# Task Force on Climate-related Financial Disclosures (TCFD)



Morgan recognises climate change as both a risk and an opportunity for our business and we fully support the implementation of the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

Climate change poses challenges to Morgan's supply chain and production operations, as well as to our employees and customers, and as such we aim to address this as part of our corporate strategy.

Morgan Advanced Materials has complied with the requirements of LR 9.8.6R by including climate-related financial disclosures consistent with the TCFD recommendations and disclosures. This statement will give an overview of our Governance, Strategy, Risk Management and Metrics & Targets pillars. Morgan intends to continually improve these climate-related disclosures as we develop a deeper understanding of the potential effects on our business as the climate continues to change.

This statement is provided in advance of insights from scenario analysis that Morgan are progressing through 2022 and will influence our future strategy.

Morgan have been disclosing climate risk under CDP since 2010. Our CDP climate change and water security responses provides further disclosures on our approach to climate change.

In 2021 we scored a 'B' in both disclosures, placing us at the management level.

This recognises that we are taking steps to assess environmental risks to our business and acknowledges that we have implemented actions to manage those risks.

Our responses are available at https://www.cdp.net/en



Our **Board Chair** has oversight of our climate change, environmental and corporate responsibility matters and ensures that our executive team progresses as planned to meet our commitments and goals. The Board Chair and Board of Directors monitor Morgan's progress against climate related actions at each meeting.

Metrics monitored include:

- Absolute Scope 1 & 2 CO<sub>2</sub>e emissions
- Water usage
- · Absolute energy use
- · Energy intensity

Where appropriate, large sustainability capital spend projects are reviewed.

Our **Chief Executive Officer** is responsible for climate change, environmental and corporate responsibility matters. He is supported by the Chief Financial Officer, by the Group Executive Management Team and the Group Director for Environmental, Health, Safety and Sustainability (EHS&S).

Our Chief Executive Officer, Chief Financial Officer and Group Executive Management Team is involved in our ESG materiality assessment and in the selection of our key ESG priorities each year.

Our **Group Director, Environment and Sustainability** was appointed in November 2020, reporting to the CEO, and is responsible for developing further and driving the environmental sustainability and governance strategy and managing and reporting progress to the executive team and board. This includes monitoring climate-related issues, driving strategy execution and reporting into monthly executive meetings on environment and sustainability matters.

The opportunity was taken to review the Group activities around environmental governance and health and safety. From the 1st February 2022, the roles of Group Director Environment and Sustainability and Group

Director Health and Safety will be combined under a single Group Director for Environment, Health, Safety and Sustainability (EHS&S).

The implementation of the climate-related projects is managed at a site level across each business unit. The Global Business Unit (GBU) leads are part of the Group Executive Management Team, reviewing progress against ESG targets, communicating and driving strategy execution in their business units.

The ESG strategy and communications from the Executive Team are cascaded to the wider business through monthly EHS&S leadership calls with the business unit EHS leads, and quarterly internal updates from the CEO to the wider business unit and site leadership teams.

The Renumeration Committee reviews the structure of the annual bonus and Long Term Incentive Plan (LTIP) to ensure that the framework remains appropriately aligned with our strategic aims and culture, and motivates and rewards management for delivering sustainable performance. As in prior years, the measures used for the annual bonus for 2022 include ESG measures being covered in the Executive Directors' personal objectives and therefore reflected in the personal performance element of bonus. For the Long Term Incentive Plan (LTIP), it is proposed to add an ESG measure (carbon reduction) to the structure, to align more closely with Morgan's strategy and priorities. The proposed ESG targets are 5% to 15% per annum carbon reduction.

Training for the Executive team on TCFD and climate risk will be delivered later in 2022 to support Morgan's ESG targets and to improve future disclosures.

In 2021 Morgan committed to the science-based target initiative (SBTi). This commitment drives the governance agenda, including setting targets and monitoring progress against these. We are progressing in 2022 with setting our targets to align with a <2°C SBT.



Climate change is considered as part of a companywide, multi-disciplinary risk management process, where it is considered as a contributory factor within several risk categories.

Additional information detailing the different time horizons and the types of climate risk and opportunity in each of these are shown in the Emerging Risks section of the 2021 Annual Report.

The materiality assessment was updated in Q4 2021 (described on page 8 of our 2021 Sustainability and Responsibility report) and identifies the ESG topics that impact our business and that are of interest to our external stakeholders. This focussed Morgan's existing environmental strategy around  $\mathrm{CO}_2\mathrm{e}$  emissions and water usage.

As part of the ongoing risk management process, the Board and the GBUs identified and assessed emerging risks and opportunities. Our key risks and opportunities are identified in the Risk Management section of our 2021 Annual Report.

In 2022 Morgan will set targets to align with a <2°C SBT and undertake climate scenario analysis to build a strategy toward transition to a low carbon economy. Morgan will increasingly use scenario analysis to inform the risk management process to continually understand

the uncertainty of the risks and opportunities climate change poses to the business.

Through the course of 2021, Morgan assembled a cross-GBU Engineering team to identify and evaluate environmental projects across the business. This opportunity to collaborate and share best practice has yielded the project portfolio to complete in the next three years in order to reduce our emissions and meet our stated  $\mathrm{CO}_2\mathrm{e}$  and water reduction targets.

We have work underway to assess the technologies we will need for the longer term (beyond 2030) to address the  $\rm CO_2e$  emissions from existing natural gas driven production processes. A portion of our R&D resource is now dedicated to exploiting low carbon opportunities.

We have partnered with the British Ceramics Confederation (BCC) and are part of the "Towards Net Zero" commitment. This collaboration brings together businesses from the ceramic manufacturing sector in the UK.

It shares best practice approaches and proven decarbonising technologies, helps nurture and encourage industry decarbonisation, and communicates related challenges for the industry. Our involvement will allow us to explore alternatives to natural gas and share best practice as part of an industry group.



The Board recognises the need to understand and assess climate related risk and the inherent uncertainty therein. Risk management and internal control are fundamental to achieving the Group aim of delivering long-term sustainable growth in shareholder value.

Principal and emerging risks are identified both 'top down' by the Board and the Executive Committee and 'bottom up' through the Group's global business units (GBUs). Further details on Morgan's procedures for identifying, assessing, and managing risk can be found in the Risk Management section of our 2021 Annual Report.

Our Environment, Health and Safety team meets monthly to oversee management of our most significant environmental risks, including climate-related risks. This group is chaired by our Group Director EHS&S who reports monthly to our Executive Committee. We use a third-party platform to monitor current and emerging environmental regulations across our industry and business sectors. We evaluate compliance regularly and consider how these regulations may impact Morgan.

The severity of each risk is quantified by assessing its inherent impact and mitigated probability, to ensure that the residual risk exposure is understood and prioritised for control throughout the Group. Senior executives are responsible for the strategic management of the Group's principal risks, including climate related risk. The output of ongoing scenario analyses will be integrated into the risk register using this approach.

Throughout 2021, the Board reviewed the preparedness of Morgan to all known principal risks with a significant potential impact at Group level. Additionally, the Audit Committee carried out focused risk reviews of each GBU. These reviews included an analysis of the

principal risks, and the controls, monitoring and assurance processes established to mitigate those risks to acceptable levels.

Substantive impacts are assessed and monitored through Morgan's risk assessment process. Morgan evaluates all management risks including health, safety, and environment (including climate-related risks). Our five business units develop business-specific risk registers and business continuity plans which are used in their annual strategic planning. These registers identify internal and external factors that could pose threats and opportunities to each business. They evaluate the inherent impact, mitigated probability, risk severity, control effectiveness and risk trends. Each risk is assessed by the business unit senior management team who consider the indicators of relevance and their associated impact.

Impact on revenue, litigation outcomes, sites disrupted, applicable fines and others are all quantifiable indicators that could affect each sites risk classification.

Morgan recognise the importance of climate scenario analysis and have engaged with a third party to support with modelling and interpretation of results. This will be incorporated into the Risk Management process to identify further actions towards our 2030 strategy.

Climate risk and scenario analysis awareness training was undertaken with functional leads from the different GBUs in December 2021. In addition, training will be delivered to the executive and group finance teams on TCFD, climate change and scenario analysis in Q2 2022. This will upskill the risk teams at group level and across business units to understand how to respond to scenario analysis, and climate change risk.



# Metrics and Targets

As a company we use GHG Protocol reporting standards to monitor  $\rm CO_2e$  intensity for Scope 1 and Scope 2 GHG emissions. The intensity figure is reported as tonnes of  $\rm CO_2e$ /million GBP. In addition, we monitor total water use, and water use in water stressed areas.

In 2021, Morgan Advanced Materials committed to the Science Based Targets Initiative (SBTi) and anticipates receiving confirmation of our Scope 1 and Scope 2 emissions targets in the next 24 months confirming alignment with the Paris Agreement target to limit global warming to a 2°C or lower scenario. This commitment meant during 2021 we focused on driving energy efficiency improvements within our operations and continued to grow our carbon free and renewable energy portfolio, in line with our commitment to the SBTi.

To achieve this, we established a cross-GBU Engineering project team to execute  $\mathrm{CO}_2\mathrm{e}$  and water reduction projects, in line with the SBTi and our 2030 targets and 2050 aspirations. The group meets monthly and includes the Group Director for EHS&S. Outputs from the group are reported on a monthly basis to Morgan Advanced Materials' CEO; CFO; Executive Team and our Board of Directors at every Board of Directors meeting.

We track Scope 1 and 2 absolute CO<sub>2</sub>e on a monthly basis. The Scope 1 and 2 absolute values for 1 January - 31 December 2021 across the group are as follows:

- Scope 1 emissions (metric tons CO<sub>2</sub>e) 122,817
- Scope 2 emissions (metric tons CO<sub>2</sub>e) 107,070

In line with Streamlined Energy and Carbon Reporting ("SECR") requirements, Scope 1 and 2 emissions and energy use are disclosed in the Environment section of the 2021 Sustainability and Responsibility report.

We recognise assessment of company's value-chain emissions is an important part of company's long-term sustainability strategy. We aim to work with our key stakeholders and top tier suppliers to reduce indirect emissions and this is Morgan's preliminary step towards minimizing product lifecycle impact. For GHG reporting purposes, Morgan outlines its organisational boundary on an operational control basis, and our Scope 1 and 2 emissions are reported on this basis.

The Scope 3 Standard further categorises these emissions into fifteen distinct categories. However, based on Morgan priorities, we will be focusing on a few key categories in the upstream and downstream.

We are actively evaluating the following areas:

## **Purchased Goods and Services.**

During 2021 we conducted a pilot on our top tier suppliers in terms of climate and other environment, social and governance (ESG) criteria. Following this we will implement a system to evaluate our suppliers in 2022. We will begin our evaluation of the associated Scope 3 emissions in 2022 using the GHG Protocol Scope 3 Evaluator and anticipate commencing to reporting on them once a robust system is in place.

#### **Capital Goods.**

We anticipate having a system identified in 2022 to begin our evaluation of Scope 3 emissions associated with capital goods.

### Fuel-and-energy-related activities.

We are currently evaluating adequate systems to accurately account or Scope 3 for Fuel-and-energy-related activities (not included in Scope 1 or 2). We anticipate having a plan identified in 2022 to capture this data. We anticipate these Scope 3 emissions associated with Fuel-and-energy-related activities both upstream and downstream will be performed using various tools such as the GHG Protocol Scope 3 Evaluator and IEA emission data. Criteria currently being evaluated include:

- Upstream transportation and distribution.
- Waste generated in operations
- Downstream transportation and distribution
- Processing of sold products
- Use of sold products
- Downstream leased assets

In 2022, we will expand our work with our customers, suppliers, and other stakeholders in our value chain to calculate an initial Scope 3 emission baseline.

In addition to this we are actively exploring product Life Cycle Assessment (LCA). Systems to conduct LCAs were evaluated in 2021, and pilot studies are planned for 2022. Product LCA information will support Scope 3 evaluation across a number of categories.



- Our aspiration is to be a CO<sub>2</sub>e net zero business by 2050. Our 2030 target is to reduce our Scope 1 and Scope 2 CO<sub>2</sub>e emissions by 50% (from a 2015 baseline).
- Our aspiration is to use water sustainably across our business. Our 2030 target is to reduce our overall water usage by 30% and reduce our water usage in high stress areas by 30% (from a 2015 baseline).

Morgan's greenhouse gas (GHG) emissions are mostly generated by the combustion of fossil fuels at various stages of our manufacturing processes. We are pleased to report that our absolute GHG emissions for Scopes 1 and 2 are down by 17% compared to end of year 2020. This correlates to a 33% reduction compared to our 2015 baseline.

We are also focusing on water reductions in areas of high or extremely high-water stress. Water withdrawal in water stress areas accounts for 7% of our total water withdrawals. Water management plans will be integrated into regular facility assessments to proactively engage our workforce in reduction activities to address water-related issues within the watershed of these local communities.

We are pleased to report that absolute water withdrawal continues to fall across the business, being 26% lower in 2021 when compared to our 2015 baseline. Water use in high and extremely high water stressed area is down 12% compared to 2015.

Water withdrawal and use increased slightly from 2020, reflecting the manufacturing facilities returning towards pre-pandemic levels of production. Investment is planned in 2022 to upgrade key facilities and install new equipment in water stressed areas to reduce water usage and increase water recycling.

Scope 1 & 2  $\rm CO_2e$  emissions continue to fall as a result of efficiency improvements completed by the Cross-GBU Engineering team and increased renewable energy procurement.



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Values adjusted to remove biogenic emissions from sawdust use at Augusta, Casal and Yixing and coffee husks in Guatemala. Totals include emissions from refrigerant.

CO<sub>2</sub>e is 33% below 2015 annual levels.



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We are making good progress however, an increase in 2021 levels is due to business growth after COVID-19 pandemic.





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