

## What is the DZP?

**\$1B** project  
**20** year initial mine life  
**70+** year potential mine life

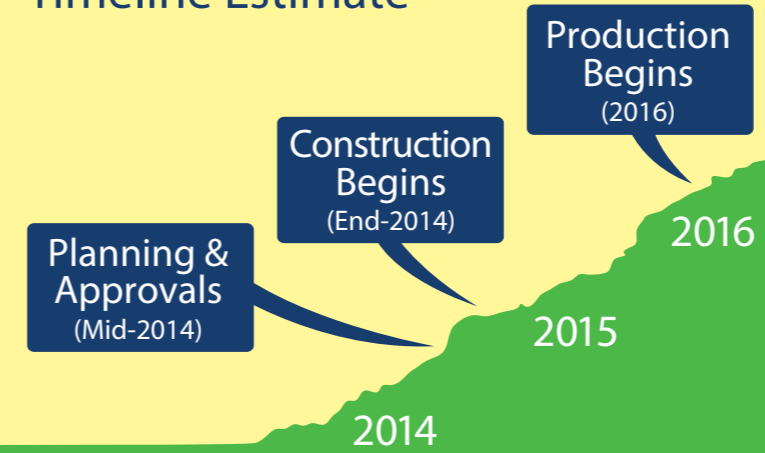
One of Australia's **most** valuable rare metal & rare earth projects



## Economic benefits to the region

**\$34m** per annum in salaries  
**\$25m** in road & bridge upgrades  
**\$13.4m** per annum in local utilities  
**\$5m+** per annum in local goods & services

## Timeline Estimate



## World Production



Material Produced	DZP	World Market
Zirconium materials (ZrO <sub>2</sub> )	16,000tpa	175,000tpa
Rare earth oxides	6,000tpa	175,000tpa
Ferroniobium (FeNb)	3,000tpa	90,000tpa

## Over 230 people employed at DZP operations



- All of site maintenance & operations
- Site office
- Mine site operations
- Processing plant operations
- Technical specialists
- Transportation

**85%** EMPLOYED LOCALLY  
 300-400 jobs during construction



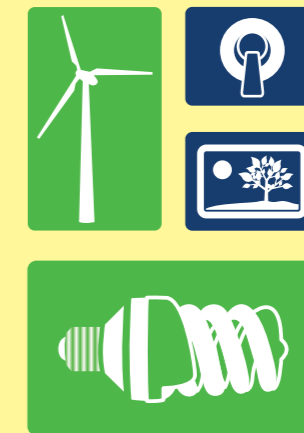
## Green Initiatives

- 70% water recycled
- 70% energy produced by co-generation
- R&D to recover & recycle salt
- No mined waste will leave site
- Lower concentration of radioactivity in waste compared to original rock
- No impact to ground water
- Waste salts stored in double lined containment & continuously monitored

## Uses & Applications

- 10% LIGHTER**  
Niobium reduces the weight of steel required = higher fuel efficiency
- Zirconia used in tooth & bone replacement = non-toxic
- Rare earths & zirconia used in car exhaust = fewer emissions
- Zirconia replaces lead in paint = improved health

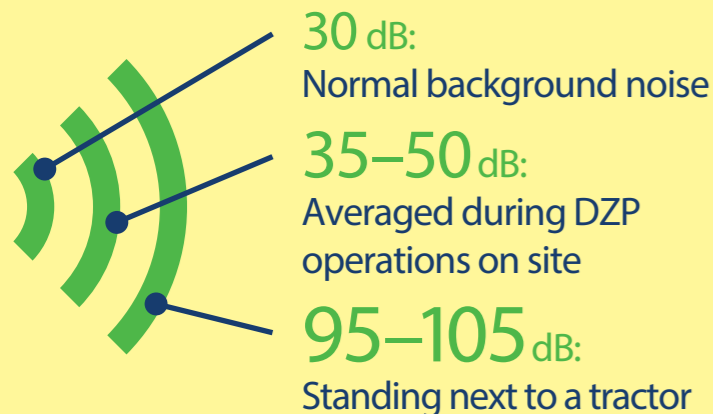
**~60%** OF RARE EARTHS ARE USED FOR MAGNETS, METAL ALLOYS (BATTERIES) & CATALYSTS



- Rare earth oxides used in:
- Magnets in wind turbines & MRIs
  - Screen colours for phones, tablets & TVs
  - Energy efficient lighting

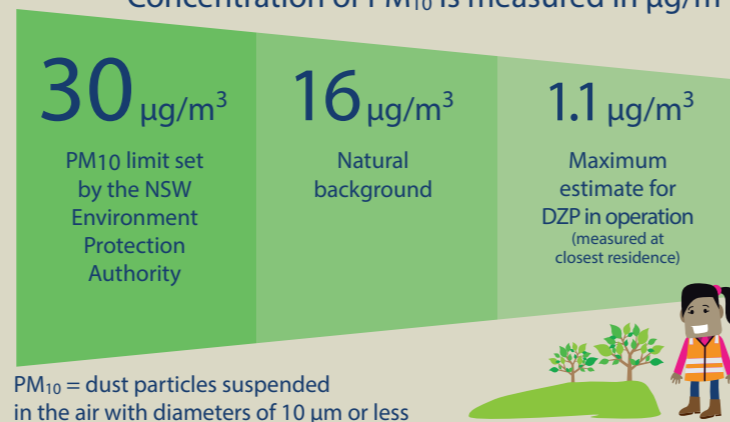
## Noise

\*dB (decibel) is the measurement for noise



## Air & Dust

PM<sub>10</sub> is used as a standard measure of air quality  
 Concentration of PM<sub>10</sub> is measured in µg/m<sup>3</sup>

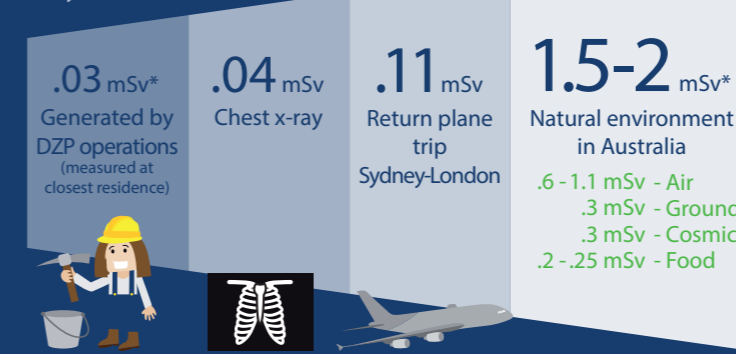


PM<sub>10</sub> = dust particles suspended in the air with diameters of 10 µm or less

## Radiation

A millisievert (mSv) is a measurement of a dose of radiation

\*Maximum dose received in a year



## References

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