

# GREETINGS

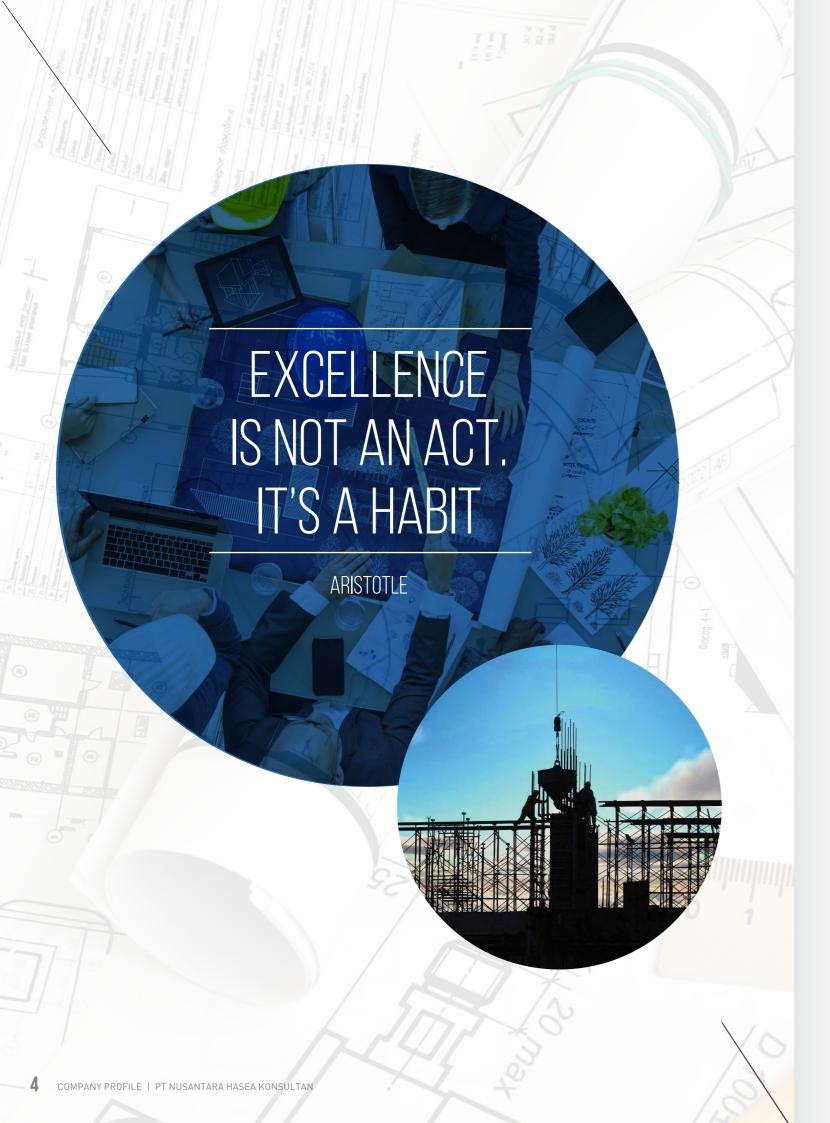
We are PT Nusantara Hasea Konsultan.

With the goal to be one of the most respected and well-known engineering consulting company in Indonesia, we aim to deliver only the best result you can trust.



Freddy is a graduate of Bandung Institute of Technology majored in Mechanical Engineering. With 4 years of experience working at Indonesian Agency for Post-Tsunami Reconstruction of Nias & Aceh and 5 years of coordinating Renewable energy projects under his belt.

**Freddy Siahaan, ST**President Director







# ABOUT US

PT Nusantara Hasea Konsultan (PT NHK) is a private Engineering Consulting Company based in Jakarta.

First established in 2013, we are motivated by the belief that the need of engineering consulting-services will be even greater in the future and we are ready to answer them.

With each varied project more challenging than the others, unique approach with new creative working methods are applied to our day-to-day basis. 'We Strive for Excellence' is the work slogan that we hold true by always spurring to enrich and broaden knowledge continuously in order to achieve goals & results that are extraordinary.

PT NHK is driven by experienced and qualified experts in their respective fields. We are committed to provide a comprehensive and high-standard engineering consulting-services through listening to your needs and deliver an achivable objective result you can count on.

### **VISION**

To be one of the most trustable & well-respected engineering consulting company in Indonesia.

### **MISSION**

. . . . . . . . . . . . . . . . . . .

. . . . . . . . . . . . . . . . . . .

To provide a professionally qualified work Studies, Surveys & Engineering you can trust.

To be actively involved in providing ideas and solutions towards Indonesia's future development.

To continuously innovate a new methods & solutions.

To provide job opportunities for local young & aspiring talents.

. . . . . . . . . . . . . . . .



# STEP.1 **PLANNING**



#### Site Identification & Pre-Feasibility study

An early-phase brief report to identify the potential of a new-site from multi-perspective - including a range of options for technical and economic aspects. The study result will be used to further justify a continued studies.



# Topography Survey & Geotechnical Investigation

**Topography Survey**: An identification & contour mapping of the ground & existing features on the surface site.

**Geotechnical Investigation**: A ground drilling process to access information on the physical properties of the soil and rocks of the site. The obtained result will be used as a base to design the earthwork & base foundations of the proposed building structures.

## STEP.2 **ENGINEERING**



#### Basic Engineering Design

A reliable structural piece of engineering design. The result can be used for further assessment & internal evaluation to recognize the feasibility of the project. The design piece can also be used as a basis to carry out the succeeding phase of Detailed Engineering Design.



#### **Detailed Engineering Design**

A more comprehensive engineering design which includes a detailed plan of Processing, Mechanical, Civil, Layout, Piping, Architectural, Structural, Electrical, Instrumentation & Control. The result of Detailed Engineering Design will be the bridge between the Engineering and Execution phase.

## STEP.3 **EXECUTION**



#### Feasibility Study

An assessment report with detailed review from multi-perspective study such as: general, technical, operational, management & economical value to help determine the feasibility of a certain project in terms of investment-return & profit-making.



#### **Project Management**

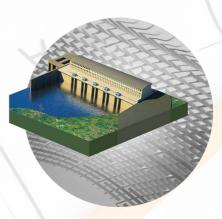
A full-guidance & monitoring services to plan, organize, control and supervise the project development from start to finish. PT NHK not only will act as the client's representative during pre-eliminary works with respective institution, but also on the ground site during construction to overcome unforeseeable issues.

### **OTHERS**



#### **Environmental Impact Assessment Document**

Document containing various studies of the identification to fully understand the environmental harm that may possibly caused by the new establishment and necessary action need to be taken in order to anticipate the damage. Environmental Impact Assessment (EIA) document is required to acquire the Environmental Permit from the government.



#### Architecture

A variety of architectural service from designing new building, renovations, extensions or alterations to existing building, advising on the restoration and conservation of old properties to overseeing the construction project from start to completion.

# PROJECT PORTFOLIO

# **PANDAN DURI HYDROPOWER PLANT**

Year : 2014

Location : West Nusa Tenggara Client : PT Mahasin Putra Energi

A joint-project by the government & private corporation; PT Mahasin Putra Energi. The goal of the project is to study the potential of utilizing the existing Pandan Duri Dam owned by the government and develop it into a hydropower plant. PT NHK provided one-stop service from planning, engineering to execution for the project.

After doing the Topography & Geotechnical Investigation of the dam area, we created the Detailed Engineering Design as the blueprint to build the hydropower plant.

Having all the necessary recommendation from the previous steps, we did a thorough Feasibility Study with an encouraging result; Outside of its original function the dam is also highly capable of producing 600KW of energy. The last step is providing the Environmental Impact Assessment to make sure all the possible environmental harm are anticipated.





Topography

Mapping the surface & contour of the dam area to get factual data.



#### Detailed Engineering Design

Highly detailed planning down to the last centimeters to ensure nothing goes awry during the implementation phase.



#### Feasibility Study

Data summarizing from the collective results gathered previously.

Geotechnical Topography & Investigation





#### Geotechnical Investigation

Both Hand-drilling and machine-drilling are done depending on necessity to obtain the rock sampling information.

Detailed Engineering Design

**Feasibility** Study

**Environmental Impact** Assessment



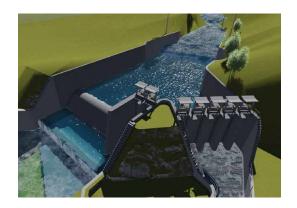




#### **Environmental Impact Assessment**

Various method are applied to fully understand the impact to environment that might occured.

# PROJECT PORTFOLIO



## **PARMONANGAN HYDROPOWER PLANT**

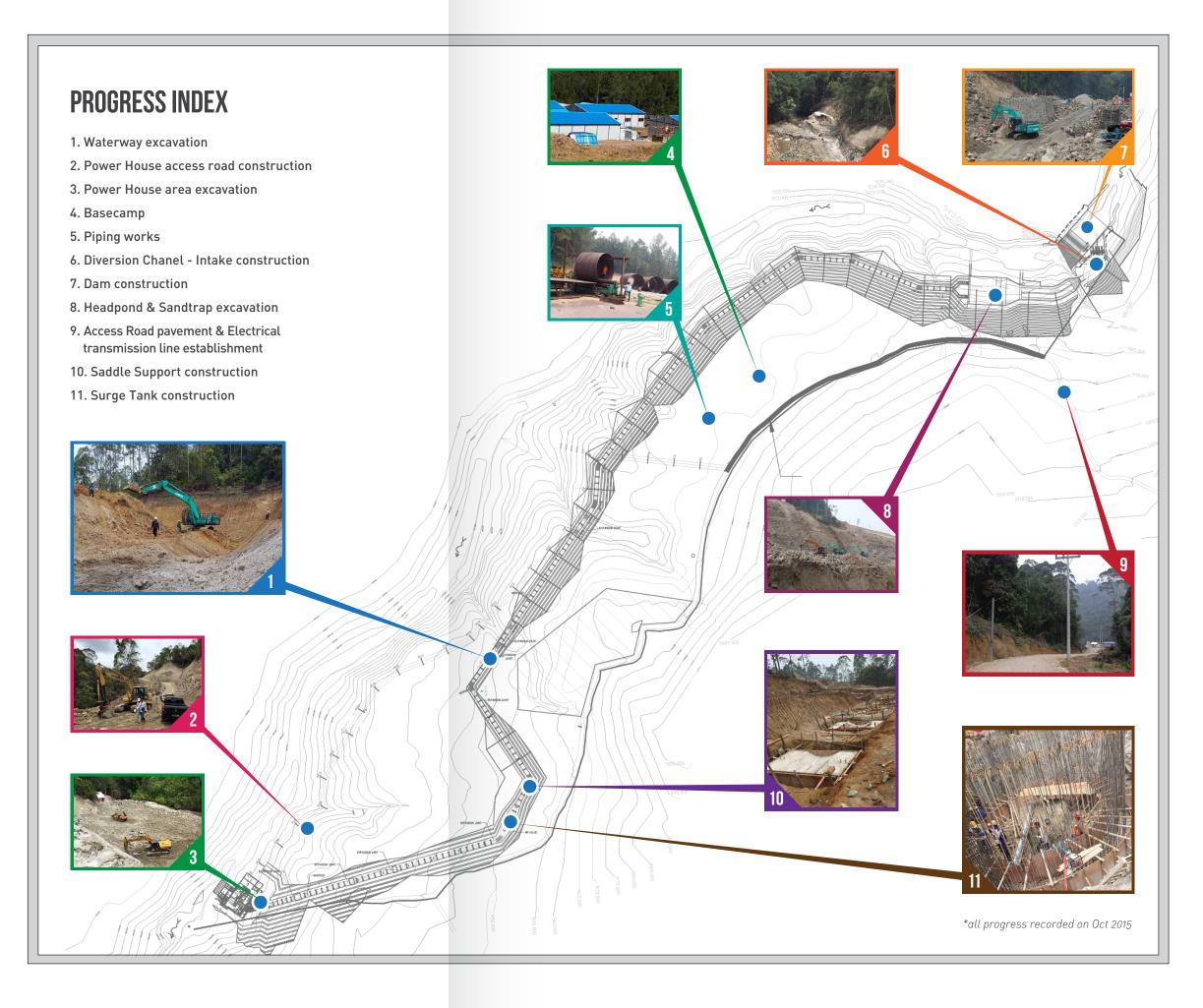
: 2015 Year

: North Sumatra Location

Client : PT Seluma Clean Energy

On 2015, PT NHK was entrusted by PT Seluma Energy to oversee PT Hutama Karya (Persero) during the construction of Parmonangan Hydropower Plant from the very beginning towards completion as the client's representative on the project site.

Parmonangan Hydropower Plant will bring a new source of renewable energy to North Sumatra and it will be capable of producing 9MW of power. The project is expected to be finished within 24 months and though not without blemish, the project has been running smoothly and on-schedule with every raising matters dealt professionally



# PROJECT HIGHLIGHT complete project list can be viewed at: http://nusantarahasea.com/project\_list.php

Project Name	Client	Project Scope	Period
Parmonangan Hydropower Plant	PT Seluma Clean Energy	<ul><li>Feasibility Study Review</li><li>Basic Engineering Design Review</li></ul>	May 2013
Tanah <mark>Pinem Hydropower Plant</mark>	PT Dairi Clean Energy	<ul><li>Feasibility Study Review</li><li>Basic Engineering Design Review</li></ul>	Dec 2013
Mrican Hydropower Plant	PT Energi Alam Persada	<ul> <li>Topography</li> <li>Geotechnical Investigation</li> <li>Feasibility Study</li> <li>Basic Engineering Design</li> <li>Environmental Impact Assessment</li> </ul>	Mar 2014
Tukad Unda 1 Hydropower Plant	PT Energi Alam Persada	Topography Geotechnical Investigation Feasibility Study Basic Engineering Design Environmental Impact Assessment	Mar 2014
Jatimlerek Hydropower Plant	PT Energi Alam Persada	Topography Geotechnical Investigation Feasibility Study Basic Engineering Design Environmental Impact Assessment	Mar 2014
Jatibarang Hydropower Plant	PT Putra Yuda Energi	<ul> <li>Topography</li> <li>Geotechnical Investigation</li> <li>Feasibility Study</li> <li>Detailed Engineering Design</li> <li>Environmental Impact Assessment</li> </ul>	Dec 2014
Titab Hydropower Plant	PT Buleleng Tirta Energi	<ul> <li>Topography</li> <li>Geotechnical Investigation</li> <li>Feasibility Study</li> <li>Detailed Engineering Design</li> <li>Environmental Impact Assessment</li> </ul>	Dec 2014
Pandan Duri Hydropower Plant	PT Mahasin Putra Energi	<ul> <li>Topography</li> <li>Geotechnical Investigation</li> <li>Feasibility Study</li> <li>Detailed Engineering Design</li> <li>Environmental Impact Assessment</li> </ul>	Dec 2014
Parmonangan Hydropower Plant	PT Seluma Clean Energy	Construction Supervision	Feb 2015
Serayu Hydropower Plant	PT Putra Yuda Energi	Topography Geotechnical Investigation Feasibility Study Basic Engineering Design Environmental Impact Assessment	Mar 2015
Batanghari Hydropower Plant	PT Setia Gemilang Perkasa	Topography Feasibility Study Basic Engineering Design	June 2015
Batutegi Hydropower Plant	PT Setia Gemilang Perkasa	<ul><li> Topography</li><li> Feasibility Study</li><li> Basic Engineering Design</li></ul>	June 2015

#### IN ASSOCIATION WITH:







#### Jakarta Office

Jl. Pangeran Jayakarta Kav. 117 Blok B No. 22 Jakarta Pusat 10730

**Tel:** 021 624 6705 | **Fax:** 021 629 2780

#### **Medan Office**

Central Business District Polonia Blok F No. 31 Medan Polonia 20157

**Tel:** 061 4207 8331 | **Fax:** 061 4207 8330

Web: www.nusantarahasea.com
Email: enquiry@nusantarahasea.com