BIMP EAGA Business Council (Malaysia, Sabah) to Support SABAH MAJU JAYA Programme in Developing SMART Food Security Industrial Park and New Technology Energy Sources (able to produce drinkable water) to Develop Measures to Address Poverty in Poor Districts in Sabah.

BIMP EAGA Business Council (Chairman, Sabah) Dr Raymond Alfred plan to bring investors and technologies to support Sabah Maju Jaya Development Programme. The Sabah state government introduced the Sabah Maju Jaya (SMJ) development plan to welcome Sabahans to come together and develop the state, Chief Minister Datuk Seri Hajiji Noor said.

Dr Raymond Alfred the Chairman of BIMP EAGA Business Council (Malaysia, Sabah) support this slogan as this slogan invites the Sabahan to progress together and develop the state together.



BIMP EAGA Business Council (Chairman, Sabah) Dr Raymond Alfred presented the Blue Growth Initiatives Action Plan (BGIAP) To the Chief Coordinator Officer of Sabah Maju Jaya, Datuk (Datu) Rosmadi Datu Sulai.

Recently Dr Alfred has presented the Blue Growth Initiatives Action Plan (BGIAP) that is developed by Dr Raymond Alfred and Associate Professor Ts. Dr. Rayner Alfred, founder and Head of the Creative Advanced Machine Intelligence Research Centre in Universiti Malaysia Sabah (UMS), to the Chief Coordinator Officer of Sabah Maju Jaya, Datuk (Datu) Rosmadi Datu Sulai, for further collaboration and integration into the Sabah Maju Jaya Programme.

This Blue Growth Initiative emphasizes the Four pillars of sustainable development – **economic, environmental, social and technology-energy** – so that the fisheries, aquaculture, tourism, trading and management of smart farming including operation of shipping industries in North Borneo (Sabah) Blue Economy Landscape contribute to the 2030 Agenda Sustainable Development Goals (SDGs). The Blue Growth Initiative is a strategic approach to improving the use of aquatic resources resulting in better economic, environmental, and social outcomes. Blue Growth seeks to achieve this by emphasizing: **BLUE PRODUCTION, BLUE TRADE, BLUE COMMUNITIES AND BLUE TECHNOLOGY.**

Blue Production includes the implementing ecosystem-based approaches to responsible fisheries, aquaculture and tourism management, at the same time carry out sustainable waste management approach in order to enhance sustainability and productivity. In **Blue Trade**, relevant programme will be identified and establish to support the economic development in BIMP EAGA Region (especially Sabah), with an emphasis on improving their business operation, markets and products and access to trade, through development of trade support system and certification scheme. Under the **Blue Communities**, programme will be carried out to empowering communities to take full advantage of fisheries and aquaculture in order to enhance food security and nutrition, decent work and livelihoods and resilience to shocks, including development of sustainable collection and certified processing hub. **Blue Technology** program will promote the business industry to utilise the application of latest information technology and relevant technology (related to source of energy) in order to enhance operation in Blue Production, Blue Trade and Blue Communities.



BIMP EAGA Business Council (Chairman, Sabah) Dr Raymond Alfred and Mr. Robson Soo (Managing Director of Hasil Kurnia Sdn Bhd, made a courtesy visit to Datuk Harun Ismail (Managing Director/Chief Executive Officer of Sabah oil and Gas Development Corporation (SOGDC Sdn. Bhd.) to discuss future opportunities in Sipitang, Kota Marudu and Pitas District.

BIMP EAGA Business Council (Chairman, Sabah) Dr Raymond Alfred and Mr. Robson Soo (Managing Director of Hasil Kurnia Sdn Bhd, also made a courtesy visit to Datuk Harun Ismail (Managing Director/Chief Executive Officer of Sabah oil and Gas Development Corporation (SOGDC Sdn. Bhd.) to discuss future opportunities to develop relevant industrial park in Tamparuli, Kota Belud, Kota

Marudu and Pitas District, to duplicate the Sipitang Industrial Park.

In order to support SABAH MAJU JAYA programme, Dr Alfred has shared the planning for BIMP EAGA Business Council to work with investors to further look into the poverty issues. According to the Statistics Department's Poverty Index 2022 report, the Seven poorest districts in Sabah are Tongod, Pitas, Telupid, Beluran, Kota Marudu, Kota Belud, and Nabawan. These districts mostly located at the west economic corridor of BIMP EAGA (Sabah, Malaysia). Through the leadership of Tan Sri Pandikar (Special Envoy BIMP EAGA Sabah – SEBES), Dr Raymond Alfred will initiate the cooperation business engagement and work hand in hand with the office of, Sabah Maju Jaya (on behalf of the State Government of Sabah), BIMP EAGA Business Council including other private sector, toward the development and establishment of (i) Sustainable Energy Power Plant, and (ii) SMART Food Security Industrial Park.

Under the Sustainable Energy Power Plant Program, the goals include.

- **To achieve goals of Sabah Energy Roadmap and Master Plan 2040,** which is to support the future need of electricity supply due to economic growth, expansion of industrial sector, recovery of tourism industry and the increase of population, and
- To provide **RAPID solution for the inadequate energy supply** in Sabah, especially in the Seven poorest districts in Sabah are Tongod, Pitas, Telupid, Beluran, Kota Marudu, Kota Belud, and Nabawan.
- To help the Sabah Government in achieving its goals for NET-ZERO by 2050 and Sustainable Development Goals.
- To assist in strengthening the capacity of SESB in managing energy demand in Sabah.
- To strengthening the capacity of the local youth (Young Generation of Sabahan) to be able to participate in operating and maintaining the Renewable Energy (RE) power plants in Sabah.

This kind of development is well aligned with the BIMP EAGA Vision (BEV) 2025's, and also help the Government of Sabah to achieve its goals in Sabah Energy Roadmap and Master Plan 2040.

<u>Under the SMART Food Security Industrial Park, the goals include.</u>

- To **establish SMART Food Industry Industrial Park** in the project area to create job opportunities for the surrounding community, through working closely with the government, and utilize suitable size of land to be developed as SMART Food Industry Industrial Park.
- To **create communication mechanism** among the key stakeholders, community and investors including other participants to support the Establishment of Food Security Industrial Park.
- To **review existing co-operation program** conducted by Government Agencies and other privates' sector, conducting review on policies requirement and Capacity Building Programme to ensure the SMART Food Industry Industrial Park can be developed in the project site.
- To develop spatial mapping on supply chain, to support the establishment of Digital Marketing (Al Based) Program, with the aim to support the marketing program for the aquaculture, SMART farming or mariculture in the project site into international and national market.

Involvement from the private and professional sectors should be encouraged especially in assisting the government of the day, especially addressing the latest economic development issues involving the well-being of the community such as socio-economic resources, electricity, water resources and the plan to empower the younger generation especially in the poorest districts in Sabah, Dr Alfred added. The private, professional sectors and investors should be given the opportunity, supported by the government's policy, to progress with emphasize to provide benefits to the Sabah's poorest community that can be delivered in a short time "Value-Benefit to the community over time" to ensure goals and vision of the State of Sabah, can be achieved rapidly.

BIMP EAGA Business Council (Malaysia, Sabah), JustGreens Tech Sdn Bhd and Allyssa Research Group Sdn Bhd has signed **a Letter of Intent** to explore cooperation toward the development and establishment of (i) Sustainable Energy Power Plant, and (ii) SMART Food Security Industrial Park, in Sabah. All parties agreed that MEMORANDUM OF AGREEMENT (MOA) will be prepared in 30 days to support the development and establishment of the **Sustainable Energy Power Plant (SEPP) and Smart** **Food Security Industrial Park (SFSIP)** to support future trade, industrial and commercial development within BIMP EAGA's Regional area.

The model of the project will be extended to **Palawan and Zamboanga (Philippines)** through the collaboration programme that is recently established with Engr. Cipriano Dc Barroma BEBC Palawan Chairman, and Mr. Alex A. Paglumotan, President of Palawan Economic Development Council. The collaboration programme between BIMP EAGA Business Council Malaysia (Sabah) and BIMP EAGA Business Council (Palawan) and CAMRIC, UMS focus to work together in

- Renewable Energy and SMART Farming Agriculture+Aquaculture in Palawan
- Lahad Datu Kudat Pahlawan transportation system
- Tourism Product Package and Digital Marketing Payment
- e-Halal Business Certification for Creating Hub Centre and Al Matching System.



Engr. Cipriano Dc Barroma BEBC Palawan Chairman, and Mr. Alex A. Paglumotan, President of Palawan Economic Development Council signed an MOU with Dr Raymond Alfred, witnessed by Prof. Assoc. Ts Dr Rayner Alfred, founder and Head of the Creative Advanced Machine Intelligence Research Centre in Universiti Malaysia Sabah (UMS) on 21 January 2024, in Puerto Princessa, Palawan, Philippines.

The SMART Food Security Industrial Park (using the AgBioEn & GRNfuels project-based

technology) will comprise the component of Agriculture (including Aquaculture), Bioenergy and Environment as shown in the following Diagram.

Diagram 1: Model of the AgBioEn & GRNfuels Project-based in Sabah (Proposed project to be carried out in Kota Marudu and Pitas)

- Managing farming operations to generate food for local and global markets
- Implementing regenerative farming techniques and innovative agri-tech including precision agriculture using sensors, drones, satellite, IOT and Big Data to create a best in class, sustainable agribusiness
- Generating agricultural waste as feedstock for bioenergy generation
- Harvesting woody weeds and improving land for future agricultural farming



Managing biofuels and energy generation operations, using thermal electrical chemical reformer technology to produce renewable diesel, bio-jet fuel, LPG, ash-fertiliser, food grade CO₂, water and electricity.

- Ensuring the efficient generation of biogenic, high-quality fuels that are better performing and cost competitive with fossil equivalents.
- Contributing to each Countries fuel security and future sustainable energy needs
- Supporting the Agriculture and Bioenergy divisions with the qualification and quantification of carbon offsets
- Managing a global portfolio of carbon offsetting projects using a variety of methodologies accepted by world-class offset programs including Verra Verified Carbon Standard, Australian Carbon Credit Units, California Air Resources Board and Gold Standard



Dato' Ir Vin Lee (Managing Director of JustGreens Tech Sdn Bhd) centre, with Dr Raymond Alfred (left) and Mr Rayyan Radzwill Abdullah (Right).

"Through this cooperation with BIMP EAGA Business Council (Malaysia, Sabah) and Allyssa Research Group Sdn Bhd, The Managing Director of JustGreens Tech Sdn Bhd, **Dato' Ir Vin Lee** hope to contribute his new technology (Air generating Energy Solutions and Solar Thermal Storage Solutions) similar to Cryo-thermal Phase Core Generation Technology (P5 power system) of renewable energy in BIMP EAGA Regional Area, especially **Sabah (Malaysia), including in other BIMP EAGA regional area such as Philippines, Indonesia and Brunei** in the next few years.

He expects to gather all the required fund from the international group to initiate the project development with the investment value (including feasibility study on Sustainable Energy Power Plant, and SMART Food Security Industrial Park covering the AgBioEn & GRNfuels project-based) to cater the project development and operation for the next 3-10 years.

There is an option to enable the **P5 power system** to also produce drinkable water. A 25-kw system will generate 4,000 litres of water (that may need to be filtered through a charcoal filter) in each 24-hour cycle Larger systems can produce very significant amounts of water The Humidity in the atmosphere can be as low as 4 percent to enable this process to occur but the humidity will vary the amount of water produced. It is particularly useful for agricultural applications as it can provide **water supply for the surrounding community** and other by products.