#### **ASX / MEDIA RELEASE**



5 October 2021

#### PRESENTATION - AUSTRALIAN NICKEL CONFERENCE, PERTH

St George Mining Limited (ASX: SGQ)) is participating in the Australian Nickel Conference in Perth today as a major sponsor.

A copy of the Investor Presentation for the Conference is attached.

Authorised for release by the Board of St George Mining Limited.

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## High-Grade Nickel-Copper Sulphides – Discoveries Continue

Australian Nickel Conference, Perth
5 October 2021

ST GEORGE MINING LIMITED ACN 139 308 973 ASX: SGQ



## **Decade of Decarbonisation**

### Nickel's critical role in world's next big investment theme



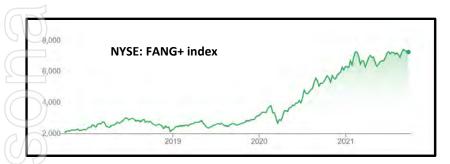
#### Decade of digitalisation:

Business processes and social practiceschanged with new technology:

	2010	2020
Internet devices	35 million	193 million
martphones	4.4 million	21.6 million

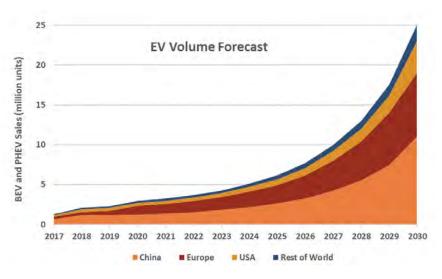
Source: Telsyte Australian Digital Consumer Study 2021

 Remarkable wealth created for technology companies and their shareholders:



#### **Decade of decarbonisation:**

 Transitioning to a low carbon world with electric vehicles and new energy storage solutions:



Source: EV Volumes, Argus Metals, Terra Studio

- EV driven battery demand is changing the market dynamics for nickel
- Nickel companies poised to be big winners

## The Race has Begun

Nickel sulphide supplies are scarce





### Elon Musk (CEO, Tesla):

"Well, I'd just like to re-emphasise, any mining companies out there, please mine more nickel. Okay. Wherever you are in the world, please mine more nickel..."

23 July 2020



## **Nickel Supply Response**

### Miners stepping up to the challenge



### New offtake deals being negotiated:

BHP Chief Commercial Officer, Vandita Pant: "Demand for nickel in batteries is estimated to grow by over 500 per cent over the next decade, in large part to support the world's rising demand for electric vehicles."

28 July 2021, BHP enters into nickel supply agreement with Tesla

#### Consolidation and M&A activity underway:

Battery blitz: 'Twiggy' Forrest fights BHP for Canadian nickel miner

The Sydney Morning Herald, 31 Aug 2021

Nickel hungry BHP will be watching talks between Western Areas and IGO

The Australian, 19 Aug 2021

### But there is only one way to meet demand through exploration and development.....

.....which requires a high incentive price for the long-term outlook

#### LME nickel price surges to 7-year high in September



Data as of Sept. 23, 2021.

NPI = nickel pig iron

Sources: S&P Global Market Intelligence; London Metal Exchange

## Mt Alexander - Overview

### High-grade discovery in strategic location



### Exceptional high-grade mineralisation:

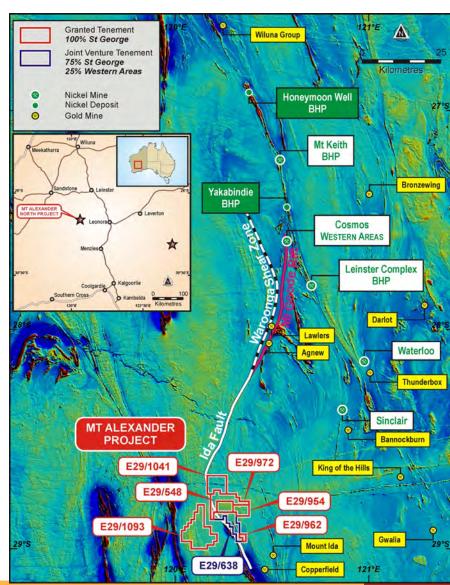
- Nickel-copper sulphides discovered 30m from surface and over a 5.5km strike
- Style of mineralisation is very rare combination of high-grade nickel, copper, cobalt and platinum group metals is not seen anywhere else in Australia
- Preliminary metallurgical test work produced 18% nickel and 32% copper concentrates
- Pipeline of regional nickel prospects

### Foundation for development:

- Tier 1 mining jurisdiction Western Australia
- Neighbouring major nickel operations, including BHP's flagship nickel mines
- Access to existing infrastructure, roads and power
- Established route to market

About the Project: St George Mining Ltd holds 100% of all the Mt Alexander tenements with the exception of E29/638, which is held in Joint Venture: St George Mining Ltd (75%) and Western Areas Ltd (25%).

St George is the manager with Western Areas retaining a 25% non-contributing interest in the Project until decision to mine.



## **Initial Discoveries**

#### Shallow mineralisation over a 5.5km strike

- Four shallow, high-grade discoveries over a 5.5km strike of the Cathedrals Belt, east-west oriented belt
  - Extensive strike suggests the system must be deeper than the extent of current shallow discoveries
- Intrusive mineral system with potential for significant mineralisation at depth
- Petrography confirms host rocks as gabbronorite and leuco-norite
  - > textbook intrusive rocks that host major intrusive nickel sulphide deposits in WA like Nova-Bollinger, Savannah and Nebo-Babel

Prospect	Hole	From <i>m</i>	Width <i>m</i>	Ni %	Cu %	Co %	PGE g/t
Stricklands	MAD71 including and	37.5 39.3 50.6	17.45 5.30 2.02	3.0 4.4 5.1	1.3 1.5 2.0	0.13 0.21 0.21	1.68 2.09 3.31
Cathedrals	MAD56 including	57.8 61.8	7.50 3.15	3.9 6.4	1.7 2.9	0.12 0.20	3.32 5.03
Investigators	MAD38	25.4	2.74	3.77	1.48	0.1	3.85
Investigators	MAD127 including	183.9 184.4	8.49 6.39	5.8 6.5	2.6 2.8	0.18 0.21	3.61 3.68
Radar	MAD152	46	6.00	2.14	0.74	-	1.62



## **New 2021 Discoveries**

### Breakthrough discovery at depth



- Deeper drilling in 2020 and 2021 along the Cathedrals Belt intersected thick intrusive rocks, confirming an intrusive unit that is open at depth
  - MAD199 intersected more than 11m of nickel-copper sulphides from 333.5m downhole (April 2021)
    - > the deepest and western most occurrence of massive sulphides discovered to date and confirms that the large intrusive unit is fertile for nickel-copper sulphides at depth
  - MAD201 first step-out hole from MAD199 intersects massive nickel-copper sulphides at 125m down-plunge of MAD199 indicating a significant plunge extent of the high-grade mineralisation
- Multiple off-hole EM conductors proximal to MAD199 and MAD201 support the presence of a significant volume of mineralisation in this location

Prospect	Hole	From (m)	Width (m)	Ni ( <i>%)</i>	Cu (%)	PGE (g/t)
Investigators	MAD199	333.50	11.07	1.58	0.71	1.23
	Including	340.67	3.90	3.98	1.8	3.01
	and	342.12	1.28	6.54	2.96	3.88
Investigators	MAD201	434.60	2.44	1.66	0.55	0.52
	including	436.76	0.26	6.18	1.2	0.79

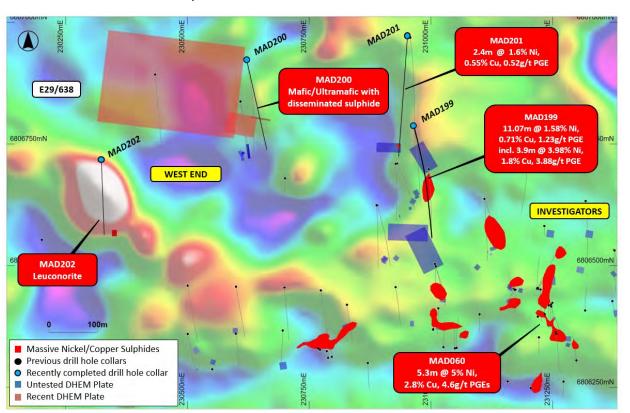


## **Field of EM Conductors**

### Targets for further discoveries



- Downhole EM surveys used concurrently with deeper drilling to identify conductive bodies –
  potential mineralisation at depths below the detection limit of surface EM surveys
- Multiple EM conductors identified at **West End** and **Investigators** suggest that this area is a very active part of the Cathedrals Belt mineral system
  - potential for the conductors to be associated with a greater volume of mineralisation along strike or down-dip



Plan view map of West End and Investigators (against gravity data) showing new DHEM conductors and prior drilling.

Gravity highs are shown by warmer colours (white, red and yellow). High density massive sulphides and their host rocks will typically present as gravity highs.

Less dense material or cover are represented by cooler colours (blues and purples).

## **Diamond Drilling Resumes**

### Testing a pipeline of EM conductors



- Drill programme commences this week focused on EM conductors at West End and Investigators
- Seismic survey completed in September with results pending mapping of intrusive host structure at depth to aid drill targeting



## **Regional Targets**

### **Exciting early results**

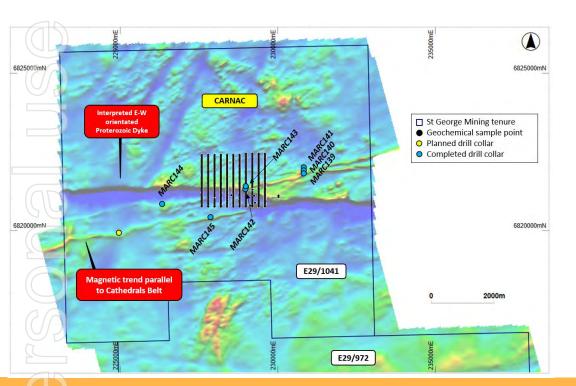


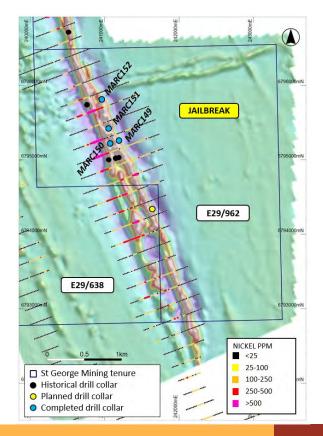
**Carnac Prospect**: an east-west belt (+8km strike) that may be a repetition of the highly mineralised Cathedrals Belt – maiden drilling intersected intrusive rocks up to 85m thick

Jailbreak Prospect: a north-south belt prospective for komatiitic nickel — maiden drilling intersected ultramafics up to 270m thick

> RC drilling completed in September with follow-up exploration being planned with downhole

EM surveys pending





## Mt Alexander – Development

### Opportunity for low cost/high margin operation being assessed



#### Resource definition:

• Resource definition for shallow deposits at Stricklands and Cathedrals underway to assess the potential of a starter mine operation

#### Metallurgical test work:

- XPS (subsidiary of Glencore) in Canada has been engaged to assess the metallurgy of the Stricklands mineralisation and to develop a flowsheet for processing the Stricklands ore
- Key focus is to optimise recoveries of all metals in the Ni-Cu-Co-PGE mineralisation at Stricklands *similar suite of metals to Canadian deposits, like Raglan*

#### Clean and high-grade concentrate will attract a premium price:

 Separate nickel and copper concentrates produced from each of the massive and disseminated sulphides through conventional flotation circuits at high grades and with high values for PGEs – mostly palladium (70%) and rhodium (10%) (work completed by Strategic Metallurgy on MAD177 samples)

Nickel Concentrate					
	Ni	Ni	Cu	Со	Total
Metal Grades	<b>%</b>	/ <sub>%</sub>	%	PGEs g/t	
			0.66	0.50	C 2C
Massive Ni Concentrate	16.2	90.6	0.66	0.59	6.26

Copper Concentrate						
	Cu	Cu	Ni	Со	Total	Ag
Metal Grades	recovery %		%	%	PGEs g/t	g/t
					0, -	<i>Oi</i> -
Massive Cu Concentrate	30.3	90.6	1.07	0.03	7.39	52

## Paterson Project – Adding More Value

## Highly successful maiden drilling programme



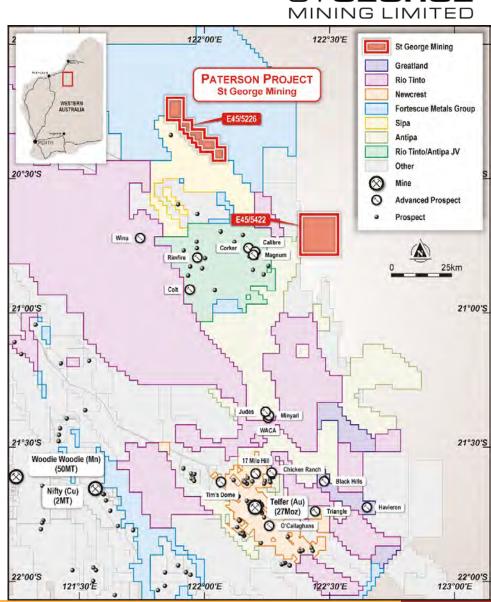


#### **Excellent address:**

- Paterson region is a hotspot for major new discoveries
- St George holds 100% of two prospective tenements
- Neighbouring companies Antipa (ASX: AZY) and Sipa (ASX: SRI) have joint ventures with Rio Tinto
- St George ground has not been explored by modern geophysics and drilling techniques

### Prospective lithology confirmed:

- Maiden drilling confirmed the presence of chalcopyrite and metasediments, the lithology known to host base metal mineralisation in the Paterson region
- Elevated levels of pathfinder elements for base metal and gold deposits including highly anomalous bismuth, arsenic, copper, zinc, lead, molybdenum and vanadium
- Follow-up exploration underway airborne EM, ground gravity and more drilling



## **Corporate Overview**

### Expertise and ability to create value for shareholders



Market Capitalisation (30 Sept 2021)

\$42m

Top 20 Shareholders

23%

Directors & Management

5%

Cash (30 June 2021)

\$6.37m

**Listed Shares** 

589,190,937

**Listed Options** 

Nil

Share Price (30 Sept 2021)

\$0.07

**Debt** 

Nil

# Directors and Management – Vision and Experience for Success

**John PRINEAS, Executive Chairman** – founding shareholder with over 25 years experience in mining, and the banking and legal sectors servicing the resources industry.

John DAWSON, Non-Executive Director — over 30 years in the finance and mining sectors where he occupied very senior roles with global investment banks Goldman Sachs and Dresdner Kleinwort Wasserstein.

Sarah SHIPWAY, Non-Executive Director/Company Secretary – Chartered Accountant with extensive experience in advising listed exploration companies.

**Dave O'NEILL, Exploration Manager** — over 20 years experience as a geologist with expertise in nickel exploration gained in senior roles with WMC Resources, BHP, Western Areas; managed exploration programmes at Mt Alexander for BHP and Western Areas.

Charles WILKINSON, Technical Consultant – over 32 years' as a geologist with 16 years at WMC including as Exploration Manager - Nickel. Joined Western Areas in 2008 as General Manager Exploration. During his 9 years at WSA, it grew its resource inventory to become Australia's No. 1 independent nickel sulphide producer.





Developing a high-grade nickel-copper sulphide project in the heart of Western Australia's Goldfields.

<u>Photo</u>: Drill core from metallurgical hole STD014 at Stricklands showing massive nickel-copper sulphides

## Forward looking statements and disclosures



The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Dave O'Neill, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr O'Neill is employed by St George Mining Limited to provide technical advice on mineral projects and holds performance rights in the Company.

This ASX announcement contains information extracted from the following reports which are available on the Company's website at <a href="https://www.stgm.com.au">www.stgm.com.au</a>:

- 1 April 2020 Breakthrough Results at Mt Alexander
- 8 April 2020 Strong Results at Paterson Province Hotspot
- 22 April 2020 MT Survey Continues to Unlock Mt Alexander
- 22 May 2020 St George Starts Major Drilling Campaign
- 2 July 2020 Mt Alexander Drilling Update
- 9 September 2020 More Thick Intercepts of Mineralised Units
- 14 September 2020 Excellent Metallurgical Results for Mt Alexander
- 3 December 2020 Multiple New EM Conductors at Mt Alexander
- 21 December 2020 Mt Alexander Exploration and Development Update
- 23 February 2021 Drilling Update for Mt Alexander

- 14 April. 021 New Discovery of Nickel-Copper Sulphides at Mt Alexander
- 27 April 2021 Nickel-Copper Sulphide Potential Grows at Mt Alexander
- 27 May 2021 High-Grade Nickel-Copper Sulphides Intersected Down-Plunge
- 22 June 2021 Assays Confirm High-Grade Discovery at Mt Alexander
- 6 July 2021 New EM Conductors at Mt Alexander
- 8 July 2021 Drilling Intersects Prospective Lithology at Paterson
- 13 August 2021 Highly Successful Drilling at Paterson Project
- 16 August 2021 Drilling Underway at Mt Alexander
- 18 August 2021 Field of EM Conductors at Mt Alexander
- 13 September 2021 Drilling of New Targets at Mt Alexander

The Company confirms that it is not aware of any new information or data that materially affects the exploration results included in any original market announcements referred to in this report and that no material change in the results has occurred. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

#### Disclaimer

Certain statements contained in this presentation, including information as to the future financial or operating performance of St George Mining Limited (ASX:SGQ) and its projects, are forward looking statements:

-may include, among other things, statements regarding targets, estimates and assumptions in respect of mineral reserves and mineral resources and anticipated grades and recovery rates, production and prices, recovery costs and results, capital expenditures, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions;

-are necessarily based upon a number of estimates and assumptions that, while considered reasonable by St George Mining, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies; and

-involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements.

St George Mining disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise. The words "believe", "expect", "anticipate", "indicate", "contemplate", "target", "plan", "intends", "continue", "budget", "estimate", "may", "will", "schedule" and similar expressions identify forward looking statements.

All forward looking statements made in this presentation are qualified by the foregoing cautionary statements. Investors are cautioned that forward looking statements are not guarantees of future performance and investors are cautioned not to put undue reliance on forward looking statements due to the inherent uncertainty therein.