



## CANADA

RPM CN Outperform

Price (at 03:35, 24 May 2017 GMT) C\$0.28

Valuation C\$ 0.77

- DCF (beta 1.2, ERP 7.0%, RFR 1.0%)

12-month target C\$ 0.65

12-month TSR % +132.1

Volatility Index Very High

GICS sector Materials

Market cap C\$m 108

Market cap US\$m 80

30-day avg turnover C\$m 0.3

Number shares on issue m 387.3

## Investment fundamentals

Year end 31 Dec		2016A	2017E	2018E	2019E
Revenue	m	7.5	86.4	149.6	143.0
EBITDA	m	-4.5	8.1	45.6	41.8
Recurring profit	m	-6.7	-8.2	8.0	6.9
Reported profit	m	-5.4	-6.0	5.9	5.1
Gross cashflow	m	-0.7	9.6	39.6	37.6
CFPS	C\$	0.00	0.02	0.10	0.09
CFPS growth	%	nfm	nfm	305.3	-5.0
PGCFPS	x	nfm	11.5	2.8	3.0
EPS rec	C\$	-0.03	-0.02	0.02	0.02
EPS rec growth	%	nfm	20.9	nfm	-14.1
PER rec	x	nfm	nfm	14.0	16.3
Total DPS	C\$	0.00	0.00	0.00	0.00
Total div yield	%	0.0	0.0	0.0	0.0
ROA	%	-7.5	-5.1	8.2	6.8
ROE	%	-16.5	-12.2	11.6	9.3
EV/EBITDA	x	-25.1	14.5	2.6	2.8
Net debt/equity	%	8.1	36.1	-12.1	5.1
P/BV	x	1.6	1.7	1.6	1.5

## RPM CN vs TSX, &amp; rec history



Note: Recommendation timeline - if not a continuous line, then there was no Macquarie coverage at the time or there was an embargo period.

Source: FactSet, Macquarie Research, May 2017

(all figures in CAD unless noted)

## Analyst(s)

Michael Gray

+1 604 639 6372 michael.gray@macquarie.com

David Medilek, CFA

+1 604 639 6378 david.medilek@macquarie.com

23 May 2017

Macquarie Capital Markets Canada Ltd.

## Rye Patch Gold

## Florida Canyon - 7 Site Visit Takeaways

## Event

- Buy RPM after our May/16 site visit to its 100% owned, flagship Florida Canyon mine (NV, USA). RPM is sequentially de-risking the ramp-up at Florida Canyon and recently improved financial position via the US\$5m sale of the Rochester NSR on May/15. This is our second visit to the project (first visit Apr/2016 pre-construction [\[LINK\]](#)). At 0.36x NAV (Macq deck) RPM is in the re-rating sweet spot with prod ramping-up in Nevada (jr producers at ~0.7x P/NAV).

## Impact

- Incremental positive – many insights gained from the Florida Canyon mine including mining and processing operations, expansion opportunities, resource performance and upside opportunities. Our seven takeaways are:
  - ⇒ #1 – Crusher performing well (so far) & potential to deliver even better throughput, at 20-25% above design (provided there is sufficient mine feed) plus potential low capital intensity improvements to increase by another 20%.
  - ⇒ #2 – Mining rates nearing design levels and plans in place drive throughput higher, via accelerating the purchase of two trucks to augment the fleet & utilize excess loader capacity. Throughput expected to increase to ~60ktons/day (53ktpd design), which will help feed the outperforming crusher for increased production & lower costs via economies of scale.
  - ⇒ #3 – Block model reconciling well (so far) at ~2% higher ounces.
  - ⇒ #4 – Near-term ore throughput bump expected, over next 2 benches via mine plan modified for pad construction delays by prioritizing waste stripping.
  - ⇒ #5 – Unit costs likely approaching design levels, due to throughput performing strongly and several input costs better than plan (although likely only until recently due to 1Q17 adverse weather).
  - ⇒ #6 – Leach kinetics encouraging & potential for near term FCF (closely monitoring). The weekly dore pour implied production of ~95-110ozAupd. With irrigation commencing recently (Apr/12), we see production continuing to ramp up and estimate ~130ozAupd is required to achieve breakeven FCF.
  - ⇒ #7 – Belt Consolidation = Multiple exploration and development opportunities for greater production scale. The near-term management focus is the ramp-up; however, there is significant near-mine and Oreana Trend exploration potential. RPM is targeting drilling to commence in 4Q.

## Earnings and target price revision

- 2017E EPS now -2c (was -3c). No change to target price.

## Price catalyst

- 12-month price target: C\$0.65 based on a DCF methodology.
- Catalyst: Ramp-up execution (ongoing)

## Action and recommendation

- We re-iterate our Outperform, C\$0.65 target and Top Pick status. RPM is an emerging Nevada producer and potentially an attractive target.

Please refer to page 7 for important disclosures and analyst certification, or on our website

[www.macquarie.com/research/disclosures](http://www.macquarie.com/research/disclosures).

## Purpose and Introduction

This note is to provide a synopsis of our May 16th site visit to RPM's 100% owned Florida Canyon Heap Leach gold mine, Oreana Trend, Nevada, USA. On the site visit we got a firsthand look at the mine restart and ramp-up plus the surrounding Oreana Trend properties. We gained significant insights that augmented our previous Apr/2016 site visit (as highlighted in our initiation report [\[LINK\]](#)).

The site visit focused on Florida Canyon with also a tour of Oreana trend projects including Lincoln Hill, Gold Ridge and Wilco. At Florida Canyon, the site visit included an asset update discussion, tour of the mining operations (primarily at Jasperoid Hill), crusher, heap leach pad, and gold room (including gold pour). For further background on RPM and its assets, see the [\[LINK\]](#) to our Oct/16 initiation report.

## Our Seven Key Site Visit Takeaways

We went on the trip to site with a number of top of mind questions to ask and aspects we wanted to see in order to assess risks, progress and opportunities. The timing was good as the mining and crushing rates were sufficient to gauge performance and we had the opportunity to gain significant insights that will be important going forward. It also augmented our site visit in Apr/16 and our sum of parts NAV valuation approach. Our seven site visit takeaways are:

- **Takeaway #1 - Crusher performing well (so far) and has potential to deliver even better throughput rates.** The crusher has been performing well, with availability in the mid 80% range vs design 79% percent, including several days operating for almost the full day (+23hrs). This has contributed to higher throughput rates being achieved at 24-25ktons/day vs the design of 20ktones/day (when there is sufficient feed available). In addition, we see further throughput expansion potential of ~200tonshr (3.5-4ktons/day) via low capital intensity improvements to optimize feed distribution at the three cone crushers (laser level-sensor surge bins ensuring feed is choked off properly). Expanding throughput beyond this, would likely be more capital intensive (costs to be determined) and involve: i) additional cone crusher; ii) primary jaw crusher upgrades, and; iii) power, conveyor & primary crusher hoppers upgrades. However, it is important that the mining fleet is first expanded to meet any mining throughput expansions for the crusher.
  - ⇒ **Implication: Potential to increase production 40-45% via utilizing higher crusher capacity and greater economies of scale to lower costs at relatively low capital intensity (provided mine can feed crusher – see Takeaway #2).** We estimate a 40% increase in throughput (incorporating an economies of scale discount) would increase NAVPS by +15c. The mining fleet will need to be expanded to consistently provide sufficient feed for a larger crusher size – see Takeaway #2. Additionally mine life would need to be extended to justify the larger mining fleet for a 40-45% increase in throughput.
  
- **Takeaway #2 – Mining rates nearing design levels – potential to increase rates.** We are encouraged that mining rates (waste & ore) were approaching run-rate design levels (53,000 tons/day – 6 days per week schedule) before two trucks went down for engine repairs (likely online before end of May). We also expect the operation to benefit from improved weather (winter weather was particularly harsh and impacted other operations in the region) and also operators climbing further up the learning curve (new equipment operators on certain equipment). RPM is also contemplating increasing throughput ~13% beyond design to ~60,000tpd via accelerating the purchase of two 785 (150 ton) trucks (potentially used) to augment the fleet (previously planned in 2019). With excess loading capacity (three large loaders) and a crusher outperforming (see Takeaway #1) we think this is a wise decision.
  - ⇒ **Implication: Feed the outperforming crusher to increase production and lower costs via economies of scale.** Increasing mining rates by ~13% to 60ktons/day from 53ktons/day (incorporating economies of scale) implies a NAVPS increase of +5c.

- **Takeaway #3 – Block model reconciling well (so far).** Mining activities late 2016/early 2017 have focused on the Jasperoid Hill area and we note that blast hole grade control has demonstrated ~2% higher ounces with tonnes slightly higher and grade slightly lower from +1.5mton ore mined to date (includes overliner). While this is still early days, we highlight the 26 years of operating history has de-risked many aspects of the operation for a lower risk development profile than most other projects.
  - ⇒ **Implication: De-risking block model resource (albeit early days in terms of mine restart) supports sequential de-risking and our target multiple of 0.9x.**
  
- **Takeaway #4 – Near term ore throughput “bump” expected.** Due to the pad construction delays as a result of the very wet weather in 1Q17, RPM modified the mine plan to front-end load waste stripping (stripping ratio increased from 1.5:1 to 2.5:1) due to limited available stockpile space. This has likely resulted in reduced waste material movements in the near term resulting in higher ore mining rates, which we expect to benefit the operation for the next couple of benches. This is important as more ore will be able to feed the outperforming crusher and we expect stacking rates to continue to perform strongly and exceed design rates.
  - ⇒ **Impact: Higher near term ore stacking rates, production and potentially cash flow (provided kinetics remain fast – historically ~50% of recoverable metal in first ~25-28 days, ~75-80% within ~60 days, and the remainder over the life of mine).**
  
- **Takeaway #5 – Units costs likely approaching design levels.** With the crusher exceeding expectations and mining operations nearing design throughput levels in conjunction with better than design inputs (fuel and reagent costs, steeper pit angle) we see costs near design levels. We note that maintenance costs have been higher than expected but are potentially near term and related to trucks requiring additional refurbishment. We also highlight that due to the 1Q17 adverse wet winter weather conditions (in addition to operators climbing the learning curve), we believe unit costs are only recently nearing design levels. Given the low grade heap leach mining method with significant earth moving, low unit operating costs are especially important. As highlighted in our initiation report [\[LINK\]](#), RPM has relatively low operating costs due to a combination of an ‘acting like an owner’ culture in addition to a downhill haul (short ~28 minute / ~2.5mi cycle from the current Jasperoid Hill mining area). The downhill haul enables a loaded truck travel speed of ~10mi/hr vs other operations of ~6mi/hr loaded uphill. Uphill unloaded trucking speed is 12-14mi/hr. Hauling downhill also has significant benefits to lower wear and tear on the equipment.
  - ⇒ **Impact: Positive indications that costs are going to be in-line or potentially better than mine plan via expanding throughput (Takeaways #1-2) & better than design input parameters.** In our initiation report [\[LINK\]](#), we noted multiple opportunities for lower than planned operating costs as well (steeper pit angle, lower fuel costs, crusher loading optimization). This is important for a low grade heap leach operation that requires crushing.

- **Takeaway #6 – Encouraging early leach kinetics signs and potential for near term free cash flow (something we will monitor closely).** With leaching commencing on Apr 12th, it is still early days to fully ascertain metallurgical performance, However, we are encouraged by the site visit week's gold pour that we attended of ~1200oz of dore (likely 55-65% Au, see Fig 2), implying gold production of 95-110ozAu/day. This compares with an estimated ~130ozAu/day to achieve break-even cash flow (at \$1276/ozAu hedge price, of which RPM can pre-deliver 150ozAu into for a modest cost). We highlight heap leaching has a lag to production and with +1.5m tons of ore (includes ~800ktons of mineralized overliner at ~0.28g/tonne) stacked as inventory (largely) prior to cyanide irrigation and we expect the pregnant solution gold concentration to increase and drive higher production rates in the near-term (110-150kozAupd). That said, given the low average LOM plan crushed ore grade stacked (0.46g/tonne vs historicals of 0.73g/tonne) we will continue to closely monitor the leach kinetics and ultimate recoveries. In terms of increasing production further, we highlight two important upcoming milestones. First, the completion of the construction of the Phase 1 heap leach pad targeting mid to late June (see Fig 3), which will increase the surface area of the stacked heap leach (from ~1.2mft<sup>2</sup> to ~3.3mft<sup>2</sup>) – potential to increase production to 150-200ozAupd, targeting <2 months. Second, is stacking the second lift for fresh ore to be leached with residual leaching of the ore underneath – potential to increase to 200-225ozAupd, targeting <4 months. We highlight that production will also be impacted by other leaching variables including increasing solution flow rates and carbon plant capacity.

⇒ **Impact: Potential for near term free cash flow.** Leach kinetics (at the 0.46g/tonneAu LOM average grades) still require more history to be fully de-risked. RPM sold its May/15 Rochester 3.4% NSR (finite royalty – concluding in 2H18/early 2019) for US\$5m likely due to a tight financial position and highlighting the importance of reaching free cash flow as soon as possible. RPM is currently investigating other measures to increase gold production and free cash flow in the near term (including increasing head grade). We note that RPM has downside gold price protection with a four year, 150kozAu hedge at an average price of \$1276/oz which can be pre-delivered into for a modest cost.

**Fig 1 Florida Canyon Gold Pour of ~1200/oz dore, of which 55-65% is estimated to be gold. This is a weekly gold pour and implies a production rate of 95-110ozAupd. We estimate free cash flow breakeven at ~130ozAupd (based on \$1276/oz hedge price). We expect the production rate to increase as the pregnant solution gold concentration increases as leaching ramps up (irrigation started Apr/12).**



Source: Macquarie Research, May 2017



**Fig 2 New Phase 1 South Leach Pad (looking West) – We highlight the stacked ore in the distance currently being irrigated (since Apr/12) and pad construction underway, with earthworks and lining underway. The liner shown in the photograph has generally already been welded and construction is underway to continue to extend the pad towards near where the photograph was taken (~10m away). Completion is targeting mid to late June.**



Source: Macquarie Research, May 2017

- **Takeaway #7 – Belt Consolidation = Multiple exploration and development opportunities for greater production scale (as highlighted in our initiation report).** Although the focus of management and financial resources is on the ramp-up execution and free cash flow generation near-term, we remain encouraged by the potential for exploration to drive mine life extension and production expansion at Florida Canyon and along the ~25km Oreana Trend (under RPM's control) for organic growth. As highlighted in our initiation report [\[LINK\]](#), we continue to see near-pit oxide resource expansion potential. We are also encouraged by the apparent broad footprint of “feeder zone” sulphide gold mineralization that underlies the oxide deposit. Preliminary historical metallurgical results suggest sulphide flotation would potentially result in a pyrite rougher concentrate recovery of +90% at concentrate grades of ~20-35g/tonneAu and we note that nearby rail could likely facilitate efficient concentrate transport (we provide zero value in our model for the sulphides). We also had the opportunity to visit some of the other projects along the Oreana Trend, including Lincoln Hill, which has the potential to add 20kozAupa of production (Macq est production start in 2020 – this is C\$0.11 of our NAVPS). RPM is focused on additional drilling and optimizing metallurgy at Lincoln Hill prior to completing an updated economic study. As free cash flow generation ramps up, RPM intends to commence drilling in 4Q16 and has applied for a Plan of Operations for 200 acres (each) for Lincoln Hill, Independence Hill and Gold Ridge.

⇒ **Implication: Mine life extension and production expansion potential.** At Florida Canyon every +250kozAu of ultimate reserves adds +C\$0.13 NAVPS (at a 20,000tpd stacking rate).

## Rye Patch Gold (RPM CN, Outperform, Target price: C\$0.65)

Income Statement						Price assumptions						NAV Breakdown (5% discount)				
Unit	2015	2016	2017E	2018E	2019E	Unit	2015	2016	2017E	2018E	2019E	US\$m	US\$ / Sh	C\$ / Sh	% Total	
Total revenue	US\$m	6	7	86	150	143	Gold	US\$/oz	1,161	1,249	1,241	1,381	1,375			
Operating expenses	US\$m	0	6	71	97	97	Silver	US\$/oz	15.71	17.12	18.46	21.25	21.75			
Operating margin	US\$m	6	1	16	52	46	USD/CAD		1.28	1.40	1.47	1.45	1.45			
Depreciation	US\$m	0	0	16	34	33										
Exploration	US\$m	4	1	1	5	2										
EBT	US\$m	0	(5)	(8)	8	7										
Total tax	US\$m	0	0	(2)	2	2										
<b>Net Income</b>	<b>US\$m</b>	<b>0</b>	<b>(5)</b>	<b>(6)</b>	<b>6</b>	<b>5</b>										
Adjusted EBITDA	US\$m	(0)	(3)	10	43	40										
Adjusted Net Income	US\$m	0	(7)	(8)	8	7										
Adj. EPS FD	US\$	0.00	(0.03)	(0.02)	0.02	0.02										

  

Production (attributable basis)						Valuation (Macq Deck)							
Unit	2015	2016	2017E	2018E	2019E	Unit	2015	2016	2017E	2018E	2019E		
Florida Canyon (100%)	000oz	0	3	47	75	73	P/E	x	NMF	NMF	NMF	10.8	12.5
<b>Total Gold Production</b>	<b>000oz</b>	<b>0</b>	<b>3</b>	<b>47</b>	<b>75</b>	<b>73</b>	P/CF	x	NMF	NMF	8.9	2.2	2.3
Gold AISC	US\$/oz	0	0	1,069	842	880	EV/EBITDA	x	NMF	NMF	5.5	1.3	1.4
							PNAV	x	0.36				

  

Cash Flow Statement						NAV Breakdown (5% discount) - Continued					
Unit	2015	2016	2017E	2018E	2019E	US\$m	US\$ / Sh	C\$ / Sh	% Total		
Cash flow from Operations	US\$m	0	(3)	9	38	38					
Cash flow from investing	US\$m	(2)	(49)	(30)	(6)	(51)					
Cash flow from financing	US\$m	(0)	59	20	(22)	(7)					
Net change in cash	US\$m	(2)	8	(2)	11	(20)					
<b>CFPS FD</b>	<b>US\$</b>	<b>0.00</b>	<b>(0.00)</b>	<b>0.02</b>	<b>0.10</b>	<b>0.09</b>					

  

Balance Sheet						NAV Breakdown (5% discount) - Continued					
Unit	2015	2016	2017E	2018E	2019E	US\$m	US\$ / Sh	C\$ / Sh	% Total		
Cash and equivalents	US\$m	4	11	9	20	1					
Working Capital	US\$m	5	0	16	19	(5)					
Debt	US\$m	0	17	33	12	5					
Total S/H equity	US\$m	13	69	66	72	77					
Enterprise Value	US\$m	66	75	93	61	73					

  

NAV Breakdown (5% discount) - Continued					
US\$m	US\$ / Sh	C\$ / Sh	% Total		
<b>Near Term Production (DCF)</b>					
Florida Canyon (NV, 100%) - NPV5%	165	0.43	0.57	69%	
<b>Advanced Dev/Expl Assets (DCF / (Comparative analysis))</b>					
Lincoln Hill (NV, 100%) - NPV5%	33	0.09	0.11	14%	
Wilco (NV, 40%) - 0.8mozAgEq @ \$20/oz	17	0.04	0.06	7%	
<b>Other Mineral Assets</b>					
Rochester NSR (3.4%) - NPV5%	0	0.00	0.00	0%	
Oreana Trend Land Package (NV, 100%) - 18000ha @ \$1200/ha	22	0.06	0.07	9%	
Golden Gate Pass (NV, 100%) - 1030ha @ \$2000/ha	2	0.01	0.01	1%	
<b>Total Mineral Asset NAV</b>	<b>238</b>	<b>0.61</b>	<b>0.82</b>	<b>100%</b>	
Cash from ITM O/W	4.5	0.01	0.02		
Cash (YE17)	7.1	0.02	0.02		
Debt (YE17)	(24.9)	(0.06)	(0.09)		
<b>Total Non-Operating NAV</b>	<b>(13)</b>	<b>(0.03)</b>	<b>(0.05)</b>		
<b>Net Asset Value</b>	<b>225</b>	<b>0.58</b>	<b>0.77</b>		

Source: Company data, Macquarie Research, May 2017

## Important disclosures:

**Recommendation definitions****Macquarie - Australia/New Zealand**

Outperform – return >3% in excess of benchmark return  
 Neutral – return within 3% of benchmark return  
 Underperform – return >3% below benchmark return

Benchmark return is determined by long term nominal GDP growth plus 12 month forward market dividend yield

**Macquarie – Asia/Europe**

Outperform – expected return >+10%  
 Neutral – expected return from -10% to +10%  
 Underperform – expected return <-10%

**Macquarie – South Africa**

Outperform – expected return >+10%  
 Neutral – expected return from -10% to +10%  
 Underperform – expected return <-10%

**Macquarie - Canada**

Outperform – return >5% in excess of benchmark return  
 Neutral – return within 5% of benchmark return  
 Underperform – return >5% below benchmark return

**Macquarie - USA**

Outperform (Buy) – return >5% in excess of Russell 3000 index return  
 Neutral (Hold) – return within 5% of Russell 3000 index return  
 Underperform (Sell) – return >5% below Russell 3000 index return

**Volatility index definition\***

This is calculated from the volatility of historical price movements.

**Very high–highest risk** – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.

**High** – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.

**Medium** – stock should be expected to move up or down at least 30–40% in a year.

**Low–medium** – stock should be expected to move up or down at least 25–30% in a year.

**Low** – stock should be expected to move up or down at least 15–25% in a year.

\* Applicable to Asia/Australian/NZ/Canada stocks only

**Recommendations** – 12 months

**Note:** Quant recommendations may differ from Fundamental Analyst recommendations

**Financial definitions**

All "Adjusted" data items have had the following adjustments made:

Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense  
 Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests

**EPS** = adjusted net profit / efpowa\*

**ROA** = adjusted ebit / average total assets

**ROA Banks/Insurance** = adjusted net profit / average total assets

**ROE** = adjusted net profit / average shareholders funds

**Gross cashflow** = adjusted net profit + depreciation

\*equivalent fully paid ordinary weighted average number of shares

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

**Recommendation proportions – For quarter ending 31 March 2017**

	AU/NZ	Asia	RSA	USA	CA	EUR	
Outperform	47.26%	55.50%	38.46%	45.47%	59.09%	48.21%	(for global coverage by Macquarie, 8.20% of stocks followed are investment banking clients)
Neutral	38.01%	29.31%	42.86%	48.77%	37.88%	36.79%	(for global coverage by Macquarie, 8.25% of stocks followed are investment banking clients)
Underperform	14.73%	15.19%	18.68%	5.76%	3.03%	15.00%	(for global coverage by Macquarie, 8.00% of stocks followed are investment banking clients)

**RPM CN vs TSX, & rec history**

(all figures in CAD currency unless noted)

Note: Recommendation timeline – if not a continuous line, then there was no Macquarie coverage at the time or there was an embargo period.

Source: FactSet, Macquarie Research, May 2017

**12-month target price methodology**

RPM CN: C\$.65 based on a DCF methodology

**Company-specific disclosures:**

**RPM CN:** MACQUARIE CAPITAL MARKETS CANADA LTD./MARCHÉS FINANCIERS MACQUARIE CANADA LTÉE. or one of its affiliates managed or co-managed a public offering of securities of Rye Patch Gold Corp in the past 12 months, for which it received compensation. Macquarie Group Limited together with its affiliates beneficially owns 1% or more of the equity securities of Rye Patch Gold Corp.

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Date	Stock Code (BBG code)	Recommendation	Target Price
18-Oct-2016	RPM CN	Outperform	C\$.65

**Target price risk disclosures:**

**RPM CN:** Any inability to compete successfully in their markets may harm the business. This could be a result of many factors which may include geographic mix and introduction of improved products or service offerings by competitors. The results of operations may be materially affected by global economic conditions generally, including conditions in financial markets. The company is exposed to market risks, such as changes in interest rates, foreign exchange rates and input prices. From time to time, the company will enter into transactions, including transactions in derivative instruments, to manage certain of these exposures.

**Analyst certification:**

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# Equities



## Research

### Heads of Equity Research

Peter Redhead (Global - Head)	(852) 3922 4836
Christine Farkas (US)	(1 212) 231 6668
Greg MacDonald (Canada)	(1 416) 628 3934

### Consumer

Chad Beynon (Head of US Consumer)	(1 212) 231 2634
Bob Summers (New York)	(1 212) 231 1072
Laurent Vasilescu (New York)	(1 212) 231 8046

### Leisure & Online Travel

Matthew Brooks (New York)	(1 212) 231 1585
---------------------------	------------------

### Autos

Takuo Katayama (New York)	(1 212) 231 1757
---------------------------	------------------

### Energy

#### Oil & Gas

Vikas Dwivedi (Head of Oil & Gas, Global Energy Strategist)	(1 713) 275 6352
Iain Reid (London)	(44 20) 3037 2119

#### US Exploration & Production

Paul Grigel (Denver)	(1 303) 952 2754
----------------------	------------------

#### US Refining

Vikas Dwivedi (Head of Oil & Gas, Global Energy Strategist)	(1 713) 275 6352
---	------------------

#### Oilfield Services

Walt Chancellor (Houston)	(1 713) 275 6230
---------------------------	------------------

#### International/Canadian Oil & Gas Producers

Brian Bagnell (Calgary)	(1 403) 539 8540
Brian Kristjansen (Calgary)	(1 403) 539 8508
Tom Hems (Calgary)	(1 403) 218 6666

#### Energy Infrastructure

David Noseworthy (New York)	(1 212) 231 6681
Andrew Weisel (New York)	(1 212) 231 1159

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Hamzah Mazari (New York)	(1 212) 231 2442
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Cooley May (Head of US Basics & Industrials)	(1 212) 231 2586
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Michael Glen (Montreal)	(1 514) 905 3636

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Sameer Rathod (San Francisco)	(1 415) 762 5034
John D'Angelo (Boca Raton)	(1 415) 732 5038

#### Transports

Konark Gupta (Toronto)	(1 416) 848 3539
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Aldo Mazzaferro (New York)	(1 212) 231 0693
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Michael Siperco (Toronto)	(1 416) 848 3520
Matt Murphy (Toronto)	(1 416) 848 3541
Michael Gray (Vancouver)	(1 604) 639 6372

### Technology

Gus Papageorgiou (Toronto)	(1 416) 848 3512
----------------------------	------------------

### TMET

#### Telecommunications

Amy Yong (New York)	(1 212) 231 2624
Greg MacDonald (Toronto)	(1 416) 628 3934

#### Cable, Satellite & Entertainment

Amy Yong (New York)	(1 212) 231 2624
---------------------	------------------

#### Satellite & Data Centers

Andrew DeGasperi (New York)	(1 212) 231 0649
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#### Internet

Ben Schachter (New York)	(1 212) 231 0644
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#### Media & Entertainment

Tim Nollen (New York)	(1 212) 231 0635
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#### Semiconductors

Srini Pajjuri (New York)	(1 415) 762 5018
--------------------------	------------------

#### Software

Sarah Hindlian (New York)	(1 212) 231 1371
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Angie Storozyński (Head of US Utilities & Alternative Energy)	(1 212) 231 2569
David Noseworthy (New York)	(1 212) 231 6681

### Commodities & Precious Metals

Colin Hamilton (Global)	(44 20) 3037 4061
Jim Lennon (London)	(44 20) 3037 4271

### Economics and Strategy

David Doyle (Toronto)	(1 416) 848 3663
-----------------------	------------------

### Quantitative Analysis

Gurvinder Brar (Mumbai)	(9197) 8055 5902
Steve Gao (London)	(44 20) 3037 2765
Giuliano De Rossi (London)	(44 20) 3037 1997

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Contact	<a href="mailto:macresearch@macquarie.com">macresearch@macquarie.com</a> for access requests.

### Email addresses

[FirstName.Surname@macquarie.com](mailto:FirstName.Surname@macquarie.com)  
eg. [peter.redhead@macquarie.com](mailto:peter.redhead@macquarie.com)

## Equities

### Head of US Equities

Robert Ansell (New York)	(1 212) 231 0888
--------------------------	------------------

### Head of Canadian Equities

David Washburn (Toronto)	(1 416) 848 3631
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### Head of US Sales

Khristina McLaughlin (New York)	(1 212) 231 8012
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David Ricciardelli (Toronto)	(1 416) 572 7150
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J.T. Cacciabauda (New York)	(1 212) 231 6381
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### Canada Trading

Perry Catellier (Co-head, Toronto)	(1 416) 848 3619
Michael O'Rourke (Co-head, Toronto)	(1 416) 848 3633

### International Sales Trading

Mike Gray (New York)	(1 212) 231 0928
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