



UK House Building and Housing Supply Conference:
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Brett Amphlett



Towards Net Zero by 2050: how the Supply Chain will help you get there

For more than 25 years, home-builders have moved to embrace sustainability and put it into practice in housing both new build and existing properties

..... now we have ambition backed by targets and international conference.

Today we look at what builders and the supply chain:

- can do for sustainability and getting carbon out of our lives;
- what comes next;
- who's going to do it;
- and the road to Net Zero Carbon Emissions by 2050.



Regulating for Low- or Zero-Carbon Homes

Central and local government has crucial role to set regulatory framework:

- National Planning Policy Framework (from 2012 onwards);
- Permitted Development Rights (from 1995 onwards).

- Code for Sustainable Homes (2006 to 2015);
- Merton Rule (2003 to 2014);
- Zero Carbon Homes Standard & Allowable Solutions (2008 to 2015);
- Building Regulations (from 1984 onwards);
 - heat & power; thermal & energy performance; fire & electrical safety;
 - water & waste; ventilation; sound; natural light, etc.
- Net Zero Carbon Emissions by 2050 target.

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Goodbye Gas, Hello Hydrogen

What we use and don't use in our homes are the net zero questions:

- burning gas to heat space & hot water;
- small-scale onsite generation of heat and electricity;
- thermal and energy performance of new & existing homes;
- over-heating, ventilation & cooling and indoor air quality;
- decarbonising heating and electrifying homes.

Future Homes Standard

Ministers want to end fossil-fuel heating in new homes by 2025.

The push is to stop gas boiler connections in 5 years' time in favour of heat networks (esp. urban homes) and heat pumps (esp. rural homes).

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Water

What we use in homes and where homes are built are the net zero questions:

- storms and floods: Boxing Day 2015, Storm Dennis 2020, Storm Christoph 2021;
- water shortages and hose-pipe bans in 'water stressed' areas.

- compulsory water meters to accompany smart meters;
- awareness of connection between water use and energy bills is low;
- industry-led labelling scheme for water-using products.

Tightening Building Regs

Ministers propose new homes to be built to consumption standard of 125 litres pppd

- higher standard 110 litres that local councils can set in 'water-stressed' areas.



Electricity

What we use in homes and how we generate power are the net zero questions:

- regulated and un-regulated energy consumption;
- small-scale onsite electricity generation (FITs);
- direct electric heating (esp. flats or if good insulation means heat need is low);
- heat pumps & networks are logical - but demand will put strain on the grid;
- switch from incandescent bulbs to LED and halogen lighting;
- battery storage of electricity in homes (time-shifting, back-up, or off-grid).

New Building Regs

Ministers propose certain new homes to be built with ev charge points fitted ready; and existing buildings undergoing change-of-use into homes.

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Sustainable and Net Zero Homes

What are we waiting for ?

- Future Homes Standard, Future Buildings Standard and Heat & Buildings Strategy;
- comprehensive plan to train & retrain people in skilled low-carbon jobs;
- clear vision for UN COP 26 Climate Change Conference in November.

Covid-19

- health - caring for vulnerable people - both old and not-so-old;
- working from home - being indoors for longer and different hours.

Voters

- strong signals the public want change and are ahead of government.



Thank You !

