

## HISTORY OF LAWI – ERK COOPERATION (as of June 2019)



### Waste to Energy Power Plant 7 MW LAWI EtaComb® 300

Commissioning Date: scheduled Q3 / 2019

DESIGN FUEL RDF  
 CLIENT RH Recovery House Co., Ltd.  
 LOCATION Ayutthaya / Thailand

#### TECHNICAL PROJECT DATA

Firing Design Capacity: 30 MW<sub>th</sub>  
 Steam Boiler Design Data: 35 tons per hour, 53 bar(a), 450 °C  
 Generator Capacity: 7 MW<sub>el</sub>

SCOPE OF LAWI SUPPLY  
 Overall Power Plant Basic Engineering and Consultancy  
 Supply and Installation of LAWI EtaComb® 300 Combustion System, Steam Boiler and Feed Water System and Ash Handling System

## 2017



### Biomass Power Plant 12 MW LAWI EtaPlant®

Commissioning Date: August 2017

DESIGN FUEL Gliricidia  
 CLIENT GIMCO Co., Ltd.  
 LOCATION Nabou of Viti Levu/ Fiji

#### TECHNICAL PROJECT DATA

Firing Design Capacity: 51.2 MW<sub>th</sub>  
 Steam Boiler Design Data: 57 tons per hour, 36.3 bar(a), 440 °C  
 Generator Capacity: 12 MW<sub>el</sub>

SCOPE OF LAWI SUPPLY  
 Overall Power Plant Basic Engineering and Consultancy  
 Supply of LAWI EtaComb® 500 Combustion System, Steam Boiler and Feed Water System, Fuel Conveying System, Ash Handling System and Flue Gas Cleaning System



### Biomass Power Plant 11 MW LAWI EtaComb® 400

Commissioning Date: May 2017

DESIGN FUEL Rice Husk, Eucalyptus Bark, Wood Chip  
 CLIENT KPN Green Energy Solution Co., Ltd.  
 LOCATION Kamphengphet / Thailand

#### TECHNICAL PROJECT DATA

Firing Design Capacity: 45 MW<sub>th</sub>  
 Steam Boiler Design Data: 45 tons per hour, 68 bar(a), 485 °C  
 Generator Capacity: 11 MW<sub>el</sub>

SCOPE OF LAWI SUPPLY  
 Overall Power Plant Basic Engineering and Consultancy  
 Supply and Installation of LAWI EtaComb® 400 Combustion System and Fuel Conveying System

## 2015



### Biomass Power Plant 9.9 MW LAWI EtaPlant®

Commissioning Date: May 2015

DESIGN FUEL Eucalyptus Bark, Wood Chip  
 CLIENT Advanced Energy Development Co., Ltd.  
 LOCATION Sirindhorn/ Thailand

SCOPE OF LAWI SUPPLY  
 Overall Basic Engineering  
 Supply and Installation of LAWI EtaComb®  
 400 Combustion System

#### TECHNICAL PROJECT DATA

Firing Design Capacity: 39.5 MW<sub>th</sub>  
 Steam Boiler Design Data: 45 tons per hour, 68 bar(a), 485 °C  
 Generator Capacity: 9.9 MW<sub>el</sub>



### Biomass Power Plant 9.9 MW LAWI EtaComb® 400

Commissioning Date: April 2015

DESIGN FUEL Rice Husk, Eucalyptus Bark  
 CLIENT KPN Green Energy Solution Co., Ltd.  
 LOCATION Phichit / Thailand

SCOPE OF LAWI SUPPLY  
 Overall Power Plant Basic Engineering  
 and Consultancy  
 Supply and Installation of LAWI EtaComb®  
 400 Combustion System and Fuel  
 Conveying System

#### TECHNICAL PROJECT DATA

Firing Design Capacity: 40.5 MW<sub>th</sub>  
 Steam Boiler Design Data: 45 tons per hour, 68 bar(a), 485 °C  
 Generator Capacity: 9.9 MW<sub>el</sub>

## 2014



### Biomass Power Plant 9.9 MW LAWI EtaPlant®

Commissioning Date: July 2014

DESIGN FUEL Eucalyptus Bark, Wood Chip  
 CLIENT Advanced Energy Development Co., Ltd.  
 LOCATION Thoen / Thailand

SCOPE OF LAWI SUPPLY  
 Overall Basic Engineering  
 Supply and Installation of LAWI EtaComb®  
 400 Combustion System

#### TECHNICAL PROJECT DATA

Firing Design Capacity: 39.5 MW<sub>th</sub>  
 Steam Boiler Design Data: 45 tons per hour, 68 bar(a), 485 °C  
 Generator Capacity: 9.9 MW<sub>el</sub>

## 2013



### Biomass Power Plant 9.9 MW LAWI EtaPlant®

Commissioning Date: December 2013

DESIGN FUEL Eucalyptus Bark, Wood Chip  
CLIENT Advanced Energy Development Co., Ltd.  
LOCATION Sririangmai / Thailand

SCOPE OF LAWI SUPPLY  
Overall Basic Engineering  
Supply and Installation of LAWI EtaComb®  
400 Combustion System

#### TECHNICAL PROJECT DATA

Firing Design Capacity: 39.5 MW<sub>th</sub>  
Steam Boiler Design Data: 45 tons per hour, 68 bar(a), 485 °C  
Generator Capacity: 9.9 MW<sub>el</sub>



### Biomass Power Plant 9.9 MW LAWI EtaComb® 400

Commissioning Date: November 2013

DESIGN FUEL Eucalyptus Bark, Wood Chip  
CLIENT Sri Wattana Green Co., Ltd.  
LOCATION Buriram / Thailand

SCOPE OF LAWI SUPPLY  
Supply of LAWI EtaComb® 400  
Combustion System

#### TECHNICAL PROJECT DATA

Firing Design Capacity: 41 MW<sub>th</sub>  
Steam Boiler Design Data: 45 tons per hour, 68 bar(a), 485 °C  
Generator Capacity: 9.9 MW<sub>el</sub>



### Biomass Power Plant 9.9 MW LAWI EtaPlant®

Commissioning Date: June 2013

DESIGN FUEL Eucalyptus Bark, Wood Chip  
CLIENT Advanced Energy Development Co., Ltd.  
LOCATION Ponthong/ Thailand

SCOPE OF LAWI SUPPLY  
Overall Basic Engineering  
Supply and Installation of LAWI EtaComb®  
400 Combustion System

#### TECHNICAL PROJECT DATA

Firing Design Capacity: 39.5 MW<sub>th</sub>  
Steam Boiler Design Data: 45 tons per hour, 68 bar(a), 485 °C  
Generator Capacity: 9.9 MW<sub>el</sub>

## ▲ Biomass Power Plant 2x 9.9 MW LAWI EtaPlant®

Commissioning Date: April 2013

DESIGN FUEL Rice Husk, Wood Chip  
CLIENT Khon Kaen Green Power Co., Ltd.  
LOCATION Khon Kaen/ Thailand

### TECHNICAL PROJECT DATA

Firing Design Capacity: 40 MW<sub>th</sub>  
Steam Boiler Design Data: 88 tons per hour, 67 bar(a), 485 °C  
Generator Capacity: 2x 9.9 MW<sub>el</sub>

SCOPE OF LAWI SUPPLY  
Overall Power Plant Basic Engineering  
and Consultancy  
Supply of LAWI EtaComb® 400  
Combustion System

## ▲ Biomass Power Plant 9.9 MW LAWI EtaComb® 400

Commissioning Date: March 2013

DESIGN FUEL Para Wood  
CLIENT Changraek Biopower Co., Ltd.  
LOCATION Tungsong/ Thailand

### TECHNICAL PROJECT DATA

Firing Design Capacity: 40 MW<sub>th</sub>  
Steam Boiler Design Data: 45 tons per hour, 67 bar(a), 485 °C  
Generator Capacity: 9.9 MW<sub>el</sub>

SCOPE OF LAWI SUPPLY  
Supply of LAWI EtaComb® 400  
Combustion System

## ▲ Biomass Power Plant 9.9 MW LAWI EtaPlant®

Commissioning Date: January 2013

DESIGN FUEL Eucalyptus Bark, Wood Chip  
CLIENT Advanced Energy Development Co., Ltd.  
LOCATION Chokchai / Thailand

### TECHNICAL PROJECT DATA

Firing Design Capacity: 39.5 MW<sub>th</sub>  
Steam Boiler Design Data: 45 tons per hour, 68 bar(a), 485 °C  
Generator Capacity: 9.9 MW<sub>el</sub>

SCOPE OF LAWI SUPPLY  
Overall Basic Engineering  
Supply and Installation of LAWI EtaComb®  
400 Combustion System

## 2012



### Biomass Power Plant 7.5 MW LAWI EtaPlant®

Commissioning Date: December 2012

DESIGN FUEL Eucalyptus Bark, Eucalyptus Wood Chip  
CLIENT Sahagreen Forest Co., Ltd.  
LOCATION Kamphaeng Phet/ Thailand

#### TECHNICAL PROJECT DATA

Firing Design Capacity: 30 MW<sub>th</sub>  
Steam Boiler Design Data: 33 tons per hour, 68 bar(a), 485 °C  
Generator Capacity: 7.5 MW<sub>el</sub>

SCOPE OF LAWI SUPPLY  
EPC Consortium Partner  
Overall Power Plant Detail Engineering  
Supply and Installation of LAWI EtaComb®  
300 Combustion System and Ash Handling System  
Supply of Fuel Conveying System and Steam Turbine



### Biomass Power Plant 9.9 MW LAWI EtaPlant®

Commissioning Date: October 2012

DESIGN FUEL Eucalyptus Bark, Wood Chip  
CLIENT Advanced Energy Development Co., Ltd.  
LOCATION Prasat / Thailand

#### TECHNICAL PROJECT DATA

Firing Design Capacity: 39.5 MW<sub>th</sub>  
Steam Boiler Design Data: 45 tons per hour, 68 bar(a), 485 °C  
Generator Capacity: 9.9 MW<sub>el</sub>

SCOPE OF LAWI SUPPLY  
Overall Basic Engineering  
Supply and Installation of LAWI EtaComb®  
400 Combustion System



### Biomass Power Plant 17 MW LAWI EtaPlant®

Commissioning Date: September 2012

DESIGN FUEL Eucalyptus Bark, Wood Chip, Rice Husk  
CLIENT Mungcharoen Biomass Co., Ltd.  
LOCATION Surin/ Thailand

#### TECHNICAL PROJECT DATA

Firing Design Capacity: 60 MW<sub>th</sub>  
Steam Boiler Design Data: 67 tons per hour, 66 bar(a), 485 °C  
Generator Capacity: 17 MW<sub>el</sub>

SCOPE OF LAWI SUPPLY  
Overall Power Plant Basic Engineering  
Supply and Installation of LAWI EtaComb®  
600 Combustion System



## Biomass Power Plant 9.9 MW LAWI EtaPlant®

Commissioning Date: June 2012

DESIGN FUEL Rice Husk, Eucalyptus Bark  
CLIENT Srisangdaw Biopower Co., Ltd.  
LOCATION Roi Et/ Thailand

SCOPE OF LAWI SUPPLY  
Overall Power Plant Basic Engineering  
Supply and Installation of LAWI EtaComb®  
400 Combustion System

### TECHNICAL PROJECT DATA

Firing Design Capacity: 40 MW<sub>th</sub>  
Steam Boiler Design Data: 45 tons per hour, 66 bar(a), 485 °C  
Generator Capacity: 9.9 MW<sub>el</sub>



## Biomass Power Plant 9.9 MW LAWI EtaPlant®

Commissioning Date: May 2012

DESIGN FUEL Eucalyptus Bark, Wood Chip  
CLIENT Advanced Energy Development Co., Ltd.  
LOCATION Nampong/ Thailand

SCOPE OF LAWI SUPPLY  
Overall Basic Engineering  
Supply and Installation of LAWI EtaComb®  
400 Combustion System

### TECHNICAL PROJECT DATA

Firing Design Capacity: 39.5 MW<sub>th</sub>  
Steam Boiler Design Data: 45 tons per hour, 68 bar(a), 485 °C  
Generator Capacity: 9.9 MW<sub>el</sub>



## Biomass Power Plant 9.9 MW LAWI EtaPlant®

Commissioning Date: April 2012

DESIGN FUEL Eucalyptus Bark, Wood Chip  
CLIENT Advanced Energy Development Co., Ltd.  
LOCATION Ban Bueng/ Thailand

SCOPE OF LAWI SUPPLY  
Overall Basic Engineering  
Supply and Installation of LAWI EtaComb®  
400 Combustion System

### TECHNICAL PROJECT DATA

Firing Design Capacity: 39.5 MW<sub>th</sub>  
Steam Boiler Design Data: 45 tons per hour, 68 bar(a), 485 °C  
Generator Capacity: 9.9 MW<sub>el</sub>

## 2011



### Biomass Power Plant 9.9 MW LAWI EtaPlant®

Commissioning Date: October 2011

DESIGN FUEL Rice Husk  
CLIENT TRC Clean Energy Co., Ltd.  
LOCATION Korat/ Thailand

SCOPE OF LAWI SUPPLY  
Overall Power Plant Basic Engineering  
Supply and Installation of LAWI EtaComb®  
400 Combustion System

#### TECHNICAL PROJECT DATA

Firing Design Capacity: 40 MW<sub>th</sub>  
Steam Boiler Design Data: 45 tons per hour, 67 bar(a), 485 °C  
Generator Capacity: 9.9 MW<sub>el</sub>



### Biomass Power Plant 9.9 MW LAWI EtaPlant®

Commissioning Date: October 2011

DESIGN FUEL Coconut Fiber, Palm Stalk, Wood Chip  
CLIENT Clean Energy Thapsakae Co., Ltd.  
LOCATION Thap Sakae/ Thailand

SCOPE OF LAWI SUPPLY  
Supply and Installation of LAWI EtaComb®  
400 Combustion System

#### TECHNICAL PROJECT DATA

Firing Design Capacity: 42 MW<sub>th</sub>  
Steam Boiler Design Data: 45 tons per hour, 42 bar(a), 455 °C  
Generator Capacity: 9.9 MW<sub>el</sub>



### Biomass Power Plant 9.9 MW LAWI EtaComb® 600

Commissioning Date: February 2011

DESIGN FUEL Bagasse (Multi-Fuel-Design)  
CLIENT Baanrai Electricity Generating Co., Ltd.  
LOCATION Utaithani/ Thailand

SCOPE OF LAWI SUPPLY  
Overall Power Plant Basic Engineering  
Supply and Installation of LAWI EtaComb®  
600 Combustion System

#### TECHNICAL PROJECT DATA

Firing Design Capacity: 55 MW<sub>th</sub>  
Steam Boiler Design Data: 60 tons per hour, 68 bar(a), 485 °C  
Generator Capacity: 9.9 MW<sub>el</sub>

## 2009



## Biomass Power Plant 9.9 MW LAWI EtaPlant®

Commissioning Date: April 2009

DESIGN FUEL Palm Leaves, Empty Fruit Bunch  
 CLIENT Sub Anan Biomass Co., Ltd.  
 LOCATION Chumporn/ Thailand

SCOPE OF LAWI SUPPLY  
 Overall Power Plant Basic Engineering  
 Supply and Installation of LAWI EtaComb®  
 500 Combustion System

## TECHNICAL PROJECT DATA

Firing Design Capacity: 46 MW<sub>th</sub>  
 Steam Boiler Design Data: 50 tons per hour, 42 bar(a), 410 °C  
 Generator Capacity: 9.9 MW<sub>el</sub>



## Biomass Power Plant 7.5 MW LAWI EtaPlant®

Commissioning Date: March 2009

DESIGN FUEL Rice Husk  
 CLIENT Decha Bio Green Co., Ltd.  
 LOCATION Chon Buri/ Thailand

SCOPE OF LAWI SUPPLY  
 Overall Power Plant Basic Engineering  
 Supply and Installation of LAWI EtaComb®  
 300 Combustion System and PLC Control  
 System for Steam Boiler

## TECHNICAL PROJECT DATA

Firing Design Capacity: 32.5 MW<sub>th</sub>  
 Steam Boiler Design Data: 35 tons per hour, 69 bar(a), 490 °C  
 Generator Capacity: 7.5 MW<sub>el</sub>

## 2008



## Biomass Power Plant 10 MW LAWI EtaPlant®

Commissioning Date: October 2008

DESIGN FUEL Rice Husk, Bark, Corn Cob  
 CLIENT Sricharoen Bio Power Co., Ltd.  
 LOCATION Buriram/ Thailand

SCOPE OF LAWI SUPPLY  
 Overall Power Plant Basic Engineering and  
 Consultancy  
 Supply and Installation of LAWI EtaComb®  
 500 Combustion System, Fuel Conveying  
 System, De-Ashing System and DCS  
 Control System for Power Plant

## TECHNICAL PROJECT DATA

Firing Design Capacity: 50 MW<sub>th</sub>  
 Steam Boiler Design Data: 55 tons per hour, 67 bar(a), 485 °C  
 Generator Capacity: 10 MW<sub>el</sub>





## Biomass Power Plant 9.9 MW LAWI EtaComb® 500

Commissioning Date: June 2008

DESIGN FUEL Rice Husk, Corn Cob  
CLIENT Kaona Power Supply Co., LTD.  
LOCATION Ubon Ratchathani/ Thailand

SCOPE OF LAWI SUPPLY  
Supply and Installation of LAWI EtaComb®  
500 Combustion System and PLC Control  
System for Steam Boiler

### TECHNICAL PROJECT DATA

Firing Design Capacity: 50 MW<sub>th</sub>  
Steam Boiler Design Data: 55 tons per hour, 66 bar(a), 485 °C  
Generator Capacity: 9.9 MW<sub>el</sub>

