on the finance and banking industries; volatile energy and commodity costs; concerns about inflation; slower economic activity; decreased consumer confidence; reduced corporate profits and capital spending; adverse business conditions; increased unemployment; and liquidity concerns. These adverse conditions may make it harder for the Company to raise additional funds to finance the continued development of its business and may reduce the demand for phosphate which, at least in the short term, could reduce the value of the Company's mineral exploration properties. Continued adverse economic conditions could adversely affect its liquidity, results of operations and financial condition.

**Metal Price Fluctuation:** Resource prices can fluctuate widely and have done so in recent years. Metal prices fluctuate frequently depending upon the factors such as international, economic and political trends; government regulation; currency exchange rate fluctuations; interest rates; global or regional consumption patterns; and worldwide production levels. There are various factors that influence the market value of minerals. These factors lie beyond the control of the Company and their impact cannot be accurately predicted.

Uncertainties Inherent in the Estimation of Mineral Reserves: Reserve estimates, including the economic recovery of ore, would require certain assumptions about recovery costs and market prices. Reserve estimation is, by its nature, an imprecise and subjective process and the accuracy of such estimates is a function of the quality of available data and of engineering and geological interpretation, judgment and experience. The economic feasibility of properties would be based upon the Company's estimates of the size and grade of ore reserves; metallurgical recoveries; production rates; capital and operating costs; and the future price of diamonds. If such estimates are incorrect or vary substantially it could affect Legend's ability to develop an economical mine and would reduce the value of an investor's investment.

Regulatory & Environmental Risk: The Company's operations are subject to several environmental risks. A breach of such an act may result in imposition of heavy fines and penalties, impacting the Company's activities adversely. Current and future environmental laws, regulations and measures could entail unforeseeable additional costs; capital expenditures; and restrictions or delays in the Company's activities. Environmental regulations and standards are subject to constant revision and could be substantially tightened which could have a serious impact on the Company and its ability to develop its properties economically.

**Global Competition:** Exploration of phosphate, base metals and diamonds is a highly competitive industry in all its aspects. The Company has to compete with other companies in terms of financial resources and technical facilities in order to acquire significant mineral interests. There is no assurance that a ready market will exist for the sale of the same, even if commercial quantities are eventually discovered.

**Investment Risk:** Investment in exploration and mining companies is considered to be speculative because of the inherent risks associated with mineral exploration. The Company cannot guarantee that it would find any or that they would be successful in locating commercial mineral reserves on any exploration properties that they may obtain. Even if they find a commercial mineral reserve, there is no assurance that would be able to mine them. Even if they develop a mine, there is no assurance that it would make a profit.

**Liquidity & Funding Risk:** The Company also faces liquidity risk to a certain extent as it must adhere to certain conditions for using funds borrowed from several financial institutions. In the event the Company is unable to maintain these contractual ratios, the lenders may request the repayment of the corresponding loan.

The Company would raise funds for future projects by issuing or selling equity share capital. If the cost of capital is greater than the rate of return expected by investors, or if the net present value of an undertaken project comes negative, the Company's reputation in the market would be at stake which might create future funding problems.



## **Annexure I: Management Team**

#### Joseph Gutnick, President and Chief Executive Officer

Joseph Gutnick is a prolific entrepreneur in the mining industry and has been Chairman of the Board, President and Chief Executive Officer of Legend International Holdings, Inc. since November 2004. Mr Gutnick has been appointed to serve on the board of directors of various listed public companies in the mining sector in North America and Australia. In the past, Mr. Gutnick has been a Director of Hawthorn Resources Limited; Astro Diamond Mines NL; Acadian Mining Corporation; and Royal Roads Corporation. Mr. Gutnick was responsible for overseeing the discovery of the Plutonic gold deposit, and the discovery, development and operation of the world class Bronzewing and Jundee gold mines in Australia Mr. Gutnick has also been a Director of the World Gold Council. He is a Fellow of the Australian Institute of Management; a Fellow of the Australasian Institute of Mining and Metallurgy; and a Member of the Institute of Company Directors in Australia. He was felicitated with the esteemed Diggers Award at the 1997 Diggers and Dealers Industry Awards.

## Dr U.S. Awasthi, Non-Executive Director

Dr.U.S. Awasthi is the Director of Legend International Holdings, Inc. since August 2008 and has broad experience in the planning and execution of fertilizer plants. Dr. Awasthi has been the Managing Director of IFFCO since February 1993 and was the Chairman of the Fertilizer Association of India, New Delhi during 1994-96. He held the position of President, International Fertilizer Industry Association, Paris during 1997-99. Dr. Awasthi had completed his graduation in Chemical Engineering from Banaras Hindu University. He represented the industry point of view on Sustainable Development at the 6th Session of United Nations Commission on Sustainable Development. He has co-authored a book 'Fertilizer Industry in India' besides publishing 30 papers.

#### **Dr David S Tyrwhitt, Non-Executive Director (Independent)**

Dr. David Stuart Tyrwhitt is a professional geologist with 46 years of experience in mineral exploration and in the management development and operation of gold mines in Australia. He is the Vice President and Director of Legend International Holdings, Inc. and was appointed as the Director in March 2005. Dr. David Stuart Tyrwhitt holds PhD degrees along with a Bachelor of Science degree. He has worked for over 20 years with Newmont Mining Corporation in Australia, South East Asia and the United States. He was given credit for the discovery of the Telfer Gold Mine in Western Australia. Dr. Tyrwhitt has also been a Director of Astro Diamond Mines NL in the last five years.

## Dr Allan Trench, Non-Executive Director (Independent)

Dr. Allan Trench is a professional geologist/geophysicist and business management consultant with almost 20 years experience within the Australian resources sector across various commodity groups. Dr. Trench is the Director of Legend International Holdings, Inc. since August 2008. He has completed his Bachelor of Science (Honours) and also holds a doctorate in Geophysics. He is a master of Business Administration (Distinction) from Oxford University and a Master of Science (Distinction) in Mineral Economics. He is currently a Chairman of the Board and a Director of Acadian Mining Corporation; a Director of Navigator Resources Ltd., Pioneer Resources Limited and Venturex Resources Ltd.; and holds the position of an Adjunct Professor of Mineral Economics & Mine Management at the WA School of Mines, Curtain University.

## **Henry Herzog, Non-Executive Director (Independent)**

Henry Herzog is the Director of Legend International Holdings, Inc. since August 2008 and also the Director of North Australian Diamonds Ltd., with more than 40 years of corporate and management experience. He has served various publicly listed companies in Australia and the United States as President, Vice President or Director. With ability and efficiency, Mr Herzog restructured and reorganized several publicly listed companies including Bayou

International Ltd. Mr. Herzog is a member of the Board of Trustees of a non-profit college of higher education.

## **Craig Michael, Executive General Manager**

Mr Michael has over 10 years experience as a geology professional in the mining and resources industry. He is currently an Executive Director for North Australian Diamonds Limited, Quantum Resources Ltd, Top End Uranium Limited, Aurum, Inc. and Electrum, Inc., and Executive General Manager of Legend International Holdings, Inc. His previous work was with Oxiana Ltd, an international mining company with operations in South East Asia and Australia. Mr Michael was based in Laos in senior management positions, both as a Mine Geologist and Resource Geologist at the Sepon Copper Gold Project, Savannahkhet, Laos.

#### Peter J. Lee, Chief Financial Officer and Secretary

Peter J. Lee has been actively involved in the accounting, company secretarial and commercial fields in Australia and in the overseas market for the last 25 years, and has been engaged in the development and introduction of various corporate issues. He is the Chief Financial Officer of Legend International Holdings, Inc. since March 2005 and Secretary since November 2004. He is a Fellow of Chartered Secretaries Australia Ltd.; a Member of the Institute of Chartered Accountants in Australia' a Member of the Australian Institute of Company Directors; and holds a Bachelor of Business (Accounting) from Royal Melbourne Institute of Technology. Prior to joining Legend International Holdings, Inc. Peter Lee has worked for 6 years with Price Waterhouse in Melbourne and Papua New Guinea.

## **Edward Walker, Project Manager**

Edward Walker has been Project Manager of the Company since October 2008. He has acquired extensive international experience in the mining and water sectors via a number of senior engineering and project manager roles in international organizations, including as Principal Engineer for Parsons Brinkerhoff Australia from April 2007 to October 2008. Prior to that, he was with Bahia Mineracao Limitada as Senior Project Manager. Mr Walker spent over 10 years in senior engineering roles in Australia and the United Kingdom before spending two years as a senior project manager of an Iron Ore Mining project run by Brazilian company Bahia Mineraçao Limitada (BML). He then moved to a multi-disciplinary engineering firm Parsons Brinkerhoff as a Principal Engineer responsible for business development and delivery of client projects. Mr Walker has a Bachelor of Engineering (Civil) from Swinburne University of Technology and an Executive MBA from the Business School of Sao Paulo.

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