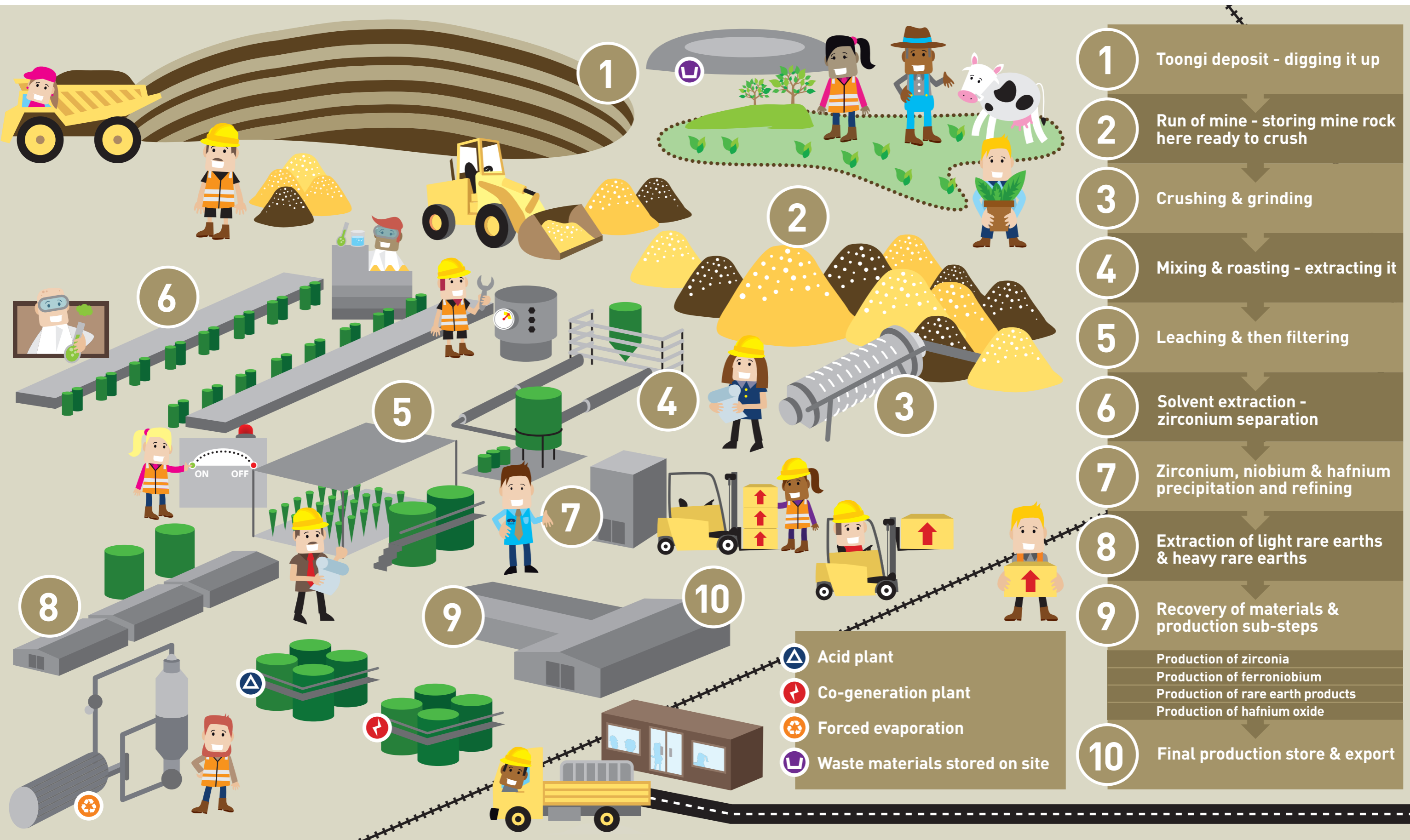






Dubbo Project (DP)

A strategic & alternate supply of zirconium, hafnium & rare earths



- 1 Toongi deposit - digging it up
- 2 Run of mine - storing mine rock here ready to crush
- 3 Crushing & grinding
- 4 Mixing & roasting - extracting it
- 5 Leaching & then filtering
- 6 Solvent extraction - zirconium separation
- 7 Zirconium, niobium & hafnium precipitation and refining
- 8 Extraction of light rare earths & heavy rare earths
- 9 Recovery of materials & production sub-steps
 - Production of zirconia
 - Production of ferroniobium
 - Production of rare earth products
 - Production of hafnium oxide
- 10 Final production store & export

-  Acid plant
-  Co-generation plant
-  Forced evaporation
-  Waste materials stored on site