

SAUDI ARABIA PROJECT UPDATE

July 2022



FT FINANCIAL TIMES
statista
CLIMATE LEADERS 2022
AMG ADVANCED METALLURGICAL GROUP



AMG ADVANCED METALLURGICAL GROUP N.V.

CAUTIONARY NOTE

This document contains proprietary information and is being provided solely for information purposes by AMG Advanced Metallurgical Group N.V. (The “Company”) and may not be reproduced in any form or further distributed to any other person or published, in whole or in part, for any purpose, except with the prior written consent of the company. Failure to comply with this restriction may constitute a violation of applicable securities laws.

This presentation does not constitute or form part of, and should not be construed as, an offer to sell or issue or the solicitation of an offer to buy or acquire securities of the Company or any of its subsidiaries nor should it or any part of it, nor the fact of its distribution, form the basis of, or be relied on in connection with, any contract or commitment whatsoever.

This presentation has been prepared by, and is the sole responsibility of, the Company. This document, any presentation made in conjunction herewith and any accompanying materials are for information only and are not a prospectus, offering circular or admission document. This presentation does not form a part of, and should not be construed as, an offer, invitation or solicitation to subscribe for or purchase, or dispose of any of the securities of the companies mentioned in this presentation. These materials do not constitute an offer of securities for sale in the United States or an invitation or an offer to the public or form of application to subscribe for securities. Neither this presentation nor anything contained herein shall form the basis of, or be relied on in connection with, any offer or commitment whatsoever. The information contained in this presentation has not been independently verified. No representation or warranty, express or implied, is made as to, and no reliance should be placed on, the fairness, accuracy or completeness of the information or the opinions contained herein. The Company and its advisors are under no obligation to update or keep current the information contained in this presentation. To the extent allowed by law, none of the Company or its affiliates, advisors or representatives accept any liability whatsoever (in negligence or otherwise) for any loss howsoever arising from any use of this presentation or its contents or otherwise arising in connection with the presentation.

Certain statements in this presentation constitute forward-looking statements, including statements regarding the Company's financial position, business strategy, plans and objectives of management for future operations. These statements, which contain the words "believe," "expect," "anticipate," "intends," "estimate," "forecast," "project," "will," "may," "should" and similar expressions, reflect the beliefs and expectations of the management board of directors of the Company and are subject to risks and uncertainties that may cause actual results to differ materially. These risks and uncertainties include, among other factors, the achievement of the anticipated levels of profitability, growth, cost and synergy of the Company's recent acquisitions, the timely development and acceptance of new products, the impact of competitive pricing, the ability to obtain necessary regulatory approvals, and the impact of general business and global economic conditions. These and other factors could adversely affect the outcome and financial effects of the plans and events described herein.

Neither the Company, nor any of its respective agents, employees or advisors intend or have any duty or obligation to supplement, amend, update or revise any of the forward-looking statements contained in this presentation.

The information and opinions contained in this document are provided as at the date of this presentation and are subject to change without notice.

This document has not been approved by any competent regulatory or supervisory authority.

SHELL & AMG RECYCLING B.V.'S (SARBV) KEY ACCOMPLISHMENTS

November 2019



MOU with Ministry of Investment (MISA)

- Formerly the Saudi Arabian General Investment Authority (SAGIA)
- Establish to support and attract investment projects to the Kingdom
- Facilitates project development, site selection, financing, etc.

September 2021

United Company for Industry

- Subsidiary of Aljomaih Holding
 - Established in 1936
 - 6,000 Employees, >\$1.7B in revenue and \$2.7B in assets
- Focused on Chemicals and Manufacturing
- Member of the Shareek program

MOU with United Company for Industry (UCI)

- Establish a local partner
- Access to domestic financing and incentives in the Kingdom of Saudi Arabia (KSA)
- Local support for in-Kingdom project localization

July 2022

Joint Venture / Shareholders Agreement with UCI



Sales Agreement with Saudi Aramco

- Long Term Offtake Agreement of vanadium-bearing gasification ash from the Jazan Refining Complex

WORLD-CLASS METALS RECLAMATION FACILITY

The SARBV Supercenter

Project 4: Mass Energy Storage
Technology Provider:
AMG LIVA



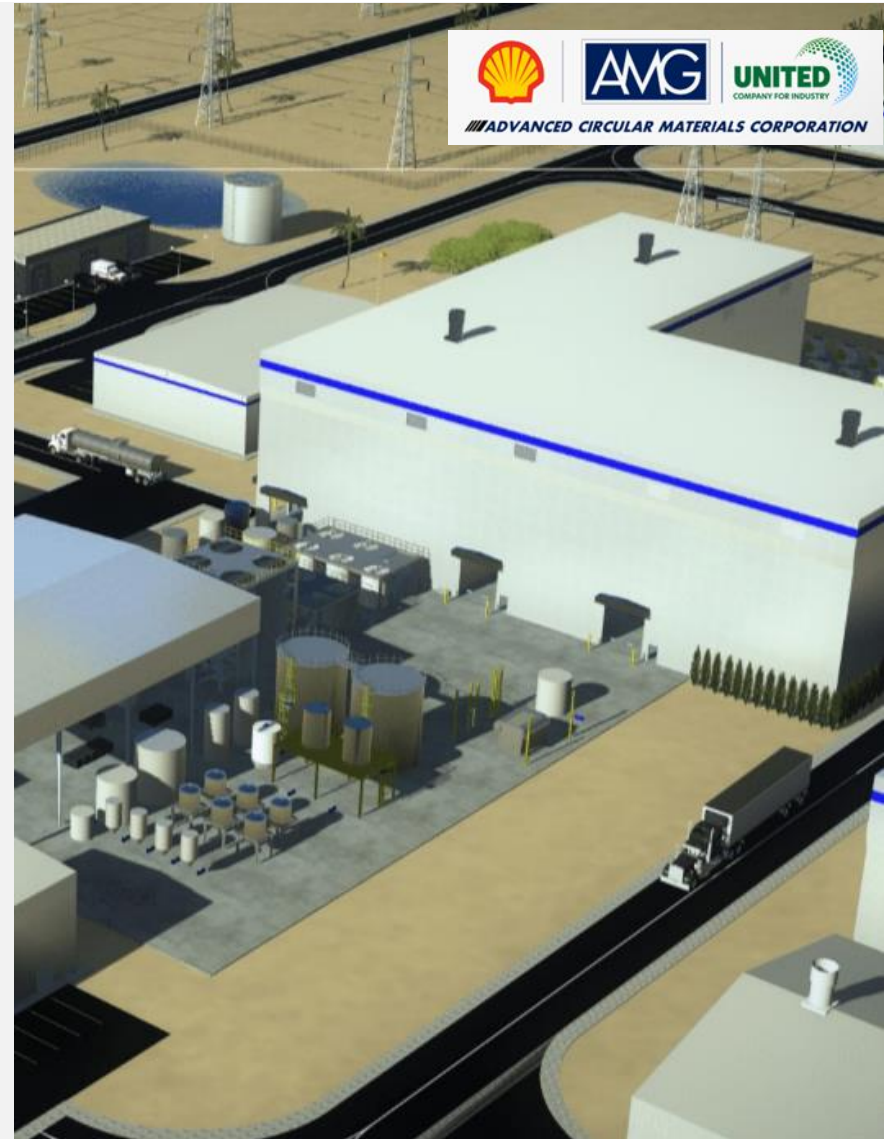
Project 3: Fresh Catalyst Manufacturing
Technology Provider:
Shell Catalysts & Technologies

Project 1: Gasification Ash
Technology Provider:
AMG TAC

Project 2: Spent Catalyst
Technology Provider:
AMG Vanadium

PROJECT 1: GASIFICATION ASH

- Lays the foundation for all other projects within the Supercenter
- Produce and sell high-purity vanadium oxide and vanadium electrolyte
- Basic engineering has begun
- Construction to commercial operation expected to take 18 months post final engineering
- AMG to provide technology and offtake
- CAPEX ± \$200M (preliminary estimate)

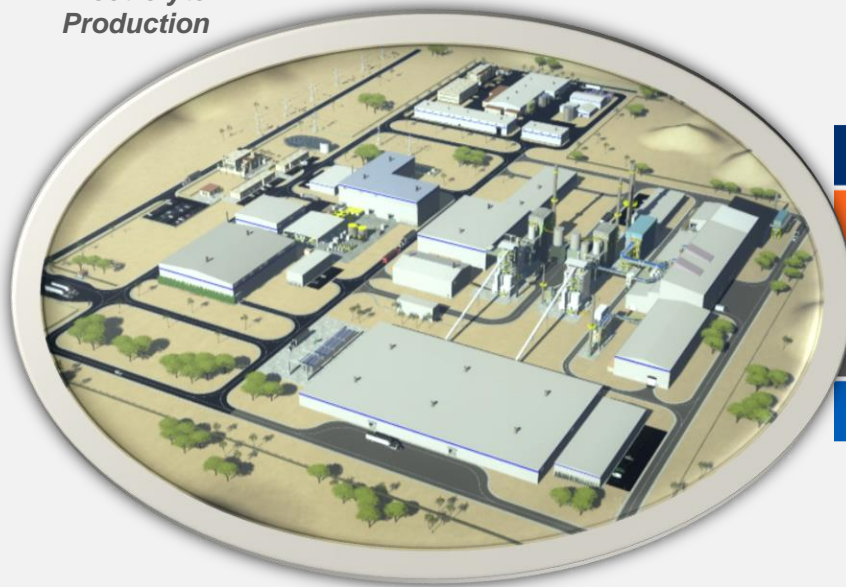


RECYCLING SUPERCENTER PROVIDES NUMEROUS OPPORTUNITIES

Shell & AMG Recycling Supercenter

Project 1
**Gasification Ash
Recycling &
Electrolyte
Production**

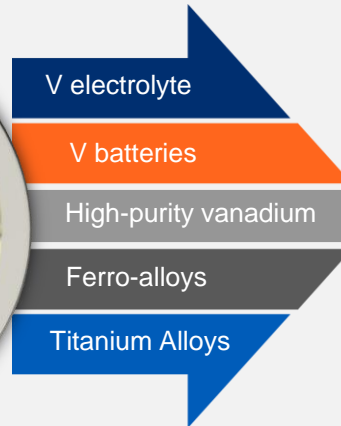
Project 3
**Fresh Catalyst
Manufacturing**



Project 2
**Spent Catalyst
Recycling**

Project 4
**Mass Energy Storage
Battery Manufacturing**

Primary and Secondary Opportunities



Vanadium Electrolyte
Solutions for Vanadium
Redox Flow Battery
Manufacturing



Development of Energy
Storage Industry in Saudi
Arabia



Production of high-purity
vanadium products such as
vanadium oxides and
solutions for a wide variety of
applications

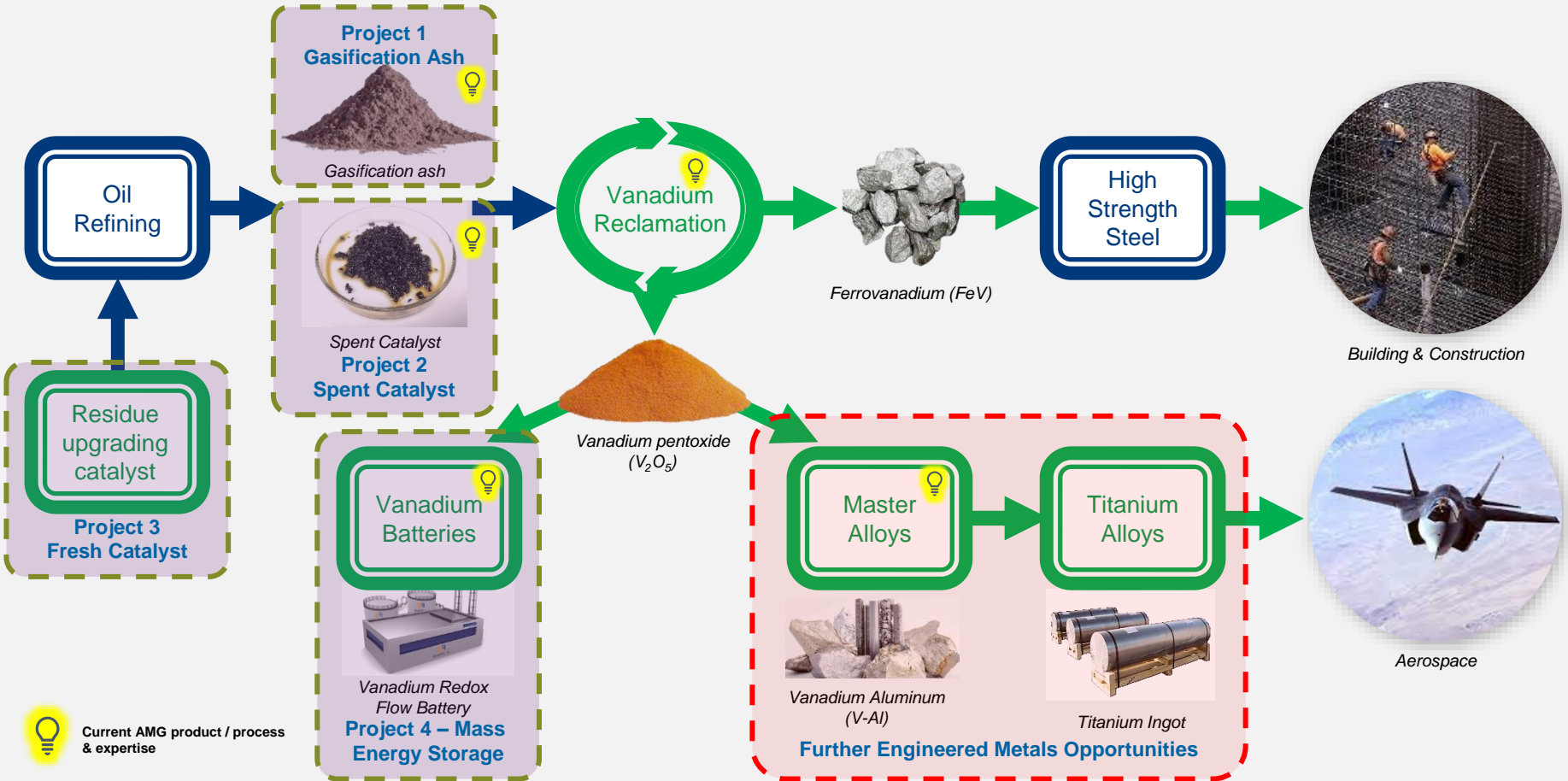


Production of ferrovanadium
for use in high-strength low-
alloy steels



Production of high-purity
vanadium-based titanium
alloys for developing Saudi
Arabian titanium industry

VANADIUM SUPERCENTER SCOPE



TANGIBLE CO₂ REDUCTION BASED ON INITIAL CALCULATIONS

Project 1

Vanadium Concentrate from Jazan
Gasification Combined Cycle Plant

The mitigated CO₂e benefit is
263,000 MT per year

Project 2

Spent Residue Catalyst Metals
Reclamation

The mitigated/enabled CO₂e
benefit is **3,270,000** MT per year

Project 4

Vanadium Electrolyte Production
Plant

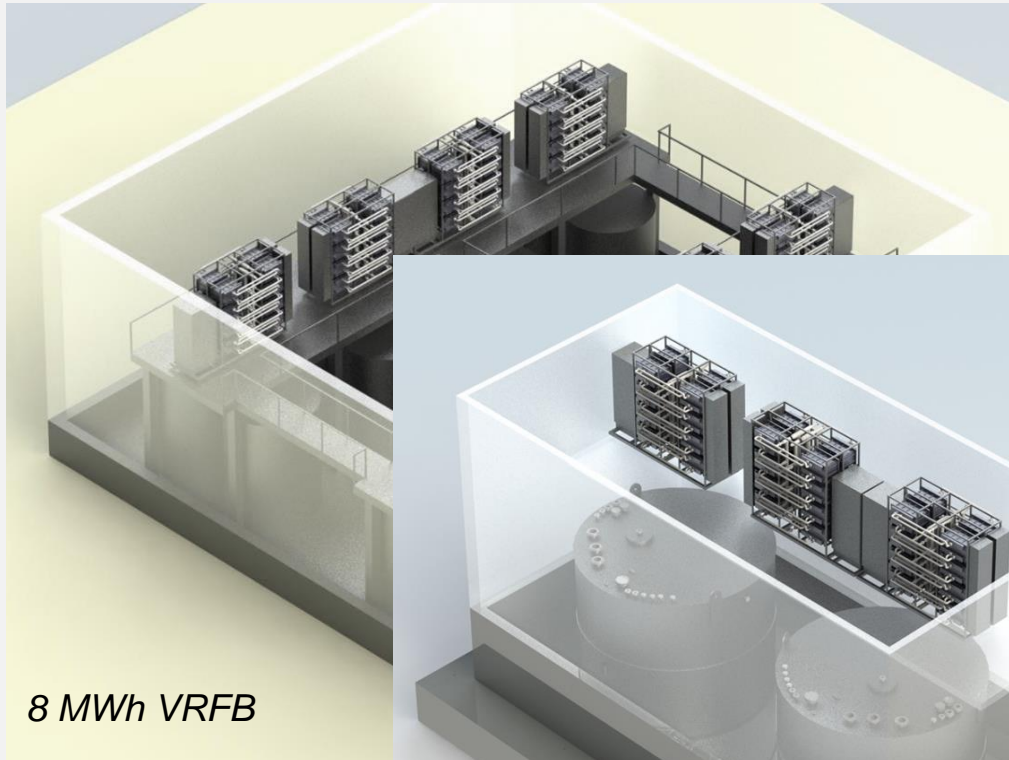
The enabled CO₂e benefit is
44,000 MT per year

~3.6 Million MT per year

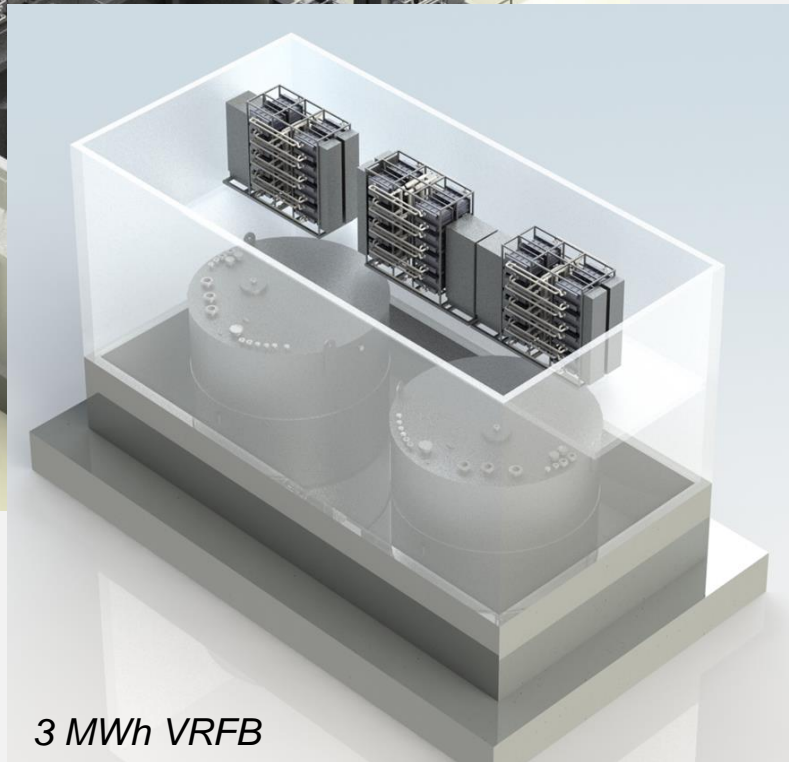
APPENDIX



LIVA HYBRID ENERGY STORAGE SYSTEM



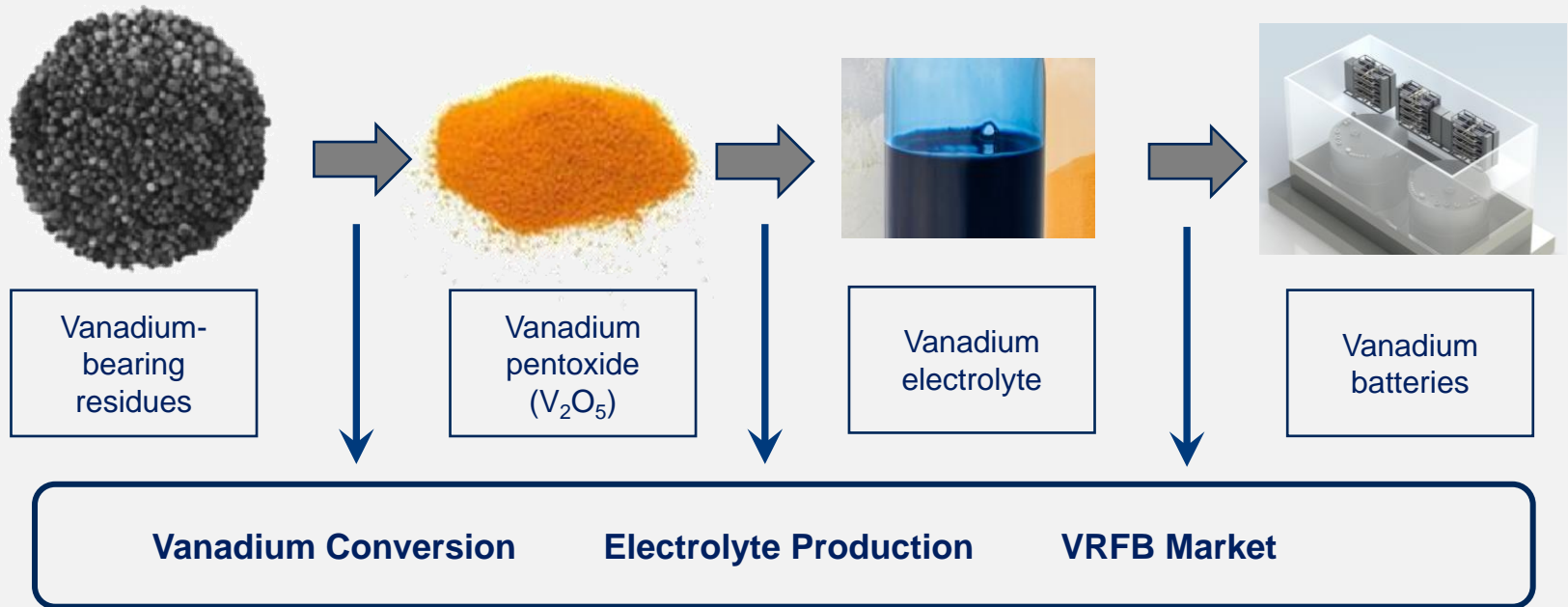
8 MWh VRFB



3 MWh VRFB

- ✓ Scalable
- ✓ Demand side power management (peak shaving, energy shifting)
- ✓ Reduce electricity costs & CO₂ footprint
- ✓ Grid service (frequency containment reserve)
- ✓ Integration of solar & wind
- ✓ Emergency power supply

VRFB VALUE CHAIN



AMG technologies are key to the integration of the vanadium battery value chain