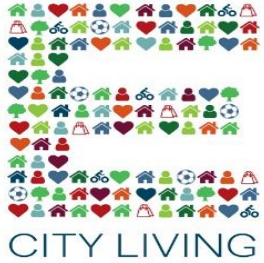


Developing the Exeter Way

22nd May 2019

Passivhaus Social Event, Cardiff.





1. Introduction
2. Triple Bottom Line Approach to Development
3. Overview of Passivhaus Projects to date
4. Building Biology Approach & Passivhaus
5. Procuring for Passivhaus Success
6. Questions



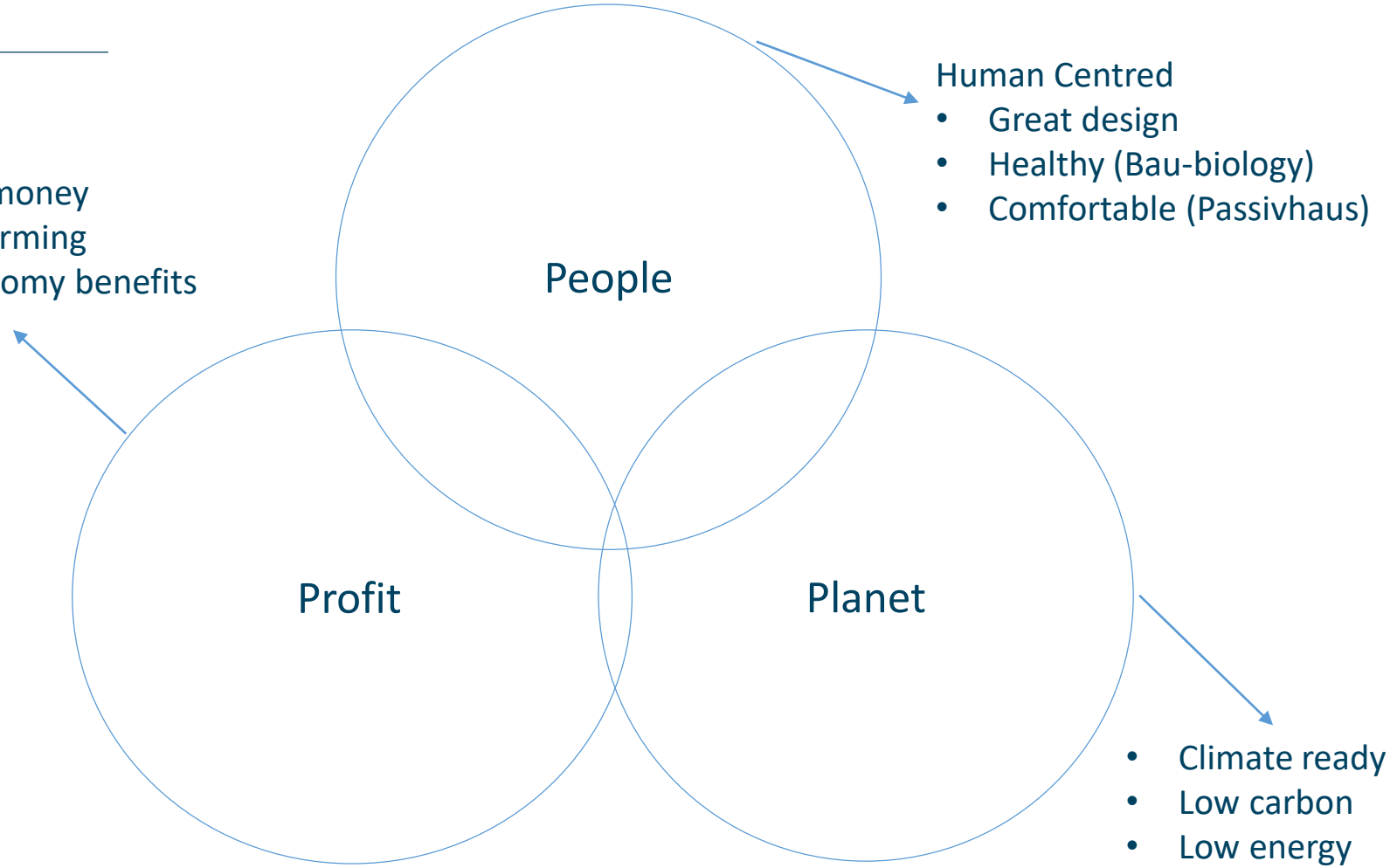
Triple Bottom Line Approach

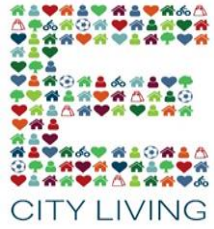




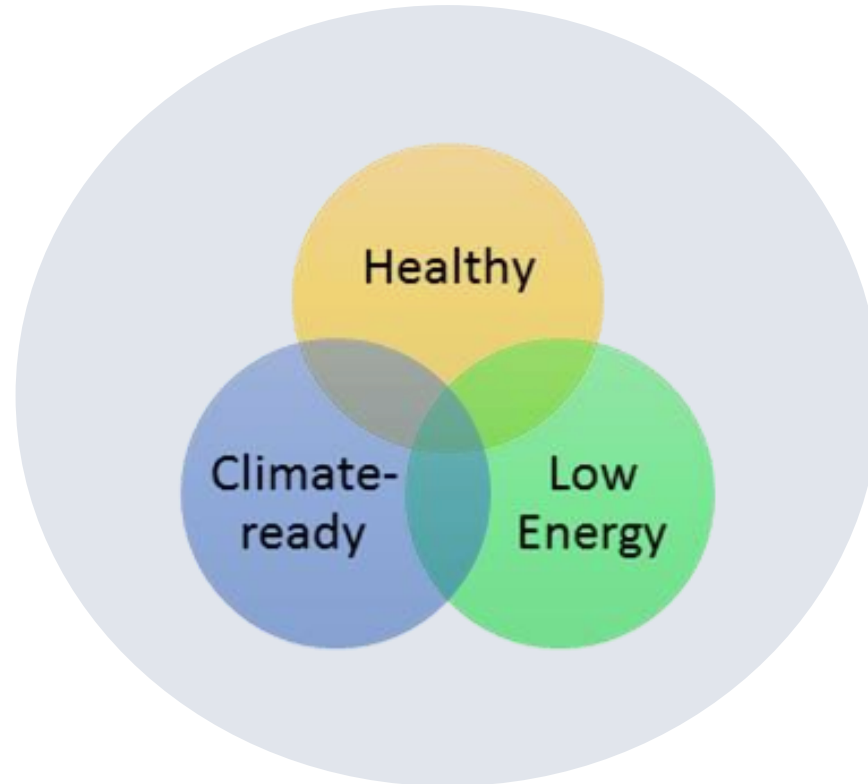
CITY LIVING

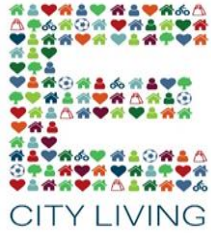
-
- Value for money
 - High Performing
 - Local economy benefits





Environmental Factors





Overview of New Build

2009 to 2015



Rowan House

2009



Knights Place



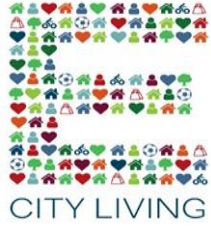
Barberry Close



Silverberry Close



Reed walk

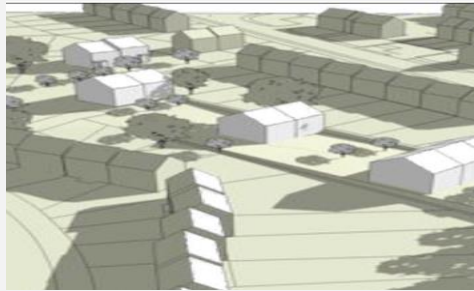


Development Pipeline



Vaughan Road

2018



COB Wave III

2019



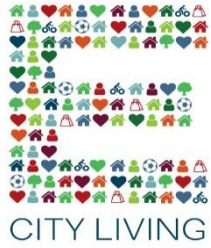
Extra Care



St Sidwell's Point

2020





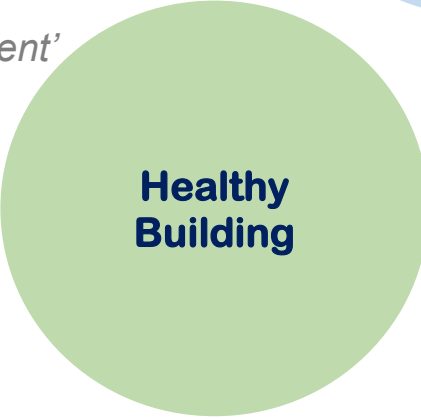
Building Biology

'Holistic study of interrelationships between humans and their environment'

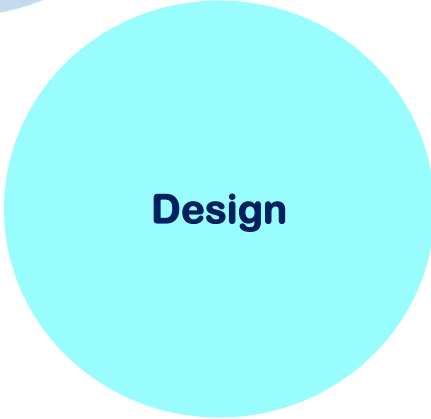


Impact on environment

Often disconnected and looked at in isolation

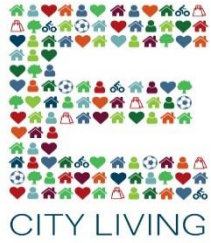


Impact on us



Design

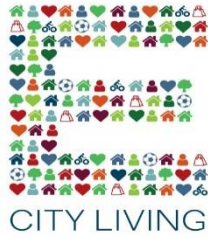




Building Biology

'Holistic study of interrelationships between humans and their environment'





Healthy Design – Why bother?

On average we spend about **90% of our time indoors** and 30% of our time in bedrooms

At these exposure times **even low concentrations** of harmful substances **affect our health** in the long term and can cause chronic diseases. More vulnerable inhabitants like children and elderly persons are particularly exposed to this risk

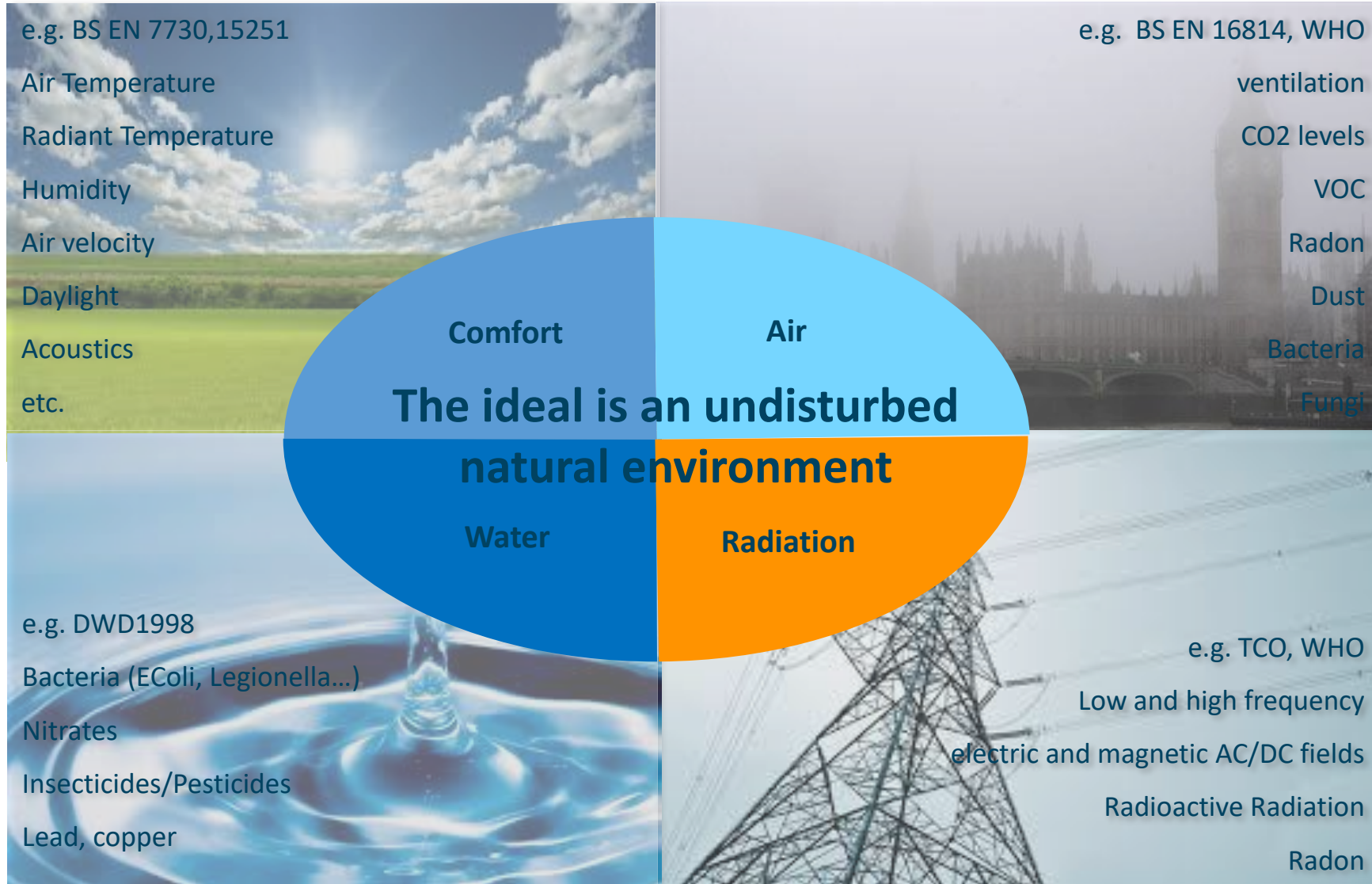
Bau Biology is about managing this risk and reducing it where possible

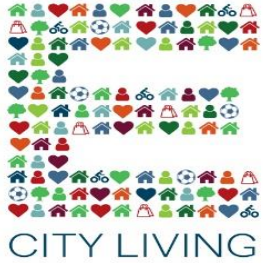




Bau Biology

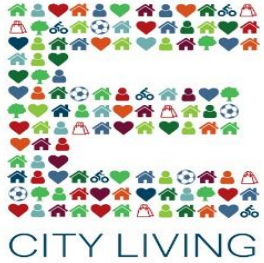
Risks are identified and assessed based on the 'Standard of Building Biology Testing Methods' (SBM 2015)





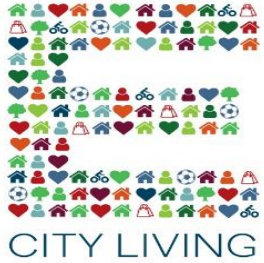
Passivhaus and Healthy Buildings

- Thermal Comfort
- Climate Resilience
- Exceptional Air Quality
- Good Daylighting
- Great Acoustics
- Excellent Ventilation



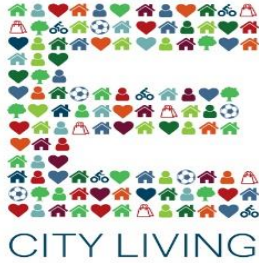
Procuring for Passivhaus – Challenges

- Lack of familiarity
- Unquantifiable Risk
- Amount of ‘Client Power’
- Skill Shortages



Potential Procurement Solutions

- Open Days
- Early Involvement / Engagement
- Passivhaus Certifier 'Approved' Design
- Educate the Passivhaus Opportunity
- Passivhaus Contractor Framework

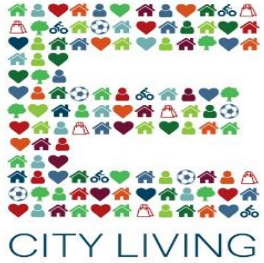


ExSEED FRAMEWORK MEMBERS

The Framework has been procured through a fully compliant OJEU process. OJEU Notice 15968876_3 published on 25 November 2015. Contract Award notice 2016/S 106-188296. published on the 06 June 2016.

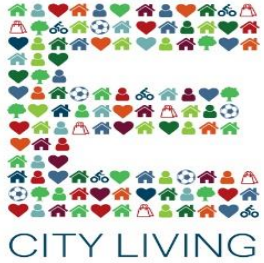
Lot A – Projects Valued between £50,000 to £1,499,999	Lot B – Projects Valued between £1,500,000 to £9,999,999	Lot C – Projects Valued Above £10,000,000
C G Fry & Sons Ltd	Bouygues UK	BAM Construction UK
ENELCO	C G Fry & Sons Ltd	Bouygues UK
Harris Bros & Collard Ltd	ENELCO	Interserve Construction Plc
Midas Group	Halsall Construction	Sir Robert McAlpine
	Harris Bros & Collard Ltd	Willmott Dixon
	Interserve Construction Plc	
	Midas Group	





Further Potential Procurement Solutions

- Traditional Approach
- Traditional Approach for Passivhaus Elements
- Focused Tender Evaluation
- Upskilling – During Tender or 2nd Stage of 2 Stage Approach



Procuring for Passivhaus Success

The benefit of cost effective design can be compromised if the incorrect procurement strategy and contract form is used as the contracting industry is still relatively unfamiliar with the methodology.

This unfamiliarity together with trying to fix the price with a contractor before the design is finalised can attract large risk premiums.

When tendering consider following;

- a) Finish the design (at least key passivhaus elements and strategy) before tendering for a fixed price.
- b) Ensure tender quality evaluation focuses on methodology and experience, requiring competent contractors, teams and individuals, and a focus on workmanship and airtightness champion (encourage intermittent testing throughout construction). Reflect in quality: price criteria.
- c) During tender period undertake workshops with all tenderers to encourage a team / collaborative approach and address any of their risk concerns/premiums (i.e. Present the design strategy and how it has been developed with simple construction, build ability and detailing in mind).

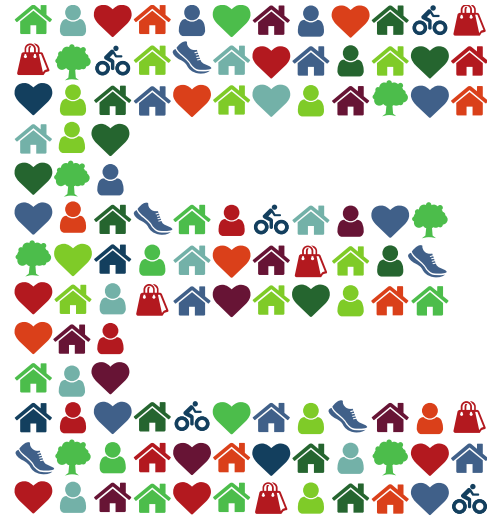
Careful consideration of the procurement strategy and contract form is required including fixing the design before the price, high focus on tenderer quality and workshops to lower premiums.





Any Questions?





CITY LIVING

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