Building Net Zero: Working with partners, customers and supply chains

Richard Davidson
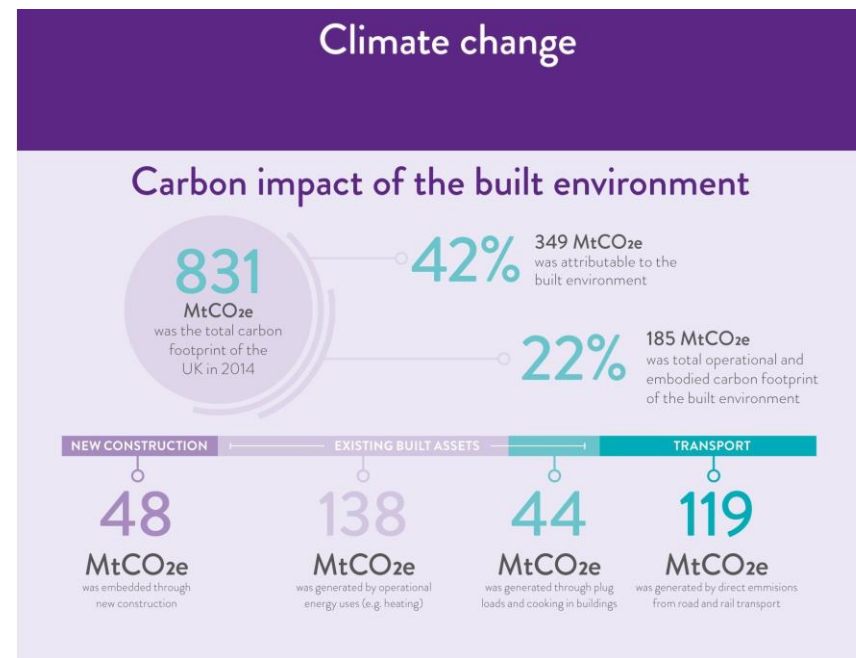Director, Willmott Dixon

The size of the challenge/opportunity

Table 1: Percentage changes in territorial carbon dioxide emissions by sector between 2018 and 2020 based on the temperature adjusted emissions and actual emissions

	Temperature adjusted emissions			Actual emissions		
	2019 ($MtCO_2$)	2020 ($MtCO_2$)	Percentage change	2019 ($MtCO_2$)	2020 ($MtCO_2$)	Percentage change
Energy supply	92.6	84.1	-9.3%	89.6	79.0	-11.9%
Business	66.7	62.1	-7.0%	65.1	59.4	-8.7%
Transport	120.8	97.2	-19.6%	120.8	97.2	-19.6%
Public	8.3	8.4	1.3%	7.9	7.7	-2.0%
Residential	71.8	76.6	6.7%	66.5	67.7	1.8%
Other	15.1	15.0	-0.1%	15.1	15.0	-0.1%
Total CO_2	375.3	343.4	-8.5%	365.1	326.1	-10.7%

Source: Tables 3 & 4, Provisional UK territorial greenhouse gas emissions national statistics 1990-2020 Excel data tables

Climate change

Carbon impact of the built environment

831 $MtCO_2e$ was the total carbon footprint of the UK in 2014

42% 349 $MtCO_2e$ was attributable to the built environment

22% 185 $MtCO_2e$ was total operational and embodied carbon footprint of the built environment

NEW CONSTRUCTION | EXISTING BUILT ASSETS | | TRANSPORT

48 $MtCO_2e$ was embedded through new construction

138 $MtCO_2e$ was generated by operational energy uses (e.g. heating)

44 $MtCO_2e$ was generated through plug loads and cooking in buildings

119 $MtCO_2e$ was generated by direct emmissions from road and rail transport

The size of the challenge/opportunity

Does your business currently have a target date for reaching net zero emissions?

- 15%
- 68%
- 17%
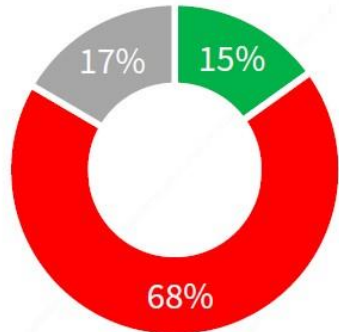
Legend: ■ Yes ■ No ■ Don't know \ N/A

Sources: Accenture, IHS Markit.

What is your target date for achieving net zero emissions?

- By 2025
- By 2030
- By 2035
- By 2040
- By 2050
- After 2050

0%   20%   40%   60%
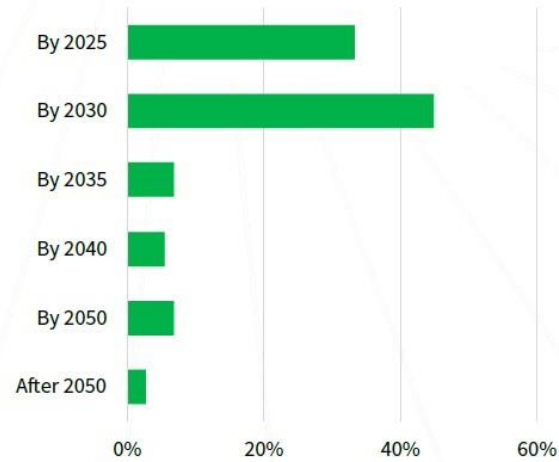
Sources: Accenture, IHS Markit.

Construction activity

% net balance

+52%

Jun '21

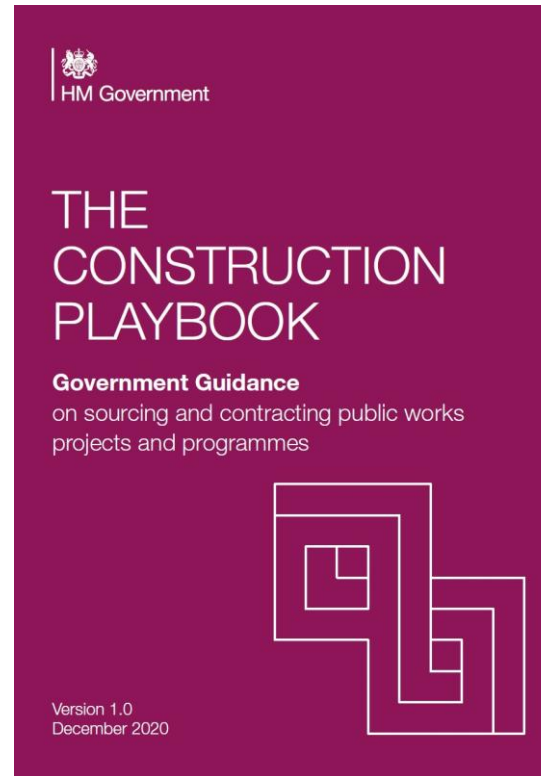'14   '15   '16   '17   '18   '19   '20   '21
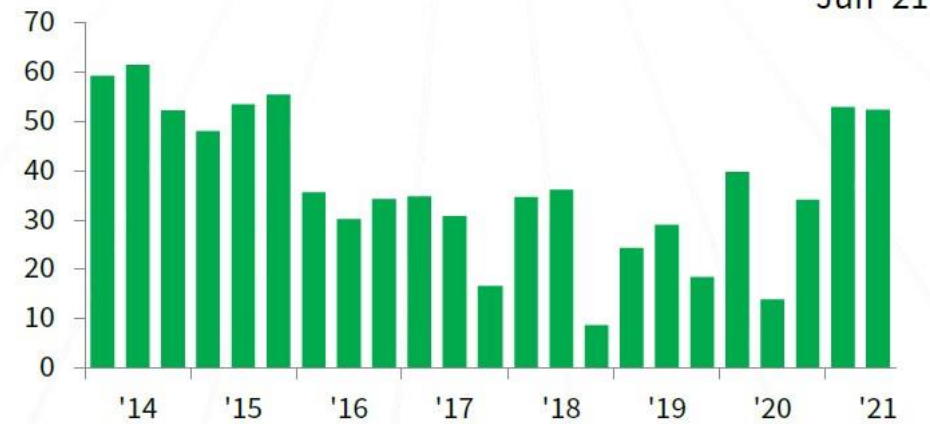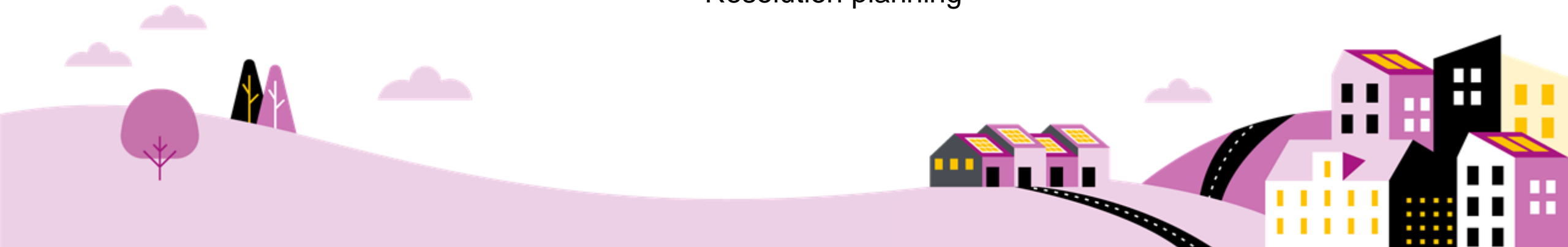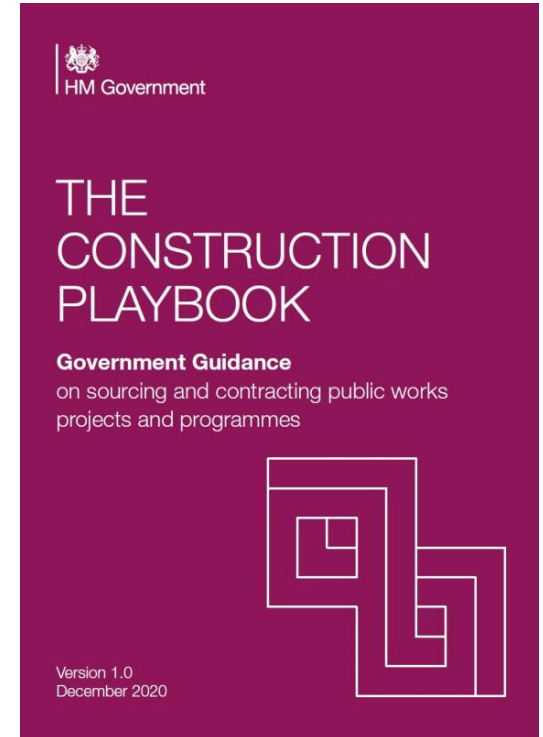
Sources: Accenture, IHS Markit.

Support

- Government Backed
- Industry Collaboration
- Public and Private Sector
- Best Practice
- Evidence Based

- All About the Outcomes

HM Government

THE
CONSTRUCTION
PLAYBOOK

Government Guidance
on sourcing and contracting public works
projects and programmes

Version 1.0
December 2020

14 Policy Areas

- Commercial Pipelines
- Market Health and Capability Assessments
- Portfolios and longer term contracting
- Harmonise, digitise and rationalise demand
- Further embed digital technologies
- Early Supply chain involvement
- Outcome based approach

- Benchmarking and should cost models
- Delivery model assessments
- Effective contracting
- Risk Allocation
- Payment mechanism and pricing approach
- Assessing the economic and financial standing of suppliers
- Resolution planning

HM Government

THE CONSTRUCTION PLAYBOOK

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Pipeline and Portfolios

- Confidence in the marketplace
- Spend on innovation & training
- Invest in MMC
- Long term relationships
- Driving Efficiencies
- Delivering Value

Supply Chains

- Access specialist advice
- Stability
- SME investment
- Shared incentives
- Delivering Value

Effective Contracting

- Smarter Procurement
- Outcome based measures
- Appropriate risk transfer
- Social Value delivered
- Sustainable business practices
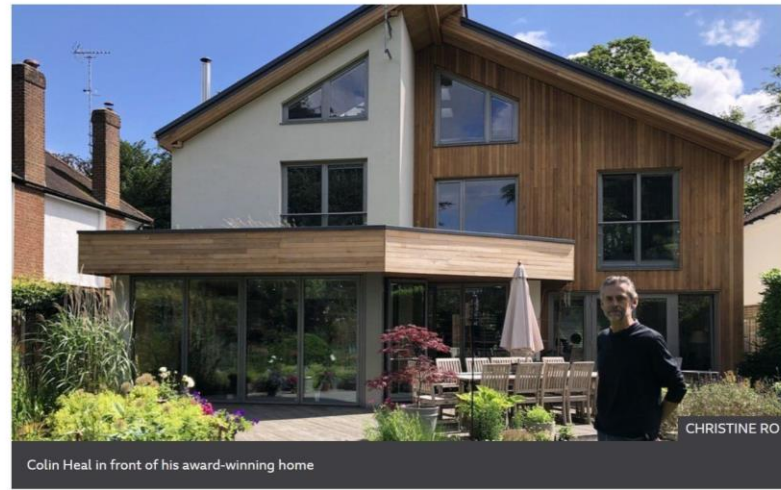- Conflict Avoidance

New Rules

2023 – Building Safety Bill
2025 – Future Homes Standard
**2030** – Net zero targets
2035 – EPC C or better

WILLMOTT DIXON
SINCE 1852

BBC NEWS

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What does a future-proofed home look like?

By Christine Ro
BBC News

8 hours ago

Climate change

CHRISTINE RO
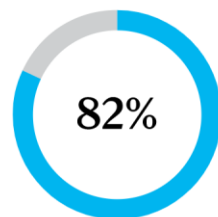
Colin Heal in front of his award-winning home

Colin Heal's house is prepared for an uncertain future.

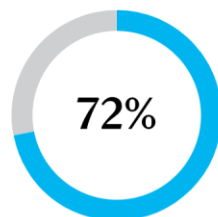The three-storey house in the Hertfordshire village of Wheathampstead has
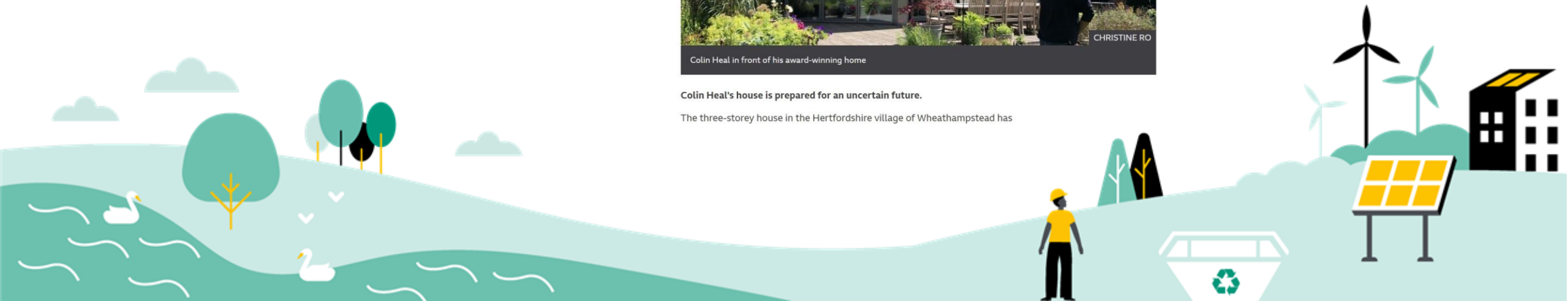
Better Business

+ Values Based

+ Appeal to customers and employees

+ Protecting your business by protecting your people.

+ Futureproof

+ Responsible growth

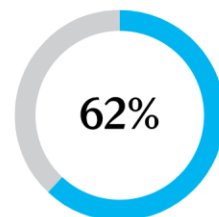Respondents reporting that …

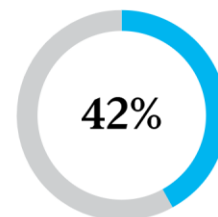| 82%	72%	62%	42%
… it is important to have a purpose	… purpose should receive more weight than profit	… their organizations have a purpose statement	… their organizations' purpose statements drive impact[1]

Note: segments displayed in gray reflect respondents who were neutral, disagreed, or strongly disagreed.

[1]Impact score, which is based on subset of respondents reporting presence of organizational purpose, derived on basis of responses to questions about achievements of purpose and positive change associated with purpose.

Source: McKinsey Organizational Purpose Survey of 1,214 managers and frontline employees at US companies, October 2019

"We are at a unique stage in our history. Never before have we had such an awareness of what we are doing to the planet, and never before have we had the power to do something about that."

David Attenborough
Natural Historian