

Business Symposium at UNEA 3

“Businesses #BeatPollution”

December 3, 2017, 15:00 – 18:00

Conference Room 1, UN Campus

Case Study Summary

Name of Company	African Agribusiness Incubators Network
Name of Speaker	Bola Adedugbe
AGRIBUSINESS AND THE ENVIRONMENT- CREATING SUSTAINABLE LIVELIHOODS FOR THE AFRICAN YOUTH	
<p>Agribusiness has the potentials to create millions of jobs for the unemployed youth population in Africa. Raising their awareness of agribusiness will not only make them conscious of the existing opportunities in agriculture, but it will also give them the necessary information needed to explore this sector and contribute to the development and adoption of agribusiness practices. One of the principal outcomes of Rio+20 were the call to produce a set of universally applicable sustainable development goals (SDGs) that balance the environmental, social and economic dimensions of sustainable development. This Paper provides advice and guidance as business people, on how environmental sustainability can be incorporated in our businesses. For example, wastewater reuse forms a reliable source for crop irrigation therefore playing a significant role in food security and raising rural incomes. Through irrigation, farmers are adapting to poor rainfall and drought resulting from climate change. Sustainable use of the arable land through improving the productivity of the farmland and reclamation of other lands is complemented by irrigation farming which has led to more lands being under cultivation that is increasing food yields; while reducing the pressure on limited land, fragile soils and wetlands ecosystems.</p>	

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Name of Company	EkoRent
Name of Speaker	Juha Suojanen
EKORENT FIGHTS AIR-POLLUTION WITH ELECTRIC VEHICLES AND SOLAR ENERGY	
<p>Conventional, privately-owned combustion engine vehicles are not only inefficient and noisy, they also kill millions around the world every single year. Worldwide, air-pollution kills more than 5,5 million people which is more than AIDS and malaria combined. Cars and trucks alone are responsible for around 15% of global CO2 emissions.</p> <p>Our company EkoRent, founded in 2014 in Finland, offers zero-emission transportation solutions to these problems. Our digital services are based on Electric Vehicles and Solar Energy, and are used with a mobile application tailored for electric vehicles.</p> <p>EkoRent’s home country of Finland is a small state that has a population of 5,5 million, or roughly about the same as Nairobi Metropolitan area. We believe that EkoRent solutions based on Electric Vehicles and solar energy, are a perfect fit to any fast-growing city, such as Nairobi. Electric Vehicles can help solving the CO2 and pollution challenges as part of global megatrends such as urbanization, smart devices and renewable energy. When more people move in to cities, transportation will become even more difficult, more time will be spent in traffic jams, and that translates to even greater emissions.</p> <p>Impressed by our potential, in 2016 WWF nominated EkoRent as a Global Climate Solver Company, an award that we are very proud of. Together with WWF we estimate that the CO2 reductions of a single EkoRent electric vehicle is comparable to 30 conventional cars, and If our services reach a 30 percent market share in our target market, about 11 million tons of CO2 would be avoided annually.</p> <p>Electrifying traffic flows in cities will make the world quieter, and the air around us more breathable. We don’t have to wait for the future, change can be started right now. EkoRent mobility services can deliver cleaner future today.</p>	

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Name of Company	International Raw Materials Limited
Name of Speaker	William O’Neill

CLIMATE SMART FERTILIZER

The fertilizer industry is uniquely positioned at the nexus of agriculture, industry and information technology. It is making efforts to better leverage this position to advance environmental goals. An often-overlooked potential of business and the fertilizer industry in fighting pollution is through better management of chemical waste by recovering and transforming industrial by-products into useful re-purposed climate-smart crop nutrients. This approach makes for a strong business case as it broadens the profit streams for chemical and mining companies, which now make revenue from products they previously discarded. It also increases resource efficiency and furthers climate adaptation, which are 2 priority areas in UNEP’s Medium-Term Strategy. These climate-smart fertilizers are re-introduced back into an inclusive and green circular economy, essentially feeding the soils that feed the crops that feed people. Prior to climate-smart fertilizer recycling, these molecules were lost to the atmosphere. In Trail, British Columbia, where we recover some of our climate-smart fertilizer, sulfur dioxide emissions have been reduced by 25% since 2014.

My company, IRM, markets close to 1 million metric tons of climate-smart fertilizer captured from industrial production streams in the US, Canada, Australia and Madagascar every year. These recovered essential molecules are given a second life and are distributed across the globe in regions where soils are starved for crop nutrients. The innovation lies in getting chemical and mining companies on board to commit to recovering their waste products, building an efficient and environmentally responsible supply chain and distribution networks and educating customers (other fertilizer companies, ag retailers and farmers) on the merits of recovered crop nutrients. Business is already footing a portion of the bill of climate change mitigation and adaptation. The industrial processes are in place and the scientific know-how exists; it’s now time to replicate, scale and disseminate these innovations through synergistic public-private partnerships at local, regional, national and supranational level.

Fertilizer companies come in all sizes. and they often are – especially in Sub-Saharan Africa - the main providers of agronomic extension services to farmers, especially smallholder farmers in developing countries through innovative approaches like soil testing caravans and mobile apps. Business in general and the fertilizer industry, in particular, is committed to address pollution, its causes and effects, in all five areas:

- Air by reducing GHG emissions in the production of fertilizer;
- Water and Marine through nutrient stewardship and the 4R framework to reduce nutrient runoff and the algae growth and hypoxia associated with it;
- Land and Soil by working with farmers and researchers to develop and disseminate fertilizer best management practices to feed depleted soils and reduce land degradation.

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Name of Company	PanAAC
Name of Speaker	Lucy Muchoki
SUPPORTING SME'S THROUGH SWITCH AFRICA GREEN	
<p>SME's are the engine of our economy. The majority of African businesses are SME's. We believe that the real game changer to our African development will be achieved through SME's, hence we need to refocus on this group.</p> <p>However, majority of our SME's, require capacity development to understand the effect of pollution in their daily businesses. Their failure to adhere to these principals will lead to dire consequences for their survival. It's noted that 70% of our SME's do not make it for various different reasons!</p> <p>Some of these are attributed to poor usage of energy, water, storage, disposal and other logistical issues leading to unbalanced business sheets that lead to failure. All these are part of our focus in our capacity development Programme as PanAAC.</p> <p>We're guided by the principals of sustainable consumption, resource efficiency, polluter pays principals, precautionary principles and good governance.</p> <p>Notably, SME's are the biggest distributors of different chemicals to the farmers on behalf of their corporate/international partner and Governments. They also offer storage and other logistical services for the farmers. The latest business trends show that more sme's are engaged in Agro processing at the county level, hence we cannot manage to ignore them.</p> <p>As PanAAC and its national chapter, Kenya Agribusiness and Agroindustry Alliance, we have partnered with KEPSA-Kenya Private Sector Alliance, UNEP, UNOPS and EU to support these businesses to achieve good practices as part of the switch Africa green Programme.</p> <p>To summarize, we all have a role to play. We all know that we must protect the environmental from pollution and adhere to Agricultural good practices. As business people, let's all do what we have to and save our environment for our businesses to spur!</p>	

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Case Study Summary

Name of Company	InPev
Name of Speaker	João Cesar Meneghel Rando
CAMPO LIMPO SYSTEM - REVERSE LOGISTICS FOR EMPTY CONTAINERS OF CROP PROTECTION PRODUCTS IN BRAZIL	
<p>Performing the environmentally correct disposal of post-consumption agrochemical containers is the mission of the Campo Limpo System, which has been operating for over 15 years, becoming one of the largest reverse logistics programs for solid waste in Brazil. As a pioneer and voluntary industry initiative, it started in 1992, and the System came into being in 2002.</p> <p>The efficiency of the system can be verified in numeric terms:</p> <ul style="list-style-type: none"> • 94% of all the primary plastic containers for agrochemical products sold in the Brazil, are properly disposed after returned by growers; • from 2002 to 2017, more than 450,000 tons of empty agrochemical containers were collected; • 572,000 tons of CO2 equivalent emissions were avoided; • 1.3 million barrels of oil were spared <p>Campo Limpo System operates under four principles or pillars: the existence of a LAW which shared responsibilities among all the links in the agricultural chain (farmers, distribution channels, manufacturing industries and government), regarding the destination of these empty containers; the INTEGRATION of all the chain links since the very beginning of the System; huge efforts on EDUCATION AND AWARENESS of each link responsibility and an INFORMATION MANAGEMENT SYSTEM that guides the decision-making process towards costs reduction and efficiency increase.</p>	

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Name of Company	Ocean Conservancy
Name of Speaker	Keondra Bills Freemyn
LEVERAGING MULTI-SECTOR PARTNERSHIP TO REDUCE OCEAN PLASTIC BY HALF	
<p>Ocean Conservancy is a U.S.-based non-governmental organization working to protect the ocean from today’s greatest global challenges. Together with our partners, we create solutions for a healthy ocean and the wildlife and communities that depend on it. For over three decades, we have been committed to reducing the amount of trash in the ocean and on shores through our annual International Coastal Cleanup. Volunteers have removed more than 100,000 tons of trash from coastlines around the world, but we realize that removal alone cannot solve this problem.</p> <p>A more systemic approach is needed, which is why in 2012, Ocean Conservancy founded the Trash Free Seas Alliance®. The Alliance unites industry, science, and conservation leaders who share a common goal for a healthy ocean free of trash. Alliance members agree to work toward the immediate goal of demonstrably reducing the amount of plastic waste leaking into the ocean annually by 50% by 2025 through a diverse portfolio of initiatives while working toward other long-term solutions for a future of trash free seas. As a signature initiative through the Alliance, Ocean Conservancy has engaged partners around the world to identify the barriers to effective waste management, including financing, and to provide a roadmap for how businesses, governments and nonprofits can come together around this issue as a key piece of solving the ocean plastic problem.</p> <p>We focus on science-based, pragmatic solutions to reducing the amount of trash in our ocean, which is why Ocean Conservancy and the Alliance created a body of research to help fill some of the knowledge gaps. Our first report, <i>Stemming the Tide</i>, focuses on land-based strategies for a plastic-free ocean, with particular emphasis on the largest global contributors. Our second report, <i>The Next Wave</i>, highlights the positive impacts of investment in waste management systems on long- and short-term pollution targets.</p> <p>To further our focus on addressing source causes of marine debris, Ocean Conservancy, the Trash Free Seas Alliance, and Closed Loop Partners, with the support of world leading brands, including The Coca-Cola Company, Procter & Gamble, 3M, PepsiCo, and plastic makers from the American Chemistry Council and the World Plastics Council, recently formed Closed Loop Oceans, an initiative to reduce marine debris through improving waste collection, recycling and reuse.</p> <p>The initiative, which will be led by Closed Loop Partners, aims to create a new funding mechanism to raise over \$150 million over five years to improve waste collection, sorting, and recycling markets in Southeast Asia. The funding mechanism will: catalyse new investments from the private sector, governments and development finance institutions; demonstrate solutions; build a pipeline of bankable waste management infrastructure projects to demonstrate investment viability; and maximize recycling profitability. This initiative aims to solve the root causes of plastics in the ocean by investing in the systems and emerging technologies needed to capture and transform waste into valuable commodities before it reaches marine environments, while also providing tangible benefits to communities.</p>	

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Name of Company	Bayer East Africa Limited
Name of Speaker	Eric Bureau
BEES AND POLLINATORS, ESSENTIAL TO AGRICULTURE, CRUCIAL TO BAYER	
<p>Bees and other pollinators are essential for global ecosystems as well as for agriculture. Therefore, bee health is a topic of key importance for Bayer. To account for this, the Bayer Bee Care Program has been established in 2012, which is being implemented by two Bayer Bee Care Centers in Germany and in the USA, and which integrates all the activities of the company related to pollinator protection and research, as well as to the stakeholder dialogue on pollinator health.</p> <p>There are three focal areas of the Bee Care Programme, pollinator biodiversity and bee nutrition, honey bee health and apiculture, and the interface between pollinators and agriculture. More than thirty scientific projects on these areas with 2-6 years of duration have been launched in collaboration with research partners in 27 countries across five continents. In these research projects, Bayer collaborates with 28 institutions, including universities, research centers, NGOs and museums and supports six MSc students (two each in Colombia, Kenya and Thailand) and four PhD students (one each in Chile, France, Germany and Kenya). Besides research activities, projects to improve foraging habitats for bees are ongoing. In US for instance, almost 1 million of individuals and 130 partnering organizations have been planting more 3 billion seeds for bee-attractive plants. In a four-year project in Latin America, bee health monitoring and beekeeper training will be established in four countries over the next four years. The overall aim of the programme is to provide long-lasting, sustainable contribution to pollinator health and to likewise contribute to farmers' profitability through optimized crop pollination, as well to foster a science-based debate among stakeholders on pollinator health topics.</p>	

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Name of Company	Palmhouse Dairies Limited
Name of Speaker	Margaret Munene
THE GLOBAL DAIRY SUSTAINABILITY FRAMEWORK	
<p>The Global Dairy Sustainability Framework represents the dairy sector’s global approach to sustainable development. Our vision is to create a sector that is committed to providing safe and nutritious dairy products from healthy cattle, while simultaneously preserving natural resources and ensuring decent livelihoods across the industry.</p> <p>The Framework has 11 key sustainability criteria, each supported by a ‘strategic intent’ which outlines the dairy sector’s aspiration for continuous improvement. We are committed to reducing Greenhouse Gas emissions, improving soil quality and soil nutrients while minimizing impacts on water availability, reducing waste and mitigating biodiversity risks. Simultaneously, we are working to ensure safe working conditions, quality products, resilient rural economies and fair treatment of animals. We currently directly track 29 members initiatives across these areas. In annual reporting, members use these criteria to quantify their progress. With these criteria, the Framework can represent and report on the delivery of the UN 2030 agenda and the Sustainable Development Goals in the dairy sector.</p> <p>The uptake of the Framework has been growing steadily and 31% of global milk production now operates under the Framework, up from 27% in the 2014/2015 period. This encompasses 35.6 million cows, 1.9 million farmers, 243 billion litres of processing and 4,492 processing plants. In the last year, the farms and farmers covered by the network have grown by 154%. The processing plants, cows and litres processed under the framework have each grown by over 10%. Last year, the framework experienced a 24% increase in the number of organisations represented. The aggregator membership option, introduced in 2015, allows countries, regions, multinationals and even small groupings in the dairy sector to register and report through one coordinating (aggregating) organisation. This has grown the size of the framework substantially. Currently, there are 5 aggregate members under the framework and they represent 231 dairy organisations.</p> <p>The Framework whilst working under the 11 key sustainability criteria and associated strategic intents, whilst connecting and allowing the sector to quantify the aggregate impact of their actions, by its very nature the whole model encourages the local identification of key issues and can address these in a way that suits that specific region/grouping...supported by the knowledge and experiences of the wider DSF membership.</p> <p>The Framework allows the dairy sector to come together and demonstrate its commitment to #beatpollution, improve sustainability and join the movement towards a pollution free planet.</p>	

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Name of Company	Account Manager, Novozymes
Name of Speaker	Erick Omollo Juma

NOVOZYMES

Novozymes works with enzymes and microorganisms, which are found in nature and used to make everyday products and solutions such as food, clothing and energy more sustainable. Novozymes works to reduce pressure on natural resources, and through this reducing Co2 emissions. Currently, when used by our customers, Novozymes saves the world some 65 Million Tons of Co2 equivalent emissions each year.

Business is a source of solutions, of know-how and of innovation. These are all essential to reducing waste and pollution, and make products and processes that are better for people and for the environment. This is especially important in emerging markets like African countries.

The use of local raw materials can help local farmers and reduce transport costs, which means less Co2 emissions. This in turn helps both large and small businesses to be more efficient and more environmentally aware.

One of the largest growing business areas for Novozymes in Africa is Brewing. By taking an approach to innovation that considers the bigger picture, we combine this and help our local customers make better products that are consistent with their needs.

With consumers becoming increasingly aware of what they eat and drink; they are demanding healthy foods, that meet their nutritional needs or requirements - for example foods that are low in sugar, fat and lactose.

Many of our African customers also want to learn from European trends in food and beverages, and want us to help them localize those trends for their consumers.

Another main area for Novozymes is the Dairy industry, where we need to be able to respond to global trends and awareness of how food is produced and how we reduce environmental impacts.

Thirdly, as a company, we need to be innovative. For example, our larger baking customers in Africa typically have their own mills and bakeries, and they want us to bring solutions that are specific to the African market and meet the needs and tastes of African consumers.

We are also exploring how to bake bread using local grains such as corn (maize), sorghum and cassava. Many of these solutions also help ensure that the bread stays fresher for longer, helping to reduce food waste.

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Name of Company	Sapat Group/Lifel
Name of Speaker	Nikhil Joshi

SAPAT GROUP SUPPORTS LIFEI

Founded in 1897, the Sapat Group is not only home to some of India’s top 10 tea brands but also to some of its oldest pharmaceutical brands. Since its inception, the group has supported numerous philanthropic and social initiatives.

In recent years our efforts have been focused on finding solutions that address two major challenges India faces- regenerating polluted and damaged ecosystems, and creating new employment opportunities.

One of the stated goals of this effort is to foster the development of new and innovative socioeconomic and financial models that can simultaneously create employment while regenerating ecosystems. Given the wide scope of this initiative, Lifel was established as an independent platform to foster cross-disciplinary research and solutions development.

Over the last several years, Lifel has brought together scientists and solutions developers from diverse fields. Findings from this research highlight some striking similarities between the organization of ecosystem networks like Arbuscular Mycorrhiza and our financial investment networks. This research continues to explore how these similarities could be leveraged to create exchangeable ecological currencies using new technologies like block chain. Exchangeable ecological currencies could not only generate new employment in the ecological sector, but also enable seamless flow of financial capital into regenerating our ecosystems. These ideas and findings have been published and presented at several international conferences on information science, economics and Mycorrhiza. More information: www.Lifel.Org, www.Sapat.com

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Name of Company	Vaisala
Name of Speaker	Seppo Halonen
VAISALA – AIR QUALITY MONITORING REINVENTED	
<p>According to the World Health Organization (WHO), more than 5.5 million people worldwide die each year as result of air pollution. Many of these deaths occur in large cities of the developing countries, where masses of people are exposed to high emissions by traffic, domestic heating and local industries. Due to continuing trend of urbanization, the situation will not improve without the new tools and actions for cleaner air.</p> <p>First step in fighting against the danger of air pollution is to understand the nature of the problem and measure the spread and concentration of pollutants. Traditionally, the governmental authorities have been measuring the air quality by using the methods defined by, for example EU Air Quality Directive and US EPA Federal Regulations. Characteristic of these methods is a high degree of accuracy and traceability obtained by using carefully defined analyzer technologies. Due to high cost and large physical size of this type of stations, they are typically installed in a small quantity, in locations requiring specific attention rather than networks characterizing the overall air quality in an area.</p> <p>In recent years, technological advance in miniature sensors, sensor networking and atmospheric modelling have made it possible to build dense networks of air quality sensors that provide a dense grid of data points giving a good understanding about the pollutant situation. By feeding the data of dense air-quality-network into the modern atmospheric model, the air quality can be assessed on city block level, as well as the air quality forecasts can be done with the same resolution.</p> <p>VAISALA has 80-year history of delivering weather observation solutions to governmental authorities and private sector worldwide. Building on this heritage, VAISALA has now set out to provide solutions also for air quality monitoring. Combining advanced sensor technologies with VAISALA’s experience in building large environmental observation networks, VAISALA offers complete solutions for obtaining, understanding and forecasting the atmospheric conditions, for instance, in polluted cities.</p> <p>The high-resolution air quality data and forecasts will help the local authorities to protect their citizens from the health effects of bad air quality. It will also provide information, for instance, for traffic management and for urban planning.</p> <p>As result of the proper awareness of our surrounding atmosphere and the quality of the air we breathe, it will help us all to create smarter cities, will affect to our behavior and finally will make our living environment healthier.</p>	

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Name of Company	IPIECA
Name of Speaker	Steven A. Flynn
THE GLOBAL OIL AND GAS INDUSTRY’S INVESTMENT TO PREVENT MARINE POLLUTION FROM OIL SPILLS	
<p>IPIECA is the global oil and gas industry’s association for environmental and social issues. It develops, shares and promotes good practices and knowledge to help the industry improve its environmental and social performance. And it is the industry’s principal communications channel with the UN.</p> <p>Following the Macondo blow-out in the Gulf of Mexico in 2010, and the earlier Montara incident in Australia, the global oil and gas industry initiated a far reaching review of both drilling safety and oil spill preparedness. Over 100 technical experts from 20 companies came together to develop the 5-year programme, which has now delivered the following new resources:</p> <ul style="list-style-type: none"> • Improved technical guidance and cooperation to prevent oil well-related accidents • New specialised equipment for tackling undersea oil well leaks. This includes transportable well-capping systems located in Brazil, Norway, South Africa and Singapore, which complement other equipment based in the USA and UK. • Fully updated guidance on the latest emergency response technology and practices available free of charge to companies, governments and other stakeholders. This includes: <ul style="list-style-type: none"> - New tools for emergency planning, which can help optimise response decision making, and enable local teams to access resources from around the globe and execute a response at any scale - The latest technical guidance also includes: <ul style="list-style-type: none"> ▪ How to use satellites, aircraft sensing and advanced information systems to find and direct resources to a major spill ▪ How to safely apply oil dispersant on and below the sea, or burn oil on the surface, or access globally available resources for wildlife response <p>This new technology has been successfully tested in several major multi-party exercises around the globe.</p> <p>And this is only one example of the many environmental and social projects in the oil and gas industry. But hopefully it serves as a powerful illustration of what can be achieved when industry works together to leverage their global resources.</p>	