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**VRB Energy signs Strategic Cooperation Framework Agreement
with Pangang Group Vanadium and Titanium Resources,
the world's largest vanadium oxide producer**

**Agreement includes long-term supply and leasing
of vanadium electrolyte, and joint development
of the global vanadium flow battery industry**

BEIJING, CHINA and VANCOUVER, CANADA – Robert Friedland, Chairman of VRB Energy, and John Wang, Chief Executive Officer, announced today that the company has entered into a Strategic Cooperation Framework Agreement with Pangang Group Vanadium and Titanium Resources Co. Ltd. (Pangang V&T). Pangang V&T is the world's largest producer of vanadium oxide and a listed subsidiary of Panzhihua Iron and Steel, one of the world's leading steel producers since 1971.

The strategic agreement paves the way for VRB Energy and Pangang V&T to jointly advance the vanadium flow battery industry through a long-term vanadium supply commitment, cooperation on electrolyte leasing, and technology collaboration on VRB Energy's world-leading VRB® (vanadium redox battery) energy storage systems. The agreement specifically contemplates an equity investment by Pangang V&T into VRB Energy, with the scope for the potential investment to be defined in the coming months.

"VRB Energy is honored to strategically partner with Pangang V&T in the joint development of the vanadium flow battery industry. In addition to being the world's largest supplier of the key ingredient in VRB systems, Pangang V&T is also passionate about developing the industry as part of its corporate commitment to promoting value-added downstream uses for vanadium," said Mr. Friedland.

"The world will see more than 1,000 gigawatts of battery capacity added between now and 2050 in support of integrating renewable energy, and our VRB technology is ideally suited for this. A stable vanadium electrolyte supply from Pangang V&T, together with our most advanced, safest and reliable VRB technology will allow us to meet this rapid, long-term growth in demand for utility-scale energy storage."

Areas of mutual benefit identified in the strategic agreement include:

- Pangang V&T will be VRB Energy's preferred vanadium electrolyte supplier with a preferential pricing offer, including a commitment to maintain relative stability of the price of vanadium electrolyte;
- Pangang V&T will join with VRB Energy to establish commercial leasing of vanadium electrolyte, including a commitment by Pangang V&T to guarantee the repurchase of the vanadium electrolyte at a mutually-agreed residual value at the end of the lease term;
- VRB Energy and Pangang V&T will cooperate on advancing the state of the art of the technologies relating to VRB® and electrolyte as applicable to energy storage; and
- Both companies have agreed to negotiate in good faith an equity investment by Pangang Group into VRB Energy.

“Vanadium electrolyte is a key component of vanadium redox batteries,” said Mr. Wang.

“Stability in vanadium electrolyte pricing and a leasing option will lower the barrier of entry for many of our customers and enable the increased adoption of VRBs worldwide, further solidifying our leading position in high quality and low cost battery storage solutions for our customers.”

About VRB Energy

VRB Energy, formerly known as Pu Neng, is a fast-growing, privately-held clean technology innovator. The company has developed the most reliable, longest-lasting vanadium flow battery in the world, with more than 30 megawatt-hours installed and in construction worldwide, and more than 800,000 hours of demonstrated performance. The combination of VRB Energy's proprietary low-cost ion-exchange membrane, long-life electrolyte formulation and innovative flow cell design sets it apart from other providers.

VRB Energy's vanadium redox battery (VRB®) systems store energy in liquid electrolyte in a patented process based on the reduction and oxidation of ionic forms of the element vanadium. This is a nearly infinitely repeatable process that is safe, reliable, and non-toxic. Components can be nearly 100% recycled at end of-life, dramatically improving lifecycle economics and environmental benefits compared to lead-acid, lithium-ion and other battery systems.

VRB Energy is majority-owned by High Power Exploration (HPX), a metals-focused exploration company that also invests in minerals-dependent, high-growth emerging technologies. HPX is a subsidiary of I-Pulse, a global leader in developing innovative commercial applications for pulsed power technologies that convert small amounts of electrical energy into limitless power to address a broad and growing suite of applications across multiple industrial markets.

For more information on VRB Energy, HPX and I-Pulse, please visit our websites at www.vrbenergy.com, www.hpxploration.com, and www.ipulse-group.com.

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