

# Site Layout

## Not to Scale

Quantity of RDF per year (tonnes)	1,150,000
Size of RDF bales (m³)	approximately 1.8
Anticipated number of ships per week to deliver RDF	9
Annual operational hours for each of the 3 gasification lines	8000
Gasification facility at full capacity (days per year)	260
Annual input to the gasification plant (tonnes)	1,000,000

Outbound quantity of aggregate (cubic metres)	anticipated at 270,000 - to be confirmed
Power generation (No. houses equivalent)	206,000
Anticipated number of ships per year	approximately 570
Gross site capacity (MWe per year)	102
Net export (MWe)	80
Design Construction period (months)	anticipated 36-42 months

### Turbine layout

Number of turbines	3
Overall height of building (m)	15

### CO2 plant - Vertical vacuum insulated ASCO Storage Tanks

Height (m)	12
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### Air-cooled condenser Unit

Height of unit (m)	30
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### Feedstock Processing Facility building

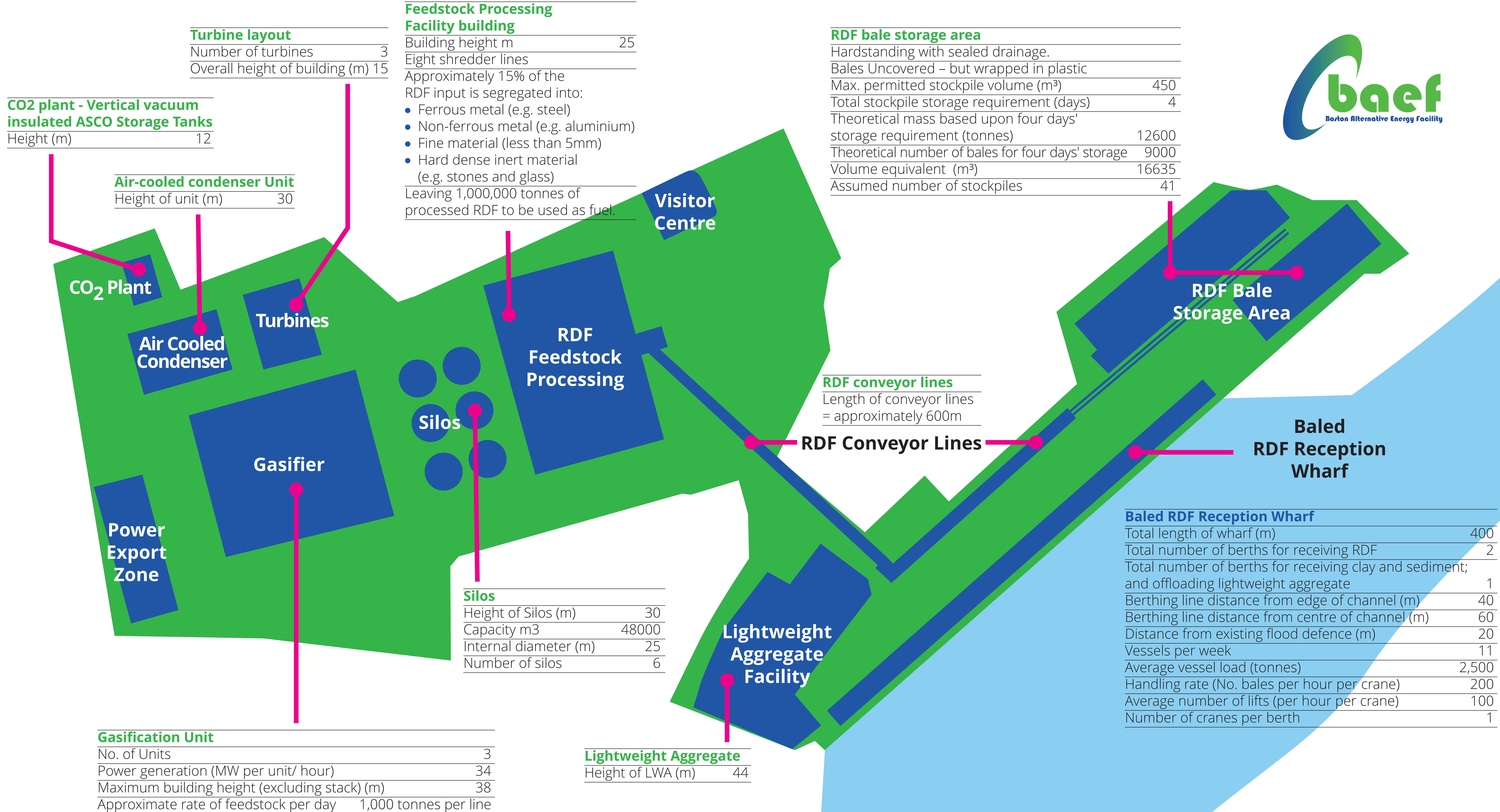
Building height m	25
Eight shredder lines	
Approximately 15% of the RDF input is segregated into:	
• Ferrous metal (e.g. steel)	
• Non-ferrous metal (e.g. aluminium)	
• Fine material (less than 5mm)	
• Hard dense inert material (e.g. stones and glass)	
Leaving 1,000,000 tonnes of processed RDF to be used as fuel.	

### RDF bale storage area

Hardstanding with sealed drainage.	
Bales Uncovered - but wrapped in plastic	
Max. permitted stockpile volume (m³)	450
Total stockpile storage requirement (days)	4
Theoretical mass based upon four days' storage requirement (tonnes)	12600
Theoretical number of bales for four days' storage	9000
Volume equivalent (m³)	16635
Assumed number of stockpiles	41

### RDF conveyor lines

Length of conveyor lines = approximately 600m
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### Baled RDF Reception Wharf

Total length of wharf (m)	400
Total number of berths for receiving RDF	2
Total number of berths for receiving clay and sediment; and offloading lightweight aggregate	1
Berthing line distance from edge of channel (m)	40
Berthing line distance from centre of channel (m)	60
Distance from existing flood defence (m)	20
Vessels per week	11
Average vessel load (tonnes)	2,500
Handling rate (No. bales per hour per crane)	200
Average number of lifts (per hour per crane)	100
Number of cranes per berth	1

### Gasification Unit

No. of Units	3
Power generation (MW per unit/ hour)	34
Maximum building height (excluding stack) (m)	38
Approximate rate of feedstock per day	1,000 tonnes per line

### Lightweight Aggregate

Height of LWA (m)	44
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### Silos

Height of Silos (m)	30
Capacity m3	48000
Internal diameter (m)	25
Number of silos	6