

## CARLIN VANADIUM PROJECT NORTH AMERICA'S LARGEST, RICHEST PRIMARY VANADIUM DEPOSIT



**PAUL COWLEY**  
P.Geo. President & CEO,  
Director



**FRED SVEINSON**  
P.Eng., Director



**DR. RADOMIR VUKCEVIC**  
PhD Metallurgist,  
Director



**JOHN ANDERSON**  
B.A., Director



**MICHAEL MRACEK**  
P.Eng., Mining Advisor



**JACQUES McMULLEN**  
P.Eng., Metallurgical Advisor



**BILL MATHESON**  
Construction Advisor



**TOOKIE ANGUS**  
LLB, Business Advisor

### ABOUT

First Vanadium Corp is built on a strong foundation of four key cornerstones:

- ▶ Experienced and proven technical and commercial teams
- ▶ Good Share Structure (38.8m)
- ▶ Excellent Project
- ▶ Perfect Timing

First Vanadium Corp's deep board management, business and technical team's core competence is in exploration, permitting, development, construction, and operations of mining projects in the USA, Canada and overseas. (Over 400 years combined)

Publicly Traded: TSX-V: FVAN, US OTCQX(R) Best Market: FVANF  
Frankfurt: 1PY

### Current Focus:

Carlin Vanadium Project in the Carlin Gold Trend, Nevada which contains the largest and highest grade primary Vanadium deposit in North America.

Drill holes systematically define the deposit at 40m centers.

Deposit averages 35m (115') thick, 1800m (6,000') long by 600m (2,000') across, flat to shallow dipping, near surface.

### THE OPPORTUNITY: CARLIN VANADIUM PROJECT



First Vanadium Corp has secured exclusive rights to North America's largest, highest grade primary Vanadium deposit.

Located in an established mining jurisdiction, 6 miles by road to the town of Carlin, Nevada.

Vanadium is a highly sought, strategic mineral critical to industries ranging from steel to utility scale batteries.

Perfect timing to advance this project: First Vanadium is fast tracking the Carlin Vanadium Project, 15-month timeline from rediscovery to Indicated resources, to rapidly unlock potential project value. Both Supply and Demand pressures have pushed Vanadium prices up, best performing metal in 2018.

Sensitivity analysis of the Carlin Vanadium Project's NI 43-101 mineral resource estimate for V<sub>2</sub>O<sub>5</sub> at various cutoff grades (CoG): Effective Jan 31, 2019

Classification	CoG (% V <sub>2</sub> O <sub>5</sub> )	Grade (% V <sub>2</sub> O <sub>5</sub> )	Tons (in millions)	V <sub>2</sub> O <sub>5</sub> lb (in millions)
Indicated <sup>1</sup>	0.2	0.539	31.26	337
	<b>0.3<sup>2</sup></b>	<b>0.615</b>	<b>24.64</b>	<b>303</b>
	0.4	0.702	18.64	262
	0.5	0.776	14.44	224
	0.6	0.849	10.92	185
	0.7	0.929	7.80	145
Inferred <sup>1</sup>	0.8	1.012	5.32	108
	0.2	0.450	9.72	87
	<b>0.3<sup>2</sup></b>	<b>0.520</b>	<b>7.19</b>	<b>75</b>
	0.4	0.596	4.94	59
	0.5	0.677	3.18	43
	0.6	0.745	2.08	31
0.7	0.847	1.05	18	
0.8	0.959	0.53	10	

<sup>1</sup> Mineral Resources are not Mineral Reserves. Mineral resources which are not mineral reserves do not have demonstrated economic viability. There has been insufficient exploration to define the Inferred Resources tabulated above as an Indicated or Measured Mineral Resource. There is no guarantee that any part of the mineral resources discussed herein will be converted into a mineral reserve in the future.

<sup>2</sup> The Base Case reported resources are highlighted in bold and have been constrained within a US\$12.50/lb V<sub>2</sub>O<sub>5</sub> optimized pit shell described above.

### GREAT LOCATION WITH STRONG INFRASTRUCTURE



- 🚗 Easy road access - 6 miles south of Carlin, Nevada
- 🚂 Carlin is major rail hub serving both coasts
- 🏠 40 minutes drive from Elko, Nevada
- ⚡ Powerline (5 miles)
- ✈️ Nearby workforce, mining vendors, service companies and airport (Elko)

## CARLIN VANADIUM PROJECT OFFERS BEST SITE CONDITIONS

- › Systematically drilled (40m centers)
- › Large deposit - Open to expand
- › Flat to shallow dipping
- › Near surface (0-60m) deposit amenable to open pit mining
- › Estimated strip ratio < 2.6:1
- › Soft broken host rock ; lower blasting, mining, crushing, grinding costs
- › High Vanadium grades
- › Preliminary metallurgy shows 95% vanadium extraction

## CARLIN VANADIUM PROJECT IS MAJOR INVESTMENT OPPORTUNITY

A new story not yet recognized and valued in marketplace at the start of the emerging vanadium boom

Company	Contained Metal (Million lb of V2O5)	Tonnes (Million)	Average Grade (% V2O5)	Market Capitalization (\$ Million)
Largo Resources Ltd. (in production, Brazil)	474	18.4*	1.15	950
First Vanadium Corp. (Nevada)	303 75	24.64*** 7.19****	0.615 0.520	20
Prophecy Development Corp. (Nevada)	132 52	20.8** 13.6****	0.286 0.175	20
Cell Cube Energy (Nevada)	124	15.8***	0.40	4

\* Proven/Probable

\*\* Measured and Indicated Resource

\*\*\* Indicated Resource

\*\*\*\* Inferred Resource

## THE IMPORTANCE OF VANADIUM TO THE STEEL INDUSTRY

Vanadium is a STRATEGIC mineral critical to the steel industry

**90% of the world's Vanadium is used in steel production**

Vanadium provides steel high temperature strength and lowers weight: for rebar, pipelines, jet engines, car frames (safer, lighter, more fuel efficient, makes it one of the strongest alloys on earth).

According to U.S Dept. of Interior, Vanadium is one of the 35 minerals critical to U.S. national security.

## NO US DOMESTIC SUPPLY OF VANADIUM

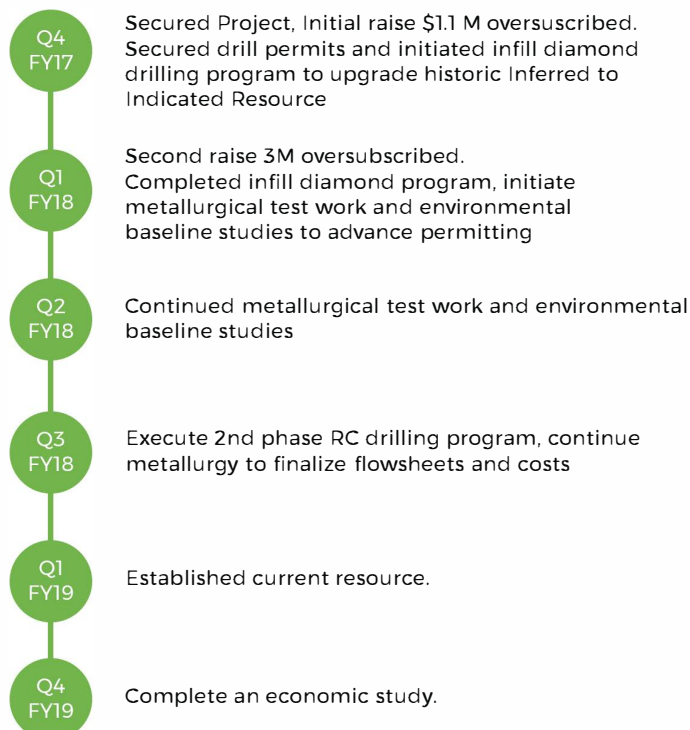
“Our nations mission is to reduce our vulnerability to disruptions in the supply of critical minerals. Any shortage in these materials represents a strategic vulnerability to the national security of the United States.”

**Dr. Tim Petty**, Assistant Secretary of the Interior for Water and Science

Environmental issues in China have resulted in permanently closing many vanadium producers. As a result, vanadium prices have reached elevated high price.

## CARLIN VANADIUM PROJECT DEVELOPMENT TIMELINE

Excellent project in established mining jurisdiction and a stellar team translates to reduced timelines



## THE IMPORTANCE OF VANADIUM TO THE ENERGY SECTOR



*VANADIUM is the Mineral of Choice for Next Generation of Battery Storage Technology and Renewable Energy Applications.*



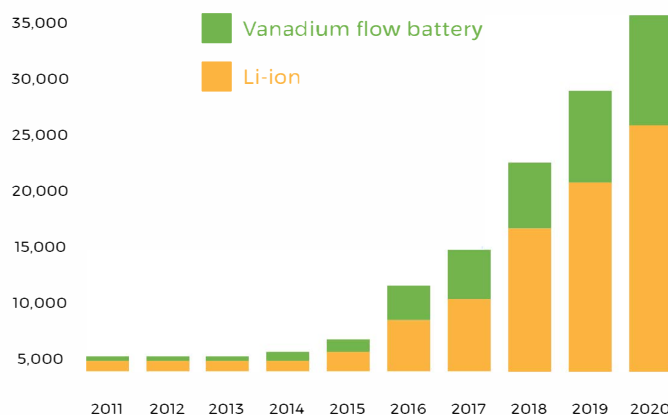
Vanadium is a third the cost of lithium energy storage and batteries



Vanadium has major lifecycle advantages over Lithium Ion lasting 25+ years Vs. 3-5 years for Lithium Ion

## VANADIUM CONSUMPTION IN ENERGY STORAGE (VRFB)

MTV\*/Year



Demand for renewable energy is growing at a record pace. The need for utility-scale energy storage has never been more crucial, in use to Power Companies (peak load shift), marine vessels and wind and solar farms.