

Report No. 02077/EOBOAR  
Date: February 6, 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 : **KOPERASI PRODUSEN ENERGI BIOMASSA INDONESIA**  
**QQ : PT. THERMAX INTERNATIONAL INDONESIA**  
 Gedung Sandipura Lantai Dasar  
 Jalan KH. Abdullah Syafei Bukit Duri, Tebet  
 Kota Adm. Jakarta Selatan, DKI Jakarta, 12840

THE FOLLOWING SAMPLE (S) WAS/ WERE SUBMITTED AND IDENTIFIED BY CLIENT AS:

TYPE OF SAMPLE : **BIOMASS**  
 DATE OF RECEIVED : January 29, 2024  
 DATE OF ANALYSIS : January 30 up to February 6, 2024  
 TEST REQUIRED : Mean analysis  
 DESCRIPTION OF SAMPLE : Form : Solid  
 Weight / Volume : ± 5 Kg  
 Packing : Plastic bag

SAMPLE IDENTIFICATION : **WOOD PELLET (WP)**  
 (STATED BY CLIENT)

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

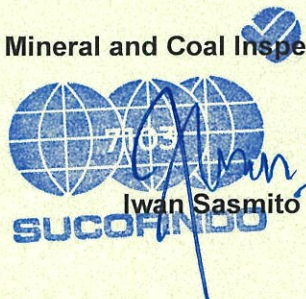
Parameters	Unit	AR (As received)	DB (Dry Basis)	Test Method
Total Moisture	% wt	6.31	---	ASTM E871 - 82 (2019)
Ash Content	% wt	3.97	4.24	ASTM D1102 - 84 (2013)
Volatile Matter	% wt	71.30	76.10	ASTM E872 - 82 (2019)
Fixed Carbon	% wt	18.42	19.66	ASTM D3172 - 13 (2021)e1
Total Sulfur	% wt	0.06	0.06	ASTM D4239 - 18e1 Method A
Gross Calorific Value	Kcal/Kg	4425	4724	ASTM D5865/D5865M - 19
Nett Calorific Value	Kcal/Kg	4093		ASTM D5865/D5865M - 19
<b>Ultimate Analysis:</b>				
Carbon	% wt	48.65	51.93	ASTM D5373 - 21 Method A
Hydrogen (*)	% wt	5.78	6.17	
Nitrogen	% wt	0.74	0.79	
Oxygen (*)	% wt	34.49	36.81	ASTM D3176 - 15

(\*) Hydrogen and Oxygen do not include H and Ox sample moisture

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](http://www.sucofindo.co.id)

Dept. Of Mineral and Coal Inspection and Testing

71030524000312



**Iwan Sasmito**  
SUCOFINDO