

# The Green Program

Introducing

**The Socioeconomic Mineral Certification & Resource Development Program**

Profitability Through Operational Excellence and Socioeconomic Resource Development

William Quam & John Metzger

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## Project Sponsors

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**William Quam**

**Nordic Sun Worldwide**

[wquam@nordicsw.com](mailto:wquam@nordicsw.com)

+43 688 600 60430

Senior management and strategy development experience with Fortune 500 and SME companies in the US, EU, Russia, Africa and several Emerging Markets in various sectors including resource development, banking, manufacturing and public government. Forensic business analysis and investigations. Designed and developed The Green Program (<http://thegreenprogram.org/>) the only complete socioeconomic 3TG "conflict minerals" certification solution. Managing Director experience of 6 production mining concessions (greater than 150,000 ha) that included underground and open cast mining operation with 3,800 staff and ASM (artisanal miners). Within 3 months brought a \$1.5 million loss making operation (previously owned by H.C. Stark, The Carlyle Group and Advent International) into profitability. Management level compliance and audit experience with 3T (Tin, Tantalum and Tungsten) minerals certification and due diligence programs including Dodd-Frank & SEC, iTSCi, Certified Trading Chain (CTC), OECD, ICGLR and UN Group of Experts. 25 years experience managing operations and developing strategy, investment and operational plans for the banking, mining, renewable energy and industrial development sectors for the US, EU, Russia, Great Lakes region of Sub Sahara Africa and other Emerging Economies.

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**John Metzger**

**METZCOMM Services**

**Applications Technologist**

[sales\\_support@metzcomm.net](mailto:sales_support@metzcomm.net)

+1 317 796 7328

Three decades of work in Africa, USA, China. New business development, critical radar monitoring and site safety data management, media production and editorial support roles have allowed me to observe, interact, and manage a range of business, social, and cultural experiences. Specialties: Applied technology reviews, Radar (interferometric) monitoring of slopes, remote and site specific insertion and task completion, Task and function specific power supply and management. IT, Media, Safety services sourcing, deployment, and support.

Field deployments in -- USA, Canada, Kenya, South Africa, Lesotho, Guinea-Bissau, Senegal, Mali, Gambia, Zambia, and China.

COMPTIA -- A+/Remote Technician Certification.

MSHA -- Metals/nonmetals certified.

Site Specific and HAZ training.

Red Cross -- Basic First Aid and CPR.

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THIS MEMORANDUM DOES NOT CONSTITUTE AN OFFER TO SELL OR THE SOLICITATION OF AN OFFER TO BUY ANY SECURITY, NOR DOES IT CONSTITUTE AN OFFER TO SELL OR A SOLICITATION OF AN OFFER TO BUY SUCH SECURITIES BY ANYONE IN ANY JURISDICTION. THIS PROJECT DESCRIBED IN THIS MEMORANDUM IS CONSIDERED A HIGH RISK WITH THE POSSIBILITY FOR A VARIABLE RETURN. THE FINANCIAL AND OTHER ANALYSIS IS AN ESTIMATE BASED ON THE POTENTIAL OF THE MARKET. THE NUMEROUS SOCIOECONOMIC FACTORS OF THE REGION ARE DYNAMIC AND IMPOSSIBLE TO DEFINE WITH ANY CERTAINITY.

The Green Program is a global resource development and business services provider of products, strategies and technologies that bridge the socioeconomic divide in resource rich developing economies. We excel at matching expectations with resource development and operational goals to strengthen profitability. Our expertise and attention to the details of operational efficiency, safety, compliance and transparency defines the new global socioeconomic resource development, business investment and operational model we are helping to shape.

The Green Program delivers sustained and increasing investment profitability, transparency capacity building for governments and measurable development for communities in resource rich developing economies by focusing on local socioeconomic development, operational excellence and regulatory compliance. We offer specialized and technical knowledge of global business & mining operational practices, mineral certification, living wage, child labor safe, worker and mine safety, environmental protection, mine site remediation, labor relations, security, crisis intervention and forensic business analysis solutions.

The most financially rewarding and socially important Impact Investments are in the resource rich developing economies. Companies who produce or use mineral resources are under increasing pressure from shareholders, governments and the consuming public to be sure their operations, business practices and minerals support responsibly sourced supply chains.

### **The “Conflict Minerals Free” Socioeconomic Certification Program**

Global manufacturing relies on stable supply chains that are becoming increasingly more complex, dynamic, prone to violence and less transparent. The horizontal structure of the manufacturing sector worked well until the buying public and governments began to require companies to conduct “due diligence” compliance investigations into their supply chains. Numerous national, intergovernment and industry trade support groups have developed a confusing array of legislation, directives, guidelines and goals to address the problem of resource development, corruption and unsafe business practices in the Democratic Republic of the Congo (DRC) and other resource rich developing countries. Domestic manufacturers, multinational financial institutions and the consuming public are often left in the dark when trying to understand the opaque world of resource development, supply chains and the operational “reality on the ground” in places like the east of the DRC. Tin, tantalum, tungsten and gold or the 3T&G “conflict minerals”, continue to support various armed groups, human rights atrocities, child labor and slave like working conditions in the DRC and the surrounding Great Lakes countries. The US Dodd-Frank legislation, that became law in 2010, changed the way the global mineral supply chain functioned by requiring companies, large and small, to certify the origin of the minerals in the components they purchase and use. Sub-assembly component manufacturers and anyone who supplies products to US based companies are required to perform their own due diligence and country of origin investigations down to the minerals that are used to manufacture these components. The main intent of the US legislation is to ensure mineral traders in the DR Congo and globally, who are often 17 to 20 levels removed from the final manufacturing companies, are not sourcing or buying “conflict minerals”. A yet unenforced section of the original Dodd-Frank legislation, Section 1503, also requires US companies to report on the number of mining accidents in the production of minerals from around the world.

The initial and current approach that companies and trade support groups have developed to address this confusing array of regulatory compliance has been to implement an equally confusing array of individual, capital intensive “paper trail” desk audit solutions that have been documented as providing no transparency in the supply chain. None of these pencil and paper based solutions are backed up with readily available technology that can accurately determine the content, location and value of the minerals as they progress along the supply chain from the mine sites to the smelters. The profitability shortcoming of this “paper trail” compliance approach for the companies who have to comply with a diverse array of legislative requirements is that companies who have spent several billion dollars over the last seven years are now reporting they do

not know if “conflict minerals” are in their supply chains and products. And to make the situation even worse there is proposed legislation to require companies to address the unsafe working conditions, workers pay and corruption that continues to plague the global supply chains.

The continued high levels of human rights abuses, instability, smuggling and corruption within the minerals supply chain in the DR Congo and Great Lakes region is well documented. In January of 2014, the UN Group of Experts reported that there was widespread corruption of all of the existing “bag and tag”, GPS location and shipment tracking mineral certification processes. The Group reported “...armed groups and FARDC continue to control many mining sites and to profit from mining and the minerals trade. During 2013, minerals — particularly tin, tungsten and tantalum — continued to be smuggled from eastern Democratic Republic of the Congo through neighbouring countries, undermining the credibility and progress of international certification and traceability mechanisms.”. Maplecroft, a global risk analytics company, in May 2014, highlighted the connection of the mineral supply chain and instability in the DRC and surrounding countries this way “Over the last six months, levels of conflict and political violence have risen significantly in 48 countries (including the DRC)”. Several manufacturers even discovered that the minerals in their products are supporting the brutal regime of North Korea. The significant shortcomings in the current supply chain business model include excessive compliance costs and a lack of transparency that opens up a unique window of opportunity for The Green Program.

As the recent Millennial Development Goals progress reports and books like “Dead Aid” reveal, the “normal” business strategies have resulted in all the countries of Africa becoming considerably worse off today on every socioeconomic metric than 50 years ago. The Green Program's socioeconomic mineral certification process combines redundant levels of technology with local involvement to produce an increased benefit value chain of minerals. The initial phase of The Green Program is to provide verifiable, minerals and certification using hand-held X-ray fluorescence (XRF) units, GPS and a proprietary combination of other available technologies in a real time environment. A cost efficient, “closed loop”, real-time minerals certification, sourcing and increasing local value-added content process is currently not being offered. Our process offers scientifically verifiable certification that our minerals are “conflict free”, “child labor free”, “fair wage”, “work place safe” and “environmentally responsible”. The Green Program's unique process offers compliance with the 10 Core Values of the UN Global Compact, Dodd-Frank (Sec. 1502 “conflict minerals” and Sec. 1503 – worker & mine safety), OFAC, FCPA, OECD Guidelines and EU directives.

Comprehensive compliance as outlined above is a complex socioeconomic, political and multicultural dynamic. To encourage participation in the Program, strategic partnerships, robust technologies, extensive local training and locally focused operational solutions will be incorporated into the process. Our detailed operational strategies to address transparency and efficiency will directly improve the socioeconomic reality in the areas we operate and assist us achieve our projected financial returns. All of our strategies will focus on maximizing local value added content, employment & training, worker & mine safety, environment protection and Living Wage engagements. As the socioeconomic minerals and certification process matures additional local value-added mineral processes will be brought on line.

## **Financial Analysis**

An initial, minimum investment goal of \$500,000 is needed to procure the necessary technology, vehicles and cash flow requirements for the first 3 to 5 months of operation. The cash flow from operations is based on an immediate bank transfer/cash payment business model that will significantly decrease the need for accounts receivable or payable financing. The variability of return is influenced by the risks associated with the political and socioeconomic instability of the locations of our operations. The various risks will be mitigated by diversifying the operations in terms of location, product offerings and the introduction of additional service as experience and needs are identified. The two principals in the business have significant expertise in

resource development, especially the mining sector in the DRC, Rwanda and central Africa mining belt. This initial operational phase will last for 2 to 3 years.

The two charts below summarize return/risk scenarios for the first 2 years of the project. There are numerous operational and sociopolitical risks associated with implementing The Green Program that can never be underestimated or ignored. These known and anticipated risks will increase the variability of the projected financial returns. Our operational and financial plans are structured to be proactively responsive to the various risk factors so there will be less possibility the investment, income stream or socioeconomic benefits of the Program will be negatively compromised. The “Conservative Outcome” and “Most Likely Outcome” scenarios both reveal a very positive Internal Rate of Return (IRR), Profitability Index Ratio (PI) and Net Present Value (NPV) that would justify a rate of return of between 15% and 25% P/A. These anticipated returns are in line with the level of risk in the emerging markets index (Ref. MSCI Emerging Markets Index). The exact return will be established once the operation is launched.

|                        |             |
|------------------------|-------------|
| First Year Net Income  | \$394,000   |
| Second Year Net Income | \$1,638,500 |
|                        |             |
| NPV at 10%             | \$513,141   |
| IRR                    | 96%         |
| PI Ratio               | 2.03        |
| Most Likely Outcome    |             |

|                        |             |
|------------------------|-------------|
| First Year Net Income  | \$15,000    |
| Second Year Net Income | \$1,067,500 |
|                        |             |
| NPV at 10%             | \$395,868   |
| IRR                    | 47.63%      |
| PI Ratio               | 1.79        |
| Conservative Outcome   |             |

### Opportunity Defined

The Green Program is unlike any Impact Investment opportunity available today. The growth potential of this region and sector are identified as extremely positive and strategically important emerging markets by the World Bank, United Nations, Ernst & Young and several government economic reports. The management team has significant regional experience in resource and business development and has the skills and expertise to mitigate and understand the political and socioeconomic risks. The Green Program focus on providing high socioeconomic impact and our unique business model that combines the latest technology with local value added content will contribute to operational stability and enhance our ability to achieve our projected financial returns. Additional resource development processes will be explored and introduced to improve socioeconomic impact, increase financial returns and mitigate the various dynamic business risk factors.



Let us know when you are ready to leave behind out-dated, extremely risky resource development business solutions. The Green Program Socioeconomic Resource Development Model delivers on the promise of Emerging Markets profitability with exceptional Impact. Early stage involvement with The Green Program will launch you into a world of creatively dynamic solutions now. Your sponsorship in The Green Program will set your organization apart as being a leader in addressing responsible resource development. Your association in The Green Program will give your supply chain scientifically based assurance the minerals and labor in your products are certified Conflict Minerals Free”, “Child Labor Free”, “Living Wage and Conditions Compliant” and “Environmentally Responsible Sourced”.