

# Minerals Explorer in South Korea



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# Forward-looking and Competent Person Statement



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Certain statements contained in this presentation constitute forward looking statements. Such forward-looking statements involve a number of known and unknown risks, uncertainties and other factors which may cause the actual results, performance of achievements of Stonehenge Metals Limited (the Company) to be materially different from actual future results and achievements expressed or implied by such forward-looking statements. Investors are cautioned not to place undue reliance on these forward-looking statements.

This presentation may describe Measured, Indicated and/or Inferred Resources. Inferred Resources have a greater amount of uncertainty as to their existence and greater uncertainty as to their economic feasibility. It cannot be assumed that all or any part of any Inferred Resource will ever be upgraded to a higher category. The potential quantity and grade of the Daejon Uranium Project Conceptual Exploration Targets is conceptual in nature and there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.

Exploration is an inherently risky proposition and investors are advised that most exploration projects fail to identify economic resources. The Company has at present not confirmed the economic viability of any resources at the project.

The Company plans further drilling programs and studies with the objective of confirmation of any deposits and ultimately completing a feasibility study to demonstrate the economics of the resources.

The information contained in this ASX release relating to Mineral Resources has been compiled by Mr. Michael Andrew of Optiro Ltd. Mr. Andrew is a Member of The Australian Institute of Mining and Metallurgy. Mr. Andrew has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Andrew consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

# Corporate Information

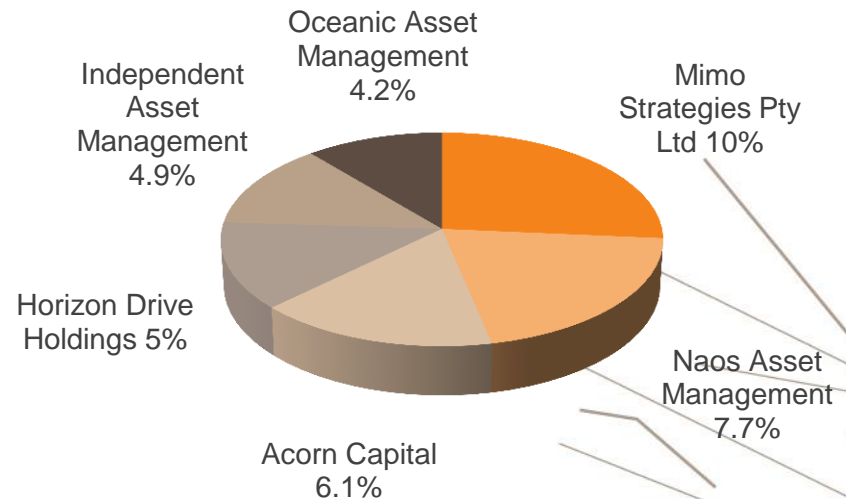


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## Corporate Structure

- Shares on Issue: 288,440,843
- Market Cap: ~A\$10 million
- Cash Reserves: ~A\$2 million
- Debt: Nil

## Top Shareholders



# Directors and Management



## Directors

- **Warren Staude** – Chairman
- **Richard Henning** – Managing Director
- **Bevan Tarratt** – Non Executive Director
- **Bob Cleary** – Non Executive Director

## Management

- **Matt Foy** – Company Secretary
- **Steven Michael** – Chief Financial Officer
- **Tony Chamberlain** – Chief Metallurgist
- **Michael Andrew** – Resource Geologist, Optiro



# Korean Project Teams



## Head office

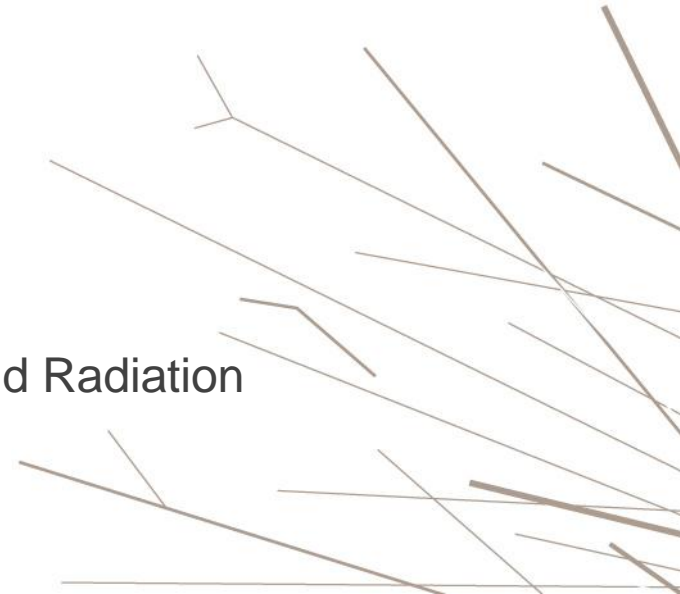
### Seoul, South Korea

- **Wan Joong Kim** – Country Manager
- **Cheong-Hie Kim** – Senior Advisor

## Exploration office

### Chubu, South Korea

- **Heyward Bates** – Manager Geology
- **Dr Sam Lee** – Manager Hydrology, ESH and Radiation



# South Korea – Country Summary

**10th largest world economy**

## **Established mining law**

- No royalties
- No “BEE” partner requirements or native title issues
- 25 year mining rights

**Excellent infrastructure and highly educated labour force**

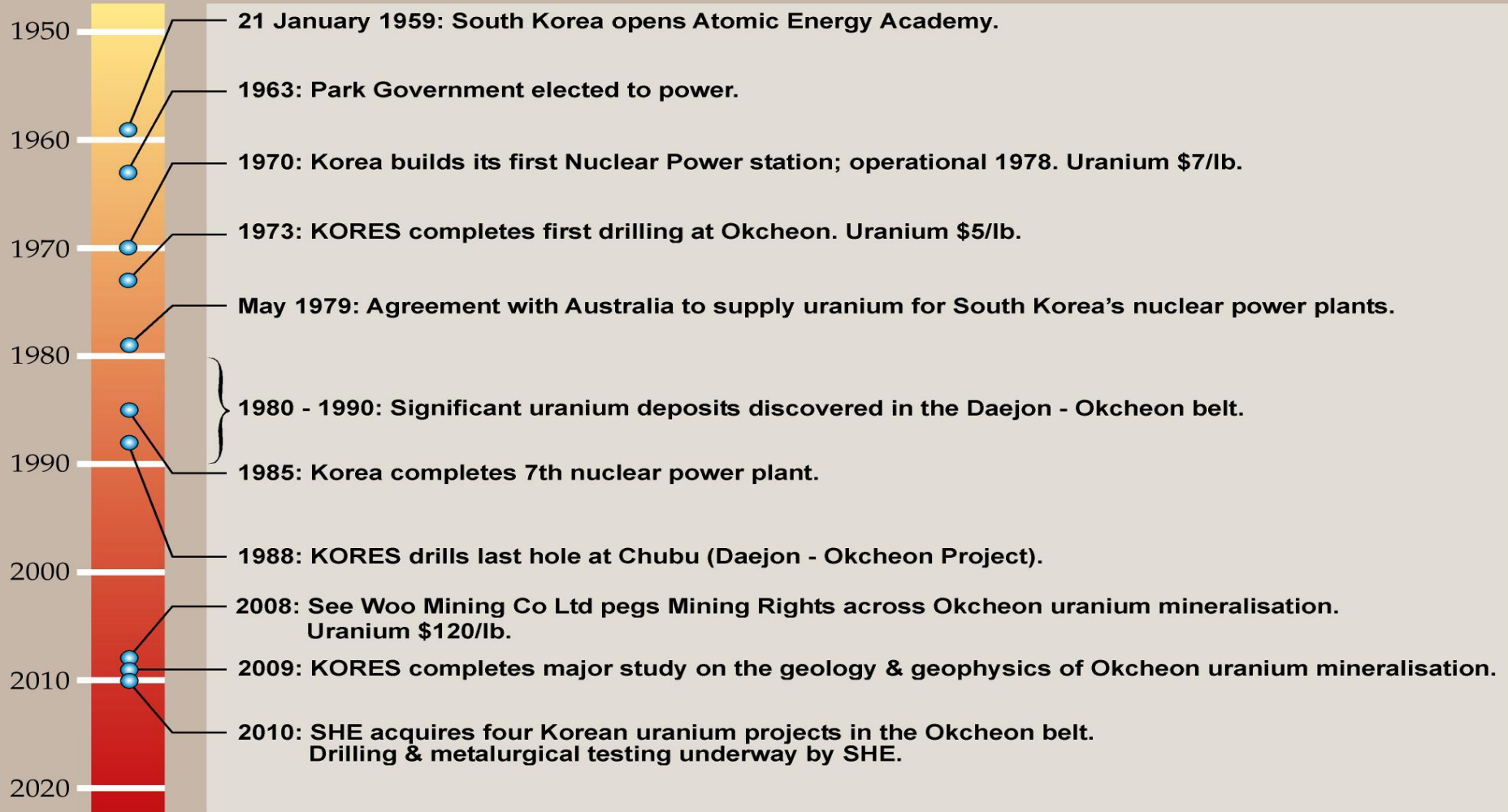
**Uranium considered a mineral of national significance**

**Low sovereign risk**

# Daejon Project History

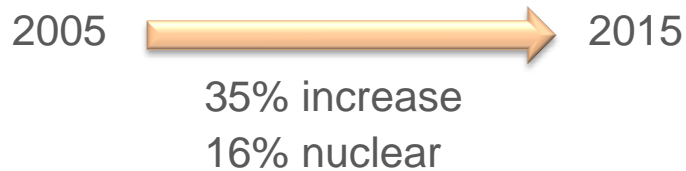


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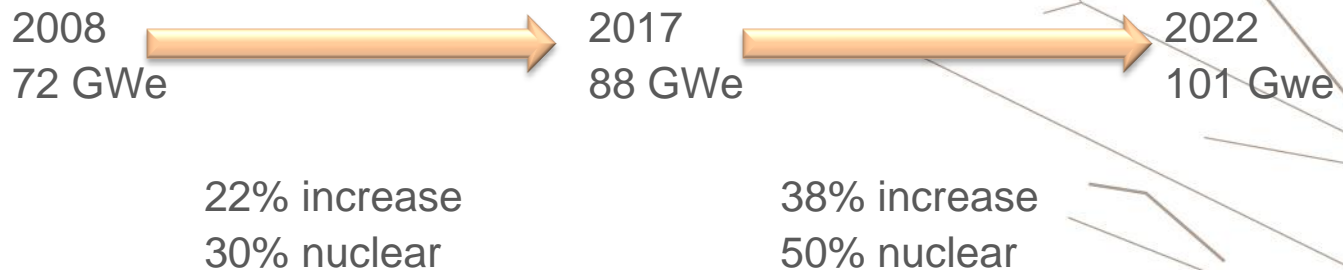


# Demand for Power is increasing

## Global annual electricity consumption



## Korean annual electricity consumption





# Korea requirements

<b>Korea has</b>	
6 reactors under construction	5.8 GWe extra required
6 reactors planned	8.4 GWe extra required

## Korea requires\*

<b>2011</b>	<b>2013</b>	<b>2016</b>	<b>2020</b>
10 mlbs	12.8 mlbs	13.4 mlbs	19.6 mlbs

\* KORES estimate

# Supply shortage



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World Uranium Production	
2009	2010
132 mlbs	139 mlbs
of which Kazakhstan...	
36 mlbs (26%)	46 mlbs (33%)

Supply shortage looming

Reactor Status		WNA estimate
Operating	433	178mlbs required
Under construction	65	
Planned	155	
Proposed	341	137mlbs required

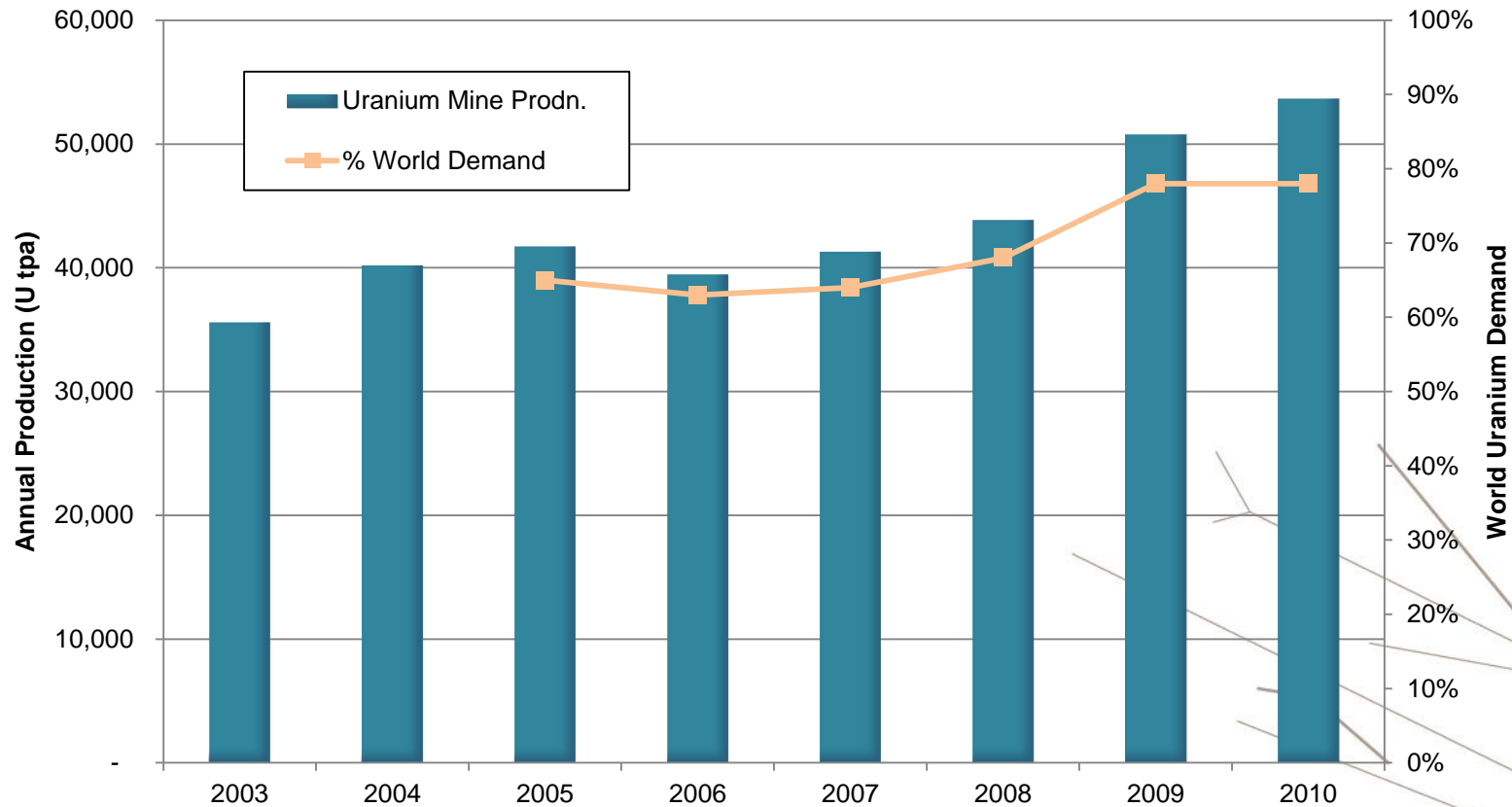
Shortfall currently met by secondary supply, not available beyond 2013



# Uranium production vs Demand



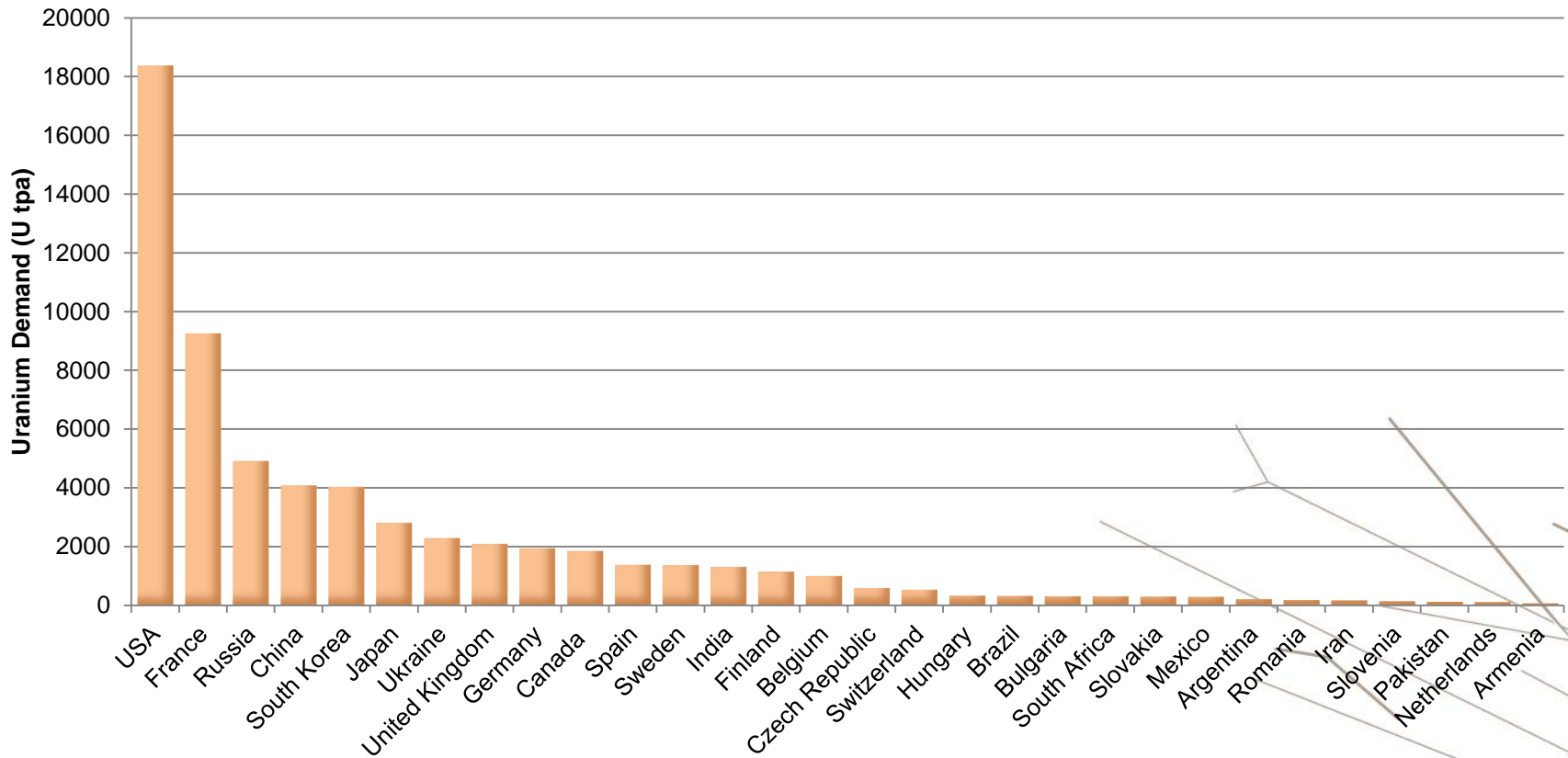
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# Uranium Demand



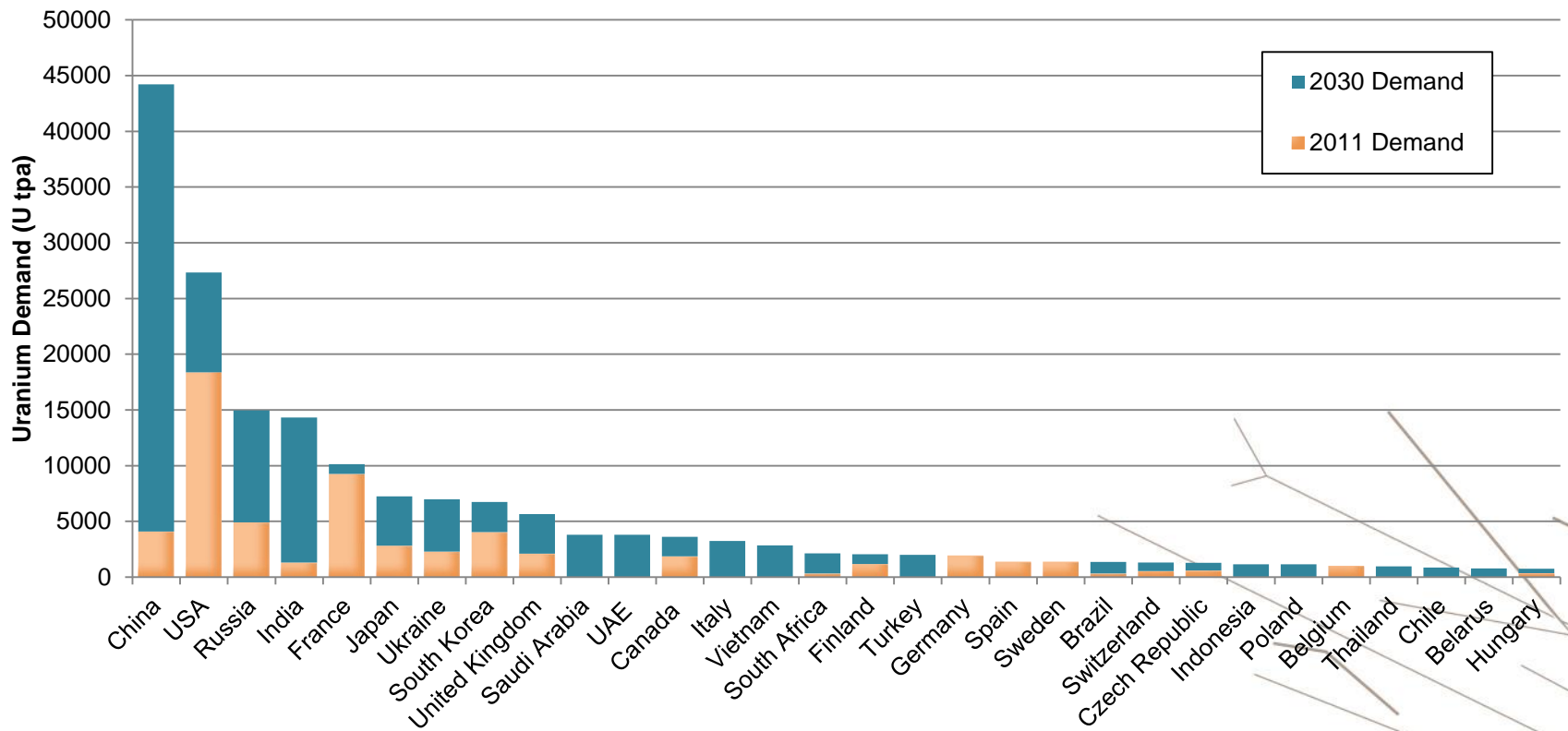
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# Uranium Demand



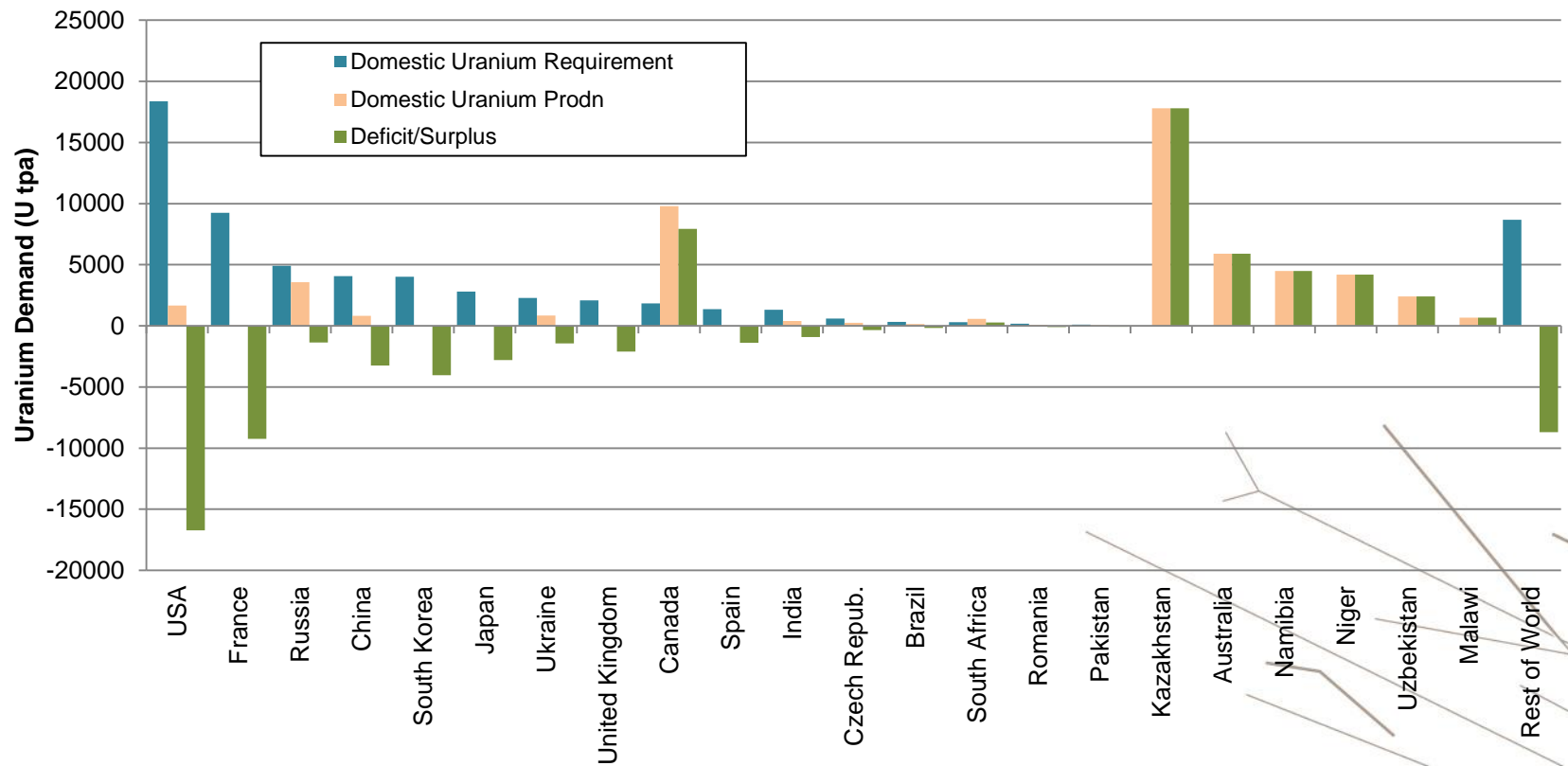
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# Uranium Demand



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# Sector Consolidation



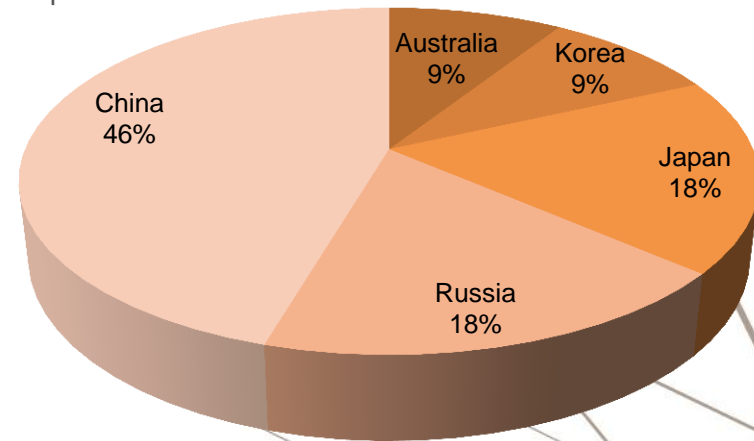
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Since 2009 downstream nuclear companies have been actively making acquisitions of upstream uranium assets to ensure security of supply

Announced date	Target	Acquirer	Country of acquirer
August 11	Hathor Exploration*	Rio	Australia
July 11	Bannerman Resources*	Hanlong Mining	China
March 11	Kalahari Minerals*	Guangdong	China
December 10	Mantra Resources	ARMZ	Russia
January 10	Khan Resources	CNNC	China
September 09	Energy Metals	Guangdong	China
June 09	Uranium One	ARMZ	Russia
April 09	Denison Mines	KEPCO	Korea
March 09	Western prospector	CNNC	China
February 09	Mega Uranium	JUARD / Itochu	Japan
February 09	Uranium One	Japan Uranium Mgt	Japan

\*Indicates deal not complete

Source: mergermarket, Capital IQ, public announcements



# The majors are moving



**BHP** predicts 154 mlbs shortfall in supply in the next 20 years  
- announces \$30 bn investment to expand Olympic Dam

**RIO Tinto** invests strongly in the uranium sector putting \$300m into ERA; and outbids Cameco for Hathor Exploration

**Cameco** announces the need to double inventory by 2020



# Security of supply is imperative

- Canada – KEPCO agreement with Denison to purchase 660k lbs U3O8 pa
- Niger – KEPCO agreement with Areva to purchase 900k lbs U3O8 pa
- Australia – no company or project participation, purchase agreements in place
- Kazakhstan – KEPCO agreement to purchase 1.7 mlbs U3O8 pa
- USA – secondary supply will end in 2013, USA will become hungry
- S Korea – opportunity to acquire 2 – 3 mlbs U3O8 pa from 2016

# Strong economic benefits

\$150m+(estimated) capex



direct foreign investment

2 -3 mlbs U3O8 production



one quarter of current domestic demand

\$6m (estimated) in royalties pa



paid to local communities and superannuation schemes

\$5m (estimated) income tax pa



payroll taxes, licences, fees

200 direct jobs



750 indirect jobs

10,000 tonnes U3O8 removed



20 tonnes U3O8 per week  
(1 container)

# South Korea understands Uranium



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**Korea is worlds 5<sup>th</sup> largest producer of nuclear power**

**Aggressively securing uranium supplies for both domestic needs and foreign power construction plant contracts**

**8Mlbs U<sub>3</sub>O<sub>8</sub> required annually**

**12 nuclear power plants to be commissioned by 2021 - 6 currently in construction**

**21 nuclear plants supply ~ 40% of South Korea's energy requirements, rising to ~ 60% by 2030**

# South Korea *understands* Nuclear Power



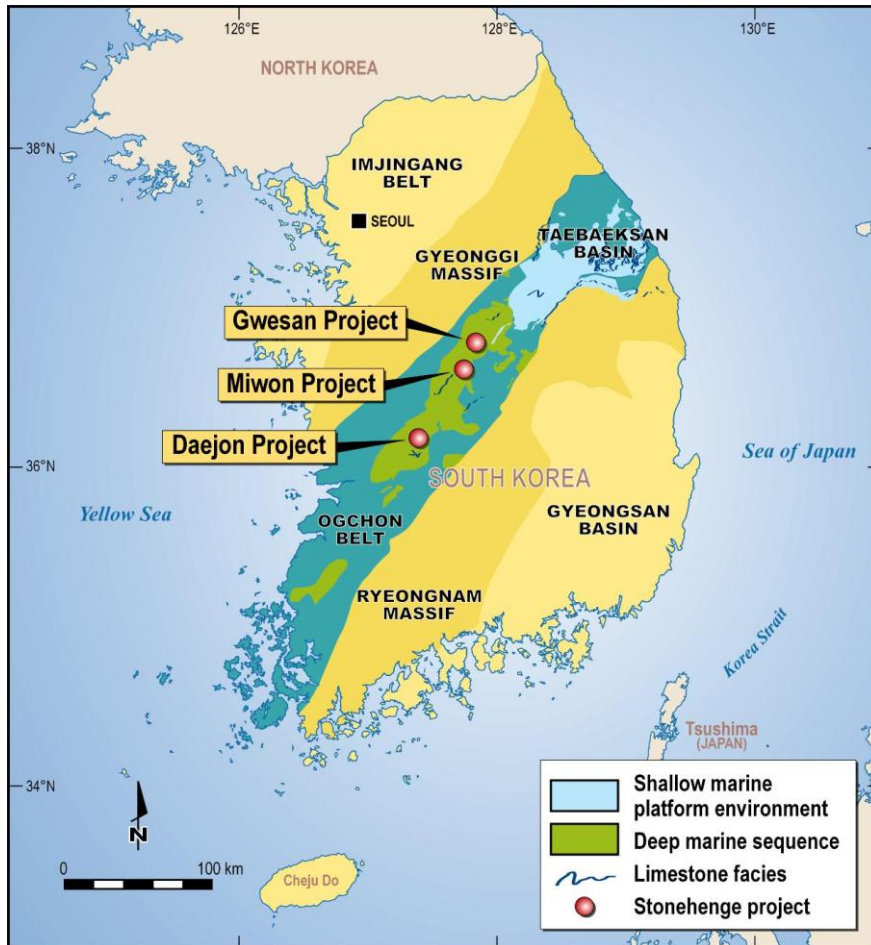
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# Project Location

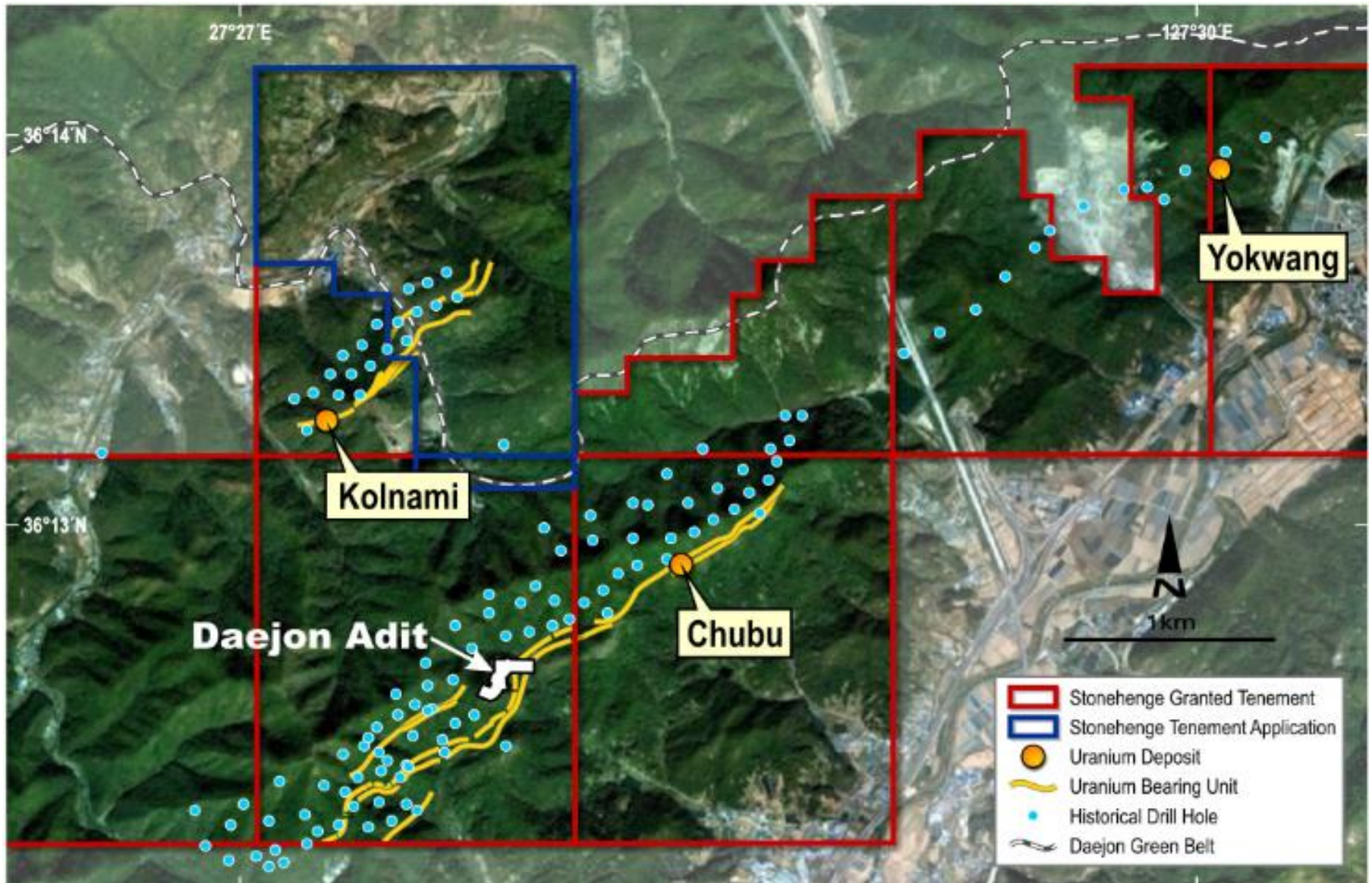


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- Daejon Project largest known uranium resource in South Korea
- 65 Mlbs contained uranium (inferred resource)
- Daejon: focus of current work
- 25-year mining rights
- Opportunity to provide Korea with 25% of Uranium requirement annually

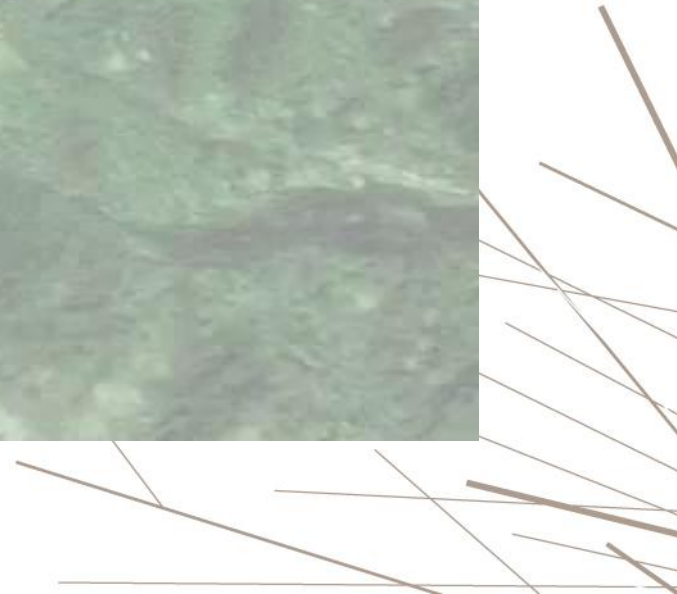
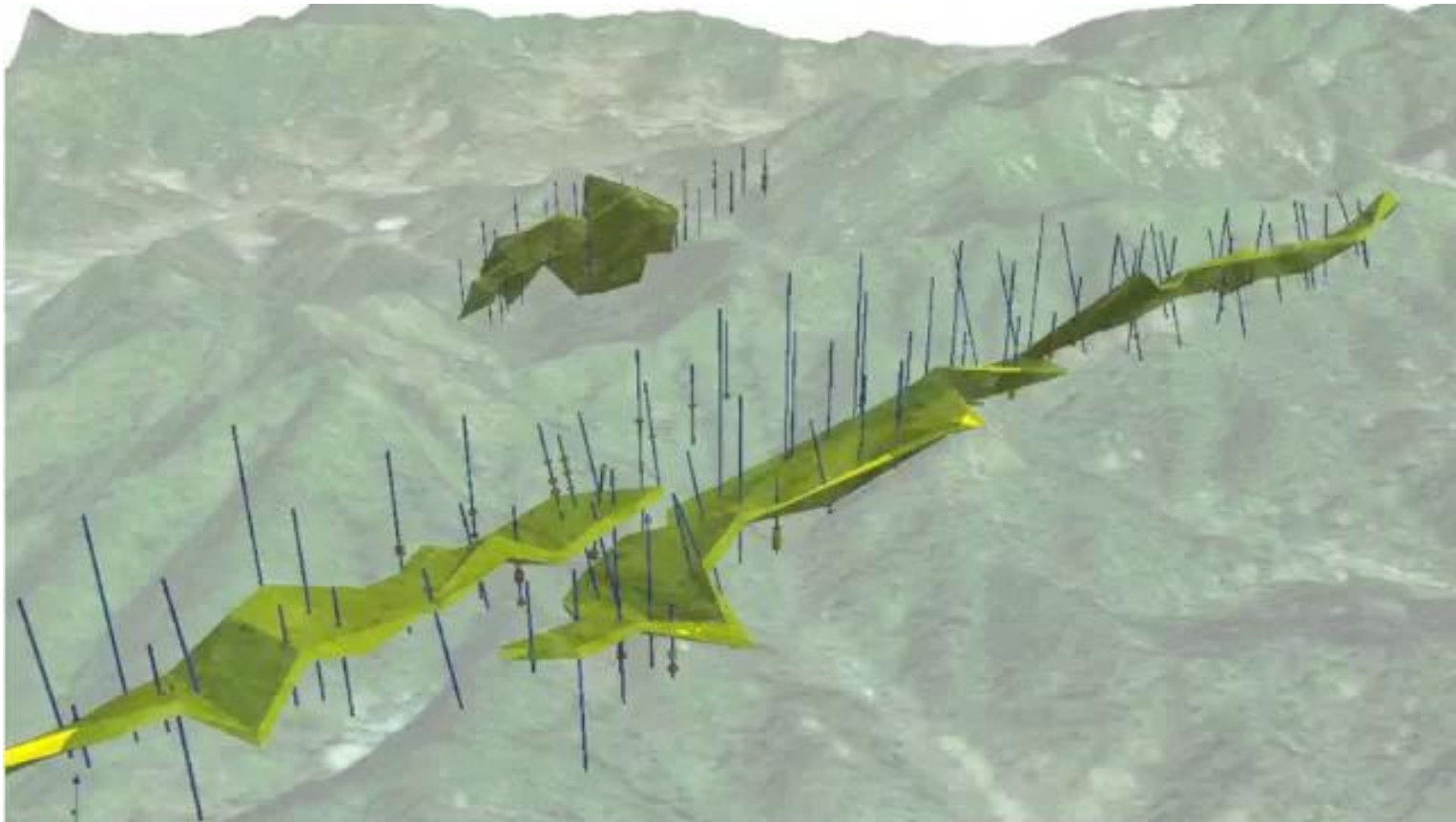
# Daejon Project



# Daejon Project



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# KIGAM Core Storage Facility



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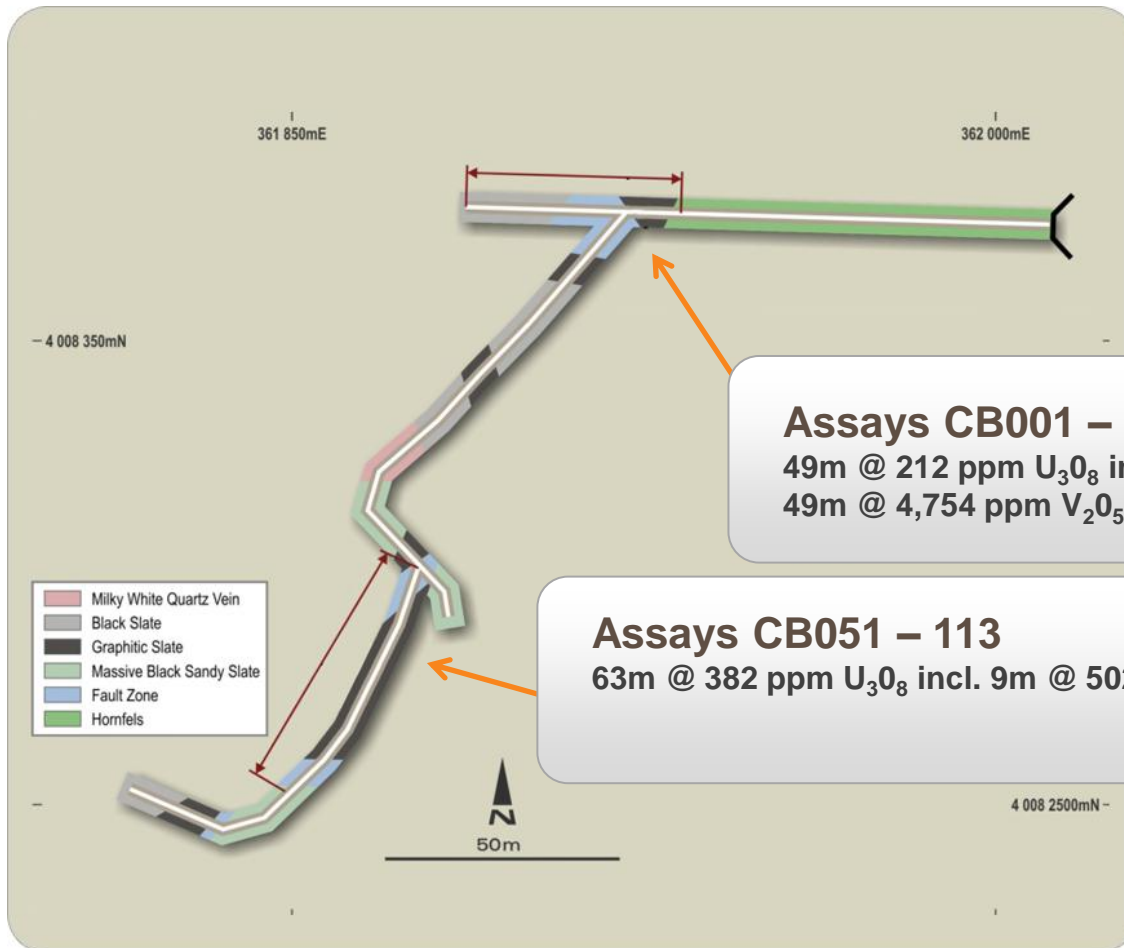




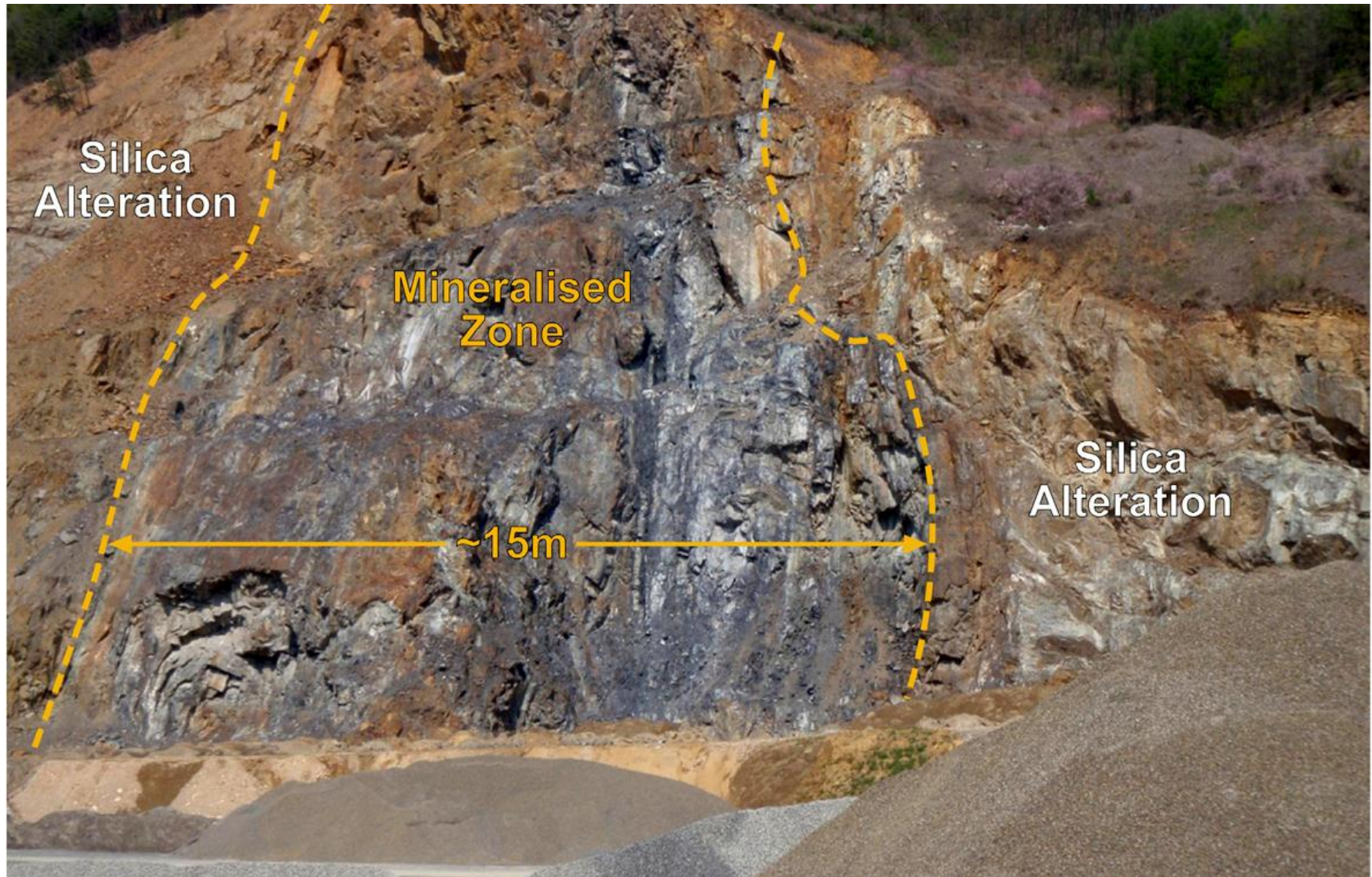
# Daejon Project – Chubu Adit



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# Daejon Project – Mineralisation



# JORC Compliant Resources

## Daejon Project: Inferred Resource

Prospect	Classification	Tonnes	Grade eU <sub>3</sub> O <sub>8</sub> (ppm)	Contained U <sub>3</sub> O <sub>8</sub> (lbs)
Chubu	Inferred	46,000,000	330	34,000,000
Yokwang	Inferred	39,000,000	310	26,000,000
Kolnami	Inferred	7,000,000	340	5,000,000
<b>Total</b>		<b>92,000,000</b>	<b>320</b>	<b>65,000,000</b>

- Key goal to upgrade resource by:
  - Continuing re-evaluation of existing core / data files
  - Collect samples from core for comprehensive chemical analysis
  - Complete rigorous geological interpretation and resource estimation
  - Identify priority drill targets

# Resource Upgrade

## Study of Historical Drill Core at KIGAM

- Complete remaining detailed geological logging and photography
- Conduct systematic SG measurements across the the drill core
- Sample and conduct multi element assaying of drill core

## Opportunities arising from assessment of core

- Increasing the level of confidence in the mineral resource
- Enhanced definition of high grade zones of mineralisation to be used to assist drill targeting
- Attaining geochemical assays for other potential credits including but not limited to: V, Mo

# Metallurgy and Process Development

## Uranium Extraction

- Uranium present as finely dissemination Uraninite ( $\text{UO}_2$ ) grains
- Historical testwork undertaken by KEIR has shown uranium can be extracted easily using conventional atmospheric acid leaching
- Stonehenge has verified this work through independent testwork on fresh metallurgical samples
- Uranium acid leach flowsheet is well established and commercial proven by others
- 90% Uranium extraction consistently achieved



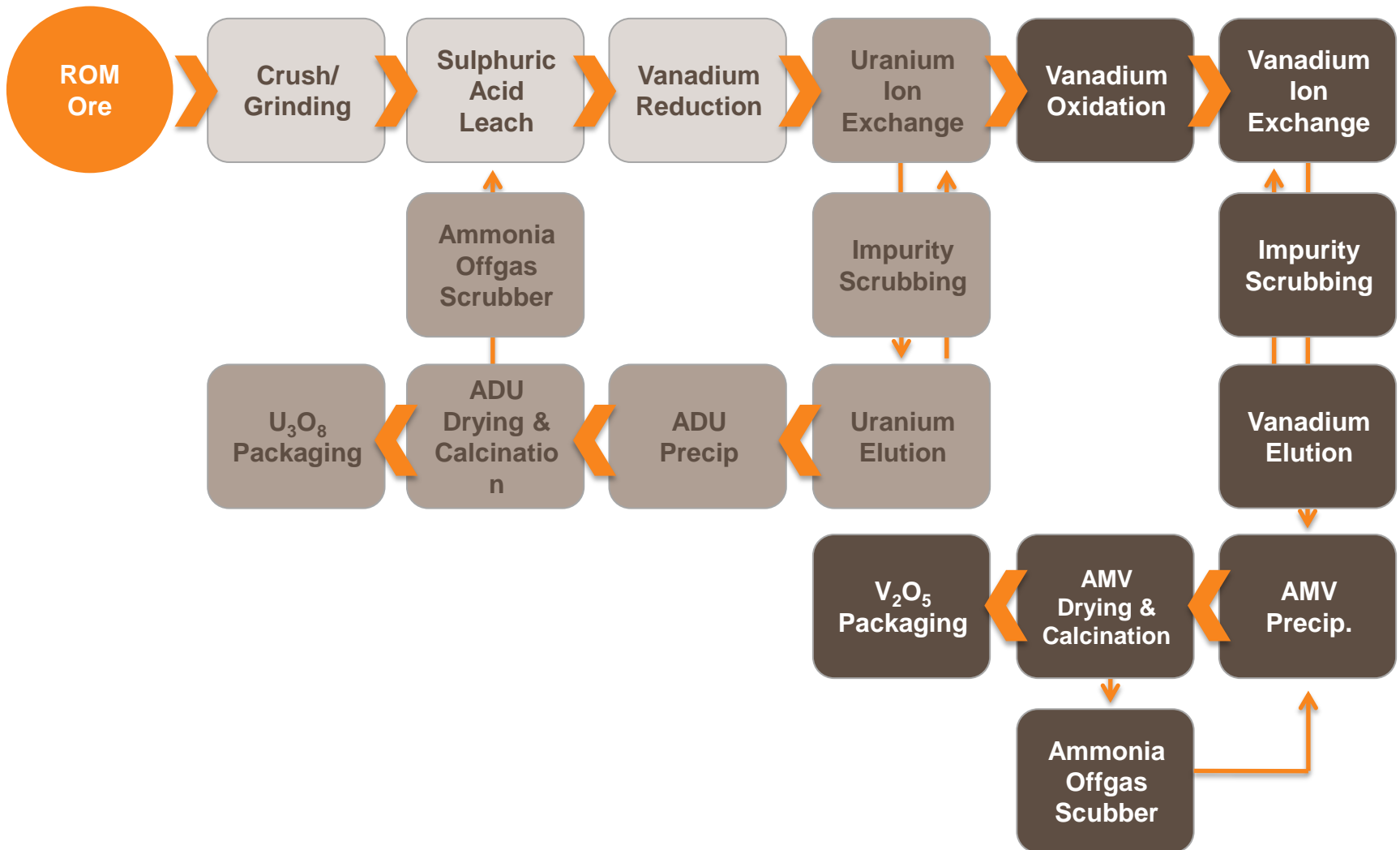
# Metallurgy and Process Development



## Vanadium Extraction

- Future flowsheet development will focus on vanadium recovery
- Several process options have been identified and testwork program prepared
- Bulk samples have been obtained and delivered to Australia
- Major testwork program commenced in June 2011
- 70% Vanadium extraction achieved compared to previous best of 50%

# Uranium / Vanadium Flowsheet



# Project Infrastructure

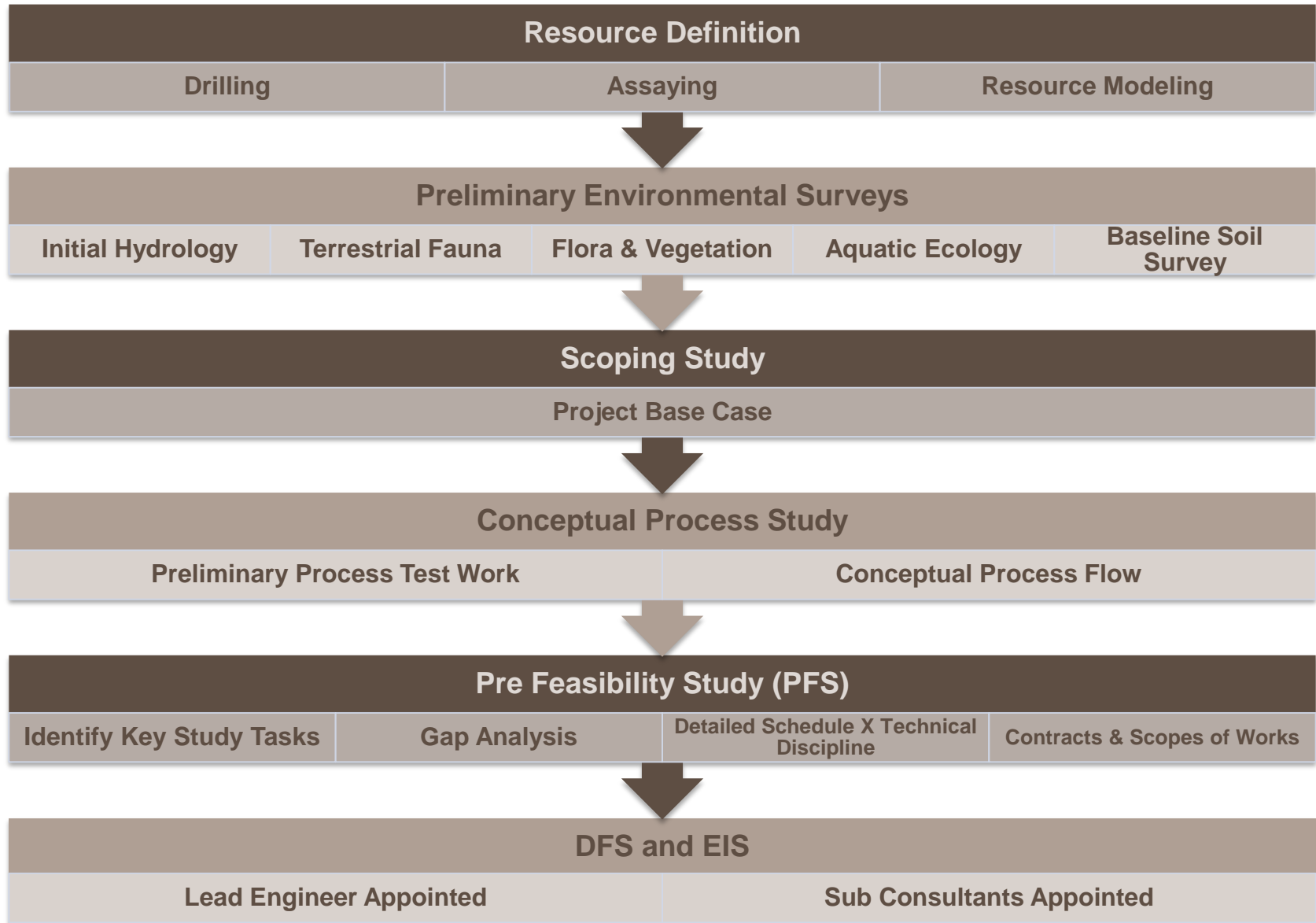


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- The Project has access to well developed infrastructure and support services
- Use of local infrastructure, engineering and support services has a major cost benefit
- Access to well trained local workforce
- Internationally recognised universities and higher education institutions
- Many opportunities to develop cooperative partnerships / alliances



# Project Evaluation Process



# Commitment to Best Practice



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- Stonehenge has engaged a team that is highly experienced in managing uranium projects
- Team has in depth experience in uranium exploration, project evaluation / design / construction and operation
- The Company's personnel have been involved in the development / operation of other world class projects

# Commitment to Best Practice



## Stonehenge is committed to:

- Application of best practice in environment, safety, health and radiation protection
- The adoption of sustainable development
- Internationally accepted standards, management systems, industry codes for its business practices
- Engagement and active participation in the broader community
- Compliance with all the relevant laws

# Working with the Community



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- Education, training and employment opportunities
- Business development and support for local industries
- Alliances / Partnerships for:
  - Environmental monitoring / studies
  - Research activities
  - Training and education
  - Continuous development of best practice
- Establishment of community engagement forums



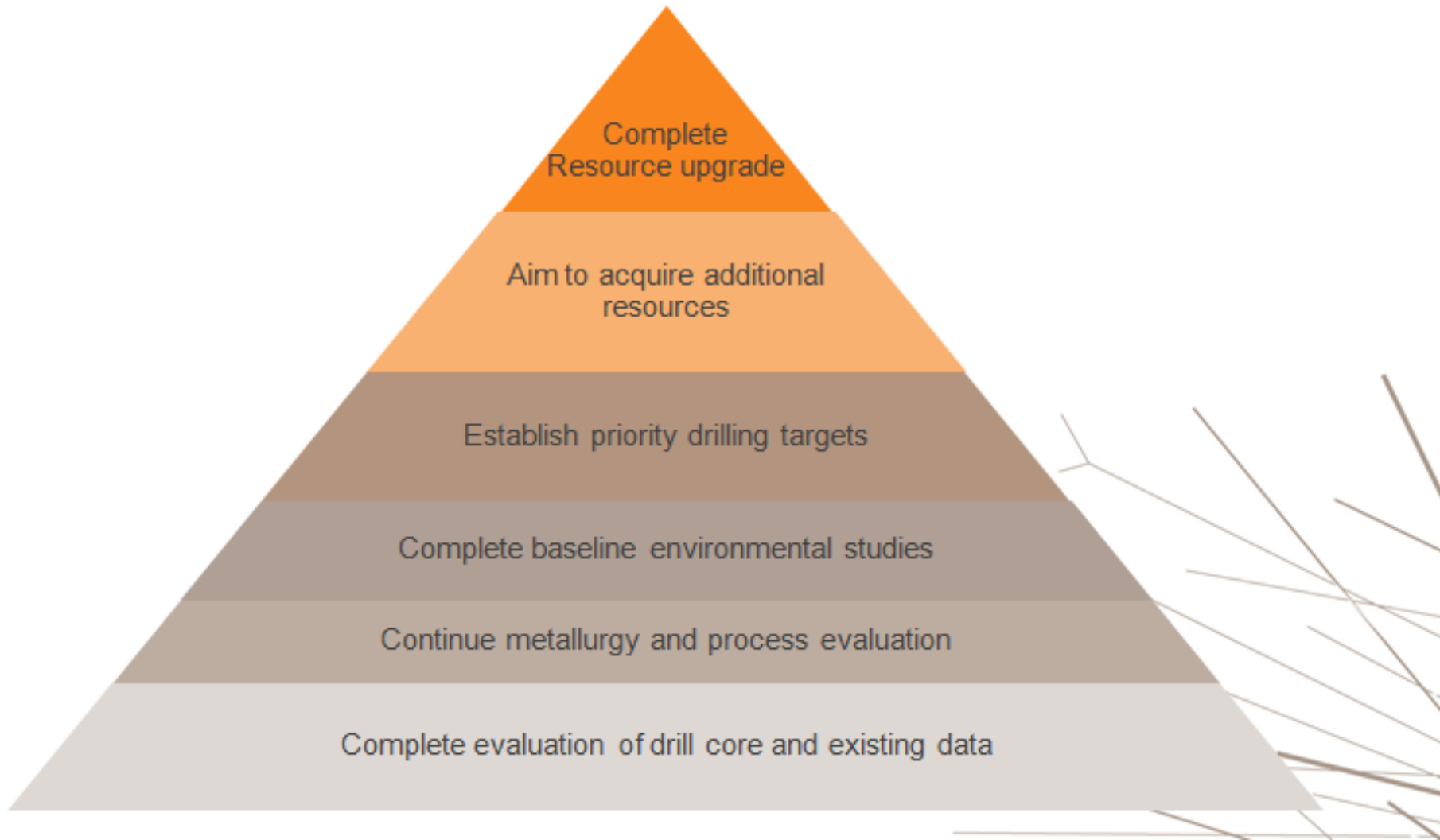
# Project Commitment and Status

- **Strong commitment to working with other stakeholders**
  - Korean Government
  - Provincial government
  - Businesses / universities and research institutes
  - Local communities
- **Extensive database of 36,000m of historic diamond drilling**
  - KIGAM / Kongu University
- **Extensive work program underway**
  - Resource evaluation and drill target identification
  - Metallurgy and process development
  - Engagement with the broader community
  - Environmental and radiation baseline studies

# H2 Targets



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# Key Issues



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- Complete resources evaluation outlined
- Establish comprehensive community engagement program
  - Establish Advisory Group
  - Establish Community Leaders Group
  - Establish Cooperative Alliances / Partnerships
- Commence targeted drilling
- Commence baseline environmental / radiation studies
- Increase the resource base through exploration and acquisition

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