

## BRIEFING PAPER ILUKA CAPITAL DISCIPLINES

May 2015

This Briefing Paper is designed to provide an indication of the financial and other disciplines which Iluka applies to the assessment and pursuit of investment opportunities. The company adopts a multi-faceted approach to the rigorous evaluation and assessment of opportunities in terms of value delivery to shareholders. The information contained within this paper is designed to provide an overview of Iluka's capital investment and management disciplines. The company does not, however, disclose specific financial hurdle rates or criteria.

Iluka's growth approach is in accordance with the company's objective: to create and deliver value for shareholders.

Growth options are evaluated and pursued through a variety of means, including:

- advancing internal mineral sands projects;
- investment in innovation and technology related to mineral sands operations and product development;
- an Australian and international mineral sands exploration programme, as well as selective involvement in other minerals commodities;
- the continued expansion of the company's international marketing presence, and
- the evaluation and preparedness to pursue corporate growth opportunities in mineral sands or other mineral commodities, subject to strict criteria.

### **Shareholder Valuation Criteria**

Iluka's principal focus in relation to the pursuit of growth opportunities includes the following:

- a focus on return on capital (as an internal company proxy for return on shareholders' equity);
- maintenance of a robust balance sheet to provide flexibility in relation to production, marketing and growth approaches and options;
- returning excess free cash flow (above a stated minimum) to shareholders where there is no identified reinvestment opportunity; and
- Iluka should be able to create value from its inherent skills and attributes (for example, technical capabilities, marketing skills and so on), rather than simply a balance sheet or shareholder funds addition;
- an assessment of the implications in terms of market structure, as well as a detailed analysis of medium term supply/demand arrangements and their impact on the financial characteristics of any such opportunity.

## Financial criteria adopted in assessing investments include:

- investments must generate returns above risk weighted hurdle rate;
- investment decision making covers scenarios, not single point views of the future;
- risk assessment plays a major part in the project process;
- a range of measures are assessed (IRR, NPV, payback period, margins, profile of cash flows, return profiles etc. as well as risk and risk mitigation considerations);
- assumptions are conservative, and include line by line contingencies;
- product prices used for project economics are consistent with Iluka's industry analysis, including inducement economics; and
- project timing or phasing is flexible.

## Elements of Iluka's Approach

In the case of mineral sands, Iluka conducts "inducement analysis" on all known mineral sands projects, current or potential developments and most identified resources with a view to understanding the inherent resource and financial characteristics, in varying pricing and demand regimes.

When considering opportunities, Iluka has typically adopted a phased or "gated" approach to opportunity identification and pursuit, which entails a significant commitment to industry and market analytical work.

This approach can be seen in relation to Iluka's investment in Sri Lanka (a large sulphate ilmenite deposit), Tapira (a large titanium dioxide mineralisation in Brazil) and Metalysis (an equity position in a potentially disruptive technology for the manufacture of high grade titanium feedstocks to titanium powder). In these cases, longer term, potentially high value "options" have been secured with minimal initial capital risk to enable the further evaluation of geological, technical, market and/or other risk factors before a more significant capital deployment decision.

In relation to the screening of other opportunities before more detailed investigation, the main components of Iluka's approach would typically include:

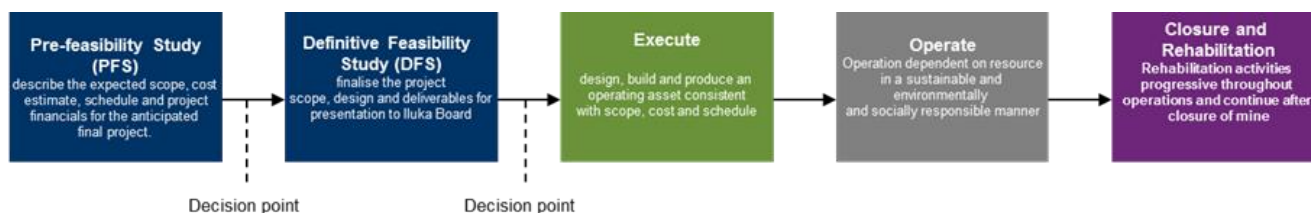
- **favourability of market dynamics** - future market supply/demand characteristics; global scarcity; proportion of cost in end products; opportunity to secure material market share; nature of customer/contracting arrangements; ability to influence market dynamics; ability to leverage and/or achieve synergies in relation to existing Iluka capabilities/infrastructure;
- **technical analysis** based on available industry data; retention (if appropriate) of industry consultants; utilisation of internal technical and operational expertise (in the case of mineral sands opportunities); industry benchmarking and ultimately, where practicable, operational due diligence;
- **quality of underlying asset** – safety; development stage; operating cost (relative cost curve position); margin characteristics; growth potential; resource scale; optionality for Iluka portfolio
- **financial and operational risk considerations** - cash/debt; legacy issues (legal, environmental etc.);
- **portfolio/capabilities fit** – operation and cultural fit; location/jurisdictional/regulatory risk; competitive regulatory factors (if appropriate); "adjacency" of opportunity relative to Iluka portfolio and skillset;
- **value considerations** – peer transactions and analogous premia; likely transaction costs; indicative measures of value (e.g. EV/reserve or resource); relative asset value. This initial evaluation would, if appropriate, lead to detailed evaluation and impact analysis with the economic analysis considering various parameters (IRR, NPV; NAV accretion; EPS accretion; free cash flow per share, payback period; shape of cash flows; return on capital/return on equity; debt and coverage ratio impact) all of which are tested against a variety of operating and market scenarios.

## Internal Growth Options

The assessment of internal growth options entails an equally comprehensive process, with internal projects being screened and ranked before progressing through scoping, pre-feasibility, definitive feasibility and execution phases. Iluka typically conducts post-implementation reviews on all projects at or near the end of their commercial operation. In the case of mineral sands projects, resource to reserve conversion usually occurs at the completion of the definitive feasibility stage, when project economics and detailed engineering design work

has been completed. Project management is under the direction of a senior executive, who reports through to an Executive member.

### Iluka's Project Stages – Schematic Representation



A key focus in relation to the implementation of internal production options includes the determination of the most capital-efficient development, with a focus on optimising the level of capital investment on production equipment and the level of investment on non-cash generating infrastructure. Iluka has, as a matter of practice, developed projects which have made use of existing infrastructure and/or equipment. Recent examples include:

- the Jacinth-Ambrosia development in South Australia which made use of existing mineral separation plants in the Iluka portfolio, initially in Western Australia and more recently by heavy mineral concentrate (an intermediate product) being processed at both the Narngulu (Western Australia) and Hamilton (Victoria) mineral separation plants. Apart from a major capital expenditure saving, this has increased the flexibility of feedstock blends and allowed mineral separation plants performance to be optimised;
- the Jacinth-Ambrosia project also made use of an existing wet concentrator plant, sourced from the United States and refurbished for use; and
- in the Murray Basin, the progression from the Kulwin to Woorneck, Rownack, Pirro mines has entailed the relocation of most equipment (pre concentrator and wet concentrator plant, mining units and other equipment), as well as associated infrastructure.

Iluka's review of growth opportunities, whether internal or external to its portfolio also takes account of other criteria which relate to areas such as: stakeholder identification and engagement; adherence to industry accepted operating principles and practices (including human rights and anti-bribery and corruption principles); environmental, health and safety and other sustainability principles.

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This briefing paper contains information that is based on projected and/or estimated expectations, assumptions and outcomes.

These forward-looking statements are subject to a range of risk factors associated, but not exclusive, with potential changes in:

- exchange rate assumptions
- product pricing assumptions
- mine plans and/or resources
- equipment life or capability
- current or new technical challenges
- market conditions
- management decisions

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