Energizer Resources Provides Business Update on its Green Giant Vanadium Project, Madagascar

President Obama Recognizes Vanadium Redox Battery Technology

NEWS RELEASE

TORONTO, ON – March 3, 2011

Energizer Resources Inc. (TSX.V: EGZ) (OTCBB: ENZR) (FWB: YE5) (“Energizer” or the “Company”) provides an update on its 100%-owned Green Giant vanadium project in Madagascar.

Energizer Well Received at Mining Indaba 2011 and in London, England

Energizer recently attended Mining Indaba 2011 in Cape Town, South Africa where it conducted one-on-one meetings with international fund managers and investment specialists. In addition, presentations were made in London, England to interested investors and funds. Significant interest in Energizer’s Green Giant vanadium project was generated as a result of these presentations and is expected to result in further discussions, including regarding strategic investments, project financing and analyst coverage.

Mining Indaba is the world’s largest gathering of mining’s most influential stakeholders and decision-makers vested in African mining. Africa, with its resource-rich regions, is catching the attention of savvy investors. Six of the world’s 10 fastest growing economies over the past decade are located in Africa, with growth rates rivaling those in Asia. Over the next five years, Africa’s growth rate is expected to surpass Asia’s, and companies with operations in relatively stable African countries, such as Energizer, are positioned to take advantage of this growth opportunity.

DRA to Complete Preliminary Economic Assessment

As previously announced, DRA Mineral Projects, a leading engineering, project management and mine construction company based in South Africa, has been retained to complete a National Instrument 43-101 (“NI 43-101”) compliant preliminary economic assessment (PEA) of the Company’s Green Giant vanadium project. Having recently completed the prefeasibility study for the neighbouring Sakoa coal project, DRA Mineral Projects will be able to provide valuable insight into potential infrastructure synergies that will result from the development of the two projects.

The PEA is expected to be completed in the third quarter of 2011.

SGS Lakefield to Optimize Process Flow Sheet in 2011

SGS Mineral Services (Lakefield) is conducting further metallurgical test work as part of the PEA to optimize the vanadium extraction process confirmed by SGS Lakefield in 2010. High vanadium extraction – up to 82% - was achieved by SGS Lakefield using an oxidizing pre-roast followed by an alkaline pressure leach. This process resulted in a leach solution low in deleterious elements and suitable for upgrading by solvent extraction. SGS Lakefield has identified several opportunities to optimize the process flow sheet, including the recycling of leach solution to increase vanadium tenor, reduction of soda ash consumption and optimization of pre-roast and pressure leach conditions (temperature and time).
George Annandale, a consultant to the Company and a vanadium expert with over 30 years of international experience, added that, “The alkaline pressure leach process which resulted in up to 82% vanadium extraction is a well-established and proven technology that is in use today, in particular, in connection with the treatment of uranium ores.”

The 2011 metallurgical program being carried out at SGS Lakefield is being directed by George Annandale.

The Green Giant vanadium is unique in that it is sediment-hosted, in contrast to the majority of known vanadium deposits which are magnetite-hosted. As a result of this geological difference, the metallurgical process for the Green Giant vanadium is different from that used by other vanadium producers.

The unique characteristics of the Green Giant vanadium will allow the Company to produce a high purity vanadium product – called vanadium pentoxide or V2O5 – required for emerging battery technologies using vanadium. V2O5 can also be used in traditional steel applications. Ferrovanadium, which is the usual end-product from magnetite-hosted deposits, can only be used for steel applications.

Julie Lee Harrs, President and Chief Operating Officer of the Company, said, “As we see more and more evidence in the marketplace of commercial applications of vanadium-based battery technologies, such as the vanadium redox batteries, a great opportunity exists for vanadium producers who can provide the necessary high purity vanadium. Energizer’s Green Giant project is being positioned to meet this anticipated new demand for high purity vanadium, as well as the anticipated 7% annual growth in demand for vanadium from the steel industry. The sheer size of the Green Giant deposit will allow the Company to scale the project to meet the increase in demand for vanadium and to provide the sureness of supply and price required by vanadium end users. Please visit our website at www.energizerresources.com to learn more about the two-sided growth story of vanadium – steady growth from traditional steel applications and explosive growth from emerging battery technologies.”

Environmental and Socio-Economic Studies Continuing

As the Green Giant project transitions from exploration to project development, environmental and socio-economic baseline studies of the project area are continuing to ensure that all pertinent information is available at each stage of project development.

Sakoa Coal Project Advancing

Julie Lee Harrs, President and Chief Operating Officer of the Company, recently met again with Asia-Thai Mining, one of the owners of the Sakoa coal project, as well as the mine construction company retained to develop the coal project, both of which are subsidiaries of Italian-Thai Development Public Company Limited, Thailand’s largest construction company, to discuss the status of the coal project. The Sakoa coal project is a large thermal coal project located approximately 30 kilometres from the Green Giant property.

Ms. Lee Harrs had the following comments regarding her recent meeting with Asia-Thai Mining: “Armed with coal mine construction and coal mining experience, Asia-Thai Mining is poised to begin construction of its Sakoa coal project. The coal owners have plans to build the necessary infrastructure, including roads and a new port, to support a new coal mine that they anticipate being in production in the next few years. They also indicated that the coal project would be phased in stages, and that further infrastructure enhancements would be made, such as railways, as the project is expanded. The Sako coal project is just the first of several projects in the region, including the Green Giant vanadium project and Sherritt’s limestone project, that are ready for development.”

The Green Giant project will require the upgrading of existing roads, ports, and water supply routes and the importation of diesel power, all of which will be detailed in the upcoming PEA being completed by DRA Mineral Projects. However, the development of the Sakoa coal project is expected to enhance the
economics of the Green Giant project as it will provide infrastructure sharing opportunities for the two projects.

The Company will continue discussions with Asia-Thai Mining to identify potential infrastructure sharing opportunities and other synergies.

**Energizer Meets with Madagascar Prime Minister and Minister of Mines**

In a recent trip to Madagascar, Ms Lee Harrs met with Madagascar's Prime Minister, Albert Camille Vital, and the Minister of Mines, Mamy Ratovomalala, to present the Green Giant vanadium project and to provide a project update. A key purpose of these meetings was to showcase the transition of the Green Giant project from exploration to project development and to position the Company and the Green Giant project as the next significant mining project in Madagascar. Given Ms. Lee Harrs' previous experience with the development of the Ambatovy nickel-cobalt project in Madagascar, she was well positioned to discuss the development plans for the Company's Green Giant vanadium project.

The Company is pleased to report that both officials expressed their continued support for the Company and the advancement of the Green Giant project.

**Non-Brokered Private Placement Completed**

With the recently completed non-brokered private placement, which raised U.S.$13,921,495 million, the Company is well financed to aggressively advance the development of the Green Giant vanadium project.

**Vanadium in the News**

Everyone is talking about vanadium – even U.S. President Barack Obama. At a recent Presidential roundtable discussion at Cleveland State University, President Obama commented on the efforts of Painesville, Ohio's power system and its partners in building a massive energy storage system for the city, funded by the U.S. Department of Energy's Smart Grid Program, using vanadium redox flow battery technology. President Obama joked that “Vanadium redox fuel cells is one of the coolest things I've ever said out loud”. President Obama continued to say that this “Next generation energy storage system will help families and businesses cut down on energy waste, save money and reduce dangerous carbon emissions”. A video clip highlighting President Obama's comments on the vanadium redox battery can be viewed at www.cbsnews.com.

Vanadium is becoming one of the most sought after metals in the world. China recently announced that the development of the country's vanadium industry will be a top priority in the next five years. Approximately 48% of the world's vanadium supply comes from China. China has gone from being the world’s largest exporter of vanadium to the world’s largest consumer. As China’s urbanization expansion continues, the country’s demand for vanadium for steel use alone is expected to remain strong for the next 10 to 20 years.

Vanadium is attracting the attention of more and more investors, analysts and the mining industry in general. Two prominent Canadian mining publications, The Northern Miner and Resource World Magazine, are profiling vanadium as lead stories. The Northern Miner’s current edition (February 29 to March 6, 2011) leads with a feature entitled, “Spotlight on Vanadium”, while Resource World Magazine’s April Issue will focus on vanadium, with a special industry feature.

Visit the Company's website at [www.energizerresources.com](http://www.energizerresources.com) to read more vanadium news.

**Attendance at PDAC 2011**
Energizer will once again exhibit at this year’s PDAC International Mining Trade Show & Investors Exchange, at the Metro Toronto Convention Centre, South Building. The Company invites shareholders and interested parties to visit Energizer’s booth (#2348) to discuss firsthand the Green Giant project and our development plans for 2011.

Qualified Person

The resource estimate referred to in this press release was completed by AGP Mining Consultants Inc. (“AGP”) and is in conformance with the CIM Mineral Resource and Mineral Reserve definitions referred to in National Instrument 43–101, Standards of Disclosure for Mineral Projects. Pierre Desautels, P.Geo., of AGP, is the Independent Qualified Person under NI 43-101 responsible for the resource estimate.

About Vanadium

Vanadium is well established as a strategic metal that strengthens and hardens alloys like steel and is positioned to play a significant role in emerging battery technologies such as batteries for electric cars and for large-scale energy storage. While there are some opportunities for substitution in steel production, the same is not true for other markets, including the emerging energy (battery) storage markets, the military and particularly in the aerospace industry, where vanadium is irreplaceable.

About the Green Giant Vanadium Project

The Green Giant vanadium project, located in Madagascar, is 100% owned by Energizer. The Company has a NI 43-101 compliant indicated resource of 49.5 million tonnes at an average grade of 0.693% vanadium pentoxide ("V₂O₅") containing 756.3 million pounds of V₂O₅ and an inferred resource of 9.7 million tonnes at an average grade of 0.632% V₂O₅ containing 134.5 million pounds of V₂O₅. With this resource estimate, the Green Giant deposit currently ranks as one of the largest known vanadium deposit in the world, with only 75% of the 21-kilometre (18 mile) stratigraphic trend of vanadium remaining open for drilling.

About Energizer Resources

Energizer Resources Inc. is a mineral exploration and development company based in Toronto, Canada. The Company’s common shares are traded on the TSX Venture Exchange under the symbol EGZ, on the Over-The-Counter Bulletin Board under the symbol ENZR, and on the Frankfurt Exchange under the symbol YE5.

For more information, please visit our website at www.energizerresources.com

Or contact:

Brent Nykoliation, Vice President of Business Development
Toll Free: 800.818.5442 or 416.364.4911
Email: bnykoliation@energizerresources.com

or Julie Lee Harrs, President and COO

Cautionary Statement: The above resource estimates were calculated in accordance with National Instrument 43-101 as required by Canadian securities regulatory authorities. For United States reporting purposes, Industry Guide 7 (under the Securities Exchange Act of 1934), as interpreted by the Staff of the SEC, applies different standards in order to classify mineralization as a reserve. Among other things, the terms “measured”, “indicated” and “inferred” mineral resources are required pursuant to National Instrument 43-101, the U.S. Securities and Exchange Commission does not recognize such terms. Canadian standards differ significantly from the requirements of the U.S. Securities and Exchange Commission, and mineral resource information contained herein is not comparable to similar information regarding mineral reserves disclosed in accordance with the requirements of the U.S. Securities and Exchange Commission.
Mineral resources are not mineral reserves and do not have demonstrated economic viability. This mineral resource estimate includes inferred resources that are normally considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. There is also no certainty that the inferred mineral resource will be converted to the measured and indicated mineral resource categories through further drilling, or into a mineral reserve once economic considerations are applied.

U.S. investors should understand that “inferred” mineral resources have a great amount of uncertainty as to their existence and great uncertainty as to their economic and legal feasibility. In addition, investors are cautioned not to assume that any part or all of the Company’s mineral resources constitute or will be converted into reserves.

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Forward-looking statements include, receipt of regulatory approval, statements on the proposed use of proceeds; completion of financing on terms proposed; the ability to raise additional funds as required; the development potential and timetable of the Company’s properties and minerals; the current and future price of minerals the Company explores; the estimated size of mineral deposits on the Company’s properties; the realization of those mineral deposit estimates; the timing and amount of estimated future exploration, development and production; costs of future exploration, development and production activities; success of exploration activities; government regulatory matters; discussion of political and environmental risks.

Forward-looking statements are based on the opinions and estimates of management of the Company. Forward-looking statements are subject to known and unknown risks that may cause actual results to be materially different from stated opinions and estimates of management. Some of the Company’s more material risks are: availability and timing of external financing; unexpected events and delays during exploration; receipt of government and stock exchange approvals; results of current exploration activities; future price of minerals; political risks in the locations of the Company’s properties; appreciation/depreciation of foreign currencies relative to the United States Dollar (the Company’s functional currency) and other risks inherent in the mining and exploration industry.

While Company’s management has attempted to determine the factors that could cause actual results to differ materially from estimated results contained in forward-looking statements, there may be other factors that cause results not to be as anticipated. The Company provides no assurance that such forward-looking statements will prove accurate or not materially different than projected. Therefore readers of this and other press releases issued by the Company should not place unreasonable reliance on stated forward-looking statements.

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