



# Ysgol Parc y Tywyn

## Burry Port

**Wednesday 22<sup>nd</sup> November 2017**



**Paul Jennings**

**Director**

**Constructing Excellence in Wales**

# ENABLING ZERO WASTE

Ysgol Parc Y Tywyn,  
Burry Port



**ADEILADU  
ARBENIGRWYDD  
YNG NGHVMRU**



**CONSTRUCTING  
EXCELLENCE  
IN WALES**

**dyfed**  
recycling services  
Tel: 01554 772478

## Health & Safety

- No Fire Alarm planned
- Muster Point behind car park (adjacent to Gatehouse)
- PPE requirements for site visit: Hard Hat; Hi Vis; Safety Footwear

## PROJECT TEAM:-

Client: 

Principal Contractor: 

Architect: 

Civil / Structural Designer: 

Project Duration: 74 Weeks

Project Start on Site: 21<sup>st</sup> November

CDMC: 

### *Construction of new Passivhaus Primary School: 375 pupils (including Early Years)*

- Relocating existing school: Open Sept 2018
- Local Materials
  - Timber Frame
  - Cladding (Welsh Larch)
- Passivhaus Standard
  - Unbroken Super Insulation
  - Thermal Bridge Free Construction
  - Triple Glazed Windows
  - Air Tight Building Envelope
  - MVHR System





## *Signed up to Enabling Zero Waste initiative in Nov 2016*

- TARGET: Zero Waste to landfill (entire scheme)
- Exceptions: Asbestos Waste
- Waste segregation: NOT ROCKET SCIENCE!
- Waste Management Contractor: Key to success
- Smart Waste SWMP
- Monthly visits from Constructing Excellence: Advise & Assistance



## *Waste Contractor: Dyfed Recycling*

- Engaged from scheme commencement
- Regular waste audits / reviews
- Local waste transfer station
- Monthly Waste Returns
- Advise on 'difficult' waste streams
- Prompt service





## Summary: Waste Figures to date

- GENERAL (MIXED) WASTE: 21120kg
- TIMBER (Clean): 8460kg
- TIMBER (Treated): 8842kg
- CARDBOARD: 1640kg
- PACKAGING: 1500kg
- HARD PLASTICS: 2400kg
- METAL: 5640kg
- PLASTERBOARD: 8440kg

WASTE RECOVERY REPORT - BURRY PORT SCHOOL PROJECT SEPTEMBER 2017

Date	Waste Transfer Note	Weighbridge TKT No.	Vehicle Registration	DESCRIPTION	EWK CODE	Tonnage in kg	Wood %	Plastic %	Hardcore %	UPVC %	Scrap %	Plasterboard %	Glass %	Card %	DRS Recovery Percentage	Residual Waste (RF) %	TOTAL RECOVERY PERCENTAGE	
01.09.17	61625	60607	CN66YMF	MIXED WASTE	20.03.01	0.70	30	15							3	49	51	100
02.09.17	61626	60609	CN66YMF	WOOD	17.02.01	0.92	100									100	0	100
05.09.17	48	60672	CN66YMF	MIXED WASTE	17.09.04	2.14	33	14	1		2				2	52	48	100
06.09.17	50	60678	CN66YMF	WOOD	17.02.01	0.72	97	1								98	2	100
11.09.17	122	60798	W700DRS	WOOD	17.02.01	0.92	100									100	0	100
12.09.17	135	60810	W700DRS	WOOD	17.02.01	0.90	98									98	2	100
14.09.17	168	60859	W700DRS	WOOD	17.02.01	0.90	100									100	0	100
18.09.17	202	60927	W700DRS	MIXED WASTE	20.03.01	0.96	25	20	2						4	51	49	100
18.09.17	54623	60931	W700DRS	MIXED WASTE	20.03.01	1.10	30	25			4				4	63	37	100
20.09.17	238	60971	CN66YMF	WOOD	17.02.01	0.92	99									99	1	100
20.09.17	61640	60975	CN66YMF	SCRAP	17.04.07	0.98					98					98	2	100
20.09.17	61641	60980	CN66YMF	WOOD	17.02.01	0.72	98	1								99	1	100
28.09.17	320	61106	W700DRS	HARD PLASTIC	17.02.03	0.94		98								98	2	100
29.09.17	330	61120	W700DRS	WOOD	17.02.01	1.00	100									100	0	100
																0	100	100

## Domestic (Canteen Waste)

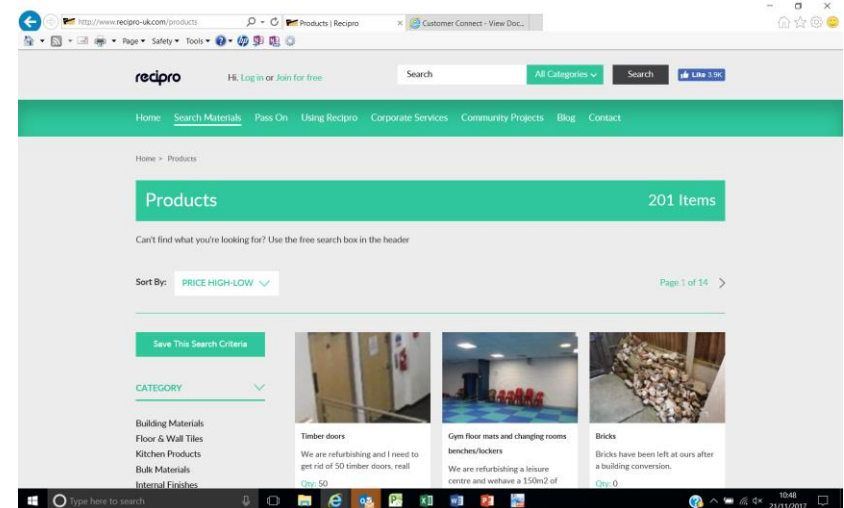
- *Weekly Collections*
  - *Dry Recyclates*
  - *Food (Composting)*

## Holding Waste: Problem waste streams

- *Insulation*
  - *Rockwool*
  - *Armouflex (rendered plinth)*
  - *Warmcell*
- *Paints & Mastics*
- *Adhesives*
- *COSHH*

## Surplus Materials

- *Donation Schemes*
  - *Local residents / businesses*
  - *Recipro UK*



## Road Planings

- *No Waste exemption required (NRW)*
- *1200T planings produced*
- *Tested: Coal Tar ; PSD's*
- *Suitable for use as 'Capping' material on site*
- *Deposited directly on site – no transfer / movement*



## What happens to the waste/resources?

**Hardcore/Soil -** This is sent for screening into different sizes. It can be crushed to form recycled stone, which can be used in construction of roads etc.

**Scrap Metal -** This is taken to a local facility, where it is shredded into a smaller size. This is then bulked up and sent to Avonmouth, where it is passed through a magnet to separate the ferrous metals. Once the various metals types have been separated, they are sent to various facilities to be recycled.

**Hard Plastics -** These are segregated into different types of plastic, then they are melted down and turned into pellets. These pellets can be used to create chairs and tables etc.



## What happens to the waste?

**Soft Plastic -** Plastic is baled and sent to recycling plants where it is shredded into small pieces and then washed. A floatation process separates plastics that may be mixed together due to lids being left on the products. Plastic is melted and stretched into strands, cooled, and cut into pellets or ground into powder. The plastic pellets and powders are sent to manufactures to be moulded and cast back into plastic products and packaging. Recycled plastic is used to make new bottles and containers, wheelie bins, guideposts, fence pickets, irrigation pipes and fleece jumpers.

**Canteen Waste - This is turned into compost.**



## What happens to the waste?

WEEE -

Waste Electronic Equipment is usually loaded into a Querstromzspanner which smashes the equipment into each other breaking it up and separating the components. Batteries and hazardous materials are then removed and then the material is shredded. The material is then separated into individual components using magnets and air separation. The materials are then sent for recycling.



## CONCLUSION

- *Industry heading in right direction*
- *Utilising Energy from Waste developments*
- *Investing in waste management*
- *Improvements to be made*
- *Waste Hierarchy & Further Improvements*
  - *REDUCE:*
    - *Design out waste*
    - *Pre fabrication*
  - *REUSE e.g. Larch reveals*
  - *RECYCLE*
- *Common sense (with Regulations)*
- *REWARDS: Less Cost; Positive PR & Promotion*



# Thank You for Attending

Any further questions?