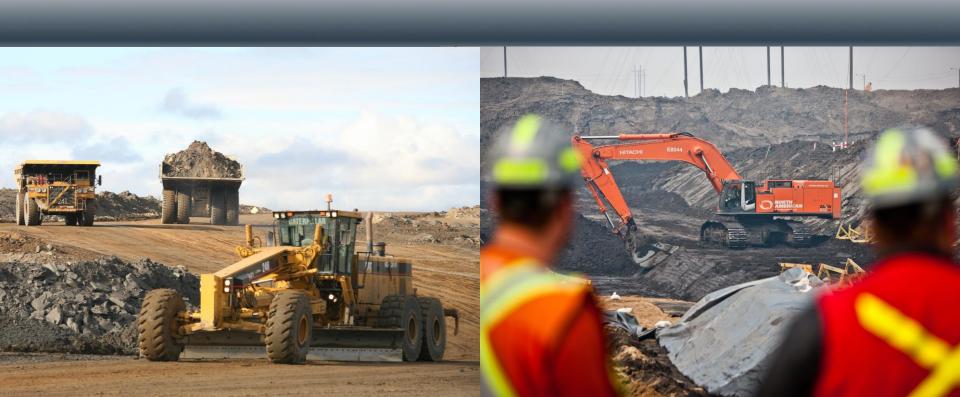


Investor Presentation

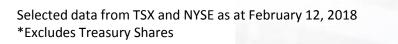
Fourth Quarter Ended December 31, 2017



Company Overview



- Founded in 1953
- TSX and NYSE listings: "NOA"
- Current share price: \$5.45 (CAD)
- 52 week low/high: \$4.52/\$7.48
- Market capitalization: \$139 million*
- Shares outstanding: 25.5 million*
- Average daily share volume (3 month):
 - NYSE: 35,422
 - **TSX: 15,966**
- Annual dividend of \$0.08 per share (CAD), payable quarterly





Heavy Construction

Strategic Focus



- Pursue operational excellence in safety, cost structure, productivity and customer satisfaction
- Maintain our strong balance sheet
- Continue to build volume of recurring mine support services at oil sands mines
- Grow construction revenue from activity on existing mine sites and incremental work on new sites
- Expand revenue diversification outside the oil sands
- Strong focus on internal and external equipment maintenance



Significant Heavy Construction & Mining Contractor in the Oil Sands

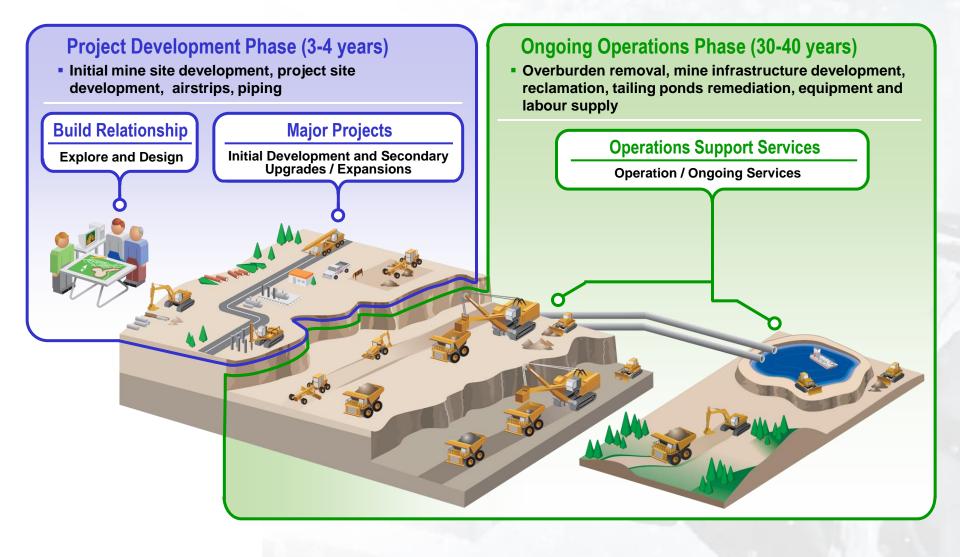


- 40+ years in Northern Alberta's harsh operating environment
- Knowledge to determine optimal solutions for customers
- Broad Service Offering
 - Unique suite of services across project lifecycle
- Operational Flexibility
 - Large and diverse equipment fleet
 - Broad multiple site footprint
 - Expertise to provide service on all active sites
 - In-house lower cost maintenance expertise
- Long-Term Customer Relationships
 - Reliability; on-time delivery
 - Strong safety culture



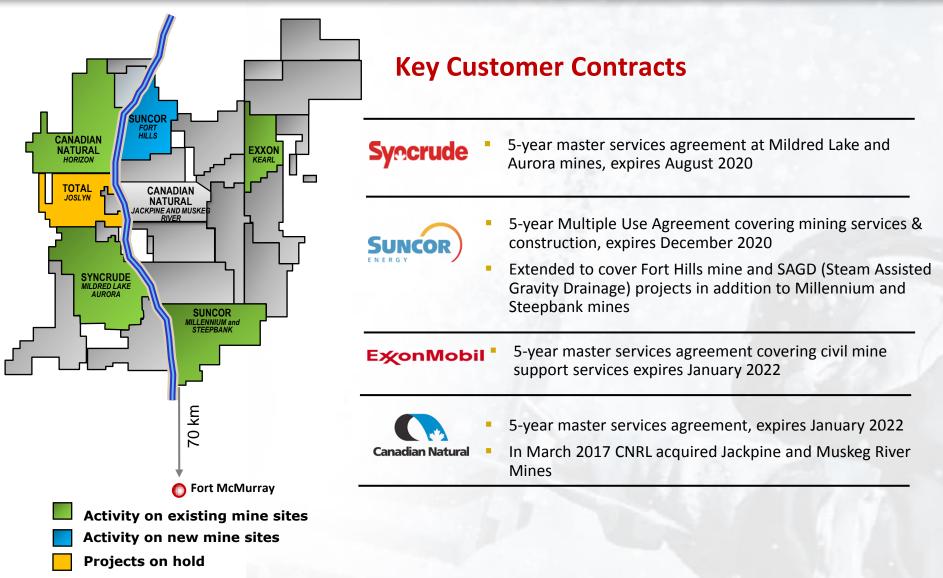
First On, Last Off





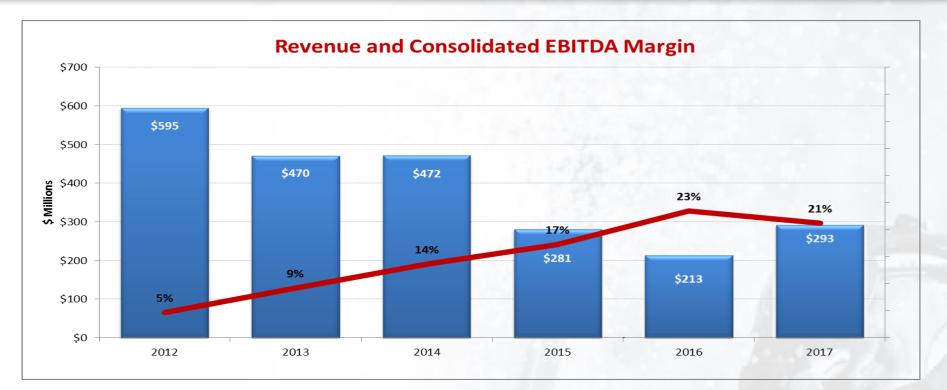
Active Oil Sands Clients



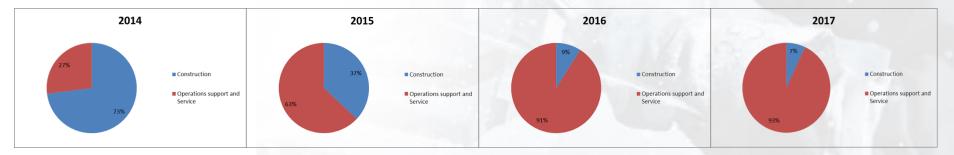


Financial Performance and Growth





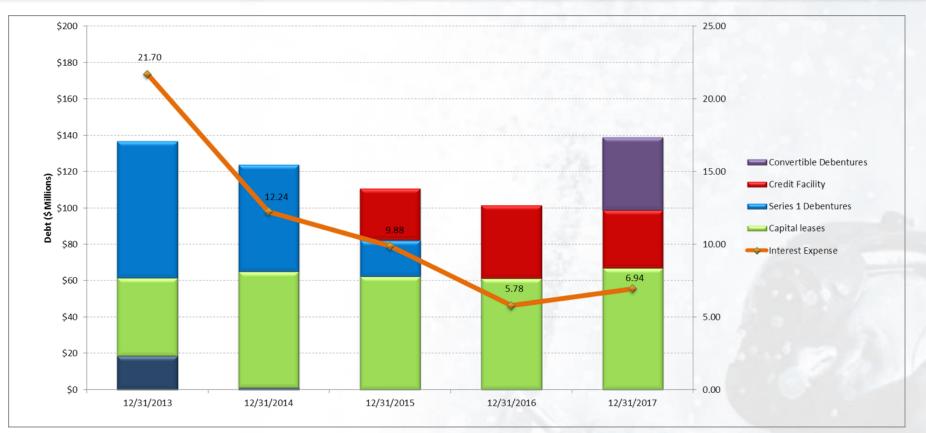
Revenue by Source



7

Debt Restructuring





- · Debt excludes operating lease obligations related to building lease commitments.
- In March 2017 we completed an offering of \$40 million 5.50% convertible unsecured subordinated debentures, due March 31, 2024. The Debentures will be convertible at any time at the option of the holder into common shares. On and after March 31, 2020 and prior to March 31, 2022 the Debentures may be redeemed, in whole or in part from time to time.
- Progressive redemption of \$225 million 9.125% Series 1 Debentures between 2013-2016.
- Cash on hand at December 31, 2017 \$8.2 million.

New Credit Facility



Highlights – August 1, 2017 New Credit Facility

- Led by National Bank of Canada
- Provides borrowing of up to \$140 million with an additional \$25 million accordion feature
- Matures on July 1, 2020, with an option to extend on an annual basis
- Capital Lease Limit of \$100 million
- Credit facility is comprised solely of a Revolver feature and is not limited by a borrowing base
- Reduced cost of borrowing and standby fees
- Financial Covenants
 - Senior Leverage Ratio, defined as Senior Debt to EBITDA, is to be maintained at less than 3.0:1 (except in the case of the following four quarters after an acquisition where the ratio will increase by 0.5:1.0)
 - Fixed Charge Cover Ratio, defined as Consolidated EBITDA less cash taxes to Fixed Charges, is to be maintained at a ratio greater than 1.15:1

Activities That Benefit Our Shareholders



Share Purchase Program

 Since October 2013, we have commenced seven NCIB purchases through the facilities of both the TSX and NYSE:

NCIB	Shares Approved for	Shares Purchased
	Purchase	
NYSE October 2013	1,800,000	1,800,000
NYSE December 2014	1,771,195	1,771,195
TSX August 2015	532,520	532,520
NYSE March 2016	1,657,514	1,657,514
TSX August 2016	1,075,968	1,075,900
TSX April 2017 (phase one)	819,395	819,395
TSX June 2017 (phase two)	838,119	663,400
NYSE/TSX August 2017	2,424,333	1,319,762*
Т	otal Shares Purchased	9,639,686

*Number of shares purchased as of January 31, 2017

Dividend Payment

 Annual aggregate dividend of \$0.08 (CAD) per common share, payable on a quarterly basis.

Long Term Incentive Hedging Plan

 Over 2.7 million shares have been purchased by the trustee for our long term incentive hedging plan. Over the next three years, the following shares have or will be vested and paid out in common shares issued from the trust:

	2018	2019	2020
RSU	422,016	432,266	335,651
PSU*	342,311	320,197	234,125
Total	764,327	752,463	569,776

*Performance Share Units (PSU's) factor by a range from nil to 2 times dependent on the relative Total Shareholder Return (TSR) in our peer group.



Enterprise Value, Tangible Book Value, and Price per Share O

Price/TBV	1.2X	1.2X	0.7X	0.5X	1.0X	1.1X
Period Low Share Price (TSX)	2.31	3.32	3.38	2.31	1.95	4.92
Period High Share Price (TSX)	6.99	6.45	9.22	3.30	5.57	6.68
End of Period Share Price (TSX)	3.32	6.20	3.68	2.47	5.38	6.28
Tangible Book Value (\$ millions) TBV per Share	99.66 2.75	184.79 5.32	185.19 5.42	168.44 5.28	157.16 5.55	144.99 5.70
Enterprise Value (\$ million) EV per Share	510.49 14.08	338.75 9.87	254.95 7.66	157.51 4.94	234.75 8.29	283.05 11.12
Net Debt (\$ million) Equity (\$ million)	390.13 120.35	123.32 215.43	128.60 126.35	78.73 78.78	88.13 146.62	131.61 151.44
	2012	2013	2014	2015	2016	2017
		Perio	d Ending Decemb	er 31,		

	December 31, 2017
Total Issued and Outstanding Common Shares	28,070,150
Shares Outstanding - Public	25,452,224
Shares Outstanding - Treasury	2,617,926

Strong Organic Growth Outlook



Projected 15%+ Compound Annual Gro 2017-	
Core Market Growth – Oil Sands	Service Expansion
Grow volume of support services on existing mines, plus new mine, and SAGD sites	Leverage core equipment maintenance expertise to secure share of a large market for third party repair and maintenance service
Market Expansion – Other Resources	Market Expansion - Infrastructure
Secure diversified revenue from non-oil sands mines: coal, copper, gold, diamonds etc.	Secure diversified revenue from infrastructure projects that involve large earthworks volumes

Outlook for Revenue Growth



- Continued growth in mine support volumes and heavy construction activity on existing oil sands mine sites as owners grow production
 - Securing our core business by signing long-term agreements with four major customers that extend to 2020 and beyond
 - Supporting production efforts at Kearl, Mildred Lake, Aurora, Millennium, Steepbank, and Horizon mines
 - Multi Use Contract with Suncor includes potential work at the new Fort Hills mine

Pursuing revenue diversification

- Other resource plays, such as metals, coal, precious gems, hydroelectricity and LNG
 - Recently won awards for an in-pit mining contract at the Fording River Coal Mine and a three year construction and mining contract at the Highland Valley Copper mine, both located in British Columbia
 - Member of a partnership shortlisted for bidding on a major flood diversion project in the US Midwest
 - Actively bidding on multiple precious gem and metal mine projects in Northern Canada
- In April, 2017 we entered into a partnership with Dene Sky Site Services Ltd. under the name Dene North Site Services. With our combined skills and synergy we can provide a platform that should expand our services in the oil sands mines and the in-situ market.

Continue to expand in the infrastructure sector

- Potential infrastructure spending from Federal and Provincial Governments
- Pursue large earthworks projects





Outlook for Revenue Growth – Best in Class Maintenance



Facilities

- Acheson (Edmonton) Major fleet repairs and overhauls
- Ruth Lake (Fort McMurray) Major inspections and repairs
- Site Equipment support to maintain unit health and utilization

Maintenance Strategy

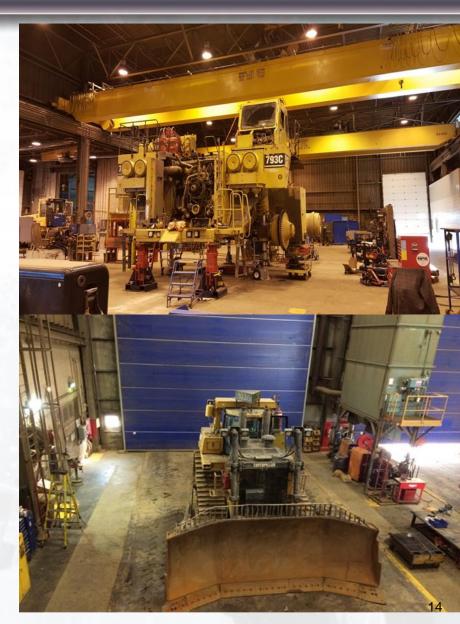
- Planning improved wrench time productivity
- Reliability increased component and unit utilization
- Supplier partnership and contract management
- Benchmarking external comparison on component life

Competitive Advantages

- Facilities sized to handle entire fleet
- Skilled and stable work force
- Significant reduction of outside vendor support
- Advanced integrated systems for equipment management
- Continuous improvement on all processes

External Maintenance Growth Opportunity

- Clients looking for options to dealer supplied maintenance
- Cost structure, facilities, labour, experience and processes to compete
- Demonstrated value internally with clients and competitors



New Edmonton Shop and Office Facility O

- \$28M Land and Building Package
 - Estimated payback of 5 years
- 10 Bay Shop with Integrated Office
 - Purpose built
 - 3 times more functional service space than existing facility
 - Fits Ultra Class (+400T trucks)
 - Growth built-in with room for expansion
 - Move-in ready Q4 2018









APPENDIX



Large, Well Maintained Equipment Fleet

Category	Own	Lease	Rental	Total
SHOVELS	2	1	0	3
EXCAVATORS (≥100T)	10	1	1	12
EXCAVATORS (<100T)	9	33	9	51
RIGID FRAME TRUCKS (>200T)	20	23	0	20%43
RIGID FRAME TRUCKS (100T to 200T)	58	33	0	91
RIGID FRAME TRUCKS (<100T)	6	1	0	7
ARTICULATED TRUCKS	5	15	13	33
DOZERS	51	26	5	82
GRADERS	15	3	2	20
LOADERS	25	10	0	35
COMPACTORS	4	0	3	7
SPECIAL SERVICE	16	2	0	18
Total	221	148	33	402





Questions



Forward-Looking Statements



The information provided in this presentation contains forward-looking statements and information which reflect the current view of North American Energy Partners Inc. with respect to future events and financial performance, including outlook for revenue and EBITDA growth, ability to grow volume of support services and third party repair and maintenance services, ability to diversify revenue sources and potential production expansion of oil sands mines. Actual results could differ materially from those contemplated by such forward-looking statements as a result of any number of factors and uncertainties, many of which are beyond our control. Important factors that could cause actual results to differ materially from those in forward-looking statements include success of business development efforts, changes in prices of oil, gas and other commodities, availability of government infrastructure spending, availability of a skilled labour force, general economic conditions, weather conditions, performance and strategic decisions of our customers, access to equipment, changes in laws and ability to execute work. Undue reliance should not be placed upon forward-looking statements and we undertake no obligation, other than those required by applicable law, to update or revise those statements.

For more complete information about us and the material factors and assumptions underlying our forward-looking statements you should read the most recent disclosure documents posted on our website <u>www.nacg.ca</u> or filed with the SEC and the CSA. You may obtain these documents by visiting EDGAR on the SEC website at <u>www.sec.gov</u> or on the CSA website at <u>www.sedar.com</u>.