

# Newhurst ERF Local Liaison Committee Project Update July 2022



### **Newhurst Energy Recovery Facility**

	Newhurst
Location	Shepshed, Leicestershire
Capacity (gross)	350 ktpy; ~42 MW
Financial Close	February 11, 2020
Engineer, Procure, Construct (EPC)	Hitachi Zosen INOVA (HZI)
Operator	Covanta
Scheduled Completion Date	Q2 2023



Construction (87% complete) progressing on time

Overall, the project is 90% complete

132kV Grid connection energised early June

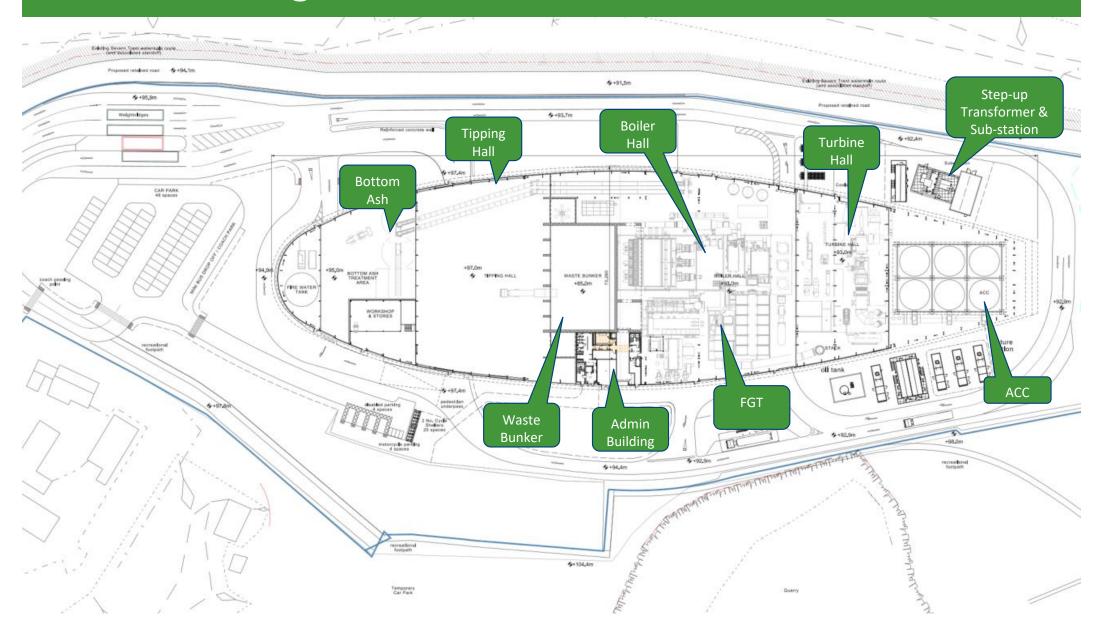
30% of systems are mechanically and electrically complete and handed over to commissioning team ready for energisation

Operations & Maintenance Team have commenced their training

Around 400 operatives currently working on site. Achieved 1 million project hours since last LTI.

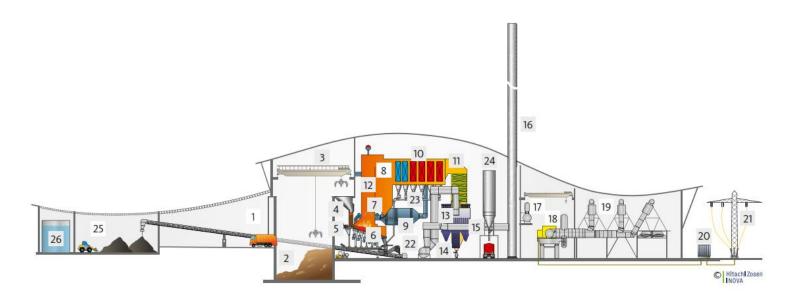


## **General Arrangement**





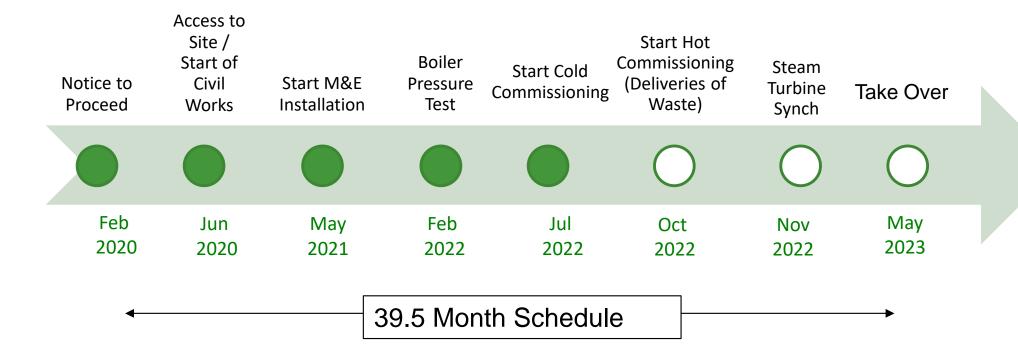
## How does it work?



Waste Delivery and Storage	Combustion and Boiler	Flue Gas Treatment	Energy Recovery	Residue Handling and Treatment
L Delivery hall	4 Feed hopper	12 SNCR DyNOR®	17 Feed water tank	22 Bottom ash extractor
2 Waste bunker	5 Ram feeder	13 Fabric filter	18 Steam turbine	23 Boiler ash discharge
3 Waste crane	6 HZI Grate	14 Induced draught fan	19 Air cooled condenser	24 Residue silos
	7 Secondary air	15 Flue gas duct	20 Transformer	25 Bottom ash area
	8 Four-pass boiler	16 Stack	21 Electrical power	
	9 Primary air		distribution	26 Fire water tank
	10 Superheater			
	11 Economiser			



## **Project Timeline**



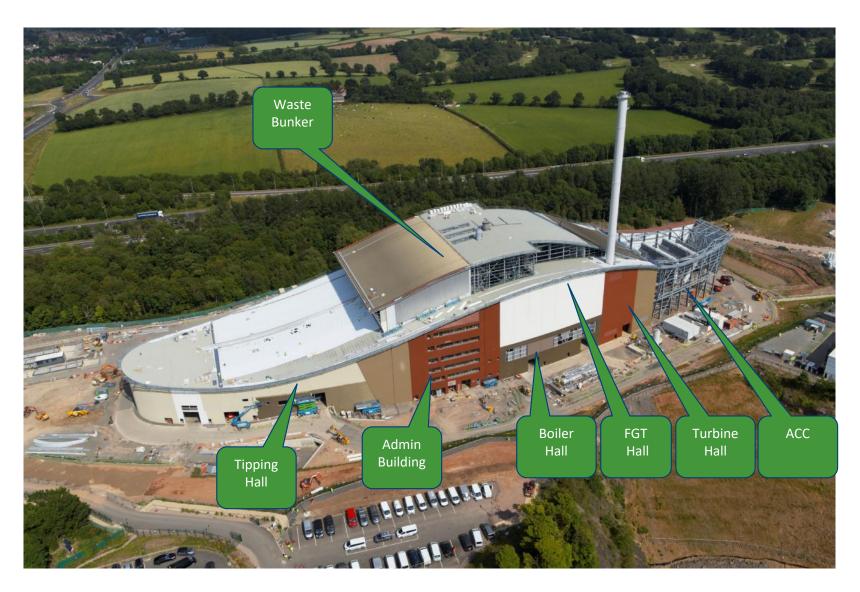


# April 2022





# **July 2022**





# Progress Photos – July 2022











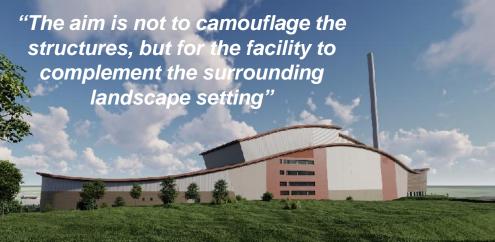






### What will it look like when it is built?











# Planned vs Reality









# **Planned vs Reality**







#### **Construction Progress over last 3 months**

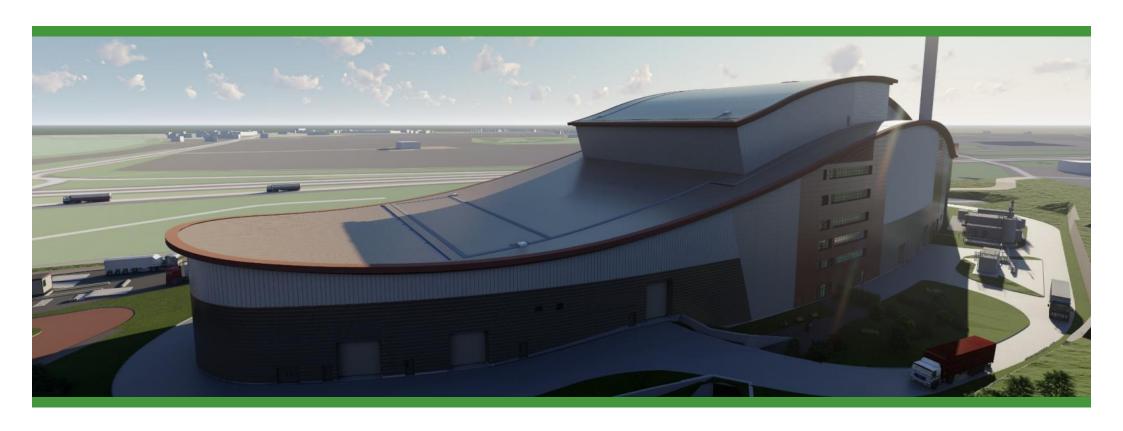
- Erection of the Building Envelope continued including steelwork and cladding.
- M&E Contractors completed installation of the Combustion equipment, Flue Gas Treatment and Water Steam Cycle equipment.
- Electrical and Piping subcontractors continued with installation.
- Installation of the Turbine Generator continued.
- Energisation of the 132kV grid connection.
- Commissioning Team have mobilised on site.
- Operations & Maintenance Team have commenced their training.



#### 3 Month Lookahead

- Cladding of the Building Envelope will continue.
- Electrical and Piping subcontractors will complete installation.
- Installation of the Turbine Generator will be completed.
- Landscaping continues.
- Cold commissioning activities will commence.
- Steam Blowing activities planned for September.
- Any questions?





# Newhurst ERF Local Liaison Committee Permitting Update July 2022



#### **Environmental Permit Pre-Commissioning Conditions**

Condition	Summary of pre-operational condition	Status / Responsibility
PO1	Prior to commencement of commissioning, submit	CEL has issued report to EA in April 2022. Pending approval.
	Environment Management System for approval by EA.	
PO2	Prior to commencement of commissioning, submit	CEL has issued report in May 2022.
	report describing options for heat utilisation including	
	CHP and district heating.	
PO3	Prior to commencement of commissioning, submit	CEL has issued report to EA in April 2022. Pending approval.
	protocol for sampling of incinerator bottom ash for	
	approval by EA.	
PO4	At least 4 months prior to the commencement of	CEL has issued report to EA in May 2022. Pending approval.
	commissioning submit commissioning plan for	
	approval by EA.	
PO5	No later than one month after completion of the final	Approved by EA. Closed
	design submit Computational Fluid Dynamics (CFD)	
	report to EA demonstrating achievement of 850°C for	
	2 seconds in the combustion chamber/ furnace.	



#### **Environmental Permit Pre-Commissioning Conditions**

DOG	At least 2 months before the commencement of	CEL requested extension of time to proper this mothedeless.
PO6		CEL requested extension of time to prepare this methodology.
	commissioning for EA approval a methodology to	Expected to submitted in July.
	demonstrate 850° / 2s residence time in furnace.	
PO7	Submit to the EA for approval, confirmation of which	Approved by EA. Closed.
	option will be implemented, including details of the	
	incinerator technology configuration and a review of	
	the air dispersion modelling.	
PO8	Prior to the commencement of commissioning submit	Currently under review by CEL.
	a written report to the EA for approval, commissioning	Submission to FA – expected August 2022
	plan and monitoring procedure for the odour	Submission to LA CAPCCICA August 2022.
	abatement system.	
PO9		EPC Contractor to carry out tests during commissioning and
	whether the furnace combustion air will provide the	
	required air flows to ensure that negative pressure is	1
	achieved throughout the reception hall. Demonstrate	
	whether air is pulled through the reception hall and	
	bunker area into the furnace and activated carbon filter	
D040	odour abatement system with dead spots minimised.	
PO10	·	CEL has issued report to EA in April 2022. Pending approval.
	commissioning, submit updated Fire Prevention Plan	
	(FPP) to EA for approval.	
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#### **Environmental Permit Pre-Commissioning Conditions**

PO11	Prior to the commencement of commissioning, submit to the EA for approval an updated Noise Impact Assessment (NIA) to reflect the final, designed plant.	CEL has issued report to EA in June 2022. Pending approval.
PO12	Prior to the commencement of commissioning, submit to the EA for approval the waste acceptance procedure to be used at the site.	CEL has issued report to EA in April 2022. Pending approval.
PO13	Prior to the commencement of commissioning, submit to EA for approval a protocol for monitoring soil and groundwater.	CEL has issued report to EA in June 2022. Pending approval.

