

# CREATING VALUE FROM WASTE™



Investor Presentation  
October 2011

**TITANIUM**  
CORPORATION

# Forward Looking Information

This presentation contains forward-looking information that involves various risks and uncertainties regarding future events. Such forward-looking information includes, without limitation, statements based on current expectations which are based on assumptions and subject to a number of risks and uncertainties and are not guarantees of future performance of the Corporation. These risks and uncertainties could cause actual results and the Corporation's plans and objectives to differ materially from those expressed in the forward-looking information. These risks and uncertainties are more particularly described and updated in the Corporation's documents filed with the Canadian securities regulatory authorities on SEDAR at [www.sedar.com](http://www.sedar.com). Most notably these risks and assumptions include, but are not limited to: successful removal/recovery of zircon, bitumen and solvent; changes in worldwide prices of zircon and titanium; fluctuation in exchange rates; development and commercialization plans; legislative, political or economic developments including changes to relevant legislation in Canada; operating or technical difficulties in connection with development activities; requirement for additional funding; development timelines; potential values of recovered zircon, bitumen and solvent; expected future oil sands production & bitumen losses; and prospective results of operations, financial position or cash flows that are based on assumptions about future economic conditions and courses of action. These and all subsequent written and oral forward-looking information are based on reasonable estimates, opinions and assumptions of management on the dates they are made and are expressly qualified in their entirety by this notice and the Corporation's documents filed with the Canadian securities regulatory authorities on SEDAR at [www.sedar.com](http://www.sedar.com). Except as required by securities law, the Corporation assumes no obligation to update forward-looking information should circumstances or management's estimates or opinions change.

# Creating Value from Waste™

**Titanium Corporation has successfully developed a two pronged technology solution for oil sands tailings:**

- Industry-wide technology solution recovers valuable bitumen, solvent and minerals from oil sands froth treatment tailings
- Reduces emissions, consumption of fresh water and the environmental footprint of tailings ponds

# Titanium Corporation

## Corporate Information

TSXV Share Price (52 week range)

\$1.77 (\$1.35/\$2.90, 12:00 Sept 27)

Average trading volume

58,205 shares/day

Shares Outstanding

64 million

Market Cap

\$113 million

Major Shareholder

Pinetree Capital 11.4%

Last Issue Dec/2010

7.2 million shares @\$2.00

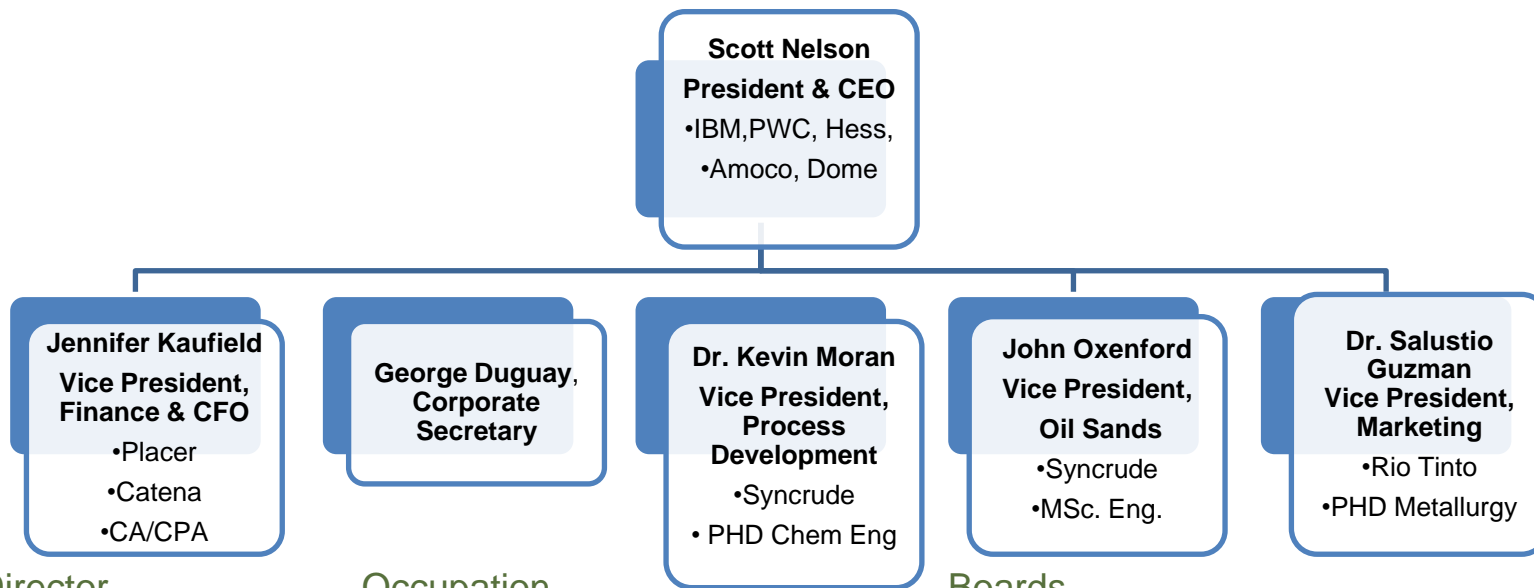
Cash Position

\$12 million (August 31/11)



POWERED BY  
**Stockhouse**

# Titanium Corporation – Management Team



## Director

**Gordon Pridham**

**C. Bruce Burton**

**Moss Kadey**

**Malcolm Macpherson**

**Scott Nelson**

**Brant G. Sangster**

**Eric W. Slavens**

## Occupation

President & CEO, Edgewater Capital

Corporate Director

Corporate Director

Corporate Director

President & CEO, Titanium Corporation

Corporate Director

Corporate Director

## Boards

Newalta Corporation; Chairman, US Silver Corporation

BioteQ Environmental Technologies Inc.;  
Continental Nickel Inc.

Brita GmbH

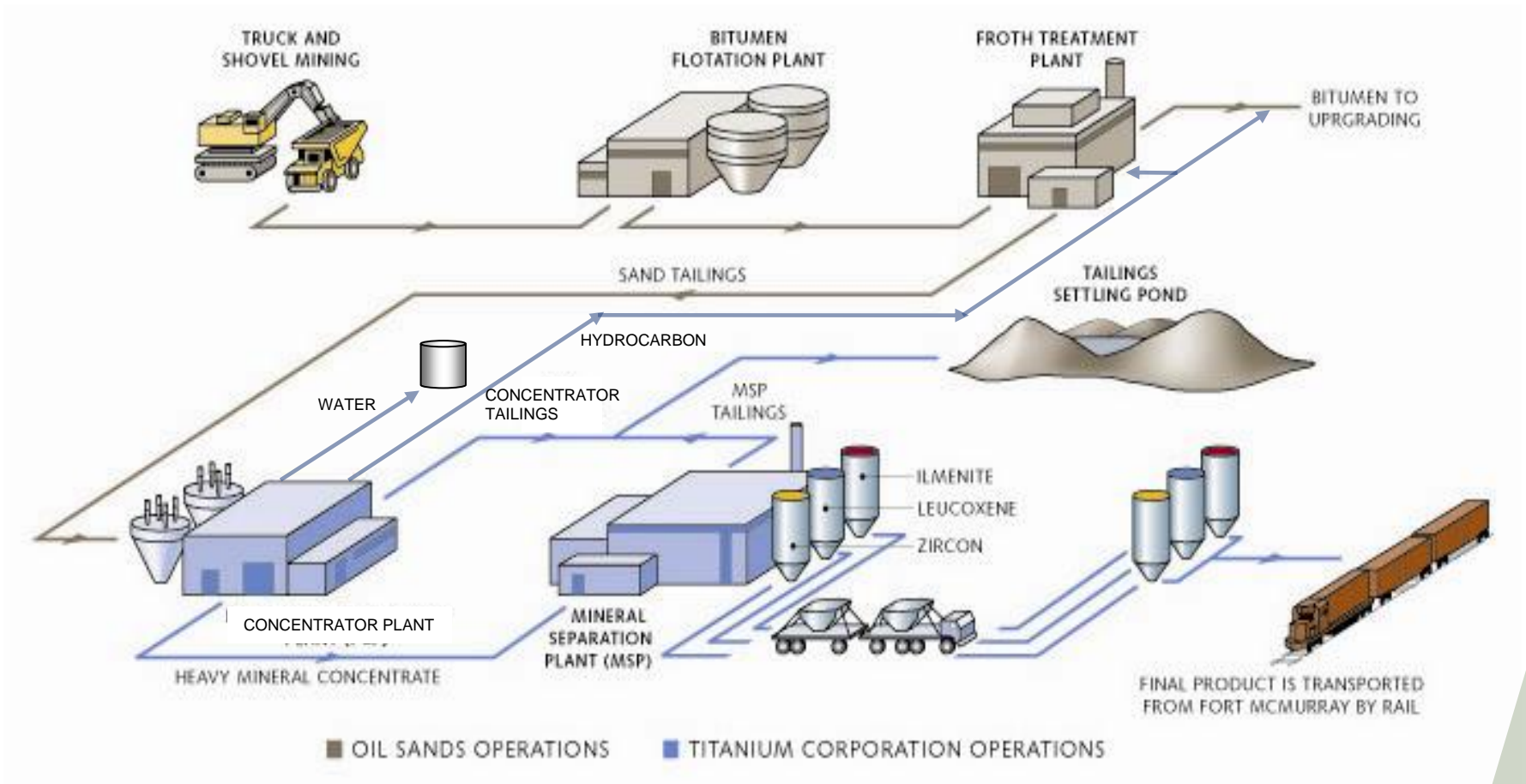
Minara Resources Limited; Pluton Resources;  
Range River Gold Inc.

Cdn.Oil Sands Ltd; Inter Pipeline; Harvest Energy  
Altus Group Income Fund

# October Update

- Demonstration pilot successfully completed in May, 2011; final reports to Alberta and Canadian Governments
- Technical reviews completed with the 3 naphtha FT oil sands operators
- Preliminary engineering by SNC-Lavalin for one site
- Site specific cost estimates and economic model
- Fiscal and regulatory work underway with Alberta Government
- Paraffinic FT piloting for 2 operators
- Positive testing of new mineral separation technologies in Australia
- Zircon markets averaged \$1,400/tonne first 6 months 2011

# Oil Sands Mining Extraction Process





Oil Sands  
Tailings Pond

# Composition of Froth Treatment Tailings

## Naphtha tailings (Syncrude, Suncor, CNRL)

- ~80% water
- 17% solids containing valuable minerals
- 2 to 3% bitumen & solvent



## Paraffinic tailings (Shell, Imperial, Total)






- ~73% water
- 17% solids containing minerals
- 8 to 10% bitumen & solvent



# Four operating oils sands sites:






Over \$600 million per year of “recoverable” valuable resources are lost to tailings ponds from froth treatment tailings

(1)Conservative price assumptions: \$70/B WTI; \$700/T zircon

	Typical Annual Range	Potential Recovery	Potential Value(1)
 Zircon	200,000 – 250,000 tons	70% – 75%	\$126M - \$169M
 Bitumen	8 – 10 million barrels	65% – 75%	\$260M - \$375M
 Solvent	750,000 – 995,000 bbls	50% – 75%	\$30M - \$60M
 Water	25 – 37 million m <sup>3</sup>	50% – 80%	
 CVW Totals			\$416M - \$604M

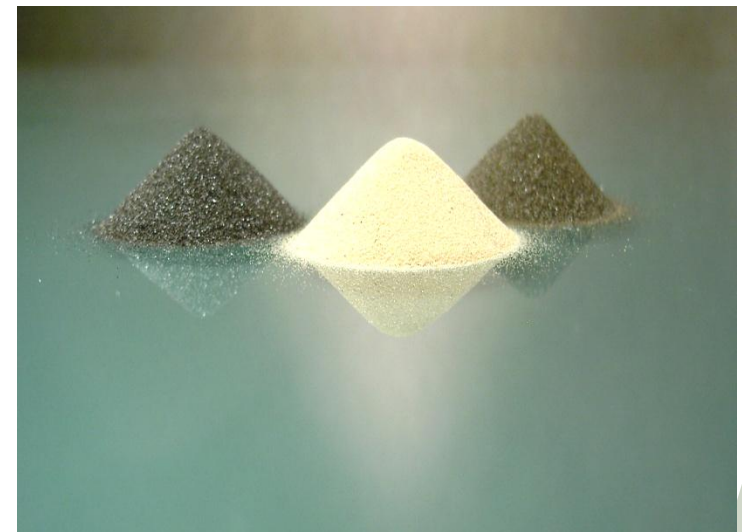
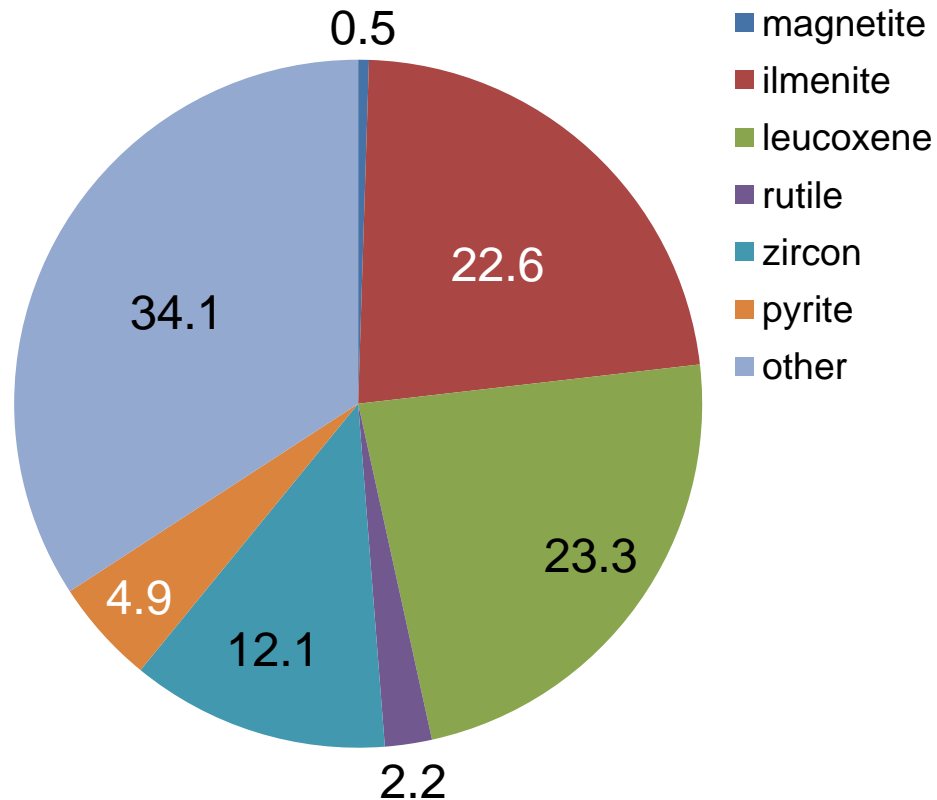
# A single large oil sands site annually loses over \$200 million of “recoverable” valuable resources:

(1) Conservative assumptions: \$70/b WTI; \$700/t zircon

	Typical Annual Range	Potential Recovery	Potential Value(1)
 Zircon	70,000 – 100,000 tons	70% – 75%	\$44M - \$67M
 Bitumen	2 – 3 million barrels	65% – 75%	\$65M - \$113M
 Solvent	300,000 – 400,000 bbls	50% – 75%	\$12M - \$24M
 Water	10 – 15 million m <sup>3</sup>	50% – 80%	
 Totals			\$121M - \$204M

# Oil Sands Heavy Minerals Suite:

12% Zircon



# Global Zircon Market Update

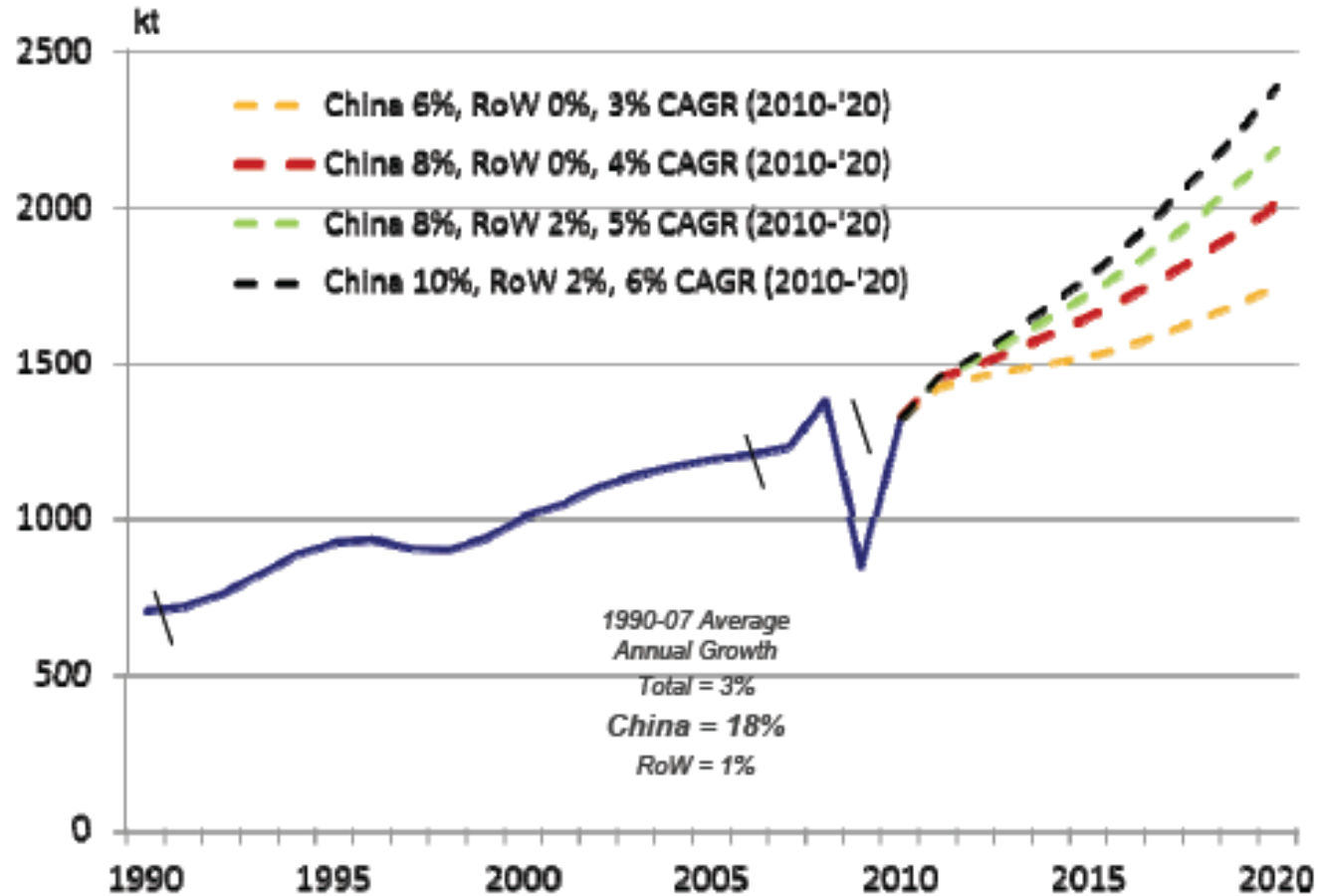
Goldman Sachs & Partners Australia: March Price Forecast

	2010	2011f	2012f	2013f	2014f	2015f
US\$/t	\$920	\$1,696	\$2,221	\$2,371	\$2,021	\$2,021

- China and other developing economies driving demand
- 1.3 million tonne market growing 4.1%: China 40%; Europe 20%; other Asia 20%
- Essential uses: ceramics 55%; foundry/refractory 22%; chemicals 18%
- Current Supply: Australia 40%; South Africa 30%
- Producers: Iluka (ASX:ILU) 35%; Exxaro 15%; BHP 9%; Rio Tinto 9%

# Global Zircon Demand

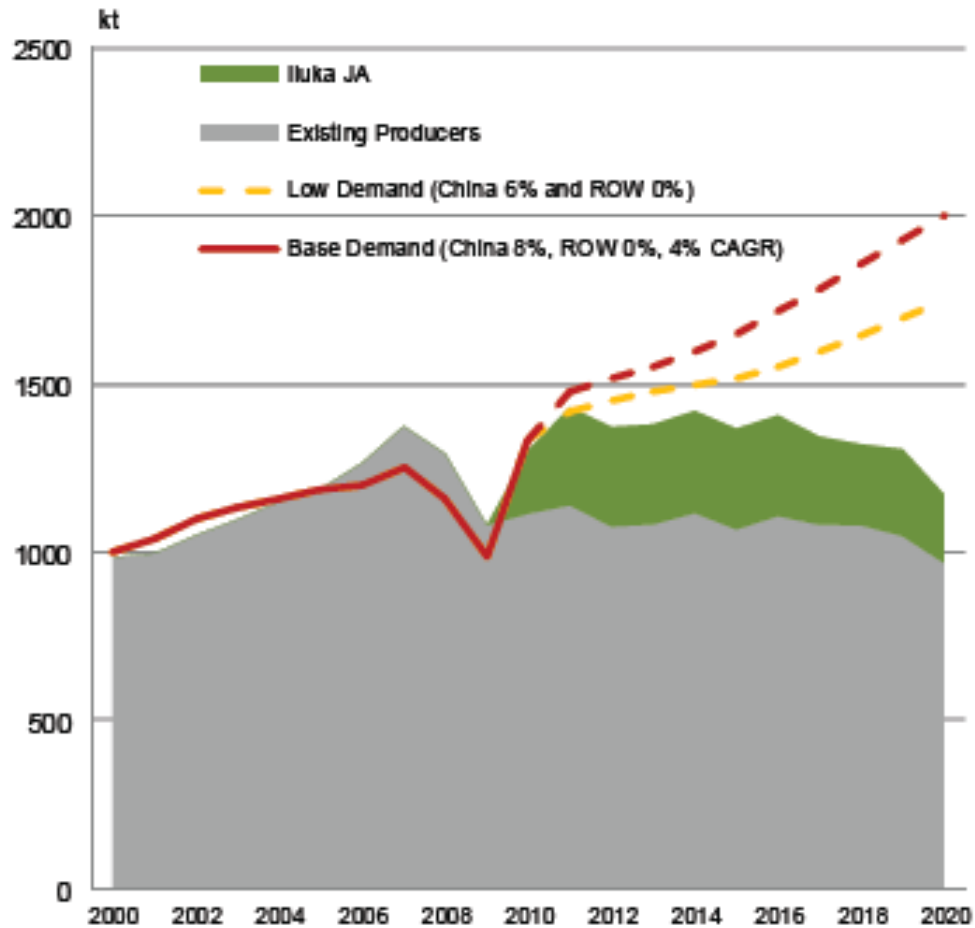
Underpinned by emerging economies



Source: Iluka Resources Ltd

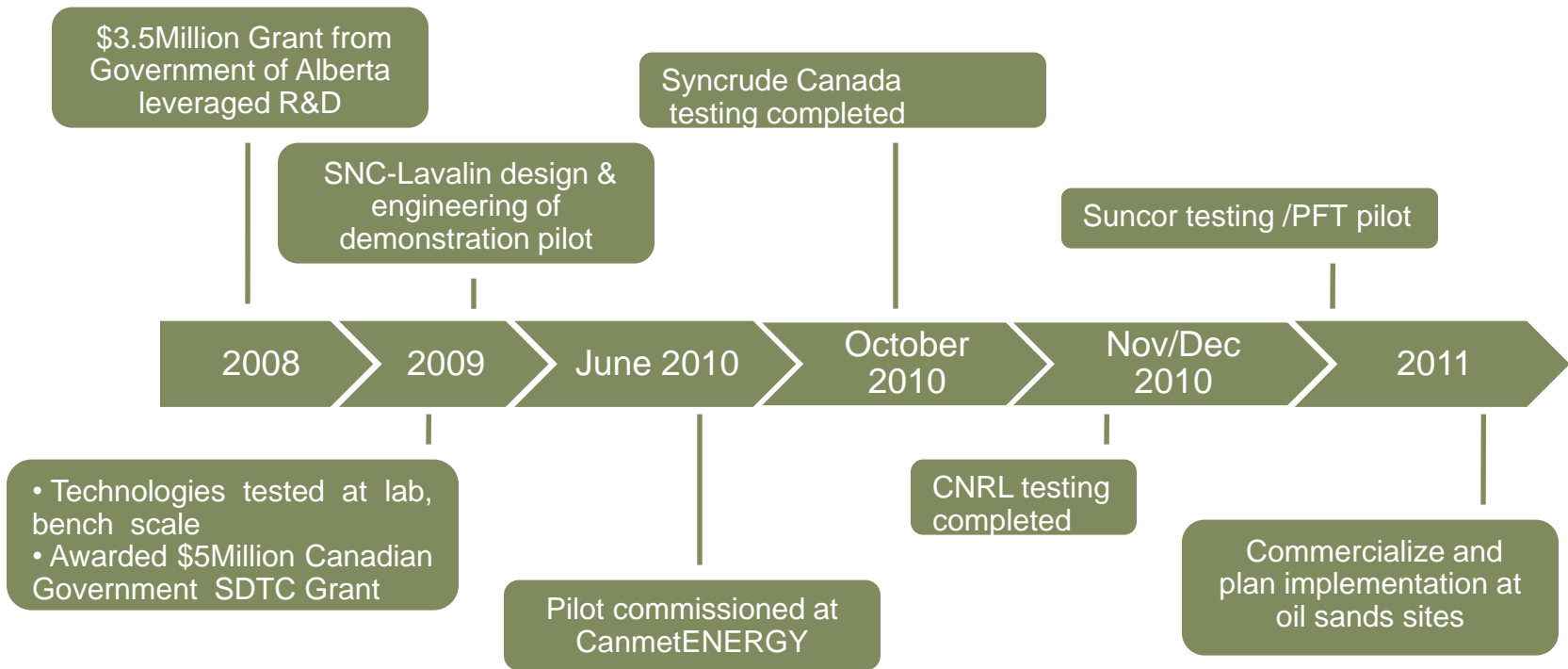
# Zircon

## Supply and demand scenarios



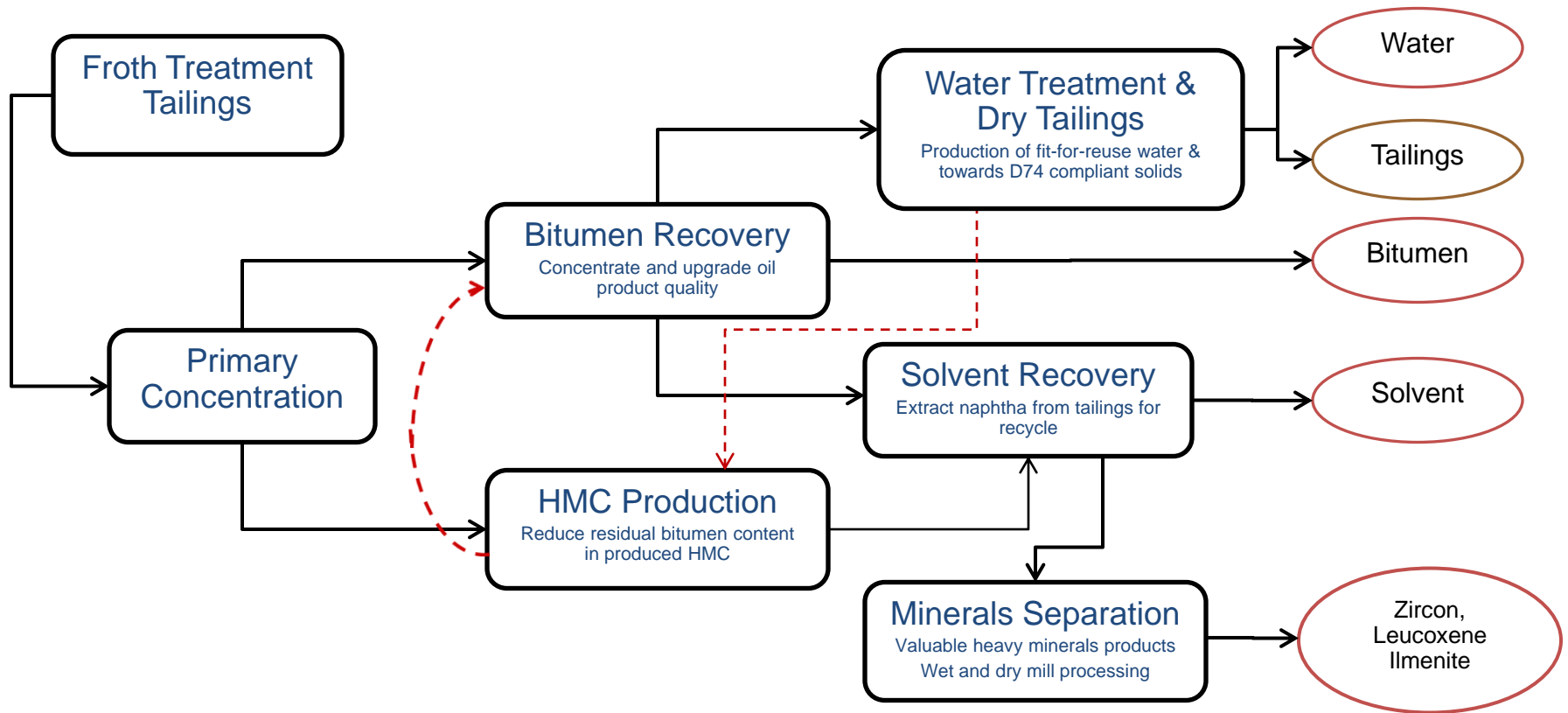
Source: Iluka Resources Ltd

# Titanium's Development Path



# Creating Value from Waste

## CVW™ Technology Flow-Sheet





**Pilot Facility at  
CanmetENERGY**



**Titanium's Pilot at  
CanmetENERGY**



**Titanium's Pilot at  
CanmetENERGY**

# Creating Value from Waste™

**After 12 month demonstration pilot, our technology has met or exceeded targets:**

- 75% recovery of bitumen
- Recovery of 75% of solvents (a major source of VOC's at oil sands sites)
- Bitumen removal from heavy minerals to target specifications
- Dry tailings and water recovery

# Compelling Economic and Environmental Benefits of Implementing Titanium's Technology:

## At 2010 Oil Sands production:

- 28,000b/d bitumen;\$700million/yr
- VOC reduction of 80%;60kt/yr
- CO2 reduction 5.6%; 0.8 mega tonnes/yr
- NOx reduction 4.2%;1.9kt/yr
- >50% recycle; 25% river water reduction
- 170,000t/y zircon; \$340 million

## At 2020 projected production:

- 70,000b/d; \$1.8 billion/yr
- 80%; 151kt/yr
- 5.6%; 2.4 mt/yr
- 4.2%; 5.8kt/yr
- >50% water recycle; 25% river water reduction
- 400,000t/y zircon; \$800 million

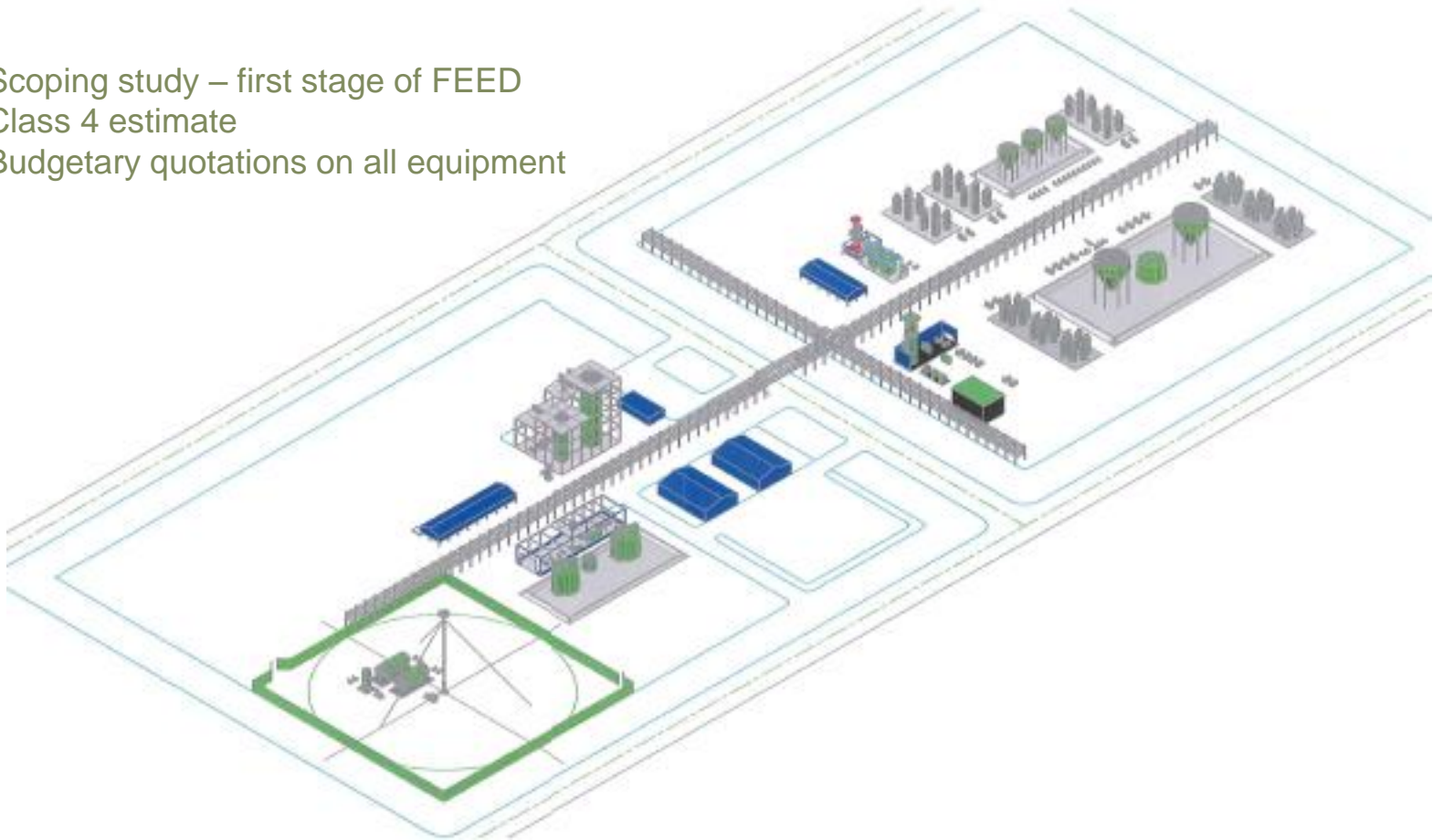
# Commercialization Process

- Technical due diligence (completed)
- Site specific planning and prelim. engineering (underway)
- Site specific cost estimates and economics (underway)
- Fiscal and regulatory terms (underway)
- Commercial agreements
- Financing
- EPC (24 months)

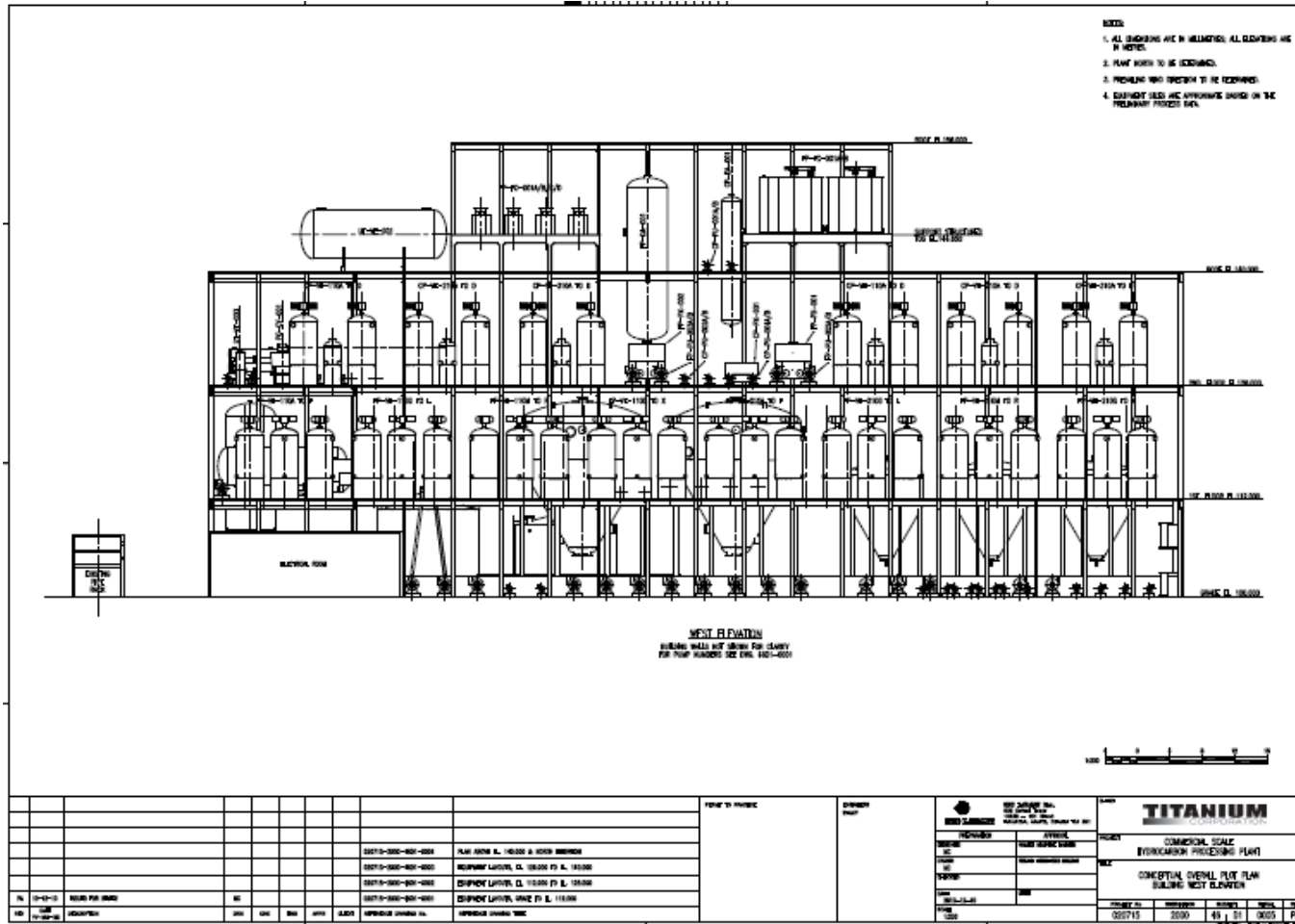
# Commercialization-Preliminary Engineering

SNC-Lavalin designed commercial plant plot plan

- Scoping study – first stage of FEED
- Class 4 estimate
- Budgetary quotations on all equipment



# Commercialization-Preliminary Site Engineering



# Commercial Alternatives

## Distinct plant operations:

- Concentrator plants located at each site
- Central mineral separation plant located off-site owned and operated by Titanium Corporation

## Options for on-site plants:

- Oil sands operators build and operate
- License CVW technology
- Titanium joint ventures with oil sands operators
- Titanium builds and operates with partners

# Single Site Project Level Economics are Robust:

	*Preliminary Estimates
Capital Costs (large site)	\$350 million
Annual Revenue	\$155 million (after royalty)
Operating Expense	\$45 million
EBITDA	\$110 million
IRR	22%
NPV-1 site	\$350 million

\*See next slide for key assumptions: \$70/B WTI; \$700/T Zircon; 30% light/heavy differential

# Financial Outlooks

The forward-looking information appearing on the previous slide (including the associated estimates of capital costs, annual revenue, operating expense, earnings before interest, taxes, depreciation, amortization and other certain items (EBITDA), internal rates of return (IRR), and net present values have been presented to provide investors with management's estimate of the single site economics for a facility employing the Corporation's Creating Value from Waste™ process. This forward-looking information is based upon the following assumptions: \$70 USD/bbl WTI; bitumen price differential 30% (i.e., bitumen price of \$49 USD/bbl); \$700 USD/ton for zircon; \$80 USD/bbl of solvent; USD to CDN \$ exchange rate \$0.90; discount rate 10%; Federal and Alberta tax rates of 28%; production of 100 million barrels per year with an estimated 2% bitumen contained in froth tailings stream; estimated bitumen recovery of 75%; 300,000 bbls of solvent being contained in tailings; estimated solvent recovery of 75%; estimated zircon recovery of 60,000 tons/year. Investors are cautioned that actual results may vary from such forward-looking information. See the Corporation's documents filed with the Canadian securities regulatory authorities on SEDAR at [www.sedar.com](http://www.sedar.com) for a description of material risk factors that could cause actual results to differ materially from the financial outlook.

# Opportunity for Multiple Projects in High Growth Oil Sands Sector

- 4 large oil sands mining sites currently in operation and expanding: Syncrude, Suncor, CNRL, Shell
- Imperial Kearl site production commissioning 2012
- Bitumen production forecast to more than double to 3 million b/d in 10 years with narrow differentials/escalating prices
- Zircon markets forecast to continue in short supply with prices escalating to \$2,000/t range

# For Information on “Creating Value from Waste”

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TSX Venture Exchange under the symbol “TIC”