SPATIALISE™
Insight from EMAPSITE

Empower Your Sustainability Strategy

Using geodata to assess, respond & report with confidence

AWARE

Contents

Your sustainability priorities

Sustainability has risen to top of every major organisation's agenda, and creating a climate change strategy is a priority. What, specifically, will the impact be? What should your response be? How can that response be part of a transition to a robust future business model?

Meanwhile, stakeholders are increasingly informing their decisions based on your Environmental, Social and Governance (ESG) credentials. You'll have obligations to fulfil or – at least – progress to assess and demonstrate.

Geolocation data is a powerful asset that can empower your response to climate change.

As Emapsite's Paul Gibson says, "All businesses will find the assessment of climate impact overwhelming or at least arduous. Where do the risks lie? What effect will climate change have on future decision-making? These are critical, time-consuming questions that underpin the more immediate issues posed by the amount of energy we use to heat offices, or our commitment to recycling."

"Take, for example, what land or property your business owns and, more importantly, exactly where it is and what potential hazards it may be subject to. Subsidence, flooding and air pollution are critical concerns and it's not just large companies with scores of sites or many acres of land to account for. It can come down to the pollution levels outside a business's front door or even the quality of the outdoor environment that the team is exposed to."

Bottom line

Geospatial intelligence and data can provide you with the insight you need to form a strategic response. There are many tools at your disposal that can help you understand your risks, identify opportunities, and provide you with proven, actionable information.

Your sustainability priorities (cont.)

The World Economic Forum (WEF) also recognises that meeting ESG goals is a matter of urgency. As stated in their 'Location Matters' report, "The collapse of nature is a global challenge, but its impacts and the remedies will vary from place to place and business to business. Developing solutions, understanding risks and transparently reporting results will require the use of spatial intelligence for nature and climate." (For more, see page 14.)

Organisations will need to adapt how they operate if they are to endure. And while the response will differ from business to business - build, design, acquire, diversify, etc. - the right response can only come from a deep understanding of the situation they're facing.

Geolocation data and mapping can help businesses to look at a much bigger picture and to accurately assess the risks they may be facing. As Paul says, "A Housing Association (HA) could, for example, pinpoint the exact properties in its portfolio that are subject to flooding, while an insurer could quote even more precisely, based on a raft of different datasets from subsidence to air pollution to flood risk."

"The HA could then decide to dispose of the affected assets, thereby minimising its risk profile, while the insurer would greatly reduce its exposure to costly future claims. These are just two examples, but this approach really relates to any company that owns almost any land or physical assets today – or is planning to move into new geographic areas tomorrow."

Location data can have a transformative effect on your sustainability strategy, and the datasets that are available are extensive and varied: soil surveys (subsidence); national tree maps; cabling and pipelines; waterways; green spaces; land boundaries and more are all documented and can be easily scrutinised.

Sustainability focus

Over the following pages, we identify five key areas to consider - and suggest a range of tools that will help you define your sustainablity strategy.
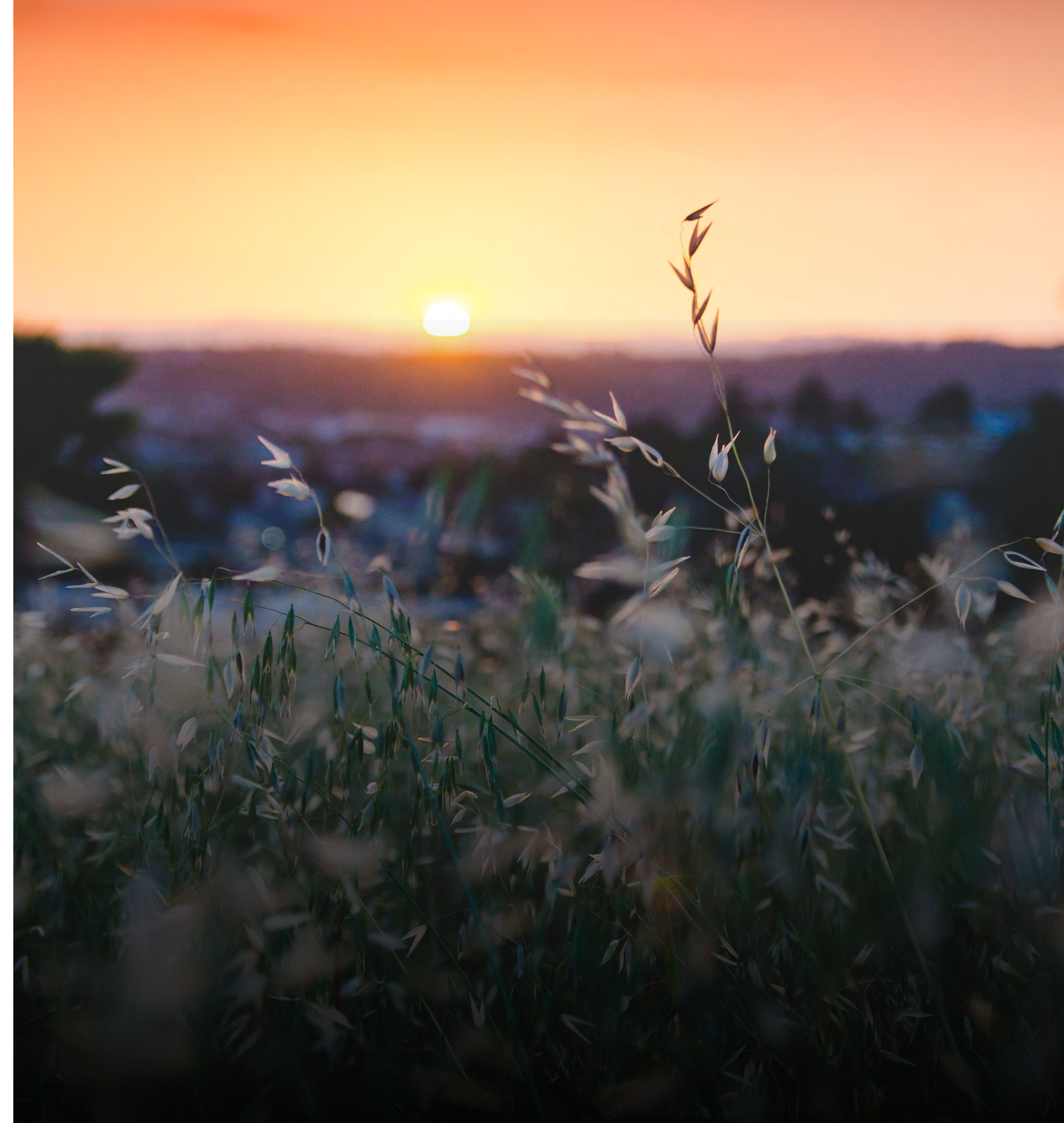
01 Sustainability focus: Flood

One in five buildings (both commercial and domestic) are at risk of flooding in the UK. Annual damages are currently between £500 million and £1 billion each year – and rising.[1]

32.5% of retail and 20.7% of manufacturing, wholesale and logistics commercial properties in Britain are most at risk of flooding, although every sector is susceptible.[2] Looking to the future, data from UK Climate Projections (UKCP) predicts that the country will experience more heavy rain, more frequently due to climate change.

This will, in turn, increase the number of flood events and the risk of loss and damage. Flood data is critical for managing and predicting this.

Strategy

Emapsite provide an extensive range of flood mapping datasets and API services to enable businesses to anticipate and respond appropriately to the risk from seasonal flood incidents. From present-day to future predictions, businesses can gain insight on the likelihood and severity of a flood hazard for each property in a certain area.

02 Sustainability focus: Subsidence

With climate change continuing to impact the environment, subsidence is a major risk factor. Dry winters and hot summers cause the ground to shrink and expand and will increase the chance of subsidence; this weather pattern is expected to continue.

Up to 70% of subsidence incidents are related to trees, drought or property foundations being disrupted by roots.[3] If the property assets that your business owns are built on subsiding ground, the cost can be considerable.

Subsidence can affect sectors such as insurers, local authorities, facilities managers, energy and utility companies and property developers (or indeed, owners).

Strategy

Emapsite provides address-level data products and services that enable businesses to understand much more about the risk of subsidence. For example, our Subsidence Risk dataset uses latest geological, soils and tree data to provide detailed insights into the subsidence risk at any specific property.

Sources:
3. Emapsite.com

03 Sustainability focus: Pollution

Air pollution is a significant factor for everyone, including companies in all sectors but it's particularly pressing for insurers, mortgage lenders, the land and property sector and organisations working in not only highways but also local government.

Exposure to air pollution causes millions of deaths globally (attributed to 11.65% of all fatalities)[4] and reduces life expectancy.

As well as health concerns, high levels of pollution can affect property saleability. Buyers and lenders are increasingly looking to environmental considerations when making decisions.

It's also a major factor for those who are interested in environmental risk and policy-making specific to health improvement.

Strategy

Emapsite's dataset AddressPollution determines the air quality right down to each individual property across the UK. With this tangible information about the risk and severity of air pollution in any given area, environmental causes will hugely benefit.

Sources:
4. Veolia.co.uk

04 Sustainability focus: Social impact

Since the pandemic, the way we live has been under review. In early 2023, the government announced a major environmental improvement plan for England; every household will 'be within a 15-minute walk of a green space or water'.

Meanwhile, employees now expect increasingly favourable workplace environments from their employers. As a company owner you should be assessing, for example, where your employees are expected to work, how they get there, whether they can use public transport or if they are required to drive. This all relates to your overall emissions data as well as employee satisfaction score.

Access to green space is also important in the workplace and the proximity to natural environments where employees can take a break will be a critical consideration. Gaining a sound overview of this will help you to move forward with your sustainability goals.

Strategy

Our LandPack GreenAccess product combines UPRNs, police crime data, tree coverage and more, and can help you easily pinpoint the green and blue areas that are available for public use and enjoyment within the UK's urban environment.

Sustainability focus: Crime rates

Loss of stock, criminal damage or threats to staff all have a negative impact on a business and its reputation. Moreover, it can significantly influence the wider risk profile of a business.

The wholesale and retail sector experience the highest levels of crime (10.1 million incidents in 2018).[5] If your business is deciding on security systems, insurance plans, or even where to purchase commercial property – knowing the crime rate for this location is essential.

Strategy

A postcode level dataset which provides information on insurance claims for criminal damage, burglary and arson can be imperative for a company's risk assessment and insurance. CrimeScore™ takes into account the number of crimes recorded per 10,000 households over the last five years. It also includes a prediction for future crime rates.

Sources:
5. AbbeySecurity.co.uk

Your priorities

We curate and create geospatial products that can inform your response to climate change in a number of key areas. Here's a small selection.

Focus	Insight
Location	We can provide incredibly accurate address and location data right down to individual properties. This unrivalled insight underpins all our climate response data.
Water and flooding	We provide products from OS, Ambiental/Royal Haskoning DHV, JBA and BGS which contain property-level flood risk information for Great Britain, Northern Ireland, and the Channel Islands. These estimate the current view of the likelihood and severity of a flood hazard affecting each individual property.
Subsidence	Access a detailed perspective into residential subsidence risk on an individual property basis using the latest geology, soils and tree data.
Wellbeing	Pinpoint green and blue spaces, cross reference with other datasets including crime rates, and gain a clear view of the natural spaces in your locations.
Crime	Crime Score uses the last five years of crime data and demographic data to generate an overall CrimeScore™ for each postcode in Great Britain and Northern Ireland.
Air pollution	Pinpoint the locations – at street level detail – that have high levels of emissions and low air quality.

In conversation...

We spoke to Emapsite's Managing Director Rich Pawlyn, about ESG and sustainability

Tell us a little about how you're enabling companies to accelerate change...

"We are at a critical time and organisations are realising that, if they are to thrive in the long term, they need to take climate change seriously today. We're essentially providing them with the tools and insight that enable them to make the necessary decisions. And we're doing that through a growing number of really powerful, highly specific datasets. We've just launched, for example, LandPack GreenAccess and flood query APIs, which can revolutionise strategic decision-making."

How is the market evolving?

"There's a realisation that, while the effects of climate change may be negative, the response can be positive. So when we help an organisation to predict change and assess impact, we can also help them to identify opportunity. We're facilitating a much longer-term view rather than helping them simply audit where they are now."

In conversation (cont.)...

That's a positive contribution...
"We want to see how we can best use environmental data and geographic data to help people. Whether it's helping water companies to manage water loss or just generally supporting customers to do things more safely.

"For example, our geospatial analysis product Addressible can help businesses to efficiently dispatch maintenance vehicles. And we also have a large footprint in the Housing Association marketplace specifically in terms of property maintenance and customer satisfaction. This enables them to minimise their carbon footprint/costs but still provide a service to customers without sending a van to every single location.

"Those are the sorts of things we like to help people with, and the plea is if you have a dream about using data to assist with your green credentials then we are equipped to help you achieve it. Let us know! We want to help customers to be good citizens."

Tell us about Emapsite's commitment to sustainability...
"Underpinning all of our products and our positioning is our desire to make authentic, lasting change to how we operate as a business. It's got to be real, harmonious and consistent across everything we do.

"So, like our clients and like many businesses across the country, we're on our journey. We achieved carbon neutrality six months after making the decision to do so, and that's just the beginning.

"We have members of the team who are dedicated to assessing, monitoring – and crucially acting on – our impact across environmental, social and governance issues. Obviously, we invest in fair and equal opportunities for all employees. And we're passionate about making all those critical smaller changes that add up to make a big difference.

"It is our hope that, eventually, terms like ESG and sustainability will almost become redundant because that mentality will become the norm – and one day fairly soon, that's how all modern businesses will be."

A deeper dive

For businesses looking to empower their ESG and sustainability objectives through spatial intelligence, the WEF's research presents a number of actionable pathways for businesses to follow. Below are the key takeaways from the full report (click here).

Commitment: Define nature-positive commitments and integrate with net-zero targets.
- Use spatial intelligence to identify, understand and track location-specific progress.
- Develop a nature and climate baseline to measure progress against targets and highlight risks and opportunities.
- Set location-specific, science-based targets and track them over time using spatial intelligence.
- Integrate spatial intelligence into financial decision-making processes to improve funding for integrated nature and climate action.

Capability: Invest in spatial intelligence expertise and data to continuously improve insights.
- Work with others to set up high-quality, credible and transparent systems that respect social and cultural norms.
- Review existing spatial data and expertise to ensure it's widely used across business units internally.
- Disclose collected data and methods.
- Identify and close data gaps, collaborating with others to collect and host data in an interoperable, accessible, credible and equitable way.

Collaboration: Work with the public and private sectors and local communities to take action now.
- Meaningful, respectful collaboration is key, ensuring effective safeguards are in place.
- Take initial no-regret actions by using spatial intelligence to locate and implement nature-based solutions in areas where they best contribute to nature and climate targets.
- Participate in pilot projects or environmental initiatives.

"We believe that spatial intelligence can play a critical role in advancing integrated action, and we call for collaboration across the public and private sectors to create the enabling conditions to accelerate uptake."

In collaboration with the SPACES Coalition

WORLD ECONOMIC FORUM

Location Matters: Using spatial intelligence for business action on nature and climate

WHITE PAPER
SEPTEMBER 2022

If you're looking to empower your sustainability strategy, we help our customers to do just that. Interested?

Contact us

Telephone: +44 (0) 118 973 6883

CustomerSupport@emapsite.com

sales@emapsite.com

Sign up for more Spatial Intelligence guides here.