



ANNUAL GROUP REPORT MAY 2017 – APRIL 2018

BATC DEVELOPMENT BHD





REMARKS BY GROUP EXECUTIVE CHAIRMAN



Dato' Seri Mohd Safie M. Jaffri
Group Executive Chairman
BATC Development Bhd

Energy security and independence are vital to national security and to the socio-economic development of any country. The rise and fall of a nation depends on the strength and sustainability of their energy resources. Unfortunately, the passionate pursuit of energy resources and the high level of dependence on fossil fuel have caused climate change and global warming which must be addressed immediately.

I call upon all leaders in the world to work towards a mutual agreement to coordinate and unify the clean energy and biofuel policies and ensure the market's stabilization in order to secure an efficient, economic and regular supply of clean energy and biofuel to the industry and consumers while securing a steady income to producers and a fair return on capital for those investing in this industry.

BIONAS is willing and able to issue investment to meet the demand of any country for biofuel or waste to energy projects in their respective countries. BIONAS takes proactive steps by collaborating our expertise and technology with any party to make climate action a reality.



STATEMENT BY GROUP CHIEF EXECUTIVE OFFICER



ZURINA AMNAN
Group Chief Executive Officer
BATC Development Bhd

2nd May 2018

To our stakeholders:

I am pleased to confirm that BATC Development Bhd reaffirms its support of the Ten Principles of the United Nations Global Compact in the areas of Human Rights, Labour, Environment and Anti-Corruption.

In this annual Communication on Progress, we describe our actions to continually improve the integration of the Global Compact and its principles into our business strategy, culture and daily operations. We also commit to share this information with our stakeholders using our primary channels of communication.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Zurina Amnan'.

Zurina Amnan



THE TEN PRINCIPLES OF THE UN GLOBAL COMPACT

HUMAN RIGHT

1. Bionas support and respect the protection of internationally proclaimed human rights.
2. Bionas make sure that we are not complicit in human rights abuses.

LABOUR

1. Bionas uphold the freedom of association and the effective recognition of the right to collective bargaining.
2. Bionas eliminated all forms of forced and compulsory labour.
3. Bionas support the effective abolition of child labour.
4. Bionas eliminated all discrimination in respect of employment and occupation.

ENVIRONMENT

1. Bionas support a precautionary approach to environmental challenges.
2. Bionas undertake initiatives to promote greater environmental responsibility.
3. Bionas encourage the development and diffusion of environmentally friendly technologies.

ANTI-CORRUPTION

1. Bionas work against corruption in all its forms, including extortion and bribery.



INTRODUCTION

Bionas Agropolitan Technology Corridor Development Berhad or better known as BATC Development Berhad under its tradename “BIONAS” was incorporated in 2004 and the project launched in 2007 with the objective of promoting Jatropha Curcas planting for fuel production as well as to generate wealth creation within the Malaysian Economy.

The Company’s main unique selling proposition lies in its technology, supply chain, branding control, its price leading position, and the relative low entry cost of producing Jatropha biofuels by outsourcing a major portion of its supply chain costs and risks to existing yet idle multi-million dollar refineries, third party nursery partners and partnering land owners and farmers.

VISION

BIONAS envisage developing new sustainable green economic activity which will enhance economic growth in rural areas and simultaneously eradicate poverty.

MISSION

To become the leading producer of sustainable third generation renewable energy, which is environmentally friendly, does not contribute to deforestation, does not compete with food production while at the same time providing and improving socio-economic value to local communities.



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FINANCIAL REPORT

Bionas has launched the Jatropha planting program for biofuel in Malaysia in 2007 with paid up capital of RM1.0 Million. In 2011, it's paid up capital was raised to RM100.0 Million. In 2009, the company has started venturing to other countries with more than 40 countries at present.

Not included the sales by its joint venture companies in other countries, Bionas' audited sales in 2008 was RM20.0 Million, 2009 at RM32.0 Million, 2010 at RM61.0 Million, 2011 at RM72 Million and 2012 at RM88 Million.

The sales for year 2008 to 2009 were from Jatropha seeds, seedlings, fertilizer and pressing mills; and the increased sales for year 2010 to 2012 were from 'samples' of biofuel additives.

After the products registration was approved by U.S Environmental Protection Agency (U.S EPA) on January 29, 2013, the company has secured a significant amount of commercial biofuel contracts in many countries and this will contribute to a drastic increase in sales volume for year 2013 to 2015 estimated to reach up to RM5.0 Billion.

The Company has developed eight (8) new clean energy and biofuel products for diesel, gasoline, heavyfuel, jetfuel , energy and power plant industries from various feed stocks including Jatropha, Algae, Canola, Rubber seed oil, Cotton seed oil and Used cooking oil.

Bionas clean energy and biofuel products are offered at the same price or lower than the international fossil fuel prices.



ABOUT BIONAS



DATO' SERI MOHD SAFI'E M. JAFFRI, GROUP EXECUTIVE CHAIRMAN

Dato' Seri Mohd Safi'e M Jaffri, Malaysian, is the Executive Chairman of Bionas Group of Companies. He is the Chairman of the Malaysia National Member Committee of the World Energy Council (WEC).

Prior to Bionas, he has acted in the capacity of Executive Chairman and Chief Executive of several national and notable organizations within the technology, investment and property development sectors in Malaysia and Singapore. These include chairmanships in public companies listed on the Main Board of Malaysia and the property development groups in Singapore.

His vision has led Bionas to take a leading position in the biofuel sectors globally. His unique concept and methodology in developing the Jatropha plantation has not only positioned the company in the global business arena but also contributed in poverty eradication amongst rural community as one of the principle of socioeconomic empowerment.

His investment into Nano-Emulsion and Polarization in biofuel production has created a revolutionary technology to the biofuel industry providing solution to the governments in any country to streamline and implement their National Biofuel Policy. His leadership has resulted in outstanding performance of the company in many countries with good increment in annual profits.

The Company is now a Member of the Climate Technology Centre Network (CTCN), UNEP and the Business Participant of the UN Global Compact (UNGC) and one of the Signatories for Caring for Climate (a joint initiatives of UNGC, UNFCCC and UNEP).

For his remarkable efforts in green and clean energy, he has been acclaimed with award and recognition from California Takshila University for excellent work in promoting energy independency and Appreciation Letter from the United Nations Environment Programme (UNEP).



ABOUT BIONAS



ZURINA AMNAN, GROUP CEO

Zurina Amnan, Malaysian, is the Chief Executive Officer of BIONAS Group of Companies. She is the Secretary of the Malaysia National Member Committee of the World Energy Council (WEC).

Zurina has been key in mapping out the Group's core strategies. She leads the operational supply chain, and business and corporate relations of the Group.

The Company's investment into Nano-Emulsion and Polarization technology in biofuel production has created a revolutionary in energy sector towards bio-energy sustainability and security. The production cost has reduced tremendously and the use of multi-feedstock has resulted to biofuels are offered at very competitive price.

She spent many years to prove the technology by conducting various tests of performance and emission in various climate conditions in many countries. Her leadership quality has extended the company's global presence to more than 50 countries.

Her passion towards bioenergy is expressed through her offer for technological collaboration to any countries in the world to streamline and implement their National Biofuel Policy.



ABOUT BIONAS



She became one of the Climate Change Leaders for her participation during the United Nations Environment Programme (UNEP) Governing Council Global Ministerial Environment Forum (GC/GMEF) 2011 in Nairobi. She was one of the speakers at the Jatropa World Summit 2008 in Bali Indonesia, the 1st Philippine International Bio Energy Conference 2012 in the Philippines, the World Biofuel Market Conference 2012 in Rotterdam, BIT's New Energy Forum 2012 in China, the 4th International Conference on Biofuel Standards 2013 organised by the U.S National Institute of Standard and Technology (NIST) in Washington DC, the World Science Forum 2013 in Brazil and ExpoNaval 2014 organised by Chilean Navy in Chile. and the World Energy Congress in Turkey.

She has received a letter of invitation from the UN Secretary General Ban Ki-moon to attend the UN Climate Summit 2014 in New York on 23 September 2014 of which she was also invited by the UN Global Compact to chair one of the Round Table Discussions of the UN Private Sector Forum.

For her remarkable efforts in green and clean energy, he has been acclaimed with award and recognition from California Takshila University for excellent work in promoting energy independency and Appreciation Letter from the United Nations Environment Programme (UNEP).



ABOUT BIONAS



Letter from UN Secretary General Ban Ki-moon to Bionas Group Chief Executive Officer, Madam Zurina Amnan



THE SECRETARY-GENERAL

2 September 2014

Dear Ms. Amnan,

It is with great pleasure that I invite you to the Climate Summit I will host at United Nations Headquarters in New York on 23 September 2014.

Climate change, and our response to it, will be the defining issue of our time. Action today will define our ability to achieve the vision laid out in the Charter of the United Nations, from establishing the conditions for peace and justice, to ensuring dignity and equality for all people and nations, and promoting social progress and better standards of life for all. The health of our people, our economics and our planet depends upon it.

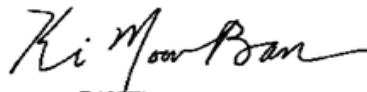
World leaders today have an unprecedented opportunity to reach a meaningful agreement and take actions on the ground that can put us on a path to sustainable prosperity. Governments have agreed to reach such a universal legal agreement in 2015. It is up to leaders from all levels of government, civil society and private sector, to scale up their actions and commitments to make this possible. This is the task before us at the Summit in September.

This is the first Summit I have hosted that brings together leaders from Government, private sector and civil society. In our increasingly interconnected world, vision and ambition must be advanced by a diverse and dynamic public-private partnership. Together, we can leverage our strengths, multiply our means, and shift the global climate trajectory. The Climate Summit will see the largest gathering to date of world leaders to catalyse climate action and to raise political ambition for a meaningful global legal agreement by 2015.

Ms. Zurina Amnan
Group Chief Executive Officer
BATC Development Bhd

I invite you to bring ambitious announcements and actions to the Summit and look forward to seeing you in September as we endeavour to provide prosperity, equity and security for this and future generations.

Yours sincerely,


BANKi-moon



ABOUT BIONAS



Bionas is a Business Participant of the UN Global Compact and one of the Signatories for Caring for Climate.

Caring for Climate



March, 2014

Dear Dato' Seri Mohd Safie M. Jaffri,

We wish to thank you and to recognize your vision and leadership in endorsing the *Caring for Climate* initiative. In addition to your valuable participation to the UN Global Compact, BATC Development Bhd is now part of the largest global business movement to address climate change, endorsed by over 350 companies from 60 countries.

The climate change crisis has risen to the top of the international agenda with growing public concern. Companies, local governments and countries have already recognized and are capitalizing on the benefits of moving towards low carbon, climate resilient and green economy pathways. With *Caring for Climate*, the UN Global Compact, the UN Environment Programme (UNEP) and the secretariat of the UN Framework Convention on Climate Change (UNFCCC) seek to (i) mobilize businesses on a global scale to take a stand for a low-carbon and climate resilient economy through their processes, products and services; as well as (ii) inform the climate change global policy agenda in order to contribute to progress in the intergovernmental climate change process.

Caring for Climate offers ongoing engagement opportunities for signatories, in particular through events, publications and collaborative action platforms. Further information on upcoming engagement opportunities can be found on the initiative's website at www.caringforclimate.org.

We welcome BATC Development Bhd to the *Caring for Climate* initiative and look forward to working with you.

Sincerely,

Georg Kell
Executive Director
UN Global Compact Office

Christiana Figueres
Executive Secretary
UN Framework on Climate Change

Sylvie Lemmet
Director
UNEP DTI

Dato' Seri Mohd Safie M. Jaffri
Group Executive Chairman
BATC Development Bhd



ABOUT BIONAS



Bionas becomes the first Private Sector Member to join the Climate Technology Centre and Network (CTCN).



23 April 2014

Re: Application for CTCN Membership
Applicant Reference: N0011
CTCN Reference: 2014/Membership06/BATC Dev. Bhd.

Dear Ms. Aminuddin,

Thank you for your application for the CTCN membership. We have completed our assessment of your application.

I am pleased to inform you that the BATC Development Bhd. has been granted the CTCN membership.

As detailed in the information note, which can be accessed on our website at (http://www.unep.org/climatechange/ctcn/Portals/50212/Guideline_CTN_membership%20application.pdf), CTCN members are invited to play a meaningful role in information sharing and capacity building, to provide as appropriate, technical assistance in response to country requests (response projects), and participate in outreach and networking activities.

I look forward to working in close collaboration with the BATC Development Bhd. toward serving the interests of the developing countries by providing high quality and diverse expertise in the transfer of climate technologies.

Yours sincerely,

Jukka Uosukainen
CTCN Director

Ms. Norazlina Aminuddin
BATC Development Bhd.
No 87-1 1st Floor, Jalan Raja Mahmud
Off Jalan Raja Abdullah
Kampung Baru, 50300
Kuala Lumpur
Malaysia



Climate Technology Centre and Network
UN City, Marmorvej 51, 2100 Copenhagen, Denmark
UNEP CTCN webpage: www.unep.org/climatechange/ctcn
Email: ctcn@unep.org



ABOUT BIONAS



Bionas becomes the first Private Sector Member to join the Climate Technology Centre and Network (CTCN).

 CTCN <small>CLIMATE TECHNOLOGY CENTRE & NETWORK</small>		The Climate Technology Network (CTN) Membership Application Assessment (New Application)	
Application Data			
To be completed by officer completing Part I Submission completeness			
Reference	N0011	Applicant Organization	BATC Development Bhd.
Contact person	Dato' Seri Mohd Safie'M. Jaffi Ms Norazlina Aminuddin	Contact email	safie@bionas.com.my norazlina@bionas.com.my
Type of institution	Private Sector Organization		
Country of Registration	Malaysia		
Date of receipt of application	24 February 2014 (initial submission)/ 14 April 2014 (additional information)		
Assessment due date	As the additional information was provided on 14 April, later than the assessment due date, the assessment period was extended.		
Note	As the additional information was provided		
Technical Appraisal			
To be completed by officer completing Part II Substantive assessment			
Recommendation	Grant membership <input checked="" type="checkbox"/>	Decline membership <input type="checkbox"/>	
Thematic area of expertise	Mitigation <input checked="" type="checkbox"/>	Adaptation <input type="checkbox"/>	
Mitigation sectors	Energy, Transport (biofuel)		
Adaptation sectors	N/A		
Service areas	Investment, Technology development and transfer, Collaboration in innovation, Capacity building, Knowledge sharing		
Geographical scope	Asia, LAC, Africa		
Summary of assessment	<p>BATC Development Bhd was incorporated in 2004. Since 2007, the organization has invested in plantation and processing of <i>Jatropha</i> and blending, storage and distribution of <i>Jatropha</i> based biofuel for industry and transport extensively in Southeast Asia and also in LAC and African countries. The organization has established Joint Ventures in 40 countries internationally for cultivation, processing and/or storage and distribution of the products. The organization produces eight additives/biofuel products transport, power generation and industrial applications with certified quality.</p> <p>The financial stability was demonstrated by statements for fiscal years 2010, 2011 and 2012.</p> <p>The organization commits to the mission of the CTCN and to abide by the CTCN code of conduct.</p>		
Date of recommendation	17 April 2014		
Recommendation by	Yuko Nagata, Interim Network Manager		
Final Decision			
To be completed by the Director of the CTCN or delegated officer			
Final decision	Grant membership <input checked="" type="checkbox"/>	Decline membership <input type="checkbox"/>	
Comments			
Date of decision	23 April 2014		
Decision by	Jukka Uosukainen, Director CTCN		
Signature			



ABOUT BIONAS



Speaker Invitation to Bionas Group Chief Executive Officer, Madam Zurina Amnan for World Energy Congress – Istanbul 2016



Istanbul 2016 Organising Committee

World Energy Council Turkish Member Committee
Cinnah Cad. No:67/15, 06680, Çankaya-Ankara, Turkey
T (+90) 312 442 82 78 – 79 | F (+90) 312 441 9610
www.wec2016istanbul.org.tr | info@wec2016istanbul.org.tr

World Energy Council

5th Floor, 62 – 64 Cornhill, London EC3V 3NH, UK
T (+44) 20 7734 5996 | F (+44) 20 7734 5926 | www.worldenergy.org

Ms. Zurina Amnan
Group CEO
Bionas
15 - 3, Jalan Seri Rejang,
Rampai Business Park South,
Taman Sri Rampai,
53300 Setapak,
Kuala Lumpur
Malaysia

2nd December 2015

Dear Ms. Amnan,

World Energy Congress – Istanbul 2016 Speaker Invitation

On behalf of both the Organising Committee for the 23rd World Energy Congress and the World Energy Council, it is our great pleasure to invite you to speak at the next Congress, to be held in Istanbul, Turkey from 9 – 13 October 2016.

Running since 1924, the triennial World Energy Congress is the World Energy Council's global flagship event and offers a unique platform for global energy leaders to challenge conventional thinking and explore new strategies. The previous Congress in Daegu in 2013 attracted over 7,500 delegates from 123 countries and included more than 50 government ministers.

Under the theme of "Embracing New Frontiers", the 23rd World Energy Congress takes place at a moment of critical transition in the energy industry and in a world of extraordinary change. This Congress will be a milestone for global dialogue and consensus building to ensure we collaboratively address the World Energy Trilemma and deliver practical solutions into a better energy future.

The Congress programme will include a number of prominent sessions and side events spread over the four days. We would be keen to discuss your possible speaking involvements in these events. Please let us know your key contact and we would be happy to provide further details.

A separate invitation will follow from the Turkish government. Please note that this invitation is non-transferable.

We sincerely hope you will accept this invitation to participate in the 2016 Congress. For further information please do not hesitate to contact us directly. The key contact for speaking involvement is Mrs. Charlotte Kidd at kidd@worldenergy.org.

Sincerely yours,

Hasan Murat Mercan
Chairman
Istanbul 2016 Organising Committee

Christoph W. Frei
Secretary General
World Energy Council



ABOUT BIONAS



Bionas Group Executive Chairman, Dato' Seri Mohd Safi'e M. Jaffri
appointed as Chairman of the Malaysia Member Committee of the
World Energy Council

**WORLD
ENERGY
COUNCIL**

Dato' Seri Mohd Safi'e M. Jaffri
Group Executive Chairman
BATC DEVELOPMENT BERHAD (Company no. 653565-U)
(Bionas Agropolitan Technology Corridor)
15-3, Jalan Seri Rejang
Rampai Business Park South
Taman Sri Rampai, Setapak
53300 Kuala Lumpur, Malaysia

World Energy Council
62-64 Cornhill
London EC3V 3NH
United Kingdom

T (+44) 20 7734 5996
F (+44) 20 7734 5926
info@worldenergy.org
www.worldenergy.org
[@WECouncil](https://twitter.com/WECouncil)

13 September 2016

Dear Mr. Dato' Seri Mohd Safi'e M. Jaffri,

We are delighted to learn that you have taken over the position of Chair of the Malaysia Member Committee of the World Energy Council. The role which you are taking on is vital to the continuing success of the Council and we look forward to working in close collaboration with you over the years to come.

It would be helpful to the Council's London Office if you could provide us with a brief biography and a photo for our files. Please forward to Sophie Rose, Manager, Member Services at srose@worldenergy.org.

Again, congratulations upon your appointment.

Sincerely,

Dr. Christoph Frei
Secretary General
World Energy Council



ABOUT BIONAS



Bionas Group Chief Executive Officer, Madam Zurina Amnan
appointed as Secretary of the Malaysia Member Committee of the
World Energy Council

Zurina Amnan
Group CEO
BATC DEVELOPMENT BERHAD (Company no. 653565-U)
(Bionas Agropolitan Technology Corridor)
15-3, Jalan Seri Rejang
Rampai Business Park South
Taman Sri Rampai, Setapak
53300 Kuala Lumpur, Malaysia

**WORLD
ENERGY
COUNCIL**

World Energy Council
62-64 Cornhill
London EC3V 3NH
United Kingdom
T (+44) 20 7734 5996
F (+44) 20 7734 5926
info@worldenergy.org
www.worldenergy.org
@WECouncil

13 September 2016

Dear Ms. Zurina Amnan,

We are delighted to learn that you have taken over the position of Secretary of the Malaysia Member Committee of the World Energy Council. The role which you are taking on is vital to the continuing success of the Council and we look forward to working in close collaboration with you over the years to come.

We would be pleased to introduce ourselves over a call in the near future, to exchange views on the opportunities and challenges that lay ahead. Please contact Sophie Rose, Manager, Member Services at srose@worldenergy.org to advise when would be a convenient time to participate in such a call. We enclose an orientation pack that will serve as an introduction to the Council in the meantime.

It would be helpful to the Council's London Office if you could provide us with a brief biography and a photo for our files. Please forward to Sophie Rose, Manager, Member Services at srose@worldenergy.org.

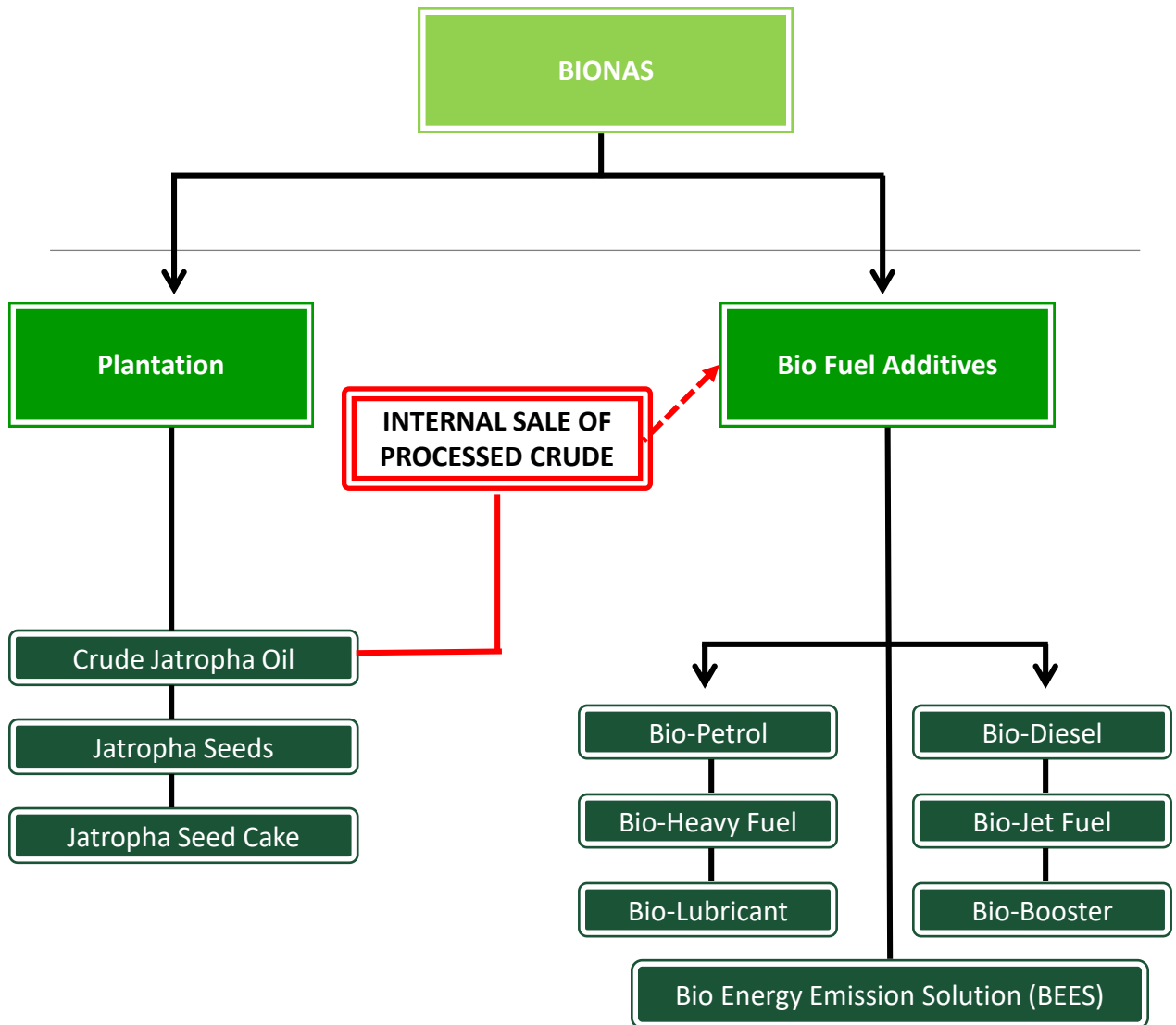
Again, congratulations upon your appointment.

Sincerely,

Dr. Christoph Frei
Secretary General
World Energy Council



BUSINESS OVERVIEW



Our core businesses are:

- Jatropha Plantation
- Production Of Bio-Fuel Additives through Nano-Emulsion & Polarization Technology.

All of our Crude Jatropha Oil (CJO) are use for our internal consumption and further processed as ingredients for our bio-fuel additives.

JATROPHA FEEDSTOCK FAST FACTS



JATROPHA CURCAS

PROPERTIES	JATROPHA
Climate Type:	Tropical
Seed Oil Content:	30% - 37%
Average Annual Yield / Hectare (1 st –3 rd Year):	6.0 Mt
Average Annual Yield / Hectare (4 th Year Onwards):	12.0 Mt
Lifespan:	50 Years
Harvest Period:	Monthly after 6 months
Crude Oil Price / Mt	USD 400
Byproducts	Seed Cakes i.e: Biomass Briquette



PRODUCT OVERVIEW



PRODUCT OVERVIEW:

The table below entails the products and its respective technology type and stages:

#	Products	Technology & Stages		
		Stage 1	Stage 2	
		Polarization	Nano-Emulsion	Nano-Emulsion & Polarization
1	B20 (W) Bio-Petrol	-	Yes	-
2	B20 (M) Bio-Petrol	Yes	-	-
3	B20 (J) Bio-Diesel	-	-	Yes
4	B25 Bio-Heavy Fuel	Yes	-	-
5	Super Bio-Jet Fuel	Yes	-	-
6	Bio Energy Emission Solution (BEES)	Yes	-	-
7	Bio-Tablet Booster	Yes	-	-
8	Bio-Superlube Additive	Yes	-	-

Polarization

Generally and briefly describing, Polarization Technology allows for alignment of positive and negative ions of elements and this is achieved under high pressure and highly magnetic environment. This further allows for the elements to form stable bonds with each other. This technological breakthrough enables the production of new types of additives that when it is blended with fossil fuels and other elements creates a stable mix of a 2nd generation renewable fuels.

Nano-Emulsion

Nano-emulsion Technology is a chemical process of blending fossil fuel, bio-feedstocks and specific types of chemical which in-turn reacts and mix to form stable bonds with each other.



TECHNOLOGY & IMPLEMENTATION CONCEPT



The key success factor for Bionas lies in the application of its technology for the production of bio-fuel as well as the implementation concept in developing its plantations.

The applied technology and implementation concept is proven to be effective and has been the driving factor for the growth of the Company.

With this technology, Bionas managed to make minimum savings of US\$30 million on transesterification refinery and this saving is channelled back to the farmers by offering good price for their harvest.

Applied Technology For The Production of Bio-fuels

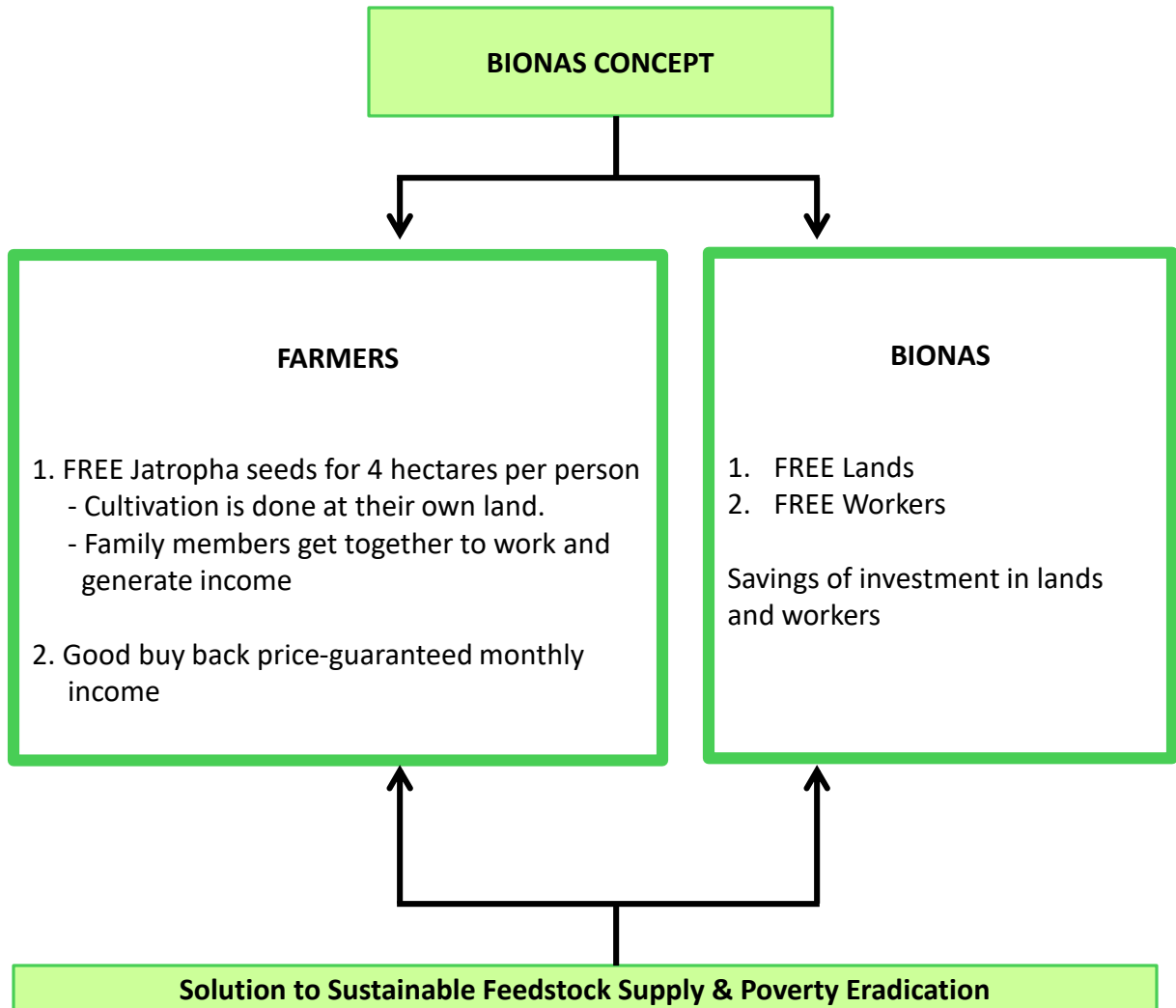




TECHNOLOGY & IMPLEMENTATION CONCEPT



Implementation Concept For Plantations

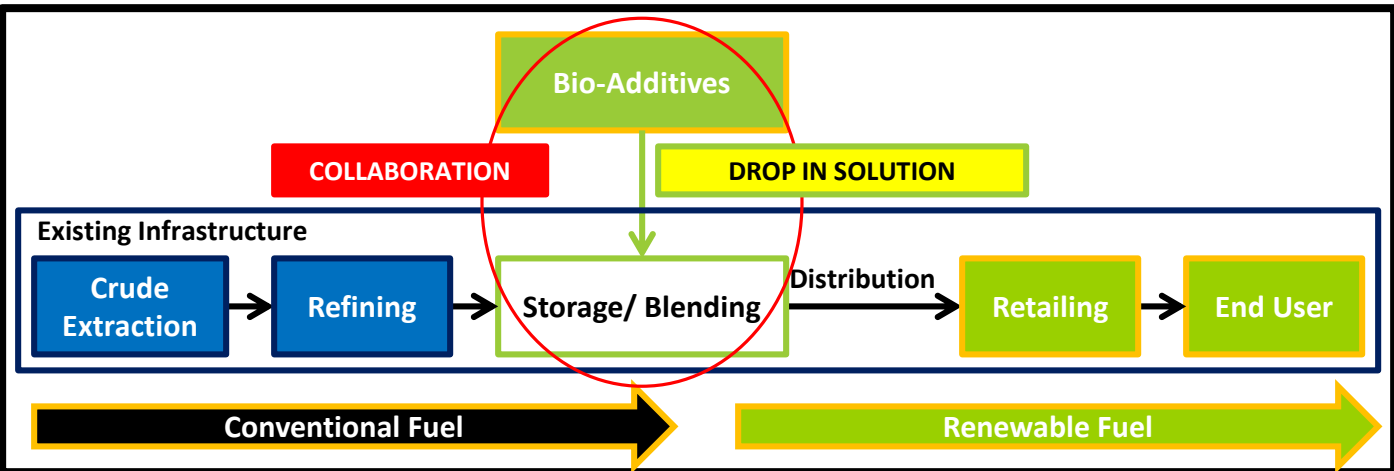




TECHNOLOGY & IMPLEMENTATION CONCEPT



Implementation Concept For Bio-Fuel Additives



We acknowledged the fact that to build new infrastructures and replacement of engines and machineries specifically for bio-fuels are cost-intensive and impractical. We strive to find ways of conducting businesses using smart approaches and most of our R&D work centers on finding ways to minimize or eliminate the impracticalities.

Today, we have successfully formulated and synthesized a very stable mixture of bio-fuels with Nano Emulsion and Polarization Technology which requires blending & storage tanks to mix bio components and fossil fuels. Even though most of our additives are Jatropha based, we have the technology to formulate “Drop-In” additives derived from other types of feedstock such as used cooking oil, canola, cotton seed oil, algae etc.

As bio-fuels and renewable fuels are comparatively new to existing fossil, we do not wish to be seen as competitor to the oil majors. Instead we opt and prefer to **collaborate** with the oil majors, national oil and energy companies to further enhance their existing products and turning them into renewable fuels. We firmly believe that through collaboration with the oil majors we would be able to speed up the promotion and use of renewable energy, minimize or eliminate investments required for infrastructure setups and utilizing the oil majors’ industry knowledge & experience, retailing, and supply chain. Through our technology, we believe this could also reduce the use of fossil thus prolonging the life of oil reserves.



BIONAS PRODUCTS REGISTRATION, CERTIFICATION & TEST REPORTS



The Company's products registration with U.S. Environmental
Protection Agency (EPA).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 29 2013

OFFICE OF
AIR AND RADIATION

Bio Oil National Corporation
Ms. Zurina Amnan
Group Chief Executive Officer
1525 Long Beach Blvd.
Long Beach, CA 90813

Dear Ms. Amnan:

Pursuant to your September 6, 2012 notifications, the following fuel additives have been registered per 40 CFR 79.23 (our internal identification number precedes the name):

267620001	Additive M30 Petrol
267620002	Additive B10 - B30 Bio-Diesel
267620003	Bio-Booster Tablet
267620004	Bio-Booster Liquid

Note that per 40 CFR 79.21(f) you would be required to notify us in writing if certain information in your notification were to change. In addition, note, that with your notification, you have provided assurances that you will not represent, directly or indirectly, in any notice, circular, letter, or other written communication, or any written, oral or pictorial notice or other announcement in any publication or by radio or television, that registration constitutes endorsement, certification, or approval by any agency of the United States.

Please call (202) 343-9648 if you have any questions.

Sincerely,

Byron J. Bunker
Director
Compliance Division

Internet Address (URL) • <http://www.epa.gov>

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 100% Postconsumer, Process Chlorine Free Recycled Paper



Certificate of Fuel Additive Registration from Department of Energy,
Ministry of Energy, Philippines to Bionas Philippines Corporation



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF ENERGY

Certificate of Fuel Additive Registration

This is to certify that the Department of Energy has duly registered **B30 & M30**, a Diesel/Gasoline Fuel Additive to **BIONAS PHILIPPINES CORPORATION** as Trader of said additive in accordance with the provisions of Section 27, Chapter 3 of R. A. 8749 otherwise known as "The Philippine Clean Air Act of 1999".

This Registration can be revoked anytime for non-compliance with the Department's reportorial requirements and failure to adhere with other conditions prescribed by the Department.

Issued this 31st day of October 2013, at the Department of Energy, Energy Center, Fort Bonifacio, Taguig City, Metro Manila.


CARLOS JERICHO L. PETILLA
Secretary

Control No. : CFAR 13-08-206/FCF-T





Permanent Registration for B30(M) Bio-Petrol and B30 Bio-Diesel issued by
the Ministry of Energy, Philippines for
Bionas Philippines Corporation



Republic of the Philippines
DEPARTMENT OF ENERGY

Dr. Sharif Adzhar H. Sarahadil
Chairman & CEO
Bionas Philippines Corporation
Bgy. East Poblacion, Salug
Zamboanga del Norte

Dear Dr. Sarahadil:

This refers to your application for registration of B30 & M30 fuel additive which you intend to market to your clients.

In view of the substantial compliance and merits of your application, and without prejudice to other requirements of the Department of Energy pursuant to the provisions of Section 27, Chapter 3 of R. A. 8749 (*The Philippine Clean Air Act of 1999*), **B30 & M30** fuel additive is hereby granted Permanent Registration under your company name with **CFAR No. 13-08-206/FCF-T** effective from the date of issuance indicated herein.

This Permanent Registration is subject to your compliance of the following conditions:

- 1) Consistency with the guaranteed performance of the product;
- 2) B30 & M30 should only be used as an additive and not for any other purposes;
and,
- 3) Submission of and full compliance with the quarterly reportorial requirements (Schedule VII-A).

Non-compliance to any of the above conditions shall automatically result to the revocation of said Permanent Registration.

This registration should not in any way be construed as an endorsement of the product nor be used for advertisement and commercial purposes.

Very truly yours,


CARLOS JERICO L. PETILLA
Secretary



Republic of the Philippines
DEPARTMENT OF ENERGY

IN REPLYING PLS CITE:

SOE-JLP-13006034



Energy Center, Merritt Rd., Fort Bonifacio, Taguig City, Metro Manila 1201 Philippines
Tel. Nos.: Trunkline (632)840-1401; Telefax (632) 840-2067; (632) 840-2138; (632) 840-4244; Fax (632) 840-1731; Hotline (632) 840-2130
Website: www.doe.gov.ph E-mail: info@doe.gov.ph

<h2 style="margin: 0;">LAPORAN PEMERIKSAAN KENDERAAN</h2>		(VIR PUSPA027)																																																							
<p style="margin: 0;">Butir-butir kenderaan motor yang dijana dalam laporan ini berdasarkan tarikh yang diperiksa adalah termasuk/mematuhi kehendak/kehendak pemertuaan</p>		** PUSPA ** NO. KEPUTUSAN: A 258768																																																							
NAME: SGA HYDROTE MALAYSIA SDN.BHD ALAMAT: NO.3 JLN. GEDDIO HULU 28/39 HICOR 3RD. EST SECTOR C 68406 S.AJAM BELANDU		A1904488																																																							
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Seluruh diperiksa dan diuji dengan komponen-komponen ini adalah:-
 SPROCKETMETER - DIESEL -

[illegible]

BEFORE USING BIO-BOOSTER TABLETS

KEPUTUSAN									
KENDERAAN					TRILER				
SAKIDAN ATAS	GELINCIR BSH (A1)	BREK	L	R	I	P	SAKIDAN ATAS	BREK	SAKIDAN BAWAH
L	L -1.7 k/s	A1	59	59	18				
		A2	46	47	23				
		A3	---	---	---				
METER LAJU	ARAS BUNYI	ASAP	X	70					
SUSPENSI	LAMPU PUNCAK	SAKIDAN BAWAH					PENDINGIN UDARA		NOVELING
A1	L R								
A2	---	L							

BEFORE SMOKE 70%

PUSPAKON

PETUNJUK

: (X) dan simbol mengindikasikan :
 # : NOVELING 17000 RPM JALAN NO. 204
 A1 : Gender 1, A2 : Gender 2, A3 : Gender 3, A4 : Gender 4
 L : Rodir, R : Kanan, I : Inbalance, P : Berk. Tangan

**** PUSPA #3A-001-2014 / 15:39:30 / 504812/15/L08 BERAT 4/L08 BERAT 5/250758/11408030804 *******

PERHATIAN UNTUK PEMELIK

TAKDIR PERHATIAN SAK BERHONGA

Nota : (Revisi) ini hasil dari pemeriksaan dengan sistem uji otomatis

AFTER USING BIO-BOOSTER TABLETS

Surat Nomor 1 Juli 2014, "Terkait imbauan untuk gerai belahang akan dihilangkan sebagai liris atau pagar. Sila pastikan terik gerai belahang terkendali anda disatukan dengan baki sebagai terik lamau".

KUTAI LORONG - 2014

KEPUTUSAN									
KENDERAMAN					TRELER				
BAWAHAN ATAS	DELICOR BISI (A)	BIREK	L	R	I	P	BAWAHAN ATAS	BIREK	BAWAHAN BIRAH
			
			A	..	..	..
			A	..	..	..
			A	..	..	..
			A	..	..	..
METER LAUJ	ANAS BUNJI	<div style="border: 2px solid red; border-radius: 50%; padding: 5px; display: inline-block;"> ASAP L 4 E </div> AFTER SMOKE 4%							
SUSPENS	L R	LAMPU PAKSIK	BAWAHAN BIRAH				METER TEKSI	PENDUNG UMAMA	NGULPO
	A	..	..				
	A	..	..				

PENERIMAAN SEKULA KENDHENDAO

**** PUSPA 04-JUN-2014 / 18:08:13 / 5680531/24/LR/0 BERAT 4/LR/0 BERAT 4/250615/114680533367 *******

PERHATUAN UNTUK
TARIKH PENERIMAAN 04-JUN BERGAGA

PETUALUK

L LULUS # : Ulan lina disatukan mengikut the
 M BIRAH 1700-1900 berikuk ke, dia
 X GAGAL A1: Gander / A2: Gander / A3: Gander / A4: Gander /
 T KAD DULU L: KDR, R: Kanser, I: Imbalance, P: Baki Terang

04-JUL-2014

08:00 AM

Note: Beras ini hendaklah diambil-kan bersama atau berdekatan semasa



Product: Bionas Bio-Booster Tablet

Emission Test on Commercial Bus

Before: 70%

After : 4%



Test result in the Philippines with ZERO EMISSION, using Bionas B30(M) Bio-Petrol.

PERFORMANCE TESTING OF BIOFUEL BIONAS PRODUCTS

TESTIMONIAL FORM

Product's Name : M30 BIO PETROL
Date : January 29, 2014
Driver's Name : Jessie M. Ticon
Vehicle ID : 0287
Model : Barako Kawasaki
Type of Engine : Motor - Kawasaki
Testimonial Ref: Number : test bionas 01/30/2014

OBSERVATION DATA:

NO.	PARAMETERS	INITIAL	AFTER	REMARKS
1	MILEAGE(KM)			
2	FUEL QUANTITY (L)	3 liters		
3	EMISSIONS (observation)	0.20	0.00	100% Emission Reduction

Before
20;2/01/24 21:28
HC Ppm 3164
CO % 0.20
CO₂ % 7.0
O₂ % 11.2
NO Ppm 1
λ 1.64
RPM 0
T oil 37.1

20;2/01/24 21:28
HC Ppm 3164
CO % 0.20
CO₂ % 7.0
O₂ % 11.2
NO Ppm 1
λ 1.64
RPM 0
T oil 37.1

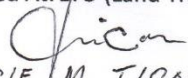
After
20;2/01/24 23:12
HC Ppm 42
CO % 0.00
CO₂ % 0.0
O₂ % 20.7
NO Ppm 0
λ 0.00
RPM 0
T oil 36.1

20;2/01/24 23:12
HC Ppm 42
CO % 0.00
CO₂ % 0.0
O₂ % 20.7
NO Ppm 0
λ 0.00
RPM 0
T oil 36.1

COMMENTS:

I am Jessie M. Ticon a tricycle driver. The product of the BIONAS Company is the best. 100% zero (0) carbon result from the emission test. Thank you so much to the BIONAS Company.

Conducted At: LTO (Land Transportation Office), Tagbilaran City, Bohol, Philippines


JESSIE M. TICON
Signature over Printed Name



Certificate of Analysis on Bionas Bio-Booster Tablet



NANOC SDN BHD (659613-D)

No. 78 Jalan Nova U5/N, Seksyen U5, Subang Bestari,
40150 Shah Alam, Selangor, MALAYSIA
Tel No : +603-7832 2011 Fax No : +603-7832 2311
Email: our.contact@nanoc.com.my



MS ISO/IEC 17025
TESTING
SAMM NO. 413

CERTIFICATE OF ANALYSIS

Our Reference : NC/14/O&G/PET/TRI/325/B1(1-2)
Page : 1 of 2
Customer Address : BATC DEVELOPMENT BHD
60-1, Jalan Usahawan 7
Wangsa Biz Avenue
Setapak, 53300 Kuala Lumpur
Tel No. : 03-4142 2218
Fax No. : 03-4142 2208
Attention To : Ms. Azlina
Sample Description : 1 Oil Samples
Sampling Date : 29/05/2014
Sample Marking : Oil
Laboratory ID : NC/14/O&G/PET/TRI/325/B1(2)
Date Received : 29/05/2014
Date Completed : 27/06/2014

Sample 2 : Bionas Bio-Booster Tablet in Petrol Ron 95

No.	Test	Method	Units	Results	Quality Specification
				Sample 2 : Bionas Bio-Booster Tablet in Petrol Ron 95	Min/Max Limit
1	#Copper Corrosion	ASTM D 130	-	1a	N/A
3	#Sulphur	In House by XRF Method	wt %	ND (< 0.01)	N/A
4	#Lead, Pb	ASTM D5185	ppm	4.04	N/A
5	#Flash Point	ASTM D93	°C	38	N/A
6	#Density @ 15°C	In House by Gravimetric Method	g/ml	0.7652	N/A
7	#Pour Point	ASTM D97	°C	-27	N/A

Remark: -

ASTM : American Society For Testing and Materials

#Test Method :Not accredited

Approved by

Name: Junaitun Alfarahim Jaafar

Department : Laboratory

Date: 27 June 2014

The above analysis is based solely on the sample submitted by customer.

The certificate shall not be reproduced except in full without the written approval of the laboratory.

End of Report



Certificate of Analysis on Bionas SuperLube Additive



NANOC SDN BHD (659613-D)

No. 78 Jalan Nova U5/N, Seksyen U5, Subang Bestari,
40150 Shah Alam, Selangor, MALAYSIA
Tel No : +603-7832 2011 Fax No : +603-7832 2311
Email: our.contact@nanoc.com.my



MS ISO/IEC 17025
TESTING
SAMM NO. 413

CERTIFICATE OF ANALYSIS

Our Reference : NC/14/O&G/PET/TRI/325/B1(1-2)
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60-1, Jalan Usahawan 7
Wangsa Biz Avenue
Setapak, 53300 Kuala Lumpur
Tel No. : 03-4142 2218
Fax No. : 03-4142 2208
Attention To : Ms. Azlina
Sample Description : 1 Oil Samples
Sampling Date : 29/05/2014
Sample Marking : Oil
Laboratory ID : NC/14/O&G/PET/TRI/325/B1(1)
Date Received : 29/05/2014
Date Completed : 27/06/2014

Sample 1 : Bionas Superlube Additive

No.	Test	Method	Units	Results	Quality Specification
				Sample 1 : Bionas Superlube Additive	Min/Max Limit
1	#Copper Corrosion	ASTM D 130	-	1a	N/A
2	#Rust Test:	ASTM D 665	PASS/FAIL		
	Distilled Water			PASS	N/A
	Sea Water			PASS	N/A
3	#Kinematic Viscosity @ 40°C	ASTM D445	cSt	84.56	N/A
4	#Kinematic Viscosity @ 100°C	ASTM D445	cSt	8.75	N/A
5	#Viscosity Index	ASTM D2270	-	72.00	N/A
6	#Total Acid Number	ASTM D664	mgKOH/g	0.66	N/A
7	#Total Base Number	ASTM D2896	mgKOH/g	3.21	N/A

Remark: -

ASTM : American Society For Testing and Materials

#Test Method : Not accredited

Approved by

Name: Junaitun Alfarahim Jaafar
Department : Laboratory
Date: 27 June 2014

The above analysis is based solely on the sample submitted by customer.

The certificate shall not be reproduced except in full without the written approval of the laboratory.

Continue



Tests conducted by Lloyd Aereo Boliviano S.A., Bolivia on Bionas Bio-Jet Fuel with 22% savings on Jetfuel consumption.



Test on Boeing 727-200

22% savings on fuel consumption

75% lower vibration

85% emission reduction

12 °C lower engine oil temperature



LLOYD AEREO BOLIVIANO S.A.

GGCBB/0009/SI00/14

PRUEBAS REALIZADAS PARA LA EMPRESA "BIONAS"

CB 21-05-2014-hr 14,00-CBB-
Banco de Prueba de corrida de Motores
Prueba motor Aeronave 727-100
Motor P&W JT8D-9A
Serial Number 654908
Prueba 1 Fuel JP1 Normal

Temp. 26 °C.....P/P 1,79
IDLE.....
N1.....32.....87
EGT.....370.....460
N2.....56.....91,5
F/F.....800.....5100
Oil Temp.....99.....72
Oil Press46.....48

CB 21-05-2014-hr 15,00-CBB-
Banco de Prueba de corrida de Motores
Prueba motor Aeronave 727-100
Motor P&W JT8D-9A
Serial Number 654908
Prueba 2 Fuel JP1 con aditivo BIONAS jet fuel

Temp. 26 °C.....P/P 1,79
IDLE.....
N1.....32,5.....88
EGT.....368.....451
N2.....56.....92
F/F.....800.....5000
Oil Temp.....99.....60
Oil Press46.....48

Nota.- Solo se corrió el motor en Prueba de IDLE y Potencia Parcial.

Personas Responsables:

Tec. Freddy Mendoza Argote
Jefe Dpto. Mantenimiento

Tec. Osvaldo Muñoz Valdivia
Jefe División Motores

Cochabamba, 21 de mayo del 2014

DIRECTORIO EJECUTIVO
GERENCIA GENERAL

Ax. Guillermo Kytman # O-1691
Casilla 132
SITA: CBBGGLB
Tells.: (591) (4) 425-1270/425-0736
Fax: (591) (4) 425-0766
Cochabamba - Bolivia

cc: MM, GG, MO, File, Cron

82609992



Super Bio-jetfuel Test Report by Refinacion, Bolivia



N°	PRUEBA	METODO	UNIDAD	RESULTADO
INFORME DE ANALISIS RG-0006-B-PG-3-LAB-0001				
PRODUCTO: BIONAS SUPER BIO-JET FUEL PROCEDENCIA: LAB FECHA DE MUESTREO: 2014-06-17 / 00:00 REFERENCIA: RCBA-GDV MUESTRA: N°: 2730				
INFORME DE ANALISIS RG-LAB-0006-A			ANEXO A PG-3-LAB-0009	
OBSERVACIONES:				
<div><div></div><div><div>SBR/sbq</div><div>Susana Gareca O. Analista</div></div><div><div>PUMAG</div><div>Nelson Solares Ortega RCBA/LAB Cochabamba</div></div></div>				

Laboratorio Refinería "Gualberto Villarroel" Av. Petrolera km. 6 Telf. (591)4 4762300 Cochabamba - Bolivia

Pág. 1 de 1



Tests conducted by Makassar State University, Makassar, Indonesia
on Bionas Bio-Booster Tablet with 20-30% savings on fuel
consumption.

UNIVERSITAS NEGERI MAKASSAR
TEST REPORT FOR BIONAS TABLET

Specification	1		2		3		4	
Additive Product	Bionas Tablet		Bionas Tablet		Bionas Tablet		Bionas Tablet	
Inspection Date	1/20/2015		1/31/2015		2/7/2015		2/24/2015	
Type of Engine	Diesel Engine		Diesel Engine		Gasoline Engine		Gasoline Engine	
Engine Capacity	2800 CC		2500 CC		1500 CC		1500 CC	
Type of Pump	Injection pump inline		-		-		-	
Type of Governor	Governor Vacuum		-		-		-	
Fuel System	-		Common rial		Carburetor		Electronic Fuel Injection (EFI)	
Condition	car work without extra load		Long Distance Drive		car work without extra load		car work without extra load	
Inspection Items	Solar	Solar +	Solar	Solar +	Premium	Premium +	Premium	Premium +
	(Diesel Fuel)	Bionas Tablet	(Diesel Fuel)	Bionas Tablet	(Gasoline Fuel)	Bionas Tablet	(Gasoline Fuel)	Bionas Tablet
Fuel Consumption	194 km= 14 L	194 km=14 L		Saving 20 -30%		Same without Bionas Tablet		Saving 20 -30%
Power	-	+	-	+	-	+	-	+
Acceleration	-	+	-	+	-	+	-	+
Emission/Smoke	50%	18 - 37%	+	-	+	-	+	-
Engine Sound	+	-	+	-	+	-	+	-

Note:

A. Inspection result rest

- = Decline
- + = Increase

B. Conclusion

1. For diesel engine fuel consumption efficiency, it needs a treatment in the injection pump (manual)
2. For fuel system with carburetor, fuel consumption is the same without using bionas tablet.

Makassar, 31st March 2015
Head of Performance Test

Haruna HL
Expert of Automotive Engineering



Tests conducted by Makassar State University, Makassar, Indonesia
on Bionas Super Bio-Diesel 20-30% savings on fuel consumption.

UNIVERSITAS NEGERI MAKASSAR
TEST REPORT FOR BIONAS SUPER BIODIESEL ADDITIVE

Specification	1		2	
Additive Product	Super Bio Diesel		Super Bio Diesel	
Inspection Date	2/13/2015		2/15/2015	
Type of Engine	Diesel Engine		Diesel Engine/Heavy Duty	
Engine Capacity	2800 CC		4000 CC	
Type of Pump	Injection pump inline		Injection pump inline	
Type of Governor	Governor Vacuum		Industrial	
Fuel System	-		-	
Condition	car work with load (Climbing)		Constant	
Inspection Items	Solar (Diesel Fuel)	Solar + Super Bio Diesel	Solar (Diesel Fuel)	Solar + Super Bio Diesel
Fuel Consumption	150 km= 14 L	150 km=10 L	17L/hour	14L/hour
Power	-	+	-	Same without Super Bio Diesel
Acceleration	-	+	-	+
Emission/Smoke	+	-	+	-
Engine Sound	+	-	+	-

Note:

A. Inspection result rest

- = Decline

+ = Increase

B. Conclusions

1. For diesel engine/heavy equipment, fuel consumption is more efficient,
but the power of engine is the same without using super bio diesel additive

Makassar, 3rd March 2015

Head of Performance Test,


Haruna HL.

Expert of Automotive Engineering



BIONAS ACTIVITIES 2016 - 2017



STARTING with Malaysia 14 years ago, Bionas biofuel products today are sold in 52 countries around the world. The latest approval of the U.S. Environment Protection Agency (EPA) has also led to Bionas opening an operations office in the United States and sales are currently in 5 different U.S. States. List of all the countries that Bionas is represented:



- | | | | |
|----------------|------------------|--------------------------|------------------|
| 1. Malaysia | 14. Nigeria | 27. Germany | 40. Singapore |
| 2. Indonesia | 15. Iran | 28. Turkey | 41. Brazil |
| 3. Philippines | 16. Belgium | 29. Brunei | 42. Bolivia |
| 4. Thailand | 17. Switzerland | 30. United Arab Emirates | 43. Somalia |
| 5. Vietnam | 18. U.K | 31. Ghana | 44. Ivory Coast |
| 6. Cambodia | 19. USA | 32. Chad | 45. Mali |
| 7. China | 20. Chile | 33. Uruguay | 46. Sierra Leone |
| 8. Taiwan | 21. Peru | 34. France | 47. Guinea |
| 9. Pakistan | 22. Tunisia | 35. Poland | 48. Uganda |
| 10. Bangladesh | 23. Egypt | 36. Myanmar | 49. Libya |
| 11. Kenya | 24. Saudi Arabia | 37. Hong Kong | 50. Burkina Faso |
| 12. Ethiopia | 25. Qatar | 38. South Korea | 51. Rwanda |
| 13. Sudan | 26. Austria | 39. Canada | 52. Burundi |

Centre of Excellence in Biofuels and Waste to Energy (WTE) Technologies in Nigeria, Africa



Zaria, Nigeria, 2 May 2017 - Signing with Ahmadu Bello University (ABU) for the setting up of the Centre of Excellence (Train the Trainers Program) focusing in Biofuels and Waste to Energy (WTE) Technologies. ABU represented by Vice Chancellor Prof. Ibrahim Garba.

Signing with Kaduna State Governor for the Jatropha Agro-politan Business Cluster Developments and Waste to Energy (WTE) 1000 Ton Garbage per day at Kaduna State and Zaria City, Nigeria



Kaduna State, Nigeria, 3rd May 2017 - Signing with Kaduna State Governor for the developments of Jatropha Agro-politan Business Cluster in Kaduna State. The Governor also signed the Waste to Energy (WTE) Plant - 1000 Ton Garbage per day at Zaria City.



Signing of Joint Venture for National Airlines in Chad, Africa



N'Djamena, Chad, 9 May 2017 - Signing of Joint Venture with a National Company involved in Aviation Industry in Chad to resume the National Airlines of the Country. Bionas Super Bio-jetfuel will be supplied for this Project for saving on jetfuel consumption.



Waste to Energy Plant (WTE PLANT) 1000MT Garbage/Day in N'Djamena, Chad, Africa



N'Djamena, Chad, 11th May 2017 - Signing with N'Djamena Municipal Council for Engineering, Procurement, Construction & Commissioning of Waste To Energy Plant (EPCC WTE PLANT) 1000MT Garbage/Day at N'Djamena City, Chad. N'Djamena Municipal Council represented by Mayor Mariam Mahamat Maintha.



BIONAS ACTIVITIES



Joint Venture Agreements for Qatar, Turkey and Ghana



Kuala Lumpur, Malaysia, 9th June 2017 - Signing of Joint Venture Agreements for Jatropha Agro-politant Business Clusters made of Jatropha Plantation Program, Press Mill for Crude Jatropha Oil, Biomass Briquette and Pallet production, Additive and Biofuel production, Biofuel Gas Stations and supporting components of Residential, Commercial, Public Utilities, etc. in Qatar, Turkey and Ghana.



Signing of Agreement with CPI International Group, Switzerland for Private Investment of USD12.2 Billion for Nigeria, Sudan, Chad and Uganda



Kuala Lumpur, Malaysia, 9th June 2017 - Signing of Agreement with CPI International Group, Switzerland for Private Investment of USD12.2 Billion for Waste-to-Energy (W2E) and Solar Power Projects in Nigeria, Sudan, Chad and Uganda. CPI International Group is a Project Developer based in Switzerland with technologies from Switzerland, Germany and the United States. Waste-to-Energy (W2E) is one of the components in Bionas' Master Plan for the Great Green Wall of Africa (GGWA).



BIONAS ACTIVITIES



Signing for the incorporation of "Bionas International Construction Consortium Limited"



Kuala Lumpur, Malaysia, 16th June 2017 - Signing with Lead Consortium Companies for the incorporation of "Bionas International Construction Consortium Limited" for the Development & Infrastructure Projects in the African countries. This International Construction Consortium consists of 21 Malaysian companies and 5 companies from China.



Waste to Energy Plant (WTE Plant) 1700MT Garbage/Day in Sumurbatu, Bekasi City, Indonesia



Kuala Lumpur, Malaysia, 14th July 2017 - Signing with PT. Nusa Wijaya Abadi for Waste to Energy Plant (WTE Plant) of 1700MT Garbage per day at Sumurbatu, a Contract they signed with Bekasi City Government.



Signing of Agreement for Centre of Excellence in Biofuels and Waste to Energy Technologies in Sudan



Khartoum, Sudan, 17th July 2017 - Signing of Agreement with Africa City of Technology for the setting up of the Centre of Excellence (Train the Trainers Program) focusing on Biofuels and Waste to Energy technologies.

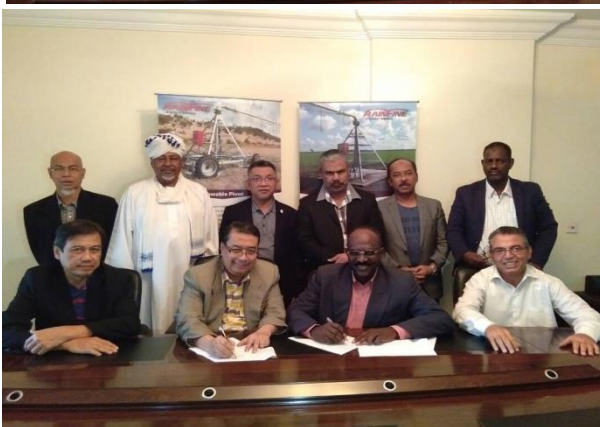
Signing of Agreement with Ministry of Environment, Sudan witnessed by H.E Speaker of the Parliament, Ministers, Governors and Medias



Khartoum, Sudan, 18th July 2017 - Signing of Agreement with Ministry of Environment at Sudan Parliament, to develop 50 blocks Jatropha Agropolitant Business Cluster at Sudan Great Green Wall, witnessed by H. E. the Speaker of the Parliament, Ministers, Governors and Medias.



Signing with White Nile State Government for the Jatropha Agro-politan Business Cluster Development and Waste to Energy (WTE) 2000 Tons Garbage per day



Khartoum, Sudan, 19th July 2017 - Signing with the White Nile State Government for the developments of 5 Blocks Jatropha Agro-politan Business Cluster and Waste to Energy (WTE) 2000 Tons Garbage per day at Kusti and Rabbak Cities.



Bionas Group CEO speaks at the National Clean Energy Forum 2017



Kuala Lumpur, Malaysia, 11 September 2017 - Bionas Group CEO, Zurina Amnan was one of the panel speakers in the National Clean Energy Forum 2017, organised by the Asian Strategy & Leadership Institute (ASLI).



Joint Venture Agreement for Malaysia



Kuala Lumpur, Malaysia, 21 September 2017 - Signing of Joint Venture Agreement for Jatropha planting, biofuel and additive processing, storage, marketing and distribution in Malaysia.



BIONAS ACTIVITIES



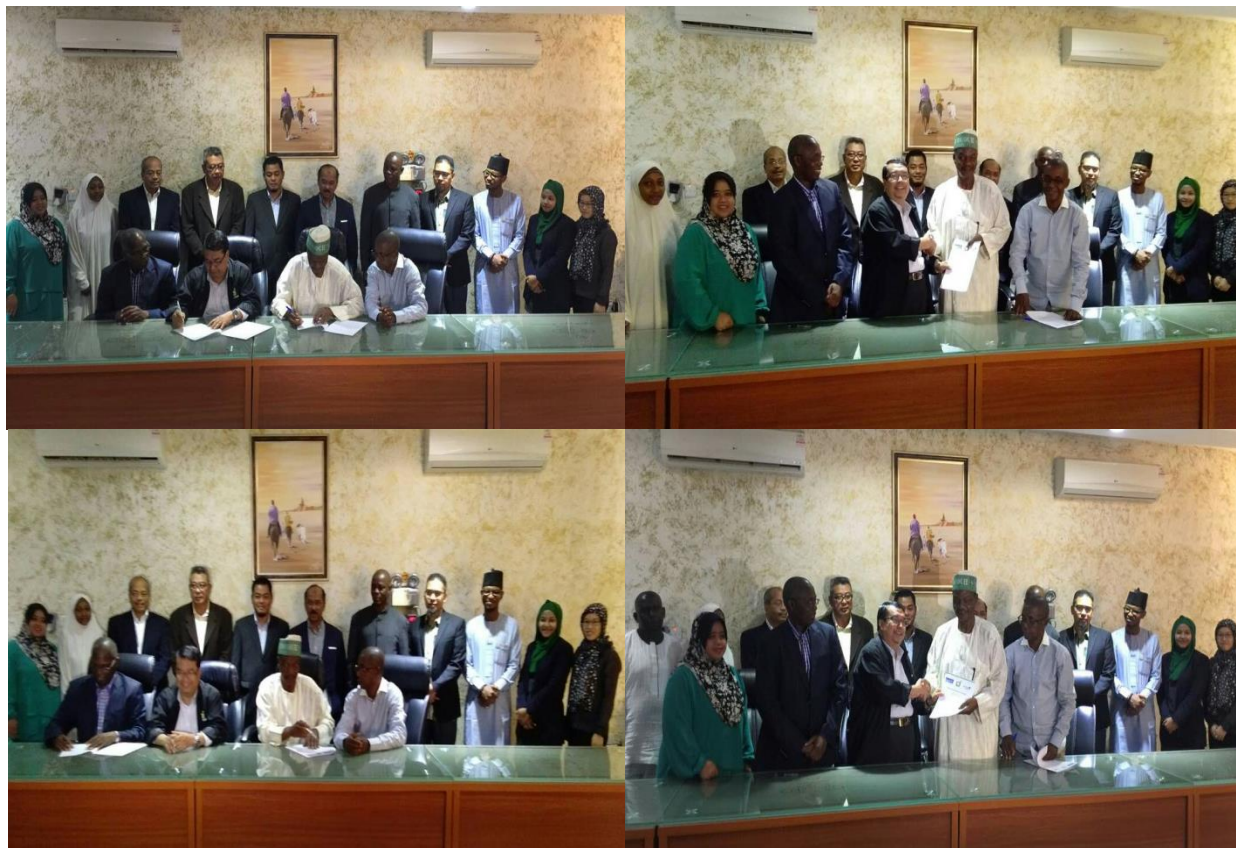
Signing with Kaduna State Government for the Jatropha Agro-politan Business Cluster Development and Waste to Energy (WTE) 1000 Tons Garbage per day



Kaduna, Nigeria, 26th September 2017 - Signing of Agreements with the Kaduna State Government for the developments of 5 Blocks Jatropha Agro-politan Business Cluster (50,000 hectares); and Waste to Energy (WTE) Plant of 1000 Tons Garbage per day at Zaria City.



Signing of Agreement with Equity Television (ETV) Nigeria



Abuja, Nigeria, 3rd October 2017 - Signing of Agreement with Equity Television (ETV) Nigeria for the Media Relationship Management. ETV will produce segmented programs, special programs, documentary, press and news releases, magazines, and coverage of Bionas' events and activities in Nigeria and other countries.

Signing with H.E. Federal Minister of Environment Nigeria



Abuja, Nigeria, 6 October 2017 - Signing with H.E Federal Minister of Environment Nigeria for the developments of 60 Blocks Jatropha Agropolitan Business Cluster at the Nigeria Great Green Wall (NGGW).



Joint Venture Agreement for Libya



Tripoli, Libya, 22 October 2017 - Signing of Joint Venture Agreement for Jatropha planting, biofuel and additives processing, storage, marketing and distribution in Libya.

Signing for Halal Hub Technology Park in Libya



Tripoli, Libya, 23 October 2017 - Signing for Halal Hub Technology Park with Tarhuna Municipal Council, Libya. Tarhuna is a Free Trade Zone for animal diseases and the biggest producer of livestock in Libya.

Signing with Ghadames Air Transport, Libya



Tripoli, Libya, 23 October 2017 - Signing with Ghadames Air Transport for additional 5 aircrafts for domestic and International routes, aircraft storage and maintenance services facilities, Flying Academy/School and installation of Bionas Bio-jetfuel additive blending and storage facilities at Ghadames Airport.



BIONAS ACTIVITIES



Signing for the developments of Green Smart City and Upgrading Ghadames International Airport



Tripoli, Libya, 23 October 2017 - Signing with Ghadames Municipal Council for the developments of Green Smart City and upgrading Ghadames International Airport. The Municipal Council represented by Federal Member of Parliament for the signing.

Signing for Jatropha Agropolitant Business Cluster and 10,000 units Affordable Houses



Tripoli, Libya, 23 October 2017 - Signing with Al-Jufra Municipal Council for the developments of Jatropha Agropolitant Business Cluster and 10,000 units Affordable Houses.

Signing of Agreements for 5 Blocks Jatropha Agropolitant Business Cluster & Waste to Energy Plants at 2 Cities in White Nile with 2000 tons garbage per day



White Nile State, Sudan, 26 October 2017 - Signing of 2 Agreements; 5 Blocks Jatropha Agropolitant Business Cluster and Waste to Energy Plants at 2 Cities in White Nile State with 2000 tons garbage per day. Also signed the MoU for White Nile Airlines with the State.

Collaboration with Ministry of Defence and National Of Housing Corporation, Sudan



Khartoum, Sudan, 28 October 2017 - Signing with the National of Housing Corporation (NHC) for the development and construction of Military Quarters for the Ministry of Defence, as well as a Joint Venture with NHC for the development and construction of Affordable Houses and Mixed Developments in Khartoum, Sudan.



BIONAS ACTIVITIES



Joint Venture Agreement for Burkina Faso



Ouagadougou City, Burkina Faso, 1 November 2017 - Signing of Joint Venture Agreement for Jatropha planting, biofuel and additives processing, storage, marketing and distribution at Ouagadougou City, Burkina Faso.



Signing with Minister of Environment, Burkina Faso for 20 Blocks Jatropha Agropolitant Business Cluster and Waste to Energy Plant at Ouagadougou City, Burkina Faso



Ouagadougou City, Burkina Faso, 2 November 2017 - Signing with the Minister of Environment, Burkina Faso for the developments of 20 Blocks Jatropha Agropolitant Business Cluster and Waste to Energy Plant, 1000 tons garbage per day at Ouagadougou City, Burkina Faso.



BIONAS ACTIVITIES



Launching of Bionas Green and Clean Energy Products in Malaysia by Koperasi Nurul Huda Berhad



Kuala Lumpur, Malaysia, 9 November 2017 - Launching of Bionas Green and Clean Energy Products in Malaysia by Koperasi Nurul Huda Berhad, officiated by Deputy Director General of Maktab Koperasi Malaysia (MKM).



Distributor Agreement for Singapore



Kuala Lumpur, Malaysia, 3 January 2018 - Signing of Distributor Agreement for Marketing and Distribution of Bionas Products in Singapore.

Uganda Green Economy Global Signing Ceremony



Kampala, Uganda, 23 February 2018 - Global signing for the development of 240 Blocks Jatropha Agropolitant Business Clusters, Waste to Energy (WTE) Plants, Green Budget Airline, Green International Airport and Green Townships with Affordable Housing between Uganda Investment Authority (UIA) and BATC Development Berhad. The Signing was held at the Ministry of Finance and witnessed by Honorable Anite Evelyn, The Minister of State for Finance in-charge of Investment and Privatisation.

Press Conference with Local and International Medias



Kampala, Uganda, 27 February 2018 - Press Conference with Local and international TVs, Radios and Newspapers which was held at Uganda Investment Authority (UIA).



BIONAS ACTIVITIES



Joint Venture Agreement for United Kingdom



London, United Kingdom, 6 March 2018 - Signing of Joint Venture Agreement for biofuels and additives Blending, Marketing, Supply and Distribution in United Kingdom.

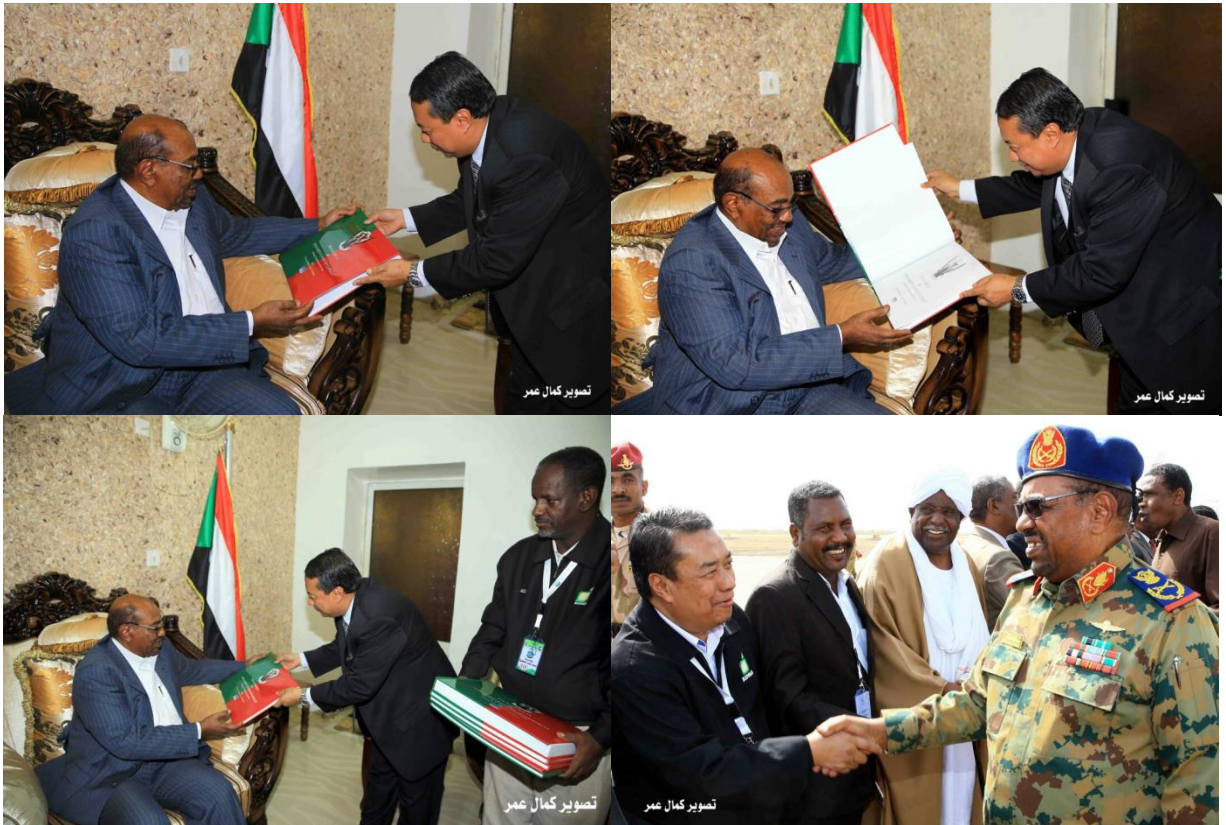


"Business Opportunity in Nigeria, Sudan & Uganda" Conference



Kuala Lumpur, Malaysia, 22 March 2018 - "Business Opportunity in Nigeria, Sudan & Uganda" Conference was held at Istana Hotel Kuala Lumpur with participation of more than 100 manufacturers, wholesalers and business owners from various Industries as well as Malaysian Contractors and Consultants. The Ambassador of Sudan Embassy, High Commissioner of Uganda High Commission and 2 Representatives from Nigeria High Commission were Guests of Honours, all have delivered very informative and inspiring speech.

Submission of Blueprint to the President of Sudan Conference



White Nile State, Sudan, 5th April 2018 - Submission of Blueprint to the President of Sudan for the 60 Blocks Jatropha Agropolitan Business Cluster Development at Sudan Great Green Wall.

Submission of Blueprint to the Governor of White Nile State, Sudan



White Nile State, Sudan, 6th April 2018 - Submission of Blueprint to the Governor of White Nile State, for the 5 Blocks Jatropha Agropolitant Business Cluster Development.

Distributor Agreement for Singapore



Khartoum, Sudan, 8th April 2018 - Launching of Official Websites for Sudan Great Green Wall -www.bionassudan.com, and Bionas Property Development -www.gedcgroup.com and property.gedcgroup.com, by the Minister of Environment, Sudan.

Signing of Agreement for Property Development Projects in Khartoum, Sudan



Khartoum, Sudan, 11 April 2018 - Signing of Agreement with Al-Gawass Build Towers & Residential Cities Co. Ltd. for Property Development Projects in various locations in Khartoum, which include Residential, Commercial and Mixed Developments mostly for Sudanese working abroad.



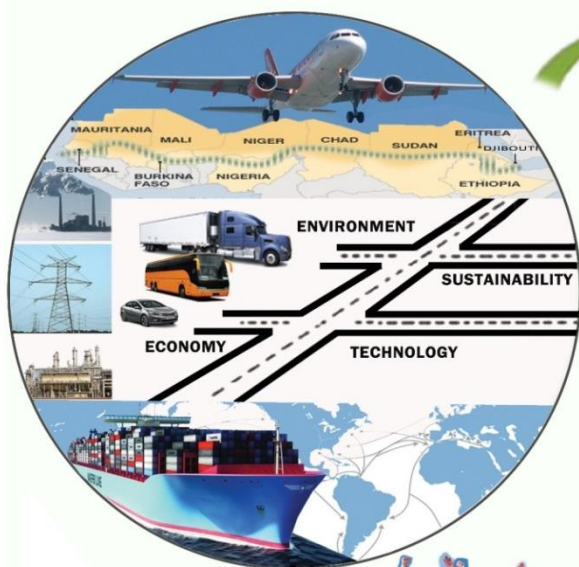
Signing of Agreement for the development of KOSTI CENTRAL, Sudan



Khartoum, Sudan, 11 April 2018 - Signing of Agreement for the development of KOSTI CENTRAL at White Nile State, a 20-storeys office, commercial and hotel/apartment. The Minister of Finance cum Vice Governor of White Nile State signed the Agreement on behalf of Al-Aktab Charity Foundation who owns the land for this development.



BIONAS ACTION PLAN TOWARDS UNITED NATIONS CLIMATE CHANGE CONFERENCE (COP23) IN BONN, GERMANY, 2017



POVERTY ERADICATION	MULTI FEEDSTOCK	ALTERNATIVE FUEL	NO FURTHER INVESTMENT ON INFRASTRUCTURE	TECHNOLOGY TRANSFER	BENEFITS TO CONSUMERS	REAL TIME RESULTS & BEYOND
Human capital and socio-economic development for poverty eradication & food security	Non-food multifeedstock produced by greenbelt countries, Great Green Wall & Waste/Garbage	The raw material/renewable fuel to produce clean energy are easily accessible in many countries	Collaboration with oil & gas industries for the production of clean energy using their existing infrastructure and network	Nano – Emulsion, Polarization & Bio – digester Technology Transfer to all countries as solution to climate change	Consumers save up to 30% on daily fuel consumption and less maintenance. Clean energy for health and better life	Emission reduction up to 97% and savings on fuel consumption up to 30%



WORLD GO GREEN ROADMAP



The pertaining issues in many countries in the world in relation to energy include:

1. The uncertainty and high price of fossil fuels due to tight oil produce/supply.
2. Oil dependencies from other nations.
3. The need to create new alternative energy sources.
4. The creation of new economy and creation of employment.

For these reasons, Bionas decided to capture the opportunity to offer reasonable solutions which will cover all of the pertaining issues in the world through a systematic expansion and competitive strategy – the Road Map to “World Go Green”.

- Human capital and socio-economic development for poverty eradication & food security
- Non-food multifeedstock produced by greenbelt countries, Great Green Wall & Waste/Garbage
- The raw material/ renewable fuel to produce clean energy are easily accessible in many countries
- Collaboration with oil & gas industries for the production of clean energy using their existing infrastructure and network
- Nano – Emulsion, Polarization & Bio – digester Technology Transfer to all countries as solution to climate change
- Consumers save up to 30% on daily fuel consumption and less maintenance. Clean energy for health and better life
- Emission reduction up to 97% and savings on fuel consumption up to 30%
- Achieving Global Clean Energy (Sustainability and Security)
- Practical Model to Lead Global Climate Change Efforts post COP21, Paris 2015



SOLUTION TO WORLD ENERGY TRILEMMA: BIONAS' NANO-EMULSION & POLARIZATION TECHNOLOGY

ENVIRONMENTAL SUSTAINABILITY

- No deforestation.
- No Refinery producing carbon emission.
- Bionas B30 (M) Bio-Gasoline test with Zero % of CO.
- Bionas Bio-Tablet test with 94% reduced emission.
- Bionas Bio-Jetfuel test with 85% reduced emission.

ENERGY SECURITY

- No further investment on Infrastructure. Use of existing blending & storage facilities.
- The raw materials are easily accessible in many countries.
- Technology Transfer is offered to all countries.
- Biofuel is sold at the same price of fossil fuels with higher profits to stakeholders.

ENERGY SECURITY



- * Earth to Engine – Integrated Business Model
- * Excellent Track Records
- * Successfully Commercialised Sustainable Jatropha Agronomy Programme
- * Unique and Strong Commerciality in bio-refining
 - * Strong Buy-In From Oil Majors
- * Increase Oil Independence – Reduced Import of Fossil Fuel
- * Lower Fuel Cost With Higher Returns & Profits to Stakeholders
 - * Carbon Sinks and Reduce Tailpipe Emission

ENVIRONMENTAL SUSTAINABILITY

ENERGY EQUITY

ENERGY EQUITY

- Jatropha planting program – FREE Seeds with Guaranteed Buy Back at Good Price → Sustainable Feedstock Supply.
- Press Mills and Additive Processing Centres installed at plantation areas → New Economic Growth In Rural Areas.
- Bionas Gas Stations installed near plantation areas → The accessibility and affordability of energy supply.



WORLD CLEAN ENERGY HUB



AFRICA CLEAN ENERGY HUB

□ INTRODUCTION

The 21st Conference of the Parties (COP21) of the UNFCCC marked the turning point when governments around the world agreed to proactively address greenhouse gas emissions through mitigation and, importantly, by adapting their economies away from fossil fuels. The pre-existing plan to provide \$100 billion per year to developing countries for these purposes was extended through 2025.

The development of Africa Clean Energy Hub (ACE HUB) is to assist the goals laid out by the Paris Agreement COP21. The Hub will function as the Center of Administration and Implementation of Paris Agreement on COP21. The Center shall provide real-time reporting on key performance indicators, Technology Transfer, Training and Certification for Compliance and Conformity to Paris Agreement that has laid out goals of reducing the greenhouse gas emissions and thus limit the global temperature increase.

The study published in the August 2017, issue of Nature, found that almost all major industrialized nations are failing to meet the pledges they made in Paris Agreement. In addition to failing in contributing their pledges, the countries are not even enacting the policies already planned to reducing the CO2 output.

In assisting member countries, the Clean Energy programs to be undertaken by the ACE HUB will be implemented through proposed Turnkey - Design, Finance, Built, Operate and Transfer within the agreed concession period. The programs run by the ACE HUB will incorporate the Poverty Eradication, Multi Feedstock, and Alternative Fuel programs. No further investment in clean energy/biofuel Production Infrastructure, and Technology Transfer, Benefits to Consumer and Real Time Results and beyond are essentially the essence of this Program.

The ACE HUB will focus on the production of Bio-Diesel, Bio-Petrol/ Gasoline, Bio-Heavy fuel, Bio-Jet Fuel, Bio-Energy Emission Solutions (Clean Coal), Waste to Energy and Oil Spill Cleanup Initiatives and Programs.

It is imperative that all Paris Agreement COP21 stakeholders within the United Nations Framework Convention on Climate Change (UNFCCC) to participate actively in this program in order to achieve the success climate change target of 2030.

We will develop three Centers/Towers with the state of the art facilities to implement and deliver the Climate Change programs for the world.



WORLD CLEAN ENERGY HUB



AFRICA CLEAN ENERGY HUB

1. GGW Tower

The tower is to accommodate all member countries participating in the Great Green Wall of Africa along with all States involved in the program. It will also include Bionas' Management team to ensure smooth development and implementation of this mega Climate Change programs.

2. Twin Peaks Tower

It is anticipated that this Tower will be the tallest twin towers in the world and will be the center for all Paris Agreement Stakeholders under the UN platform to be placed here to participate in the Climate Change programs. It is also expected that 400 oil companies from 200 countries will work here so they can actively participate in this UN Climate Change Programs.

3. ACE Tower

The tower is named the African Clean Energy (ACE) Tower suited for the development of Clean Energy in line with the UN's efforts to ensure clean energy production from contaminated sources such as oil spills and garbage.

The tower will be the green smart building and is expected to be the hub of operation of 14 OPEC member countries and non-OPEC countries, as well as the international and local oil and gas companies specializing in the production of clean energy.

The main source of funding for these activities will come from the World Bank and the USD100 billion per year for developing countries agreed by the Government around the World under COP21 where the pre-existing plan should be extended through 2025. Countries that have implemented Green Initiatives with certification can claim for Carbon Credit.

The world is confronted to critical crude oil depletion and environmental crisis that have threatened the security and harmony of the world. The drastic change to the climate and the speed at which change has occurred are beyond our imagination. Thus, the responsibility to mitigate climate change and global warming lies not only with the government, but also with each and every one of us.



WORLD CLEAN ENERGY HUB



AFRICA CLEAN ENERGY HUB

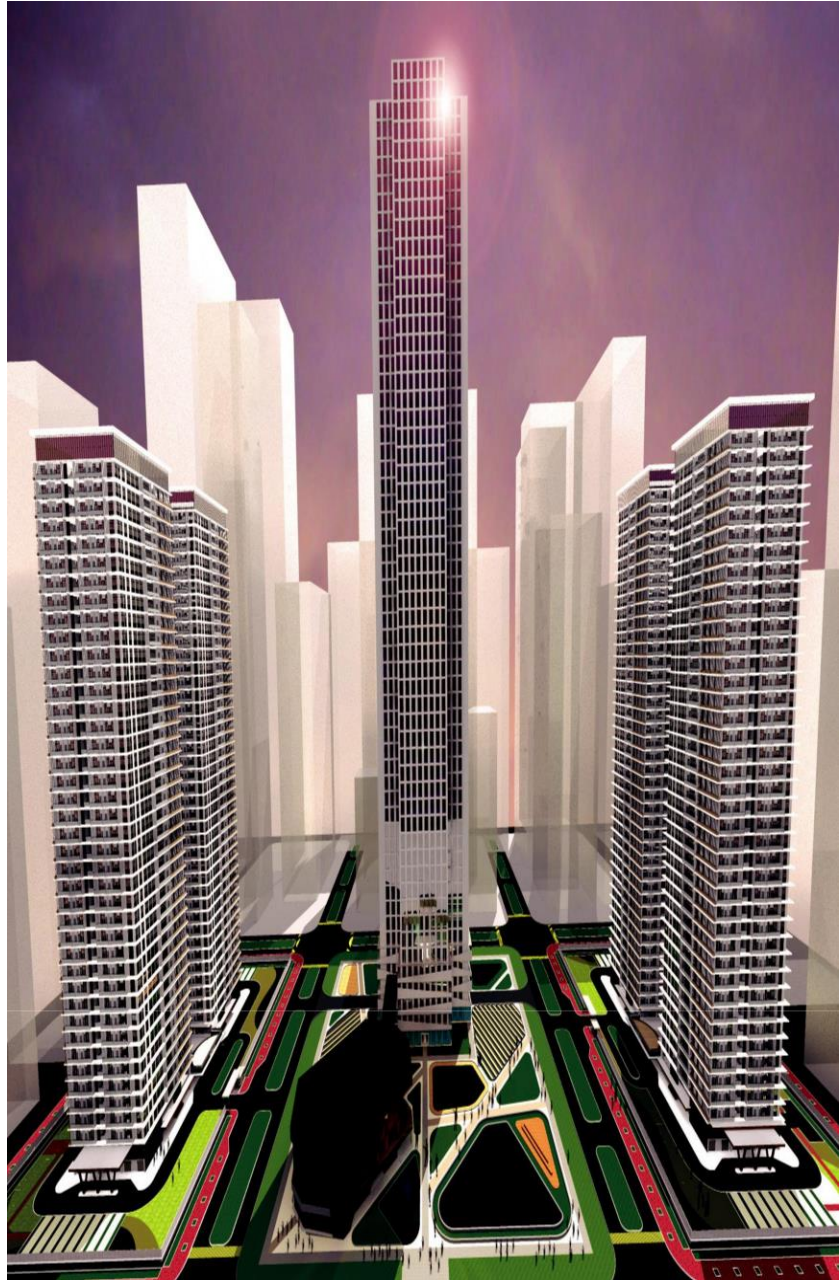
1. GGW TOWER

The GGW Tower, shall be a new iconic landmark tower in Africa. The Tower shall represent the development of Great Green Wall (GGW) Africa.

It shall be a hub for Sustainable Green Economy and Climate Change Mitigation program under United Nation through GGW development.

The tower is designed to the highest specifications with the state of art facilities, environmentally sustainable and according to Green Building Index (GBI) guidelines as well as Leadership in Energy and Environmental Design (LEED).

Rich with symbolism and tradition, this new iconic landmark shall be a standing monument to modern architecture. This city shall transformed itself from a regional centre to a global one.





WORLD CLEAN ENERGY HUB



AFRICA CLEAN ENERGY HUB

2. SKYSCRAPER – TWIN PEAKS

A 106-storey Twin energy and material efficient building , the skyscraper shall be located at central of African country.

The TWIN PEAKS shall be the tallest twin towers in the world . Magnificent in the day and glowing at night, the TWIN PEAKS shall be Africa's crown jewel honouring the nation with its extraordinary union of art, engineering and meticulous craftsmanship.

The towers setting a new benchmark in green building design and intelligent building systems with highest specifications for environmentally sustainable and certified under Green Building Index (GBI) as well as the Leadership in Energy and Environmental Design (LEED).

Develop as a hub for Sustainable Green Economy and Climate Change Mitigation program under United Nation. The towers shall stand amongst the world's most luxurious and efficient corporate office suites, truly worthy as center piece of Africa's International hub.





AFRICA CLEAN ENERGY HUB

3. SKYSCRAPER – THE ACE TOWER

A skyscraper of Ace Tower is the energy and material efficient building.

ACE TOWER will be built based on pre-fabricated assembly (95% of the materials will be assembled in modular form before on-site construction even begins). The Tower shall be sustainable and earthquake proof. Expected of a 7-month construction period, ACE TOWER shall be constructed in record time.

Expected to mainly accommodate both local and international oil and gas companies from OPEC and Non-OPEC member countries for corporate office suites, training centres, integrated accommodation suites and international standard hotel, retail commercial outlet, leisure facilities and many more. It has been designed with 15-cm (6-inch) thick exterior walls and a quadruple glazing in order to improve its insulation, allowing it to consume a fifth of the energy of a conventional building its size.

The ACE TOWER will conform and to be certified under Green Building Index (GBI) as well as the Leadership In Energy And Environmental Design (LEED).





WORLD CLEAN ENERGY HUB

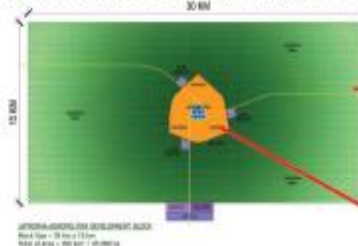


AFRICA CLEAN ENERGY HUB

❑ PROPOSED GGW MASTER PLAN

THE GREAT GREEN WALL OF AFRICA GREEN ECONOMIC BELT DEVELOPMENT

AGROPOLITANT DEVELOPMENT BLOCKS



CENTRAL AREA OF THE AGROPOLITANT DEVELOPMENT BLOCK



JATROPHA COLLECTION & PROCESSING CENTER



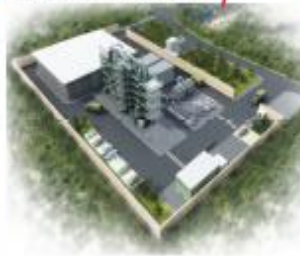
JATROPHA PLANTATION



TECHNO PLANTERS' HOUSE



WASTE TO ENERGY COMPLEX



FOOD PRODUCTION PARK



EDUCATION FACILITIES



COMMERCIAL FACILITIES



MEDICAL FACILITIES





WORLD CLEAN ENERGY HUB



AFRICA CLEAN ENERGY HUB

☐ PROPOSED GGW DEVELOPMENT

	PARTICULARS	AGRO-POLITAN BLOCK
		Size: 15 km x 30 km Area: 450 km ² / 45,000 ha Block: 1 Block
	Jatropha Plantation Area	Area: 40,000 ha (88.9%)
1	Employment Created 1.1 Techno Planters 2.2 Support	10,000 ppl <u>50,000 ppl</u> <u>60,000 ppl</u>
2	Housing 2.1 Techno Planters (0.25 ha each) 2.2 Support	Area: 2,688 ha (6.0%) 5,000 units <u>25,000 units</u> <u>30,000 units</u>
3	Commercial & Facilities	Area: 1,202 ha (2.7%)
4	Infrastructure & Amenities	Area: 1,110 ha (2.5%)
5	Industry (External) 5.1 Waste To Energy Complex 5.2 Bio-Fuel Processing & Blending Plant 5.3 Food Processing % Manufacturing 5.4 Trans Africa Logistic Center	Area: 400 ha
6	Trans Africa Logistic Reserve Zone (External) Super Highway; Highspeed Train; Intercity & Goods Train; Hyperloop; Utilities Reserve	Size: 30 km x 0.5 km Area: 15.0 sq.km : 1,500 ha
7	Workforce & Population 7.1 Workforce 7.2 Estimated Population (Household size: 5.1)	60,000 ppl 153,000 ppl



WORLD CLEAN ENERGY HUB

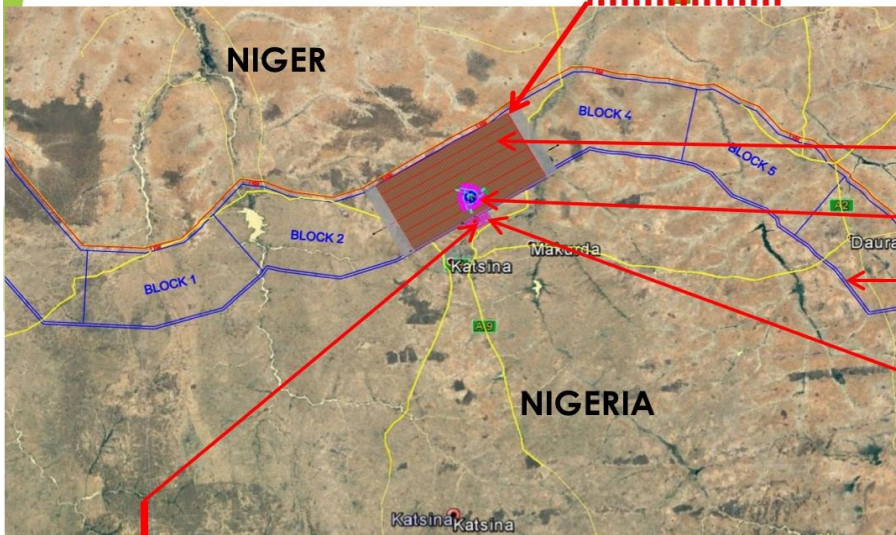


AFRICA CLEAN ENERGY HUB

KEY PLAN

PROPOSED PARCEL OF DEVELOPMENT OF JATROPHA AGROPOLITANT BLOCKS

Parcel Size : 15 km x 150 km : 225,000 hectares



Jatropha Agropolitant Block

Agropolitant Center

Trans Africa Logistic Zone

Industrial Township with Housing, Commercial & Facilities

GREEN
INDUSTRIAL
PARK



ABATTOIR



FOOD PROCESSING FACTORY

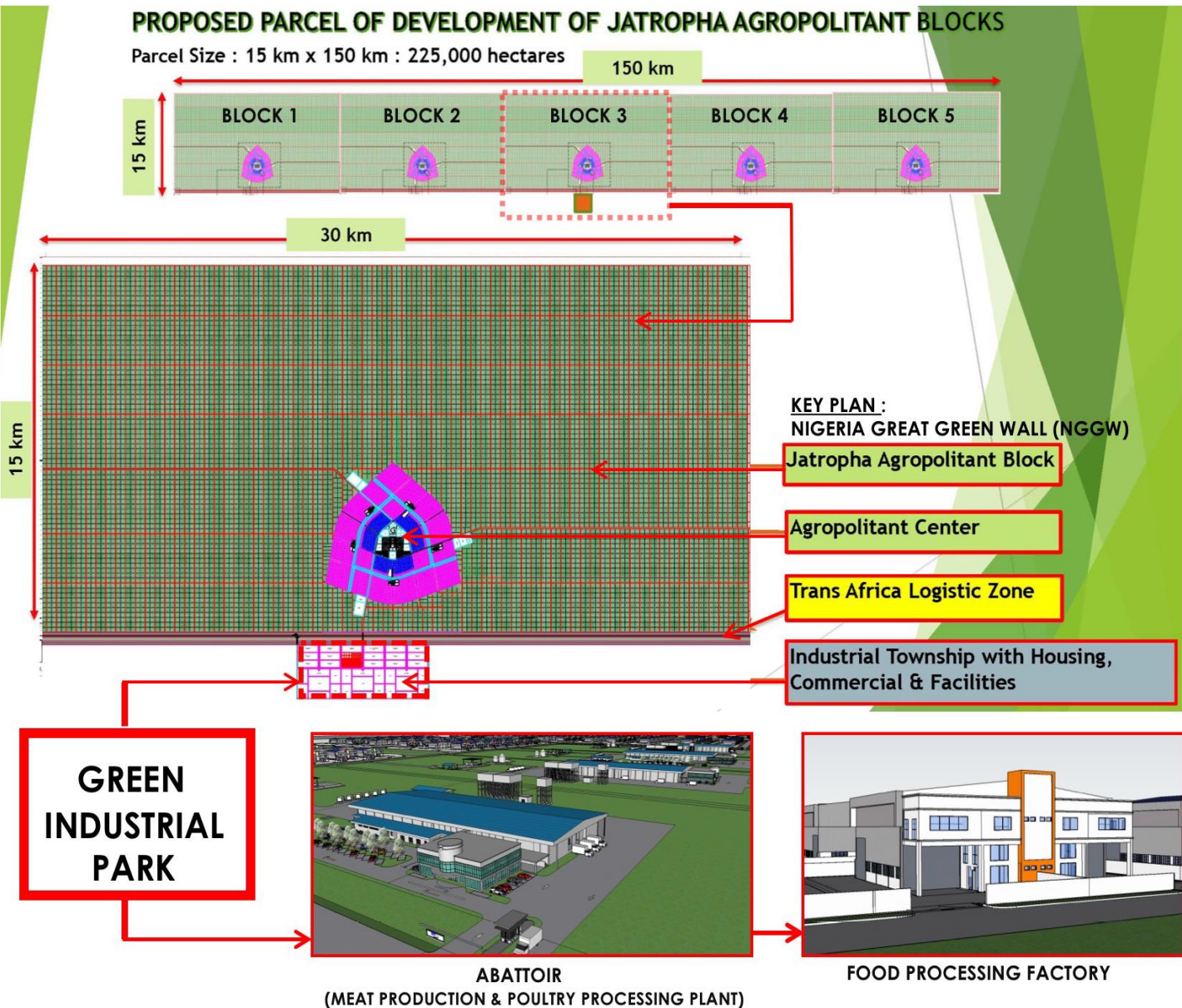


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AFRICA CLEAN ENERGY HUB

□ LAYOUT PLAN



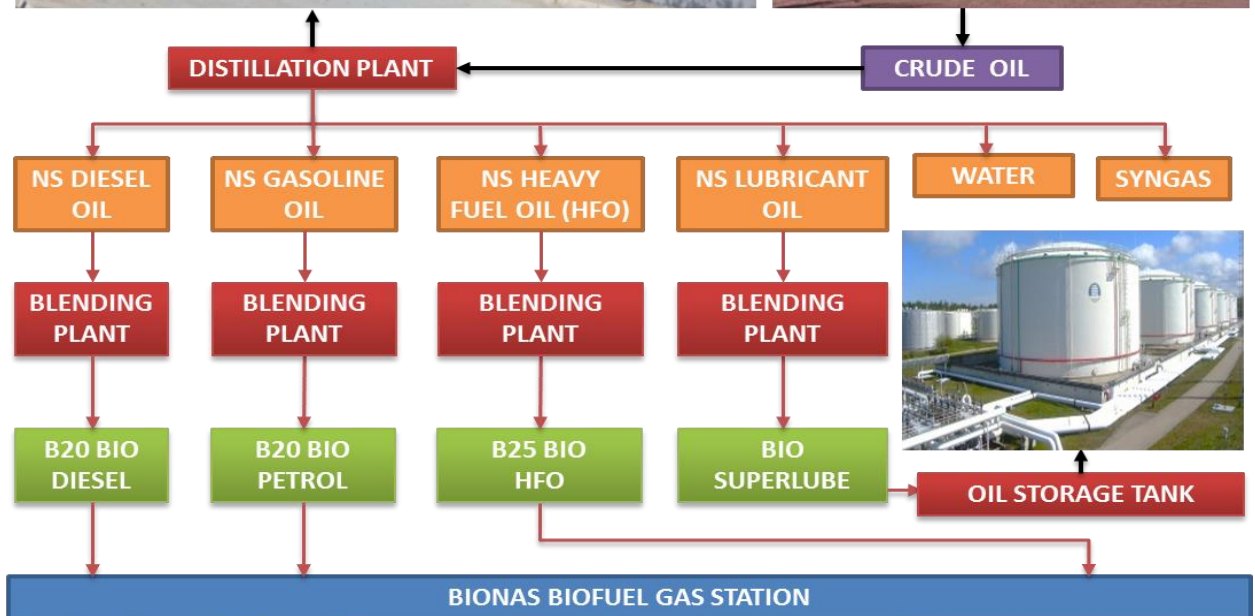
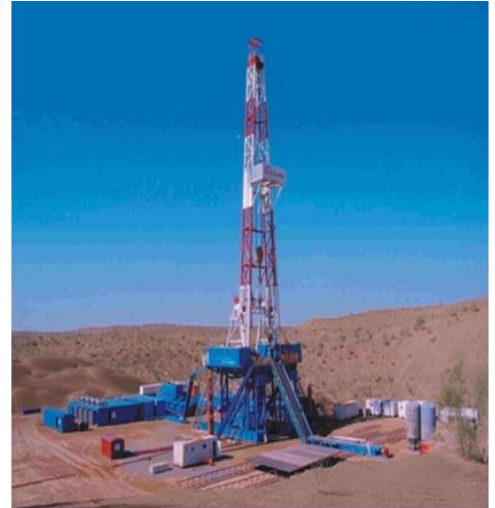


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AFRICA CLEAN ENERGY HUB

❑ BIONAS OIL REFINERY PROCESS



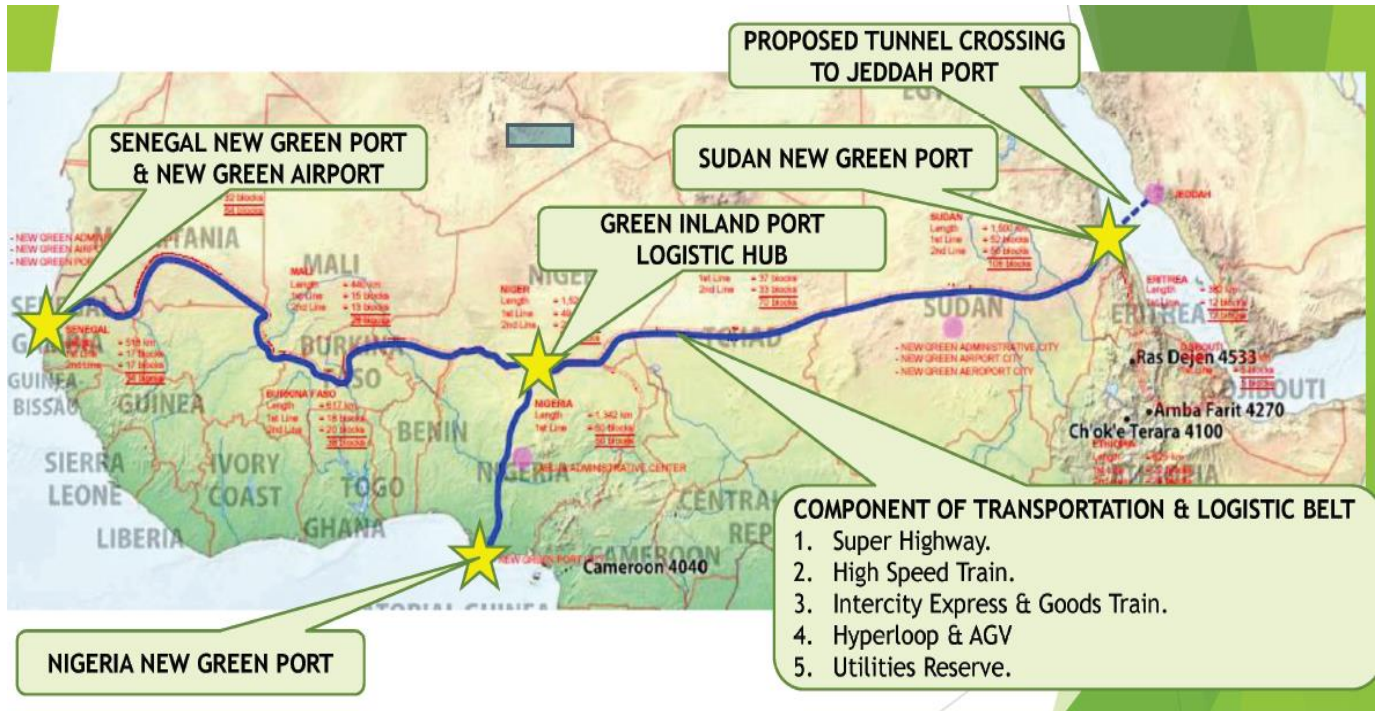
*NS = NON STANDARD



WORLD CLEAN ENERGY HUB

AFRICA CLEAN ENERGY HUB

PROPOSED GGW LOGISTIC & UTILITIES CORRIDOR



AFRICAN ECONOMIC GETAWAY HUB

1	GREEN INLAND PORT LOGISTIC HUB
2	NIGERIAN NEW GREEN PORT
3	SUDAN NEW GREEN PORT
4	SENEGAL NEW GREEN PORT & NEW GREEN AIRPORT



WORLD CLEAN ENERGY HUB



AFRICA CLEAN ENERGY HUB

TRANSPORTATION INFRASTRUCTURES IN THE GREEN ECONOMIC BELT

Developing and upgrading infrastructure have to be of highest priority to lead and be in the forefront country of Africa.

The persistent drive to develop and upgrade its infrastructure will bear direct and indirect benefits to the nation. Our experience showed that this is the key to making sure the development succeed as intended.

TRANSPORTATION INFRASTRUCTURES IN THE GREEN ECONOMIC BELT

1. Trans African Super Highway
2. High Speed Train (HST) & InterCity & Goods Train
3. Green Inland Port & Transportation Hub
4. New Green Ports & New Green Airports



GREEN AIRPORT IN SENEGAL



GREEN PORT IN SENEGAL



GREEN PORT IN NIGERIA



TRANSPORTATION TERMINAL & HUB



UNDERSEA TUNNEL FROM PORT SUDAN TO JEDDAH



GREEN PORT IN SUDAN



TRANSPORTATION INFRASTRUCTURES IN THE GREEN ECONOMIC BELT

TRANS AFRICAN SUPER HIGHWAY



HIGH SPEED TRAIN



GOODS TRAIN



INTERCITY RAIL EXPRESS





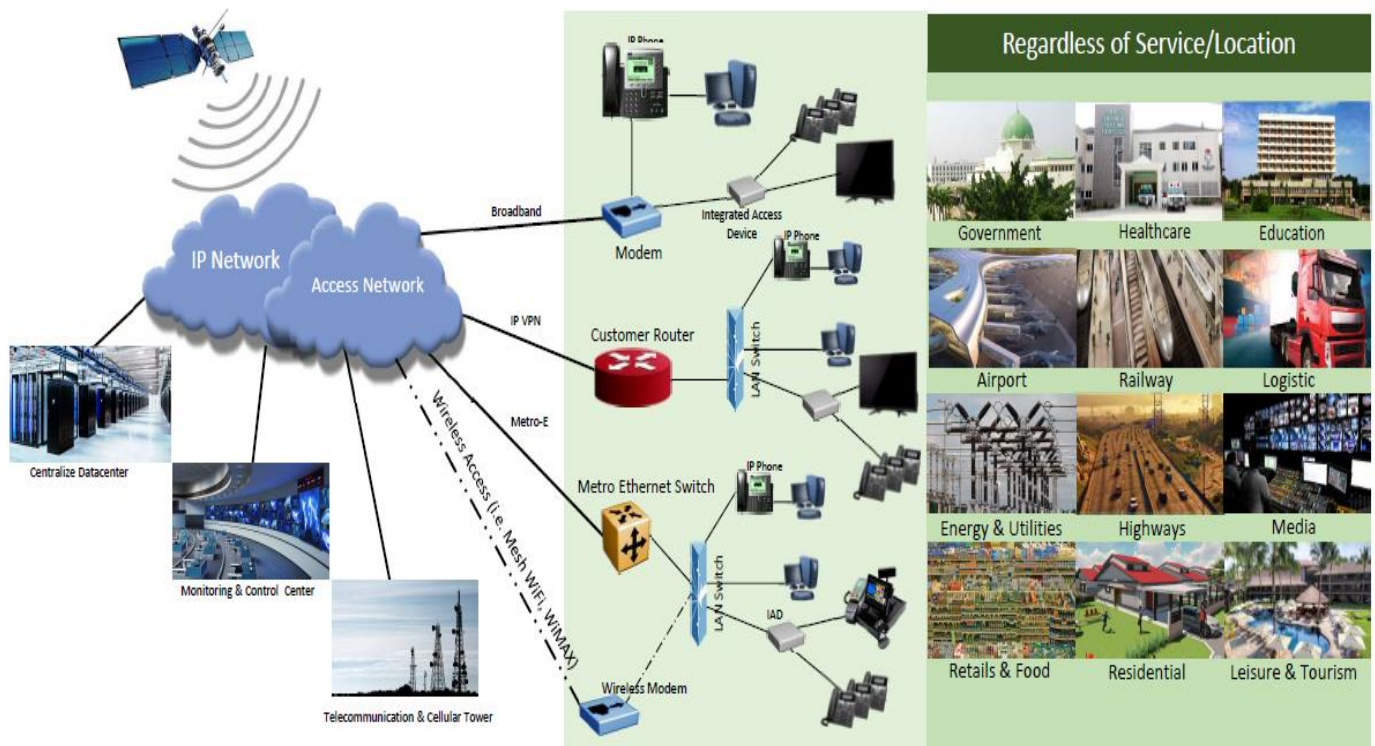
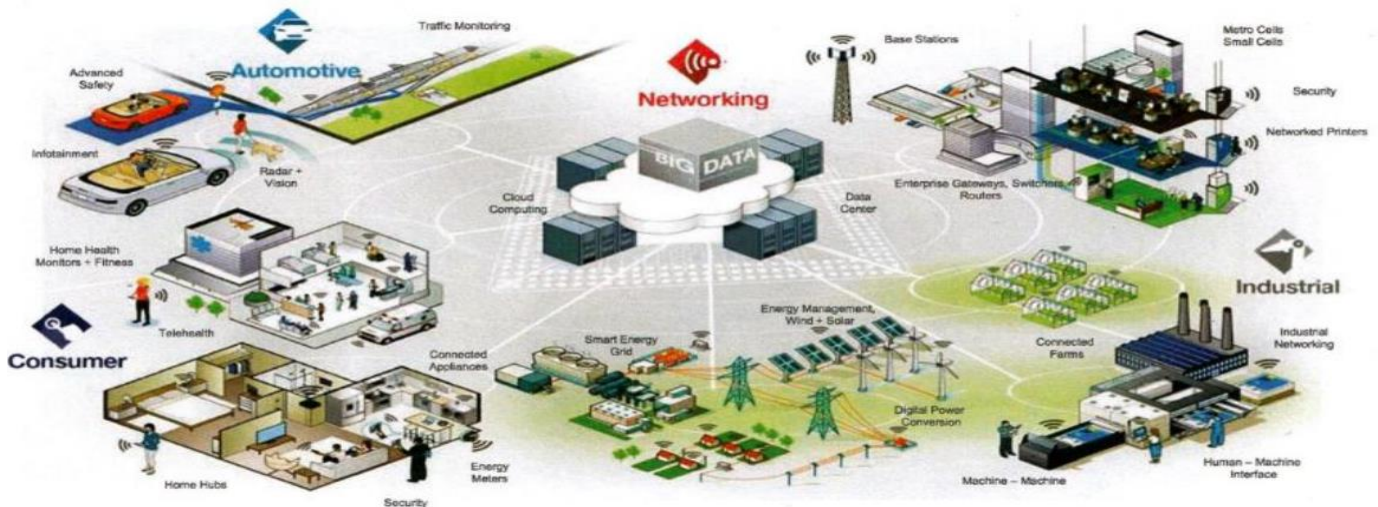
WORLD CLEAN ENERGY HUB



AFRICA CLEAN ENERGY HUB

❑ ICT INFRASTRUCTURE

To provide the best ICT infrastructure with latest connectivity technology via fiber optic core network and provide a high-speed network access throughout Agropolitan blocks. The high quality infrastructure will bridge the digital gap between the nation to enable digital initiative as per planned.





AFRICA CLEAN ENERGY HUB

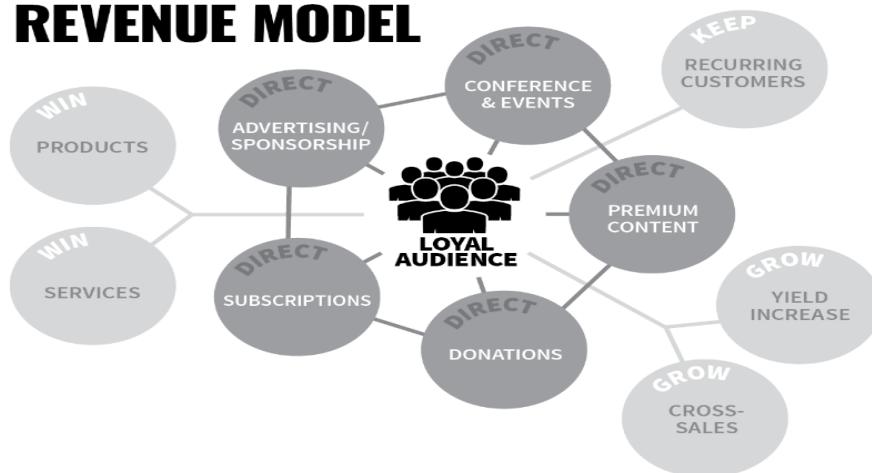
❑ CREATIVE MEDIA INFRASTRUCTURE



Above: Creative Media Scope

The arrival of new individuals, families and communities to the Great Green Wall will require focused, effective and innovative efforts in creative media. Media initiatives provide powerful means of reaching to communities towards intended vision and mission. That are the planned population. The new economic wealth created by the Great Green Wall Initiatives will also invite unplanned movement of people to this new region of economic region of activity. This belt is expected to bring vigorous growth unseen before. Efforts need to be well planned right from the beginning in order to give the right and powerful messages to ensure the success of the Great Green Wall Initiatives. Creative Media and content creation will be a central infrastructure that will be in place and we are investing heavily in it to make sure that everything goes as planned.

MEDIA MARKETING REVENUE MODEL



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AFRICA CLEAN ENERGY HUB

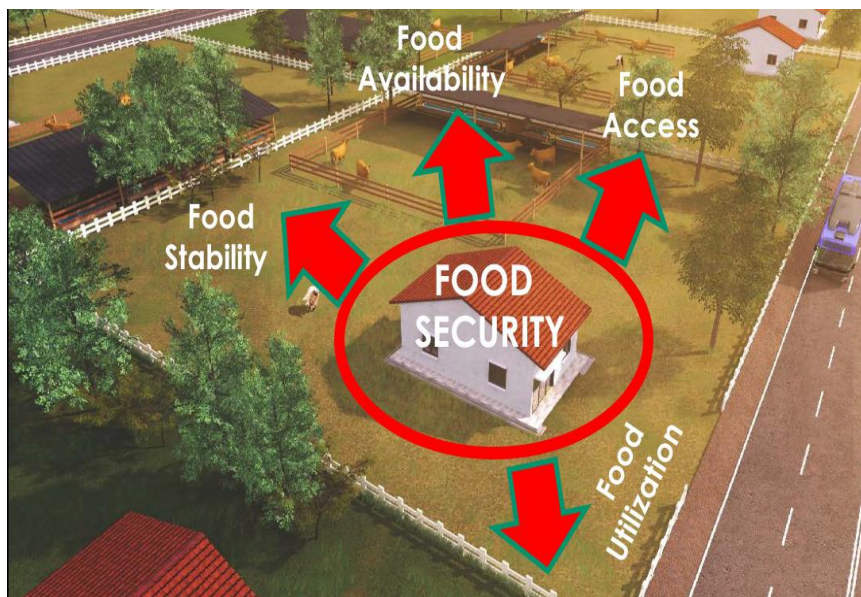
☐ FOOD SECURITY

Africa is World's largest country after Asia and America and its second largest population with 800 million people causing the country to be vulnerable to the food crisis. Climate changes from the world's largest Sahara Desert (9.2 million sq km) is also among the major causes of the food crisis in Africa as well as environmental and socio-economic issues.

'Africa Food Security' is the main agenda for the development of the 'Africa Great Green Wall' that will be able to cope with the world's largest food crisis and unemployment problems in Africa as well as solving the problem of climate change.

Food Security was defined as:

"Availability at all times of adequate food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices"



CONCEPT OF FOOD SECURITY

1 Farmer = 0.25 Hectares housing land area with husbandry farms (Cattle and Goat, Poultry, Fish, Vegetables and Fruits)



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☐ STANDARD DRAWING OF BUILDING DEVELOPMENT

TECHNO PLANTER HOUSING



SUPPORT HOUSING (DETACH)





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SUPPORT HOUSING (SEMI-DETACH)



SUPPORT HOUSING (LINKED)





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SHOP (SINGLE STOREYSHOP)



(DOUBLE STOREY)





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FACTORY (DETACH)



FACTORY (SEMI-DETACH)





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JATROPHA PROCESSING CENTER



EXPAT COMPLEX





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EDUCATIONAL FACILITIES - SECONDARY SCHOOL



EDUCATIONAL FACILITIES - PRIMARY SCHOOL





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EDUCATIONAL FACILITIES – KINDERGARTEN



EDUCATIONAL FACILITIES - HALL





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MEDICAL FACILITIES - MEDICAL CENTER



MEDICAL FACILITIES - CLINIC





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MEDICAL FACILITIES – DENTISTRY



MEDICAL FACILITIES - GENERAL HOSPITAL





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TRANSPORTATION TERMINAL



SPORT COMPLEX





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COLLEGE



POLICE DEPARTMENT - POLICE STATION





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POLICE DEPARTMENT - GUARD HOUSE



POLICE DEPARTMENT - APARTMENT QUARTERS A





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POLICE DEPARTMENT - APARTMENT QUARTERS B



POLICE DEPARTMENT - DETACH HOUSE





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POLICE DEPARTMENT - SEMI-D HOUSE



FIRE BRIGADE DEPARTMENT - FIRE STATION





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FIRE BRIGADE DEPARTMENT - GUARD HOUSE



FIRE BRIGADE DEPARTMENT - APARTMENT QUARTERS A





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FIRE BRIGADE DEPARTMENT - APARTMENT QUARTERS B



FIRE BRIGADE DEPARTMENT - DETACH HOUSE





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FIRE BRIGADE DEPARTMENT - SEMI-D HOUSE



HYPERMARKET





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TEMPORARY WORKERS QUARTERS



TEMPORARY WORKERS QUARTERS - CANTEEN





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WASTE TO ENERGY (W.T.E)



WASTE TO ENERGY (W.T.E)- WORKERS QUARTERS 1





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WASTE TO ENERGY (W.T.E) - WORKERS QUARTERS 2



WASTE TO ENERGY (W.T.E) - TOWN HOUSE





Action Plans

1. Proposed Jatropha Agro-politan Business Clusters Development for:

Nigeria (60 Blocks)	Uganda (240 Blocks)	Mauritania (32 Blocks)	Tanzania (100 Blocks)
Kaduna State, Nigeria (5 Blocks)	Guinea (30 Blocks)	Senegal (17 Blocks)	Kenya (60 Blocks)
Sudan (60 Blocks)	Ivory Coast (30 Blocks)	Burundi (25 Blocks)	South Sudan (25 Blocks)
White Nile, Sudan (5 Blocks)	Burkina Faso (20 Blocks)	Rwanda (35 Blocks)	Mali (29 Blocks)
NNPC (13 Blocks)	Chad (29 Blocks)	Congo (100 Blocks)	Ethiopia (17 Blocks)


2. Proposed Ogoniland Cleanup (Oil Waste to Energy) for Niger Delta.

3. Proposed Waste-to-Energy (WTE) Project for:

Nigeria (12,000 MT/d)	Ouagadougou, Burkina Faso (1,000 MT/d)	Kinshasa, Congo (1,000 MT/d)	Bamako, Mali (1,000 MT/d)
Khartoum State, Sudan (2,000 MT/d)	Nouakchott, Mauritania (1,000 MT/d)	Dodoma, Tanzania (1,000 MT/d)	Addis Ababa, Ethiopia (1,000 MT/d)
Mbale, Uganda (1,000 MT/d)	Dakar, Senegal (1,000 MT/d)	Nairobi, Kenya (1,000 MT/d)	NNPC (1,000 MT/d)
Conakry, Guinea (1,000 MT/d)	Bujumbura, Burundi (1,000 MT/d)	Juba, South Sudan (1,000 MT/d)	N'Djamena, Chad (1,000 MT/d)
Yamoussoukro, Ivory Coast (4,000 MT/d)	Kigali, Rwanda (1,000 MT/d)	Mbale, Uganda (1,000 MT/d)	




BEHIND THE SUCCESS



'I believe in the laws of nature, we must give first before expecting anything.'

The world is desperate for climate change solution, just look at the continuous natural disasters and catastrophic around the world, who actually cares?'
- DATO' SERI MOHD SAFI'E M. JAFFRI



'We must understand the need of the people, they are not capable to invest on anything but they have some lands for food crops. Give them the seeds, buy back at the right price, good price! Process the seeds in front of their eyes and produce the oil and additive locally for their benefits! This is the only way to bring them out of misery.'
- ZURINA AMNAN