



Mineral Products Association

AMPS 2022

10th Annual Mineral Planning Survey Report

EXECUTIVE SUMMARY

The 10th Annual Mineral Planning Survey, AMPS 2022, reports on mineral planning data for 2021.

This report is set against the backdrop of increasing aggregate sales, with a total tonnage in 2021 back to 2018 levels. It identifies that the long-term reserve base upon which the aggregates sector is so dependant remains under pressure, illustrated by the difference between annual sales and new reserves being permitted or 'replenished' (see fig 1&2). This declining reserve base was confirmed in the [Aggregate Minerals Survey for England and Wales, AM2019](#).

Analysis of reserve replenishment rates and annual sales illustrates the declining reserve trends that are emerging across Great Britain, particularly in regions that traditionally have been responsible for large exports to other regions. The 10-year average sales and reserves for each region (see figs 3 & 4) for both sand & gravel and crushed rock illustrate the challenge that some of the regions, including those responsible for strategic national supply of rock, are facing in maintaining their reserve base. Given the additional and growing demand for aggregates to support the delivery of major infrastructure projects, the pressure on reserve availability and supply can be expected to increase. This needs to be closely monitored, given the time required for any corrective action to take effect.

In 2021, the average time taken to determine a mineral planning application (pre-application through to a permission being issued) was 30 months and 9 days for sand and gravel and 20 months and 15 days for crushed rock. However, the overall time taken for application preparation through to commencing development will be significantly longer. Typically, it can take between 5 to 15 years to convert a new site from exploration into an active, operational concern. The continued absence of a strategic approach to forecasting future demand requirements is increasingly resulting in tensions between mineral planning authorities, and hindering the Aggregate Working Parties in England to effectively monitor whether adequate provision is being made. In turn, this is undermining the the ability of the Managed Aggregate Supply System (MASS) to function effectively. This in turn creates unnecessary uncertainty for industry in committing to investment and long-term developments.

The future supply of essential minerals cannot be assumed. It requires effective planning, management and monitoring to ensure sustainable and cost-effective supply. There is a continued desire from both local authorities and from industry for the National and Sub-

national Guidelines for aggregates provision in England to be updated to provide a much-needed forecast of need and to support the delivery of MASS. To this end, it is encouraging that the Department for Levelling Up, Housing and Communities (DLUHC) have organised two National Aggregates Coordination Meetings, after a hiatus, from which a Task & Finish Group has formed to consider the refreshing of the Guidelines and how levels of provision required might be apportioned to the local level.

The latest MPA report "[Aggregates demand and supply in Great Britain: Scenarios for 2035](#)" indicates that between 3.8 and 4.1 billion tonnes of aggregates will be required between 2022 and 2035 to support construction needs. This compares to a total of 3.2 billion tonnes of aggregates supplied in the previous 14-year period, between 2008 and 2021. Securing the sustainable and cost-effective supply of these essential minerals will require active management, planning and investment, supported by regular survey and up to date data to monitor performance.

If the long-term trend of diminishing reserves continues, it is inevitable that the tensions involved in maintaining future supply will increase, with MPA member companies reporting that quarries are operating at their maximum capacity with product going straight to market over longer distances rather than building up as stock.

THE KEY FINDINGS OF THE REPORT

■ Sales

Land won aggregates sales by MPA members increased by 15.4% in 2021 from a total of 122Mt in 2020 to 141Mt.

■ Replenishment of sand and gravel reserves

As of the end of 2021, the rolling 10-year average for replenishment of sand & gravel reserves was 63%, indicating that sales continue to outstrip the tonnage of new reserves permitted.

■ Replenishment of crushed rock reserves

The 10-year average for the replenishment of crushed rock reserves was 52% as of the end of 2021.

■ Number of planning applications

There were 49 new minerals applications submitted in 2021 (up from a revised 44 applications in 2020). This is in line with the long term average of 50 applications per annum. Out of this total, 11 were for new land-won sand & gravel, 2 for crushed rock, and 2 for soft sand.

■ Number of planning decisions

7 applications (17 in 2020) were determined for sand & gravel extraction in 2021, with 3 being approved (14 in 2020), 2 refused (1 in 2020) and a further 2 withdrawn (2 in 2020). For crushed rock in 2021, 5 applications were approved (2 in 2020), with no refusals or withdrawals.

■ Time taken to obtain permission

In 2021 it took on average 30 months and 9 days and 20 months and 15 days respectively to secure permission (from the commencement of pre-application discussions to the permission being issued) for new sand & gravel and crushed rock reserves.

■ Plan allocations

Over the past 10 years, 38% of all new permissions issued were for sites that had not been allocated in a mineral plan.



Figure 1. Land-won sand & gravel: Difference between new permitted reserves and sales (GB)

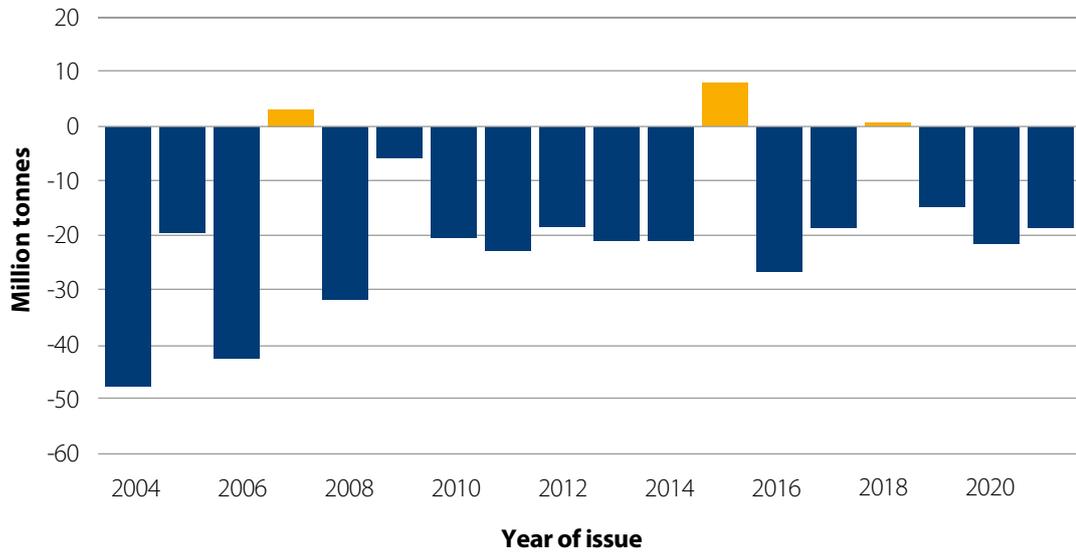


Figure 2. Crushed rock: Difference between new permitted reserves and sales (GB)

Note: 2007, 2011 and 2012 dominated by major individual consents

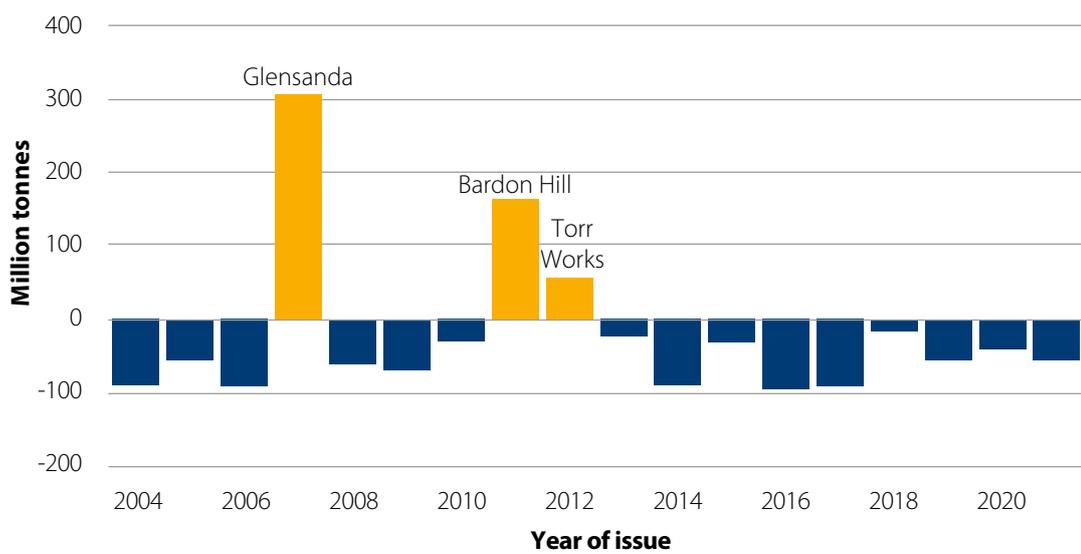
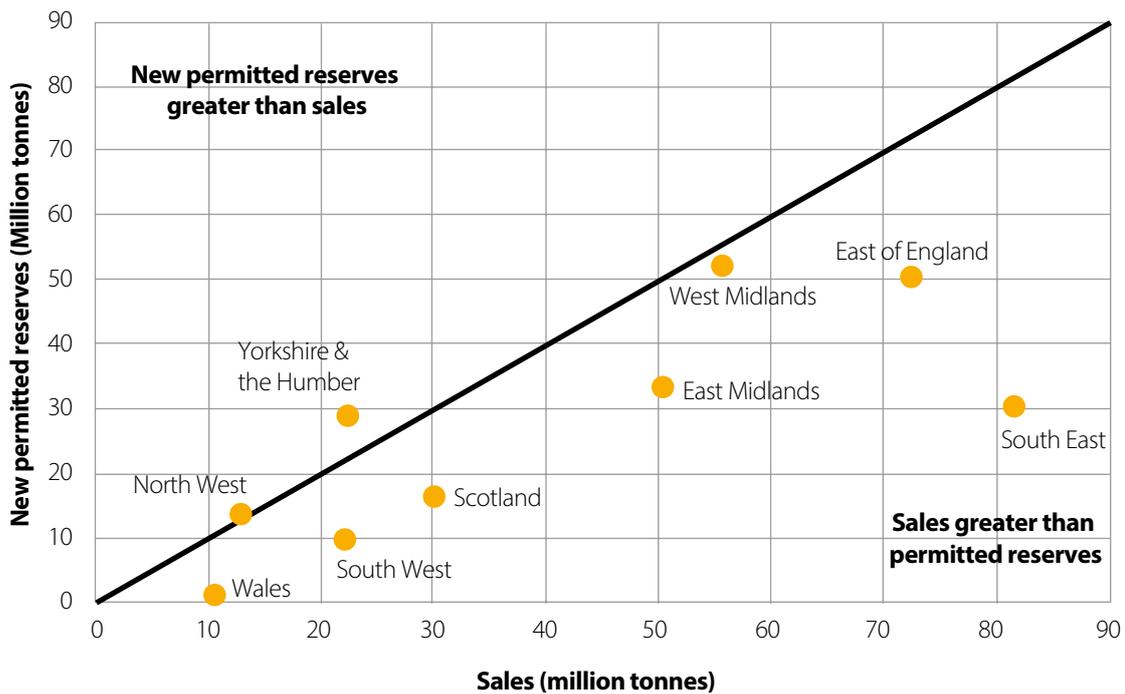
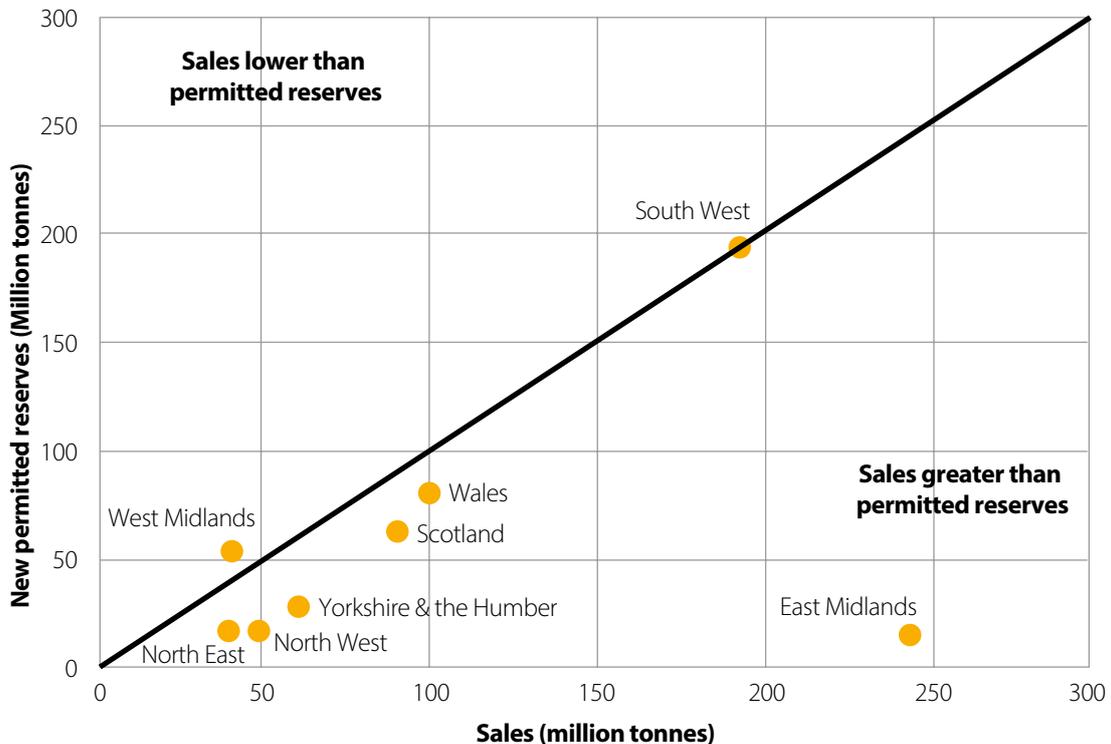


Figure 3: Regional sales volumes and new permitted reserves of sand & gravel 2012-21



- (1) New permitted reserves include land-won aggregates only. The sales data include marine sand & gravel. This difference primarily affects the comparability in the South East, and to a lesser extent, the South West.
- (2) Whilst the sample of producers reporting the new permitted reserves cover all MPA members, the sample of sales is smaller, marginally under-representing total sales from all MPA producers.
- (3) Tonnages for the North East have been removed for confidentiality.
- (4) London has been removed from the comparison due to marine sand & gravel landings dominating sales.

Figure 4: Regional sales volumes and new permitted reserves of crushed rock, 2012-21



- (1) Whilst the sample of producers reporting the new permitted reserves cover all MPA members, the sample of sales is smaller, marginally under-representing total sales from all MPA producers.
- (2) Tonnages for London, the South East and the East of England have been removed for confidentiality.

SURVEY SCOPE AND BACKGROUND

AMPS 2022 is the latest in a series of annual reports produced by the Mineral Products Association (MPA), informed by a survey of the planning activities of the membership across Great Britain during 2021.

The objective of AMPS is to provide an annual overview of the performance of the mineral planning processes taking place across Great Britain. These support the delivery of the permitted reserves which ultimately sustain the minerals industry and those activities that rely on it, primarily construction and manufacturing. Other reports produced by the MPA evidence the sustainable development performance of the industry¹, the contribution it makes to the UK economy², the contribution of recycled and secondary materials to aggregates supply³, and other industry achievements in relation to quarry restoration and biodiversity⁴.

Some of the data reported relate only to construction aggregates, which represent by far the largest element of mineral extraction and supply in Great Britain.

The planning application statistics relate to all planning applications submitted by MPA members for aggregates and other minerals including high PSV roadstone, and industrial materials such as industrial limestone, industrial clay, dimension stone and silica sand. It includes mineral-bearing applications (for new sites and extensions of area or depth), ROMP applications, Section 73/42 and time extensions to existing sites.

Each figure sets out the scope of the information that is presented and the

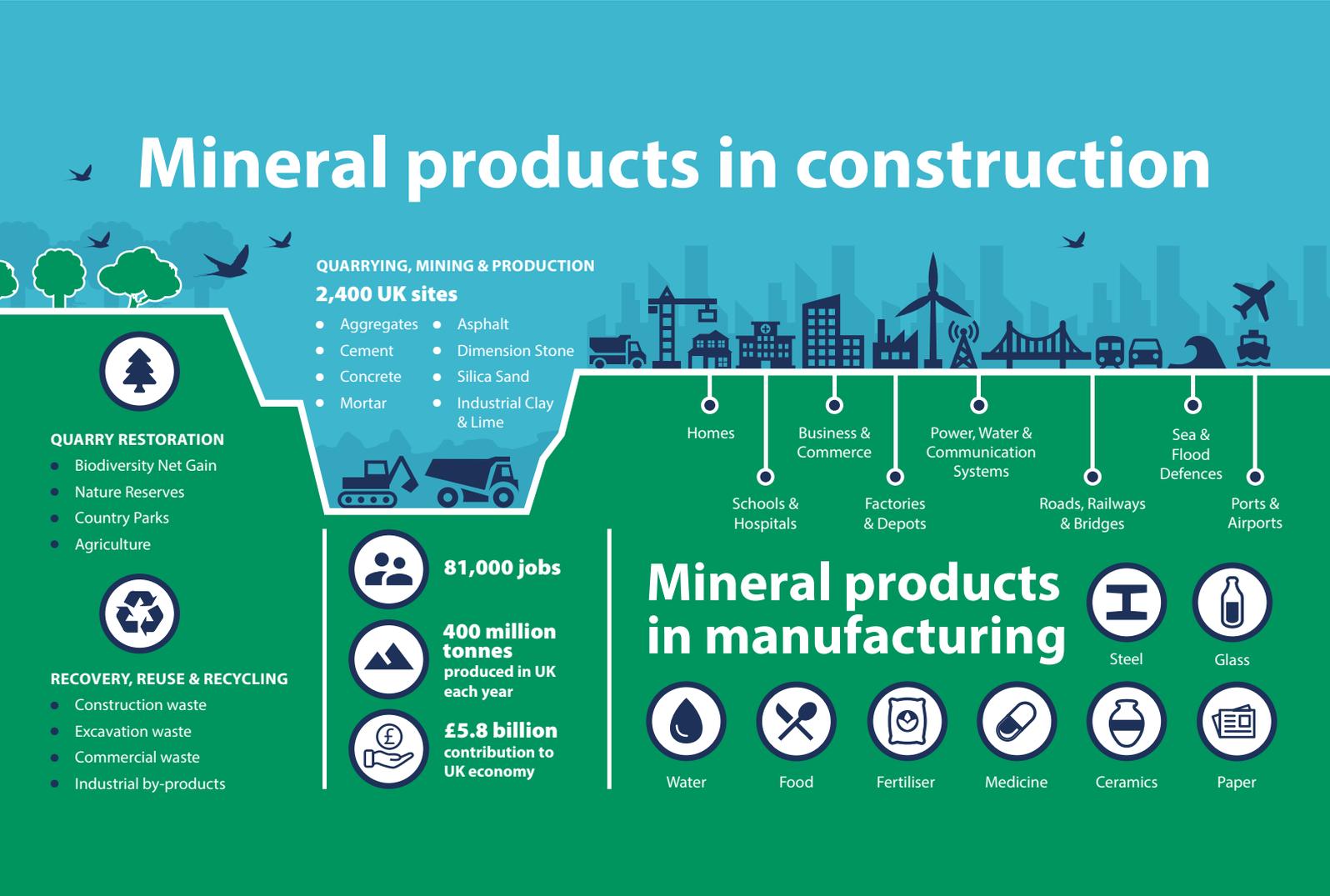
variations between the topics reflect the historical data that can be drawn upon. This is principally because the AMPS report is continually evolving in response to feedback received and what information is available. Consequently, some data has only been collected relatively recently, whilst other data goes back to the 1990s. The overall objective is to produce a document which is useful to all those involved in planning for minerals, primarily aggregates.

¹ <https://mineralproducts.org/Sustainability/Reporting.aspx>

² <https://mineralproducts.org/Publications/Communicating-Industry-Value.aspx>

³ <https://mineralproducts.org/Publications/Resource-Use.aspx>

⁴ <https://mineralproducts.org/Publications/Natural-Environment.aspx>



MINERAL PLANNING OVERVIEW

Last year's AMPS report highlighted that the Managed Aggregate Supply System (MASS) in England was struggling to perform in the absence of updated National and Sub-national Guidelines for aggregates provision that provide a clear and strategic statement of future demand and needs for construction aggregates.

This continues to be the case, albeit DHLUC have organised two National Aggregate Co-ordinating Group (NACG) meetings in the last 6 months, after a multi-year hiatus. A Task and Finish Group has been formed to consider the refreshing of National and Sub-National Guidelines on future provision and how they might be disseminated to local mineral planning authorities.

From an industry perspective, accurate and up to date data is essential for planning and ensuring a steady and adequate supply of materials, and thus the effectiveness of the MASS. Alongside additional resourcing within DHLUC, and a commitment to support the Aggregates Working Parties (AWPs) until 2025, the [Aggregate Minerals Survey \(AM19\)](#) was undertaken in 2020 by the British Geological Survey and was published during 2021. The Aggregate Minerals Survey remain the only Government-funded national data collection exercise for aggregate minerals, and takes place every four or five years. AM19, which reports 2019 data, confirms the continued trend of declining reserves as identified in previous AMPS reports.

The most recent Guidelines for aggregates provision in England, which were published in 2005 and subsequently updated in 2009,

covered the period 2005 to 2020. These set out figures for provision for land-won mineral production over this period, alongside assumptions for the contributions from other sources of supply, including marine sand and gravel, secondary and recycled sources, and imports. Without updated Guidelines, there is an absence of any strategic assessment of future needs and benchmarks against which local planning including Local Aggregates Assessments (LAAs) can be measured. This creates a risk of under-provision arising from local subjectivity and interpretation around what constitutes future 'need'.

The reliance on LAAs to determine local needs remains flawed, given that most do not include projections of demand (as required by national planning guidance), but instead rely on past trends in sales. This results in a backwards-looking approach and creates uncertainty for industry committing to significant long-term investment and developments. There remains an urgent need to produce revised National and Sub-national Guidelines for aggregates provision to provide a strategic, forward looking basis for plan development. This would effectively provide a clear national 'statement of need for aggregates.

A key consideration for effective mineral planning remains the intra- and inter-regional supply of material – given the location of resources can often be distant from the main centres of demand and consumption. Although LAAs are meant to try to address these issues, the absence of data and resource constraints within individual mineral planning authorities mean that in practice this cannot be done on a consistent or comparable basis. As a default, it is generally assumed by local planning authorities that historic supply patterns will continue.

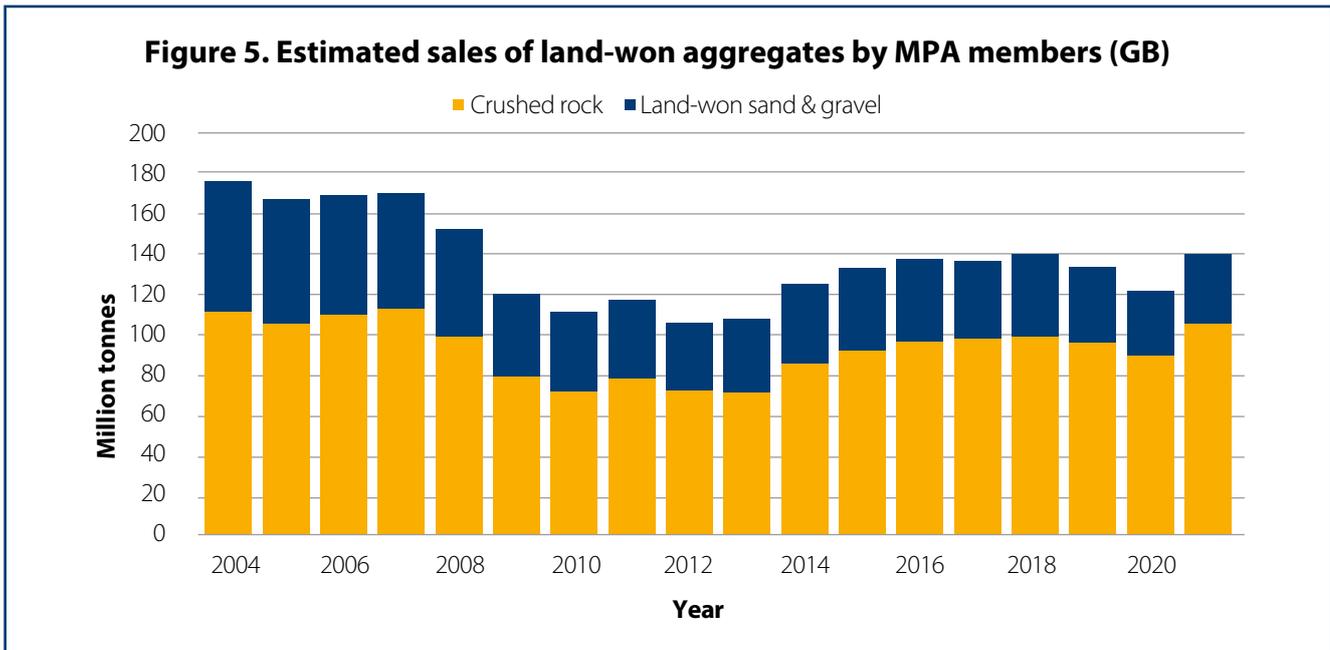
The 2022 AMPS report has examined reserves versus sales for both sand & gravel and crushed rock, on a regional basis, using the 10-year average (see figs 3 & 4). This clearly shows that reserves in the traditional supply areas, such as the East & West Midlands, North West, South West and South East, continue to be under increasing pressure as the quantity of new reserves permitted remains below sales, resulting in a gradual depletion of the reserve base.

A sound and consistent evidence-based approach to minerals is essential to realising Government ambitions around housing delivery, as well as supporting the delivery of wider infrastructure plans. Given the characteristics of both the minerals that are produced and the needs of the construction sector that is being supplied, the basic premise of 'plan, monitor and manage' to ensure a steady and adequate supply of minerals requires long term coordination.

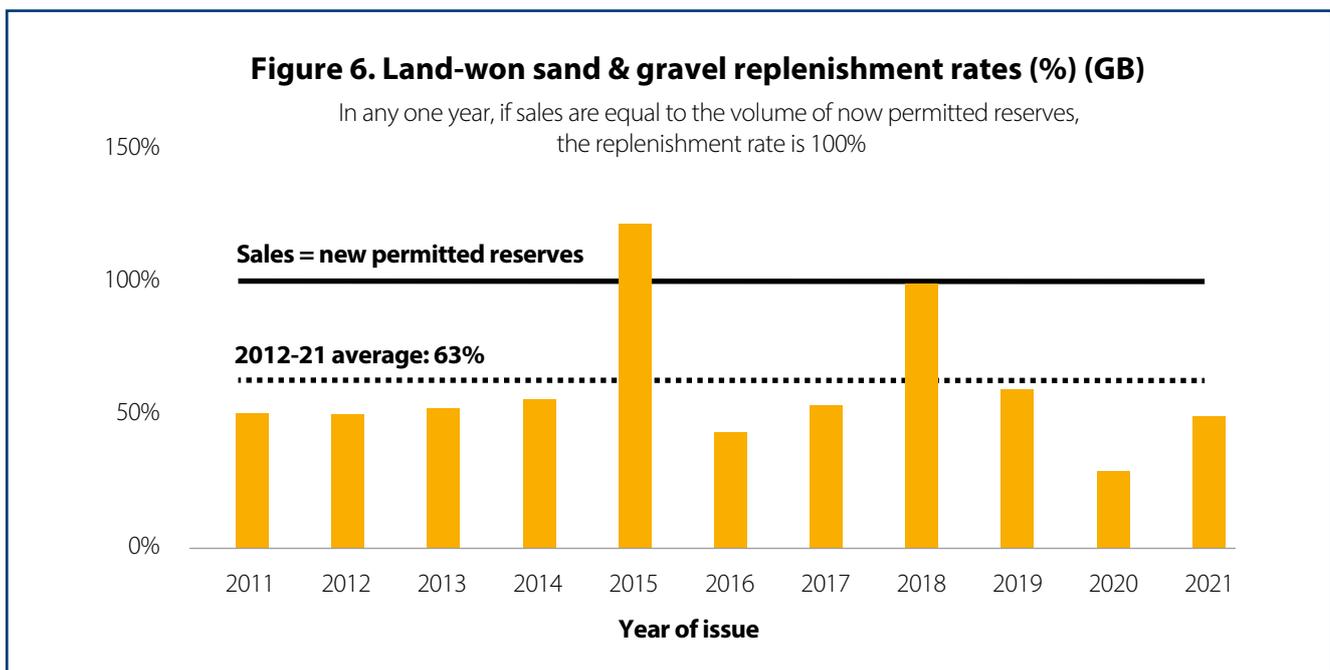


1. SALES

Figure 5 has been derived from land-won sales data provided by MPA members. MPA producer members represent around 90% of the total GB primary aggregates market, including both land-won and marine aggregates. The chart shows that land-won primary aggregate sales increased by 15.4% in 2021 compared to 2020 (to 141 million tonnes), with the total tonnage back to 2018 levels.

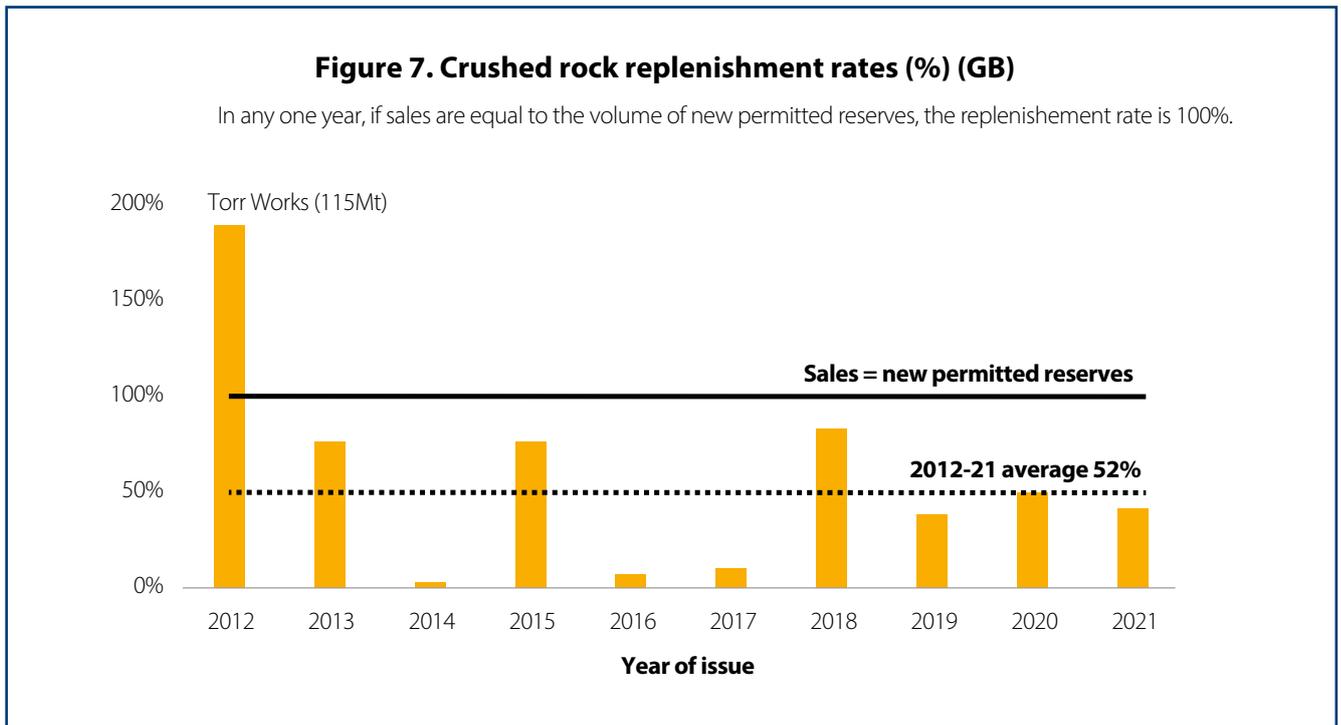


During 2021, only 50% of land-won sand & gravel annual sales were replaced by newly permitted reserves. Long-term replenishment rates for land-won sand & gravel also continue to be of concern, with the 10-year average remaining at only 63% (see figure 6). This means that, in the past 10 years, for every 100 tonnes of land-won sand & gravel produced, only 63 tonnes on average have been replaced with new permitted reserves.



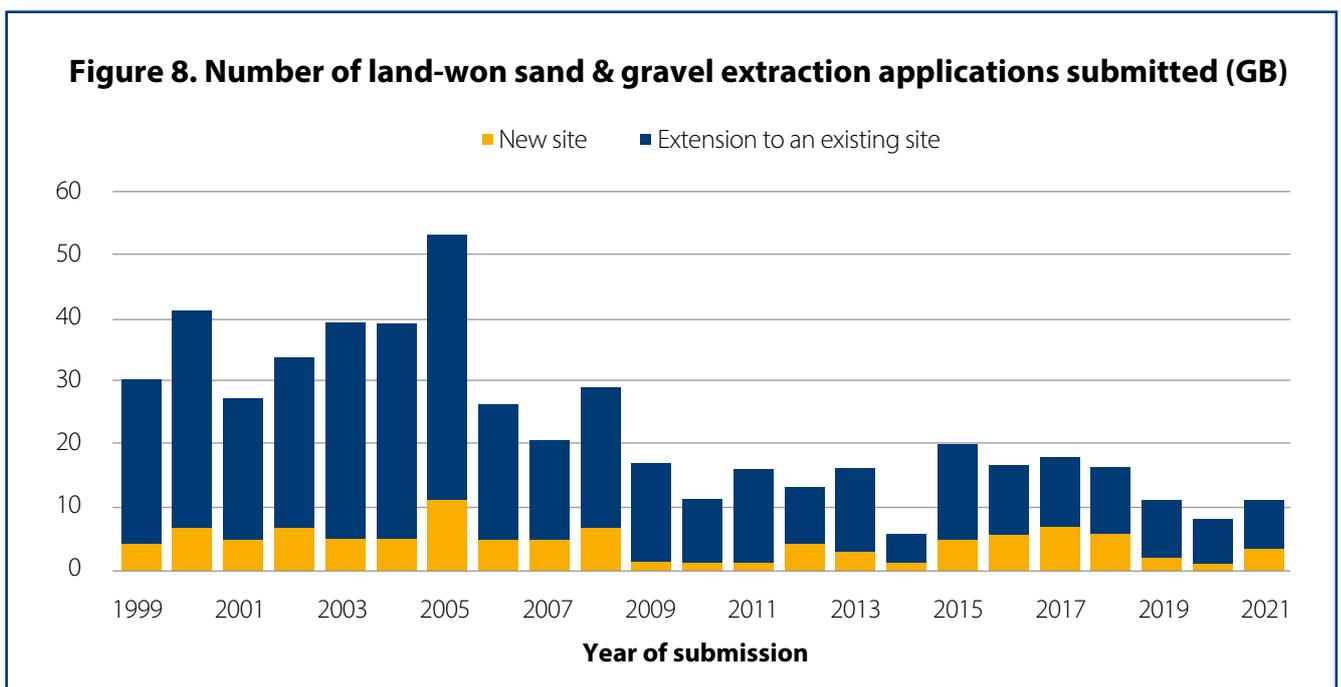
In 2021, new crushed rock reserves of 46.3 million tonnes were permitted, representing 45% of annual sales.

Survey results show that for the ninth year running, annual sales have continued to exceed the replenishment rates for crushed rock reserves. Consequently, the 10-year average replenishment rate for crushed rock currently stands at 52% (see figure 7). This rate is likely to decrease further next year when the Torr consent drops out of the 10 year average.

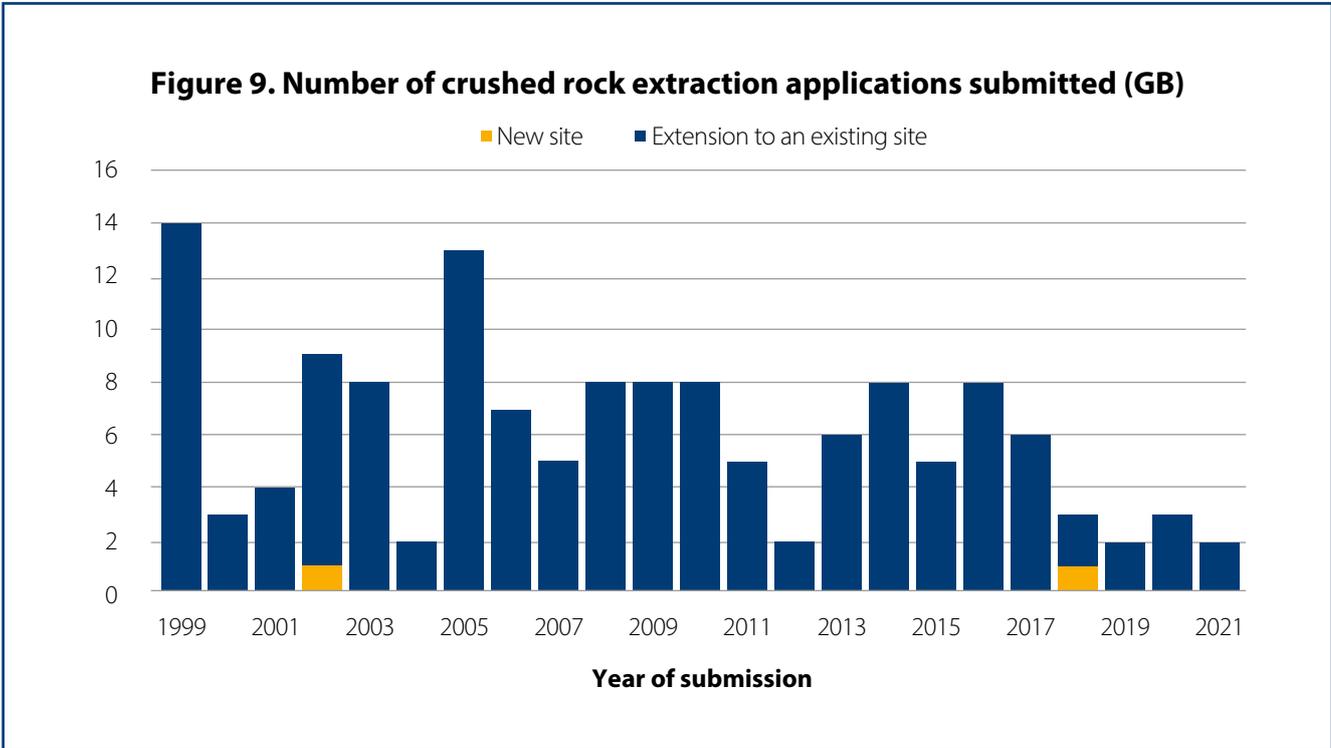


2. NUMBER OF APPLICATIONS

In 2021, 4 sand & gravel applications were made for greenfield sites, and 7 applications were made to physically extend existing quarries.



In 2021 there were 2 crushed rock extension applications submitted. There were no applications for new sites.



3. NUMBER OF DETERMINATIONS

In 2021, 3 sand & gravel applications were approved and 2 refused with 2 withdrawals. In respect of crushed rock, 5 applications were approved in 2021 with no refusals or withdrawn applications.

4. REGIONAL RESERVES AND DEMAND

An analysis of sales versus newly permitted reserves has been undertaken for both sand & gravel and crushed rock using the 10-year average data for each region (see figures 3 & 4). The outputs illustrate the challenge that some of the regions responsible for national supply are facing in maintaining their reserve base given the levels of ongoing demand.

Given the continued demands required to support the delivery of the nationally significant infrastructure programme, housing and commercial, developments this situation needs to be urgently addressed. Government must revise the Guidelines for aggregates provision to reflect the additional demands that are expected.

A way to improve the transparency and visibility of the material demands created by infrastructure projects and major housing developments and thus improves the robustness of future demand predictions would be to require projects to prepare an upfront mineral resource assessment and supply audit as part of the consenting process for the scheme. This would support both mineral planning authorities and the mineral industry to plan more effectively for future demand requirements.

5. TIME TAKEN TO OBTAIN PERMISSION

Figures 10 and 11 show the time taken to complete each stage of the overall planning process required to secure a mineral planning permission. In 2021 it took on average 30 months and 9 days for a sand & gravel application to be approved and issued and 20 months and 15 days for crushed rock.

The average time (2012-2021) for a permission to be issued is 31 months and 21 days for sand & gravel and 29 months and 3 days for crushed rock. It is important to note, however, that the determination phase represents just one part of a wider site development process that can take 10 to 15 years to complete.

Figure 10. Average time to obtain a sand & gravel extraction planning permission (GB)

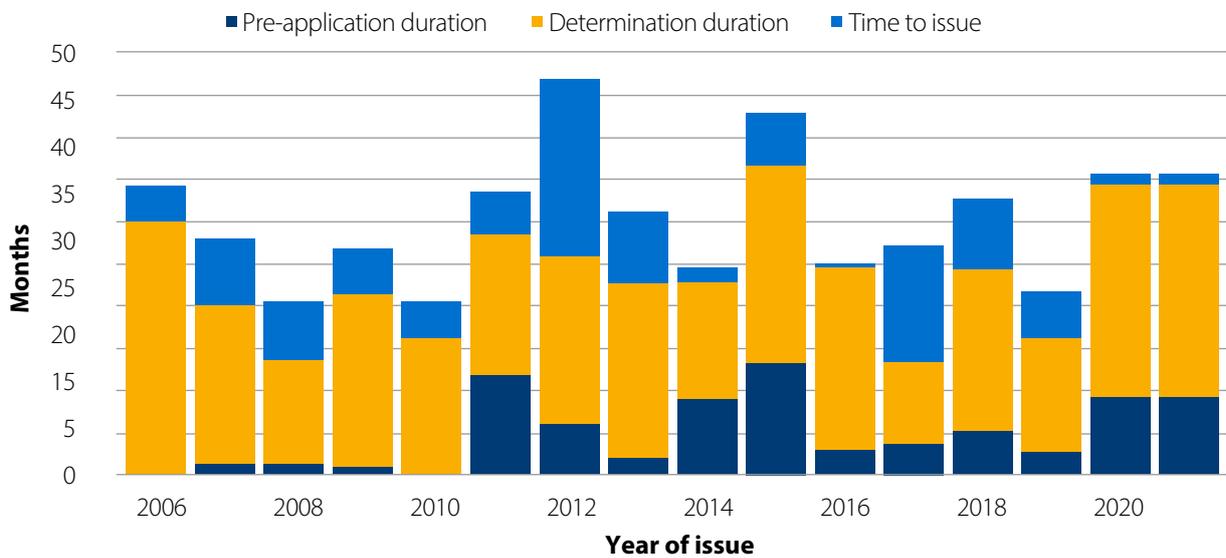
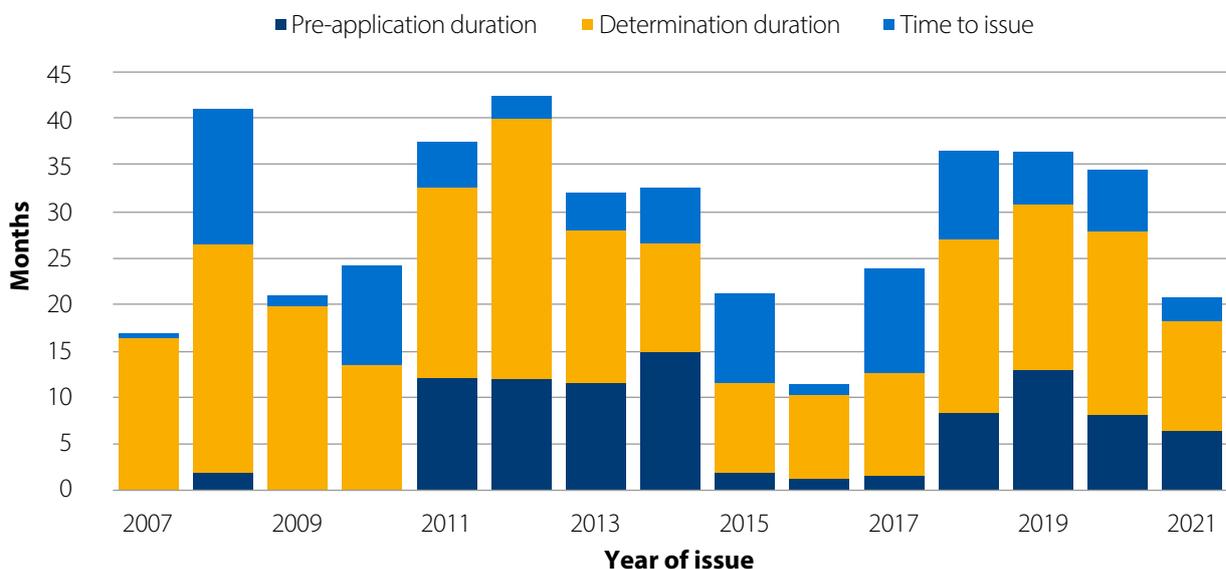


Figure 11. Average time to obtain a crushed rock extraction planning permission (GB)



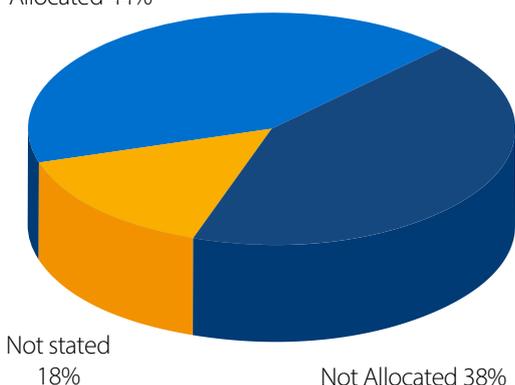
6. ALLOCATED VERSUS UNALLOCATED SITES

Figure 12 shows that for the period 2012 to 2021, 38% of the permissions granted for extraction of minerals were not identified or allocated in an adopted Mineral Plan.

Figure 12. Local plan status for land-won aggregates* permissions issued, 2012-21 (GB)

*Crushed rock and sand & gravel

Allocated 44%



7. PLANNING OFFICER RECOMMENDATIONS

For permissions issued over the period 2012 to 2021, 88% were issued following an officer's recommendation for approval. It is likely that a high proportion of the remaining balance may also have had officer support.

Figure 13. Officer recommendation for land-won aggregates* permissions issued, 2012-21 (GB)

*Crushed rock and sand & gravel

Approved 88%

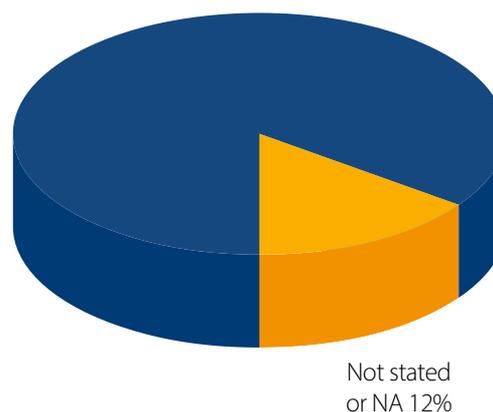
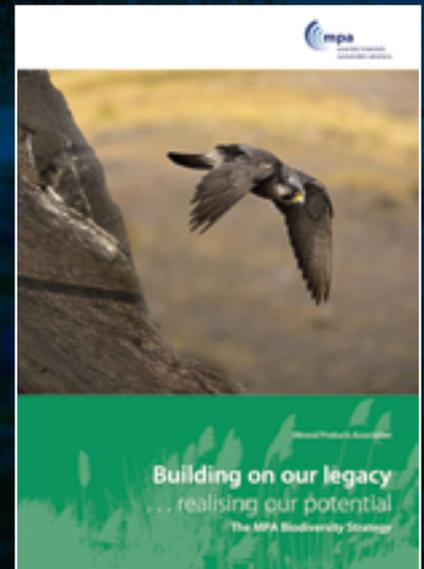
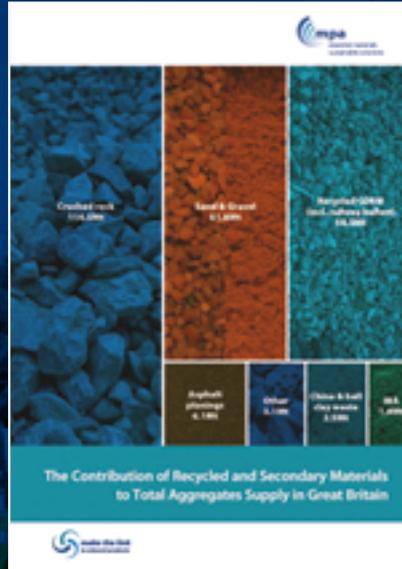
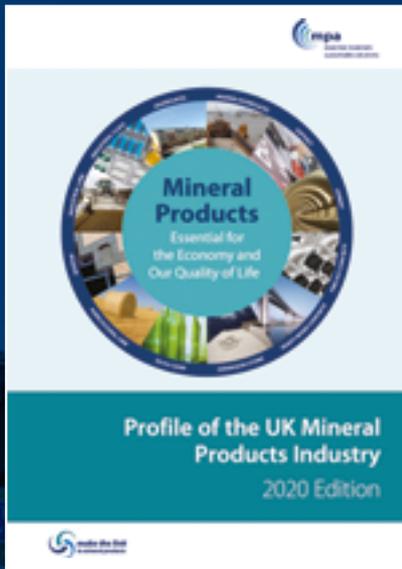


Table 1: Metrics for planning authority approvals, permissions issued only, during 2012-21

Material	SAND & GRAVEL		CRUSHED ROCK		Total
	New	Extension	New	Extension	
Type of site					All
No. of approvals	19	90	0	44	153
% of total GB	12%	59%	0%	29%	100%
Tonnage approved (Mt)	41	182	0	448	672
% of total GB	6%	27%	0%	67%	100%
Area covered (Ha)	1,053	4,482	0	1,903	7,438
% of total GB	14%	60%	0%	26%	100%

Note: Computations are based solely on MPA members' returns where both the tonnage and the area information were provided.



The Mineral Products Association is the trade association for the aggregates, asphalt, cement, concrete, dimension stone, lime, mortar and silica sand industries.

For further MPA information visit www.mineralproducts.org

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