



Historic England

# HERITAGE AND THE CIRCULAR ECONOMY

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WHY LOOK AT THE  
HISTORIC ENVIRONMENT  
THROUGH AN ECONOMIC  
LENS?

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**Economics is a powerful decision making tool**

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Success is often measured using economic indicators e.g. GDP. (MEASUREMENT)

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Governments pursue policies supported by economic analysis e.g. cost benefit analysis (VALUATION)

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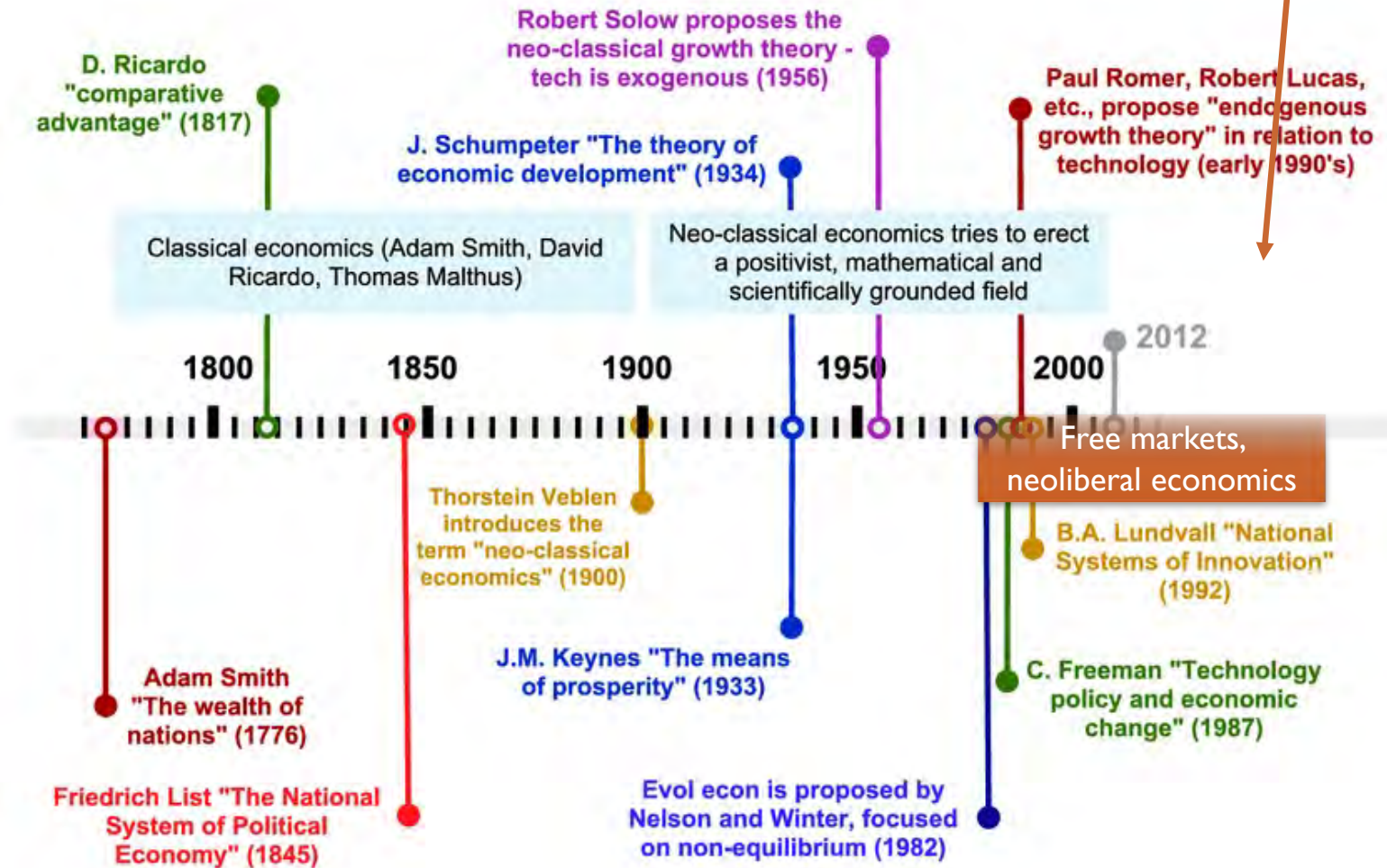
**Economics influences political, social and environmental outcomes.**

**Economics influences outcomes in the built environment including the historic built environment.**

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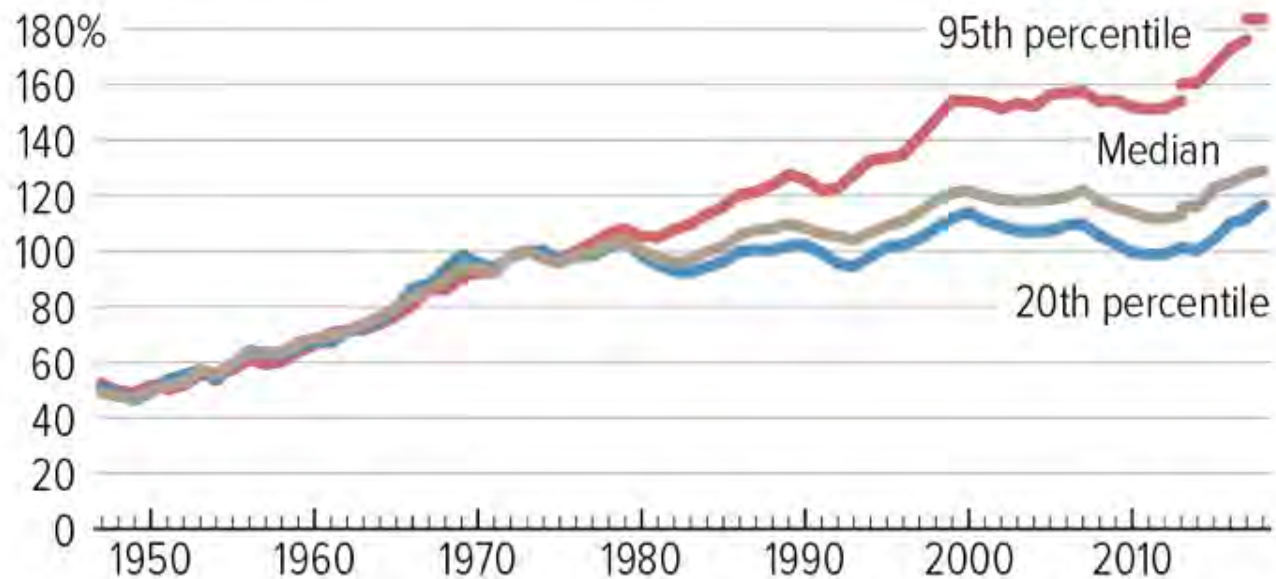
AT BEST  
ECONOMICS IS  
AN  
INCOMPLETE,  
EVOLVING  
SCIENCE

What is next? Ecological econ, evolutionary econ, doughnut econ, wellbeing econ ...



## Income Gains Widely Shared in Early Postwar Decades — But Not Since Then

Real family income between 1947 and 2018, as a percentage of 1973 level



Note: Breaks indicate implementation of a redesigned questionnaire (2013) and an updated data processing system (2017).

Source: CBPP calculations based on U.S. Census Bureau Data

CENTER ON BUDGET AND POLICY PRIORITIES | CBPP.ORG

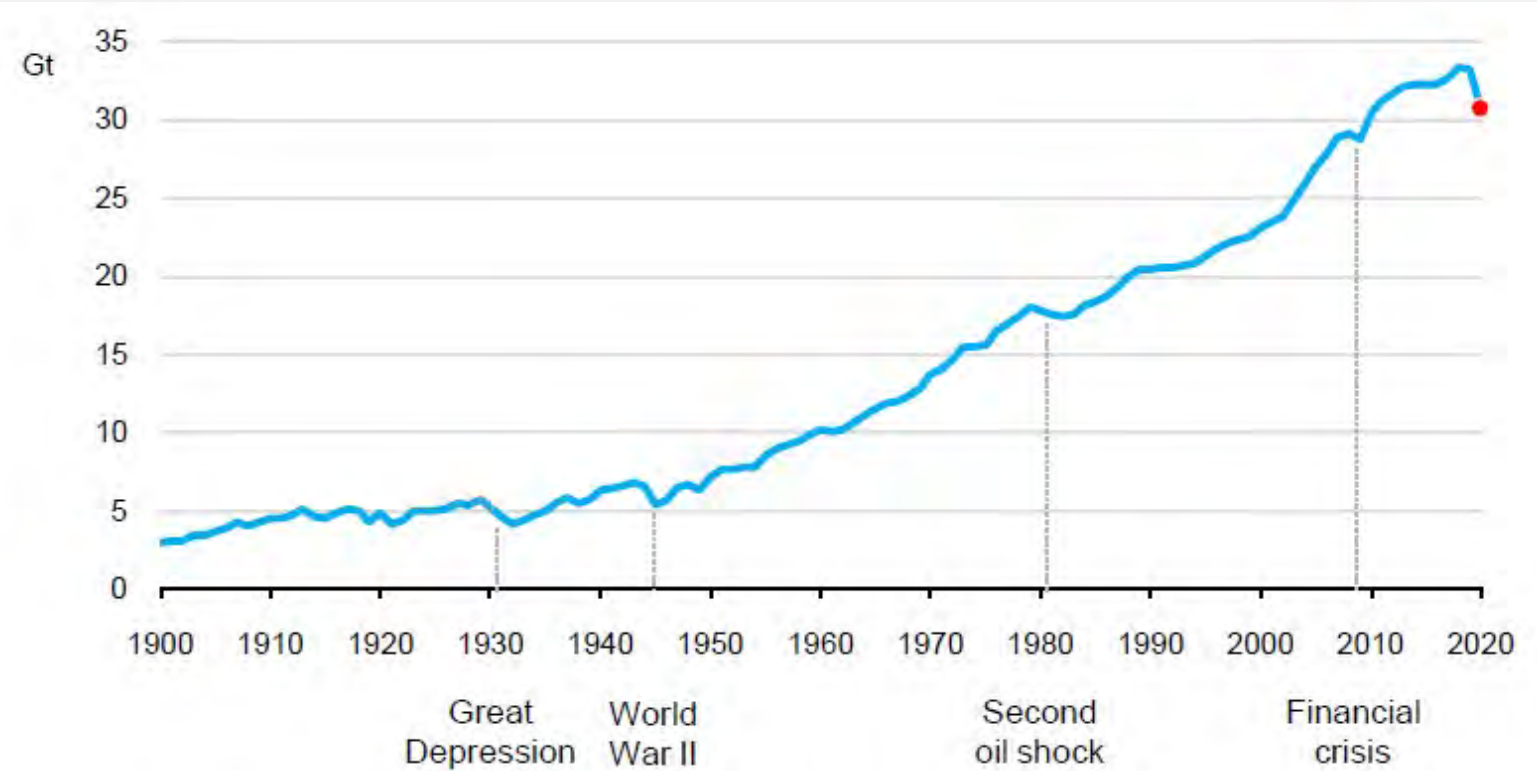
## Seeking a new economic approach that:

- Is structured to reduce inequalities of income, wealth and power, and to eliminate systematic gender and race inequality
- Is focused on improving individual and social wellbeing rather than prioritising economic growth

• **WHAT DO WE VALUE?**

# GLOBAL ENERGY-RELATED CARBON DIOXIDE EMISSIONS OVER 1900-2020 IN GIGATONS (GT).

IMAGE SOURCE - GLOBAL ENERGY REVIEW, INTERNATIONAL ENERGY AGENCY (IEA), ALL RIGHTS RESERVED [\[5\]](#)



## Seeking a new economic approach that:

- is environmentally sustainable, living within the earth's planetary boundaries in a just and fair way for all the world's people and for future generations

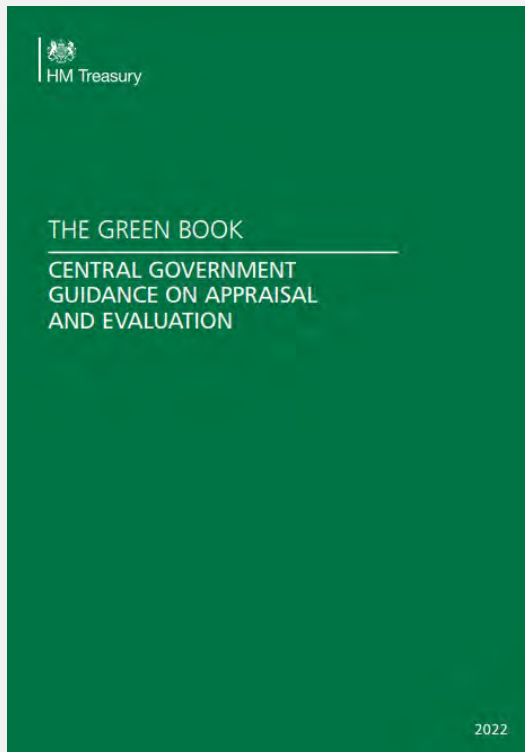
## WHAT ARE WE MEASURING?

## MOVING TO A CIRCULAR ECONOMY

“A circular economy is an industrial system that is restorative or regenerative by intention and design. ... It replaces the ‘end-of-life’ concept with restoration, shifts towards the use of renewable energy, ... and aims for the elimination of waste .....” (EMF, 2013: 7)

- In our current economy, we take materials from the Earth, make products from them, and eventually throw them away as waste – the process is linear. In a circular economy, by contrast, we stop waste being produced in the first place.
- The concepts of the circular economy can be seen to fit neatly into the prevailing neoliberal economic narrative.

# MAKING THE ECONOMIC CASE FOR CIRCULAR POLICY FOR THE HISTORIC ENVIRONMENT



## THE CASE

### I. WHAT AND HOW WE MEASURE: Information asymmetries

- Leading to market failure and the strong rationale for government intervention

### II. WHAT AND HOW WE VALUE: Non-use values of the historic environment.

- Heritage assets have values beyond those captured in the market



**“Buildings contribute to global warming over their whole lives: when we build, maintain, use and demolish them.**

**“Failure to model the whole life of the building ignores these impacts and so we simply shift the problem from one part of the building lifecycle to another.”**

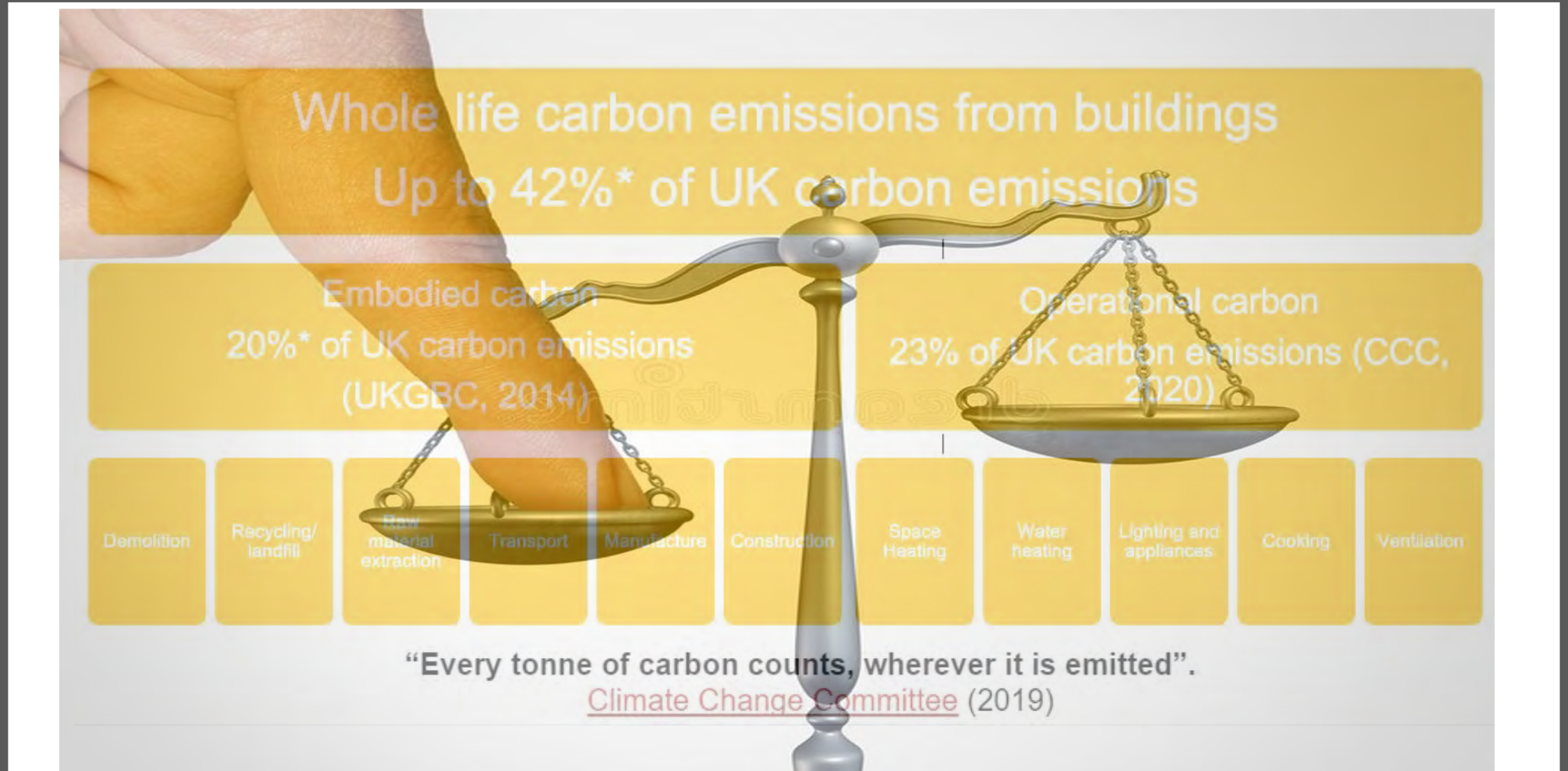
## I. WHAT AND HOW WE MEASURE

- “What we measure determines what we do” J. Stiglitz, Nobel prize winner, Economics



# I. WHAT AND HOW ARE WE MEASURE

E.g. net zero targets based on territorial emissions – off-shoring our carbon footprint? (HM Treasury 2021)



# I. MEASUREMENT AND MARKET FAILURES

“It is not at all clear that a circular economy is remotely likely to be achieved without sustained and determined public policy” – generally informed by economic evidence (OECD, 2019)

- In market led economics governments intervene where markets fail.
- Clear market failures over the building life cycle
- Addressing this is critical to a move to a circular economy

# Measure embodied carbon (e.g. material passports/ environmental product declarations.)

## II. WHAT AND HOW WE VALUE

“[The circular economy] articulates (more clearly) the capacity to extend the productive life of resources as a means to **create value and reduce value destruction.**” (Blomsma and Brennan 2017: 609).

Economic value: Willingness to pay/accept

Market goods and services

Non market goods and services

Price paid & any consumer surplus

Revealed preference: actual behaviour

Stated preference: hypothetical

In economics, value is measured by the most someone is willing to give up in other goods and services in order to obtain a good or service: **“willingness to pay.”**

OR compensation which reflects the minimum monetary amount required to relinquish the good or service **“willingness to accept.”**

Some goods or services have value but they are not easily measured by conventional economic metrics. Alternative approaches are needed and exist.

But our linear economic models are relatively silent on non-use.

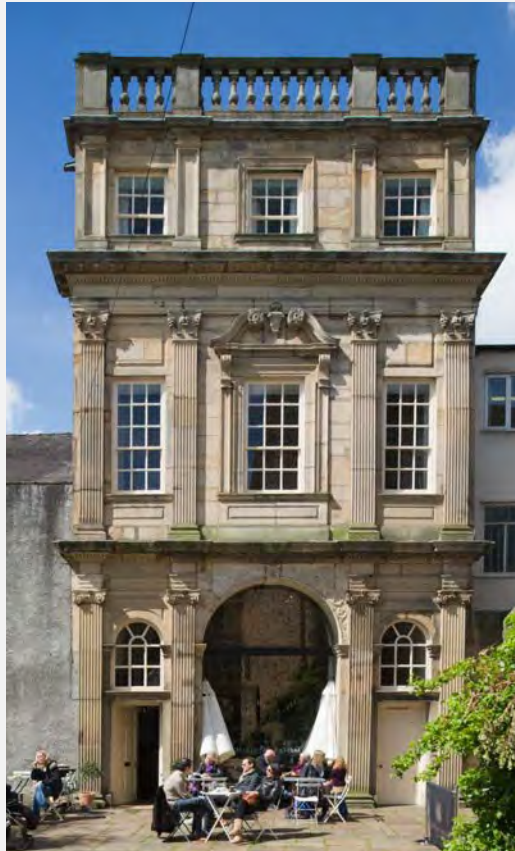
## II. WHAT AND HOW WE VALUE

Heritage has multiple values

- Archaeological value – a bridge to the past
- Architectural value – uniqueness, craftsmanship
  - Aesthetic value – beauty, distinctive
- Historical value – collective memories, vintage effects
  - Social value – identity, cohesion, wellbeing
  - Environmental values – embodied carbon
  - Spiritual value – meaning, authenticity, faith

## II. WHAT AND HOW WE VALUE.

E.g. economic cases including cases for demolition?



### We measure e.g.

Floorspace

Land use

Land values

Visits

Training

Volunteering

### To calculate...

Net Jobs

GVA

(new and safeguarded)

(new jobs and training)

### But silent on...

Historical value – collective memories, vintage effects

Architectural value – distinctiveness, craftsmanship

Aesthetic value – beauty

Spiritual value – meaning, authenticity, pride

Environmental value - Embodied carbon



**% Strongly/tend to prefer each statement**

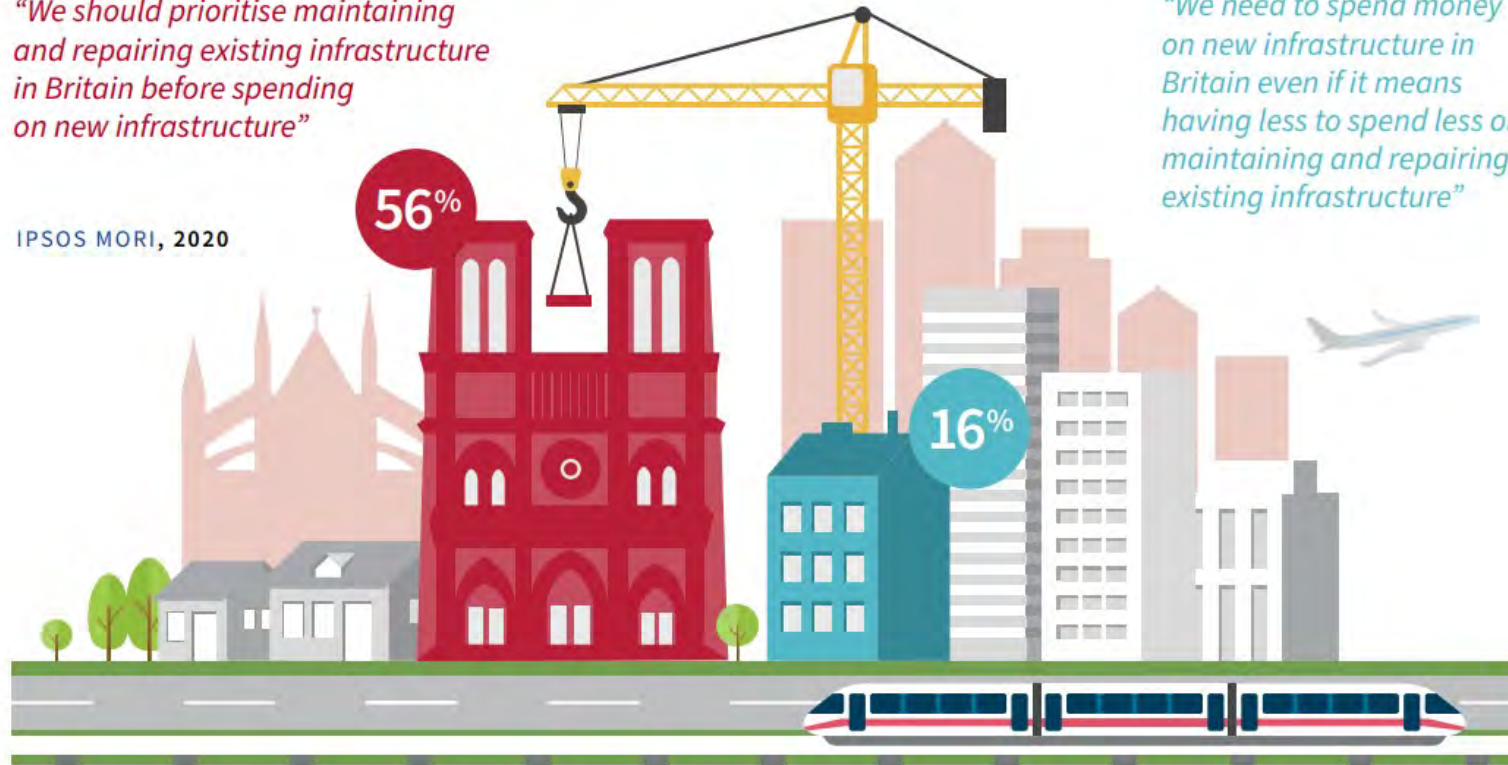
*“We should prioritise maintaining and repairing existing infrastructure in Britain before spending on new infrastructure”*

IPSOS MORI, 2020

56%

*“We need to spend money on new infrastructure in Britain even if it means having less to spend less on maintaining and repairing existing infrastructure”*

16%



# VALUATION IN A CIRCULAR ECONOMY

In a circular economy the “*capacity to extend the productive life of resources as a means to create value and reduce value destruction.*” (Blomsma and Brennan 2017: 609).

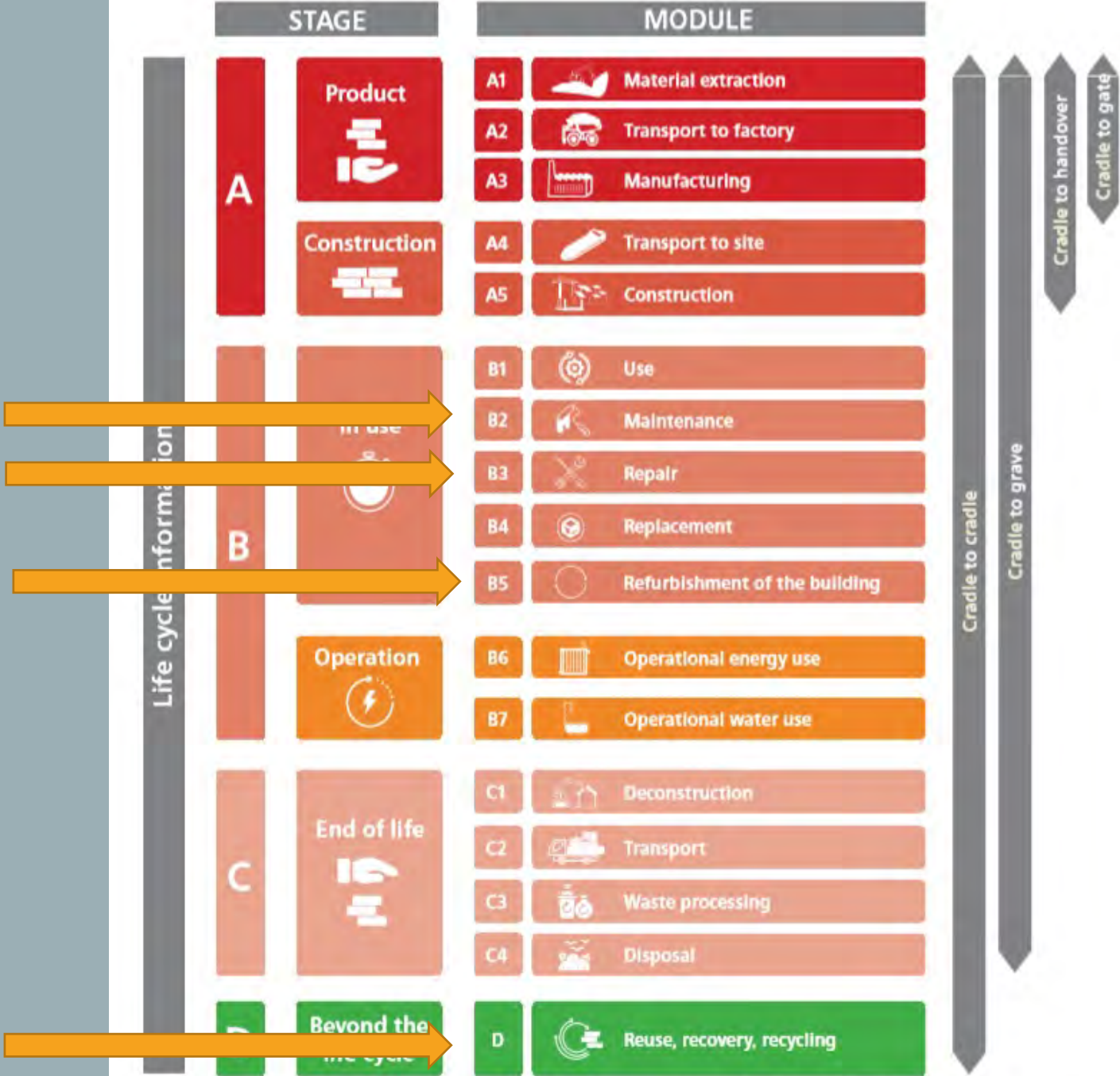
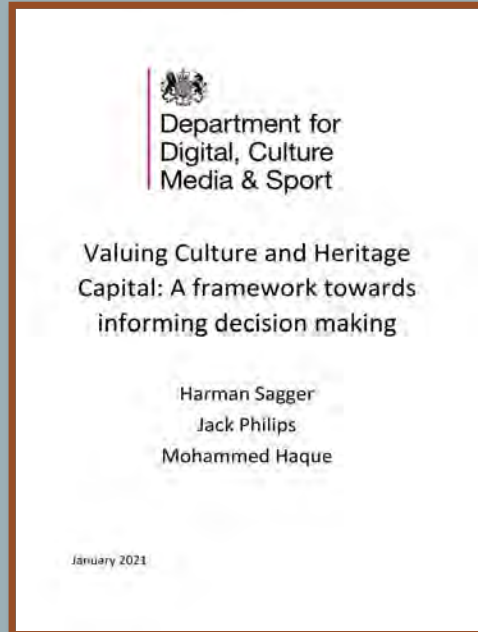


Figure 1.1 Information for a life cycle assessment as defined by BS EN 15978:2011, including typical system boundaries



# VALUATION AND CULTURE AND HERITAGE CAPITAL



- People's preferences matter – Systematically include non- market values in social cost benefit analysis to deliver public value and wellbeing

# Repair, maintenance and restoration is climate action – include this in public policies including energy efficiency (e.g. VAT)

# THERE ARE CONSEQUENCES OF POOR MEASUREMENT AND POOR VALUATION

'Death trap' mill which has had 250 emergency incidents in the last three years -including arson and serious injuries - to be knocked down



Controversial Halifax building earmarked for demolition granted listed status



Hill House, as seen over railings from New Road. Picture: Ed Nix.



THE TIMES



WILL HURST

## Demolishing 50,000 buildings a year is a national disgrace

Will Hurst | Monday June 28 2021, 12:01am, The Times



Moving to a circular economy will require:

- new business models
- fundamental changes in the economic landscape
- need to be brought about through public policies of many kinds



## MAIN TAKEAWAYS

- **Economics is a powerful tool** – it is used widely – it is used in decision making - shapes outcomes.
- **But economic tools are incomplete** – here 2 things
- **i) Measurement in the built historic environment: There are market failures**
  - Public sector intervention to actively seek solutions to measure and embed embodied carbon in policy/ modelling
- **ii) Valuation: non- market values matter – to people**
  - Repair, maintenance and restoration has value – include this in public policies including part of energy efficiency packages (e.g.VAT)

Circular economy – are we ready? Maybe even more is needed?

**THANK YOU**

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