



# company **PROFILE**

**Biomass Energy.**

PT. Niaga Indo Alam is a Manufacturer of biomass energy, we are producing palm kernel shell, wood pellets and charcoal briquette.



# About Us

## **Company Profile** of Biomass Energy

PT. Niaga Indo Alam has been established as a Manufacturer of Biomass Energy for wood pellets and charcoal briquettes. Our manufacturer is located in Pasuruan, East Java and Bangka, the main office is located in Surabaya, East Java, The 2<sup>nd</sup> big city in Indonesia. We export our products to supply industries that need biomass energy such as Japan, Korea and even some countries in the Middle East. We offer a wide range of services that are capable of fulfilling client specific requirements such as packaging. Our shipment and export dealings are fully transparent, thereby, helping us gain client's trust and satisfaction.

Based on one of the world's need to reduction of carbon emissions to reduce global warming, we are committed to produce biomass energy, wood pellets and charcoal briquettes. We are committed to offer our client high quality product, assuring they receive the most value. We also deliver high quality customer service and we strive to exceed their expectation in quality. We always act with integrity take personal responsibility to fulfill our commitment with our client. We are provide quality product due to the correct operation and maintenance relating to the main machines, we are coscentious about training the technicians and workers on how to operate and maintain the machines efficiently and also produce high products.



## Service From Us

We are provide quality product due to the correct operation and maintenance relating to the main machines, we are coscentious about training the technicians and workers on how to operate and maintain the machines based on the manual and the practical conditions, which makes the complete biomass pellets and briquettes plant operate stably, efficiently and also produce high products.

**1**

### COMMITTED

We are committed to offer our client high quality product, assuring they receive the most value.

**2**

### HIGH QUALITY

We also deliver high quality customer service and we strive to exceed their expectation in quality.

**3**

### INTEGRITY

We always act with integrity take personal responsibility to fulfill our commitment with our client.

**4**

### REDUCE GLOBAL WARMING

Based on one of the world's need to reduction of carbon emissions to reduce global warming, we are committed to produce biomass energy, wood pellets and charcoal briquettes.





# Vision & Mission



## Vision

To be a leading exporter of coconut products and biomass energy in Indonesia which has reputation of "eco" quality.



## Mission

1. Producing a consistently high quality products.
2. Deliver high quality customer services and improve it continuously for customer satisfaction.
3. Having a integrity, responsibility and transparency to fulfill commitment with customers.





The header image features a close-up of wood pellets and charcoal briquettes. A bright flame is visible in the upper left corner, suggesting combustion. The background is a solid green color that transitions into the white text area.

# Biomass Energy Overview

On a global or as a national scale as well the current era is the era of reducing carbon emissions and we believe this can be achieved by substitution of fossil fuels with renewable energy such as substitution of coal with wood pellets and charcoal briquettes.

Biomass waste-to-energy conversion reduces greenhouse gas emissions in two ways. Heat and electrical energy is generated which reduces the dependence on power plants based on fossil fuels. The greenhouse gas emissions are significantly reduced by preventing methane emissions from landfills. Moreover, waste-to-energy plants are highly efficient in harnessing the untapped sources of energy from wastes.

Sustainable and renewable natural resources such as biomass can supply potential raw materials for energy conversion. In Indonesia, they comprise variable-sized wood from forests (i.e. natural forests, plantations and community forests that commonly produce small-diameter logs used as firewood by local people), woody residues from logging and wood industries, palm residues from oil palm industries, coconut shell wastes from coconut plantations, as well as skimmed coconut oil and rice husk from agro industrial wastes.

**Moreover, we get raw materials from small business sector and we are likely supporting local business that supply the raw materials, and therefore, contributing to the local economy.**



# Benefit of Biomass Energy Product

## Eco-energy

Reduced carbon emissions – much less than oil, log, coal or gas-fired boilers due to their high burn efficiency and the density of the fuel. Also, burn cleanly and are more convenient than logs, oil or coal.

## Cost efficiency

Wood pellets are much more price stable than many other forms of fuel. Compared to fossil oil or natural gas, wood pellets can save about half of expenses on fuel.

## Renewable

They are produced from renewable materials which unlimited fuel source, because the raw materials are easy to get.





# Our Products

## 1. Wood Pellets

Wood pellets are the most common type of pellet fuel and are generally made from compacted sawdust and milling of lumber, manufacture of wood products and furniture, or construction.

### Product Specification :

Diameter	: 6 – 8 mm	Ash content	: < 3 %
Length	: 2 – 5 cm	Sulphur	: < 0.2 %
Moisture	: < 10%	Bulk Density	: > 600 kg/m <sup>3</sup>
Caloric Value	: > 4.200 Kcal/kg	Supply Ability	: 5.000 MT/Month

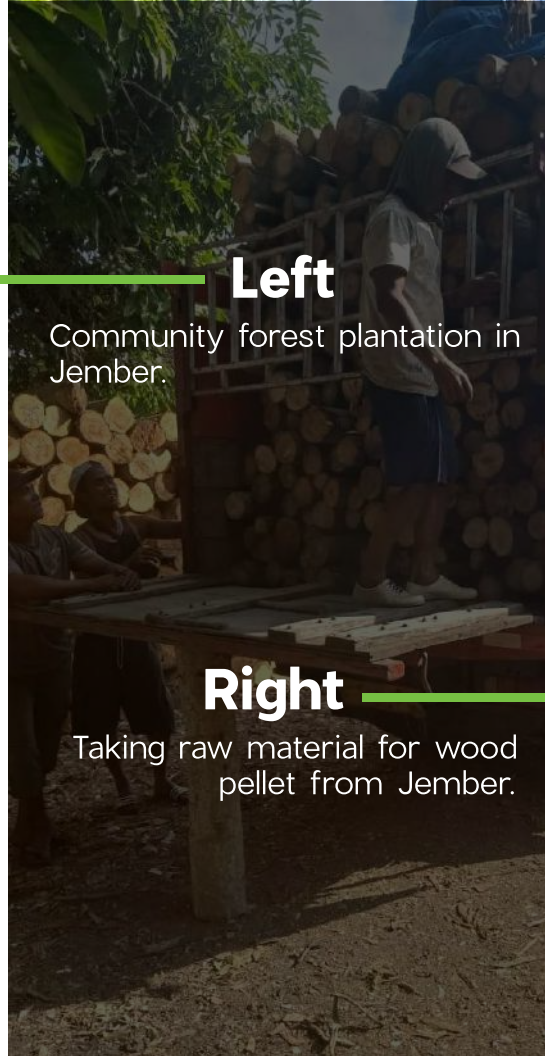


# Our Products



**Left**

Community forest plantation in Jember.



**Right**

Taking raw material for wood pellet from Jember.





# Our Products

## 2. Wood Chips

Wood Chips may be used as a biomass solid fuel or other uses. In order to produce wood chips, woody biomass, with the intention of being burned afterwards, must be through chipping process which is able to flow and can be fed to a boiler automatically.

### Product Specification :

Length :  $\geq 1$  cm -  $\pm 4$  cm  
Thickness :  $\leq 1$  cm  
Moisture : max. 20%  
Supply Ability : 5.000 MT/Month





# Our Products



Source Wood Chip Acacia



## Our Products

### 3. Charcoal Briquette

Charcoal Briquette is made from natural wastes such as coconut shell and sawdust . With strict quality control and compressed under high pressure using mechanical presses method, it makes our briquette is easy to burn for industrial and manufacture burning and any outdoor cooking . The advantages of our briquette are no spark or flame, eco friendly, long burning time, no chemical and also no smoke/ smell.

#### Product Specification :

Shape	: Cube, Hexagonal, Round Tablet and Log
Cube size	: 2.5 x 2.5 x 2.5 cm
Hexagonal size	: 4.5 x 10 cm
Log size	: 20 – 40 cm
Round tablet size	: 5 cm
Fix Carbon	: 70 Up
Total Sulfur	: Max. 0.2
Total Moisture	: Max. 6
Ash Content	: Max. 3
Calories	: 7000 Up
Volatile Matter	: Max. 15
Supply Ability	: 1.000 MT/Month



# Our Products

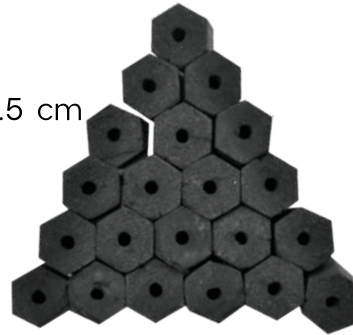
## Various shape of Charcoal Briquette.



### Charcoal briquette in Cube shape

#### Product Specification :

Shape : Cube  
Size : 2.5 x 2.5 x 2.5 cm  
Fix Carbon : 70 Up  
Total Sulfur : Max 0.2  
Total Moisture : Max. 6  
Ash Content : Max. 3  
Calories : 7000 Up  
Volatile matter : Max. 15  
Supply Ability : 1.000 MT/Month



### Charcoal briquette in Hexagonal shape

#### Product Specification :

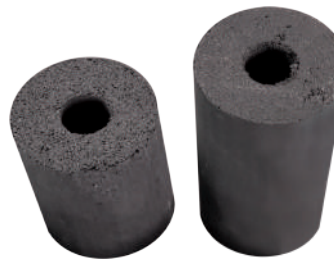
Shape : Hexagonal  
Size : 4.5 x 10 cm  
Fix Carbon : 70 Up  
Total Sulfur : Max 0.2  
Total Moisture : Max. 6  
Ash Content : Max. 3  
Calories : 7000 Up  
Volatile matter : Max. 15  
Supply Ability : 1.000 MT/Month



### Charcoal briquette in Log shape

#### Product Specification :

Shape : Round tablet  
Size : 5 cm  
Fix Carbon : 70 Up  
Total Sulfur : Max 0.2  
Total Moisture : Max. 6  
Ash Content : Max. 3  
Calories : 7000 Up  
Volatile matter : Max. 15  
Supply Ability : 1.000 MT/Month



### Charcoal briquette in Round shape

#### Product Specification :

Shape : Round  
Size : 4 cm  
Fix Carbon : 70 Up  
Total Sulfur : Max 0.2  
Total Moisture : Max. 6  
Ash Content : Max. 3  
Calories : 7000 Up  
Volatile matter : Max. 15  
Supply Ability : 1.000 MT/Month



# Our Products

## Various product of Charcoal Briquette.





# Our Products

## 4. Palm Kernel Shell

Palm kernel shell is a well-known biomass product because of its small size and high heat energy or calorific value. Palm kernel shells (or PKS) are the shell fractions left after the nut has been removed after crushing in the Palm Oil mill.

### Product Specification :

Type	: Dura or Tinara
Size	: < 2.5 cm
Impurities	: 3 %
Moisture	: < 15 %
Caloric Value	: > 4.700 Kcal/kg
Sulfur	: ≤ 0.2 %
Ash Content	: < 2 %

### PKS Charcoal Specification :

Moisture	: < 3 %
Ash Content	: < 5 %
Fixed Carbon	: > 80 %
Total Sulfur	: < 0.1 %
Caloric Value	: > 7.500 Kcal/kg
Supply Ability	: 10.000 MT/Month





## Our Products

### PKS Supplier List

No.	Company Name	Capacity per Month	PKS Waste (3%)
1	PT GCM	45.000	1.350
2	PT GSBL	30.000	900
3	PT BPRM	30.000	900
4	PT LWSM	30.000	900
5	PT GML	30.000	900
6	PT GPL	30.000	900
7	PT BSSP	30.000	900
8	PT THEP	22.500	675
9	PT MAL	22.500	675
10	PT SNS	22.500	675
11	PT PBM	22.500	675
12	PT BSS	22.500	675
<b>Total Capacity per Month</b>		<b>337.500</b>	<b>10.125</b>



# Our Products



Source  
Palm Kernel Shell



## Our Plants

### PT. Niaga Indo Alam factory location :

PT. Niaga Indo Alam factory is located in :



Distance from Pasuruan Plant to Port of Tanjung Perak in East Java approximately 73.9 km, so as facilitate shipment.

# Our Shipment

## Shipping Wood Pellet to Japan





# Our Shipment

## Shipping Wood Pellet to Japan



# Tanjung Perak Port

## Port of Tanjung Perak (East Java)





# Our Plants

## A. Pasuruan – Jawa Timur





# Our Plants





## Our Plants

### PT. Niaga Indo Alam factory location :

PT. Niaga Indo Alam factory is located in :



Distance from Bangka Plant to Port of Pangkal Balam in Bangka Belitung approximately 2 km, so as facilitate shipment.

# Pangkal Balam Port

## Port of Pangkal Balam (Bangka Belitung)





# Our Plants

## B. Bangka – Bangka Belitung



# Our Plants

## Screening machine from Japan & Brother Wood Chip Machine



### Brother Wood Chip Machine

- Stationary and movable type -



### Specification

Model	Dimensions (mm)			Input Inlet size (mm)		Feeding conveyor	Diesel Engine (HP)	Working capacity (t/h)
	Length	width	height	Width	Height			
BR-400C	3800	1950	2450	400	400	-	205	17-20
BR-500C	4200	1950	2550	500	500	-	205	28-33
BR-500EC	4900	1950	2550	500	500	1000x1250	290	30-35



# Our Exhibition

The following is PT. Niaga Indo Alam participation in Trade Expo Indonesia 33<sup>rd</sup> in ICE-BSD Tangerang.





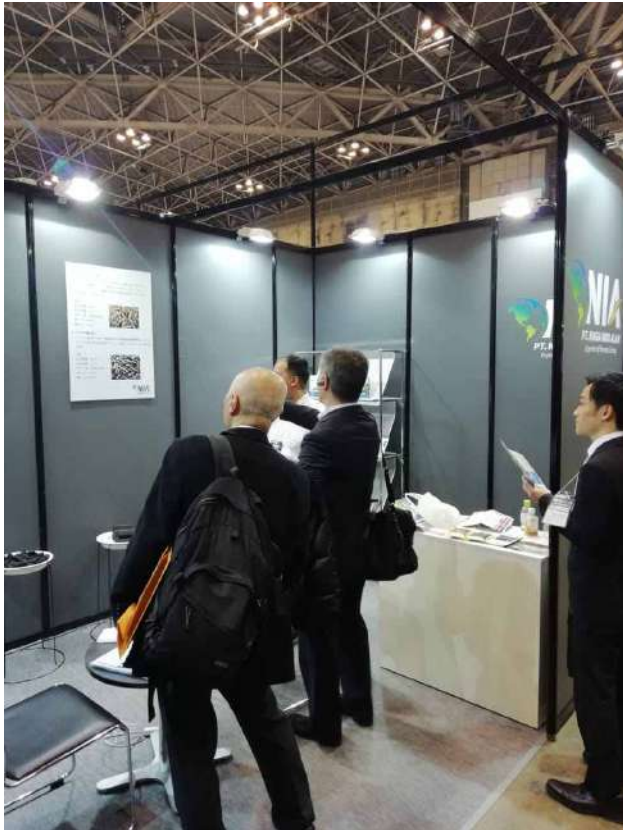
# Our Exhibition





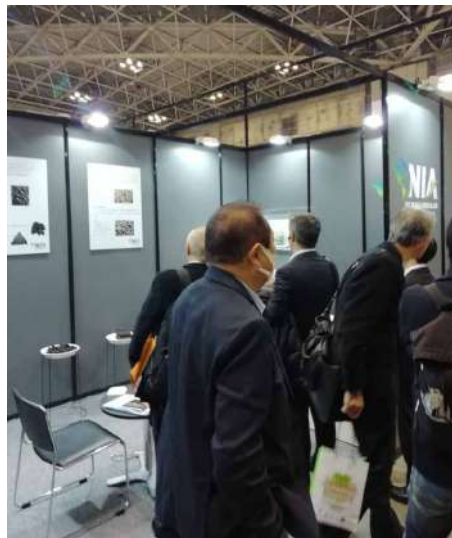
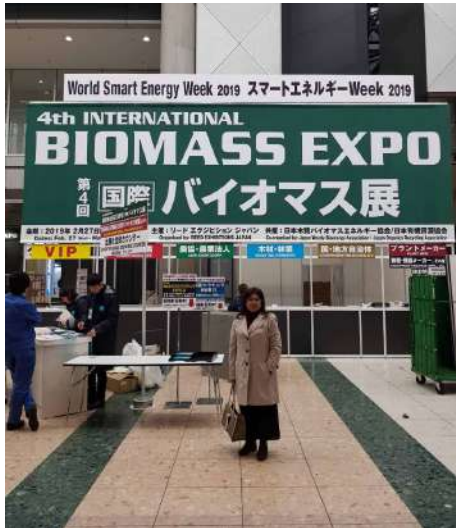
## Our Exhibition

The following is PT. Niaga Indo Alam participation in Biomass Expo Japan 2019 in Tokyo – Japan.





# Our Exhibition





# company **PROFILE**



Jl. R.A. Kartini 123 (2nd Floor)  
Kel. Dr. Soetomo, Kec. Tegalsari, Surabaya  
60264 Jawa Timur – Indonesia

