## LITHIUM: MIND THE GAP THE SUPPLY CHALLENGE



## LITHIUM IS EXTRACTED FROM TWO SOURCES: BRINE AND HARD ROCK

- LITHIUM BRINES: SALT-RICH WATERS CONTAINING HIGH LITHIUM CONTENTS. DEPOSITS FROM BRINES OFTEN CONTAIN LARGE QUANTITIES OF USEFUL ELEMENTS BESIDES LITHIUM, SUCH AS SODIUM, POTASSIUM, MAGNESIUM AND BORON, OFFSETTING SOME OF THE COST OF PUMPING AND PROCESSING BRINE. [1]
- LITHIUM HARD ROCK (SPODUMENE): USED TO CREATE LITHIUM CARBONATE OR LITHIUM HYDROXIDE. LITHIUM HYDROXIDE IS BECOMING INCREASINGLY DESIRABLE FOR BATTERY PRODUCERS, WITH DEMAND CURRENTLY RISING AT A 25-29% CAGR. [2]
- LITHIUM PRODUCTION: DESPITE BEING ABUNDANT IN NATURE. THREE COUNTRIES CURRENTLY MINE ROUGHLY 86% OF THE WORLD'S LITHIUM — AUSTRALIA, CHILE, AND CHINA [3], THIS SAID, WE'RE INCREASINGLY SEEING A PUSH FROM GOVERNMENTS TO DEVELOP DOMESTIC SUPPLY AND ONSHORE CAPABILITIES TO REDUCE RELIANCE ON OVERSEAS PROJECTS. PROJECTS ARE STARTING TO EMERGE WITHIN THE UK AND IRELAND AFTER FINDING SIZEABLE LITHIUM DEPOSITS DEEMED VITAL TO THE INDUSTRIAL STRATEGY OF THE UK.
- TECHNOLOGY MINERALS' LITHIUM PROJECT: THE LEINSTER PROPERTY, IN SE IRELAND, IS A 35KM LONG ZONE OF LITHIUM-BEARING PEGMATITE (SPODUMENE), STRATEGICALLY LOCATED TO PROVIDE DOMESTIC SUPPLY. GIVEN THE FORECAST LITHIUM SUPPLY GAP, PROJECTS SUCH AS THIS ARE VITAL TO SECURING SUFFICIENT SUPPLY WITHIN THE UK.

## THE COMMODITY WITH THE LARGEST PROJECTED DEMAND-SUPPLY GAP



**DEMAND FOR LITHIUM IN 2030** COULD REQUIRE THE EQUIVALENT OF

50 NEW MINES

2017

2020

2021

LITHIUM DEMAND HAS ALMOST DOUBLED SINCE 2017 TO

47%. UP FROM 36% IN 2020 AND ONLY 20% IN 2017. [1]



ACCORDING TO S&P GLOBAL MARKET INTELLIGENCE. 84% OF ALL LITHIUM PRODUCED IS EXPECTED TO BE USED IN EV, ENERGY STORAGE SYSTEMS, AND PORTABLE ELECTRONICS BY 2025. [4]

**LITHIUM CARBONATE PRICES** IN CHINA WERE AT 474.500 YUAN/TONNE IN EARLY JUNE 2022 [5]



