

# Monarch Mining Corporation

Initiation of coverage

## Monarch's magicians

Metals &amp; mining

24 March 2021

**Price** **C\$0.87**
**Market cap** **C\$61m**

Net cash (C\$m) at 28 February 2021 20.0

Shares in issue 69.7m

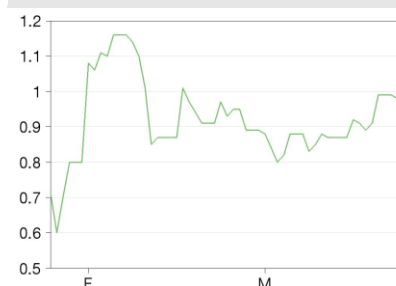
Free float 83.4%

Code GBAR

Primary exchange TSX

Secondary exchange OTC

### Share price performance



%	1m	3m	12m
Abs	(6.5)	N/A	N/A
Rel (local)	(8.2)	N/A	N/A
52-week high/low	C\$1.16	C\$0.59	

### Business description

Monarch Mining Corporation is a Canadian gold explorer with one past producing asset, one major near-term project and two second tier projects in the Abitibi, Quebec, gold belt.

### Next events

Q3 results May 2021

### Analyst

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**Monarch Mining Corporation**  
 is a research client of Edison  
 Investment Research Limited

Monarch Mining Corporation was spun out of Monarch Gold (MQR) in January 2021. MQR sold its Wasamac and Camflo assets to Yamana for C\$200m but retains a suite of potentially high-return projects as Monarch Mining. Its portfolio is located in the well-established and highly prospective Abitibi gold belt. Beaufor should start production in FY22, with minimal capex outlay. Once in production, its cash flows, combined with existing cash (Monarch Mining is debt free) will be invested in Croinor, expected to start up in FY24. Our valuation is C\$0.99/share, comprising C\$0.69 for Beaufor and Croinor and C\$0.30/share for second-tier assets McKenzie Break and Swanson. With financing, Croinor could be brought forward, accelerating cash flows. Meanwhile, ongoing exploration, given the highly prospective locations, is likely to add to available resources and potentially to mine-life extensions, offering considerable valuation upside.

Year-end June	Revenue (C\$m)	PBT* (C\$m)	EPS* (c)	DPS (c)	P/E (x)	Yield (%)
06/21e	0.0	(2.8)	(4.1)	0.0	N/A	N/A
06/22e	21.0	(3.2)	(4.6)	0.0	N/A	N/A
06/23e	56.2	15.9	17.9	0.0	4.9	N/A
06/24e	74.6	21.6	19.4	17.3	4.5	19.9

Note: \*PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments.

## Next two projects: Beaufor and Croinor

Monarch Mining's next two projects, 274koz measured, indicated and inferred (MI&I) resource Croinor and 123koz Beaufor, are planned to start staggered production, with Beaufor maybe as soon as autumn 2021 and Croinor in FY24, based on self-funding; Croinor could be earlier if additional funding is secured. The 750tpd Beacon Mill is fully permitted, with limited capex needed to restart. The capex needed to restart Beaufor is low, at around C\$5m including Beacon Mill, but Croinor requires C\$45m, to be funded by existing cash (C\$20m at end February) and future Beaufor cash flows. Our base case allows for four years of production at Beaufor, running to FY26, and at Croinor, running to FY27. However, given the high-grade gold-bearing veins already known in the Abitibi area, which Monarch is actively exploring through its fully funded drilling programmes, mine-life extensions are likely by converting its 329Koz inferred resources to bring its total to 918Koz MI&I resources and adding to this over time.

## Valuation: C\$0.99/share including next tier of C\$0.30

Our valuation with production to FY27 produces free cash flow of over C\$70m from the two key projects, Beaufor and Croinor, with C\$1.15/share in total dividends starting in FY24. This implies a valuation for the Beaufor/Croinor combination of C\$0.69/share using a 10% pa discount rate. McKenzie and Swanson potentially add a further C\$0.30/share. With additional funding, the Croinor start up could be accelerated to FY22, which would increase our core valuation by C\$0.21/share, while a two-year mine-life extension could add another C\$0.38/share. Combined, these imply full valuation upside of C\$1.58/share. This excludes any potential future upside from exploration, M&A or further mine life extensions.

## Investment summary

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### **Company description: Explorer, developer and M&A player**

Monarch Mining has a diverse portfolio of gold assets across former producers, development and exploration in Quebec province, in the mineral-rich Abitibi greenstone gold belt. It is located in a well-developed, well-served mining area with excellent infrastructure and low hydro-generated electricity cost, giving the projects good economics and a flexible approach. Monarch Mining was formed in January 2021 when it was spun out of MQR. MQR sold its Wasamac assets and Camflo assets to Yamana for C\$200m. The board members have a proven track record of creating value for shareholders through M&A, for the acquisition of distressed/forgotten assets and the ability to monetise them. CEO Jean-Marc Lacoste, CFO Alain Lévesque and VP corporate development Mathieu Séguin have been in investment banking and company directors with M&A activity most of their careers. The culture of the board is one of M&A and serial deal-making, targeting uplifts in value to the shareholders of the company. Based on planned exploration, we have confidence the company can extend resources and achieve mine-life extensions to generate significant valuation uplift as management will push hard for deals and generate cash.

### **Financials: debt free balance sheet**

Monarch had C\$20m in net cash (no debt) on its balance sheet at end February 2021. Although still pre-production, cash outlays are modest. For FY21 we estimate operating cash outflow of C\$2.3m, with net interest and capex combined of C\$0.7m offset by C\$4.7m financing, leaving our estimated end June 2021 net cash at C\$15.7m. This reduces to C\$9.9m at end June 2022, the year in which Beaufor cash flows start contributing. Our base-case forecasts see free cash flow of C\$70m plus from Beaufor and Croinor, with C\$0.24/share average dividends, from 2024 to 2027 (24% dividend yield on current share price), although in reality we would expect the company to achieve mine life extensions well beyond this.

### **Valuation: Mine-life extensions the key**

Our analysis shows overwhelmingly that the best value uplift for Monarch can be achieved by finding more ounces of gold and bringing them to account by converting them from inferred to indicated. This extends the life of the company's mines, which each have a resource life of four years, so an increase of only four years (approximately 260koz) has a 50% impact on life extension showing how 'life-marginal' the company is. Our base-case valuation of Monarch is C\$0.99/share, representing valuations of C\$0.69/share for the two DCF-ready projects and C\$0.30 for the two next-tier projects. The base case assumes four years of production for Beaufor and Croinor respectively, with cash in hand and Beaufor cash flow funding a Croinor start-up in FY24, with production running to FY27. No mine life extensions or production for McKenzie Break and Swanson are assumed. Our analysis suggests that with fund raising of C\$22m (assuming a mix of debt and equity), Croinor's start-up and cash flows could be brought forward. The key priority is to add to the gold ounces inventory through a planned exploration programme, which offers significant upside to our valuation. Furthermore, by potentially acquiring increasingly scarce properties in the area, the range of exploration can be increased in an area that is peppered with gold mineralisation. Exploration programmes are in full swing with fully financed drilling programmes of 42,500m at Beaufor, 14,500m at McKenzie Break and 6,200m at Croinor underway, pointing to a high chance of success in expanding the resource base.

## Sensitivities: Highly geared to mine-life extensions

In addition to the normal risks of execution and management, we see the principal risks and sensitivities for Monarch as the life extension of the mines, or the lack thereof, bringing Croinor mine into production before FY24, which is the base case, the value of the Canadian dollar against the US dollar, the gold price, capex, operating costs, discount rates and funding.

We note that even Monarch's first project, Beaufor, is at a pre-production stage and our valuation is conditional on management executing the project according to the assumptions we have set out and within the cost and timing parameters given. Given the established history of mining in this area, we think geological and metallurgical risks are minimal. Our various sensitivity analyses show a base-case value around C\$0.99/share with conservative upside to C\$1.81/share through mine-life extensions and capital raises on some of the properties. As a maximum downside we calculate that the gold price would need to fall to US\$800/oz for the share value to reflect a break-even situation based on the economics of Beaufor and Croinor.

The overriding key sensitivity lies in achieving the life extension of Croinor and bringing in funding to do this. Assuming, for the purposes of our model (at a notional price of C\$0.90), funding of C\$22m in FY22, we estimate this could add C\$0.21/share to our valuation (see Exhibit 1) before life extension and a further C\$0.38/share with a two-year life extension.

**Exhibit 1: Base case valuation and sensitivities to bringing Croinor into production in FY22 and earlier funding**

C\$/share	Funding options	No extension for Beaufor or Croinor		Two-year extension for Croinor		Three-year extension for Croinor	
		Core	Full	Core	Full	Core	Full
Beaufor start-up autumn 2021 and Croinor in 2025	No capital raise	0.69	0.99	1.16	1.46	1.37	1.67
Beaufor start-up in autumn 2021 and Croinor in 2022	Funding of C\$22m in 2022 with a 60:40 debt:equity split	0.90	1.20	1.28	1.58	1.51	1.81

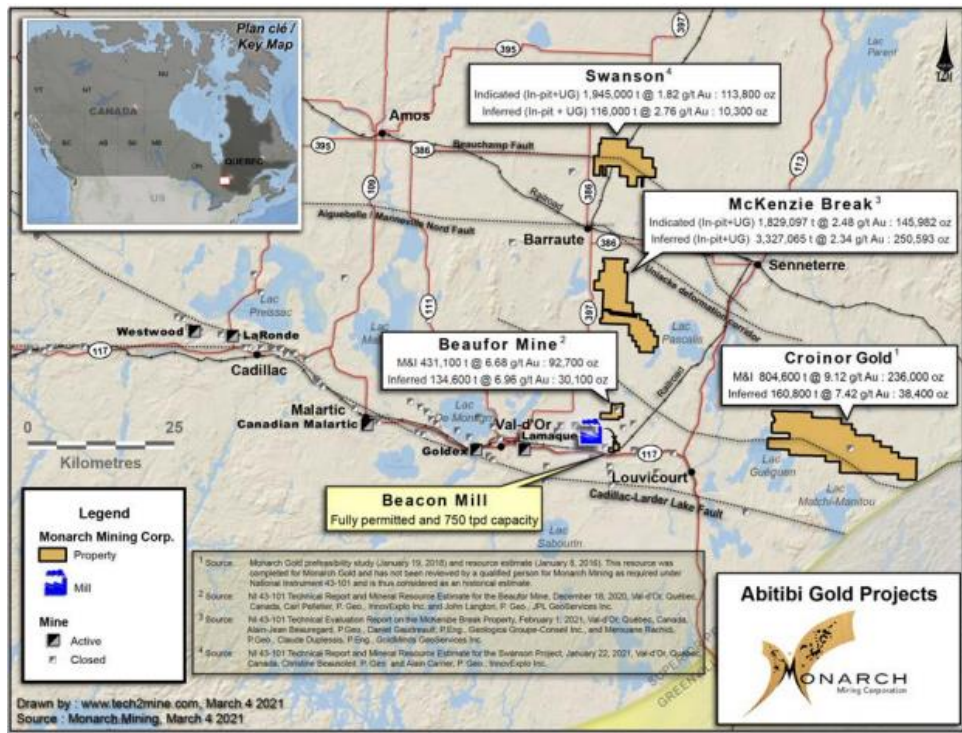
Source: Edison Investment Research

## Company description: Canadian explorer with potential

### Potential to be 25–65koz gold producer with life extensions

Monarch Mining has a well-balanced portfolio of four gold properties, which will be brought into production in a staggered sequence. The earliest of these is Beaufor, which is planned to start up in eight to 14 months from now, followed by Croinor within two to four years subject to funding decisions. Over its history of mining, the Abitibi gold belt has produced over 125Moz of fine gold along a significant geological shear zone system along the Beaufor-Croinor line, with secondary shear zones also exploited by the Swanson and McKenzie Break mines. There is good geological reason for the shear zone extensions between the mines and the projects to be lucrative for further low-risk exploration.

## Exhibit 2: Location of Monarch's projects, Abitibi, Quebec



Source: Monarch Mining, 2021

Geologically, the Abitibi greenstone terrane is highly conducive to further discoveries. These deposits are usually high grade and typically concentrated in lenses and pockets that need constant drilling and good geological interpretation to locate.

In assessing exploration activity to potential upside, we have looked at the possible link between the number of ounces of resource added per metre drilled in an exploration programme. The track record of Monarch's geologists shows that for every metre drilled, an increase of 11 resource ounces M&I or a factor of 11x, has been achieved for the McKenzie Break project. This is a known deposit and is the type of drilling that adds the most ounces. By their own admission and experience this is extremely good factor. As a comparison, Osisko Mining's Windfall gold project, similar to Monarch's deposits as it is also a multiple-zone, high-grade deposit located in the Abitibi greenstone belt between Val d'Or and Eeyou Istchee, had an increase of 4.55x. Monarch's geologists mention that this would be more typical of the increase ratio in this area. In our assessment of the number of ounces that the drilling programmes planned for each of the projects could add, we have used a notional 5x factor to estimate the possible addition of M&I ounces.

This relationship between metres drilled and the number of ounces of resources added to a company's inventory is not an established methodology; however, we consider it a useful broad metric and apply it in our analysis as an indication of what a drilling programme could add. We mention it here to give a broad indication of what Monarch's drilling programme could potentially add, the equivalent of 'blue sky' upside, but with some basis in fact as this is what the company's geologists and assets have managed to produce in the past.

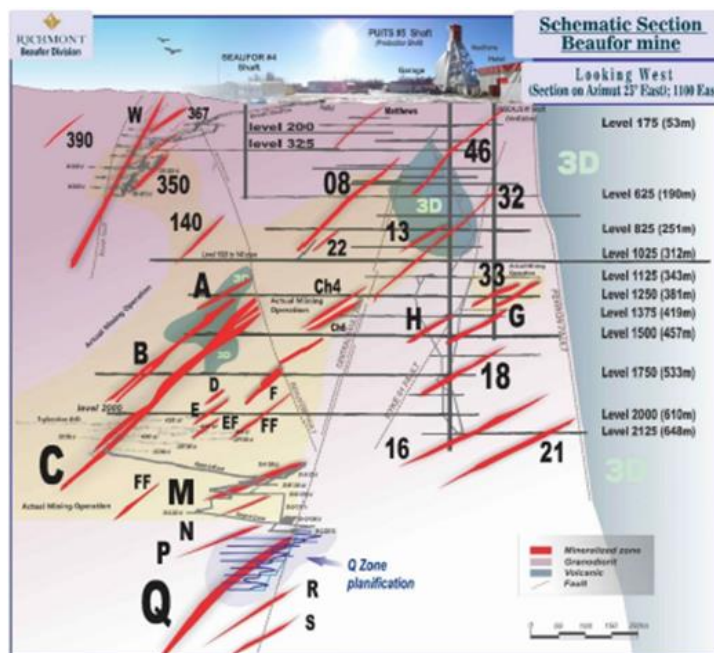
### Beaufor

Beaufor is on care and maintenance, with production halted in 2019. At Beaufor, mineralisation occurs in veins associated with shear zones and extension fractures that follow east-west trending corridors in the granodiorite generally in the vicinity of a contact with volcanic rocks. The gold

mineralisation appears predominantly in quartz veins and sometimes in the wall rock of the quartz veins. The veins dip south from 30° to 65° and are 5cm to 5m in thickness (Exhibit 3).

The latest Beaufor Mineral Resource Estimate, effective 18 December 2020, states that the project has 92,700 measured and indicated gold ounces and 30,100 gold ounces inferred. With the project comprising 63 distinct mineralised zones, a fully financed 42,500m underground and surface drilling programme has a high probability of increasing the resources of the mine by a significant number of ounces. The drilling programme, which is underway, plans to drill 194 short holes (20,000m) near the current underground workings of the mine, 19 longer underground holes (6,000m), 20 surface holes (4,000m) and 31 holes (10,000m) below the current workings, leaving 2,500m as contingency holes. It is likely, in our opinion, that of the 264 holes drilled more than half will make significant intersections that could double the current MI&I. The 194 holes drilled are in close proximity to known veins, most of which are being mined and with half of all the planned metres here, these holes are likely to provide the highest boost to Monarch’s MI&I category expansion. Applying our drilling to the increased ounces factor of 5x already mentioned, for the purpose of illustration this could possibly result in an addition of 212,500 ounces of gold to Monarch’s MI&I or a possible life extension of around eight years at a production rate of 25koz per year. This Beaufor life extension presents blue-sky potential not represented in our base case or sensitivity scenarios.

**Exhibit 3: Beaufor mine schematic vertical cross section (looking west)**



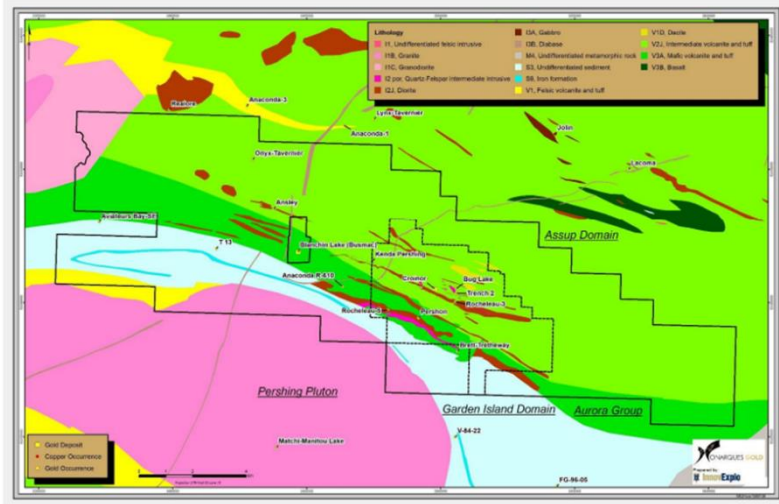
Source: Thelland and Manda Mbomba, 2016; Monarch Gold NI 43-101, December 2020

### **Croinor: Past producing mine**

Croinor has as its main gold-bearing zone a sill that is 3km long, dips north at 50–65° and is 60–120m thick. There are secondary gold-rich lenses in shear zones, brecciated zones and hydrothermal alteration zones, which have trapped gold that was remobilised during emplacement. The fact that the target zone for the gold mineralisation is a well-defined thick sill makes the likelihood of further gold discoveries almost certain; only the quantum remains a question. The project has an underexplored district scale land package of around 150km<sup>2</sup>, and has the largest M&I resources of the Monarch projects. A 6,200m drilling programme has been completed and results are awaited. Croinor has open-ended ore shoots extending below and longitudinally from the mothballed underground workings. The open-pit potential is being investigated with the possibility of shallow orebody extensions. Using our 5x factor of converting drilling metres to ounces

of MI&I resources, this could add 31,000oz to its MI&I. Considering this potential, combined with the fact that our base case (four years of production, guided by management depleting 130,000oz) leaves over 100,000oz M&I in the ground (total M&I is 236,000oz, Exhibit 6) at the end of 2027, we have modelled two-year and three-year life extensions at a production rate of 42koz a year.

**Exhibit 4: Croinor Gold property showing mineralised zones in the form of diorite sills and quartz feldspar veins as shown in the centre of the exhibit**



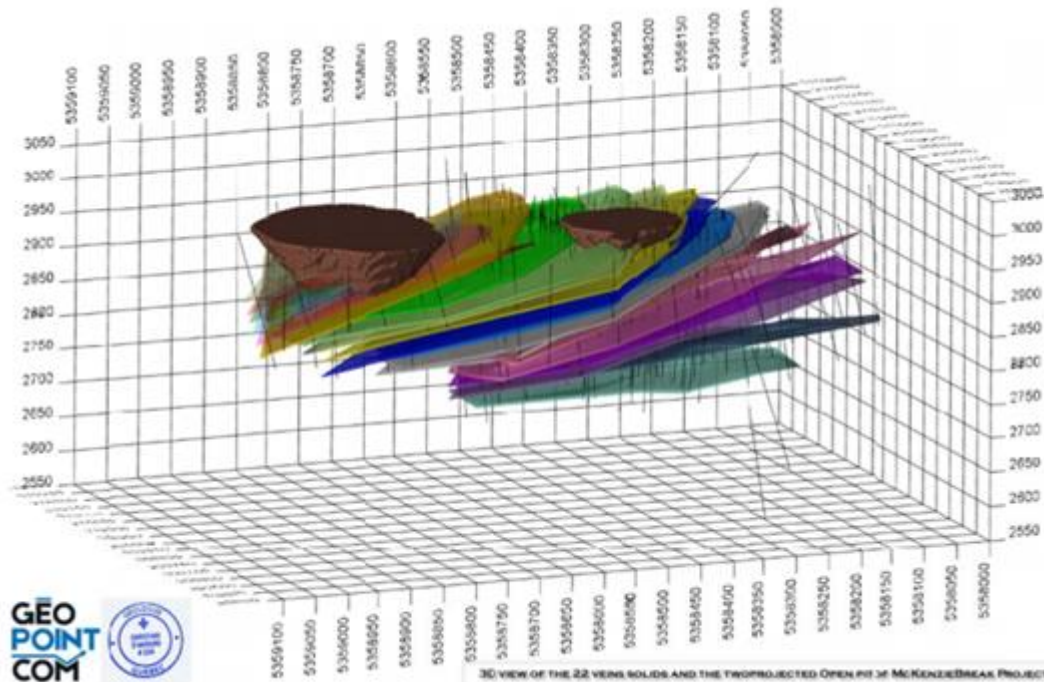
Source: Monarch Gold NI 43-101, March 2018

### McKenzie Break and Swanson

The orebodies of the McKenzie Break are stacked lenses of gold-bearing rocks, of which 12 have been identified. The lowermost lens or zone shows the greatest prospectivity, with high grades having been intersected in the eastern part of the mine. A 14,500m drilling programme with drilling results already pending is focused on following the mineralised trend southwards. Using our 5x factor, this could add 72,500oz of MI&I to Monarch's total open-pit and underground resources or an increase of some 18%. The acquisitions of properties totalling some 19.4km<sup>2</sup> in March 2021 are on this trend as well. McKenzie now has a total of 70.7km<sup>2</sup> of highly prospective properties in one of the most prospective gold terranes in the world.

The Swanson deposit is associated with the same type of geology as McKenzie Break, with the same prospectivity in our view.

**Exhibit 5: McKenzie Break wireframe model showing stacked mineralised zones, which can be mined by open-pit and underground methods**



Source: Monarch Gold NI 43-101, April 2018

## Reserves and resources

The Monarch Mining Corporation gold resources comprise a total of 588koz M&I and 329koz inferred resources (Exhibit 6). With Monarch's strategy to become a 25koz a year gold producer initially with Beaufor coming into production first, and a further c.40koz a year with Croinor kicking in around FY24, applying an inferred-to-reserve conversion factor of 90% (which Battle North, a peer gold exploration company, BNAU in Exhibit 13, has reported), we think that Beaufor could potentially have a life extension of 4.8 years and Croinor 6.4 years. Our sensitivities at this stage only allow for up to three additional years for Croinor.

However, using a ratio of 5x metres to be drilled to the increase in gold ounces (MI&I), we see a potential 316,000oz of gold added to the MI&I of the company. Bearing in mind that not all of the inferred ounces will be converted to M&I, this could result in an extra four to five years of life at the 65koz (combined Beaufor and Croinor) a year level. Should Monarch's geologists get closer to the 11x factor (as has been seen at McKenzie Break), the life expectancy of assets could well be eight to 10 years extra.

The blue-sky potential that these possibilities demonstrate have not been allowed for in our sensitivities and offers huge potential to our high-road valuation.

**Exhibit 6: Monarch NI 43-101 resource estimate**

		Tonnes (metric)	Grade (g/t)	Ounces (Au)
Croinor*	Measured resource	80,100	8.44	21,700
	Indicated resources	724,500	9.20	214,300
	Total M&I	804,600	9.12	236,000
	Total inferred	160,800	7.42	38,400
Beaufor**	Measured resource	121,000	5.62	21,900
	Indicated resources	310,100	7.1	70,800
	Total M&I	431,100	6.68	92,700
	Total Inferred	134,600	6.96	30,100
McKenzie Break***	In pit			
	Total indicated	1,441,377	1.8	83,305
	Total inferred	2,243,562	1.44	104,038
	Underground			
	Total indicated	387,720	5.03	62,677
	Total inferred	1,083,503	4.21	146,555
Swanson****	In pit			
	Total indicated	1,854,000	1.76	105,400
	Total inferred	29,000	2.46	2,300
	Underground			
	Total indicated	91,000	2.86	8,400
	Total inferred	87,000	2.87	8,000
<b>Total combined*****</b>	<b>Total M&amp;I</b>			<b>588,482</b>
	<b>Inferred resources</b>			<b>329,393</b>

Source: Mining Corp corporate presentation, March 2021. Note: \*Monarch Gold PFS (January 2018) and resource estimate (2016). This resource was completed for Monarch Gold and has not been reviewed by a qualified person for Monarch Mining as required under NI 43-101 and is thus considered a historical estimate. \*\*A NI 43-101 Technical Report and Mineral Resource Estimate for Beaufor Mine, December 2020. \*\*\*A NI 43-101 Technical Evaluation Report on the McKenzie Break property, February 2021. \*\*\*\*A NI 43-101 Technical Report and Mineral Resource Estimate for the Swanson Project, January 2021. \*\*\*\*\*Numbers may not add up due to rounding.

## Mining and processing

Currently Beaufor is on care and maintenance and Croinor is flooded. Bringing Beaufor into production can be accomplished fairly quickly with full production being reached in around three months, with full production being around 12,000 tonnes per month. Croinor will take longer to bring into production depending on the pumping time needed, which we estimate could take two or three months before production can be started up. We have provided for the pumping in our capex assumptions.

Mining of the Beaufor, Croinor and, in due course, McKenzie Break orebodies will be done through existing infrastructure. The mining method to be used is mostly transverse longhole stoping and to a minor extent, room and pillar. All three mines have infrastructure that has been put on care and maintenance and will need minimal capex and time to restart. The ore will probably be transported by truck to the nearby 100% owned Beacon Mill site, which is 10km from Beaufor, where the milling and concentrating is to be done. The mill has 750 tonnes per day capacity, which is the equivalent of roughly 50koz to 60koz of gold a year.

## Assumptions

In formulating our valuation, we have made certain cost and scheduling assumptions relating to Monarch's Beaufor and Croinor projects. Figures used in our operating assumptions were provided by Monarch Mining in various technical NI 43-101 reports: Beaufor Technical Report of December 2020, McKenzie Break in December 2020, Swanson in January 2021 and the Croinor updated Pre-Feasibility Study of August 2018.

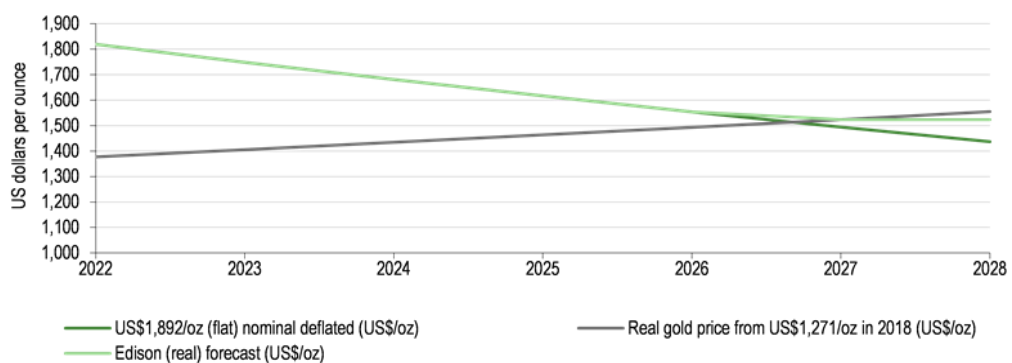


## The gold price

Edison's gold price assumptions have now been updated to reflect the passage of time since 2020. In our last note on the subject (see [A golden future](#), published on 11 June 2020), Edison argued that the recent, sharp increases in the total US monetary base might be expected to support a (nominal) gold price of US\$1,892/oz. Edison's strategy is to maintain a flat, nominal gold price of US\$1,892/oz into the future.

In the absence of more general deflation, a flat, nominal gold price of US\$1,892/oz is, self-evidently, a declining gold price in real terms, which is an unlikely long-term scenario, given that the gold price has historically increased by 2.0% per annum in real terms from 1914 to 2018 (see [Portents of economic weakness, Gold: Doves in the ascendant](#)). During the period 2013–18, the gold price was relatively flat, averaging US\$1,270/oz. Its average price in 2018 was also US\$1,271/oz; both of these levels were arguably supported by the marginal cost of production. If this level is then increased at 2% per annum from 2018, it may be compared with the flat nominal (declining real) price scenario previously described, as shown in the exhibit below:

**Exhibit 7: Edison updated real gold price pricing scenarios and forecast (US\$/oz)**



Source: Edison Investment Research

As may be seen from the chart above, the two lines cross between 2026 and 2027 at a level fractionally above US\$1,500/oz. All Edison's gold company valuations are conducted in real terms. Consequently, and in the absence of much immediate visibility as to the evolution of the total US monetary base, Edison's gold price scenario for valuation purposes continues to assume that the gold price will remain at US\$1,892/oz in flat nominal terms (ie declining in real terms) until the price (in real terms) crosses with the increased US\$1,271/oz 2018 price. At that point we (conservatively) assume that the price will flatten out (in real terms) at US\$1,524/oz. This compares with our analysis in 2020 only inasmuch as the base year from which deflation is deemed to occur has been moved from 2020 to 2021. A table comparing the difference between our real terms gold price forecasts last year and this is as follows:

**Exhibit 8: Edison gold price forecasts 2021 vs 2020**

Year of (real) gold price forecast	2022	2023	2024	2025	2026	2027 onwards
2021 (real) gold price forecast (US\$/oz)	1,819	1,749	1,681	1,617	1,554	1,524
2020 (real) gold price forecast (US\$/oz)	1,681	1,617	1,554	1,494	1,494	1,494

Source: Edison Investment Research

In simple terms, the consequence of the gold price remaining higher for longer into 2021 is that we are now assuming that the (real) gold price will similarly stay higher for longer and will flatten out at a higher level, later. For 2021, we are assuming that a price of US\$1,838/oz will prevail for the remainder of the year.

## Operating assumptions

Only the Beaufor and Croinor NI 43-101 reports have sufficient detail for us to model on a discounted cash flow (DCF) basis, supplemented by our own analysis. McKenzie Break is in the process of having a PEA done and we will include this in a DCF model during 2021.

Our base case assumptions are that Beaufor will be brought into production in FY22 with currently a four-year life. Beaufor is fully permitted and has minimal capital requirement (C\$5.0m, including Beacon Mill) to begin producing ore, which is to be processed through the fully permitted Beacon Mill, situated within 5km of Beaufor mine shaft (Exhibit 1). Beaufor has operating costs of an estimated C\$221 per tonne, implied head grade of 5.5g/t, 92% recovery with 25koz steady state production for four years with project capital of C\$10.7m. The NI 43-101 Technical Report of December 2020 has the total operating cost of Beaufor at C\$169–214 per tonne of ore. We note that the mine has a four-year life, but with a 42,500m drilling programme could potentially double its life. With the low capex requirement for Beaufor and the proximity of the Beacon Mill it makes more sense to start with Beaufor even though its gold production rate is much lower than Croinor.

At our gold price and cost assumptions, we calculate that around C\$11m a year of post-tax cash flow will be available to develop Croinor, with production forecast to start in 2024. Croinor has operating costs of an estimated C\$200/tonne (March 2018 PFS), implied head grade of 7.0g/t reducing to 6.6g/t, 92% recovery with around 40koz per year gold production for six years on current M&I resources with a project capital of C\$45m.

### Exhibit 9: Key drivers

	FY21e	FY22e	FY23e	FY24e	FY25e	FY26e	FY27e
<b>Beaufor</b>							
Tonnes milled (000s)	-	51	142	142	142	106	-
Grade (g/t)	5.50	5.50	5.50	5.50	5.50	5.50	-
Gold produced (koz)		9,018	25,110	25,110	25,110	18,744	-
Cash cost (C\$/oz)	-	1,022	1,022	1,022	1,022	1,022	-
Cash cost (US\$/oz)	-	798	798	798	798	798	-
<b>Croinor</b>							
Tonnes milled (000s)				62	201	210	210
Grade (g/t)				5.22	7.01	6.85	6.55
Gold produced (koz)				9,573	41,677	42,549	40,686
Cash cost (C\$/oz)				1,295	969	879	599
Cash cost (US\$/oz)				1,012	757	686	468

Source: Monarch Mining Corp, Edison Investment Research

## Capex assumptions

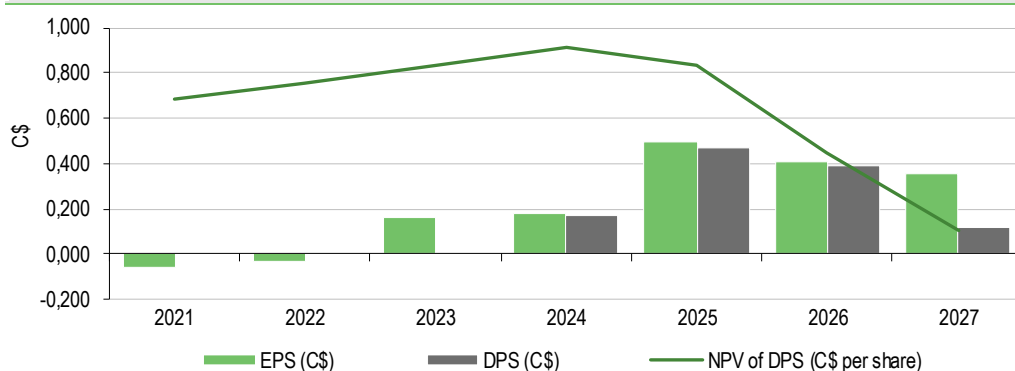
Exhibit 10 below shows the figures provided by the company in its NI 43-101 reports and management. We bring Croinor into production in FY24 and forecast FY27 capex at C\$1.6m. As the mines are already owned by Monarch and virtually the entire infrastructure is in place, little capex is needed compared to a new mine where shafts or a concentrator plant needs to be built.

**Exhibit 10: Capital costs**

C\$m	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28
Mine	Beaufor	Beaufor	Beaufor	Beaufor/ Croinor	Croinor	Croinor	Croinor	Croinor
Mining	0	0	0	0	0	0	0	0
Mine dewatering and rehabilitation	0	0	0	1,594	129	-	0	0
Process Plant	2,500	830	0	694	-	-	0	0
Mine infrastructure	0	183	0	8,080	300	-	0	0
Electrical distribution - Surface	0	0	0	1,685	507	-	0	0
Underground pumping system	0	0	0	203	213	-	0	0
Underground ventilation system	0	0	0	630	71	-	0	0
Lateral development	0	0	0	9,469	13,090	774	1,600	-
Beacon mill refurbishing	0	0	0	2,173	642	642	-	0
Tailings impoundment refurbishing	0	1,800	0	393	-	0	0	0
Owner's mobile equipment	0	0	0	219	113	113	-	0
Environmental	0	0	0	2,200	-	0	0	0
Mining mngmt and tech services (Beaufor only)	0	0	1,800	1,800	1,800			
<b>Project capital total (SIB capex after 2025)</b>	<b>2,500</b>	<b>2,813</b>	<b>1,800</b>	<b>29,140</b>	<b>16,865</b>	<b>1,529</b>	<b>1,600</b>	<b>0</b>
Cumulative capital	2,500	5,313	7,113	36,253	53,118	54,647	56,247	56247

Source: Monarch Mining Corp, Edison Investment Research

## Valuation

**Exhibit 11: Valuation and dividend forecasts – base case to FY27**


Source: Edison Investment Research

Note that this valuation is based on the projected dividend flow resulting from the execution of the Beaufor and Croinor projects, limited to four years of production each, and does not include any value for Monarch's next-tier assets. On this basis alone, we estimate that an investment in Monarch shares on 1 January 2021 at a price of C\$0.90 would generate an internal rate of return to investors of 52.2% pa over the seven years to 2027 (inclusive) in Canadian dollar terms. Including the tier 2 assets would push this above 60% pa, but to really achieve a superior return, we need to look to the accelerated production of Croinor and life extensions, which we explore in our sensitivities.

### Potential value in the next-tier projects

We have valued the McKenzie Break and Swanson assets on a resource base using the peer resource valuations of 12 gold producers in Canada, which on 15 March 2021 averaged US\$48.80/oz (C\$61/oz) in terms of their enterprise value (EV). This price when applied to McKenzie Break and Swanson, results in a theoretical value of C\$0.47/share. However, given our declining gold price outlook, we take a conservative approach and have discounted this to

C\$0.30/share, which, when added to our Beaufor and Croinor valuation of C\$0.69 leads to our total Monarch Mining Corp valuation of C\$0.99/share.

**Exhibit 12: Analysis on a resource base per Monarch Mining Corp share**

	Canadian peer group*	Discounted value for conservatism**
US\$ EV per ounce value applied	48.80	
Tier 2:		
McKenzie Break (US\$)	0.28	0.21
Swanson (US\$)	0.09	0.07
Total (US\$)	0.37	0.28
Total (C\$)	0.47	0.30
Add Beaufor and Croinor at DCF value for base case (C\$)		0.69
Total base case value (C\$)		0.99

Source: Edison Investment Research. Note: \*With a peer group value of C\$61/oz (US\$48.80/oz) shown in Exhibit 13). \*\*Discounted for conservatism on softening gold price outlook.

## Valuation of corporate deals in the area

It is worth noting there has been a relatively high degree of M&A activity in the region in the last couple of years. It is difficult to draw direct comparisons as markets and the gold price have been volatile. However, we note the physical similarities across some of these assets, which gives some indication of transaction values for properties with similar characteristics to those of Monarch Mining Corp.

Eldorado Gold acquired QMX Gold for C\$132m at the end of January 2021. QMX has 397koz of indicated and 291koz inferred resources, with some spectacular drillhole intersections at its Bonnefond and Bevcon deposits (in the tens to the over 100 grams per ton range). The transaction, at a 39% premium to the 20 January 2021 QMX closing price, represented a value of C\$192/oz MI&I on the resource base and compared with an EV of C\$170 per resource ounce (Exhibit 13).

QMX declared 687,900oz in its NI 43-101 update of December 2020. These are indicated and inferred resources (not measured) in the Bonnefond mine, which is adjacent to the Beaufor and Croinor projects of Monarch. It was purchased by Eldorado Gold placing a value of C\$170/oz at spot EV per ounce resource on the property. It has no other declared resource and only speaks about exploration targets and drilling results in Bonnefond South. It also has a previously working mine, Bevcon, and the New Louvre and Bourlamaque deposits and targets in the central and south-western zone, almost exactly the same type of assets and deposits that Monarch has. The geology of the mineralised units is exactly the same as that of Beaufor and Croinor with multiple stacked vein deposits. C\$170/oz compares with the valuation of C\$49 EV per resource ounce of Monarch. The QMX valuation post deal is significantly above the average market cap per ounce for peer exploration companies shown in Exhibit 13. We think this is because it has high quality ounces that are easily accessible and with the mining infrastructure virtually all in place, production can be restarted in a short time-span.

Beaufor, Croinor and even McKenzie Break are virtually in the same position as the QMX assets in terms of timing, geography and access to milling capacity. Even though QMX has the second lowest MI&I of the companies listed in Exhibit 13, it has by far the highest value, indicating that the quality and accessibility give it this rating. Monarch has the third lowest MI&I but also has virtually exactly the same assets that QMX has. On an EV per MI&I ounce, Monarch's shares are trading at a 71% discount relative to the QMX transaction multiple to the rating given to QMX (see Exhibit 13).

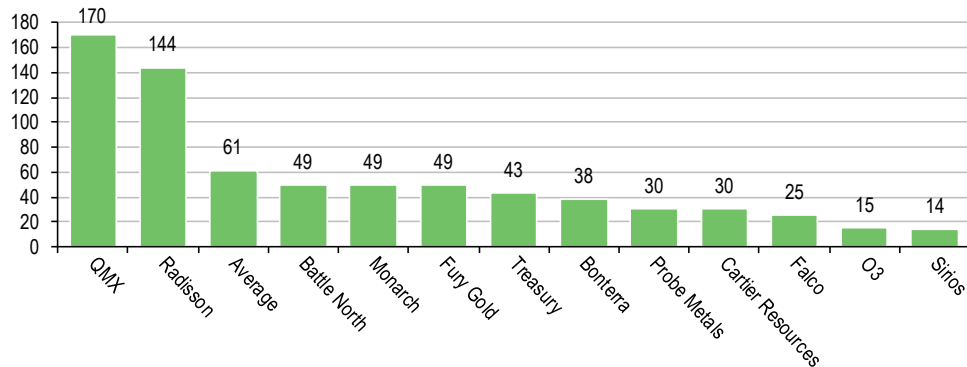
The Yamana acquisition of Wasamac in November 2020 year was a C\$200m deal for 2.9Moz MI&I. This placed a value of C\$69/oz MI&I on the resource.

Caldas Gold acquired the Ruby project in May 2020, which had a 2.2Moz MI&I resource for shares in Caldas at an estimated value of C\$18/oz. Note, this deal was before the gold price ran up in

2020 (gold price then was US\$1,700/oz versus the peak of US\$2,048 in August 2020 and US\$1,726/oz now).

The value we use is US\$48.80/oz for McKenzie Break and Croinor (see Exhibit 12) or C\$61/oz (using an exchange rate of C\$1.25/US\$) indicated by Canadian peer gold market caps (see Exhibit 13) and presents significant upside relative to recent corporate deals.

**Exhibit 13: Valuation based on EV per ounce of Canadian peer gold companies – average of C\$61 per ounce vs Monarch Mining (GBAR) at C\$49 per ounce**



Source: Monarch Mining from Corporate Presentation and Edison Research updated 15 March 2021

## Risks and sensitivities

In addition to the normal risks of execution and management, we see the principal risks and sensitivities for Monarch as being the life extension of the mines, or the lack thereof, bringing Croinor mine into production earlier than FY24, which is the base case, the value of the Canadian dollar against the US dollar, the gold price, capex, operating costs, discount rates and funding.

We note that even Monarch's first project, Beaufor, is at a pre-production stage and our valuation is conditional upon management executing the project according to the assumptions that we have set out and within the cost and timing parameters given.

Any variation around either capex amounts or timing would alter this valuation range accordingly, and the corresponding funding requirement.

Meanwhile, our base case valuation assumes that Beaufor will start production in FY22 and operate until FY26, with Croinor coming into operation in FY24 and operating until FY27. The sensitivities in the exhibits below are applied to this base case.

**Funding and timing risk:** the most significant of valuation sensitivities is the timing of when Croinor is brought into production and raising capital to allow this to happen. Furthermore, if we allow for an extension of two and three years to the life of Croinor, which is quite likely given the culture of this management in bringing ounces to account and being well versed in raising capital, then we see significant potential upside in the value of the shares. By raising capital at a 60:40 debt:equity ratio, in our calculation of a required C\$22m (at a notional price of C\$0.90), cash flows and dividend payments are advanced by applying the debt to the capex needed for the development of Croinor.

With the additional impetus of issuing further flow-through shares, (the most recent was a C\$5.1m bought deal in March 2021) and which we expect to be a regular feature for this company, these proceeds, which are ring-fenced to exploration expenditure, will certainly increase the M&I resources. Our confidence reflects the company's land and exploration permits being situated in the Abitibi gold belt, which is a highly prospective region in terms of geology and known gold deposits.

We have chosen a number of scenarios that show the sensitivity of the share price to timing, raising capital and extending the life of Croinor, which at this stage has the highest resource base, and compare them to the base case.

**Exhibit 14: Valuation sensitivity to bringing Croinor into production in 2022 and earlier funding**

C\$/share	Funding options	No extension for Beaufor or Croinor		Two-year extension for Croinor		Three-year extension for Croinor	
		Core	Full	Core	Full	Core	Full
Beaufor start-up October 2021 and Croinor in 2025	No capital raise	0.69	0.99	1.16	1.46	1.37	1.67
Beaufor start-up in October 2021 and Croinor in 2022	Capital raise of C\$22m in 2022 with a 60:40 debt:equity split	0.90	1.20	1.28	1.58	1.51	1.81

Source: Edison Investment Research. Note: Core refers to Beaufor and Croinor combined valuation. Full includes McKenzie Break and Swanson

With Croinor starting up in 2022 and raising C\$22m in cash, which we estimate it would need to cover the shortfall between the cash flows of Beaufor and the capex required to get Croinor into production, the value of the shares improves 30% to C\$0.90/share. This shows the advantage of this route even without an extension to the life of Croinor, which is likely. We have allowed for exploration and development expenditure of C\$4m per year to 2028 in this scenario.

Extending the life of Croinor adds significant value to the shares, whether production is brought forward or not. A two-year extension, an early start-up and a capital raise of C\$22m, increases the valuation of the shares to C\$1.58 (C\$1.28/share for the core businesses of Beaufor and Croinor alone), which is a 60% increase. A further year of extension adds another C\$0.23/share to the valuation (84% total uplift).

With our assumed funding of C\$22m, we estimate Monarch will have repaid any debt left at the end of the life of the mines given the current resources. This amount is C\$0.16/share and has been deducted from the values shown in the capital raises in Exhibit 14.

Taking another scenario whereby no capital is raised, life extensions of two and three years make a tremendous difference to the share value with uplifts of 48% and 70% respectively when compared to the base case.

This shows overwhelmingly that the best value uplift for Monarch can be achieved by simply finding more ounces and bringing them to account by converting them from inferred to indicated. This has extended the life of the company's mines, which each have a resource life of four years, so an increase of only four years (approximately 260koz) has a 50% impact on life extension, showing how 'life-marginal' the company actually is.

**Gold price risk:** this is usually the driver that a gold producer is most sensitive to.

**Exhibit 15: Monarch discounted dividend NPV sensitivity to gold prices (C\$/share)**

Value at 10% real	Breakeven gold price	-20%	-10%	Base case	+10%	+20%
Gold price (US\$/oz)	800	1399	1574	1749	1924	2099
Beaufor and Croinor	-	0.35	0.52	0.69	0.85	1.02
Tier 2 assets	0.30	0.30	0.30	0.30	0.30	0.30
<b>Total</b>	<b>0.30</b>	<b>0.65</b>	<b>0.82</b>	<b>0.99</b>	<b>1.15</b>	<b>1.32</b>
Change %	(70)	(34)	(17)	0	16	33

Source: Edison Investment Research

**Operating cost risk:** the valuation declines by 9% and 16% if costs are raised by 10% and 20%, respectively.

**Exhibit 14: Monarch discounted dividend NPV sensitivity to operating costs (C\$/share)**

Value at 10% real	20%	10%	Base case	-10%	-20%
Operating costs (C\$/ton)	255	230	210	190	170
Beaufor and Croinor	0.53	0.60	0.69	0.77	0.84
Tier 2 assets	0.30	0.30	0.30	0.30	0.30
<b>Total</b>	<b>0.83</b>	<b>0.90</b>	<b>0.99</b>	<b>1.07</b>	<b>1.14</b>
Change	-16%	-9%	0%	8%	15%

Source: Edison Investment Research

**DCF Discount Rate risk:** The change of the share value between different discount rates is an indication of riskiness of the share; the greater the change, the more risk inherent in the share.

**Exhibit 15: Monarch discounted dividend NPV at varying discount rates (C\$/share)**

Discount rate	0%	5%	10% (base case)	15%	20%
Beaufor and Croinor	1.30	0.94	0.69	0.51	0.39
Tier 2 assets	0.30	0.30	0.30	0.30	0.30
<b>Total</b>	<b>1.60</b>	<b>1.24</b>	<b>0.99</b>	<b>0.81</b>	<b>0.69</b>
Change	62%	25%	0%	-18%	-30%

Source: Edison Investment Research

**Currency risk:** A fall in the Canadian dollar vs the US dollar has the effect of increasing the value of the shares in Canadian dollars; the converse also holds true.

**Exhibit 18: Monarch discounted dividend NPV sensitivity to changes in US\$/C\$ rates (C\$/share)**

Value at 10% real	+10%	Base case	-10%
FX (US\$/C\$)	1.15	1.28	1.41
Beaufor and Croinor	0.52	0.69	0.86
Tier 2 assets	0.30	0.30	0.30
<b>Total</b>	<b>0.82</b>	<b>0.99</b>	<b>1.16</b>
Change	-17%	0%	17%

Source: Edison Investment Research

## Fraser Institute mining attractiveness of Canada

Canada ranks second in the world, behind Australia, in the 2020 Fraser Institute index of mining attractiveness. Quebec ranks second highest in the Canadian region and is ranked in the top quartile globally of all regions for certainty concerning administration, interpretation and enforcement of existing regulations, environmental regulations, legal system, geological database and labour skills; and in the top half in low land claims, tax regime, uncertainty on protected areas, infrastructure, socioeconomic and community development conditions, trade barriers, political stability, labour militancy and security.

## Financials

At 30 September 2020, the company had C\$14m in cash and cash equivalents and no debt. During Q321 an additional C\$2m was received as a balance of sale for the Wasamac transaction. In early February 2021, the proceeds from an issuance of flow-through shares were C\$5m. Flow-through share proceeds are ring-fenced to exploration expenditure. Monarch had C\$20m in net cash (no debt) on its balance sheet at end February 2021. Although still pre-production, cash outlays are modest; for FY21 we estimate operating cash outflow of C\$2.3m, with financial and capex combined of C\$0.7m offset by the C\$4.7m (net) financing, leaving our estimated end June 2021 net cash at C\$15.7m. This reduces to C\$9.9m at end June 2022, the year in which Beaufor cash flows start contributing. Our base case forecasts free cash flow of C\$70m plus from Beaufor and Croinor,

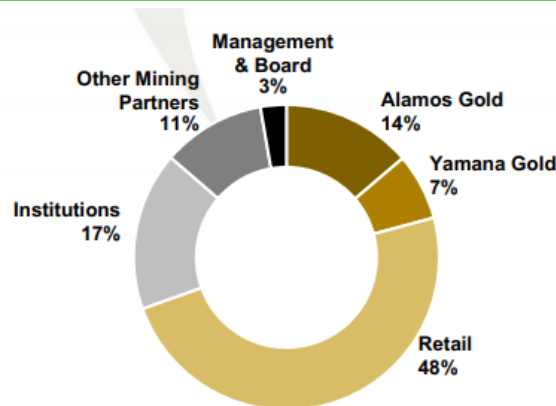
with C\$0.24/share average dividends, from FY24 to FY27, although in reality we would expect the company to achieve mine life extensions beyond this.

Our forecasts are shown in Exhibit 20.

## Financing considerations

Management states that its business plan requires no funding at this stage, but, as discussed above, it is possible that funding, possibly a mix of debt and equity, might be used to accelerate the start-up of production at Croinor, giving rise to earlier cashflows. The company is seeking financing partnerships that could assist in this. With the history of the management team in doing deals that are value accretive for shareholders, we see this being an ongoing key part of the current strategy.

**Exhibit 19: Corporate structure**



Source: Monarch Mining corporate presentation

The biggest corporate shareholder is Alamos Gold, a 14% owner of Monarch Mining. Alamos Gold is a predominantly Canadian gold producer with its flagship, the Young Davison Mine, one of the largest Canadian gold producers at around 140koz a year at a cash cost of US\$1,010/oz, and the Island Gold mine, also with 2020 guidance of 140koz and cash costs of around US\$500/oz, both in Ontario. It also has the Mulatos gold mine in Mexico, also a 140koz US\$860/oz producer.



**Exhibit 20: Financial summary**

	C\$'000s	Sep 2020	2021e	2022e	2023e	2024e
June		Pro forma	IFRS	IFRS	IFRS	IFRS
<b>PROFIT &amp; LOSS</b>						
Revenue		0	0	20,998	56,214	74,626
Cost of Sales		0	0	(11,256)	(31,339)	(43,739)
Gross Profit		0	0	9,742	24,875	30,887
EBITDA		(1,883)	(2,592)	(2,758)	16,250	22,078
Operating Profit (before amort. and except.)		(1,883)	(2,592)	(2,758)	16,250	22,078
Amortisation		0	(2,500)	(1,328)	(1,477)	(1,509)
Exceptionals		188	250	1,500	500	0
Other		0	0	0	0	0
Operating Profit		(1,695)	(4,842)	(2,586)	15,273	20,569
Net Interest		(69)	(206)	(432)	(392)	(528)
Profit Before Tax (norm)		(1,952)	(2,797)	(3,190)	15,858	21,550
Profit Before Tax (FRS 3)		(1,764)	(5,047)	(3,018)	14,881	20,041
Tax		467	0	0	(3,405)	(8,054)
Profit After Tax (norm)		(1,485)	(2,797)	(3,190)	12,454	13,498
Profit After Tax (FRS 3)		(1,297)	(5,047)	(3,018)	11,477	11,987
Average Number of Shares Outstanding (m)		66.3	68.0	69.7	69.7	69.7
EPS - normalised (c)		(2.2)	(4.1)	(4.6)	17.9	19.4
EPS - normalised and fully diluted (c)		(2.2)	(4.0)	(4.5)	17.4	18.9
EPS - (IFRS) (c)		(2.0)	(7.4)	(4.3)	16.5	17.2
Dividend per share (c)		0.0	0.0	0.0	0.0	16.3
Gross Margin (%)		N/A	N/A	46.4	44.2	41.4
EBITDA Margin (%)		N/A	N/A	-13.1	28.9	29.6
Operating Margin (before GW and except.) (%)		N/A	N/A	-13.1	28.9	29.6
<b>BALANCE SHEET</b>						
Fixed Assets		36,504	36,504	37,989	38,313	65,944
Intangible Assets		14,319	14,319	14,319	14,319	14,319
Tangible Assets		13,282	13,282	14,767	15,090	42,721
Investments		8,903	8,903	8,903	8,903	8,903
Current Assets		20,920	20,638	14,824	30,815	18,282
Stocks		1,192	1,192	1,167	3,123	4,146
Debtors		2,122	2,122	2,129	5,698	7,565
Cash		14,000	15,718	9,923	20,388	4,966
Other		3,605	1,605	1,605	1,605	1,605
Current Liabilities		(2,698)	(2,695)	(2,558)	(7,070)	(9,856)
Creditors		(2,666)	(2,666)	(2,529)	(7,041)	(9,826)
Short term borrowings		(32)	(29)	(29)	(29)	(29)
Long Term Liabilities		(10,671)	(8,797)	(9,123)	(9,949)	(10,275)
Long term borrowings		(26)	(29)	(29)	(29)	(29)
Other long term liabilities		(10,644)	(8,768)	(9,093)	(9,919)	(10,245)
Net Assets		44,056	45,650	41,132	52,108	64,096
<b>CASH FLOW</b>						
Operating Cash Flow		0	(2,266)	(2,550)	15,561	22,300
Net Interest		0	(206)	(432)	(392)	(528)
Tax		0	0	0	(2,905)	(8,054)
Capex		0	(500)	(2,813)	(1,800)	(29,140)
Acquisitions/disposals		0	0	0	0	0
Financing		0	4,690	0	0	0
Dividends		0	0	0	0	0
Net Cash Flow		0	1,718	(5,795)	10,465	(15,422)
Opening net debt/(cash)		0	(13,941)	(15,659)	(9,864)	(20,329)
HP finance leases initiated		0	0	0	0	0
Other		0	(0)	0	0	0
Closing net debt/(cash)		(13,941)	(15,659)	(9,864)	(20,329)	(4,907)

Source: Monarch Mining accounts, Edison Investment Research. Note: We do not show historical figures and instead show pro forma FY20 figures published in September 2020, reflecting that on 10 November 2020, Yamana bought the Wasamac mine and Camflo mill from Monarch Gold and, as such, there are no historical numbers relevant to Monarch Mining.

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**Location of assets: Val d'Or (source: Monarch Mining)**

**Management team**
**President and chief executive: Jean-Marc Lacoste**

Jean-Marc Lacoste earned his bachelor's degree in economics from McGill University in Montreal. In 1993, he started a career in finance at the Montreal Stock Exchange where he worked for National Bank Financial and, subsequently, Merrill Lynch Canada. In 2000 he left Montreal for Toronto to join Northland Power, a wind power energy corporation, as vice president of acquisitions. He returned to Montreal in 2002 where he joined the boards of a few public and private companies. From 2004 to 2010 he took a major role in Golden Goose Resources Inc. where he became president, CEO and COB.

**Chief financial officer: Alain Lévesque, CPA, CA**

Mr Lévesque has 20 years of experience in the field of financial reporting and the management of corporations including several in the mining sector. His experience in the mining industry is diverse, ranging from exploration corporations to those in production. He began his career as an auditor in two majors accounting firms, Raymond Chabot Grant Thornton and Deloitte, where he worked for 10 years. He then worked as a consultant for various corporations and held the position of CFO for publicly traded companies. Since 2003, he has held the position of CFO for another mining corporation listed on the TSX Venture Exchange. Mr Lévesque is CPA, CA and a member of the Ordre des comptables professionnels agréés du Québec. He holds a bachelor's degree in business of administration from Université Laval.

**Vice president corporate development: Mathieu Séguin, CFA**

Mathieu Séguin has been an investment banker since 2002, with a focus on small and mid-capitalisation issuers across various sectors, including mining, industrial and technology. During his career, he has advised clients on a broad range of transactions, from equity and debt financings to mergers and acquisitions. Prior to joining Monarch, he was director of investment banking at Laurentian Bank Securities (2016–18), VP of investment banking for Industrial Alliance Securities (2009–16) and VP with the Strategic Capital Group of Desjardins Securities (2005–09). Mr Séguin has a bachelor of business administration from HEC Montréal and is a chartered financial analyst.

**Vice president operations and community relations: Marc-André Lavergne, ENG**

Mr Lavergne has over 20 years of experience in mine engineering with various companies, including Cambior, Agnico Eagle and North American Palladium. In November 2011, he joined Richmond Mines as general superintendent at the Francoeur Mine, and has held various management positions within the corporation, including at the Francoeur and the Beaufor divisions. Prior to the acquisition of Richmond Mines' Quebec assets by Monarch in October 2017, he was general manager, Beaufor and Monique divisions since December 2013. Mr Lavergne holds a bachelor's degree in mining engineering from the Polytechnique School of Montreal.

**Principal shareholders**

	(%)
Retail	48
Alamos	14
Yamana	7
Management and board	3
Other mining partners	11

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