

Hydrogen starting to show real promise

We have had a strong rally in the first week of 2021. A number of downtrending (mostly gold) stocks have tested those downtrends and have started to head higher, adopting what looks like shallower uptrends. However, the fall in the gold price on Friday night could test this thesis. While everything looked sweet on Friday afternoon, we could see that these secondary uptrends have a limited life if in fact we are in a bull trap i.e. where charts give a false signal.

The EV and alternative energy stocks surged to new highs last week, particularly the leading lithium stocks. Lithium has been on a bit of a roller coaster ride in recent years with a surging price having led to the development of a number of hard rock mines, only to be followed by oversupply and falling prices. Today, established producers will benefit from growing demand but if this leads to additional price jumps, new projects could put a lid on the price again.

Nevertheless, there is increasingly positive sentiment towards the lithium sector in the near term, aided by the first sustained rise in the lithium carbonate prices in almost three years. We have seen a 12% rise from October to December, to \$6,700/tonne.

Copper enthusiasm has continued to be strong during the week with the red metal hitting an eight year high on US stimulus and positive manufacturing data. Anything electric needs copper, so the enthusiasm for EVs and alternative energy is also providing a good backdrop for demand at a time when there are concerns about security of supply.

UK Energy White Paper re Hydrogen

Just before Christmas, the UK Government released an updated White Paper concerning its strategy to become carbon neutral in energy generation. Amongst other objectives is the plan to generate 40GW of power from offshore wind farms by 2030, enough to power every home in the UK. It quotes a significant drop in the cost of wind power from £120/MWh to £40/MWh over the last five years.

There has been strong interest in hydrogen companies in the UK in recent months, so I was particularly interested in what the White Paper had to say on this front.

The UK Government is allocating £240m to advance hydrogen through the Net Zero Hydrogen Fund up to 2024/25, with an aim to have the UK producing 42 TWh of low carbon hydrogen by 2030. The emphasis is on clean green hydrogen as opposed to the 95% of current global production coming from fossil-fuel based methodology. A green hydrogen process captures carbon by-products at the point of manufacture.

Just this week there has been a report that more than 650 homes in Gateshead, near Newcastle, will become the first on the UK public gas grid to be partially heated by hydrogen this year. Up to 20% hydrogen will be blended

into the natural gas network in Q1 of 2021. Eventually it is expected that this will lead to 100% hydrogen heating.

Overseas companies are well advanced

ITM Power

The UK paper offers up ITM Power as a case study, which makes hydrogen from the electrolysis of water using a proton exchange membrane (PEM) process. A proton exchange membrane fuel cell transforms the chemical energy liberated during the electrochemical reaction of hydrogen and oxygen to electrical energy, as opposed to the direct combustion of hydrogen and oxygen gases to produce thermal energy.

ITM is a substantial company with 185 employees and a market capitalisation of £3bn at its recent share price of £538. It recently raised £172m in a placement at £235 a share. It has been a 10 bagger for shareholders over the last 12 months. A recent research note by First Berlin has forecast a small maiden profit for the 2023 year, on revenue of £119m. You can go to the website <https://www.itm-power.com> for further information, but my point is that this company, the UK Government and the stock market is taking green hydrogen power seriously. In Australia, we should be looking for opportunities in the sector, though any company here will certainly be much smaller and earlier stage.

Ballard Power Systems (NASDAQ:BLDP)

Another company that is also developing hydrogen power, using fuel cells and the PEM process is a Canadian company called Ballard Power Systems Inc. After 40 years of operation it is now working on the eighth generation of its technology. Its main focus is on heavy and medium vehicles where refuelling takes place at centralised depots rather than a wide network of fuelling stations. Rail and marine applications are also being advanced.

Ballard believes that the hydrogen fuel business is at an inflection point with costs having fallen up to 80% over the last decade. However, Ballard is yet to make a profit, even though it generated revenue of \$28m in the quarter to September 2020.

How many mines constantly produce >100 carat sized diamonds?

Have a look at all of the diamonds mines around the world and ask yourself, "what size of diamonds are they producing and what is their value?" You will find that the majority of them produce small diamonds that are less than one carat in size, and occasionally they will produce diamonds at 10-20 carats. This is the working man's end of the industry.

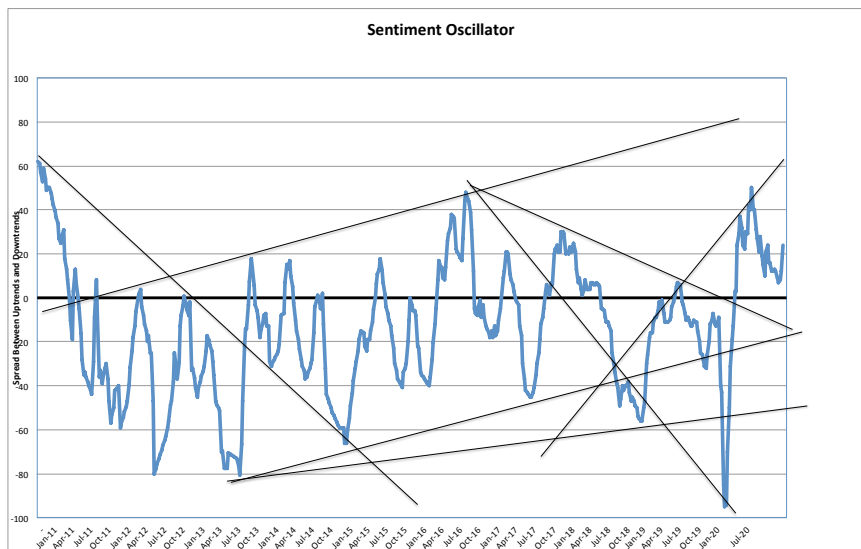
There are probably only three mines in the world that can legitimately claim to be producers of the very high value, + 100 carat diamonds. Lucapa's Lulo mine is one of the three.

Last Monday, Lucapa announced a 113 carat gem quality diamond had been recovered from Lulo. To emphasize the above point, page two of the release has a diagram showing 16 +100 carat diamonds that have been recovered from Lulo. Admittedly there is a range of quality in these stones, but remember that the 404 carat diamond sold for \$22m.

This latest stone has particular relevance in that it was recovered from Mining Block 46 which is located immediately downstream of the Canguige River. Recall that the Company is assessing a number of kimberlite targets

upstream in the Canguige catchment area, having already recovered a couple of diamonds from the bulk testing of one of these targets. Lucapa is gently, gently homing in on the source pipe that could result in a massive re-rating of the share price.

Disclosure: Interests associated with the author own shares in Lucapa Diamond Company had FEC has received capital raising fees.



Sentiment Oscillator: There was a strong improvement in sentiment over the week, but this was measured ahead of the weak gold price in New York, on Friday night. Caution is required for the next few days. There were 54% (45%) of the charts in uptrend and 30% (33%) in downtrend on Friday's close.

Detailed Chart Comments

NB. Only the bold comments have been updated. Comments in grey type are from previous weeks and will be less relevant. Please note that this list is a cross section of the market. It IS NOT a list of recommendations.

Indices	Code	Trend Comment	
All Ordinaries	XAO	new high	
Metals and Mining	XMM	new high	
Energy	XEJ	new high	
Stocks	Code	Trend Comment (updated comments in bold)	Main Interest
Alpha HPA	A4N	testing uptrend	HPA
Adriatic Resources	ADT	holding shallower uptrend	zinc, polymetallic
Aeon Metals	AML	down	copper + cobalt
Alkane Resources	ALK	breached uptrend, heading down	gold, zirconia
Alicanto Minerals	AQI	down	base metals, silver, gold
Allegiance Coal	AHQ	surge through downtrend, then pullback	coking coal

*This commentary is provided at no charge and in good faith from sources believed to be reliable and accurate. Far East Capital Ltd directors and employees do not accept liability for the results of any action taken on the basis of information provided or for any errors or omissions contained therein. Readers should seek investment advice from their professional advisors before acting on information contained therein. Please see **Disclosure of Conflicts of Interest** at the end of this commentary.*

Alliance Resources	AGS	down	gold predevelopment
Aito Metals	AME	down	gold exploration
American Rare Earths (was BPL)	ARR	short term down	rare earths
Apollo Consolidated	AOP	down	gold exploration
Arafura Resources	ARU	new high	rare earths
Aurelia Metals	AMI	down	gold + base metals
Australian Potash	APC	holding shallower uptrend	potash
Auteco Minerals	AUT	down	gold exploration
BHP	BHP	another new high	diversified, iron ore
Base Resources	BSE	new high	mineral sands
BBX Minerals	BBX	holding shallower uptrend	gold exploration
Beach Energy	BPT	surged higher	oil and gas
Beacon Mining	BCN	sideways	gold production
Bellevue Gold	BGL	off its highs	gold exploration
Blackstone Minerals	BSX	breached downtrend	nickel
Blue Star Helium	BNL	spike through downtrend	gas, helium
Boab Metals		named change from Pacifico Minerals	silver/lead
Breaker Resources	BRB	testing downtrend	gold exploration
Buru Energy	BRU	surge higher	oil
Calidus Resources	CAI	down	gold
Capricorn Metals	CMM	holding shallower uptrend	gold
Caravel Minerals	CVV	steeply higher	copper
Celsius Resources	CLA	strong uptrend	uptrend
Central Petroleum	CTP	sideways	oil/gas
Chalice Gold	CHN	new high	nickel, copper, PGMs, gold exploration
Chase Mining	CML	sideways at lows	nickel/copper/PGE
Chesser Resources	CHZ	holding shallower uptrend	gold exploration
Cobalt Blue	COB	strongly higher	cobalt
Cyprium Metals	CYM	fallen back to support line	copper
Dacian Gold	DCN	strongly higher	gold
Danakali	DNK	down	potash
Davenport Resources	DAV	rising	potash
De Grey	DEG	shallower downtrend	gold
E2 Metals	E2M	correcting lower, ST downtrend	gold exploration
Ecograf (was Kibaran)	EGR	pullback	graphite
Element 25	E25	new high	manganese
Emerald Resources	EMR	steeply higher	gold
Euro Manganese	EMN	on apex of a wedge	manganese
Evolution Mining	EVN	testing downtrend	gold
Firefinch	FFX	strongly higher	gold
First Graphene	FGR	new high	graphene
Fortescue Metals	FMG	rising again	iron ore
Galaxy Resources	GXY	new high	lithium
Galena Mining	G1A	surge higher	lead

*This commentary is provided at no charge and in good faith from sources believed to be reliable and accurate. Far East Capital Ltd directors and employees do not accept liability for the results of any action taken on the basis of information provided or for any errors or omissions contained therein. Readers should seek investment advice from their professional advisors before acting on information contained therein. Please see **Disclosure of Conflicts of Interest** at the end of this commentary.*

Galilee Energy	GLL	down	oil and gas, CBM
Genesis Minerals	GMD	down	gold
Gold Road	GOR	holding shallower uptrend	gold
Highfield Resources	HFR	rising	potash
Hillgrove Resources	HGO	breached support line	copper
Iluka Resources	ILU	strong rise	mineral sands
Image Resources	IMA	falling back to support line	mineral sands
Independence Group	IGO	surge through resistance line	gold
ioneer (was Global Geoscience)	INR	steeply higher	lithium
Ionic Rare Earths (Oro Verde)	IXR	new high	rare earths
Jervois Mining	JVR	rising again	nickel/cobalt
Jindalee Resources	JRL	on support line	lithium
Kin Mining	KIN	testing uptrend	gold
Kingston Resources	KSN	rising gently	gold
Kingwest Resources	KWR	back to support line	gold
Legend Mining	LEG	down	nickel exploration
Lepidico	LPD	new uptrend forming	lithium
Lindian Resources	LIN	trying to recapture uptrend	bauxite
Lithium Australia	LIT	rising	lithium
Los Cerros	LCL	holding shallower uptrend	gold exploration
Lotus Resources	LOT	firmer	uranium
Lucapa Diamond	LOM	breaking downtrend	diamonds
Lynas Corp.	LYC	new high	rare earths
Mako Gold	MKG	down again	gold exploration
Manhattan Corp	MHC	down	gold exploration
Marmota	MEU	drifting lower	gold exploration
Marvel Gold (was Graphex)	MVL	down	gold exploration
MetalTech	MTC	testing downtrend	gold
Meteoric Resources	MEI	rising	gold exploration
MetalsX	MLX	strongly higher	tin, nickel
Metro Mining	MMI	at lows	bauxite
Mincor Resources	MCR	rising	gold/nickel
Musgrave Minerals	MGV	down	gold exploration
Myanmar Minerals	MYL	breaching downtrend	lead, zinc, silver
Nelson Resources	NES	new high	gold exploration
Neometals	NMT	rising	lithium
Northern Minerals	NTU	back to support line	REE
Northern Star Res.	NST	breached downtrend	gold
NTM Gold	NTM	new high	gold exploration
Oceana Gold	OGC	surge through downtrend	gold
Oklo Resources	OKU	down	gold expl.
OreCorp	ORR	rising again	gold development
Orocobre	ORE	rising	lithium
Oz Minerals	OZL	at recent highs	copper

*This commentary is provided at no charge and in good faith from sources believed to be reliable and accurate. Far East Capital Ltd directors and employees do not accept liability for the results of any action taken on the basis of information provided or for any errors or omissions contained therein. Readers should seek investment advice from their professional advisors before acting on information contained therein. Please see **Disclosure of Conflicts of Interest** at the end of this commentary.*

Pacific American Holdings	PAK		down	coal
Pantoro	PNR		sideways through downtrend	gold
Panoramic Res	PAN		holding shallower uptrend	nickel
Peak Resources	PEK		correcting	rare earths
Peel Mining	PEX		new uptrend forming	copper
Peninsula Energy	PEN		surge out of downtrend	uranium
Poseidon Nickel	POS		breached uptrend	nickel
Pensana Metals	PM8		new high	rare earths
Perseus Mining	PRU		holding shallower uptrend	gold
Pilbara Minerals	PLS		new high	lithium
Polarex	PXX		down	polymetallic exploration
Queensland Pacific Metals	QPM		holding shallower uptrend	nickel/cobalt/HPA
Ramelius Resources	RMS		rallying	gold production
Red5	RED		holding shallower uptrend	gold
Red River Resources	RVR		new high	zinc
Regis Resources	RRL		down	gold
Regergen	RLT		back to support line	gas, helium
Resolution Minerals	RML		sideways at lows	gold exploration
Resolute Mining	RSG		testing downtrend	gold
RIO	RIO		new high	diversified, iron ore
Rumble Resources	RTR		rallied to resistance line	gold exploration
Salt Lake Potash	SO4		down again	potash
Saracen Minerals	SAR		down	gold
St Barbara	SBM		secondary downtrend	gold
Sandfire Resources	SFR		breached downtrend	copper
Santos	STO		strongly higher	oil/gas
Saturn Metals	STN		secondary downtrend	gold exploration
Sheffield Resources	SFX		rising	mineral sands
Sky Metals	SKY		back in downtrend	gold exploration
St George Mining	SGQ		down	nickel
Silix Systems	SLX		steeply higher	uranium enrichment technology
Silver Mines	SVL		on support line	silver
Sipa Resources	SRI		down	general exploration - Ni,Cu, Co, Au
Stanmore Coal	SMR		breached steepest downtrend	coal
Strandline Resources	STA		still in downtrend	mineral sands
Sunstone Metals	STM		down	
Talga Resources	TLG		fallen back to support line	graphite
Technology Metals	TMT		surge out of downtrend	vanadium
Tesoro Resources	TSO		down	gold exploration
Theta Gold Mines	TGM		uptrend	gold
Thor Mining	THR		down	gold exploration
Tietto Minerals	TIE		down	gold
Titan Minerals	TTM		sideways	gold
Vango Mining	VAN		down	gold

*This commentary is provided at no charge and in good faith from sources believed to be reliable and accurate. Far East Capital Ltd directors and employees do not accept liability for the results of any action taken on the basis of information provided or for any errors or omissions contained therein. Readers should seek investment advice from their professional advisors before acting on information contained therein. Please see **Disclosure of Conflicts of Interest** at the end of this commentary.*

Venturex	VXR	Orange	testing uptrend	zinc
Vimy Resources	VMY	Green	steeply higher	uranium
West African Resources	WAF	Green	holding shallower uptrend	gold
Westgold Resources	WGX	Green	rising again	gold
West Wits Mining	WWI	Green	off its highs	gold
Western Areas	WSA	Green	rising	nickel
Whitehaven Coal	WHC	Green	rising	coal
Wiluna Mining	WMX	Red	down	gold
Yandal Resources	YRL	Red	down	gold exploration
Zinc Mines of Ireland	ZMI	Red	secondary downtrend	zinc
Totals	54%	80	Uptrend	
	30%	44	Downtrend	
		148	Total	

Guides to Chart Interpretations

- Charts usually go pass from one trend (up or down) into the other via a period of indecision and uncertainty during which the trend can either recover or change. This period is signified by the orange colour. The orange represent both the greatest risk and greatest reward possibilities.
- Once a chart is in confirmed up or downtrends it is not uncommon for 10-20% of that trend to have already transpired.
- There are trends within trends. The focus of this chart review is the immediate trend that affects the sentiment i.e. it can be a downtrend within a long-term uptrend.
- Not every chart warrants a new comment every week. The new comments are in bold type. Grey type comments may be dated.
- Individual charts provide a single view. It is valuable to look at charts of other companies in similar commodities, and the overall sentiment is also very valuable. Not many stocks can swim against the tide.
- We periodically add or delete charts, some times for obscure reasons. If a chart consistent gives poor signals or is very erratic, we may delete it. Sometimes we add a chart because we want to see what all the fuss is about. We do have a preference for charting stocks that we cover in our research as well.
- Errors and omissions may occur from time to time, especially in fast moving markets.

Amber Lights in Tables: Just a reminder if when the amber light is used in the table – it is when the charts are ambiguous or when there is a change of trend taking place. If a chart is breaching a downtrend it can either be a positive sign or a trap. Only once it has done more work can it be confirmed as a new uptrend. Maybe it is a new uptrend (or conversely a new downtrend); the risk takers can decide to jump on board early (or sell). They will maximise their profits (or minimise their losses if indeed it is the start of the new uptrend (downtrend). More risk-averse investors should wait a little longer, being prepared to give up some of the gains in return for greater certainty.

Weightings of Sectors Represented in the Company Charts

Sector	No. of Companies	Weighting	
Gold	37	25.0%	
Gold Exploration	26	17.6%	
Nickel	12	8.1%	
Oil/Gas	7	4.7%	
Lithium	8	5.4%	
Zinc/Lead	7	4.7%	
Rare Earths	7	4.7%	
Copper	9	6.1%	

Mineral Sands	5	3.4%	
Iron Ore/Manganese	5	3.4%	
Potash/Phosphate	5	3.4%	
Coal	4	2.7%	
Uranium	4	2.7%	
Graphite	2	1.4%	
Bauxite	2	1.4%	
Silver	2	1.4%	
Cobalt	1	0.7%	
Tin	1	0.7%	
Diamonds	1	0.7%	
Other	3		
Total	148		

FEC Disclosure of Interests: It is a requirement of ASIC that holders of AFS licences prominently disclose any conflicts of interest. At all times readers should be aware that Far East Capital Ltd is an active investor. It shares its research and opinions free of charge to other investors and it aims to do so on an ethical basis. Accordingly, when it is writing about stocks in which it holds interests, these will be disclosed. In this week's publication FEC discloses that interests associated with the the author hold shares in First Graphene. and Lucapa Diamond Company. The author is chairman of First Graphene and one of the largest shareholders, through a number of entities. Over the last three years FEC has received fees from Alicanto Minerals, Blackstone Minerals, Broken Hill Prospecting, Cobalt Blue, First Graphene, Golden Rim, Lindian Resources, Lucapa Diamond Company, Orinoco Gold, Pacific American and West Wits for corporate and capital raising services. Its primary business is investing and managing its own money, but it does occasionally raise money for resource companies.

Disclaimer: This Research Report has been prepared exclusively for Far East Capital clients and is not to be relied upon by anyone else. In compiling this Commentary, we are of necessity unable to take account of the particular investment objectives, financial situation and needs of any of our individual clients. Accordingly, each client should evaluate the recommendations obtained in this Commentary in the light of their own particular investment objectives, financial situation and needs. If you wish to obtain further advice regarding any recommendation made in this Commentary to take account of your particular investment objectives, financial situation and needs, you should contact us. We believe that the advice and information herein are accurate and reliable, but no warranty of accuracy, reliability or completeness is given and (except insofar as liability under any statute cannot be excluded) no responsibility arising in any other way for errors or omissions or in negligence is accepted by Far East Capital Limited or any employee or agent. For private circulation only. This document is not intended to be an offer, or a solicitation of an offer, to buy or sell any relevant securities (i.e. securities mentioned herein or of the same issuer and options, warrant, or rights with respect to or interests in any such securities). We do not guarantee the accuracy or completeness of the information herein, or upon which opinions herein have been based. At any time we or any of our connected or affiliated companies (or our or their employees) may have a position, subject to change, and we or any such companies may make a market or act as principal in transactions, in any relevant securities or provide advisory or other services to an issuer of relevant securities or any company therewith. Unless otherwise stated all views expressed herein (including estimates or forecasts) are solely those of our research department and subject to change without notice. This document may not be reproduced or copies circulated without authority. Copyright © Far East Capital Ltd 2020.