



TSXV: **RTH**

**RATHDOWNEY**

# AN EXCITING POLISH ZINC DEVELOPMENT OPPORTUNITY

PROJEKT  
OLZA



OLZA

- Nyrstar
- Boliden
- Glencore
- ZGH Boleslaw
- Polish Zn-Pb District
- Sea Port



## INVESTMENT HIGHLIGHTS

### RESOURCES AND ECONOMICS

- Rathdowney owns 100% of Project Olza in the Silesian MVT District, Poland
- Rathdowney has drilled 30% of the area of the historical resource area, and confirmed a 43-101 24.4Mt, inferred resource, at 7.02% Zn-Pb<sup>1</sup>
- 77Mt, 6.15% Zn+Pb C1,C2 resource drilled by the Polish Geological Department<sup>2</sup>
- 2014 Preliminary Economic Assessment yielded robust project economics with a Post tax NPV US\$170M, IRR 30%, Payback in 2.4 years<sup>3</sup>

### JURISDICTION POLAND

- Well established mining industry with a long history of operating mines
- Clear, concise and legislated process to obtaining a mining extraction license.
- Highly skilled mining workforce in Poland.
- Open to foreign investment.

### STAKEHOLDERS

- Ongoing engagement with all levels government, residents & other stakeholders since 2011

### MANAGEMENT

- Polish and Canadian fully integrated and multi-disciplinary team with global experience and a proven track record of mineral development success.

### NEAR TERM DEVELOPMENT

- Permitting process initiated: Over 1 year into engineering and environmental work, in parallel

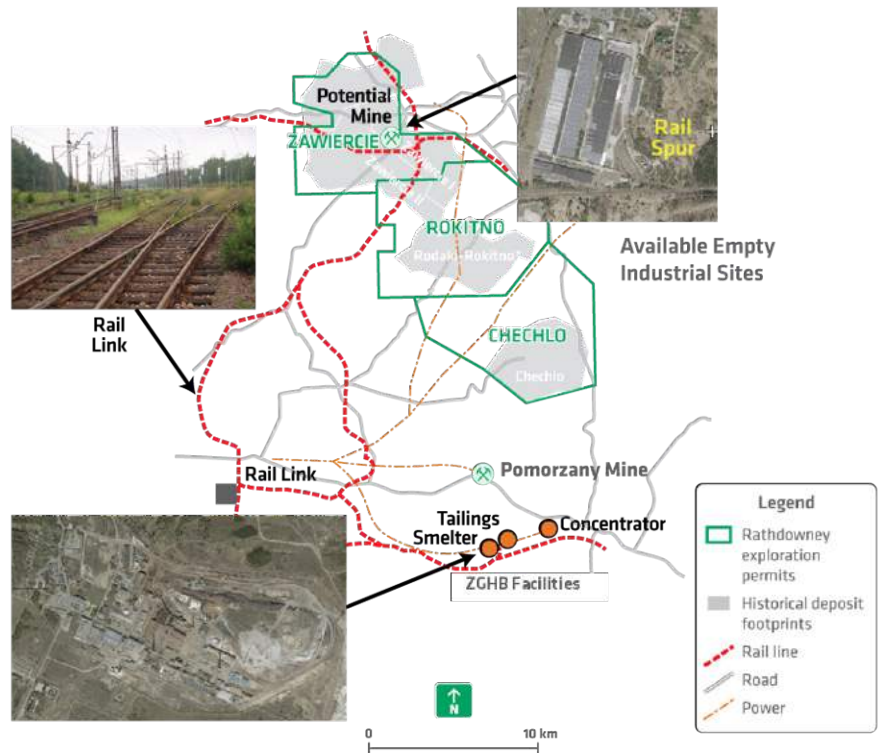
<sup>1,3</sup> Preliminary Economic Assessment (PEA), effective date December 31, 2014, download in entirety at [www.sedar.com](http://www.sedar.com). See cautionary, Page 4.  
<sup>2</sup> Historical estimate by the Polish State Geological Institute (PSGI) from PSGI 1992 report based on the Polish resource classification system, which is very similar to the Soviet classification system. A QP has not done sufficient work to classify the estimate as current mineral resources and the Company is not treating it as current.

## MINING & INFRASTRUCTURE

- Adjacent to ZGHB Pomorzany Mine:
  - Operating over 40 years
  - Producing over 90Mt Zn-Pb ore
- Olza connected by rail to operating ZGHB smelter complex and port of Gdansk

### Excellent Infrastructure

Key Item	Availability
Power	Power line and substation at project site
Rail	Rail line at project site.
Water	Ample water available at project site
Roads	Current road access to project site.
Labour	Skilled mining workforce, one hour from Krakow.
Smelters	Boleslaw, Budelm, Kokkola, Nordenham.
Nearby Mines	Pomorzany, Olkuz



## ECONOMICS AND EXPANDABLE ASSET

### Post Tax Metrics

PEA Pre-TAX <sup>1</sup>		
Cash Flow	IRR	NPV <sup>2</sup>
<b>\$408</b> Million	<b>36%</b>	<b>\$221</b> Million

PEA Post-TAX <sup>1</sup>		
Net Cash Flow	IRR	NPV <sup>2</sup>
<b>\$330</b> Million	<b>30%</b>	<b>\$170</b> Million

PAYBACK **2.4** YRS

<sup>1</sup> Notes on the PEA: Based on median consensus metal prices: **\$1.00-1.10/lb for zinc; \$0.95-1.00/lb for lead.**

PEA study by international engineering specialists: SRK Consulting (UK) Ltd, Melis Engineering Ltd. The PEA is preliminary in nature and includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is no certainty that the conclusions of the PEA will be supported by the more detailed engineering work found in a pre-feasibility or feasibility study.

### Projected Capital Costs

	Initial (\$M)	Sustaining (\$M)	Total LOM (\$M)
• Mining	82.3	36.6	<b>118.9</b>
• Processing	59.7	-	<b>59.7</b>
• Tailings Management & Water Treatment Facilities	33.1	14.5	<b>47.6</b>
• Surface Facilities	15.7	-	<b>15.7</b>
• Contingency	23.1	-	<b>23.1</b>
• EPCM	13.1	-	<b>13.1</b>
Sub-Total	227.0	51.1	278.1
• Reclamation Security	6.8	4.5	<b>11.3</b>
<b>TOTAL CAPITAL COSTS<sup>1</sup></b>	<b>233.8</b>	<b>55.6</b>	<b>289.4</b>

1. All values in US dollars and metric units where M = Millions. Thirty percent contingency and fifteen percent EPCM applied to processing

## PRELIMINARY ECONOMIC ASSESSEMENT KEY HIGHLIGHTS

### Projected Operating Costs<sup>1</sup>

Operating Cost <sup>1</sup>	(US\$/t)
• Mining	26.88
• Milling	11.46
• Environmental/Tailings Storage Facility	5.15
• Site General & Administration	3.93
<b>TOTAL ON-SITE COSTS</b>	<b>47.42</b>

Refining & Smelting Cost <sup>1</sup>	(US\$/t)
• TC / RC <sup>2</sup>	12.01
• Freight	3.47
<b>TOTAL OFF-SITE COSTS</b>	<b>15.48</b>

**\$US 0.47/LB ZINC BY-PRODUCT BASIS**

Total cost to produce metal<sup>1</sup>  
**US\$0.57/lb Zn**  
or  
**US\$62.90/t**  
processed

1. Operating costs are based on the Company's NI 43-101 Preliminary Economic Assessment (December 2014).
2. TC/RCs are based on Q1 2017 market costing projections (\$120/t for zinc; \$120/t for lead).
3. All values in US dollars and metric units. Total On-Site includes mining, milling and infrastructure costs incurred to produce concentrate. Total Off-Site includes TC/RCs, transportation, handling and freight costs. Totals may not add due to rounding.

### Annual Production Summary

	ANNUAL (Avg) <sup>1</sup>	
• Total Mineralized Material Mined & Processed	<b>2,013,000</b>	t
• Average Recovery, Zinc	<b>89.0</b>	%
• Average Recovery, Lead	<b>88.5</b>	%
• Zinc Concentrate Produced	<b>160,000</b>	dmt
• Lead Concentrate Produced	<b>38,000</b>	dmt
• Zinc Concentrate Grade	<b>56</b>	%
• Lead Concentrate Grade	<b>70</b>	%
• Recovered Zinc	<b>196,794,000</b>	lb
	<b>89,452</b>	tonnes
• Recovered Lead	<b>59,133,000</b>	lb
	<b>26,878</b>	tonnes

1. PEA study by international engineering specialists: SRK Consulting (UK) Ltd, Melis Engineering Ltd.  
2. Legend: t = tonnes (metric), % = percent, lb = pound

## JURISDICTION - POLAND

- Open to foreign investment
- Poland has a well established mining industry with a long history of operating mines
- Highly skilled mining workforce in Poland
- History has been supported by a well defined legal framework and permitting process for mining
- Keen interest for clean concentrate from off-take groups and smelters
- Recent expansion into other sectors – fertilizers, petrochemicals, machine tools, electrical machinery, electronics, cars and shipbuilding
- Only country in the EU to avoid a recession through the 2008-2009 economic downturn
- 38-million consumer market is one of the biggest in Europe
- 2018 growth rate forecast at 4%



## STAKEHOLDERS

## SUPPORTING THE DEVELOPMENT OF PROJECT OLZA

### Commitment to Stakeholder Engagement

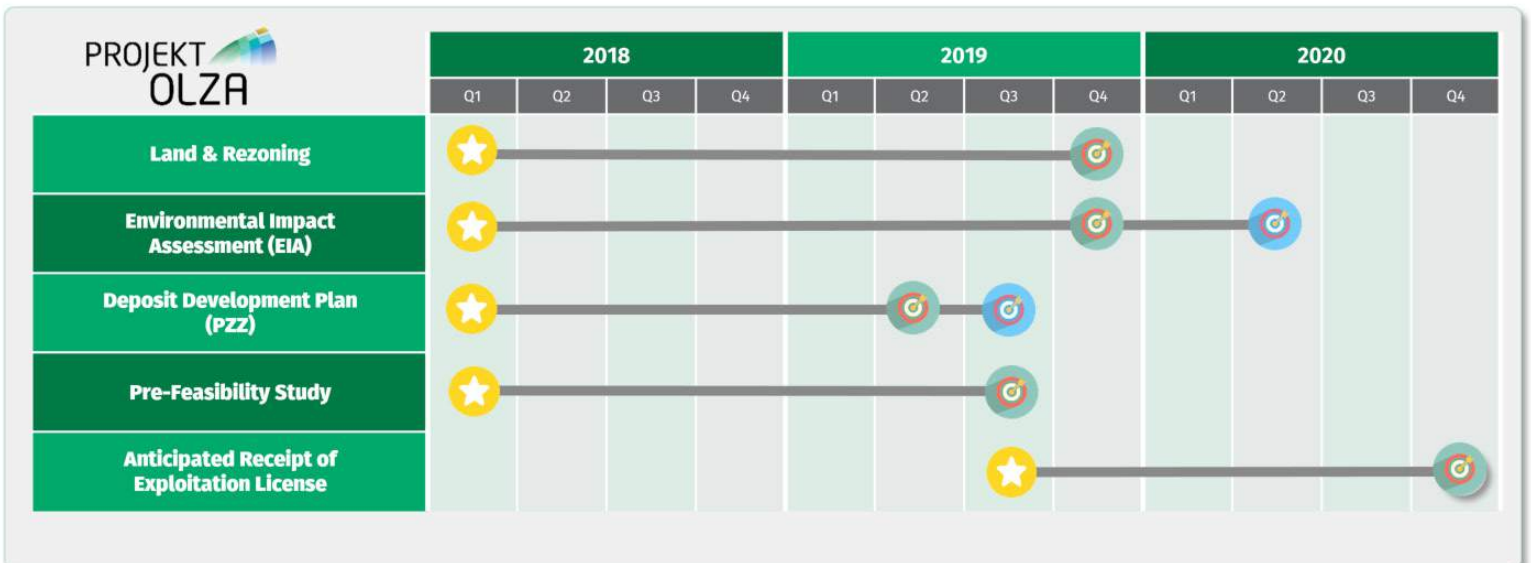
- Rathdowney is working together with local communities to ensure that they are fully informed throughout the project evaluation and design.

### Community Development

- Rathdowney continues to invest in Poland to advance Project Olza in a manner that protects important natural resources, respects local priorities and concerns, and provides meaningful benefits to surrounding communities.
- Since exploration commenced in 2011, Rathdowney has supported over 500 local initiatives in areas of health, well-being, education and sport, which benefit children, hospitals and social/cultural opportunities in local communities.



## NEAR TERM DEVELOPMENT



## RATHDOWNEY MANAGEMENT AND BOARD

Experienced Polish & Canadian development team with strong project management, project finance & technical capabilities

### MANAGEMENT TEAM

#### David J. Copeland **Chairman**

Dave Copeland is a professional engineer and mining executive with over 30 years' experience in advancing global mineral projects through feasibility, permitting, engineering design and initial development phases.

#### Robert Konski **President & CEO**

Robert has over 25 years' experience as an executive and strategic advisor to the management of public/private companies and the government in Poland. He holds an M.P.A. from the JFK School of Government at Harvard University. Robert has worked on Olza for approximately 6 years and became President & CEO in 2014.

#### Andrew Ing **Chief Financial Officer**

Andrew is a finance-corporate development professional with more than 15 years of experience in project finance, risk management and corporate governance, and holds designations in Chartered Accountancy and Corporate Finance.

#### Trevor R. Thomas **Secretary**

Trevor Thomas is corporate secretary and has practiced in the areas of corporate commercial, corporate finance, securities and mining law since 1995, both in the private practice environment as well as in-house positions.

### BOARD OF DIRECTORS

David Copeland, Robert Konski, Michael H. Nolan, Rene G. Carrier, Barry Coughlan, Lena Brommeland, George Ireland

This investor brochure includes certain statements that may be deemed "forward-looking statements". All information contained in this presentation relating to the contents of the Preliminary Economic Assessment (PEA) of the Olza zinc-lead project (Project Olza) in Poland, including but not limited to statements of the Project Olza's potential and information are "forward looking statements". Although Rathdowney (RTH) believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Assumptions used by Rathdowney to develop forward-looking statements include the following: Project Olza will obtain all required environmental and other permits and all land use and other licenses, studies and development of the Project Olza will continue to be positive, and no geological or technical problems will occur. Additional information on assumptions for the PEA is available in the Technical Report.

The PEA was prepared to broadly quantify the project's capital and operating cost parameters and to provide guidance on the type and scale of future project engineering and development work that will be needed to ultimately define the project's likelihood of feasibility and optimal production rate. The following are the principal risk factors and uncertainties which, in management's opinion, are likely to most directly affect the conclusions of the PEA and the ultimate

feasibility of the project. The PEA is based on the inferred resources estimated by Hunter Dickinson Services Inc. (HDSI) and audited by SRK Consulting (UK) Ltd (SRK). Additional exploration, process tests and other engineering and geological work will be required to estimate indicated or measured mineral resources at Project Olza and if an economically exploitable reserve can be established. Final feasibility work has not been completed to confirm the underground design, mining methods, and processing methods assumed in the PEA. Final feasibility could determine that the assumed underground design, mining methods, and processing methods are not correct. Construction and operation of the mine and processing facilities depends on securing environmental and other permits on a timely basis. No permits have been applied for and there can be no assurance that required permits can be secured or secured on a timely basis. Data is incomplete and cost estimates have been developed in part based on the expertise of the individuals participating in the preparation of the PEA and on costs at projects believed to be comparable, and not based on firm price quotes. Costs, including design, procurement, construction, and on-going operating costs and metal recoveries could be materially different from those contained in the PEA. There can be no assurance that mining can be conducted at the rates and grades assumed in the PEA. Energy risks include the potential for significant increases in the cost of fuel and electricity. The PEA assumes specified, long-term prices levels for zinc and lead. Prices for these commodities are historically volatile,

and RTH has no control of or influence on those prices, all of which are determined in international markets. Prices for zinc and lead have been below the price ranges assumed in PEA at times during the past ten years, and for extended periods of time. There can be no assurance that the prices of these commodities will continue at current levels or that they will not decline below the prices assumed in the PEA. The project will require major financing, probably a combination of debt and equity financing. Interest rates are at historically low levels. There can be no assurance that debt and/or equity financing will be available on acceptable terms. A significant increase in costs of capital could materially and adversely affect the value and feasibility of constructing the project. Other general risks include continuity of mineralization, those ordinary to large construction projects including the general uncertainties inherent in engineering and construction cost, the need to comply with generally increasing environmental obligations, and accommodation of local and community concerns, potential environmental issues or liabilities associated with exploration, development and mining activities, exploitation and exploration successes, delays due to third party opposition, and changes in government policies regarding mining and natural resource exploration and exploitation. Rathdowney is also subject to the specific risks inherent in the mining business, as well as general economic and business conditions. For more information on Rathdowney, investors should review RTH's filings that are available at [www.sedar.com](http://www.sedar.com).

### TECHNICAL TEAM

#### Lena Brommeland **General Manager, Poland**

Lena Brommeland has a degree in geology and more than 20 years' experience managing major exploration and development around the world.

#### Doug Nicholson

##### **Snr Project Development Manager, Poland**

Doug Nicholson is a mining engineer with more than 25 years of progressive experience in project management, mine development and mine operations.

#### Barbara Chammas

##### **Lead Environmental & Governmental Environmental Strategy (Consultant)**

Barbara has an advanced degree in Environmental Engineering, a certificate in Mid-Management and Business Administration and over 10 years' experience in public consultation and water management in Poland. Barbara has provided contributions to Olza for over 7 years.

#### Bartosz Wladimirow **Community & Outreach Manager**

Bartosz has a degree in psychology and is responsible for relationship building and networking with the local governments and stakeholders as well as regional governments. Bartosz has worked on Olza for approximately 7 years.

#### Martyna Grelewicz **Senior Geologist**

Martyna has an advanced degree in Geology, She holds a Class II certificate in Polish geological documentation, the highest professional designation for geologists in Poland, which enables her to certify all project geological work. Martyna has provided contributions to Olza for over 7 years.



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#### Key Equity Information (as at March 31, 2018)

<b>Common Shares</b>	
<b>Outstanding:</b>	161.7 million
<b>Options Outstanding:</b>	9.7 million
<b>Warrants:</b>	42.1 million
<b>Market Capitalization:</b>	C\$25 million

#### Rathdowney Resources Ltd.

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#### Investor Services

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