



## INDONESIA HYDRO<sup>®</sup> CONSULT

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### COMPANY EXPERIENCES

#### 1. ADIPASIR SATU HYDROPOWER PROJECT

##### PROJECT FEATURES

Location: Banjarnegara, Central Java, Indonesia  
Net head: 5.45 m  
Design discharge: 7.69 m<sup>3</sup>/s  
Installed capacity: 340 kW  
Turbine type: Vertical axis Kaplan

##### COOPERATED FIRMS

Project owner: PT Daya Tirta Banjarnegara  
Associated consultant: PT Naluritama Engineering & Construction

##### SERVICES

Scope of services: Feasibility study, basic design, detailed design, construction assistance  
Year: 2011 – present

#### 2. ADIPASIR DUA HYDROPOWER PROJECT

##### PROJECT FEATURES

Location: Banjarnegara, Central Java, Indonesia  
Net head: 5.45 m  
Design discharge: 7.69 m<sup>3</sup>/s  
Installed capacity: 340 kW  
Turbine type: Vertical axis Kaplan

##### COOPERATED FIRMS

Project owner: PT Daya Tirta Banjarnegara  
Associated consultant: PT Naluritama Engineering & Construction

##### SERVICES

Scope of services: Feasibility study, basic design, detailed design, construction assistance  
Year: 2011 – present

#### 3. ADIPASIR TIGA HYDROPOWER PROJECT

##### PROJECT FEATURES

Location: Banjarnegara, Central Java, Indonesia  
Net head: 6.00 m  
Design discharge: 6.40 m<sup>3</sup>/s  
Installed capacity: 320 kW  
Turbine type: Vertical axis Kaplan

##### COOPERATED FIRMS

Project owner: PT Daya Tirta Banjarnegara  
Associated consultant: PT Naluritama Engineering & Construction

##### SERVICES

Scope of services: Feasibility study, basic design, detailed design, construction assistance  
Year: 2011 - 2012



## 4. KINCANG HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Banjarnegara, Central Java, Indonesia  
Net head: 5.00 m  
Design discharge: 8.29 m<sup>3</sup>/s  
Installed capacity: 320 kW  
Turbine type: Vertical axis Kaplan

### COOPERATED FIRMS

Project owner: PT Naluri Energi Utama  
Associated consultant: PT Satyakarsa Mudatama

### SERVICES

Scope of services: Feasibility study, basic design, detailed design, construction assistance  
Year: 2011 - 2012

## 5. SINGGI HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Banjarnegara, Central Java, Indonesia  
Net head: 8.25 m  
Design discharge: 3.25 m<sup>3</sup>/s  
Installed capacity: 220 kW  
Turbine type: Vertical axis Kaplan  
Penstock length: 14.2 m

### COOPERATED FIRMS

Project owner: PT Naluri Energi Utama  
Associated consultant: PT Satyakarsa Mudatama

### SERVICES

Scope of services: Feasibility study, basic design, detailed design, construction assistance  
Year: 2011 - 2012

## 6. SUNYALANGU HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Banyumas, Central Java, Indonesia  
River: Logawa  
Net head: 59.65 m  
Design discharge: 1.60 m<sup>3</sup>/s  
Installed capacity: 2 x 760 kW  
Turbine type: Horizontal axis Francis  
Headrace channel: 464.2 m  
Penstock length: 188.2 m

### COOPERATED FIRMS

Project owner: PT Naluri Energi Utama  
Associated consultant: PT Satyakarsa Mudatama

### SERVICES

Scope of services: Feasibility study, basic design, detailed design, construction assistance  
Year: 2011 – present

## 7. BASEH HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Banyumas, Central Java, Indonesia  
River: Logawa  
Net head: 67.24 m  
Design discharge: 3.44 m<sup>3</sup>/s  
Installed capacity: 2 × 930 kW  
Turbine type: Horizontal axis Francis  
Headrace channel: 1023.3 m  
Penstock length: 528.9 m

### COOPERATED FIRMS

Project owner: PT Rumeksa Power

### SERVICES

Scope of services: Feasibility study, basic design, detailed design, construction assistance  
Year: 2011 - present

## 8. BABAKAN HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Banyumas, Central Java, Indonesia  
River: Logawa  
Net head: 47.8 m  
Design discharge: 3.50 m<sup>3</sup>/s  
Installed capacity: 2 × 670 kW  
Turbine type: Horizontal axis Francis  
Headrace channel: 732.4 m  
Penstock length: 275.1 m

### COOPERATED FIRMS

Project owner: PT Rumeksa Power

### SERVICES

Scope of services: Feasibility study, basic design, detailed design, construction assistance  
Year: 2011 - present

## 9. BANJARAN HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Banyumas, Central Java, Indonesia  
River: Banjaran  
Net head: 68.25 m  
Design discharge: 4.00 m<sup>3</sup>/s  
Installed capacity: 2 × 1100 kW  
Turbine type: Horizontal axis Francis  
Headrace channel: 1655.2 m  
Penstock length: 151.9 m

### COOPERATED FIRMS

Project owner: PT Rumeksa Power

### SERVICES

Scope of services: Feasibility study, basic design, detailed design, construction assistance  
Year: 2011 - present

## 10. AMBAL HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Banjarnegara, Central Java, Indonesia  
River: Urang  
Net head: 79.50 m  
Design discharge: 3.27 m<sup>3</sup>/s  
Installed capacity: 2 × 1050 kW  
Turbine type: Horizontal axis Francis  
Headrace channel: 1259.9 m  
Penstock length: 473.4 m

### COOPERATED FIRMS

Project owner: PT Nureco Tirta Banjarnegara  
Associated consultant: PT Naluritama Engineering & Construction

### SERVICES

Scope of services: Feasibility study, basic design, detailed design, construction assistance  
Year: 2011 - present

## 11. SAMBIRATA HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Banyumas, Central Java, Indonesia  
River: Prukut  
Net head: 137.56 m  
Design discharge: 1.35 m<sup>3</sup>/s  
Installed capacity: 2 × 750 kW  
Turbine type: Horizontal axis Pelton  
Headrace channel: 1158.3 m  
Penstock length: 605.8 m

### COOPERATED FIRMS

Project owner: PT Rumangsa Energi Banyumas Utama  
Associated consultant: PT Naluritama Engineering & Construction

### SERVICES

Scope of services: Feasibility study, basic design, detailed design, construction assistance  
Year: 2011 - present

## 12. CICATIH HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Sukabumi, West Java, Indonesia  
River: Cicatih  
Net head: 25.55 m  
Design discharge: 30.00 m<sup>3</sup>/s  
Installed capacity: 2 × 3200 kW  
Turbine type: Vertical axis Kaplan  
Headrace channel: 2306.7 m  
Penstock length: 44.9 m

### COOPERATED FIRMS

Project owner: PT Bias Petrasia Persada  
Associated consultant: PT Naluritama Engineering & Construction

### SERVICES

Scope of services: Feasibility study, basic design, detailed design, construction assistance  
Year: 2011 - present

### **13. LAE ORDI 2 HYDROPOWER PROJECT**

#### **PROJECT FEATURES**

Location: Pakpak Barat, North Sumatera, Indonesia  
River: Lae Ordi  
Net head: 100.02 m  
Design discharge: 9.50 m<sup>3</sup>/s  
Installed capacity: 2 × 3800 kW  
Turbine type: Horizontal axis Francis  
Headrace channel: 3266.9 m  
Penstock length: 561.6 m

#### **COOPERATED FIRMS**

Project owner: PT Bakara Bumi Energi  
Associated consultant: PT Wiratman & Associates

#### **SERVICES**

Scope of services: Basic design, detailed design  
Year: 2011

### **14. TORNAULI HYDROPOWER PROJECT**

#### **PROJECT FEATURES**

Location: Humbang Hasundutan, North Sumatera, Indonesia  
River: Simonggo  
Net head: 85.21 m  
Design discharge: 11.50 m<sup>3</sup>/s  
Installed capacity: 2 × 4000 kW  
Turbine type: Horizontal axis Francis  
Headrace channel: 2522.2 m  
Penstock length: 727.7 m

#### **COOPERATED FIRMS**

Project owner: PT Northsum Hydro

#### **SERVICES**

Scope of services: Topographic survey, geological investigations, feasibility study and detailed design  
Year: 2011 – present

### **15. NAMBADIA HYDROPOWER PROJECT**

#### **PRELIMINARY PROJECT FEATURES**

Location: Humbang Hasundutan, North Sumatera, Indonesia  
River: Simonggo  
Net head: 66.36 m  
Design discharge: 18.60 m<sup>3</sup>/s  
Installed capacity: 2 × 4950 kW  
Turbine type: Horizontal axis Francis  
Headrace channel: 1862.8 m  
Penstock length: 251.1 m

#### **COOPERATED FIRMS**

Project owner: PT Northsum Hydro

#### **SERVICES**

Scope of services: Feasibility study, basic design  
Year: 2011 – present

## 16. PARDUAN HYDROPOWER PROJECT

### PRELIMINARY PROJECT FEATURES

Location: Humbang Hasundutan, North Sumatera, Indonesia  
River: Simonggo  
Net head: 123.40 m  
Design discharge: 10.00 m<sup>3</sup>/s  
Installed capacity: 2 × 5000 kW  
Headrace channel: 2550 m  
Penstock length: 520 m

### COOPERATED FIRMS

Project owner: PT Northsum Hydro

### SERVICES

Scope of services: Feasibility study  
Year: 2011 – present

## 17. PUSUK HYDROPOWER PROJECT

### PRELIMINARY PROJECT FEATURES

Location: Humbang Hasundutan, North Sumatera, Indonesia  
River: Sisira  
Net head: 180 m  
Design discharge: 4.63 m<sup>3</sup>/s  
Installed capacity: 2 × 3110 kW  
Headrace channel: 1200 m  
Penstock length: 591 m

### COOPERATED FIRMS

Project owner: PT Northsum Hydro

### SERVICES

Scope of services: Feasibility study  
Year: 2011 – present

## 18. AIR MEO HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Muaraenim, South Sumatera, Indonesia  
River: Air Meo  
Net head: 26.53 m  
Design discharge: 13.00 m<sup>3</sup>/s  
Installed capacity: 2 × 1350 kW  
Turbine type: Horizontal axis Kaplan  
Headrace channel: 576.6 m  
Penstock length: 506.1 m

### COOPERATED FIRMS

Project owner: PT Ulu Enerindo Jaya  
Associated consultant: PT Naluritama Engineering & Construction

### SERVICES

Scope of services: Feasibility study, basic design, detailed design, construction assistance  
Year: 2011 – present

## 19. 8 HYDROPOWER PROJECTS IN WEST JAVA AND BANTEN

### PRELIMINARY PROJECT FEATURES

Scheme:	Cibalapulang 1	Cibareno	Cileteuh	Cisereuh	Cisiih Leutik	Cisimeut	Curug Citambur	Curug Malela
Location:	Cianjur	Lebak	Sukabumi	Sukabumi	Lebak	Lebak	Cianjur	West Bandung
River:	Cibalapulang	Cibareno	Cileteuh	Cisereuh	Cisiih	Cisimeut	Citambur	Malela
Net head (m):	92.3	51.3	187.6	65.5	190.2	61.4	123.0	53.8
Design discharge (m <sup>3</sup> /s):	15.5	7.1	1.2	3.9	1.1	6.6	0.75	7.5
Installed capacity (MW):	11.5	2.9	1.8	2.1	1.7	3.3	0.62	3.2
Headrace channel (m):	982	1471	2659	1500	3750	1300	20	50
Penstock length (m):	420	596	250	135	1850	300	115	320

### COOPERATED FIRMS

Task owner: PT Medco Power Indonesia  
 Associated consultant: PT Naluritama Engineering & Construction

### SERVICES

Scope of services: Due diligence  
 Year: 2011

## 20. PALUMBUNGAN HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Purbalingga, Central Java, Indonesia  
 River: Klawing  
 Net head: 40.98 m  
 Design discharge: 4.00 m<sup>3</sup>/s  
 Installed capacity: 2 x 660 kW  
 Turbine type: Horizontal axis Francis  
 Headrace channel: 142.5 m  
 Penstock length: 867.9 m

### COOPERATED FIRMS

Project owner: PT Purbalingga Energi

### SERVICES

Scope of services: Feasibility study, basic design, detailed design, construction assistance  
 Year: 2011 - present

## 21. JAYAMUKTI HYDROPOWER PROJECT

### PRELIMINARY PROJECT FEATURES

Location: Garut, West Java, Indonesia  
 River: Cisanggiri  
 Net head: 126.9 m  
 Design discharge: 6.4 m<sup>3</sup>/s  
 Installed capacity: 7.0 MW  
 Headrace channel: 2660 m  
 Headrace tunnel: 930 m  
 Penstock length: 980 m

### COOPERATED FIRMS

Project owner: PT Naluri Energi Utama

### SERVICES

Scope of services: Pre feasibility study  
 Year: 2011 – 2012

## 22. MALABAR HYDROPOWER PROJECT

### PRELIMINARY PROJECT FEATURES

Location: South Bandung, West Java, Indonesia  
River: Cilaki  
Net head: 108.8 m  
Design discharge: 0.9 m<sup>3</sup>/s  
Installed capacity: 800 kW  
Turbine type: Horizontal axis Francis  
Headrace channel: 10 m  
Headrace tunnel: 1530 m  
Penstock length: 260 m

### COOPERATED FIRMS

Project owner: PT Trimulia Makmur Sejati  
Associated consultant: PT Naluritama Engineering & Construction

### SERVICES

Scope of services: Pre feasibility study  
Year: 2012

## 23. PANYAIRAN HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Garut, West Java, Indonesia  
River: Cibatarua  
Net head: 180.7 m  
Design discharge: 5.6 m<sup>3</sup>/s  
Installed capacity: 8.23 MW  
Turbine type: Horizontal axis Pelton  
Headrace channel: 1405 m  
Penstock length: 302 m

### COOPERATED FIRMS

Project owner: PT Tirta Energindo

### SERVICES

Scope of services: Topographic survey, geological investigations, feasibility study and detailed design  
Year: 2012

## 24. CIBALAPULANG 1 HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Cianjur, West Java, Indonesia  
River: Cibalapulang  
Net head: 92.3 m  
Design discharge: 15.5 m<sup>3</sup>/s  
Installed capacity: 11.5 MW  
Turbine type: Horizontal axis Francis  
Headrace channel: 982 m  
Penstock length: 420 m

### COOPERATED FIRMS

Project owner: PT Bio Jatropha Indonesia

### SERVICES

Scope of services: Design review  
Year: 2012



## 25. KERPAH HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Central Aceh, Aceh, Indonesia  
River: Wih Jambua  
Net head: 56.5 m  
Design discharge: 4.7 m<sup>3</sup>/s  
Installed capacity: 2.25 MW  
Turbine type: Horizontal axis Francis  
Headrace channel: 142 m  
Penstock length: 321 m

### COOPERATED FIRMS

Project owner: PT Kamigayo Kerpap Energi

### SERVICES

Scope of services: Topographic survey, geological investigations, feasibility study and detailed design  
Year: 2012

## 26. KETOL HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Central Aceh, Aceh, Indonesia  
River: Peusangan  
Net head: 84.0 m  
Design discharge: 14.3 m<sup>3</sup>/s  
Installed capacity: 10 MW  
Turbine type: Horizontal axis Francis  
Headrace channel: 5290 m  
Penstock length: 490 m

### COOPERATED FIRMS

Project owner: PT Pacific Artha Nusantara  
Associated consultant: PT AECOM Indonesia

### SERVICES

Scope of services: Feasibility study review  
Year: 2012

## 27. SILINDA HYDROPOWER PROJECT

### PRELIMINARY PROJECT FEATURES

Location: Serdang Bedagai, North Sumatera, Indonesia  
River: Buaya  
Net head: 39.9 m  
Design discharge: 11.0 m<sup>3</sup>/s  
Installed capacity: 3.6 MW  
Turbine type: Horizontal axis Francis  
Headrace channel: 1787 m  
Penstock length: 149 m

### COOPERATED FIRMS

Task owner: PT Medco Power Indonesia

### SERVICES

Scope of services: Due diligence  
Year: 2012

## 28. PUSAKA 1 HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Cianjur, West Java, Indonesia  
River: Cibuni  
Net head: 152.9 m  
Design discharge: 7.8 m<sup>3</sup>/s  
Installed capacity: 10 MW  
Turbine type: Horizontal axis Francis  
Headrace channel: 3880 m  
Penstock length: 316 m

### COOPERATED FIRMS

Task owner: PT Medco Power Indonesia

### SERVICES

Scope of services: Due diligence  
Year: 2012

## 29. PUSAKA 3 HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Cianjur, West Java, Indonesia  
River: Cibuni  
Net head: 49.5 m  
Design discharge: 7.5 m<sup>3</sup>/s  
Installed capacity: 3.2 MW  
Turbine type: Horizontal axis Francis  
Headrace channel: 740 m  
Penstock length: 260 m

### COOPERATED FIRMS

Task owner: PT Medco Power Indonesia

### SERVICES

Scope of services: Due diligence  
Year: 2012

## 30. DOMINANGA HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Bolaang Mongondow, North Sulawesi, Indonesianesia  
River: Dominanga  
Net head: 90.8 m  
Design discharge: 1.8 m<sup>3</sup>/s  
Installed capacity: 1.3 MW  
Turbine type: Horizontal axis Francis  
Headrace channel: 1748 m  
Penstock length: 605 m

### COOPERATED FIRMS

Project owner: PT Sulawesi Hydro Energy  
Associated consultant: PT AECOM Indonesia

### SERVICES

Scope of services: Feasibility study review  
Year: 2012

### **31. MUARALANGKAP HYDROPOWER PROJECT**

#### **PROJECT FEATURES**

Location: North Bengkulu, Bengkulu, Indonesia  
River: Air Belimbing  
Net head: 24.3 m  
Design discharge: 7.4 m<sup>3</sup>/s  
Installed capacity: 1.52 MW  
Turbine type: Francis  
Headrace channel: 2300 m  
Penstock length: 46 m

#### **COOPERATED FIRMS**

Project owner: PT Mukes Energi  
Associated consultant: PT Naluritama Engineering & Construction

#### **SERVICES**

Scope of services: Feasibility study and detailed design  
Year: 2012

### **32. DATARA HYDROPOWER PROJECT**

#### **PROJECT FEATURES**

Location: Gowa, South Sulawesi, Indonesianesia  
River: Karaloe  
Net head: 100.10 m  
Design discharge: 10.5 m<sup>3</sup>/s  
Installed capacity: 9 MW  
Turbine type: Francis  
Headrace channel: 3528 m  
Penstock length: 251 m

#### **COOPERATED FIRMS**

Project owner: PT Prisma Karun Energy  
Associated consultant: PT AECOM Indonesia

#### **SERVICES**

Scope of services: Feasibility Study Review  
Year: 2012

### **33. RONGKONG HYDROPOWER PROJECT**

#### **PROJECT FEATURES**

Location: North Luwu, South Sulawesi, Indonesia  
River: Rongkong  
Net head: 85.8 m  
Design discharge: 13.2 m<sup>3</sup>/s  
Installed capacity: 2 × 5.0 MW  
Turbine type: Francis  
Headrace channel: 5071 m  
Penstock length: 195 m

#### **COOPERATED FIRMS**

Project owner: PT Sangsaka Hidro Kasmar  
Associated consultant: PT Brantas Energi

#### **SERVICES**

Scope of services: Feasibility study review, topographic survey, geological investigations and detailed design  
Year: 2013

### **34. BALIASE HYDROPOWER PROJECT**

#### **PROJECT FEATURES**

Location: North Luwu, South Sulawesi, Indonesia  
River: Baliase  
Net head: 83.0 m  
Design discharge: 15.0 m<sup>3</sup>/s  
Installed capacity: 2 × 5.4 MW  
Turbine type: Francis  
Headrace channel: 2662 m  
Penstock length: 170.5 m

#### **COOPERATED FIRMS**

Project owner: PT Sangsaka Hidro Kasmar  
Associated consultant: PT Brantas Energi

#### **SERVICES**

Scope of services: Feasibility study review, topographic survey, geological investigations and detailed design  
Year: 2013

### **35. BAYANGNYALO HYDROPOWER PROJECT**

#### **PROJECT FEATURES**

Location: Pesisir Selatan, West Sumatera, Indonesia  
River: Bayangnyalo  
Net head: 115.7 m  
Design discharge: 7.3 m<sup>3</sup>/s  
Installed capacity: 2 × 3.63 MW  
Turbine type: Francis  
Headrace channel: 1765 m  
Penstock length: 141 m

#### **COOPERATED FIRMS**

Project owner: PT Bayang Nyalo Hidro

#### **SERVICES**

Scope of services: Topographic survey, geological investigations, feasibility study and detailed design  
Year: 2013

### **36. LHOKSANDENG 3 HYDROPOWER PROJECT**

#### **PROJECT FEATURES**

Location: Pidie Jaya, Aceh, Indonesia  
River: Meureudu  
Net head: 65.4 m  
Design discharge: 9.4 m<sup>3</sup>/s  
Installed capacity: 2 × 2.7 MW  
Turbine type: Francis  
Headrace channel: 2140 m  
Penstock length: 205 m

#### **COOPERATED FIRMS**

Project owner: PT Bumiku Hijau Sinergi

#### **SERVICES**

Scope of services: Pre feasibility study  
Year: 2013

### **37. PALASA HYDROPOWER PROJECT**

#### **PRELIMINARY PROJECT FEATURES**

Location: Parigi Moutong, Central Sulawesi, Indonesia  
River: Palasa  
Net head: 45.6 m  
Design discharge: 11.6 m<sup>3</sup>/s  
Installed capacity: 2 × 2.25 MW  
Turbine type: Francis  
Headrace channel: 2410 m  
Penstock length: 207 m

#### **COOPERATED FIRMS**

Project owner: PT Potensia Tomini Energi

#### **SERVICES**

Scope of services: Feasibility study review  
Year: 2013

### **38. TINOMBO HYDROPOWER PROJECT**

#### **PROJECT FEATURES**

Location: Parigi Moutong, Central Sulawesi, Indonesia  
River: Tinombo  
Net head: 57.9 m  
Design discharge: 3.5 m<sup>3</sup>/s  
Installed capacity: 2 × 0.86 MW  
Turbine type: Francis  
Headrace channel: 1829 m  
Penstock length: 164.6 m

#### **COOPERATED FIRMS**

Project owner: PT Potensia Tomini Energi

#### **SERVICES**

Scope of services: Topographic survey, geological investigations and detailed design  
Year: 2013

### **39. SUMPUR HYDROPOWER PROJECT**

#### **PROJECT FEATURES**

Location: Pasaman, West Sumatera, Indonesia  
River: Sumpur  
Net head: 58.7 m  
Design discharge: 16.1 m<sup>3</sup>/s  
Installed capacity: 2 × 4 MW  
Turbine type: Francis  
Headrace channel: 2167 m  
Penstock length: 205 m

#### **COOPERATED FIRMS**

Task owner: PT Nawakara Energi Sumpur

#### **SERVICES**

Scope of services: Due diligence  
Year: 2013

## 40. KOMERING HYDROPOWER PROJECT

### PROJECT FEATURES

Location: East Ogan Komerling Ulu, South Sumatera, Indonesia  
River: Komerling Irrigation Channel  
Net head: 5.85 m  
Design discharge: 51 m<sup>3</sup>/s  
Installed capacity: 3 × 0.86 MW  
Turbine type: Vertical Axis Kaplan

### COOPERATED FIRMS

Project owner: PT Bumiloka Tegar Perkasa

### SERVICES

Scope of services: Topographic survey and detailed design  
Year: 2013

## 41. 10 HYDROPOWER PROJECTS IN SOUTHEAST SULAWESI

### PRELIMINARY PROJECT FEATURES

Location:	North Kolaka, Southeast Sulawesi, Indonesia									
Scheme:	Lasusua	Lasusua	Ranteangin	Ranteangin	Ranteangin	Ranteangin	Ranteangin	Ranteangin	Ranteangin	Ranteangin
	1	2	1	2	3	4	5	6	7	8
River:	Lasusua	Lasusua	Ranteangin	Ranteangin	Ranteangin	Ranteangin	Ranteangin	Ranteangin	Ranteangin	Ranteangin
Net head (m):	111.6	120.7	126.5	115.0	72.2	151.6	116.6	255.8	47.3	80.0
Design discharge (m <sup>3</sup> /s):	3.4	4.0	1.9	2.1	2.2	2.4	4.6	3.0	5.2	2.4
Installed capacity (MW):	3.1	4.0	2.0	2.0	1.3	3.0	4.5	6.3	2.1	1.6
Headrace channel (m):	3633	3305	1259	2545	1153	1204	3699	4125	2482	1655
Penstock length (m):	283	313	298	186	176	218	198	377	176	174

### COOPERATED FIRMS

Task owner: PT Brantas Energi

### SERVICES

Scope of services: Due diligence  
Year: 2013

## 42. LIMBANGAN HYDROPOWER PROJECT

### PRELIMINARY PROJECT FEATURES

Location: Banjarnegara, Central Java, Indonesia  
River: Tulis  
Net head: 56.7 m  
Design discharge: 10.4 m<sup>3</sup>/s  
Installed capacity: 2 × 2.5 MW  
Turbine type: Horizontal Axis Francis  
Headrace channel: 1434 m  
Penstock length: 161 m

### COOPERATED FIRMS

Project owner: PT Bumiloka Tegar Perkasa

### SERVICES

Scope of services: Preliminary site assessment  
Year: 2013

### **43. WINDUSARI HYDROPOWER PROJECT**

#### **PRELIMINARY PRELIMINARY PROJECT FEATURES**

Location: Banjarnegara, Central Java, Indonesia  
River: Tulis  
Net head: 66.7 m  
Design discharge: 6.9 m<sup>3</sup>/s  
Installed capacity: 2 × 2 MW  
Turbine type: Horizontal Axis Francis  
Headrace channel: 2474 m  
Penstock length: 416 m

#### **COOPERATED FIRMS**

Project owner: PT Bumiloka Tegar Perkasa

#### **SERVICES**

Scope of services: Preliminary site assessment  
Year: 2013

### **44. PUSAKA 1 AND 3 HYDROPOWER PROJECTS**

#### **PROJECT FEATURES**

Location: Cianjur, West Java, Indonesia  
River: Cibuni  
Net head: 150.4 and 49.5 m  
Design discharge: 7.9 and 7.5 m<sup>3</sup>/s  
Installed capacity: 2 × 5 and 2 × 1.6 MW  
Turbine type: Horizontal Axis Francis  
Headrace channel: 3880 and 740 m  
Penstock length: 316 and 260 m

#### **COOPERATED FIRMS**

Project owner: PT Pembangkitan Pusaka Parahyangan  
Funder: PT Bank Mandiri, Tbk

#### **SERVICES**

Scope of services: Bankability assessments  
Year: 2014

### **45. CIBALAPULANG 2 AND 3 HYDROPOWER PROJECTS**

#### **PROJECT FEATURES**

Location: Cianjur, West Java, Indonesia  
River: Cibalapulang  
Net head: 58.4 and 57.8 m  
Design discharge: 14.5 and 13.3 m<sup>3</sup>/s  
Installed capacity: 2 × 3.25 and 2 × 3 MW  
Turbine type: Horizontal Axis Francis  
Headrace channel: 1698 and 1698 m  
Penstock length: 465 and 296 m

#### **COOPERATED FIRMS**

Project owner: PT Sangsaka Hidro Barat  
Funder: PT Bank Mandiri, Tbk

#### **SERVICES**

Scope of services: Bankability assessments  
Year: 2014

## 46. BAYANG HYDROPOWER PROJECT

### PRELIMINARY PROJECT FEATURES

Location: Pesisir Selatan, West Sumatera, Indonesia  
River: Batang Bayang  
Net head: 46.4 m  
Design discharge: 14.5 m<sup>3</sup>/s  
Installed capacity: 2 × 2.9 MW  
Turbine type: Horizontal Axis Francis  
Headrace channel: 1789 m  
Penstock length: 183 m

### COOPERATED FIRMS

Project owner: PT Bumiloka Tegar Perkasa

### SERVICES

Scope of services: Preliminary site assessment  
Year: 2014

## 47. KETELANG HYDROPOWER PROJECT

### PRELIMINARY PROJECT FEATURES

Location: Lebong, Bengkulu, Indonesia  
River: Ketelang  
Net head: 168 m  
Design discharge: 1.8 m<sup>3</sup>/s  
Installed capacity: 2 × 1.3 MW  
Turbine type: Horizontal Axis Francis  
Headrace channel: 2580 m  
Penstock length: 773 m

### COOPERATED FIRMS

Project owner: PT Green Investments

### SERVICES

Scope of services: Feasibility Study  
Year: 2014

## 48. RENEWABLE ENERGY RESOURCE MAPPING IN INDONESIA

### PROJECT FEATURES

Location: Sulawesi Island, Nusa Tenggara Islands, Maluku Islands

### COOPERATED FIRMS

Project owner: PT Energy Sector Management Assistance Program (ESMAP), a World Bank Initiative

Associated consultants: Gesto Energy Consulting  
Aqualogus, Engenharia e Ambiente

### SERVICES

Scope of services: Site surveys, data collections, potential assessment, GIS development, training, public converage

Year: 2014 to 2015



## 49. CICATIH HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Sukabumi, West Java, Indonesia  
River: Cicatih  
Net head: 23.65 m  
Design discharge: 35.00 m<sup>3</sup>/s  
Installed capacity: 2 × 3.55 MW  
Turbine type: Vertical axis Kaplan  
Headrace channel: 2441 m  
Penstock length: 51.7 m

### COOPERATED FIRMS

Project owner: PT Bias Petrasia Persada

### SERVICES

Scope of services: Revision of Detailed Design and Tender Documents  
Year: 2014

## 50. LUBUKGADANG HYDROPOWER PROJECT

### PROJECT FEATURES

Location: South Solok, West Sumatera, Indonesia  
River: Sangir  
Net head: 39.8 m  
Design discharge: 23.50 m<sup>3</sup>/s  
Installed capacity: 2 × 4 MW  
Turbine type: Horizontal axis Francis  
Headrace channel: 1490 m  
Penstock length: 642 m

### COOPERATED FIRMS

Task owner: PT Energi Infranasantara  
Project owner: PT Selo Kencana Energi

### SERVICES

Scope of services: Due Diligence  
Year: 2014

## 51. PONGKOR HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Bogor, West Java, Indonesia  
River: Cikaniki  
Net head: 126.7 m  
Design discharge: 6.9 m<sup>3</sup>/s  
Installed capacity: 3 × 2.5 MW  
Turbine type: Horizontal axis Francis  
Headrace channel: 3500 m  
Penstock length: 251 m

### COOPERATED FIRMS

Project owner: PT Antamloka Energi

### SERVICES

Scope of services: Detailed design  
Year: 2014

## 52. MUSI KOTAAGUNG HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Kepahiang, Bengkulu, Indonesia  
River: Musi  
Net head: 102.3 m  
Design discharge: 14.5 m<sup>3</sup>/s  
Installed capacity: 3 × 6.2 MW  
Turbine type: Horizontal axis Francis  
Headrace channel: 7920 m  
Penstock length: 1505 m

### COOPERATED FIRMS

Project owner: PT Dharma Agung Wijaya

### SERVICES

Scope of services: Feasibility Study and Detailed design  
Year: 2014

## 53. PALASA HYDROPOWER PROJECT

### PROJECT FEATURES

Location: Parigi Moutong, Central Sulawesi, Indonesia  
River: Palasa  
Net head: 45.6 m  
Design discharge: 11.6 m<sup>3</sup>/s  
Installed capacity: 2 × 2.25 MW  
Turbine type: Francis  
Headrace channel: 2410 m  
Penstock length: 207 m

### COOPERATED FIRMS

Project owner: PT Potensia Tomini Energi

### SERVICES

Scope of services: Topographic survey, geological investigations, feasibility study and detailed design  
Year: 2014

## 54. THREE HYDROPOWER PROJECTS IN CENTRAL JAVA

### PROJECT FEATURES

Projects:	Gunungwugul	Harjosari	Lambur
Location:	Banjarnegara	Pekalongan	Pekalongan
River:	Urang	Genteng	Genteng
Net head:	68.0 m	117.0 m	77.0
Design discharge:	5.4 m <sup>3</sup> /s	9.2 m <sup>3</sup> /s	10.5 m <sup>3</sup> /s
Installed capacity:	2 × 1.5 MW	2 × 3.3 MW	2 × 4.0 MW
Turbine type:	Francis	Francis	Francis
Headrace channel:	393 m	1700 m	2984 m
Penstock length:	427 m	1630 m	435 m

### COOPERATED FIRMS

Project owner: PT Indonesia Power

### SERVICES

Scope of services: Tendering assistance  
Year: 2014

This update: September 2014  
Find updated list [here](#).