

## Initial Questionnaire for Biomass Gasification Power-Plants

### Your Company

Name of your company:

Contact person/role(i.e. CEO, Director, Manager):

Street, number:

Postal code, City:

Country:

E-Mail:

Phone number: +

Fax number: +

### Site Place

Address & location of the power plant:

City:

Nearest port, roads, trains, launch, (inland transportation fee):

Country (for sea freight fee):

Local language:

Working language:

## Your project objectives

We desire to produce electrical energy  YES \_\_\_\_\_  No \_\_\_\_\_

If yes:

The electrical energy will be  consumed by us  fed into the grid

How many kW shall the new power-station produce? \_\_\_\_\_ kWel

In case of self-consumption:

How many operating hours per year do you require? \_\_\_\_\_ hrs

In case of feed-in:

The grid operator's feed-in point is \_\_\_\_\_ meters away.

Your main grid voltage: \_\_\_\_\_ Volt, Hz : \_\_\_\_\_

how much you will get per 1 kwh t: \_\_\_\_\_ USD/KWh

Do you need switch-gear or synchronization units:  YES \_\_\_\_\_ or  No \_\_\_\_\_

Do you need a power transformer:  YES \_\_\_\_\_ or  No \_\_\_\_\_

We desire to produce thermal energy  YES \_\_\_\_\_  No \_\_\_\_\_

If yes:

We require \_\_\_\_\_ kWth at \_\_\_\_\_ °C temperature

\_\_\_\_\_ kWth at \_\_\_\_\_ °C temperature.

The thermal energy will be  consumed by us  fed into a grid/sold.

A local distribution grid is available:  YES \_\_\_\_\_  No \_\_\_\_\_

How many operating hours per year do you require? \_\_\_\_\_ hrs

## Current Situation

Source of your current electricity power?, is it of the mains grid?, by diesel generators? or CNG/LNG generators? \_\_\_\_\_

if it is of mains grid, what is the price per one 1 KWh: \_\_\_\_\_ USD/KWh

if it is of generators, what is the price per one 1 KWh: \_\_\_\_\_ USD/KWh

What is your power peak load demand: \_\_\_\_\_ KW or \_\_\_\_\_ KVA

There is already electricity production at the site now  YES \_\_\_\_\_  No \_\_\_\_\_

If yes:

The electrical energy is  being self-consumed  fed into the grid

What is the electrical output of your current system? \_\_\_\_\_ kWel

How many operating hours per year do you achieve? \_\_\_\_\_ hrs

Do you already operate a gas-engine/genset?  YES \_\_\_\_\_  No \_\_\_\_\_

The upper limit of the grid operator's feed-in point is \_\_\_\_\_ kWel

There is already thermal energy generation at the site now  YES \_\_\_\_\_  No \_\_\_\_\_

If yes:

Energy production is \_\_\_\_\_ kW at \_\_\_\_\_ °C per hour

\_\_\_\_\_ kW at \_\_\_\_\_ °C per hour.

How many operating hours per year do you achieve? \_\_\_\_\_ hrs

The thermal energy is  used by us  fed into a grid/sold

The current feedstock is \_\_\_\_\_

## Biomass/Feedstock

Which amounts of biomass supply have you already secured(per year)?  none

Type(i.e. type of wood and size)	tons/year	Humidity u	Water content w
_____	_____	_____ %	_____ %
_____	_____	_____ %	_____ %
_____	_____	_____ %	_____ %

The above mentioned gasification feedstock is

- a by-product/residual waste from our own production
- delivered by suppliers, at an average price of \_\_\_\_\_(currency)\_\_\_\_\_per ton

Price and amount of supply are fixed for \_\_\_\_\_years.

## Structural Situation

The planned production site is in the following type of area:

- Industrial Zone
- Housing Zone
- Recreational Zone/Nature Reserve

An existing  New building  Old building  Listed building

with \_\_\_\_\_m<sup>2</sup> and a floor load of \_\_\_\_\_metric tons/m<sup>2</sup> is marked to house the plant.

Present connections:  Electricity capacity/throughput \_\_\_\_\_

Waste water capacity/throughput \_\_\_\_\_

Fresh water capacity/throughput \_\_\_\_\_

At the site there is  an open  a covered storage area for biomass/wood.

The storage capacity stands at \_\_\_\_\_m<sup>3</sup> or \_\_\_\_\_kg.

The storage area does feature a system to dry the biomass:  YES \_\_\_  No \_\_\_

The access roads to the site (premises and access roads including any diversions) can be used by trucks with a total maximum weight of \_\_\_\_\_metric tons.

Is there a river or lake next to your designed site:  YES \_\_\_ or  No \_\_\_

Any residential houses near the proposed site:  YES \_\_\_ or  No \_\_\_

Any sensitive building or items near site:  YES \_\_\_ or  No \_\_\_

Can you provide us a site layout plan for reference designs?

## Planned Operations

The plant shall be operated  by our company  by a third party

In case there is energy production already happening at the site,

this is operated  by our company  by a third party

with a total of \_\_\_\_\_trained full-/part-time (i.e. electrician, mechatronic)

and \_\_\_\_\_untrained full-/part-time employees.

Future maintenance shall be conducted by the manufacturer

as part of a full-service package

as part of an individual service-contract involving the customer and/or third parties.

## Commercial Aspects

The project has an approved investbudget

Yes(amount, currency)\_\_\_\_\_  No

If no: The investment cost per kWh shall not exceed(amount, currency)\_\_\_\_\_

These numbers refer to the  electrical  thermal output per year

If yes: The investment  is based on a date  is spread over \_\_\_\_\_ months.

You have finished your financial planning  YES \_\_\_\_\_ or  No \_\_\_\_\_

If no: When will you reach this milestone? \_\_\_\_\_.\_\_\_\_.201\_\_ (Day.Month.Year)

As a part of your financing you are interested in leasing offers

YES \_\_\_\_\_ or  No \_\_\_\_\_

As a part of your project you need support in insurance matters

YES \_\_\_\_\_ or  No \_\_\_\_\_

As a part of your project you need support with

Project Planning  Project Supervision  Project Management

## Additional Information

We have the following in place/support by third parties in the areas of

- Legal issues of gasification-plant operation
- Legal issues of construction requirements
- Long-term feedstock supply
- Storage and transportation/logistics



- Financial planning
- Communication with local interest groups

If planned:

- Legal  Technical requirements for feeding energy into local grids

Further information you would like to give or questions you might have.

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