



NOTES:
 1. NATURAL GAS USED AT START-UP ONLY FOR GASIFIER PRE-HEATING.

FOR INFORMATION DO NOT USE FOR CONSTRUCTION									
					CONTRACT ROTTERDAM				
					TITLE BLOCK FLOW DIAGRAM BIOREFINERY – MSW RDF TO METHANOL				
04	2017-10-20	ISSUED FOR FEL1 BOD	RGF	FS	DESIGNED	J.GILETA	2017-01-05	CUSTOMER	
03	2017-08-17	ISSUED FOR FEL1 BOD	CT	FS	CHECKED	F.ST-ONGE	2017-01-05		
02	2017-06-12	ISSUED FOR FEL1 BOD	CT	FS	APPROVED			1702	
01	2017-04-06	RE-ISSUED FOR PERMITTING	KE	FS	SCALE			DRAWING NO	REV
00	2017-01-06	ISSUED FOR PERMITTING	JG	FS	SCALE	NTS		1702-D901-0001	04
REV	DATE	DESCRIPTION	DSG	CHK	APP	THIS DRAWING IS CONFIDENTIAL AND IS THE PROPERTY OF ENERKEM. IT MUST NOT BE DISCLOSED TO A THIRD PARTY, COPIED OR LENT WITHOUT THE WRITTEN CONSENT OF ENERKEM.			

Nederlandse vertaling tekening 1702-D901-0001_R04.pdf
Biorefinery - MSW RDF to Methanol, Block Flow Diagram

Inputs	
Chemicals	Chemicaliën
Demin water	Demiwater
Hydrogen	Waterstof
Natural gas	Aardgas
Oxygen	Zuurstof
Plant water	Bedrijfswater
RDF feedstock	Ruw RDF afval

Installatie	
RDF finishing	Hal afvalvoorbewerking
Gasification	Vergassingsinstallatie
Gas conditioning	Gasreiniging
Methanol distillation	Methanol productie
HP compressor & methanol reactor	Compressor en methanol reactor
Thermal oxidizer (TOX) & WHR boiler & flue gas desulfurisation (FGD)	Thermal oxidizer (TOX), warmteterugwinningsketel en rookgasontzwaveling
BFW & CW treatment	Ketelvoedingswater- en koelwater behandeling
Cooling water	Koelwater
Primary waste water treatment	Afvalwatervoorbehandeling

Stoffen	
BFW	Ketelvoedingswater
BFW to users	Ketelvoedingswater naar gebruikers
Boiler blowdown	Ketelwaterspui
CO2 recycle	CO2 hergebruik
Condensate	Condensaat
Crude MEOH	Ruwe Methanol
CW purge	Koelwaterspui
LG heat	Lage temperatuur warmte
LOW grade heat	Lage temperatuur warmte
MEOH Make-up	Methanol rest om opnieuw te reinigen
MEOH Purge	Methanol rest om opnieuw te vergassen
MP steam	Midden druk stoom
Offgas	Restgas
Process waste water	Proces afvalwater
RSW	Reststroom gasreiniging
Sweet syngas	Zuiver Syngas
Syngas	Syngas

Output	
38% SBS	38% Natriumbisulfiet oplossing
Boiler & CW blowdown	Boiler blowdown en koelwaterspui
CSR	Coarse solid residues, vaste stoffen; grofkorrelige reststoffen
Flue	Rookgas
FSR	Fine solid residues, aste stoffen; fijnkorrelige reststoffen
GSR	Gasifier solid residues, vaste stoffen; reststoffen vergasser
Impca	International Methanol Producers and Consumers Association
Offside treatment	Externe afvalwaterzuivering

Note	
Natural gas used at Startup only for gasifier pre-heating	Aardgas gebruikt voor de opstart / voorverwarming van de installatie