How Effective Project Management Will Add Value To Your Uranium Asset

Russell Bradford and Malcolm Titley

www.jem-met.com

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Introduction

- Like any project development certain steps should be taken at a particular time
- Like to share the experience of the last 7 years and 5 various Uranium projects either through to construction, acquisition or at different levels of feasibility
- Technical or Non Technical

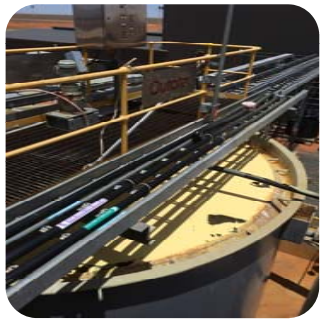
Project Life Cycle

Team members will change as key activity is initiated

Exploration
Drilling resource definition

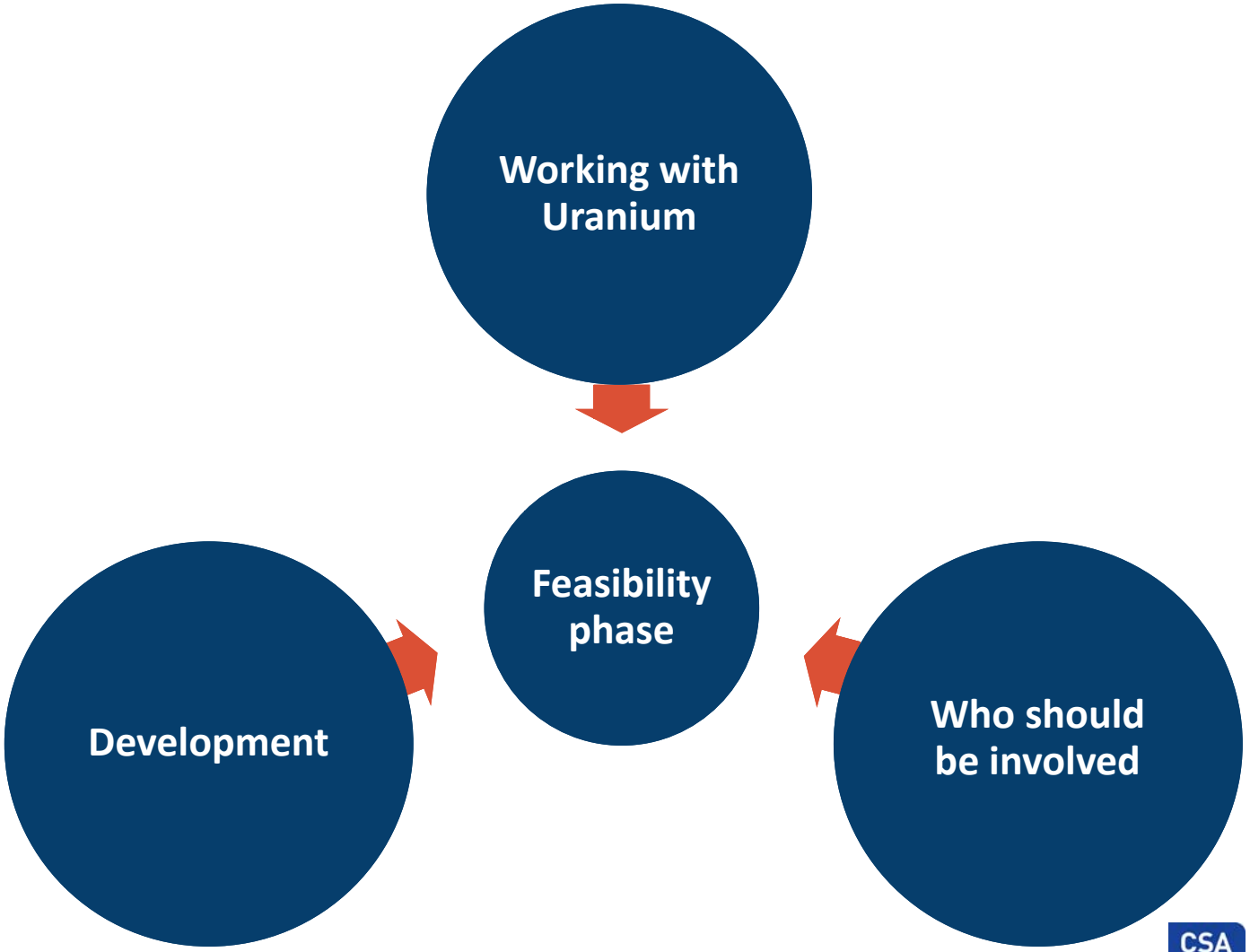
Development
SS,PFS,DFS and ESIA approval

Construction
Detailed design, project schedules



Production

Project Considerations



Working with Uranium

Point	Discussion	Example
Documentation requirements for sample movement	In-country and country where work will be conducted. Check prior to making a decision where work will be done. Can be costly	4 days from leaving East Africa to Laboratory in Sydney 6 – 8 weeks in Africa via land In country restrictions movement of Uranium samples
Uranium Legislation	Review in country status. May require drafting or may have certain restrictions	Assistance given in drafting Uranium Legislation
Align with an authorised Uranium body	Finer points on Engineering construction and exposure may require design changes	IAEA Audit , NECCSA , In country agency
What do you want to produce – UO_4, U_3O_8 ADU , SDU	Where and who can your product go to	Be careful trying to dry at high temperatures can create pressure and heat related issues

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Who should be involved

Point	Discussion	Example
Project Owners Team - key consultants or owners team	Invest the time working together on this, create cross functional teams	Work activity packs (WAP's), role descriptions, site visit
In country engagement	National, Regional and Local Stakeholders	Stakeholder Map
Network with other Uranium developers and producers	Learn from other companies experiences, good or bad	Flowsheet development replicated a plant being commissioned

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Stakeholder Map

TARGET	GENERAL INFORMATION	ENVIRONMENTAL IMPACT ASSESSMENT	SPECIAL MINING LICENCE	URANIUM REGULATIONS	FINANCE	EMPLOYMENT	INFRASTUCTURE	LAND	HEALTH	EDUCATION	POWER	WATER	EDUCATION AND MEDIA	SITE VISIT	DATE OF LAST MEETING	DATE OF LAST CORRESPONDENCE
EXECUTIVE																
MINISTERS AND DEPUTY MINISTERS																
MEMBERS OF PARLIAMENT																
PERMANENT SECRETARIES/ASSISTANT PS																
COMMISIONERS/DEPUTY COMMISSIONERS																
PRIVATE SECRETARIES																
TAEC																
BUSINESS PARTNERS																
MINISTRY OF NATURAL RESOURCES AND TOURISM																
MINISTRY OF WATER																
INTERSECTORAL COMMITTEE - URANIUM REGULATIONS																
PARLIAMENTARY MINING COMMITTEE																
POTENTIAL INVESTORS																
OTHER REGIONAL AND DISTRICT COMMISSIONERS																
REGIONAL AND DISTRICT EXECUTIVES																
MINING INTERSTAKEHOLDERS FORUM																
ENVIRONMENTAL BODIES																
BASELINE STUDIES																
PRESS																

Stakeholder Awareness

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Project Development

Point	Discussion	Example
Resource growth	Can influence the Uranium output	Mantra in 3 years increased from 2.5mlbs/yr to 4.2mlbs to 6mlbs/yr
Mineralogy	Make sure sample selection is correct	Flow sheet development can be well justified
Metallurgical flow-sheet	Understand Uranium Mineralogy, sample selection and Integration of Pilot flow-sheet	Pilot Plant campaign over 3 months at Ansto Sydney
Water supply and environment	Site visit will create understanding	Rivers can create an issue on geo-tech and study time due to location
Financial model	Start to understand Key sensitivies ASAP	Inputs, DCF Model and financials charts

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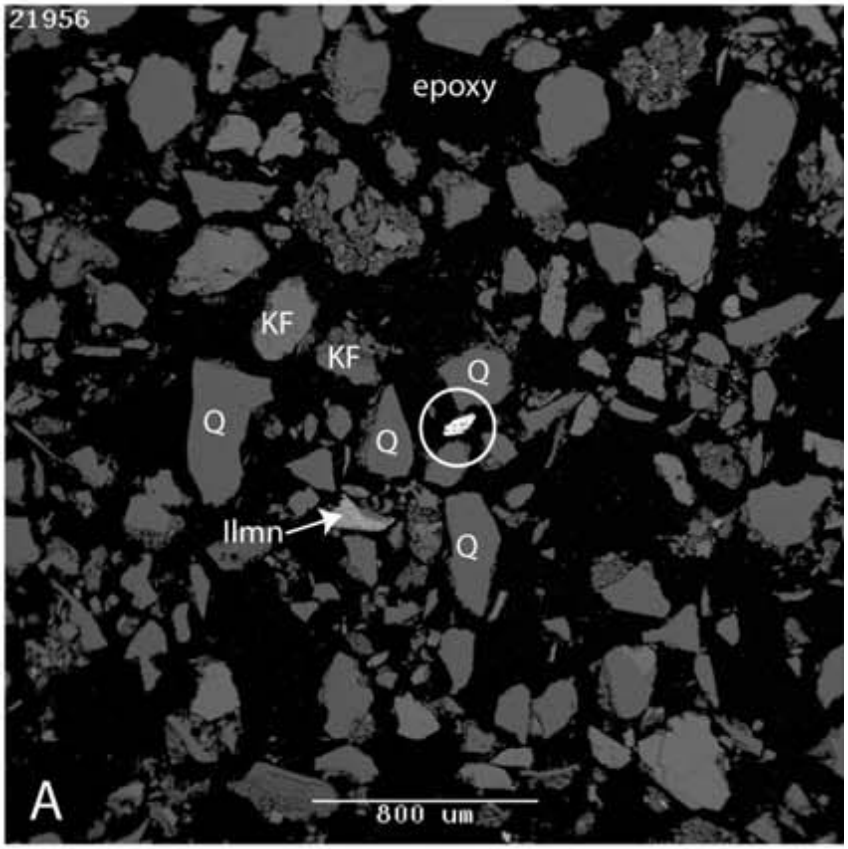
QEM SCAN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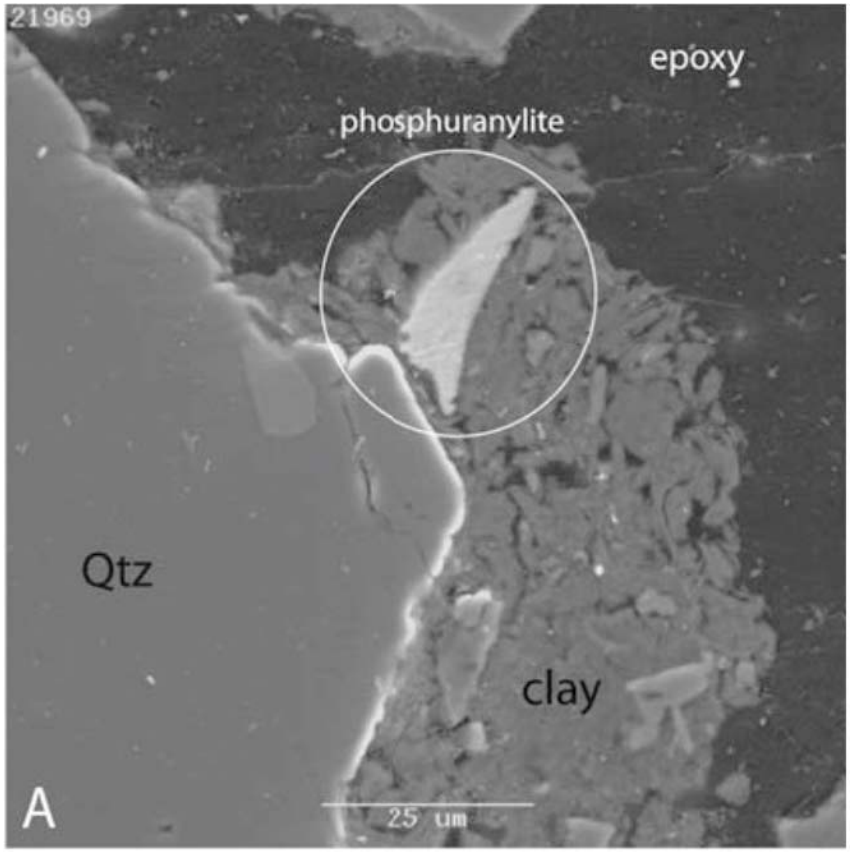
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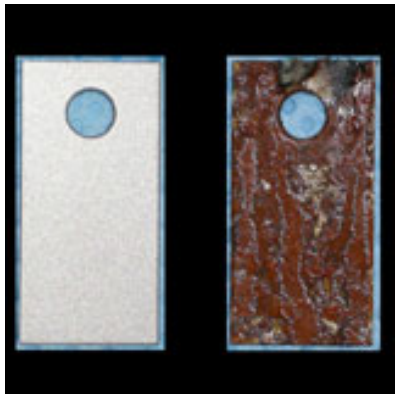
Pilot Plant Development

Pilot Plant Development - Corrosion Coupons



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River Pictures

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Exploration and Resource Development

The key areas of focus,

- **Drilling programs and QAQC**
- **Geophysics and down hole equivalent U_3O_8 grades**
- **Mapping and the geology model**
- **Metallurgical sampling and geology characterisation**
- **Don't underestimate the specialist technical skills required to ensure quality work on-site**
- **Understand JORC and NI 43-101 reporting requirements**
- **The fund raising team is a critical entity – keep informed and collaborate to ensure no surprises**

This section is discussed in detail by Malcolm Titley – Principal Consultant, CSA Global (UK) Ltd, in the paper to be published with this presentation.

Key Learnings

- Timely stakeholder communication and education
- Mineralogy and testwork
- Learn from other Uranium developers

Feasibility work can cost anywhere from $1m up to $30m, construction and operation costs run into $100m's. Spend investors money wisely to ensure a good product .

Thank you