Program Management

**Origins of Energy Giant Limited.**

In 2011, EG was organized as a ‘sister company’ to LFTR Energy LLC. LFTR Energy was organized by G.R. Langworth, L.M. Samuels, and J. W. Chalice to develop an internationally based private sector supply chain for a small modular denatured moltens alt reactor. This initiative not only requires a government sponsor, but also about $4 billion in working capital.

To facilitate these criteria, Energy Giant was formed to develop power generation systems based on natural gas to capture electricity grid customers for future evolution to the less expensive and more reliable DMSRs.

*Technology First*. EG developed relationships in the U.S., Europe, the Middle East, India, and the Philippines, in addition to its southern Africa market focus.

Gas turbines are cheaper and faster to build than coal-fired power plants. However, gas turbine power plants are more expensive to operate – even with the huge new volumes of natural gas becoming available. Open cycle gas turbine power plants were normally operated as a ‘peaker’ source of electricity 6% to 10% of the time to address spikes in demand because the OCGT costs 5 to 8 times more to make electricity than a nuclear or coal-fired ‘based-load’ plant that stays in operation constantly, generating low-cost electricity.

Today, “king-sized” turbines (800 MW – to 1200 MW per station) combine gas combustion with steam cycles to generate the conversion of upwards of 64% heat generated to electricity – far higher than the 39% typical in the open-cycle gas turbine systems. These giant systems are practical in well-industrialized countries where the infrastructure is robust and the ability to pick up and move giant boilers and components is prevalent.

However, for the developing countries that EG focuses on, there is scant support to accept large ships that off-load 25 ton sub-systems which then must be leveraged into place on broad foundations where constant fuel supply of up to 100 tons per hour is readily available.

Countries like Bangladesh with rivers kept shallow by the heavy annual siltation, have a constant congestion of small boats coming and going on these tributaries. Large power stations (Siemens has agreed to build four 1,200 MW stations at Payra Port in Bangladesh) have no deep-draught seaward access, and poor roads and scant rail.

The developing countries in Africa and Southwest Asia are usually quite hot and humid. EG has focused on the 60 MW aeroderivative gas turbine unit because it has a long-term record of high reliability, and is small enough to fit into the back of a pickup truck. Building a 400 MW power plant involves configuring three 60 MW turbines whose exhaust is fed into a steam turbine.

In addition, EG determined that inlet fogging [as provided by Mee Industries] – NOT active ‘chiller’ refrigeration and NOT media-based evaporative coolers – is highly effective on a regular basis in both high-humidity and high-temperature environments. A gas turbine can lose 40% of its power trying to pressurize hot air to feed its combustor.

High-pressure steam injection (“STIG”) offers a power boost, but EG discarded STIG due to its destructive impact on the generation system.

Combining the steam turbine cycle with the gas combustion boosted the electricity generated per unit of heat produced. But very large boiler configurations confront a major single system failure risk of devastating business interruptions for locations that are remote from the factory. Breach of the Power Purchase Agreements would stop debt service, inviting default.

Combinations of multiple 60MW aeroderivatives with steam turbines deliver efficiency and resilience – generation capacity continues to be available regardless of a component or even a unit failure.

EG has also developed a relationship with Petr Hayek, lead engineer of Prague Czech Republic’s Quality Assurance Institute, who has come up with a Brayton-cycle ‘flow acceleration’ heat exchanger. This 3rd stage cycle (after the gas combustion and then the steam cycle) could harness the final exhaust waste heat (about 100˚ C. is needed to boost the heat-to-electricity conversion efficiency by another 40%.

*Operating for our Own Account*. EG works to obtain its own customer base on which to build its DMSR roll-out. Power projects in under-developed countries are our objective. We developed power barge projects in 2011 and 2012 for the Bangladesh Power Development Board. Investors stayed away from Bangladesh’s credit rating – even though its foreign currency reserves moved from $9 billion in 2011 to $30.6 billion by August 2016. We crafted power plants for Kurdish Iraq, but nearing war precluded financing.

EG is now supporting a new Moroccan based EPCM that we plan to finance in the implementation in a series of new aeroderivative-based CCGT power plants situated at several cities along the EMPL Pipeline from Algeria through Morocco to Spain. In addition, EG has introduced this strategy for similar projects in Myanmar, and in Syria.

*Problems are actually Opportunities*. EG stays in dialogue with its chemist partners in the DMSR project. A fluid-fueled nuclear reactor’s high temperature fluid thermodynamics are radically different from other power plants – nuclear or otherwise.

An analysis of the Molten Salt Reactor Experiment from 1959 – 1965 in Oak Ridge National Laboratory made it quite clear that ‘frightening’ chemicals [fluorine, beryllium, uranium-235, et al] when appropriately compounded, liquefied, and mixed into specific recipes – provide far better safety, simplicity of management, and sizing versatility than other power generation technology.

Indeed, our chemist partners discovered that the functional utilities of these molten salts in non-nuclear applications were stunning.

By adding a half-dozen new molten salt compounds to the Lithium Fluoride – Beryllium Fluoride (FLiBe) fuel salt eutectic, we will be able to extract neutron-poisoning actinides from the fuel salt bath through a 1% slip stream using a partial vacuum. This will enable the DMSR to achieve breakeven fissile fuel generation to fissile fuel consumption in ten years of operation – without changing the power plant’s original configuration. At the same time, the structural metal and graphite core will last for at least 45 years.

*Molten Salt Catalysis Processing* (“MSCP”]. Our chemist partners have pushed the envelope with molten salts into the non-nuclear application arena: So far, they have developed MSCP solutions for:

[a] Converting natural gas into hydrogen gas and highly-branched naphtha

[b] Removing minerals and moisture from raw sub-bituminous coal to makes its hydrocarbon organics suitable for hydrocracking with hydrogen gas in the presence of molten salt catalysts

[c] Hydrocracking coal hydrocarbon organics with hydrogen gas in the presence of molten salt catalysts into EURO VI emissions compliant diesel and aviation fuel

[d] Converting the minerals and moisture removed from raw sub-bituminous coal into time-released fertilizer that can be reconstituted for alkaline or acidic soils.

[e] Converting highly-branched naphtha from its normal status as a octane enhancer, to elastomeric mono-enes that range from Neo-hexene (C6) to highly-branched olefins of 9 to 10 total Carbons. These high value specialty monomers will boost its revenue potential from $375 per mt as an octane-enhancer to over $994 per mt as feedstocks for specialty synthetic rubber products.

*Agriculture and Agro-chemicals*. EG has identified a series of agricultural and agro-chemical beneficiation technologies that will be used to collaborate with local community populations situated along our pipelines. The normal NIMBY resistance that threatens many new right-of-way constructions will be counter-acted by a broadbased prosperity and educational upliftment, based upon:

[a] Soil amendment, water catchment, and drip irrigation systems will support the planting and harvesting of Pakchong 1 grand napier grass utilizing the Philippines-developed VB-Tall growth enhancer that enables a harvest of 1,000 mt per hectare per annum.

[b] This high-protein sweet grass was originally developed as a dairy cattle feed for which we will deploy it in special murrah buffalo dairy farms.

[c] This sweet grass will be converted via a technology provider’s cellulose-to-sugar system, which produces C5 and C6 sugars, along with lignin.

[d] Our C2S technology provider has the means to separate C5 from C6 sugars. This enables two different beneficiation strategies:

(1a) Xylose to Xilotol

(1b) Xylose to Furfural

(2a) Dextrose to Adipic Acid

(2b) Dextrose to Omega-7

[e] The lignin also has several fruitful applications:

(1) Activated Charcoal

(2) Vanillin

(3) Carbon Fibers, which will be combined with thermoplasts to form the feedstock for Arevo 3-D printing cells that turn out automotive parts

*Subject Matter Experts*. EG is basically a ***System Integrator***.

* EG assembles the most effective technologies to build an ironclad business case with exceptional return on investment.
* EG evaluates each technology provider on the value its innovation can contribute. EG selects the right engineering that can execute the vision of our business case.
* EG’s objective is to miniaturize each technology solution into a transportable container-sized factory module.
* This factory module must conform to the performance criteria of its technology claims.
* This factory module must also conform to the operational, safety, and pollution protocol of all relevant U.S. regulatory agencies.
* The setup team must be trained and certified professionals able to implement or modify the factory module so that it performs satisfactorily on the ground in the Host Country.
* The operations team must be trained and certified professionals able to operate, troubleshoot, and maintain the factory module in accordance with all U.S. regulatory protocols, regardless of location within a Host Country.

EG sees its major responsibility as the identification and perfection of all operational and safety procedures in training curricula that are continuously upgraded with ‘Lessons Learned’ and design/operating refinements.

**Corporate Structure**

World-Wide Transition Technologies LLC [to be formed and resident in UAE]

* Owned by Management Team
* Receives funding for specific project operating companies
* Supplies management services in exchange for equity and service fees
* Funds Florida Transition Tech Actualization Ltd.
* Funds implementation of initial coal beneficiation systems for each project operating company
* Project operating company buys subsequent coal beneficiation systems from cash flow
* Funds implementation of initial agricultural / agri-chemical beneficiation systems for each project operating company
* Project operating company buys subsequent agri-systems from cash flow

India Transition Tech Deployment [to be formed and resident in India]

* Owned by investors, management, and WWTT
* Funded by WWTT
* Buys subsequent coal beneficiation systems from cash flow from FTTA
* Buys subsequent agri-systems from cash flow

Mozambique Transition Tech Deployment [to be formed and resident in Mozambique]

* Owned by investors, management, and WWTT
* Funded by WWTT
* Buys subsequent coal beneficiation systems from cash flow from FTTA
* Buys subsequent agri-systems from cash flow

Florida Transition Tech Actualization LLC [to be formed and resident in Fla., USA]

* Owned by WWTT
* Funded by WWTT
* Verifies and commercializes all beneficiation technologies
* Trains all Matrix teams on a full-time operating Training Matrix
* Oversees all troubleshooting and technology upgrades
* Sells susbsequent coal beneficiation systems to MTTD and ITTD project operating companies
* Sells subsequent agri-systems to MTTD and ITTD project operating companies

**Program Management**

EG’s Beneficiation Programs each entail the commercial realization of several new technologies in an integrated system that will provide unprecedented returns for its Host Countries, its workforce, its management, and its investors. Coupling coal with electricity and natural gas – generating 5,000-plus permanent jobs by producing 5 billion+ gallons of liquid petroleum products annually requires innovation, discipline, and large-project management skills.

A select interdisciplinary management team with delivery and operational experience in diverse international projects in disparate fields as well as basic industries is assembled to marshal the change management expertise to break new ground with these Programs.

The Program team is composed of entrepreneurs, business executives, engineers, educators, program / project directors / managers, financial management executives, and international operations managers.

The areas of expertise of the team are in: energy, programme governance, portfolio management, migration planning, risk mitigation, procurement, international business development, program development, information technology, design and development of engineering systems, financial / fiscal management, auditing and assessment analysis, security, eCommerce, training and education, knowledge management (KM), supply chain management (SCM), enterprise resource planning (ERP), national information systems infrastructure, systems analysis and design, team building, and organizational development.

The team has a combined 295 years of experience in these areas.

**G.R. Langworth, Managing Director**

Mr. Langworth has 40+ years in business and technology development. He was a member of the startup team for Sperry/Unisys’ SNAPnet retail brokerage support system. He was a member of the startup team for Fiber Link Around the Globe submarine cable system. Mr. Langworth was responsible for all FLAG cable circuit sales to African telecommunications carriers, where he traveled regularly to 38 of the 52 countries in the continent. He developed the PC-based circuit forecast and sales agreement data base for the FLAG cable, the first non-mainframe application of its kind. Mr. Langworth was made head of global new product development for the FLAG cable where he developed the global buyers’ cooperative network, convinced PSInet, a global ISP, to convert itself into a U.S. international telecom carrier that could buy circuits on the FLAG cable system, and developed the U.S. Defense Information Systems Agency’s Tampa to Bahrain private network demonstration on FLAG before he left to form GBCN.

Consulted on the design and architecture for Marubeni Trading / Global Crossing terrestrial network in Japan.

Led GBCN to develop and implement [a] business-to-business ‘Data Call’, [b] ‘Local Fulfillment Facility’ providing 500% more broadband capacity in a macro-cell footprint at 30% of the cost of the micro-cell, [c] the ‘Power Grid Network’ a fiber optic application based solution generating telecom revenues from residential & business networked application services to fund smart power grid solutions.

Mr. Langworth developed a vertically integrated business model for ‘base load’ energy generation using gas turbines powered by LPG, expanding heat-to-electricity conversion to dramatically lower electricity costs with specific subsystems for inlet fogging, steam injection, combined steam turbine, and a new ‘tail-end’ flow acceleration heat-exchanger.

Mr. Langworth devised a vertically-integrated business model for small, modular denatured molten salt reactors to deliver pollution-free power generation and fresh water for developing countries. He worked with molten salt chemists to define ‘chemical control rods’ that manage evolution from uranium fuel cycles to pure thorium fuel cycles within the same reactor design.

As its principal architect, Mr. Langworth conceived the beneficiation program for Namibia, Mozambique and India; and identified and designed the deployment strategies for all technologies required for the full solution.

**B.A. Jaafar MBA, PhD– Chief Financial Officer**

Mr. Jaafar has over 35 years of involvement in Money and Banking. He was Chief Economist of the Reserves Bank of Malaysia, Chief Executives of a premier Malaysian bank and was involved as Financial Advisor to a Malaysian Corporative Society and a financial institution with the onset of the East Asia Financial crisis.

He served at the International Monetary Fund as Executive Director covering the South-East Asia Voting Group (ASEAN plus Fiji and Nepal).

He had served as Executive Director for Africa Operations for a Multinational Corporation. The mission was to consolidate and sell off their banking, hotel and shipyard operations in various countries in Sub-Sahara Africa.

He was the chief architect for the rescue and restructuring of a premier Malaysia bank hit by a major property collapse in Hong Kong which led to a joint takeover of the Bank, briefly by PETRONAS and the Malaysian Airline System.

Under the IMF Technical Assistance Program, Mr. Jaafar served as Governor of the Reserve Bank of Namibia. The mission was to institute financial sector reforms and capacity building. His latest contract (2016) was as Professor of Economics at the Malaysian University Kelantan.

He is an elected Fellow of the Institute of Bankers Malaysia and received numerous national awards for country contributions. He is a qualified economist specializing in the fields of Econometrics and Money and Banking.

**P. Carrillo, Director for Operations and Training –**

Mr. Carrillo has been affiliated with Mr. Langworth in Energy Giant LLC and GBCN since 1999. In addition, the following are highlights of Mr. Carrillo’s relevant experience:

*National University, San Diego, CA* **-** Adjunct Faculty in the School of Engineering and the School of Business (20+ years). Developed Graduate Coursework (online and classroom) in Ecommerce, Leadership, Organization Management, Fiber Optics, Technology Management, Information Systems Management, Knowledge Management, Supply Chain Management, Data (Wired and Wireless) Networks, Business Management for Information Systems, Project Management, Globalization, and Ethics. The opportunity to present these graduate courses continues, as well as the presentation of other courses in business and technology.

*Thrunet, Inc. South Korea* **-** Responsible for the design and implementation proposal of the nationwide (South Korea) network for Thrunet, Inc., a leading telecommunications company, headquartered in Seoul, during this period. As Vice-President of Research & Development, the proposal included due diligence of vendors, equipment verification, network design, RFP’s, RFQ’s, partner/vendor collaboration, and training of the R&D hardware/software engineering group, was successfully completed in 7 months.

*McDonnell Douglas Aerospace Information Systems, Cypress, CA* **-** Leader for the successful design and implementation of the fiber optic network for the Mesa, Arizona Apache Helicopter Plant. This network was designed for administrative, engineering, and the manufacturing floor supporting the entire facility. Responsible for vendor due diligence, selection, and monitoring.

Co-Team Leader for the successful design and implementation for the fiber optic network for the Long Beach, California C-17 Globemaster Program. This network was designed for the engineering and manufacturing floor of the interconnecting facilities in Long Beach.

Accomplished the security assessment of all Telecommunications (worldwide) for McDonnel Douglas Aerospace. This included systems in Hong Kong, Spain, Canada, and throughout the United States. Used tools common to assessment efforts and improvised with tools common to due diligence efforts -- embraced by the consultant team verifying the assessment report.

RFP Team member for the entire McDonnel Douglas Aerospace Information Services organization (MDAIS) effort to improve performance and cost. Reviewed proposals from AT&T, IBM, and CONTEL. The effort resulting in a multi-company contract saving the organization an estimated $1M USD/year with improved performance.

Organized and coordinated a company-wide monthly meeting for network engineers and managers. This meeting started out as a cross-organization effort to share knowledge, growing from the first meeting of 12 engineers to 35 engineers and managers from the entire organization. It also evolved from 1 hour to 4 + hours and lunch. From a meeting to a seminar environment, which was also attended via audio by engineers in the St. Louis and San Jose facilities. This effort led to increased collaboration and the sharing of knowledge regarding network design, vendor justification, wiring and panel design, vendor negotiations, implementation procedures, software and hardware tools, and leadership skills required to perform in Team Leader and Project Management positions.

Member of the following standards groups: MAP/TOP Network Committee, the IEEE 802.3H Fiber Optic Committee and the NIST ISDN committee

*NATO, Izmir, Turkey* **-** Responsible for communications to the NATO fleet and ground forces in the Eastern [Mediterranean Sea](https://en.wikipedia.org/wiki/Mediterranean_Sea" \t "_blank) (NATO’s Southeaster Flank). Developed and implemented a leadership and training program resulting in a 35% improvement in Performance. Mr. Carrillo received the Defense Meritorious Service Medal, the military’s highest non-combative Award for his efforts. Leadership responsibilities, for 129 personnel (operators, technicians, administrative, and engineering) from Turkey, the United States, and the United Kingdom was successful due to the collaborative and sharing climate introduced by Mr. Carrillo.

**Kim L. Johnson, P.E.**

Lead Scientist, developer of MSCP. Expertise in developing, trouble-shooting, and improving products, processes and markets for specialty materials and energy products. Through technical leadership, expertise, and example, Mr. Johnson assists his colleagues and customers alike to realize new and improved products and processes that are more cost-effective and globally sustainable.

• *Energy-Product Improvement.*  Regarding Honeywell’s Chemical Power Systems, my R&D practically doubled VED (vol. energy density) over the baseline (the Lithium/ SF6 / Al-KClO4 chemistry of the MK50 torpedo).

* For this, I conceived and developed:   
  • *Lithium Alloy* Fuels; • Dense Oxidant Mixtures based on novel *Fluoro-sulfurcarbon* fluid*s*;   
  • “Pyrotechnic Starters” with greater VEDs *and* safety; • Improved high-temperature materials of construction for the lithium-based fuels and resulting molten *Fluoride* products.
* Although awarded three Patents for greatly improving the reliability, environmental footprint and range of Chem Power Systems, the significance of such technology today is that the Liquid Fluoride Reactor shall enable, thanks to the safety & high-temperature stability that are inherent with inorganic fluorides – Energy that is remarkably affordable *and* sustainable
* *Project Management and Intellectual Property*. Led Lab, Pilot and Factory work at 3M for the Air force’s $4-million ManTech contract to develop the **Glycidyl Azide Polymer.** Came up with and implemented a new Phase Transfer Catalyst route for a purer polymer and improved process safety, cutting factory costs by over 50%.
* Won broad-patent coverage for this novel and environmental-sound manufacturing technology, all while maintaining the strict reporting, tracking and accountability schedules of 3M’s project with the USAF.
* *Manufacturing Cost Reduction and Regulatory Relief*. The FC-1100™ Mist Suppressant was a Fluorochemical surfactant with a short C-4, enviro-friendly Fluorochemical tail. Developed an improved product formulation and a production process with a 45% lower cost. Personally scaled both innovations at 3M’s factory in Decatur, Alabama.
* Permanent benefits included no more VOC or SARA Raw Materials (RMs), reliability quality control methods for more automated process control, and over $6 million more profit annually and growing. Enabled copper producers’ environmental compliance. The product continues to grow worldwide to this day, especially in Latin America.
* *Product and Process Development and Engineering*. Developed speciality products and systems for coatings and elastomers, Lithium thermal & electric batteries as well as other electrochemical processes, in addition to process scale-up ranging from niche surfactants to Fluorochemical coatings.
* *Later Technical and Engineering Milestones*. After 3M’s Fluorochemical technology group was defunded in early 2001, transferred to analyzing developing and validating Quality Assurance methods.
* Consulted for R&D-startup, GrainValue, identifying processes affordable for small-to-midsized Ethanol Co-ops to separate valuable protein, oil and fiber from corn before fermentation rather than after as was typically practiced at the time.
* Professional Project Manager II certification from the University of St. Thomas, 2007
* After improving Processes for ECP + Photochromatic films (at ev3 and Vision Ease), focused exclusively on FloChem America R&D to commercialize molten salt science-based chemical processes to ultimately enable Thorium, whose abundant energy and environmental footprint can deliver truly sustainable clean electricity.

Language & Culture Skills

R&D and businesses that need to reach beyond the U.S. will also benefit from my strong cultural and international skills:

* Having lived and worked outside the U.S. for over five years, I’ve remained connected with the cultures of Latin American and Europe (EU).
* I’m more or less conversant in *German,* fluent in *Spanish* and totally proficient with *Portuguese* (the type spoken throughout *Brazil*).

In summary, products and production processes that possess better performance *and* sustainability are my greatest passions. His career has evinced an ability – to select more sustainable Routes & RMs while perceiving the still-unspoken needs – that empowers his projects and teams to tackle and resolve difficult problems.

**John Palumbo, PhD**

Assistant to Kim L. Johnson

John Palumbo earned a PhD at Stony Brook University in 2007, where he gained extensive experience in X-ray diffractometry, both in the laboratory and at Brookhaven’s National Synchrotron Light Source.

Dr. Palumbo also has a strong background in Magic-Angle Spinning Nuclear Magnetic Resonance in both low and high magnetic fields, having run spectrometers at Pacific Northwest National Laboratories, Stony Brook and the New York Center for Structural Biology.

His scientific investigations have focused on disorder in crystalline systems by studying the nuclei of low-natural abundance, such as the isotopes oxygen-17, Magnesium-25 and both isotopes of Titanium: 47Ti and 49Ti.

His PhD dissertation in solid-state chemistry specifically focused on oxygen anion transport and disorder of pyrochlore and perovskite crystalline systems, while some of his other work involved the novel syntheses of nanoparticles of related lithium-ion compounds where a control over their morphology was instituted.

**Sugato Banerjee, President of India Projects**

Mr. Banerjee has 30-plus years’ experience in serial entrepreneurial activity in India. He is well known in several industries as well as within the federal and state governments of both India and Bangladesh.

Mr. Banerjee completed Senior Cambridge First Division in 1971, a Bachelor of Commerce, Hours in Advanced Accountancy, at University of Calcutta in 1975, and a Masters Degree in Business Administration with Specialization in Finance from the University of Calcutta in 1978.

His business achievements include in 1979, the manufacture and supply of jute cement bags sold to cement factories in Bhutan and India. In 1981, the successful design of Poly-Lined Jute Bangs for Cement Packing. In 1982, he was responsible for Introduction of Meghalaya Coal into the production of cement in Bhutan. In 1986, he originated the exports of Bhutan Gypsum to Nepal. In 1986 he represented Aircraft Leasing & Management in Gatwick, London in the sale of two Airbus 310 aircraft to Bangladesh Biman.

In 1987 managed in the capacity of a director, a fleet of 400 LPG tank trucks for Batra Brothers, a transport contractor servicing the 3 Nationalised Oil Companies in India.

In 1992 he started the exports of Bhutan coal to Nepal cement factories.

In 2004 he became the first ever Indian exporter of Bitumen

In 2006, he conducted research on Pongammia Pinata based bio diesel, pubishing a paper on the subject in the Second International Bio-Technology Conference at Nagpur, India.

In 2008, he obtain a patent for an automatic packing machine for bitumen packed in self-dissolving poly bags.

In 2009 he applied for a patent for a slag drying & grinding system for deployment in cement factories.

In 2010 he introduced an add mixture in the manufacture of Portland Slag and Portland Pozzolona cement, where up to 70% blast furnace granulated slag or up to 38% fly ash can be used, thereby substantially cutting the Clinker consumption.

Mr. Banerjee has been responsible for the past five years in all negotiations with government and private parties-at-interest regarding our projects in India, Bangladesh, Sri Lanka, Bhutan, and Myanmar.

**P. Bronsveld, Programs Relationship Manager**

Mr. Bronsveld has more than 25 years’ experience in communications, marketing, and international business development with an emphasis in promoting new programs and fundraising for non-profit projects and NGO’s. Mr. Bronsveld is a founding board member of the Dutch branch of the Jubilee Campaign, formed in 1987 by Lord Alton in the UK.

This organization has a consultative status at the United Nations that allows direct submission of its reports to the General Assembly and the International Criminal Court in The Hague.

Mr. Bronsveld has been able to build informal relationships with diverse governments across the world. He has taken advantage of Jubilee Campaign’s UN consultative status to organize ‘side events’ at the United Nations, raising human rights issues at the General Assembly on many occasions. Mr. Bronsveld and his team periodically exercise the privilege of informing Dutch Parliament directly, which is only possible if a relevant number of members of parliament are willing to endorse the program’s agenda.

These activities have enabled Mr. Bronsveld to develop **[a]** an in-depth involvement with the inception and establishment of the ‘Democratic Self Administration’ (DSA) in Northern Syria, **[b]** based on relationships developed with the Kurds, Syriacs, and other groups in Syria, Jubilee Campaign was able to develop a comprehensive proposal in liaison with the ‘Christian Political Foundation for Europe’ (PCPF) to work with the Kurdish forces to counter the advances of ISIS. Later on, Jubilee Campaign was able to introduce the same proposal to the State Department in Washington, DC, which later changed its policy and started supporting the Kurds in Iraq as well. **[c]** In 2012, Mr. Bronsveld joined a Dutch Member of parliament on a working visit to Pakistan whose focus was on the Human Rights situation of minorities, and especially the Ahmadiah and Christian communities. Mr. Bronsveld has recently established the ‘Pakistan Christian Political Foundation’, the first ‘think tank’ at the European Parliament to represent the concerns of the Christian minorities in Pakistan. **[d]** in a March 2015 Thailand visit, Mr. Bronsveld learned of hundreds of Pakistani asylum seekers kept in the central jail in Bangkok. After he visited the jail, the Jubilee Campaign published a report on the situation, leading several Dutch MP’s to raise the issue in Parliament. Other governments also responded to the report, resulting in the BBC fielding an investigative team to review the situation. The follow-on international pressure resulted in the liberation of most people from jail. Mr. Bronsveld continues with ‘quiet diplomacy’ with the UNHCR and the Thai Government to seek sustainable solutions for the Pakistani asylum seekers in Bangkok. **[e]** Since May 2012, Jubilee Campaign has submitted reports to the UN General Assembly about the atrocities committed by the extremist organization ‘Boko Haram’ in Northern Nigeria at the International Criminal Court in The Hague. Mr. Bronsveld was given the opportunity to develop personal relationships with Nigeria’s President Buhari and the Muslim leaders in the North of Nigeria close to the president. Mr. Bronsveld developed a “Leaders of Integrity” model, endorsed by President Buhari, for a select group to select & invest in feasibility studies of Nigerian business projects in agriculture & mining.

**F. MacLeod, Director of Administration**

Mr. MacLeod has more than 25 years international IT experience, delivering business aligned results in the Financial, Oil and Gas Production, IT, Telco, Multi Media, and sectors for the Enterprise Corporate / Financial / SME markets (B2B, and B2C). A few of the recent highlights of his experience include the following:

*G4S Operations UK and Ireland:* Operations and Programme delivery, established a Target Operating Model to enable best shoring of resource and ongoing supply side of IT goods and services, leveraging third party capabilities. Provided elasticity of IT service supply and conversion of Capex to Opex spend turning fixed into variable cost. Operational budget of £49M. Delivered Operations services to multiple customers: Finance, Government and to other basic industries.

*WorldPay:* Carve out the card processing services from Royal Bank Of Scotland (Bain Capital, Apex), design development and implementation of new Card Processing services. Transformation budget of £300M+. Established and transitioned to a retained operational production service organisation for UK and ROW.

*First Data***:** Programme managed a major business transformation (KKR): Application centric consolidation of 18 EMEA Data Centres, Command Centres and offices, reducing Data Centre occupancy to drive annualised benefits of $20M. Internal user base of 6000, 500 external customers, 5.3 million merchant Point of Sale Terminals and multiple ATM. Retooled the management team across EMEA with best shoring resourcing, Capital budget of $50M.

*British Telecom:*Managed and operated 23 UK Data Centres, 73 ROW and associated Network Command Centres. Programme managed and delivered upgrades to nine existing data centres and three new builds, budget of £63M. Hosted and delivered IT services for internal and external customers. Implemented energy saving measures reducing energy costs by 16%. Decommissioned IT assets; reducing annual operating costs by £16M. Internal user population of 140,000 and multiple hosting services for external customers: Retail, Manufacturing, Government and Financial Institutions.

**N. Reda, Project Management Portfolio Manager –**

Mr. Reda’s project management experience encompasses the nuclear engineering, power generation, and telecommunications infrastructure businesses.

With nearly 25 years of experience in engineering and 18 years in telecommunications. Mr. Reda ‘s relevant experience began in Nuclear Power Services Inc., where he spent eight years of project management positions related to the design, manufacture and supply of products for national and international power plants.

Mr. Reda joined NYNEX Corporation where he was assigned to develop special telecommunications initiatives for the company. Much of that time he held the position of director of International Ventures in Several NYNEX companies, including NYNEX Network Systems, NYNEX International Company, NYNEX Information Solutions Group and the NYNEX Development Company.

Mr. Reda was named managing director of Fiberoptic Association for International Research to define the feasibility of the Fiberoptic Link around the Globe, a submarine fiberoptic cable that would stretch from the United Kingdom to Japan and Korea via the Red Sea and Indian Ocean. As president and COO of FLAG Limited, Mr. Reda was responsible for the construction, operations and business development of the FLAG system, a US $ 1.55 billion capitalized infrastructure. He served on the Board of Directors, and as a member of the FLAG Executive Committee, the FLAG Policy Council, and the FLAG Management Committee.

The FLAG [Europe-Asia] system, started at Porthcurno, England, and proceeds to Estepona, Spain; through the Strait of Gibraltar to Palermo, Sicily; across the Mediterranean to Alexandria and Port Said, Egypt; overland from those two cities to Suez, Egypt; down the Gulf of Suez and the Red Sea, with a potential branching unit to Jedda, Saudia Arabia; around the Arabian Peninsula to Dubai, site of the FLAG Network Operations Center; across the Indian Ocean to Bombay; around the tip of India and across the Bay of Bengal and the Andaman Sea to Ban Pak Bara, Thailand, with a branch down to Penang, Malaysia; overland across Thailand to Songkhla; up through the South China Sea to Lan Tao Island in Hong Kong; up the coast of China to a branch in the East China Sea where one fork goes to Shanghai and the other to Koje-do Island in Korea, and finally to two separate landings in Japan - Ninomiya and Miura, which are owned by rival carriers. The project connected countries that represented 70% of the world’s population.

The FLAG cable system was successfully placed into commercial service on November 22, 1997 with an initial group of 62 international carriers with purchase agreements for capacity. After 2002, the system’s 10 Gbps capacity was doubled by installing Raman optical amplifiers in the Indian Ocean to overcome the long distances between the original install erbium amplifiers. In 2005, the FLAG cable system, extended across the Atlantic and throughout the Persian Gulf and reported a capacity of 80 Gbps west of Mumbai to South Korea and Japan. RCOM, the FLAG system’s current owner, reported lit capacity reached 7 Tbps on the Europe-Asia reach in 2015, responsible East to West connections of RCOM’s 63% share of the global data demand as measured by lit capacity.

**J. W. Chalice – ERP Planning, MD for Power Generation**

Mr. Chalice is a world-class ERP subject matter expert, with 20-plus years of experience in international business development.

Matriculated in 1980, Data Processing Diploma (P.E. Technikon), BCom Information Systems (UNISA), Business Management (Paris Chamber of Commerce)

Director for J.C. and Associates from 1995 through 1997.

Managing Director of ARMADA from 1998 through 1999.

Managing Director of A2A Global Technologies from 2002 through 2003

President, TalkWithUs (Pty) Ltd. operator of outdoor wireless networks, covering more than 100,000 square km of under serviced rural areas in South Africa. Projects include Kwa-zulu Natal Network, Magaliesburg, Thabazimbi, Vaal Triangle Network, Majhabeng Municipality, BHP Billiton Mine Group in Hotazhel, Illovo Sugar Mills in Natal, Alazon Connexions, Metro Rail’s video surveillance network, and Gateway VoIP at shopping centers across SA, working in conjunction with BCX and Datapro.

Mr. Chalice, Mr. L. Samuels, and Mr. Langworth formed SA LFTR LLC to commercialize denatured molten salt reactors for future power generation, and Energy Giant LLC to build and operate CCGT systems for real-time power generation.

Most recently, Mr. Chalice has conducted ERP consultations for a number of Hong Kong-based financial- and retail-service enterprises.

**Sola Idowu, Ph.D., is the University and Agricultural Systems Director.**

Dr. Idowu has worked in Nigeria, the USA, the UK and India. Technology start-up companies he has pioneered since 2010 include

e-Therapeutics plc, UK – <http://www.etherapeutics.co.uk>, a network pharmacology and drug discovery company

BlueGate Software Technologies, India – <http://bluegate-soft.com> , software development and consulting across industrial domains

Forthmetrics Limited, Scotland, UK – <http://forthmetrics.com> / <http://inkybee.com> ,automated tool for digital in-bound marketing campaign on the web

Hexislab Ltd., UK, [www.hexislab.com](http://www.hexislab.com) , research and development of cosmetic and nutritional products

Novia Cosmetics, UK, [www.noviacosmetics.com](http://www.noviacosmetics.com) , research and development of cosmetic products

Africa Emerging Partners, UK, [www.aep.africa.com](http://www.aep.africa.com) , Africa-focused commercial consultancy

*PhD Mathematics, Newcastle University*

*MASt Mathematics, Cambridge University*

*BSc Mathematics (First Class Honours), Logos State University*

Institutions*.*

*Newcastle University* – Under Dr. Idowu’s leadership, Newcastle University oversees several projects that source relevant technologies for mentorship and deployment in African countries. Newcastle’s International Water Management Institute [IWMI] is growing the evidence base on groundwater availability and management in Sub-Saharan Africa to enable sustainable use of this water for indigenous populations in poverty there. Research is now being conducted in Ethiopia, Ghana and South Africa. Newcastle is the UK’s leader in the study of sustainable agriculture and food security, the number 1 university for agriculture and forestry in the UK in 2016, ahead of Cambridge and Oxford. Newcastle collaborates in Africa with universities and institutions that facility on the ground agricultural projects. Representative institutions Dr. Idowu will integrate into our Programs include, in addition to Newcastle University:

* *Sarian Farm, Zac B. Sarian, Alfonso G. Buyat* – A new follar fertilizer formulation has been shown to accelerate the growth of Pakchong 1, up to 15 feet tall in 70 days from planting. The yield can reach more than a thousand tons of herbage per hectare in a single cutting. VB Tall was formulated by Alfonso G. Puyat, a seasoned researcher on plant growth acceleration. His past efforts include the Power Grower Combo and the Heavy Weight Tandom, which demonstrated significant efficacy in accelerating the growth of various crops resulting in much higher harvest yields.
* *Netafim Ltd, Tel Aviv, Israel*  – Netafim is the global leader in drip and micro irrigation solutions for a sustainable future. With 27 subsidiaries worldwide, Netafim agronomists and engineers deliver optimal so¬lutions to growers in over 110 countries, with 16 manufacturing facilities around the globe and over 3,000 employees.  Founded over 45 years ago, Netafim pioneered the drip irrigation revolution that has created a paradigm shift in low volume irrigation technology.
* *Thailand Department of Livestock Development* – Dr. Krailas Kiyothong developed Pakchong 1 Super Napier grass by crossing ordinary napier grass and pearl millet. It yields 16% to 18% more crude protein that bolsters dairy output. It can also be ratooned once the plant is established in a field and can be harvested every 45 to 48 days.
* *Chiang Mai University, Center for Agricultural Research System Research* - Research led by Tupthai Norsuwan investigated effects of various irrigation treatments including rainfed conditions, drip irrigation, and nitrogen application rates on Pakchong 1 super napier grass crops during the dry season in Chiang Mai province.

**Team Summary**

**G.R. Langworth** –

1. Number of years: 40 years

2. Skills: Technology [telecommunications, energy, new product development], Financing and new business development

3. Areas of Work: Africa, Europe, Middle East, Asia

**B. A. Jaafar** –

1. Number of years: 35 years

2. Skills: Financing, fiscal governance

3. Areas of Work: Malaysia, Africa, Middle East

**P. Carrillo –**

1. Number of years: 40 years

2. Skills: Organizational Development/Program Development/Information Technology/Training and Education

3. Areas of Work: North America, Asia, Marshall Island & Philippines, Australia, NZ, Turkey, Malaysia, Singapore, Caribbean

**N. Reda** –

1. Number of years: 30 years

2. Skills: Nuclear / electrical engineering, project management, started, built and operated $1.55 billion global telecom fiberoptic network

3. Areas of Work: U.S., Europe, Middle East, Asia

**J. Chalice** –

1. Number of years: 25 years

2. Skills: New business development; telecommunications, energy, financing

3. Areas of Work: Africa, Middle East, Asia

**F. MacLeod** –

1. Number of years: 25 years

2. Skills: Programme governance, portfolio management, migration planning, transformation & business operations

3. Areas of Work: UK, Europe, Middle East, Africa

**S. Banerjee –**

1. Number of years: 30+ years

2. Skills: Accounting, new business development, scientific analysis

3. Areas of Work: India and ASEAN countries

**P. Bronsveld –**

1. Number of years: 25 years

2. Skills: International business development / communications / marketing

3. Areas of Work: Africa, Middle East, SW Asia

**S. Idowu –**

1. Number of years: 15 years

2. Skills: International business development, educating entrepreneurs

3. Areas of Work: Africa, Europe, SW Asia.