

# COMPANY PROFILE CV. ENERGI BIO PELANGI

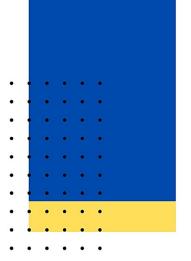








## TABLE OF CONTENT



- 01. Company Overview
- 02. Welcome Message
- 03. Our Metallurgical Product
- 04. Our Energy Alternative Product
- 05. Our Media Water Treatment Plant Product
- 06. Our Services
- 07. Our Certification Product
- 08. Our Partner Laboratory
- 09. Our Customer
- 10. Get In Touch

## **COMPANY OVERVIEW**

## **About Us**

Our company is a local supplier of raw materials for metallurgical products, alternative energy, and water treatment plants. By sourcing domestically, we ensure reliable, cost-effective, and sustainable solutions. We provide key inputs for metallurgical production, offer materials for alternative energy in bioenergy applications, and deliver effective filtration media for water treatment. Committed to quality and sustainability, we aim to strengthen local supply chains and contribute to the growth of these vital industries.

## Vision

"Increase the added value of domestic products."

## Mission

- Socializing domestic products in the fields of metallurgy, water treatment plants, and alternative energy.
- Demonstrating the efficient use of domestic products in metallurgy, water treatment plants, and alternative energy fields.
- Implementing domestic products in the foundry, water treatment plant, and alternative energy industries to support Indonesia's industrial independence.



## WELCOME MESSAGE



## ENDANG DWI KARTINI

President Director Of Energi Bio Pelangi

#### Dear Customers,

Energi Bio Pelangi was founded in 2008 to serve various industries, including metal casting, media water treatment plants, and small and medium enterprises that rely on alternative energy. Since our inception, we have grown to become an environmentally friendly product provider in Indonesia. We are committed to supporting sustainability and environmental conservation through innovative energy solutions.

## **JAMSON SIJABAT**

Vice President Director Of Energi Bio Pelangi

#### Dear Customers,

We enhance the value of domestic products, ensuring their suitability for local use and delivering the highest-quality goods to promote efficient production. Our company is committed to implementing local metallurgical products in Indonesia's metal casting industry while advancing sustainable solutions in water treatment plant media and alternative energy sectors.



## **OUR METALLURGICAL PRODUCT**

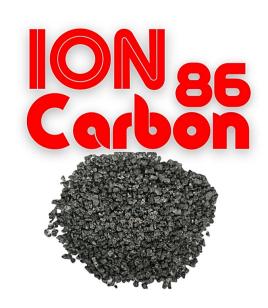


**ION Coal** is a local product. It is made from coal that undergoes a process to achieve optimal fineness, allowing it to be used for metallurgical casting. **ION COAL** is a locally produced product that has received TKDN certification from the Ministry of Industry.

**PRODUCTION CAPACITY: 400 MT/MONTH** 

**ION Carbon 86** is local Carbon produced from green coke. The coke undergoes a calcination process, followed by a size adjustment to attain a fixed carbon value. This is crucial to enhancing the carbon content in metal castings. This product is commonly utilized for induction furnaces and cupola furnaces.

PRODUCTION CAPACITY: 150 MT/MONTH





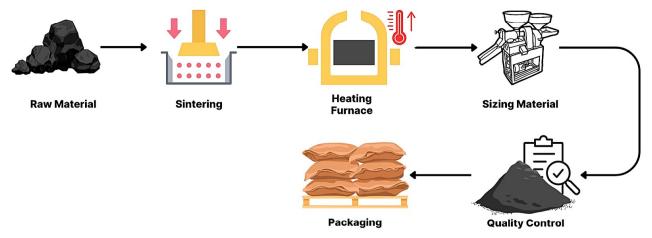
Palm Kernel Shell Charcoal is palm shell waste that goes through the carbonization process, so it has a fixed carbon (FC) value that is needed as a carbon additive for metal casting.

This product is usually used as a mixture in induction and cupola furnaces. Palm Kernel Shell Charcoal is available in 2 sizes, namely natural size and powder.

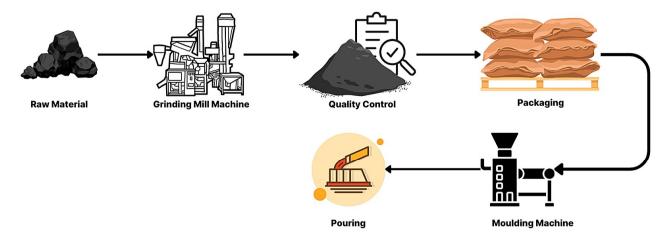
PRODUCTION CAPACITY: 200 MT/MONTH

# OUR PROCESS PRODUCT

#### **OUR PROCESS CARBON**



#### **OUR PROCESS CARBON POWDER**



#### **SPECIFICATION OUR METALLURGICAL PRODUCT**

Product	Moisture (%)	Ash Content (%)	Volatile matter (%)	Fixed Carbon (%)	Total Sulfur (%)	Gross Caloric Value (Cal/g)	Sizing
ION Coal	Max 5	Max 7.5	Min 30	Min 50	Max 0.5	8233	Powder 99% (Mesh 200-300)
ION Carbon 86	Max 0.85	Max 4	Max 6	89 - 92	Max 0.5	7914	99% (0.1-4 mm)
Palm Kernell	Max 6.5	Max 5	Max 14.5	75-80	Max 0.3	6970	Natural Size 99% (2-60 mm)
Shell Charcoal	Max 6.5	Max 6.5	Max 12.5	75-80	Max 0.3	6970	Powder 99% (Mesh 200-300)

## **OUR ALTERNATIVE ENERGY**

Carbonized briquettes are made by heating organic materials in airless conditions to remove water and gases, resulting in dense, efficient fuel that produces high energy. These briquettes are smokeless, environmentally friendly, and convenient for indoor use. They ignite easily, burn for a long time, and produce minimal air pollution.

**PRODUCTION CAPACITY: 100 MT/MONTH** 

Non-carbonized briquettes are made from organic materials that retain water and gas content, resulting in more smoke when burned. Due to a more straightforward manufacturing process, they are cheaper than carbonized briquettes and are commonly used for specific applications, like heating chicks, where smoke is not a significant issue. These briquettes are effective for maintaining stable temperatures in chicken coops at a low cost.

PRODUCTION CAPACITY: 100 MT/MONTH



Hexagonal briquettes are six-sided briquettes made from coconut shell or wood charcoal, offering enhanced density and combustion efficiency due to optimal airflow. Compacted using a high-temperature briquette machine, resulting in durable and stable-burning briquettes. Known for consistent heat output, they are versatile and customizable, allowing users to choose the charcoal type that suits their needs. This makes them ideal for various applications, including grilling.

**PRODUCTION CAPACITY: 100 MT/MONTH** 

## OUR PRODUCT





Cube briquettes are solid, cube-shaped briquettes made from coconut shell or wood charcoal, which can be customized based on user preferences. They offer stable combustion, even heat, and minimal smoke, making them environmentally friendly. These briquettes are energy-efficient, versatile in raw material selection, and easy to use for applications like roasting or heating. Their compact, durable shape makes them suitable for both industrial and household use.

**PRODUCTION CAPACITY: 100 MT/MONTH** 

#### SPECIFICATION OUR ALTERNATIVE ENERGY PRODUCT

Product	Moisture (%)	Ash Content (%)	Volatile matter (%)	Fixed Carbon (%)	Total Sulfur (%)	Gross Caloric Value (Cal/g)	Sizing
Carbonized briquettes	Max 5	Max 16	Max 24	50-55	Max 0.1	5731	Pillow Briquatte
Non-carbonized briquettes	Max 8	Max 9.1	Max 41	40-42	Max 0.5	6010	Pillow Briquatte
Hexagonal briquettes	Max 5	Max 14	Max 18	65-68	Max 0.45	6274	Hexagonal
Cube briquettes	Max 5	Max 13	Max 19	65-68	Max 0.45	6774	Cube

## **OUR MEDIA WATER TREATMENT PLANT**



Palm Kernel Shell Activated Carbon (PKS Activated Carbon) is activated carbon produced from palm kernel shells through an activation process that increases porosity and surface area.

This activation allows the carbon to have a higher adsorption capacity, effectively absorbing various contaminants in water.

PRODUCTION CAPACITY: 100 MT/MONTH

Coconut Shell Activated Carbon is activated carbon derived from coconut shells through thermal and chemical activation. This material has a dense microporous structure and large surface area, making it very effective in filtering and absorbing various pollutants in water.

**PRODUCTION CAPACITY: 100 MT/MONTH** 





**Sawdust Activated Carbon** is activated Carbon produced from sawdust through carbonization and activation. Due to its lightweight and malleability, this material is an economical and environmentally friendly alternative to water filtration applications.

PRODUCTION CAPACITY: 100 MT/MONTH

## OUR PRODUCT



Anthracite Activated Carbon is derived from anthracite coal, a type of coal with a high carbon content and a hard structure. Through thermal activation, anthracite is transformed into a robust and highly effective filter medium for water purification applications, particularly in industrial systems and wastewater treatment.

PRODUCTION CAPACITY: 200 MT/MONTH

**Zeolite** is a natural aluminosilicate mineral with a **porous structure** and ion exchange capability. It is used in water filtration to remove contaminants such as heavy metals, ammonia, and other compounds through the process of **absorption and ion exchange.** 

**PRODUCTION CAPACITY: 100 MT/MONTH** 





Silica sand consists mainly of silica (silicon dioxide), which has delicate and hard grains. In water purification, silica sand is used as a filtration medium to remove impurities, solid particles, and contaminants in water.

**PRODUCTION CAPACITY: 100 MT/MONTH** 

## **OUR SERVICES**



One-stop service is a comprehensive solution where customers access all necessary services in one place. We manage every aspect of the export process, including packaging, shipping, logistics, and permits, so businesses can focus on preparing their goods and documents while we handle the rest.

**PRODUCTION CAPACITY: 400 MT/MONTH** 

Repackaging services in the export industry involve modifying the packaging of products to meet specific requirements or standards of the destination country or to enhance product presentation. Repackaging can include tasks such as resizing, relabeling, or customizing packaging materials to ensure compliance with international shipping regulations and market preferences.

PRODUCTION CAPACITY: 200 MT/MONTH

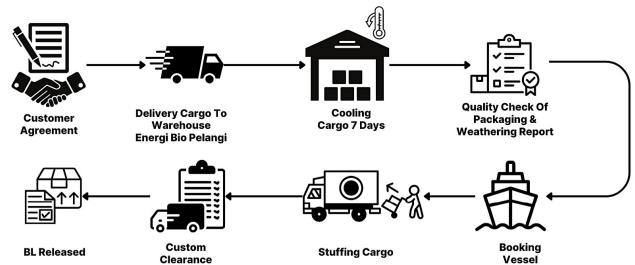




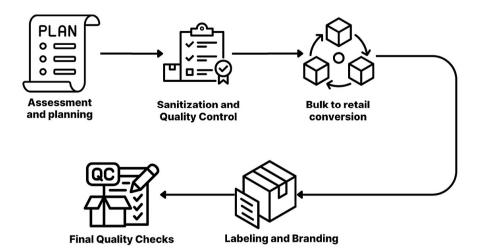
Powder grinding services are specialized processes used to reduce the particle size of bulk materials, transforming them into fine or ultra-fine powders. This size reduction is essential in various industries, including chemicals and materials science, as it can significantly influence the solubility, bioavailability, and overall performance of the materials.

**PRODUCTION CAPACITY: 400 MT/MONTH** 

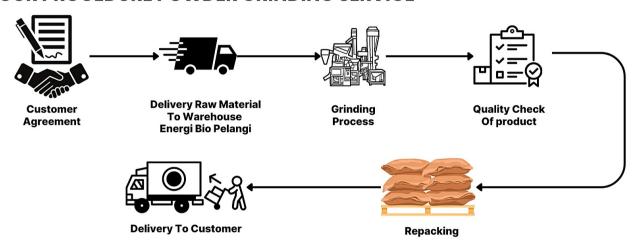
#### **OUR PROCEDURE ONE STOP SERVICE**



#### **OUR PROCEDURE REPACKAGING SERVICE**



#### **OUR PROCEDURE POWDER GRINDING SERVICE**



## **OUR CERTIFICATION PRODUCT**

## COA of ION COAL



#### Arbie Scientific

Trustworthy Laboratory

#### **SUMMARY**

OF ANALYSIS REPORT

Report No. : 01/420622

Report On : Testing of Coal sample

Report To : CV Energi Bio Pelangi - Ibu Endang Dwi Kartini

Sample ID : D-420652

Sample Code : COAL DUST PREMIUM

#### SAMPLE IDENTIFICATION

Package condition: Packed properly / Sample condition: Dry / Sample color: Black / Particle

size: Top size of 1 mm / Initial mass: 0,9 kg

#### ANALYSIS RESULTS

This is the summary of analysis report of sample received. As the history of sample is unknown so we are not responsible for any errors that may have been generated during transportation, packaging and sampling process.

Parameter	as-received basis	air-dried basis	dry basis	dry, ash-free basis	Unit
Total moisture	3,9				%
Proximate					
Moisture		4,0			%
Ash content	6,0	5,8	5,8		%
Volatile matter	35,0	35,0	38,0	38,7	%
Fixed carbon	55,1	55,2	56,2	61,3	%
Total sulfur	0,42	0,43	0,44		%
Gross calorific value	8112	8233	8528	8680	cal/g
HGI		n/a			
CSN		n/a			

#### COAL CLASSIFICATION

This classification is **an approximation only**, especially for coal sample either having ash content more than 20% adb or the coal has already been exposed for long period of time.

	very high calorific value			
Coal Classification based on coal components	low moisture			
of sample received shown at Table 1 of the				
rep	medium sulfur			
	high-volatile matter			
Classification Based on ASTM D309	High-volatile bituminous A			

Date: 24 March 2025

Note:

For details, please have a look at the full report. n/a = not analyzed

> Arbie Yakub Laboratory Manager

Jl. Cemara III No. 7 Bandung 40161 Phone/Fax: 022-2784798 / 2034016. Email: yak@bdg.centrin.net.id

## COA of ION Carbon 86





Report No. 03874/EOBOAR Date: March 5, 2024

Issuing Office: Jl. Jend. A. Yani. No. 315 Surabaya 60234, Indonesia Phone/Facs: +62 31 8470547/8470563 Email: labsurabaya@sucofindo.co.id

#### REPORT OF ANALYSIS

CLIENT : CV. ENERGI BIO PELANGI

KP Cinyosog RT.002 RW.002

Burangkeng Setu

THE SAMPLE WAS SUBMITTED BY THE CLIENT WITH THE FOLLOWING IDENTIFICATION:

: CARBON RAISER CPC (CALCINED PETROLEUM COKE) TYPE OF SAMPLE

DATE OF RECEIVED : February 27, 2024

DATE OF ANALYSIS : February 28 up to March 5, 2024

TEST REQUIRED : Proximate analysis

DESCRIPTION OF SAMPLE : Form

Weight / Volume : ± 2 Kg
Packing : Carton

SAMPLE IDENTIFICATION : Carbon Raiser EBP-2224

(STATED BY CLIENT)

We have tested the sample(s) submitted, and the following results were obtained:

Parameters	Unit	AR	ADB	DB	Test Method
Total Moisture	% wt	1.18			ASTM D2961 - 17
Moisture in the Analysis Sample	% wt		0.83		ASTM D3173/D3173M - 17a
Ash Content	% wt	3.85	3.86	3.89	ASTM D3174 - 12(2018)e1
Volatile Matter	% wt	5.96	5.98	6.03	ASTM D3175 - 20
Fixed Carbon	% wt	89.01	89.33	90.08	ASTM D3172 - 13(2021)e1
Total Sulfur	% wt	0.50	0.50	0.50	ASTM D4239 - 18e1 Method A
Gross Calorific Value	Kcal/Kg	7886	7914	7980	ASTM D5865/D5865M - 19

AR : As Received ADB : Air Dried Basis

DB : Dry Basis

This Certificate/report is issued under our General Terms and Conditions, copy of which is available upon request or may be accessed at www.sucofindo.co.id

Dept. Of Mineral and Compspection and Testing

71030524000568









## **OUR CERTIFICATION PRODUCT**

## COA of Palm Kernell Shell Charcoal



1968

Page No : 1 of 1

Report No : 231861.2575

#### **REPORT OF ANALYSIS**

Description

Manufactured / Shipper

: Palm Kernel Shell Charcoal

: CV. Energi Bio Pelangi

KP Cinyosog RT. 002 RW. 002

Burangkeng, Setu

Sample Code Sample Weight : Natural Size : 3.00 Kgs

Received Date : December 18<sup>th</sup>, 2023 Date of Analysis : December 18<sup>th</sup>, 2023

#### **Analysis**

Analysis were performed at PT Carsurin Cikarang Laboratory (accreditation by KAN / National Accreditation Committe – Indonesia for ISO 17025:2017 Cert No. LP-415-IDN) in accordance with ASTM Standard. The results of our analysis are as follows:

Davamatar	Unit	Res	ults	Method	
Parameter	Unit	Wet Basis	Dry Basis	Method	
Moisture	%	6.05		ASTM D1762-84 (REAPPROVED 2021)	
Ash Content	%	4.75	5.06	ASTM D1762-84 (REAPPROVED 2021)	
Volatile Matter	%	13.64	14.52	ASTM D1762-84 (REAPPROVED 2021)	
Fixed Carbon	%	75.56	80.42	By Calculation	

This certificate refers solely to the analysis in accordance with the details described herein and does not certify any other matter, and is issued without prejudice.

Jakarta, January 03rd, 2024

PT. PARSUBIN TOK

Dede Jemmi Supriadi

Head of Laboratory

For verification of authenticity certificate or report, please e-mail to <a href="mailto:charcoal@carsurin.com">charcoal@carsurin.com</a>

The below findings are based on sample/s only, which is/are submitted or supplied by client. The report is valid within 90 days from the date of analysis.





This report is made and issued by the Company upon the Principal/Applicant's request and the analysis contained therein reflects the Company's finding on the sample(s) submitted by Principal/Applicant and/or sample(s) drawn by the Company at the time and place of perincipal (position in the inspection) of company at the time and place of perincipal to the inspection only. Company shall not be liable for any changes to the results herein due to effects of weather, transport, storage or other factors outside Company's control. Furthermore, the Company shall not be responsible to any parties on any business, financial and/or/legal consequence for any transaction by using this report/analysis. Any unauthorised alteration or falsification of the content or appearance of this document cannot be reproduced except in full, without prior appearance of the Company.

e headoffice@carsurin.com

## COA of Palm Kernell Shell Powder



1968

Page No

: 1 of 1

Report No : 231861.2576

#### **REPORT OF ANALYSIS**

Description

Manufactured / Shipper

: Palm Kernel Shell Charcoal

: CV. Energi Bio Pelangi

KP Cinyosog RT. 002 RW. 002

Burangkeng, Setu

Sample Code

Sample Weight

: Powder : 3.00 Kgs

Date of Received Sample Date of Analysis

: December 18th, 2023

: December 18th, 2023

#### **Analysis**

Analysis were performed at PT Carsurin Cikarang Laboratory (accreditation by KAN / National Accreditation Committe - Indonesia for ISO 17025:2017 Cert No. LP-415-IDN) in accordance with ASTM Standard. The results of our analysis are as follows:

Davameter	Unit	Res	ults	
Parameter		Wet Basis	Dry Basis	Method
Moisture	Pct	6.41		ASTM D1762-84 (REAPPROVED 2021)
Ash Content	Pct	6.20	6.62	ASTM D1762-84 (REAPPROVED 2021)
Volatile Matter	Pct	11.77	12.58	ASTM D1762-84 (REAPPROVED 2021)
Fixed Carbon	Pct	75.62	80.80	By Calculation

This certificate refers solely to the analysis in accordance with the details described herein and does not certify any other matter, and is issued without prejudice.

Jakarta, January 03rd, 2024

PT. CARSHRIN TOK

1968 Dede Jemmi Supriadi

Head of Laboratory

For verification of authenticity certificate or report, please e-mail to <a href="mailto:charcoal@carsurin.com">charcoal@carsurin.com</a>

The below findings are based on sample/s only, which is/are submitted or supplied by client. Th report is valid within 90 days from the date of analysis.





## **OUR CERTIFICATION PRODUCT**

## **TKDN Certificate Of Coal Dust**



## **COA of Eco Briquattes**





## **OUR PARTNER LABORATORY**



PT Superintending Company of Indonesia (SUCOFINDO)



**PT Arbie Scientific** 



1968

**PT CARSURIN Tbk** 



Laboratorium Energi dan Lingkungan ITS

## **Our Customer**

#### International





#### **Domestic**

**PT Octo Corindo Sarana** 

**PT Artha Mulia Nusantara** 

**PT Atmaja Jaya** 

**PT Bioli Lestari** 

**PT Waka Magma** 

PT Garva Berkat Usaha

PT Ispat Indo

**PT Walsin Lippo Industries** 

**PT Neo Surya Pratama** 

PT Tanjungmas Indah Abadi

PT Makmur Meta Graha Dinamika

**CV Bumi Buana Citra** 













#### Workshop & Office CV. Energi Bio Pelangi.

JI Pangkalan II, RT.02, RW. 02, Burangkeng, Kec. Setu, Kabupaten Bekasi, Jawa Barat 17154. Phone. +62 21 825 2399

## **DISCOVER OUR ONLINE SHOP!**









+62 851 7305 4317 Mr. Richard



+62 851 7305 4317 Mr. Richard



energi@biopelangi.biz.id



www.energibiopelangi.com

