GREEN WATCH

Working together for a better future



OCTOBER 2023

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Welcome to GREEN WATCH

Each month, Environment and Sustainability Manager, Corrina Jones MRICS, shares a round-up of stories and guidance on energy efficiency and sustainable practices.

We welcome the opportunity to work with you and your colleagues to explore the ways in which we could support you to achieve your sustainability targets. If you would like to arrange a meeting to discuss any of the initiatives featured in this update, please email Corrina at corrina.jones@esurv.co.uk.



In this month's issue:

- PROPERTY RISK
- NEW HOMES
- FUNDING SUSTAINABLE HOMES
- ENERGY
- RENEWABLE TECHNOLOGY
- DRIVE GREEN
- CLIMATE CHANGE
- GOVERNMENT STRATEGY
- GREEN BUSINESS

CLIMATE CHANGE CONTINUES TO CHALLENGE POLICY MAKERS

World breaches key 1.5C warming mark - On about a third of days in 2023, the average global temperature was at least 1.5C higher than pre-industrial levels. Staying below that marker long-term is widely considered crucial to avoid the most damaging impacts of climate change. 2023 is "on track" to be the hottest year on record.





World breaches key 1.5C warming mark for record number of days - BBC News

Risk tipping points - A United Nations University report released this month finds that drastic changes are approaching if risks to our fundamental socioecological systems are not addressed.

The Interconnected Disaster Risks Report 2023 warns of six risk tipping points ahead of us:

- **1. Accelerating extinctions** the current rate of species extinction is accelerating. 1 million plant and animal species are threatened with extinction, many within decades.
- **2. Groundwater depletion** 21 of the world's aquifers are being depleted faster than they can be replenished. 40% of aquifers will be unable to support food production by 2100.
- **3. Mountain glaciers melting** glaciers are melting at increasing speed. We are projected to lose 50% of our glaciers by 2100. After glaciers melt, freshwater availability will decline. 90,000 + glaciers are at risk as are the 1.9 billion people who rely on them.

- **4. Space debris** out of 34,260 objects tracked in orbit, only around 25 per cent are working satellites while the rest are junk. More than 100,000 new spacecraft could be launched into orbit by 2030 increasing the risk of collision and debris.
- **5. Unbearable heat** extreme heat is responsible for 500,000 excess deaths per year. If the scientific 'wet-bulb' temperature exceeds 35 degrees, 70% of the global population will be exposed to potentially fatal conditions by 2070.
- **6. Uninsurable future** Limiting global warming is essential, as a world with 3–4°C warming is deemed uninsurable. Climate change is dramatically shifting the landscape of risks, with the number of severe and frequent disasters forecast to double globally by 2040, causing insurance prices to rise. Homeowners have seen prices climb by as much as 57 per cent since 2015.

Un-insurability will severely limit lending, especially to lower income individuals.



Access the report here: Home - Interconnected Disaster Risks (interconnected risks.org)





Corrina says:

If you have been completing TCFD reporting, you will be aware of how all the above tipping points could eventually impact on your business in the long term. Extreme weather could not only impact on assets but on people and employee's ability to work. A lot of us work from home but happens if your employee's homes flood and they cannot access an office or homes become unbearably hot.

Then there is disruption to markets. Without the ability to access insurance, people are exposed to drastic financial losses, and may also find it difficult to buy or sell uninsurable homes, affecting the stability of housing markets. Getting a loan for a house or property often requires proof of insurance, thus un-insurability will severely limit lending, especially to lower-income individuals who may not be able to access insurance as costs increase.

Our business models are also very much based on information technology and increasingly Al, we are relying more on technology to help develop our products and services, to increase profitability, services and reduce carbon emissions. We can all also suffer from short termism when we complete our risk assessments. We only look a few years ahead, but what is becoming clear is that our reliance on technology could be a growing risk over the next 75 years. Increasing space junk could eventually reach a point where our orbit becomes unusable.

Water crisis threatens \$58trn in global economic value - A new WWF report has revealed that a looming water crisis endangers water resources and freshwater ecosystems valued at approximately \$58trn annually, with significant implications for food security, human well-being, and the environment.



Looming Water Crisis Threatens \$58tn in Water Resources and Freshwater Ecosystems, Reveals WWF Report (edie.net)

Up to 1.5 million UK properties at risk of flooding by 2080 due to melting Arctic ice -

Greenhouse gases have already warmed the atmosphere enough to lock in between 17.5mm-52.4mm of global sea level rise by 2100 and any further warming will only increase that, scientists told the Environmental Audit Committee's subcommittee on polar research. Sea level rise will erode British coasts and threaten homes, with the Thames barrier needing an upgrade to deal with higher tides. Governments later in the century will likely have to decide where they will build defences and where they will allow flooding to happen.



<u>Up to 1.5 million UK properties at risk of flooding due to melting Arctic ice (msn.com)</u>



A new report by Hometrack predicts that that more than 1.5 million homes could be at risk of flooding due to the effects of climate change by 2050.



Climate change will put 1.5 million homes at risk from flooding | Today's Conveyancer (todaysconveyancer.co.uk)

Majority of UK residents remain in the dark about risks posed by flooding - Despite almost half of UK residents believing their home is at risk from flooding, less than a third know what steps to take to make their homes flood resilient, according to new research by Aviva.



Majority of UK residents remain in the dark about risks posed by flooding | Property Reporter

Government announces support for flood-hit

areas - Communities impacted by flooding will benefit from thousands of pounds of Government funding to help them recover from the impact of Storm Babet which has battered Scotland during October.



<u>Government announces support for flood-hit areas - GOV.UK (www.gov.uk)</u>

World shift to clean energy is unstoppable -

The world is on an "unstoppable" shift towards renewable energy but the phase down of fossil fuels is not happening quickly enough, a new report says. The International Energy Agency, the global energy watchdog, predicted renewables would provide half of the world's electricity by 2030. But it warned that emissions were still too high to prevent temperatures rising above a key threshold of 1.5C and that investment in fossil fuels need to halve.



World shift to clean energy is unstoppable, IEA report says - BBC News

PARTIES POSITION FOR THE ENVIRONMENT

Labour conference 2023 – Labour delegates were asked to sign off on the party's wideranging current policy programme at the recent annual conference. The document will help inform Labour's manifesto for the next general election. There was a significant focus on sustainability with Labour pledging public capital investment into the green economy of £28bn a year. Proposals include:

- Align policy with obligations under the Paris agreements to aim for 1.5°C degree future.
- Set out a clear roadmap for decarbonisation so businesses and workers can plan ahead.
- Invest in both mitigating the climate crisis but also adapting to the effects of a warming world, for example by rapidly improving flood defences.
- Reform the energy markets to cut bills and deliver clean energy by 2030.
- Commit to not handing out new licences to explore new oil and gas fields.
- Integrate learning about climate change and sustainability throughout the curriculum in schools and on vocational courses and provide training and support for teachers.
- Improve green public transport.
- Support sustainable farming.
- Deliver a national Warm Homes Plan
 - Upgrade every home that needs it to EPC standard C within a decade by installing energy-saving measures such as loft insulation, going street by street in locally delivered programmes.
 - Give devolved governments and local authorities the power and the resources to bring every home in their area up to standard within a decade, with particular urgency for those in fuel poverty.



Revealed: Full final policy platform set to shape next Labour manifesto - LabourList | Latest UK Labour Party news, analysis and comment

Government denies request to disclose carbon impact of net-zero policy rollbacks

- The Department for Energy Security and Net-Zero (DESNZ) has denied a request for MPs to see "detailed" calculations of how recent changes to key policies on electric transport and building energy use will impact the UK's emissions trajectory.



Government shirks request from MPs to disclose carbon impact of net-zero policy rollbacks (edie.net)

Changes to policies on building energy efficiency and low-carbon heating recently made by Prime Minister "increase longer-term risks" to decarbonising the UK in line with its 2050 net-zero pledge according to the Climate Change Committee.



<u>CCC: Sunak's green policy rollbacks</u> <u>mean UK is less likely to reach net-</u> <u>zero - edie</u>

The government respond to the Climate Change Committee's latest report –The government has told the Climate Change Committee (CCC) that "we have to be realistic" about the UK's pathway to net zero emissions, in response to the independent advisory body's damning criticism of the lack of progress on decarbonisation and green policy ambition over the last year. The CCC has warned that without more detailed roadmaps and a step-up in policy ambition, the UK risked breaching its statutory carbon budgets for the mid-2030s and beyond.



'We have to be realistic': Government dismisses CCC's concerns over UK's net zero progress | BusinessGreen News

RICS HOST DEBATE ON POST GROWTH ECONOMY

Is it right to damage the economy to save to the environment? The RICS hosted the Harris Debate on the 10th of October 2023 and invited Smith Mordak, Chief Executive from UKGBC, to lead a talk on what a post-growth economy might look like. This discussion focused on the ethics of a green economy and whether it is right to damage the economy to save the environment.

The UKGBC estimates that construction, demolition and excavation of buildings accounts for 60% of material use and waste generation in the UK. A recording of the debate is available here:



<u>Debate on Building a Green Economy: Insights from RICS and Industry Experts - YouTube</u>



Corrina says:

Smith's contribution to this debate was very thought provoking. Economic growth plays a pivotal role for human development and is a considered a fundamental goal. It's how we measure success. Nevertheless, economic activities are causing an environmental emergency and we are becoming architects of our own demise. Ultimately, continual growth requires continued increasing consumption, but this drives climate change and bio-diversity loss.

The higher the GDP we aim for, the more we need to consume, the more resources we need to extract from the planet, the more we need to manufacture and then dispose of somewhere and so the cycle will continue until we run out of resources, or the planet becomes unhabitable due to the damage we have caused.

I think it is becoming clear that we need to find other ways to measure and maintain our health and prosperity. GDP is a measure of size not health. GDP can't grow forever, and this is where postgrowth comes in. We need to create an economy that allows us to thrive whether we are growing or not.

But how that is achieved when our business models are growth biased and focus on profitability and shareholder dividends is difficult to answer. Some businesses are starting to measure things other than profit and financial KPIs, including environmental and social indicators as a method to determine success, but we are a long way off from equitable business models. But having these debates will help. We need to stop focusing on short term financial gain and damaging the environment to grow the economy to a model which protects the environment to enable continual sustainable growth. There is no other way forward.



NEARER HOME - HEAT PUMPS OR HYDROGEN?

Infrastructure body backs massive heat pump roll-out - The UK government should rule out backing hydrogen as way to heat homes and instead focus on the speedy roll-out of heat pumps and networks, according to the country's top infrastructure advisor, the National Infrastructure Commission.



Infrastructure body backs massive heat pump roll-out but spurns hydrogen | News | Building

UK Government urged to rule out hydrogen heating for homes - The government has been urged by Citizens Advice to rule out hydrogen heating in rural areas, as well as technology mixes that require extensive upgrades to both electricity and gas networks as costs are prohibitive.



<u>Area-specific decisions crucial for future</u> <u>of low-carbon heating, says Citizens</u> <u>Advice (edie.net)</u>

Hydrogen boiler push to continue despite verdict of UK watchdog – The Government and gas-focused industry body resist the conclusion that heat pumps are the 'only viable' option for heating UK homes. Companies that are pushing hydrogen include those with a strong vested interest in retaining the UK's gas network. Some companies are now selling gas boilers as "hydrogen-ready", to make their products appear future-proof or low-carbon.



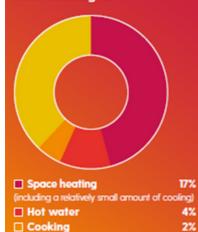
<u>Hydrogen boiler push to continue</u> <u>despite verdict of UK watchdog |</u> <u>Energy | The Guardian</u>



AT A GLANCE HEAT'S CONTRIBUTION TO UK CO2 EMISSIONS

Heating is the UK's biggest source of emissions, accounting for about 37% of total emissions when including industrial processes.

The breakdown of UK carbon dioxide emissions from heating is:



What is net-zero carbon heating?

Why is net-zero carbon heating important?

The different forms of net-zero carbon heating include:

- Heat pumps
- Waste heat
- Solar thermal
- Low-carbon district heating schemes
- Hydrogen

What are the business benefits of net-zero carbon heating?

- Environmental Simplifies emissions reporting and helps to meet net-zero targets.
- Reputational Increasingly people want to buy from, work with, and work for companies which are seen to be lowering their impact on the environment.
- Financial In the long-term, net-zero heating schemes will inevitably save an organisation money.



edie Explains: Net-Zero Heating - edie

ENERGY SAVINGS FOR HOME OWNERS

14%

How to save energy and lower bills this winter - There are 6 low-to-no cost actions that collectively could save a typical household as much as £100 off their energy bill.

The 6 measures are:

Industrial processes

- 1. Reducing boiler flow temperature to 60 degrees, saving up to £60 per year
- 2. Getting your boiler serviced to prevent costly and unexpected repairs.
- 3. Bleeding radiators to remove air pockets and improve their efficiency.
- 4. Turning down radiators in rooms not being used, saving up to £50 per year.
- 5. Washing clothes at 30 degrees, saving up to £20 per year
- 6. Installing an energy efficient showerhead, saving up to £40 per year





<u>Families to cut bills with energy saving tips</u> <u>and support for most vulnerable - GOV.UK</u> <u>(www.gov.uk)</u> **Cheaper bills** - Households near to new green projects would get money off energy bills under Labour. Shadow Chancellor Rachel Reeves will outline Labour's plans to redistribute profits made by new clean energy projects to people through their local council and in the form of direct payments.



<u>Households near to new green projects would get money off energy bills under Labour (inews.co.uk)</u>



EPCS – A LIGHTBULB MOMENT?

As much as 85% of UK office buildings are at high risk of being unlettable due to EPC regulations proposed to be implemented in 2027 according to new data from PwC UK. Based on geospatial analytics, the data shows this risk is spread right across the UK, with hotspots occurring in the South East, the North West and Central England for buildings rated 'C' or below.

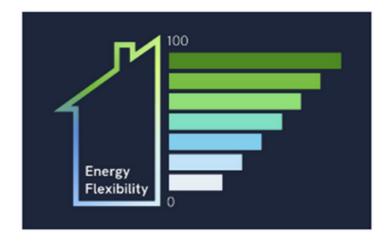


'Stark challenges facing UK landlords and developers' ahead of commercial EPC regulation update | Property Reporter

The Smart Building Rating - Debate has been lively in recent years around whether the UK's Energy Performance Certificate (EPC) scheme is fit for purpose. This week, Octopus Energy's Centre for Net-Zero and the Energy Systems Catapult issued proposals for a new Smart Building Rating (SBR) and recommendations for the design of a reformed EPC. An SBR would rank buildings on how much flexibility they could provide to the grid by shifting energy use

times or discharging energy from assets like electric vehicles (EVs) or battery storage systems.

Organisations supporting the new SBR proposals include Energy Saving Trust, the UK Green Building Council, and the Royal Institution of Chartered Surveyors (RICS). The Smart Building Rating, alongside a reformed EPC, can drive us towards an efficient and smart building stock.





<u>Smart-Building-Rating-report-Centre-for-Net-Zero-Oct-23.pdf (centrefornetzero.org)</u>

THE NATIONAL RETROFIT MISSION

Solar panels - The rate of new solar panel installations on UK homes has reached a seven-year high, with more solar panels installed during the first eight months of the year than the entirety of 2022 – according to analysis from Coventry Building Society.



Solar installation rate on UK homes rising sharply: Coventry BS - Mortgage Finance Gazette

Mission retrofit - A new report co-authored by Net-Zero Review author Chris Skidmore MP and green building expert Simon McWhirter makes the case for the Government to target a 30% reduction in energy demand in buildings by 2035, against a 2021 baseline. The Mission Retrofit report is the first of two reports that will focus specifically on decarbonising existing buildings, with a second report on new buildings to be published in November. To achieve net zero by 2050, the report recommends:

- 97% of homes should be retrofitted by 2040.
- No sale of gas boilers by 2030, and no gas boilers in operation by 2050
- 80% of all homes to be using heat pumps by 2040
- 5% reduction in domestic lighting use by 2025, 10% by 2050
- 30 000 MW of PV installed on domestic properties by 2050, 1 in every 4 homes.
- Gas cooking phased out by 2040 and all households using electric induction by 2045.



Buildings Mission Zero Network - Mission Zero Coalition



NEW BUILD

Modern methods of construction – what's gone wrong? The House of Lords Built Environment Committee has launched an inquiry into the future of modern methods of construction (MMC) as a viable method of housing delivery. To increase housing supply and meet its 300,000 homes a year target, the Government has stated that we need a diversified housing market which embraces innovation, including MMC. This inquiry seeks to understand the barriers to the increased delivery of MMC homes and to what extent the Government's approach to supporting MMC development is effectively overcoming and resolving these barriers



<u>Modern methods of construction – what's gone wrong? - Committees -</u> UK Parliament

Canary Wharf: Europe's largest Passivhaus scheme comes to London - Urbanest is delivering what will be the world's largest residential development in Europe to meet Passivhaus standards of energy efficiency. The purpose-built student accommodation (PBSA) and residential apartments in London's Canary Wharf are due for completion in 2026. Passivhaus design standards seek to eliminate the need for space heating and cooling, while also reducing the need for non-natural lighting.



<u>Canary Wharf: Europe's largest</u> <u>Passivhaus scheme comes to London -</u> edie

Labour will build new towns and Georgian style homes - Labour pledge to build Georgian-style townhouses in urban areas as well as a string of new towns, with this "new generation" of large towns and suburbs linked to areas of high growth. Labour state that developers will be issued with planning passports, to enable developers to build on brownfield land if they meet the new design standards.

Guidance will highlight a focus on "gentle urban development" which will emulate five-storey townhouses built during the 18th and 19th centuries. Sir Keir Starmer is promising "a big build" which will also allow low-quality green belt made up of areas such as scrubland and car parks to be released for development. The labour party has branded these areas "grey belt" and specify that half of homes built on these areas are to be sold at affordable prices.



<u>Labour will build new towns and</u>
<u>Georgian style homes, pledges Sir Keir</u>
<u>Starmer | Today's Conveyancer</u>
<u>(todaysconveyancer.co.uk)</u>



Building Materials and the Climate:
Constructing a New Future - A new report from the United Nations Environment
Programme highlights the urgent need to develop new models for cooperation on the decarbonisation of building materials if the world is to reach its goals for net zero emissions from the sector by the midcentury. It focuses on three urgent pathways that must be facilitated by supporting stakeholders across the whole lifecycle of the built environment:



- 1. Shift designs towards ethically, sustainably sourced, and properly managed bio-based building materials.
- 2. Improve decarbonisation of conventional materials that cannot be replaced, primarily relating to the processing of concrete, steel, and aluminium.
- 3. Avoid waste by adopting a circular approach and build less through repurposing existing buildings.



<u>UNEP report on building materials and the climate - Designing Buildings</u>

New timber frame system wins NHBC warranty and insurance approval - The New Model Building is based on 30 standard details said to offer the same fire resistance as conventionally constructed apartment buildings less than 18m high. An industry consortium has developed a NHBC warranty and insurance approved residential timber frame system in a bid to restore confidence in timber frame construction.



New timber frame system wins NHBC warranty and insurance approval | News | Building

GREEN BUSINESS

Mobilising capital for a Net Zero economy - UK Finance has published a paper on key policy asks of the banking and finance sector to support the transition to a Net Zero economy. The paper says more clarity is needed from the government on the path to a net zero economy to help financial markets muster the huge amounts of capital needed. Recommendations include:

- Setting a clear direction of travel with Net Zero road maps sector by sector
- Facilitating blended finance and de-risk private lending
- Providing green tax adjustments and incentives to decarbonise
- Implement urgent planning reforms.
- Commit to a long terms plan for skills building.



<u>Download the report here: Mobilising Capital for a Net Zero transition | Policy and Guidance | UK Finance</u>

Half of high-street banks lagging on climate policies - New analysis has warned that half of the UK's largest banking current account providers have weak policies in place to restrict funding into the fossil fuel sector and commodities linked to deforestation such as beef, soy, timber and palm oil. New analysis compared the fossil fuel investments and environmental policies of 13 leading UK financial institutions.



UK Banks and Fossil Fuel Financing:
Analysis Reveals Winners and Losers in
Climate Policies (edie.net)



Does your business have a Sustainability manager - The demand for green jobs such as sustainability management, engineering and consulting has increased by 667% in the last four years. The research also demonstrates a desire for eco-engaged employees within the workforce. 82% of employees express an expectation that their employers should address climate change.



Report: Green hiring soars six-fold in four years (edie.net)

Sustainability credentials impact on recruitment - Nearly 60% of Millennials say that they would avoid applying for jobs at companies that produce environmentally harmful products, and almost half of them are actively seeking opportunities with sustainable employers. 90% of employees believe their employers have a responsibility to contribute to environmental causes and would welcome sustainability-related restrictions.



Report: Green hiring soars six-fold in four years (edie.net)

Electric cars could have 745-mile range and charge in minutes after huge Toyota breakthrough - Range anxiety could be a thing of the past after a major manufacturer claimed that electric cars with a range of almost 750 miles could be seen within years.



Electric cars could have 745-mile range and charge in minutes after huge Toyota breakthrough (msn.com)

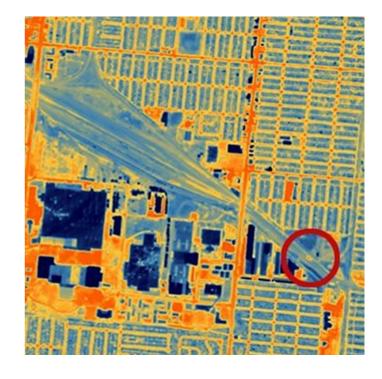
TECHNOLOGY

UK spacecraft maps heat variations across

Earth - A novel UK satellite has returned its first pictures of heat variations across the surface of the Earth. HotSat-1's heat maps, still imagery and short videos should have wide application, but especially in climate-related matters. They'll permit urban planners, for example, to see roof tops and walls. This will enable them to understand the temperature profiles of individual buildings, offices, and factories. It's information that can identify infrastructure and properties that are wasting energy and need better insulation.



<u>HotSat-1: Novel UK spacecraft maps heat</u> variations across Earth - BBC News



CLIMATE ACTION



Phase out fossil fuels by 2040, business giants urge world leaders - Unilever, Heineken and Volvo are among the 125+ businesses urging world leaders to commit to a full phase-out of unabated fossil fuels at the upcoming UN climate conference in Dubai.



Businesses Urge World Leaders to Phase Out Fossil Fuels and Transition to Clean Energy (edie.net)

Where are your pension funds being invested?

Pension schemes run by UK-based councils collectively hold £16bn of investments in the fossil fuel industry, with at least half of this investment being in new oil and gas exploration. Make My Money Matter previously estimated that UK-based pension schemes collectively have more than £88bn invested in fossil fuels.



<u>UK Pension Funds Risking Sustainability</u> with £16bn Invested in Fossil Fuels (edie.net) Mandatory climate labelling on food and drinks in the UK - The food and drink we consume is responsible for a third of total UK emissions. Scientists, including the UK Government's own Climate Change Committee (CCC), are clear that those emissions must urgently come down and that consumer behaviour change is a necessary part of that. Oatly has launched a campaign in the UK urging the food and drink industry to carbon label their products, in a bid to enhance sector emissions transparency and enable consumers to make informed decisions.



Oatly Urges UK Food and Drink Industry to Carbon Label Products (edie.net)

Hilton has added new dishes with a lower carbon footprint to its autumn menus in the UK, following trials of carbon labelling on food that began this spring.



<u>Hilton refreshes menu options</u> <u>following carbon labelling trials</u> (edie.net)

Are you recycling your IT equipment?

According to the survey, 70% of companies wish to adopt more sustainable disposal practices but lack the knowledge to manage electronic waste (e-waste) effectively. Virgin Media O2 has rolled out an enhanced edition of its 'O2 Recycle for Business' initiative and is aiming to collect and recycle more than 12 million unwanted phones and tablets



<u>Virgin Media O2 targets 12 million</u> <u>devices in phone and tablet recycling</u> <u>and reuse scheme (edie.net)</u>

ENVIRONMENTAL CALENDAR:

Activites to support in November & December

Date	Activity	Organiser	Benefits
1st to 30th November 2023	World Vegan Month	https://www.vegansociety.com /get-involved/world-vegan- month	Emissions reduction
24th November 2023	Buy Nothing Day	<u>http://www.buynothingday.co.</u> <u>uk/</u>	Reduce consumerism and emissions
25th November to 3rd December 2023	National Tree Week - plant a tree	https://treecouncil.org.uk/seas onal-campaigns/national-tree- week/	Emissions reduction and biodiversity gain
5th December	World Soil Day	<u>https://www.un.org/en/observ</u> ances/world-soil-day	Promoting healthy eco- systems and biodiversity

