



CLAW Sub-group Chairs Update on life after COVID

<https://www.claw.wales/eng/>
info@CLAW.Wales

Design Group

Jim Allen *Architecture Services Manager*
Blaenau Gwent County Borough Council

2021 Summary of Activities

Covid-19



Significant impact on operations for all design group members



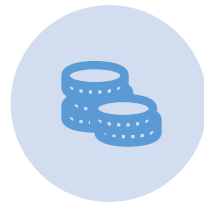
Substantial delays



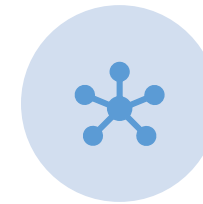
Inefficiencies



Complications



Cost overruns



Disruption



Stress



Compromised communications - internal & external

2021 Summary of Activities

Software Survey



CLAW Software Survey

Authority	BIM	2D CAD	Building Specification	Contract Management	3D Presentation	
Rhondda Cynon Taf	Revit also trialling Revizto during design development.	Autocad	NBS and internal SDS using word and excel	Internal SDS using word and excel also trialling Tf Cloud	Revizto also use 360 camera to create virtual tours	Decided by contr often use viewpo
Swansea	Mechanical - Revit	Autocad	No package in use- Word and Excel	NEC 3 Contracts in line with Procurement policy	N/A	N/A
Torfaen	No BIM software only	Autocad	None	Internal suite of	None	Decided by contr

2021 Summary of Activities

2020-2021 Design Awards



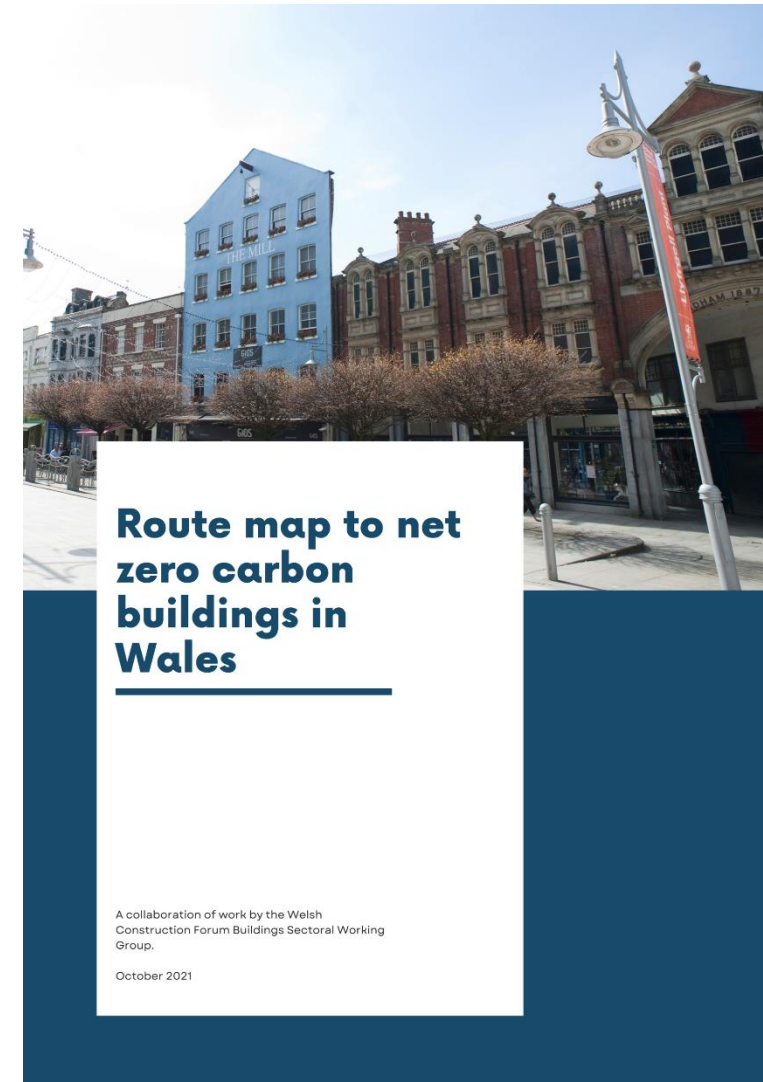
2022 Going Forwards

Net Zero Carbon – Welsh Government Guidance

Route Map to net Zero Carbon Buildings in Wales

- Brand new publication – guidance not legislation
- Sets out principles and strategy
- New set of challenges!
- Specific targets for different building types
- New builds and refurbishments
- Definition of net zero carbon

“when the amount of carbon emissions associated with a building’s embodied and operational impacts over the life of the building, including its disposal, are zero or negative”



2022 Going Forwards

Net Zero Carbon - Impact

Route Map to net Zero Carbon Buildings in Wales

Sets out some of the most significant and broad reaching changes to how we design buildings in future.

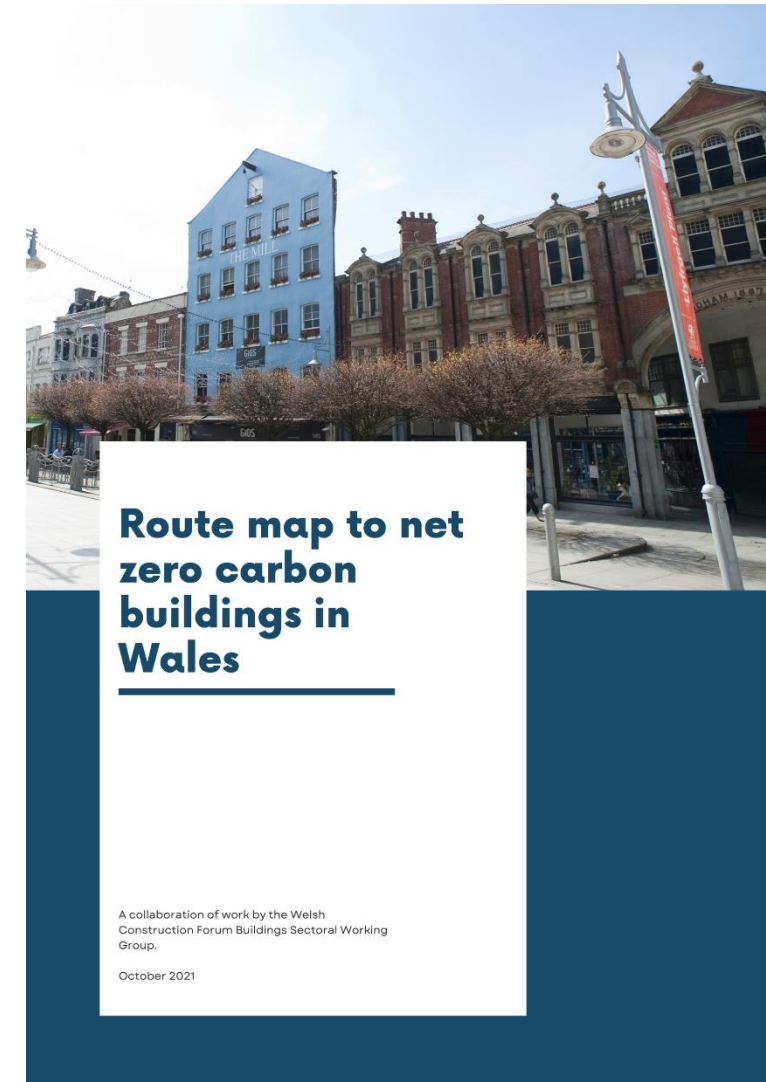
Important changes to process, procurement and costs.

Significant implications for all construction disciplines including estates departments, designers, asset managers, energy managers and tenants/occupiers

Key takeaways for design group are:

- Embodied carbon calculations for design and construction stages
- Expectation for maximisation of renewables
- Net zero carbon reporting spreadsheet
- Lots of whole life costing exercises

These will form the basis for group activities over the new year



2022 Going Forwards

Net Zero Carbon - Reporting

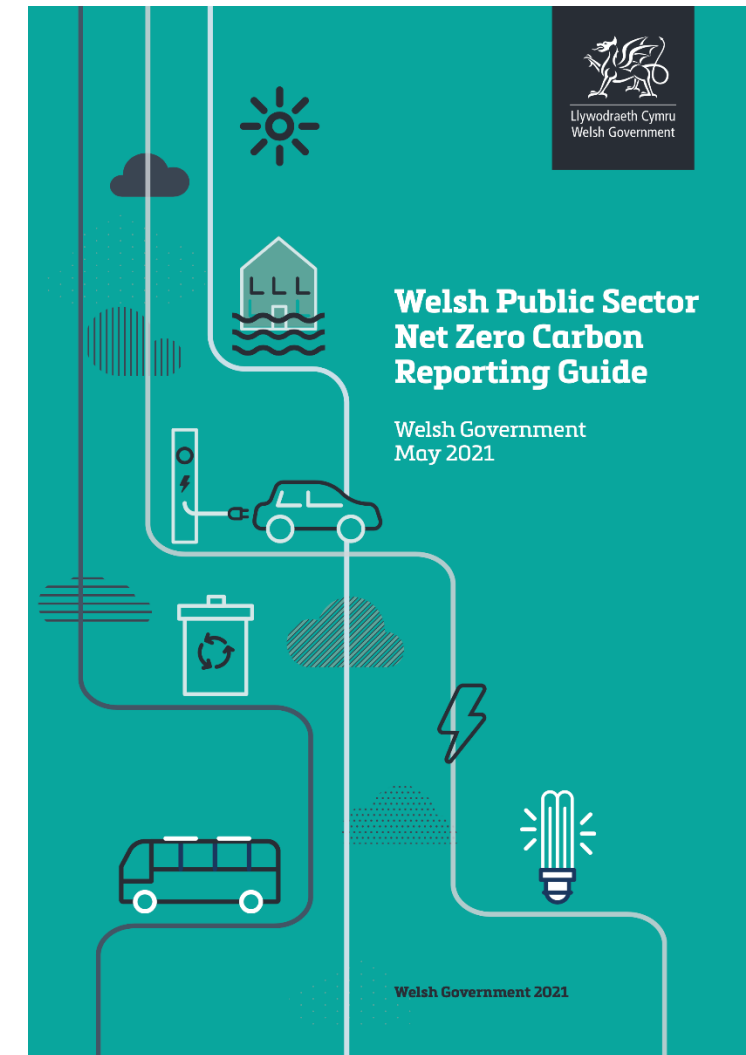
Welsh Public Sector Net Zero Carbon Reporting Guide

Identifies principles and specific reporting targets and definitions

Comprehensive approach, onerous and time-consuming

Requires capture of a lot of data

Mainly aimed at building services and energy officers

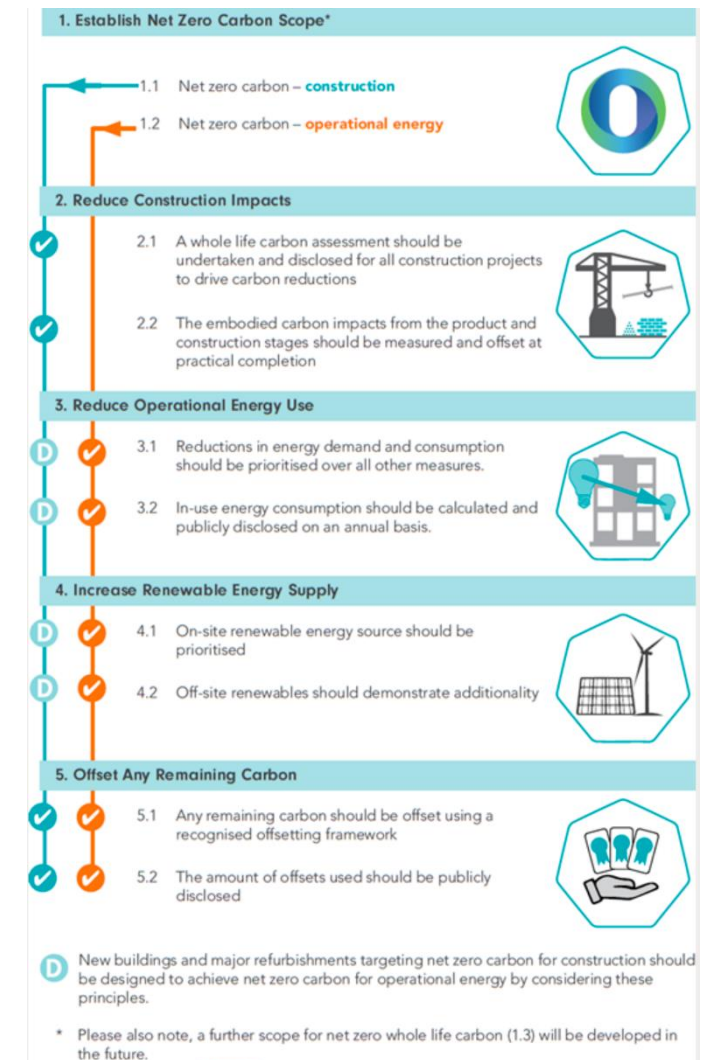


2022 Going Forwards

Net Zero Carbon – Implications

This will change the way we design

- Greater focus on embodied carbon – design (TM54), construction and operation
- Move towards more biogenic carbon sequestration - basically use of timber in construction for structure as well as cladding
- Maximise use of renewables -TM25
- Offsetting permitted as a last resort
- Guidance available from RIBA and RICS

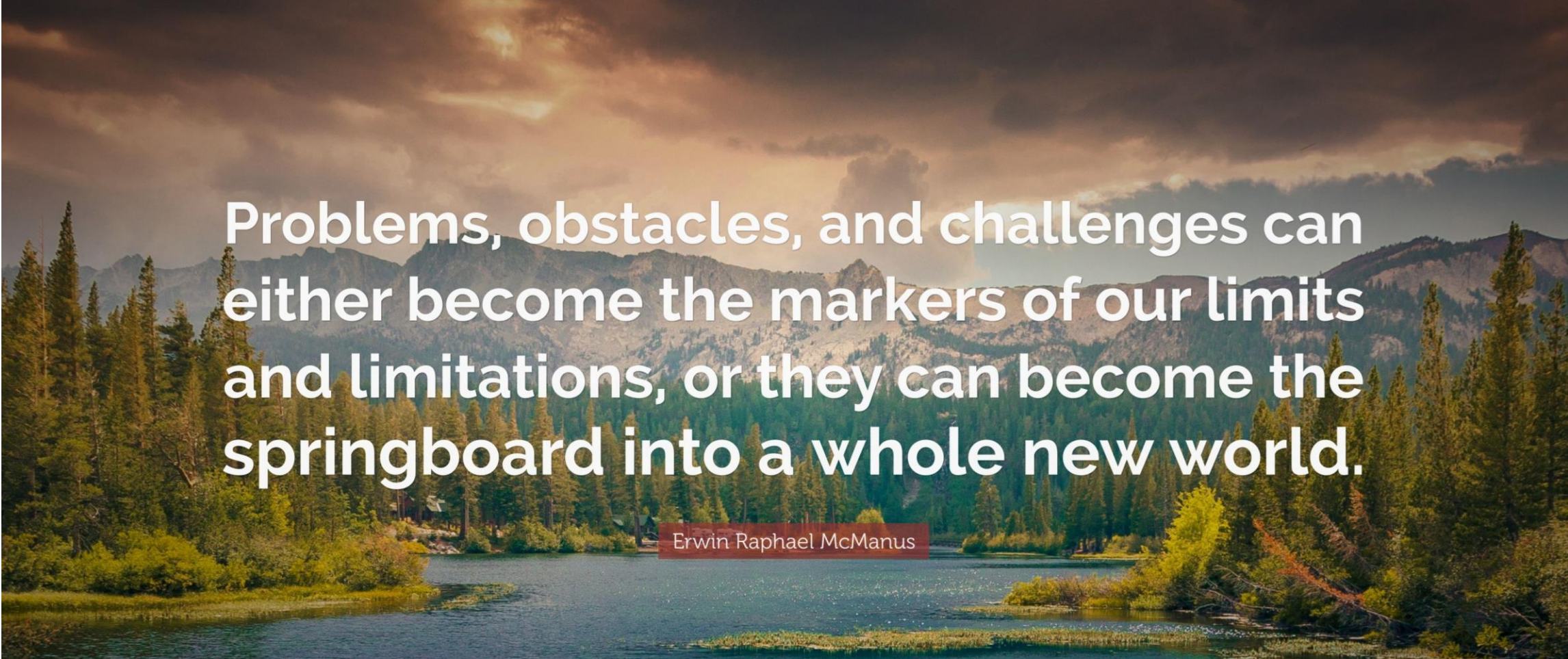


2022 Going Forwards

Net Zero Carbon – Summary



Single largest change in the way professionals and local governments operate



Problems, obstacles, and challenges can either become the markers of our limits and limitations, or they can become the springboard into a whole new world.

Erwin Raphael McManus

Estates land management during pandemic

CAPE meet quarterly

Well attended

Ability to discuss key issues

Agile working

Health and safety

Supporting local businesses

Supporting local partners

Challenges

Finance

Resources

Ageing workforce

Climate change

Decarbonisation

Opportunities

**Driving forward our accommodation
strategies**

Regeneration

Climate Emergency

Nature emergency

Resetting the CLAW agenda

M&E Life since Covid

Ventilation not Air Conditioning

- Remember this is Ventilation not Air Conditioning, they are totally separate systems.
- Since the start of the Pandemic ventilation has played a significant role in trying to contain the spread of the Virus.
- There have been numerous instances where the requirements and recommendations of ventilation have changed as more was known about the Virus spread.
- So what are the basic Recommendations and are there any issues with the recommendations as they stand.
- Adequate ventilation reduces how much virus is in the air. It helps reduce the risk from aerosol transmission.

Current Recommendations

- Natural Ventilation – Open windows, doors and vents to provide good through airflow.
- Mechanical ventilation - Fans and ducts bring in fresh air from outside.
- Both types of Ventilation should be used where possible
- Carbon Dioxide monitoring should be used to detect low areas of ventilation where the levels are above 1500PPM
- The general consensus is to try and achieve levels between 80 and 1000PPM

Ventilation Issues

- There are various issues with achieving good ventilation.
- The biggest issue is comfort, at this time of year it can get very cold outside so with windows, doors and vents open or partially open you have cold air entering a space, ensuring that space is comfortable is a fine balancing act. It has to be done on a room by room basis as each room will have different characteristics, occupancy levels and requirements.
- It is recommended not to use or vastly reduce the recirculation of air in Mechanical Ventilation this again leads to heating issues.

Summing Up Ventilation

- I have not given answers because there is no one answer and each organisations Engineers will need to take their own approach to solutions for their own buildings.
- There are many ways to get the right results.
- Ventilation with regards to Covid and in general is often discussed and experiences shared within the CLAW M&E Group so don't worry we have this covered.
- Going forward, Strategies on Ventilation will have to change as will new ventilation units and the way they work.

Challenges going Forward

- There are a number of difficult challenges for M&E Engineers going forward.
- Covid will be here for the foreseeable future.
- Welsh Government has a very ambitious zero carbon policy which will massively impact M&E design, use and control strategy.
- So what will help???
- Money, Money and more Money!!!! Realistic time scales on projects and more money.
- We all wish to be Carbon Neutral but it will not be easy or cheap.
- Thank you for your time.

GRWP YNNI CLAW

“BYWYD AR ÔL COFID”

Mathew Preece

Cyngor Dinas Casnewydd

(Cadeirydd Ynni CLAW)

CLAW ENERGY GROUP

“LIFE AFTER COVID”

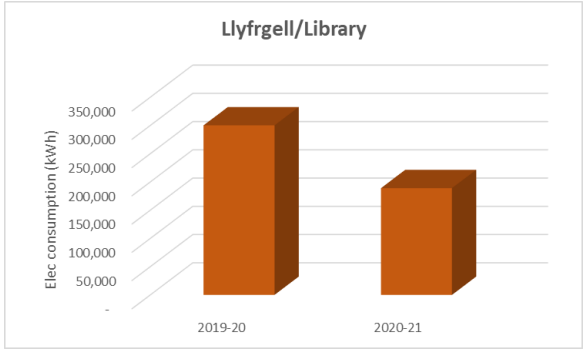
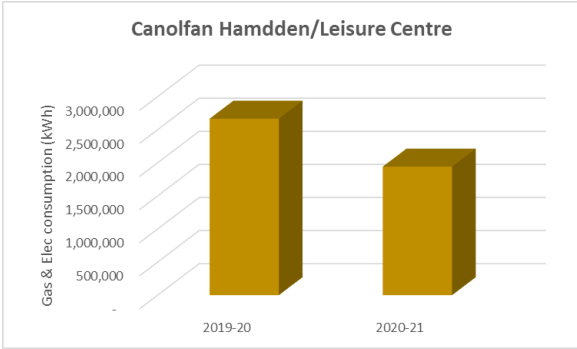
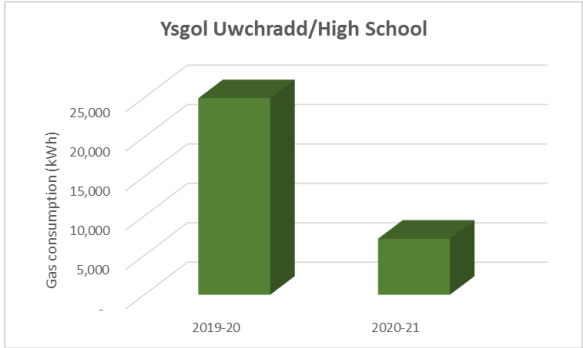
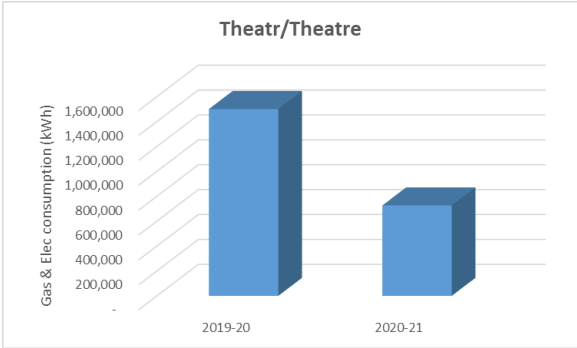
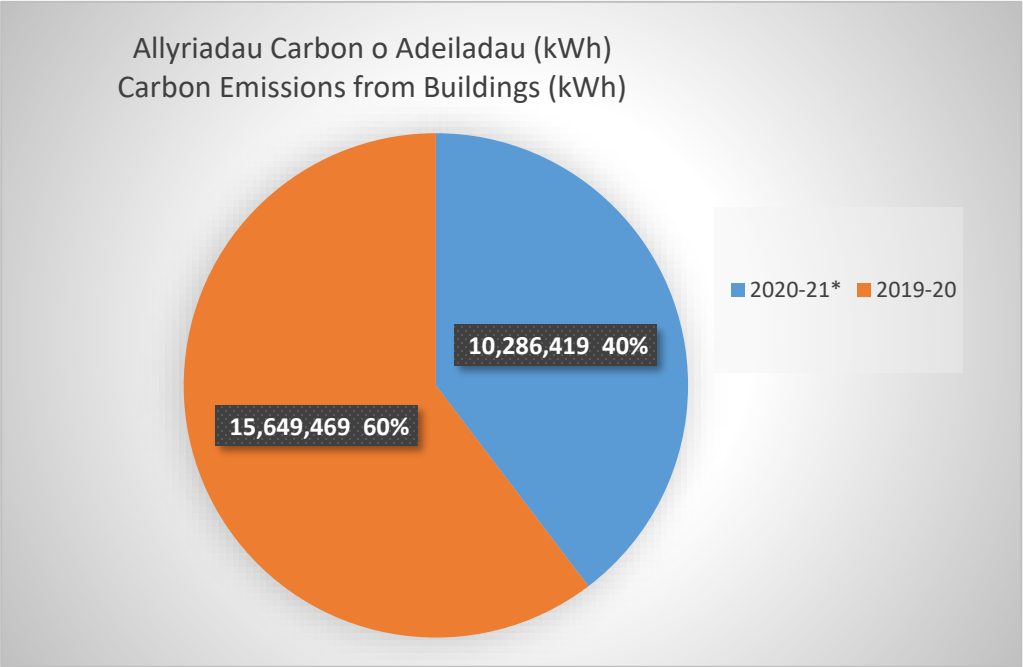
Mathew Preece

Newport City Council

(CLAW Energy chairman)

RHEOLI YNNI YN YSTOD Y PANDEMIG

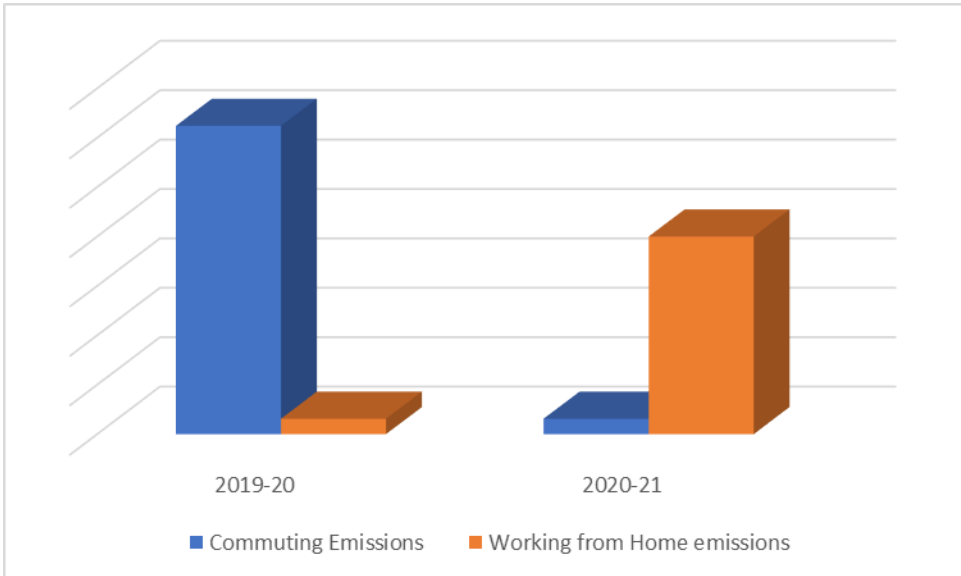
ENERGY MANAGEMENT DURING THE PANDEMIC



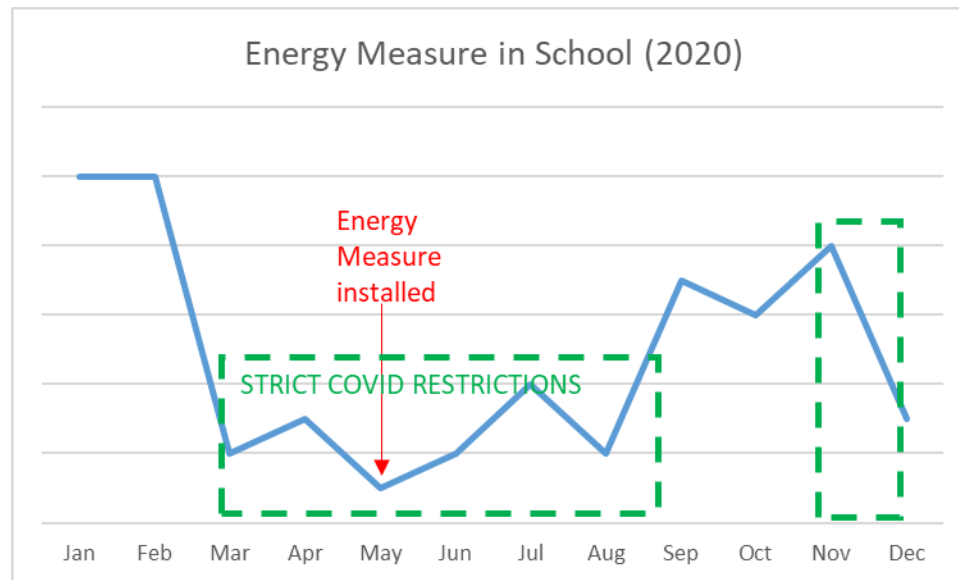
CYFLEOEDD / OPPORTUNITIES



- Empty sites
- Working from home
- Coordinated approach to COVID: All Sectors



HERIAU / CHALLENGES



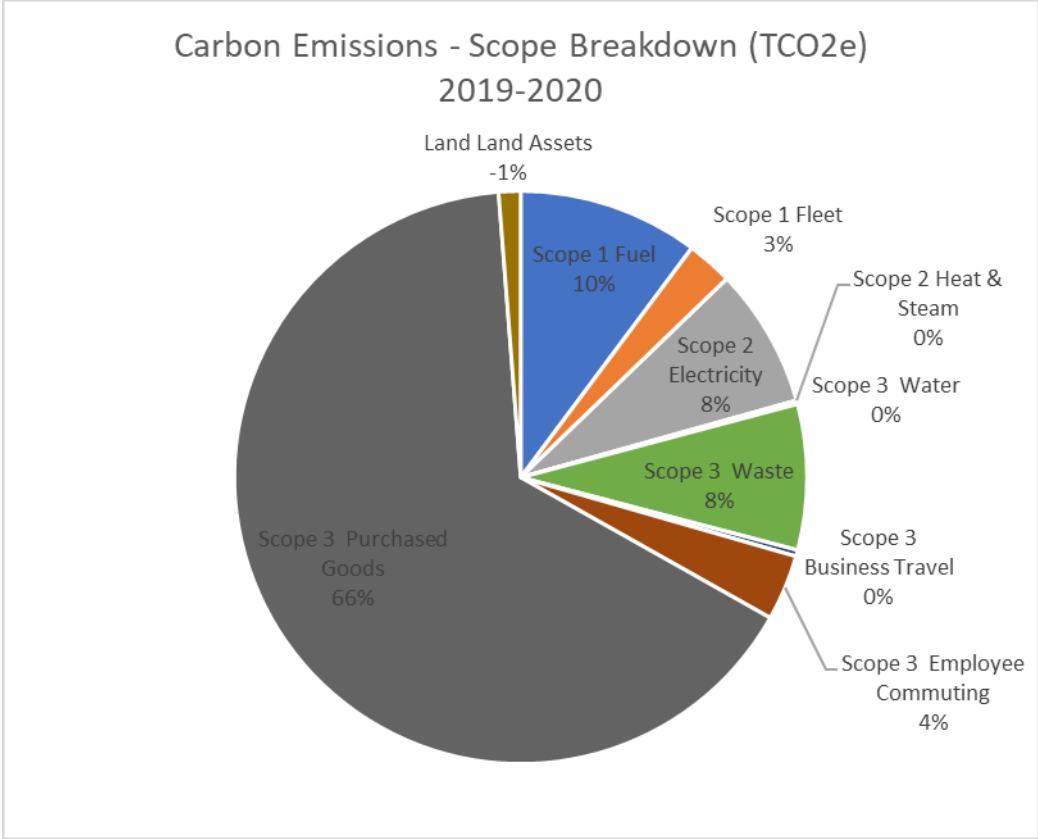
- Staffing levels and redeployment
- Increased ventilation in winter is likely to drive up gas usage
- Validation of energy saving measures is more complex

PRISOEDD CYFLEUSTODAU / UTILITY PRICES



- Gas Increased
- Electricity/Power prices increased
- Energy purchasing strategy for LAs in Wales

NET SERO 2030 / NET ZERO 2030

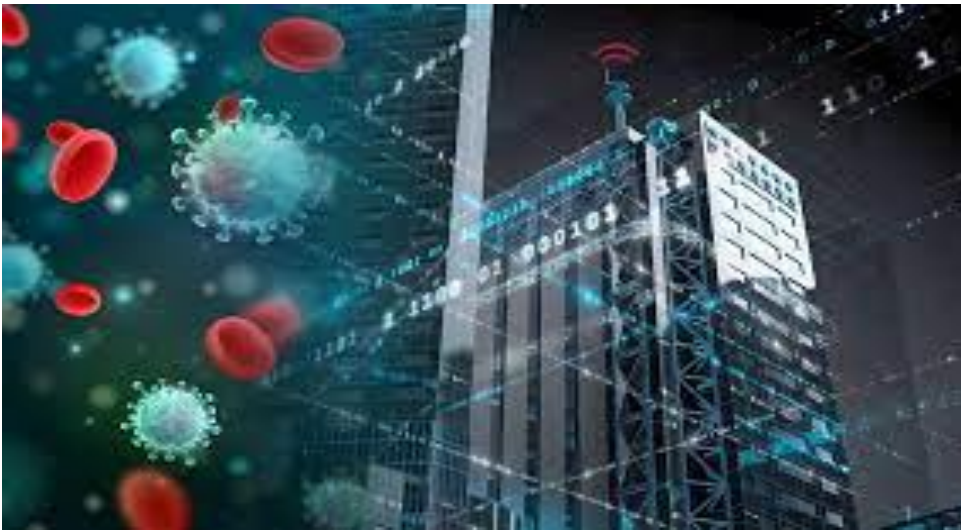


- WNZC reporting – Baselineing
- Focus group on new reporting requirements
- Assisted WLGA on LA net zero 2030 action plans
- Call for Evidence – Decarbonisation Baselineing and Action Plans

DIOLCH YN FAWR
AM WRANDO

THANK YOU
FOR LISTENING

Opportunities as a result of COVID 19 in relation to Building Maintenance



Opportunities as a result of the Covid Pandemic

Covid has affected all Local Authorities in their service provision however it has offered opportunities for the Authorities to overcome and adapt the way that Building Maintenance is undertaken in the future.



Covid has enabled Authorities to :-

- Carry out essential maintenance to its portfolio as a result of buildings not being occupied.*
- Bring forward any planned maintenance schemes*
- Reduce any backlog maintenance*
- Prepare and update any maintenance programmes for the various properties within its portfolio*
- Utilise any surplus revenue / capital funding available*
- To plan the effective and efficient maintenance regimes required for compliance*

Opportunities as a result of the Covid Pandemic

- ❑ *Post Covid has enabled Authorities to bring forward any potential building rationalisation proposals in connection with the possible future low use of buildings and how 'New Ways of Working' are to be accommodated.*
- ❑ *Leads to reduce energy use; reduce maintenance burden; release capital receipts to reinvest in retained buildings; reduce carbon footprint of the Authority.*



Opportunities as a result of the Covid Pandemic

Covid , in association with Brexit, has identified the need to ensure a reliable supply chain of Contractors and suppliers to cater for any future requirements .

It has enabled Authorities to reconsider :-

- Frameworks – The availability of good , local , reliable contractors*

- Parts / spares- The requirements to stock parts / spares for any plant, equipment that are essential for day to day business and essential services ,e.g Social Care*

- Future technology – The use of new technology for ‘ contactless /hands free’ operation of equipment , i.e taps, door closers*



Opportunities as a result of the Covid Pandemic

Future challenges - To prepare buildings for the return of staff

- ❑ *To adapt the traditional office layout to Hybrid version*
- ❑ *Cater for all stakeholders and users*
- ❑ *Provide a user friendly, fit for purpose working environment*



A last thought



Life After Covid

Mark Wade

Housing Sub Group Chair

Life After Covid?

- Newly formed Housing Sub Group
- In Housing it will be 'living with Covid' rather than 'Life After'
- Key words - Pressure, Demand and Cost – All rising
- Key areas – homelessness, the Economy, Capital works, Development, Net Zero, Health and Social Care
- Challenges – New Build but also Welsh Housing Quality Standard (2) & Retrofit Decarbonisation of the stock.

Homelessness – Rising Pressures



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Development – Pace, Scale and Cost



The Ideal Future Housing



Vs The Realities of Retrofit

- Cost
- Supply Chain
- Resident cooperation and priorities
- Importance of design and test



Mark Wade - Housing Sub Group Chair

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Head of Housing & Public Health