Welcome to your CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Dow (NYSE: DOW) combines global breadth; asset integration and scale; focused innovation and materials science expertise; leading business positions; and environmental, social and governance (ESG) leadership to achieve profitable growth and deliver a sustainable future. The Company's ambition is to become the most innovative, customer centric, inclusive and sustainable materials science company in the world. Dow's portfolio of plastics, industrial intermediates, coatings and silicones businesses delivers a broad range of differentiated, science-based products and solutions for its customers in high-growth market segments, such as packaging, infrastructure, mobility and consumer applications. Dow operates 104 manufacturing sites in 31 countries and employs approximately 37,800 people. Dow delivered net sales of approximately $56.9 billion in 2022.

Dow's major manufacturing sites are located in Argentina, Brazil, Canada, China, Germany, The Netherlands, Spain, Thailand, United Kingdom, and the United States. Our portfolio includes six global businesses which are organized into the following operating segments: Packaging & Specialty Plastics (Hydrocarbons & Energy and Packaging and Specialty Plastics), Industrial Intermediates & Infrastructure (Industrial Solutions and Polyurethanes & Construction Chemicals), and Performance Materials & Coatings (Coatings & Performance Monomers and Consumer Solutions).
This report is a combined report being submitted by Dow Inc. and The Dow Chemical Company and its consolidated subsidiaries ("TDCC" and together with Dow Inc., "Dow" or the "Company").

Dow supports the Paris Agreement and is committed to achieving its goal of keeping global temperature rise well below 2°C and to pursue efforts to limit the increase to 1.5°C. As both a major user of energy, as well as a producer of technologies that are essential to a lower-carbon future, we have a responsibility to act. As a tangible demonstration of our commitment to climate protection, in 2020 Dow set the following targets:
- By 2030, Dow will reduce its net annual GHG emissions by 5 million metric tons vs. our 2020 baseline (15% reduction) and representing a 30% reduction since its 2005 baseline. By 2050, Dow intends to be carbon neutral (scope 1 + 2 + 3 plus product benefits).

- Demonstrating progress toward the 2030 target, Dow intends to reduce emissions by approximately 2 million metric tons by 2025 through increased use of clean energy, driving energy efficiency improvements, and through manufacturing asset renewals and optimization, growing earnings by ~$3B/Year by 2030.
These targets are in addition to our 2025 Sustainability Goals with the following climate-related objectives:
- Dow will obtain 750 MW of its power demand from renewable sources by 2025. In 2022, we expanded our access to renewable power capacity to more than 1,000 megawatts (MW), enabling approximately 40% of our purchased electricity to come from renewable sources. Though we expect variation in this amount year over year, we expect achievement of our target to be maintained. BloombergNEF ranks Dow amongst the top 20 global corporations for clean energy purchases.

The company further enhanced its carbon-focused team (initiated in 2018) through the creation of a Climate Steering Team and Climate Program Management Office (Climate PMO), led by Dow's Leadership Team. The enhanced team structure further aligns senior leadership from across Dow's businesses and functions and drives all aspects of the Company's initiatives around carbon and emissions.

A summary of Dow's current strategy as it relates to GHG emissions is as follows:
- Optimizing our manufacturing facilities and processes for sustainability.
- Increasing use of clean energy and low or zero emissions steam.
- Building a value-generating Scope 3 decarbonization pathway.
- Partnering with suppliers to develop innovative solutions to reduce Scope 3 emissions.
- Investing in transformative next-generation manufacturing technology.
- Developing low-carbon emissions products and services.
Dow supports CDP's efforts to promote the measurement, management, reporting, and reduction of greenhouse gas emissions. Dow also supports the recommendations made by the Task Force on Climate-related Financial Disclosures (TCFD). GHG emissions are collected and accounted for in accordance with the GHG Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), published by the World Resources Institute/World Business Council for Sustainable Development. Dow recently released its 2022 INtersections Progress Report. Along with the 2022 INtersections Progress Report, Dow views the opportunity to report to CDP as a key mechanism for it to report its progress as it relates to climate.

More information on Dow can be found at www.dow.com.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

January 1, 2022

End date

December 31, 2022

Indicate if you are providing emissions data for past reporting years

Yes

Select the number of past reporting years you will be providing Scope 1 emissions data for

2 years

Select the number of past reporting years you will be providing Scope 2 emissions data for

2 years

Select the number of past reporting years you will be providing Scope 3 emissions data for

2 years

C0.3

(C0.3) Select the countries/areas in which you operate.

Argentina
Australia
Belgium
Brazil
Canada
China
Colombia
Egypt
France
Germany
India
Indonesia
Italy
Japan
Mexico
Netherlands
Philippines
Portugal
Republic of Korea
Russian Federation
Singapore
South Africa
Spain
Sweden
Taiwan, China
Thailand

Turkey
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
United States of America
Viet Nam

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C-CH0.7

(C-CH0.7) Which part of the chemicals value chain does your organization operate in?

Row 1

Bulk organic chemicals

Lower olefins (cracking)
Aromatics
Ethylene oxide & Ethylene glycol
Ethanol
Polymers

Bulk inorganic chemicals

Chlorine and Sodium hydroxide
Hydrogen
Other industrial gasses

Other chemicals

Specialty chemicals
Specialty organic chemicals

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier

Yes, an ISIN code	US2605571031
Yes, a CUSIP number	260557 103
Yes, a Ticker symbol	DOW

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Chief Executive Officer (CEO)	The CEO provides leadership oversight for the entire organization, including decisions made on strategy as it relates to sustainability and climate change. The CEO is responsible for discussing Company strategy, plans, results, and issues with the Board and Board Committees. As Chair of the Board and in consultation with the Independent Lead Director, the CEO ensures that topics related to sustainability and climate change are given appropriate time on meeting agendas, and that decisions made related to the Company's strategy around sustainability and climate change are brought to consensus. The CEO is a member of the Leadership Team, which oversees the efforts of Dow's Climate Steering Team and Program Management Office (Climate PMO) and associated sub-teams. The Leadership Team oversees all of Dow's efforts related to GHG emissions reduction and climate management, including but not limited to setting targets and goals, developing strategy, reporting, advocacy, evaluation of climate risks and opportunities, technology investments, and capital planning. All our Board Committees have input and oversight of elements relating to our environmental, social and governance ambition. With stakeholder feedback and our commitments to driving progress, our Board has taken the following recent actions: • Reinforced our focus on near-term investments in higher-return with lower-risk and faster-payback., while remaining committed long term to our transformational Decarbonize and Grow strategy. • Further increased accountability and enhanced approach to pay for performance by adding a quantifiable GHG emissions reduction metric to our long-term incentive compensation program. Notably, this also included: – Successfully establishing detailed GHG emissions reduction plans for Scopes 1

	and 2 for Dow's top 25 manufacturing sites. – A commitment to define our Scope 3 GHG emissions exposures for purchased goods and services, fuel and energy-related activities, and purchased transportation/distribution all by year-end 2023.
Board-level committee	Description of the position and explanation of how the Board committee's responsibility is related to climate issues: The Environment, Health, Safety & Technology (EHS&T) Committee oversees the following: environmental performance, health, safety, community, corporate citizenship, social responsibility, public policy, sustainability, climate, and science and technology. Key responsibilities of the EHS&T Committee include but are not limited to: -Assesses current aspects of the Company's environment, health and safety policies and performance and makes recommendations to the Board and the management of the Company with regard to the promotion and maintenance of superior standards of performance, including processes to ensure compliance with applicable laws and regulations. -Oversees risk management associated with environment, health and safety policies and operations, emerging regulatory developments, reporting and compliance. -Oversees and advises the Board on environmental, social and governance matters and on matters impacting corporate social responsibility. -Oversees and advises the Board on the Company's corporate citizenship, including public policy, philanthropy and corporate reputation. -Oversees and advises the Board on the Company's sustainability commitments and progress including efforts to protect the climate, reduce GHG emissions, eliminate plastic waste and deliver circular economy solutions. -Regularly reviews the Company's science and technology capabilities in relation to its strategies and plans and makes recommendations to the Board and the management of the Company with the goal of continually enhancing the Company's science and technology capabilities and protecting its intellectual property. -Oversees the Company's policies relating to, and reviews an annual report on, political contributions and lobbying expenses. -In coordination with other Committees of the Board, reviews and, as applicable, approves information relating to environmental and social policies, practices and performance for inclusion in the Company's annual INtersections report or SEC filings. Aspects of the Company's strategy as it relates to carbon and climate change are integrated into the responsibilities above.
Board-level committee	Description of the position and explanation of how the Board-level committee's responsibility is related to climate issues: The Audit Committee oversees the following: external reporting, risk management, internal controls, compliance with legal and regulatory requirements and environmental, social and governance reporting frameworks. Key responsibilities of the Audit Committee include but are not limited to:

	- Meet periodically with management to discuss current and, if any, proposed, guidelines and policies governing the processes used to assess, monitor and control the Company's major risk exposures, including climate-related or financial risk exposures, as well as, if any, actual major risk exposures. - Provide oversight on the external reporting process and the adequacy of the Company's internal controls. - Reviews with management, and any external firm retained for this purpose, assurances provided on the assertion that the environmental, social and governance disclosures referenced in the Company's annual INtersections report are presented in accordance with applicable reporting frameworks and resolves any issues, difficulties or disagreements encountered during the review. Aspects of the Company's strategy as it relates to carbon and climate change are integrated into the responsibilities above.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – all meetings	Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures Reviewing innovation/R&D priorities Overseeing and guiding employee incentives Reviewing and guiding strategy Overseeing and guiding the development of a transition plan Overseeing the setting of corporate targets	Dow's full Board and our EHS&T Committee (Board committee) both review climate-related topics multiple times per year. Dow held six Board meetings and the Committees of the Board collectively held 24 meetings for a total of 30 meetings in 2022 during which economic, environmental, and social topics were discussed. The EHS&T Committee of the Board (which held 5 meetings in 2022) oversees strategy and action plans developed by Dow's Leadership Team as they relate to sustainability, carbon, and climate change. The CEO is a member of the Leadership Team, along with the President and Chief Financial Officer, General Counsel and Corporate Secretary, Senior VP of Research & Development and Chief Technology Officer, Business Presidents, Senior VP of Operations, Manufacturing & Engineering, Chief Human Resources Officer, Senior VP of Corporate Development, and the Chief Information and Digital Officer. Under the advisement of the Leadership Team, sub teams direct specific efforts related to CO2 reduction and climate, such as reporting, policy advocacy, evaluating climate risks and

		opportunities, technology investment, and capital planning. The Climate Steering Team (CST) includes executives from our businesses and functions. They oversee the Climate Program Management Office (PMO), which is responsible for assessing and managing climate-related risks and opportunities, including reducing Scopes 1+2+3 emissions; improving metric tracking and reporting; developing products, technologies and business models to address customers' climate-related needs; and developing and executing actions to deliver committed targets. The CST is responsible to the Board via the CEO. Although each Committee is responsible for overseeing the management of certain responsibilities and risk as described in the Committee Charters, the full Board is regularly updated by the Committees, management and senior leaders. This enables the Board and the Committees to coordinate oversight and the relationships among the various priorities of the Company. Examples of climate-related topics discussed at EHS&T Committee meetings include but are not limited to: monitoring environmental performance and progress against Dow's Sustainability Goals; overseeing risk associated with EH&S policies and operations, emerging regulatory developments, reporting and compliance; and reviewing the Company's sustainability commitments and progress, including efforts to protect the climate, reduce GHG emissions, eliminate plastic waste and deliver circular economy solutions. Examples of climate-related topics discussed at full Board meetings include but are not limited to updates by the Committees, management and senior leaders on the Company's strategy, risk management and overall performance; approving significant capital investments to achieve the Company's Sustainability Goals; and reviewing the Company's annual report on the Company's environmental, social and governance performance.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	In alignment with the Task Force on Climate-related Financial Disclosures (TCFD), Dow has assessed each of its Director's professional experience (including other board memberships), education, and board-level accountability, as well as the frequency and structure of review of the relevant subject matter and substantive information provided from internal and external subject matter experts to the Board. Dow also utilizes a questionnaire that is sent to each Director to provide additional support for the assessment. Based on the 2022 assessment of the Directors, 100% have strategic planning and enterprise risk management experience and 75% (9 out of 12 Directors) have environmental, sustainability, or climate-related experience which both provide a strong oversight to the Company's sustainability ambitions.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee

Chief Executive Officer (CEO)

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Providing climate-related employee incentives
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

Dow's CEO is responsible for setting and overseeing the Company's strategic direction and priorities, overall business results, organizational health, culture, and corporate responsibility.
Some 2022 achievements include:
-Expanded access to renewable energy to >1000 megawatts; among top 20 global corporations using renewable, clean energy.
-Announced the acceleration of efforts to address plastic waste through our expanded Transform the Waste target committing to transform plastic waste and other forms of alternative feedstock into more than 3 million metric tons of circular and low-carbon emissions solutions every year by 2030.
-Reached preliminary investment decision for building the world's first net-zero (Scope 1 and 2 CO2 emissions) integrated ethylene cracker and derivatives site in Fort Saskatchewan, Alberta, Canada.
-Announced a collaboration with X-energy with the intent to utilize zero-carbon-emissions advanced nuclear technology at our UCC Seadrift, Texas, site by the end of the decade.
-Enhanced accountability by adding GHG emissions reduction metrics into the LTI program.

Significant improvements in Scope 3 accounting, including the integration of suppliers' emissions data for the first time. Dow invited suppliers representing 80% of emissions to disclose their GHG emissions and climate strategy.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	Incentives for the management of Dow's climate related issues are provided through both Long-Term and Short-Term Programs. -Long-Term Incentive Program- Carbon Emissions Reduction Metrics account for 20% of Dow's 2022-2024 Performance Share Program. -Short-Term Incentive Program (Annual Performance Award (annual cash bonus) Program)- 20% of the Annual Performance Award is aligned to Dow's Ambition, including the Company's environmental,

		social and governance performance. This Ambition" component includes the WLO index, which is associated with our 2025 World Leading Operations sustainability goal.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive

Chief Executive Officer (CEO)

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary
Shares

Performance indicator(s)

Achievement of a climate-related target
Reduction in absolute emissions
Reduction in emissions intensity
Increased share of renewable energy in total energy consumption
Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

Performance Share Program (PSP)- To align the LTI programs to the Company's strategy to decarbonize and grow, and based on feedback from investors, benchmarking, management's recommendation and input from the Independent Compensation Consultant, the Committee approved including carbon emission-related metrics in the 2022-2024 Performance Share Program to drive performance on sustainability targets and carbon and climate goals. The 2022 program design includes enhancements that align with Dow's stated goals to stakeholders, including employees and stockholders, to achieve carbon neutrality by 2050 through increasing its positive impact on customers, business, and society, while also supporting Dow's commitment to reduce its net annual GHG emissions by an additional 15 percent by 2030, as measured against the 2020 levels.

WLO-Dow's commitment to safety and world-leading operations performance is key to our company's success, our history and our "license to operate" in communities around

the world. We measure our annual progress through four indices: Unplanned Events, Environmental Stewardship, Total Worker Health and Transportation Stewardship.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

PSP- The GHG emissions reduction metrics will help enable the Company to decarbonize and grow and reduce overall zero-carbon emissions, including a cumulative net-zero carbon target as measured against the 2020 levels previously announced by the Company. The carbon metric represents 20 percent of the 2022 program design.

Our World Leading Operations metrics align to Dow's short-term climate commitments (2025). These metrics include obtaining 750 MW of power from renewable sources, reducing freshwater intake intensity at our key-water-stressed sites by 20% and reducing waste intensity by 20%. Additionally, as Dow grows, we will identify and eliminate emissions of Priority Compounds, Volatile Organic Compounds and nitrogen oxides (NOx). Our annual goal is to not exceed our 2015 baseline for these emissions.

Entitled to incentive

Chief Financial Officer (CFO)

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary
Shares

Performance indicator(s)

Achievement of a climate-related target
Reduction in absolute emissions
Reduction in emissions intensity
Increased share of renewable energy in total energy consumption
Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

Performance Share Program (PSP)- To align the LTI programs to the Company's strategy to decarbonize and grow, and based on feedback from investors, benchmarking, management's recommendation and input from the Independent Compensation Consultant, the Committee approved including carbon emission-related metrics in the 2022-2024 Performance Share Program to drive performance on sustainability targets and carbon and climate goals. The 2022 program design includes enhancements that align with Dow's stated goals to stakeholders, including employees

and stockholders, to achieve carbon neutrality by 2050 through increasing its positive impact on customers, business, and society, while also supporting Dow's commitment to reduce its net annual GHG emissions by an additional 15 percent by 2030, as measured against the 2020 levels.

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Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

PSP- The GHG emissions reduction metrics will help enable the Company to decarbonize and grow and reduce overall zero-carbon emissions, including a cumulative net-zero carbon target as measured against the 2020 levels previously announced by the Company. The carbon metric represents 20 percent of the 2022 program design.

Our World Leading Operations metrics align to Dow's short-term climate commitments (2025). These metrics include obtaining 750 MW of power from renewable sources, reducing freshwater intake intensity at our key-water-stressed sites by 20% and reducing waste intensity by 20%. Additionally, as Dow grows, we will identify and eliminate emissions of Priority Compounds, Volatile Organic Compounds and nitrogen oxides (NOx). Our annual goal is to not exceed our 2015 baseline for these emissions.

Entitled to incentive

Corporate executive team

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary
Shares

Performance indicator(s)

Achievement of a climate-related target
Reduction in absolute emissions
Reduction in emissions intensity
Increased share of renewable energy in total energy consumption

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

Corporate Executive Team includes other C-Suite Professionals and Business Presidents.

Performance Share Program (PSP)- To align the LTI programs to the Company's strategy to decarbonize and grow, and based on feedback from investors, benchmarking, management's recommendation and input from the Independent Compensation Consultant, the Committee approved including carbon emission-related metrics in the 2022-2024 Performance Share Program to drive performance on sustainability targets and carbon and climate goals. The 2022 program design includes enhancements that align with Dow's stated goals to stakeholders, including employees and stockholders, to achieve carbon neutrality by 2050 through increasing its positive impact on customers, business, and society, while also supporting Dow's commitment to reduce its net annual GHG emissions by an additional 15 percent by 2030, as measured against the 2020 levels.

WLO-Dow's commitment to safety and world-leading operations performance is key to our company's success, our history and our "license to operate" in communities around the world. We measure our annual progress through four indices: Unplanned Events, Environmental Stewardship, Total Worker Health and Transportation Stewardship.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

PSP- The GHG emissions reduction metrics will help enable the Company to decarbonize and grow and reduce overall zero-carbon emissions, including a cumulative net-zero carbon target as measured against the 2020 levels previously announced by the Company. The carbon metric represents 20 percent of the 2022 program design.

Our World Leading Operations metrics align to Dow's short-term climate commitments (2025). These metrics include obtaining 750 MW of power from renewable sources, reducing freshwater intake intensity at our key-water-stressed sites by 20% and reducing waste intensity by 20%. Additionally, as Dow grows, we will identify and eliminate emissions of Priority Compounds, Volatile Organic Compounds and nitrogen oxides (NOx). Our annual goal is to not exceed our 2015 baseline for these emissions.

Entitled to incentive

All employees

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary
Shares

Performance indicator(s)

Achievement of a climate-related target
Reduction in absolute emissions
Reduction in emissions intensity

Increased share of renewable energy in total energy consumption
Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

Performance Share Program (PSP) (Based on job level eligibility) - To align the LTI programs to the Company's strategy to decarbonize and grow, and based on feedback from investors, benchmarking, management's recommendation and input from the Independent Compensation Consultant, the Committee approved including carbon emission-related metrics in the 2022-2024 Performance Share Program to drive performance on sustainability targets and carbon and climate goals. The 2022 program design includes enhancements that align with Dow's stated goals to stakeholders, including employees and stockholders, to achieve carbon neutrality by 2050 through increasing its positive impact on customers, business, and society, while also supporting Dow's commitment to reduce its net annual GHG emissions by an additional 15 percent by 2030, as measured against the 2020 levels.

WLO-Dow's commitment to safety and world-leading operations performance is key to our company's success, our history and our "license to operate" in communities around the world. We measure our annual progress through four indices: Unplanned Events, Environmental Stewardship, Total Worker Health and Transportation Stewardship.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

PSP- The GHG emissions reduction metrics will help enable the Company to decarbonize and grow and reduce overall zero-carbon emissions, including a cumulative net-zero carbon target as measured against the 2020 levels previously announced by the Company. The carbon metric represents 20 percent of the 2022 program design.

Our World Leading Operations metrics align to Dow's short-term climate commitments (2025). These metrics include: obtaining 750 MW of power from renewable sources, reducing freshwater intake intensity at our key-water-stressed sites by 20% and reducing waste intensity by 20%. Additionally, as Dow grows, we will identify and eliminate emissions of Priority Compounds, Volatile Organic Compounds, and nitrogen oxides (NOx). Our annual goal is to not exceed our 2015 baseline for these emissions.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	5	The Company has a fiduciary responsibility to its stakeholders to manage short term performance. This responsibility has both quarterly and yearly components.
Medium-term	5	10	The Company monitors market trends, and external forces that are expected to present opportunities or be disruptive to Dow. Manufacturing processes, assets and product portfolios are adjusted based on these trends.
Long-term	10	30	The chemical industry is capital intensive with long lasting assets and highly valuable intellectual property. All major investment decisions, portfolio reviews, acquisitions and divestitures are reviewed in the light of long-term trends, opportunities and threats (10-30 year). Those reviews consider evolution of global trends in regulation, climate change, energy and raw material markets, and consumer demands. In addition, a long-term outlook is used to identify opportunities to design new solutions which enable lower carbon for the system and value chain that our products touch.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Definition of substantive impact:
Dow assesses climate risks based on the potential impact (magnitude of impact) and likelihood of a significant event occurring within the next five years (time horizon). Dow's periodic climate scenario analysis considers a longer time frame (currently to 2050) for magnitude of impact. When assessing whether a climate-related risk or opportunity is substantive, Dow evaluates impacts related to factors such as the cost of raw materials, impact on operating cost (e.g., energy costs, costs of complying with regulation), cost of investment in new technology to reduce emissions or water use, impact to the price at which products can be sold, impact as a result of potential lost sales, or in the case of opportunities, market share gained, etc. In addition, there could be impacts that need to be considered that are not yet able to be quantified in a concrete manner (for example, reputational impact of certain risks is more difficult to quantify) but could still be important for discussion due to a variety of factors

Description of the quantifiable indicators used to define substantive impact:
For a risk to be considered substantive by Dow it needs to either have a high likelihood of occurring in the next 5 years and a greater than $100MM financial impact or medium likelihood of occurring in the next 5 years and a greater than >$1B impact to Dow.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

The evaluation of climate-related risks and opportunities is integrated into a multi-disciplinary company-wide risk management process, known as Enterprise Risk Management (ERM). The ERM process identifies significant or major risks to the company and develops action plans to modify or mitigate risks and capitalize on opportunities. The ERM process is an enterprise-wide, cross-functional assessment that identifies, assesses, manages, and mitigates risk on an ongoing basis utilizing a broad range of data, both internal and external to Dow, covering all value chain stages (direct operations, upstream, and downstream). A member of the leadership team is assigned and accountable for managing each identified risk.

While ERM covers all time horizons (short-term, medium-term, and long-term), risks are categorized based on the potential impact and likelihood of a significant event happening within the next five years (short-term). Key risks, including short- and medium-term risks, and emerging risks are also evaluated more than once a year at meetings of the Committees and Board. Enterprise risks are evaluated quarterly with the Controllers team and disclosure counsel to determine if additional risk factors should be included in the Company's periodic reports such as the Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q ("Periodic Reports"). Principal risks that may negatively impact the future results of the Company are reviewed at least quarterly with the Audit Committee and full Board, if necessary, and a detailed discussion is included in the section titled "Risk Factors" in the Periodic Reports. In addition, the Board believes that having an independent Lead Director enhances the Board's independent oversight of the Company's risk mitigation efforts by enabling

consultation between the Chair and independent Lead Director on time-sensitive risks. All remaining low impact risks that are identified are reviewed at least on an annual basis.

In addition to our ERM process, which includes a long-term (2050) risk analysis, Dow also utilizes a robust scenario analysis to assess the long-term materiality and magnitude of the impact of climate-related risks and opportunities. Scenario analysis is used to challenge business-as-usual assumptions and strengthen the resiliency of the Company's decarbonize and grow strategy. Scenarios are used to evaluate both physical and transition risk and are particularly useful in evaluating the potential and impact of emerging risks. These scenario analyses are conducted every three years and are part of an added effort to our ERM process.

When assessing whether a climate related risk or opportunity is substantive, Dow evaluates impacts related to factors such as the cost of raw materials, impact on operating cost (e.g. energy costs, costs of complying with regulation), cost of investment in new technology to reduce emissions or water use, impact to the price at which products can be sold, impact as a result of potential lost sales, or in the case of opportunities, market share gained, etc. In addition, there could be impacts that need to be considered that are not yet able to be quantified in a concrete manner (for example, reputational impact of certain risks is more difficult to quantify) but could still be important for discussion due to a variety of factors. Whether or not a risk or opportunity is determined to be substantive is also dependent on other factors such as where in the value chain the impact may be felt and the duration of impact.

To evaluate physical risks, Dow partnered with S&P Global Trucost (Trucost) to assess the Company's exposure to physical risks based on the geographic location of our manufacturing operations. The risks assessed included water stress, flood, heat waves, cold waves, hurricanes, wildfires and sea level rise. The analysis included an assessment of the physical risks using a baseline year of 2020 with time periods for medium (year 2030) and long term (year 2050) using the Intergovernmental Panel on Climate Change (IPCC) representative concentration pathways (RCP): RCP 2.6, RCP 4.5 and RCP 8.5. These pathways represent varying degrees of global atmospheric GHG concentrations (low, medium, and high, respectively), and thus different expectations on global temperature rise. Results will be incorporated into our long-term assessments of Dow's manufacturing sites, which is a key input into Dow's capital approval process.

Management of climate risk is assigned to Dow's Climate Steering Team which is accountable for developing and implementing mitigation plans to mitigate risk and for tracking actions and progress against those plans. With oversight and accountability by the Climate Steering Team (CST) specific carbon related risks are managed by Dow's Climate PMO, a group comprised of Dow business and functional leaders, and together with subject matter experts they work to develop and implement strategies to mitigate or eliminate carbon-related risks. They develop specific action plans and ensure owners are assigned to drive forward progress to reduce our risk exposure. Risk mitigation

status updates are provided to executive leaders on a regular basis and discussions include risk time horizons or magnitude of impact to confirm that the strategy remains solid.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Rationale for relevance: Dow operates manufacturing sites in 31 countries across the globe. Current approaches to climate-related regulation vary across the different countries in which Dow operates, but all impact the expected cost to operate our facilities or conduct emissions-reduction projects. Regulations focused on the cost of carbon emissions have a variable component in that the cost of compliance may vary over time depending on elements such as available allowances and Dow's own emissions projections. Example of risk type: Climate change regulations apply to Dow's operations in Europe through the EU Emissions Trading System (ETS). The ETS results in costs at several of Dow's manufacturing facilities.
Emerging regulation	Relevant, always included	Rationale for relevance: Dow operates manufacturing sites in 31 countries across the globe. Climate change regulations are emerging and changing in different geographies where Dow has operations. Changes in governments can also bring changes to regulation that impact our operations. Depending on Dow's emissions footprint in a particular geography the impact of emerging regulation may vary but could be significant. Example of risk type: As the majority of Dow's emissions are generated in the United States, of particular relevance to Dow is the emergence of regulations focused on reducing emissions that could result in a change to the timing of our 'Decarbonize and Grow' strategy. For example, the EPA has recently proposed new carbon pollution standards for natural gas and coal fired electric generators that are intended to set emission limits based on possible emissions-control strategies, such as carbon capture and sequestration (CCS) and co-firing a natural gas plant with clean hydrogen. As a large consumer and self-generator of energy from natural gas, these regulations have the potential to increase energy costs and represent an implicit price on carbon in the US. Timing of these regulations could result in the need to re-prioritize or re-order our expected investments in decarbonization.

Technology	Relevant, always included	Rationale for relevance: Dow has mature, capital intensive assets in place that are by nature energy and emission intensive. Though Dow continuously looks for opportunities to reduce the energy and emissions intensity of our operations, many of our assets have been optimized such that achieving further significant step-changes in emissions requires the deployment of new technologies not yet economically available. As a science- and technology-driven company, Dow ensures continuous evaluation of changes/progress related to economically available technologies that could reduce our energy or emissions intensity. Example of risk type: Dow operates capital-intensive assets that currently rely largely on natural gas to generate the high-temperature heat (>550° C to 1,100°C) needed to run our processes (ie. steam boilers, furnaces, combined heat and power generation plants). Some technologies needed for the deep decarbonization of these assets, such as high temperature and high-pressure electrification and green hydrogen, are not yet commercially available at scale. Dow is working on the acceleration of these technologies – for example, Dow and Shell have a joint development agreement to advance technology to electrify ethylene steam crackers. Implementation will have a cost, and for jurisdictions where there is not a price on carbon emissions currently or no supporting incentives for new technologies, Dow must carefully weigh the implementation of these technologies with maintaining regional competitiveness.
Legal	Relevant, always included	Rationale for relevance: Climate litigation has become an instrument used to enforce or enhance climate commitments made by governments and corporations. Failure to meet both legal obligations, and our voluntary commitments related to climate change would have negative impacts for Dow. Example of risk type: Dow closely monitors the development of litigation, such as cases that have developed in the energy industry seeking to recover climate change-related damages allegedly resulting from defendant energy companies' production (gasoline, fuels). The chemical and energy industry are linked. As some of Dow's feedstock is a by-product of energy production, material impact to the energy industry could have an impact to Dow. In addition, the scope of industries that could be engaged in cases focused on climate is expanding. Dow is actively involved with industry groups regionally and globally to assess the legal risk from climate change.
Market	Relevant, always included	Rationale for relevance: Dow has many product families that support key markets such as packaging, building, construction and infrastructure, consumer goods and appliances, and automotive and transportation. As customer specifications and expectations evolve in light of societal goals to address climate change, Dow monitors the risk

		of product de-selection or substitution for our products to ensure that the solutions themselves, and how we manufacture said solutions, continue to evolve alongside these expectations. Example of risk type: Markets that Dow serves including high-performance buildings, architectural paint, protective and functional coatings, insulation, infrastructure, heat transfer fluids, and energy have trends that demand innovation for more carbon efficient solutions. Dow products contribute to carbon emissions reductions today – for example, foam made with Dow Polyurethanes helps to increase the insulation resistance factor of buildings, thereby reducing emissions associated with heating and/or cooling – and the Company intends to continue to make sure that it provides innovative solutions to these market trends or risk losing market share.
Reputation	Relevant, always included	Rationale for relevance: How companies are addressing risks and opportunities related to climate change is increasingly being used as a criterion to evaluate organizations by investors, customers, employees and other key stakeholders. Dow's customers have their own sustainability objectives that often require collaboration with their suppliers. Failure to act on climate-related issues could impact Dow from a reputational standpoint, affecting our interactions with both the investment community and current/future customers. Example of risk type: The investment community is strategically making sustainability an integral part of portfolio construction, with some firms vocalizing intent to limit investments in companies seen as not acting on climate-related issues or who score poorly in third-party Environmental, Social, and Governance (ESG) rankings.
Acute physical	Relevant, always included	Rationale for relevance: Dow has 104 manufacturing sites in 31 countries, and a globally connected supply chain. The potential for acute impacts from climate change varies across Dow's locations, but some of Dow's major manufacturing sites are located in areas that could experience more severe weather. In addition, because of Dow's interconnectivity, an impact to one location could have a resulting impact on our supply chain and subsequently impact those locations that may not experience a severe weather event directly. Example of risk type: The impact of severe weather is not only a safety risk, but also has the potential to result in production loss events. For example, Dow has significant operations in the US Gulf Coast region and others that are likely to be impacted by acute effects of climate change including severe weather events such as hurricanes. If the frequency of severe weather events increases due to climate change, then the potential risk to our operations also will increase.

Chronic physical	Relevant, always included	Rationale for relevance: Dow operates 104 sites in 31 countries, and a globally connected supply chain. Some of these sites have the potential to be impacted by chronic effects of climate change such as drought, water level rise, temperature rise, and changing weather patterns. Example of risk type: Of particular importance to Dow's operations are water availability and water quality – both of which are needed for the safe operation of our plants. Without available water, Dow could experience production loss events. Understanding the risk of impact to the water supply for our plants is important for Dow to put plans in place to mitigate the risk. Using the Aqueduct tool from the World Resources Institute (WRI), as well as determining how material a production loss event may be at a particular site, Dow has identified six key water-stressed sites that are closely monitored with respect to this risk. The key water-stressed sites are designated based on a number of factors: their location in a water-stressed watershed; water quality; competition among users of the same watershed; local knowledge of watershed challenges at the site; and long-term projections. In addition, Dow has developed a "watch list" of sites where water challenges may occur.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Cyclone, hurricane, typhoon

Primary potential financial impact

Decreased revenues due to reduced production capacity

Company-specific description

Dow has engaged S&P Trucost to evaluate the potential for acute physical impacts on our manufacturing sites. Using data from the National Oceanic and Atmospheric Administration (NOAA), as well as their own analysis, S&P Trucost highlighted the US Gulf Coast region for Dow as an area with an increased potential for hurricane impact compared to other regions. Trucost looks at the historical incidence and severity of hurricane, typhoon, or cyclone activity at a given location, weighted in favour of recent events. Severe weather events have a potential to cause disruption in production which can impact revenue. The specific Dow sites that have an elevated potential for exposure to severe weather events such as hurricanes are St. Charles Operations, Louisiana; Plaquemine, Louisiana, Freeport, Texas; Seadrift, Texas; Deer Park, Texas; Sabine River (Orange), Texas and Texas City, Texas. Along with this forward-looking evaluation from S&P Trucost, Dow has already experienced impacts from severe weather at these locations. Hurricane Harvey hit the U.S. Gulf Coast in 2017 and caused widespread temporary logistics and supply chain disruptions as well as brief outages and slowdown of production rates for some of our facilities. In anticipation of Hurricane Ida in 2021, Dow proactively shutdown our manufacturing operations in Louisiana on August 29, 2021, resulting in decreased revenues due to reduced production capacity. While our Louisiana Operations in Plaquemine was restarted approximately 1 week later, our St. Charles Operations facility experienced a longer duration outage. The impact to Dow as a result of Ida was approximately $100 million USD. In addition, though not a hurricane, but still a severe weather event, winter storm Uri which hit Texas in 2021 resulted in an impact to Dow of approximately $400 million USD in the first quarter of 2021, from production loss due to unexpected plant shutdowns, particularly at Dow's largest manufacturing site in Freeport.

Time horizon

Short-term

Likelihood

More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

50,000,000

Potential financial impact figure – maximum (currency)

400,000,000

Explanation of financial impact figure

Each potential severe weather event experienced in the past has impacted Dow differently – depending on the exact location and nature of the event, Dow could be

unaffected by the event hitting the region, a partial shutdown of the facilities could occur, or on the high end, a full shutdown could occur. The financial impact figure is intended to represent the potential annual earnings before interest & taxes (EBIT) impact due to production loss from one severe weather event per year impacting at least one facility in the US Gulf Coast. On the low end would be the production loss associated with a weather event that impacts one of our smaller Gulf Coast facilities, such as Texas City, for a shorter duration outage (<1 week). The high end of the potential financial impact figure represents the impact associated with production loss due a severe weather event that impacted the US Gulf Coast region across multiple sites – winter storm Uri. Amongst those sites impacted was our largest operating site in Freeport, Texas, where multiple facilities were impacted for approximately 30 days. Approximately 17% of Dow's production volume is associated with our Freeport site. Given the severity of this event, it provides a reasonable estimate for the upper-bound annual impact.

Cost of response to risk

20,000,000

Description of response and explanation of cost calculation

Cost Calculation: The cost is an estimate of salaries and wages of Dow personnel in emergency services roles that support the US Gulf Coast (~200 FTEs at ~$100,000 USD/Year) It does not include costs for contractors who support Dow's emergency services organization, or future engineering related costs.

Case study: To mitigate risks associated with severe weather, Dow has engineered our facilities to better withstand these events and have developed emergency preparedness plans that detail actions to take in the event of severe weather.
Situation: Dow has facilities in the US Gulf Coast that are at a higher risk of impact from severe weather than some of our other sites.

Task: Dow needs to minimize potential impact and production loss from severe weather on our US Gulf Coast facilities with a primary focus on the safety of employees, contractors, and the communities in which Dow operates.
Action: Dow maintains severe weather preparedness plans for our Gulf Coast facilities to serve as a guide for coordinating resources to ensure the safety and minimize losses during severe weather events. Plans are reviewed at least annually and were updated in 2022. Frequent drill schedules ensure seamless deployment of our emergency plans. Included in these plans is a rapidly established command structure that empowers our Emergency Operations Centers (EOCs) at each site to lead the response to a severe weather event and deploy the necessary resources to safely return our plants to operation as quickly as possible.

Result: Dow's preparedness to deal with severe weather events helps to minimize the potential impact of these events. Due to our preparation and operating and maintenance discipline following the 2021 Winter storm Uri, Dow Texas Operations mobilized >2000 maintenance personnel in less than a week and deploy those personnel around our sites in the US Gulf Coast in the sequence required for startup, beginning with our upstream energy and hydrocarbons assets, through to our derivative plants. We were

able to start up our LHC9 cracker 11 days after the freeze. This was the first industry cracker start-up in Texas after this event. In addition, our preparedness for severe weather events resulted in our Energy assets providing grid support during Uri.

Timescale of implementation: Action against severe weather events begins as early as >100 hours before potential impact and remains ongoing until all employees are safely returned and normal operations resume.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Momentum is accelerating toward decarbonization across the value chain as customers establish and accelerate commitments to reduce Scope 3 emissions. Regulatory frameworks are emerging, focusing the reporting on carbon footprint at a product level (ie. EU Carbon Border Adjustment Mechanism, labelling requirements, etc.). All these factors mean an increased focus on product differentiation based on product carbon footprint, and we expect will translate into a higher value for products from companies that can demonstrate lower carbon footprints compared to competitors. Dow sees value in the potential to differentiate our products based on lower carbon footprints, bringing increased revenues resulting from increased demand for products. Depending on the

end-market, the value per tonne of CO2 differentiated may vary. Dow currently sees value opportunity from differentiation in silicones, including sealants that can reduce energy use in buildings, polyolefin elastomers that increase the lifetime and efficiency of solar PV panels, PU insulation for insulated metal panels (IMP) that reduces energy flow with the same thickness as mineral wool based IMP, as well as many other lower carbon footprint offerings including surfactants, polyethylene, home & personal care products, consumer packaging, automotive, and other building materials. Additional details on products/services that are classified as low carbon can be found in C4.5a of this report.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

700,000,000

Potential financial impact figure – maximum (currency)

1,200,000,000

Explanation of financial impact figure

The financial impact range presented here represents the expected annual earnings growth by 2030 from just one of our key decarbonization projects – Alberta 'Decarbonize and Grow'. This project is expected to enable an additional $0.7 – $1.2B earnings growth by 2030 from expanded capacity at our Fort Saskatchewan site in Alberta, while taking the whole site to net-zero Scope 1 and 2 carbon dioxide emissions. It is expected to decarbonize approximately 20 percent of Dow's global ethylene capacity while growing polyethylene supply by about 15 percent. The financial impact calculation assumes 1900 kta of ethylene derivatives capacity from new low carbon emissions assets by 2030; the estimated peak-to-trough EBITDA range is based on Dow and IHS historical margins in Americas and an operating rate of ~90%.

In 2022, the project achieved a preliminary investment decision from the Board of Directors; Dow is targeting Board, regulatory approval, and final investment decision (FID) by year end, 2023.

Globally, Dow anticipates low-carbon product differentiation will enable additional value generation, beyond the impact described by just this one project. Dow remains on track

to improve our underlying EBITDA by more than $3 billion across the economic cycle by 2030, while reducing greenhouse gas emissions by 30% by 2030 over the 2005 levels and achieving carbon net neutrality by 2050.

Cost to realize opportunity

1,000,000,000

Strategy to realize opportunity and explanation of cost calculation

Explanation of cost calculation:
Dow is investing approximately $1 billion in annual capital per year across the economic cycle – or approximately one-third of Dow's depreciation and amortization levels - to decarbonize assets in a phased, site-by-site approach, while growing capacity. This expected annual average CAPEX includes the Fort Saskatchewan project described above, along with other targeted decarbonization and growth projects.

Strategy to realize opportunity:
Fundamentally, Dow capitalizes on the opportunity to transition to low emission technology in many ways: improving the accuracy in projections that could influence project economics, a strong understanding of the regulatory environment, excellence in project execution (on time, on budget), and collaboration with partners (other industrials, local governments, NGOs, etc.). Dow's company-wide Decarbonize and Grow strategy includes a phased approach to decarbonizing our assets to meet growing demand for our products and differentiating our products through carbon footprint-based product differentiation. We expect market demand for low-carbon products to bring added value to our products compared to industry average, higher emissions intensity production.

Example of company-specific activity aiming to capitalize on opportunity:
In 2022, Dow launched the first-ever carbon neutrality service for silicones used in structural glazing, insulating glass and weather sealing applications on high-performance building facades. The journey toward carbon-neutral silicones started with Dow's 2022 investment in decarbonizing our backward-integrated production process for silicone feedstocks. Low-carbon silicon metal is produced with clean, renewable energy and responsibly sourced, audited raw materials. The remaining embodied carbon is offset (sequestered) to achieve carbon neutrality. The silicones are produced in compliance with the internationally recognized PAS 2060 verified carbon neutrality standard.

Result: Dow carbon neutral silicones for building facades can contribute to energy and material efficiency. On a 30,000 m2 building façade, up to 600 tons of CO2 emissions can be saved. Through this program, Dow is gaining insight into the demand for low-carbon emissions products, learnings that can be leveraged to our larger decarbonization projects, such as the Alberta 'Decarbonize and Grow' project.

Comment

Dow has begun to offer low-carbon emissions products to customers. These initial offerings help build our understanding of the demand for low-carbon emissions products

in key market segments. In particular, the building and construction segment has had an early focus on the embodied carbon of building materials to achieve certain certifications. Conducting smaller-scale programs offering low-carbon emissions products will generate valuable intelligence around the scalability of future projects to deliver low-carbon products and help understand market demand.

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan

Yes, we have a climate transition plan which aligns with a 1.5°C world

Publicly available climate transition plan

Yes

Mechanism by which feedback is collected from shareholders on your climate transition plan

We have a different feedback mechanism in place

Description of feedback mechanism

Throughout the year, members of the management team and Board, conduct extensive outreach to stockholders, engaging with institutional investors that collectively held approximately 70 percent of outstanding shares of common stock of the Company. This outreach included direct engagement, off-cycle proxy interactions on ESG with large shareholders as well as various investor coalitions like CA100+, NZAMI and ESG ratings agencies like MSCI, Sustainalytics, Bloomberg, SAM CSA, where the management team regularly updated investors and stakeholders on a range of topics including ESG and gained an understanding of their perspectives and feedback. The Board and management team carefully consider the feedback from these interactions when reviewing our climate-based strategies and priorities in Dow's proxy, investor day materials, 10-K, latest 10-Q and the 2022 INtersections Report. After every quarterly earnings release, Dow's CEO, President and CFO and the IR team interact with top shareholders to discuss the Company's financial performance as well as progress on the ESG goals and initiatives. This cadence continues through the quarter at investor conferences, non-deal investor road shows as well as direct interactions with key shareholders and stakeholders.

Dow provides information on our approach and progress against our CO2 reduction targets, on an annual basis in our INtersections Report. Dow presents information to investors, NGOs, ESG Advisory and ratings firms and investor coalitions on climate-

related initiatives directly and indirectly when appropriate during annual governance engagement and quarterly dialogues with large owners – these events actively seek investor input. At Dow's 2021 Investor Day, which was attended by more than 5000 audience members (online and in person), the company outlined its effort to achieve carbon neutrality by 2050 while meeting its 2030 reduction targets as well as the various programs to develop sustainable products in each of its end markets. Dow also provides updates on its carbon neutrality efforts at each quarterly earnings webcast.

Stockholders and other parties interested in communicating directly with the full Board, the Chair, the independent Lead Director, or the independent Directors as a group or individually, may do so by mail addressed to Dow Inc. in care of the Office of the Corporate Secretary, 2211 H.H. Dow Way, Midland, Michigan 48674 or via email addressed to directors@dow.com.

Frequency of feedback collection

More frequently than annually

Attach any relevant documents which detail your climate transition plan (optional)

2022 INtersections Progress Report.pdf

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy
Row 1	Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios RCP 2.6	Company-wide		To evaluate physical risks, Dow partnered with S&P Global Trucost (Trucost) to assess the Company's exposure to physical risks based on the geographic location of its manufacturing operations. The risks assessed included water stress, flood, heat waves, cold waves, hurricanes, wildfires and sea level rise. Parameters: S&P Trucost utilized climate modelling datasets and hazard models combined with Dow's asset locations to quantify the potential exposure. Assumptions: The RCP 2.6 scenario assumes radiative

			forcing of 2.6 W/m2 in the year 2100. RCP 2.6 requires that CO2 emissions decline from 2020 and approach zero at 2100. Analytical choices: The analysis included a quantitative assessment of the physical risks using a baseline year of 2020 with time periods for medium (year 2030) and long term (year 2050). The following data sources were used: WRI Aqueduct, CMIP5 multi-model average, NOAA, Climate Central, S&P Trucost analysis.
Physical climate scenarios RCP 4.5	Company-wide		To evaluate physical risks, Dow partnered with S&P Global Trucost (Trucost) to assess the Company's exposure to physical risks based on the geographic location of its manufacturing operations. The risks assessed included water stress, flood, heat waves, cold waves, hurricanes, wildfires and sea level rise. Parameters: S&P Trucost utilized climate modelling datasets and hazard models combined with Dow's asset locations to quantify the potential exposure. Assumptions: The RCP 4.5 scenario assumes radiative forcing of 4.5 W/m2 in the year 2100. RCP 4.5 is an intermediate scenario that represents an emissions peak at around 2040, then decline. Analytical choices: The analysis included a quantitative assessment of the physical risks using a baseline year of 2020 with time periods for medium (year 2030) and long term (year 2050). The following data sources were used: WRI Aqueduct, CMIP5 multi-model average, NOAA, Climate Central, S&P Trucost analysis.
Physical climate scenarios RCP 8.5	Company-wide		To evaluate physical risks, Dow partnered with S&P Global Trucost (Trucost) to assess the Company's exposure to physical risks based on the geographic location of its manufacturing operations. The risks assessed included water stress, flood, heat waves, cold waves, hurricanes, wildfires and sea level rise. Parameters: S&P Trucost utilized climate modelling datasets and hazard models combined with Dow's asset locations to quantify the potential exposure. Assumptions: The RCP 8.5 scenario assumes radiative forcing of 8.5 W/m2 in the year 2100. RCP 8.5 is a scenario where emissions continue to rise throughout the 21st century and represents a 'worst case' scenario in terms of potential physical risk. Analytical choices: The analysis included a quantitative assessment of the physical risks using a baseline year

			of 2020 with time periods for medium (year 2030) and long term (year 2050). The following data sources were used: WRI Aqueduct, CMIP5 multi-model average, NOAA, Climate Central, S&P Trucost analysis.
Transition scenarios IEA SDS	Company-wide		The IEA Sustainable Development scenario (IEA SDS) is a 2°C or lower scenario. As per the recommendations from the Task Force on Climate-related Financial Disclosures (TCFD), utilizing a 2°C or lower scenario is recommended. Per IEA, “The SDS is based on a surge in clean energy policies and investment that puts the energy system on track for key SDGs. All current net zero pledges are achieved in full and there are extensive efforts to realize near-term emissions reductions; advanced economies reach net zero emissions by 2050, China around 2060, and all other countries by 2070 at the latest. Without assuming any net negative emissions, this scenario is consistent with limiting the global temperature rise to 1.65°C (with a 50% probability). With some level of net negative emissions after 2070, the temperature rise could be reduced to 1.5°C in 2100.” Parameters: Dow is a large consumer of energy, so transition scenarios that focus on trends in energy consumption are particularly relevant to Dow. Some key parameters used for this scenario include (Examples given at 2030 timeframe): Global Primary energy demand (EJ/year) = 573 at 2030 Energy intensity (kgOE per $1000USD GDP), cagr = -3.6% Global Oil demand (MMbpd) = 89 at 2030 Global Gas demand (Bcfd) = 397 at 2030 Global % renewables in primary energy = 21% at 2030 Global GDP, cagr = 3.4% CO2 pricing (based on 2018 $USD) = $100/ton in advanced economies by 2030 Assumptions: IEA SDS represents the immediate successful scale-up of climate mitigation efforts and global climate policies. It represents a de-coupling of energy consumption and GDP. From a market-trends perspective, IEA SDS represents increased demand for technologies that can help mitigate GHG emissions, and a willingness to pay for low carbon solutions. Analytical choices:

			For the scenario analysis, Dow looked at a 2030 and 2050 timeline using 2020 as a baseline. We quantitatively evaluated the potential impact on our upstream hydrocarbons assets due to global energy dynamics outlined in the scenarios, using internal models. We qualitatively evaluated the impact to our downstream businesses for potential opportunities to deliver solutions to the world described by the scenario.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

For evaluating transitional risks and opportunities, the following high level focal questions were used:
- For risks: in a 'do nothing' approach, could the impact to Dow be significant? For example, in the IEA Sustainable Development scenario, a certain temperature outcome is prescribed (<2°C), and an energy and emissions pathway is then determined to achieve that outcome. To ensure that emission-free technologies can compete with traditional technologies, carbon emission pricing is incorporated in the scenarios. If Dow was subjected to the same emissions pricing as described in the scenarios, and we had not reduced our emissions accordingly, could the impact be material?
- For opportunities: is there a potential to take advantage of the opportunity that would result in significant impact? For example, the IEA Sustainable Development scenario assumes that coordinated policy efforts speed up innovation and deployment timelines for new energy technologies. As Dow has products that support new energies (ie. amines for carbon capture and sequestration), how will we see demand for these products growing over time?
Rationale for scenario selection: The chemicals sector is associated with approximately 11% of the final energy demand globally (IEA World Energy Outlook, 2022). Feedstock dynamics, energy costs, policies focused on energy, etc. could all have material impact on the chemical sector. The chemicals sector also will be key to unlocking the solutions to the needs of the energy transition. Scenarios that focus on energy consumption and trends are of particular relevance to the profitability of the chemical sector.
- Which actions are needed to mitigate risk/ capitalize on opportunity?

For evaluating physical risks:
- Which sites are potentially exposed to water stress, flood, heatwave, cold wave, hurricane, wildfire, and sea level rise, and how sensitive are these risks to different temperature outcomes? For example, how much does our risk of water stress increase if the temperature rises to >3° C compared to 2° C.

Rationale for scenario selection: Physical risks were evaluated using a range of Representative Concentration Pathways (RCP) spanning different temperature outcomes to understand how sensitive the potential impacts to our operations are to varying temperatures.

Results of the climate-related scenario analysis with respect to the focal questions

For transitional risks and opportunities, example result of a focal question:
In a do-nothing approach (ie. if Dow does not take steps to reduce emissions), coordinated policy efforts resulting in the escalation of a regional price on carbon to the levels prescribed in the IEA Sustainable Development Scenario (eg IEA SDS suggests a carbon price of $100 USD/tonne at 2030 in advanced economies based on 2018 $USD) could result in significant impact to Dow. For example, Dow has approximately 1.1 million tonnes of CO2e emissions associated with our operations in Canada. At a cost of $100 USD/tonne at 2030, assuming that every tonne of carbon emissions is taxed, this level of emissions could result in a cost impact to Dow of up to $110 million USD, although not expected to reach this value. The SDS scenarios suggests different price trajectories for carbon in different regions, with advanced economies supporting higher carbon pricing. Current policies in Canada suggest that $100 USD/tonne by 2030 could be a possible pricing outcome. As a result, the supportive policy environment in Canada, coupled with regional feedstock advantage and infrastructure considerations were the driving factors behind Dow's proposal for our Alberta Path 2 Zero project, which is expected to take our Fort Saskatchewan site (the largest contributor to our emissions footprint in Canada) to net zero Scope 1 and 2 emissions by 2030. This will reduce our exposure to regulatory risk due to carbon pricing in this jurisdiction.
For physical risk, example result of a focal question:
Which sites are potentially exposed to water stress and how sensitive is this risk to different temperature outcomes? The result of Dow's analysis with S&P Trucost suggested that while Dow has sites that are water-stressed, the risk these sites may be exposed to related to water scarcity or quality does not significantly change under different RCPs. Nevertheless, the baseline presence of water scarcity and quality risk is identified to be the largest contributor to climate-related physical risk. As such, we have plans in place at our water stressed sites to increase water circularity and improve water quality. For example, we are partnering to reduce our freshwater intake intensity at two water-stressed sites – Bohlen, Germany and Terneuzen, the Netherlands – by enhancing the recycle of various process water streams and using smart monitoring on raw water, discharge and recycle streams to improve water management.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities	Description of influence

	influenced your strategy in this area?	
Products and services	Yes	Climate-related risks and opportunities have informed our strategy as it relates to our products and services across all strategic planning timeframes [short (0-5 years), medium (5-10 years), and long term (>10 years)] and include elements of both climate change adaptation and mitigation. Dow products can often reduce GHG emissions more than the footprint of manufacturing them. We continue to align investments in our product R&D with a low-carbon future. We also evaluate our product line for resiliency in future scenarios. We see climate protection and the circular economy as being inherently linked and we see the circular economy as a tool to further reduce emissions. In 2022, we announced that we will expand our Stop the Waste target to a new Transform the Waste target. This new target aims to transform plastic waste and other forms of alternative feedstock to commercialize 3 million metric tons of circular and renewable solutions by 2030. Further, we continue to advance our efforts on our Close the Loop target, whereby by 2035, Dow will enable 100% of the packaging applications we sell into to be recyclable or reusable. Example of a substantial strategic decision: Situation: The lower-carbon benefits of plastics on a lifecycle basis versus alternatives is critical to a world that is also targeting carbon emissions reduction. To maintain the benefits of plastics and end plastic pollution, it is critical to make low carbon emission circular plastics available. Task: Dow sees advancing the circular economy as a fundamental part of Dow's science-based Decarbonize and Grow strategy to scale our production of circular and low-carbon-emissions solutions. Action: Following our strategy in 2022 we announced the launch of our Circular & Renewable Solutions (C&RS) business platform and announced a partnership with Mura Technology to construct multiple world scale advanced recycling facilities in the US and Europe. Result: These efforts are expected to contribute 600 kilotons of aggregate advanced recycling capacity and to save approximately 1.5 tons of carbon dioxide per ton of plastic recycled, compared to incineration while reducing reliance on fossil-based feedstocks. Dow will become a key off-taker of the circular feed, supplying major brands with

		sustainable products and help scale the elimination of plastic waste while reducing GHG emissions.
Supply chain and/or value chain	Yes	Climate-related risks and opportunities have informed our strategy relative to our value chain through climate change adaptation and mitigation initiatives across all strategic planning timeframes: short (0-5 years), medium (5-10 years), and long term (>10 years). Dow recognizes the need to reduce value chain emissions to mitigate climate-related risk. Dow's goal is to be carbon neutral by 2050, which includes Scope 3 supply chain-related emissions. Dow is developing scope 3 climate strategies for all material categories, which consists of both internal activities to actively manage and reduce our impact as well as external engagement to drive and promote climate action. Dow was named a CDP Supplier Engagement Leader in 2023, achieving an "A" score on the 2022 Supplier Engagement Rating system. Example of substantial strategic decision made in this area: Situation: Reducing purchased logistics emissions is a key priority for Dow. Task: Collaborating with Dow's internal shipment data and our logistics suppliers to identify and track emission reduction opportunities. Action: Emissions are now being tracked on the shipment level. A transportation optimization engine is helping identify shipment consolidations when products can be shipped together while respecting all relevant constraints, including material compatibility, route, temperature requirements and delivery times. Result: Improving data to calculate logistics emissions resulted in a large variance compared to previous years. This resulted in much more granular and accurate calculation of upstream transportation emissions, resulting in a decrease of approximately 50% from 2020 (more than 2 million MTCO2e).
Investment in R&D	Yes	Climate-related risks and opportunities have informed our strategy as it relates to investment in R&D across all strategic planning timeframes [short (0-5 years), medium (5-10 years), and long term (>10 years)], and includes elements of climate change adaptation and mitigation. Achieving Dow's goal to be carbon neutral by 2050 will involve the use of breakthrough technologies. Scenario analysis can provide insights into opportunities for these breakthrough technologies. Example of a substantial strategic decision made in this

		area: Situation: Today's ethylene steam crackers, which make up a large portion of Dow's asset base, rely primarily on natural gas combustion to obtain the temperature needed to operate – making these assets CO2 emission intensive. We know from climate-related scenario analysis that pathways to limit temperature rise to well below 2° C involve an acceleration in the use of clean energy. As the energy grid becomes greener, using clean electricity to heat steam cracker furnaces could become one of the breakthrough technologies to decarbonize the chemicals industry. Task: Develop a technologically and economically feasible solution for ethylene steam crackers that allows the chemicals industry to utilize clean electricity in place of natural gas combustion. Action: In 2020, Dow and Shell announced a joint development agreement to accelerate technology to electrify ethylene steam crackers. Following the initial announcement, other collaborators joined the effort, including The Netherlands Organisation for Applied Scientific Research (TNO) and the Institute for Sustainable Process Technology (ISPT). Result: In 2022, the e-cracking furnace experimental unit was completed and is operational in the Netherlands. This represents a key milestone in the company's joint technology program. The experimental unit is currently being used to test a theoretical electrification model developed for retrofitting today's gas-fired steam cracker furnaces. Data generated by the unit will be used to validate the model and allow the electrification program to advance to the next phase; the design and construction of a multi-megawatt pilot plant, with potential start-up in 2025, subject to investment support.
Operations	Yes	Climate-related risks and opportunities have informed our strategy as it relates to Operations across all strategic planning timeframes [short (0-5 years), medium (5-10 years), and long term (>10 years)] and includes elements around both climate change adaptation and mitigation. Dow recognizes the need to reduce emissions to mitigate climate-related risk. Dow has a goal to reduce emissions by 15% by 2030 (from 2020 baseline) and be carbon neutral by 2050 (Scope 1+2+3 plus product benefits). In addition, Dow has set 'World Leading Operations' 2025 Sustainability Goals that address a number of areas with the goal of reducing our impact on the environment: for example,

		reducing freshwater intake intensity, reducing our waste intensity, and reducing our GHG emissions. Example of a substantial strategic decision made in this area: Situation: A key part of Dow's strategy to reduce our GHG emissions and minimize our carbon exposure is to increase the amount of clean energy in our purchased power mix. We know from climate scenario analysis that clean energy will play an increasingly important role in future electricity grids. Task: We have a dedicated 2025 Sustainability Goal to source 750 MW of renewable power capacity to support our sites by 2025. A portion of our goal is to reduce emissions15% by 2030 (over 2020 levels) and will come from increasing the use of renewable power. Action: In 2022, we expanded access to renewable power to more than 1000 MW, such that more than 40% of our purchased electricity comes from renewable sources. Though we expect variation in this amount year over year, we expect achievement of our target to be on track. Result: In 2022, our scope 2 emissions decreased by approximately 1.1 million metric tons compared to 2021 due to our efforts to procure cleaner sources of energy to support our sites.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures Capital allocation	Climate-related risks and opportunities influence our financial planning across short (1-5 years), medium (5-10 years), and long term (>10 years) timeframes. Case study of how climate-related risks and opportunities have influenced financial planning – Capital Allocation 1. Situation: A climate-related risk for Dow is related to carbon emission pricing regulation. If carbon emission prices rise significantly in the jurisdictions where we operate, it could impact our cost to operate compared to competitors. 2. Task: Ensure the potential for rising emission costs is incorporated into our capital allocation process such that the potential impact of rising

		emission prices is assessed. This enables Dow to make appropriate investment decisions regarding the capital needed for decarbonization. 3. Action: Dow has an internally defined price on carbon that is incorporated in the business process plan and in our long-term division capital allocation process. We maintain a 20-year carbon price forecast for all jurisdictions in which we operate that is updated, at a minimum, on an annual basis. The business process plan is used in one-to-five-year decisions (short term). The division capital allocation process is utilized to evaluate long term investments. As many assets in the chemical industry are capital intensive, long-lived assets, long-term investments are evaluated on a 20-year timeframe. The objective of defining an internal carbon price is to inform the risk of carbon exposure, to make the best decisions that will ensure company results longer term comply with regulatory frameworks. 4. Result: Our projected price on carbon emissions helps inform our decisions regarding the allocation of spending on internal and external resources dedicated to achieving these reduction objectives. For example, Dow's projected emissions price forecast for the EU ETS is incorporated into the project economics for our decarbonization plan for our site in Terneuzen, The Netherlands. Another example is where Dow's projected emissions price forecast for the Alberta TIER is incorporated into the project economics for our decarbonization plan for our site in Alberta, Canada.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition
Row 1	Yes, we identify alignment with our climate transition plan

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric

CAPEX

Type of alignment being reported for this financial metric

Alignment with our climate transition plan

Taxonomy under which information is being reported

Objective under which alignment is being reported

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

522,000,000

Percentage share of selected financial metric aligned in the reporting year (%)

28.63

Percentage share of selected financial metric planned to align in 2025 (%)

60

Percentage share of selected financial metric planned to align in 2030 (%)

60

Describe the methodology used to identify spending/revenue that is aligned

The Company considers sustainability in all capital project decisions, ensuring projects align with the Company's long-term Sustainability Strategy which focuses on decarbonization and growth, circularity advancement, safety of products and operations, and improved reliability of operations Dow is investing approximately $1 billion in annual capital across the economic cycle to decarbonize assets, in a phased approach, while growing capacity.

The Company's capital expenditures include projects that support decarbonization and climate change adaptation and mitigation efforts as part of our climate transition plan. In 2022, Dow's total capital expenditures were $1,823 million, which primarily reflected ongoing investment and/or completion of higher return, lower risk and quick payback incremental growth projects. Of this, approximately $580 million was aligned to projects with direct environmental sustainability drivers, of which approximately $522 million was climate-aligned.

To qualify as climate-aligned capital spending, projects should utilize energy and/or technology solutions that:
- lower or eliminate Scope 1 and/or Scope 2 GHG absolute emissions
- reduce Scope 1 and/or Scope 2 GHG emission intensity
- directly enable other activities to reduce GHG emissions
- address water quality, wastewater discharge and/or freshwater intake
- improve biodiversity and related ecosystems

Climate-aligned projects in 2022:
- Replacement of the Company's obsolete steam and power assets in Louisiana, resulting in lower Scope 1 GHG emissions.
- Retrofit of one of the Company's Louisiana steam crackers with Dow's proprietary FCDh technology to produce on-purpose propylene, which was completed in 2022 and

is expected to reduce energy use and greenhouse gas emissions by up to 20% versus conventional propane dehydrogenation units.
- Addition of an integrated methylene diphenyl diisocyanate ("MDI") distillation and prepolymers facility in Freeport, Texas, which is expected to be completed in 2023 and will generate lower GHG emissions and reduce freshwater intake and wastewater generation.
- Preliminary spending related to the Company's first net zero carbon emissions manufacturing facility in Alberta, Canada.

The Company's expects that projects with environmental sustainability drivers will continue to increase and are anticipated to reach more than 60 percent of Company's annual capital spending by 2025, driven in large part by the Company's "Decarbonize and Grow" strategic projects. We anticipate the 2030 percentage will be similar to 2025 based current expectations for Decarbonize and Grow projects.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Is this a science-based target?

No, but we anticipate setting one in the next two years

Target ambition

Year target was set

2020

Target coverage

Company-wide

Scope(s)

Scope 1
Scope 2

Scope 2 accounting method

Market-based

Base year

2020

Base year Scope 1 emissions covered by target (metric tons CO2e)

28,790,000

Base year Scope 2 emissions covered by target (metric tons CO2e)

6,220,000

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

35,010,000

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

15

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

29,758,500

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

27,290,861

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

4,192,403

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

31,483,264

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

67.1567361706

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

100% of GHG emissions are covered in this target, thus there is no exclusions. Dow is actively working to set a medium term (2030) Scope 3 target while also working to enhance its processes and value chain engagement to ensure transparent reporting and identification of emission reduction opportunities.

Plan for achieving target, and progress made to the end of the reporting year

-Optimizing Our Manufacturing Facilities: We developed and approved Scope 1 and 2 carbon emission reduction plans for Dow's 25 highest emitting sites accounting for ~95% of those emissions. These plans include replacing end-of-life and high carbon-intensity assets with more carbon-efficient technologies and by investing in carbon abatement technologies, including circular hydrogen and carbon capture and storage. We approved the preliminary investment decision to proceed with the world's first net-zero carbon emissions integrated ethylene cracker and derivatives site in Fort Saskatchewan, which will triple the site's capacity and decarbonize approximately 20% of Dow's global ethylene capacity. We have a clear road map to reduce carbon emissions at the Terneuzen site by more than 40% by 2030. This project is progressing as we secure partner and government agreements and subsidies.

-Increasing Use of Clean Energy and Steam: We expanded our access to renewable power capacity to more than 1000 MW, enabling approximately 40% of our purchased electricity to come from renewable sources. We announced a collaboration with X-energy with the intent to utilize zero-carbon-emissions advanced nuclear technology at our Seadrift, Texas site by the end of the decade. Scope 2 GHG emissions reduced 1.1 MMT in 2022 due to Dow's efforts to procure cleaner sources of energy to support its sites.

-Investing in Transformative, Next-Generation Solutions: We are investing in manufacturing technology innovations, such as fluidized catalytic dehydrogenation (FCDh), ethane dehydrogenation (EDH) and electric cracking technology (e-cracking), that will help us transition to cleaner manufacturing facilities by 2050. We completed construction and began final commissioning of our FCDh unit in Louisiana. This breakthrough propylene technology features up to 25% lower capital outlay while reducing energy usage and greenhouse gas emissions by up to 20% versus conventional propane dehydrogenation units. We continue to advance our collaborative e-cracking technology program with Shell, which is on track to start up in 2025. We started up an experimental unit at the Energy Transition Campus Amsterdam, the Netherlands, a key milestone in the companies' joint technology program to electrify steam cracking furnaces.

Dow expects our decarbonization reduction path progress to be variable over the course of our target time frame. See our 2022 INtersections Progress Report page 16 for more details.

List the emissions reduction initiatives which contributed most to achieving this target

Target reference number

Abs 2

Is this a science-based target?

No, but we anticipate setting one in the next two years

Target ambition

Year target was set

2020

Target coverage

Company-wide

Scope(s)

Scope 1
Scope 2
Scope 3

Scope 2 accounting method

Market-based

Scope 3 category(ies)

Category 1: Purchased goods and services
Category 2: Capital goods
Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)
Category 4: Upstream transportation and distribution
Category 5: Waste generated in operations
Category 6: Business travel
Category 7: Employee commuting
Category 8: Upstream leased assets
Category 11: Use of sold products
Category 12: End-of-life treatment of sold products
Category 15: Investments

Base year

2020

Base year Scope 1 emissions covered by target (metric tons CO2e)

28,790,000

Base year Scope 2 emissions covered by target (metric tons CO2e)

6,220,000

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

45,170,000

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

240,000

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

4,750,000

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

2,590,000

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

410,000

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

7,100

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

46,000

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

17,000

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

9,520,000

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

19,120,000

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

4,030,000

Base year total Scope 3 emissions covered by target (metric tons CO2e)

85,900,000

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

120,910,000

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

100

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

100

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

100

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

100

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

100

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

100

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

100

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

100

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

100

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

100

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

100

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2050

Targeted reduction from base year (%)

100

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

0

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

27,290,861

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

4,192,403

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

40,650,000

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

290,000

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

4,420,000

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

2,630,000

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

410,000

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

20,000

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

60,000

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

8,000

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

10,430,000

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

17,460,000

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

4,170,000

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

80,550,000

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

112,031,264

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

7.3432602762

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

100% of GHG emissions are covered in this target. Dow is actively working to set a Scope 3 baseline while also working to enhance its processes and value chain engagement to ensure transparent reporting and identification of emission reduction opportunities. Dow does not currently have any downstream leased assets or franchises (3.13 and 3.14); therefore, these categories are not included. According to guidance from leading NGOs such as WBCSD and CDP, categories 3.9 and 3.10 are not considered relevant for the chemical sector. The WBCSD Chemical Sector Guidance advises chemical companies to disregard category 3.10 due to the complexities associated with data gathering and the resulting uncertainty in values. Additionally, the CDP Technical Note: Relevance of Scope 3 Categories by Sector indicates that only categories 3.11 and 3.12 are relevant for the chemicals sector in terms of downstream scope 3 emissions. However, Dow is committed to ensuring transparent and comprehensive scope 3 accounting and has plans to account for these categories in the future. Dow is actively to build meaningful models of downstream value chain emissions and is collaborating with the industry to enhance the data and methodologies.

Plan for achieving target, and progress made to the end of the reporting year

-Optimizing Our Manufacturing Facilities: We developed and approved Scope 1 and 2 carbon emission reduction plans for Dow's 25 highest emitting sites accounting for ~95% of Dow's Scope 1 and 2emissions. These plans include replacing end-of-life and high carbon-intensity assets with more carbon-efficient technologies and by investing in carbon abatement technologies, including circular hydrogen and carbon capture and storage. We approved the preliminary investment decision to proceed with the world's first net-zero carbon emissions integrated ethylene cracker and derivatives site in Fort Saskatchewan, which will triple the site's capacity and decarbonize approximately 20% of Dow's global ethylene capacity. We have a clear road map to reduce carbon emissions at the site by more than 40% by 2030 in Terneuzen site. This project is progressing as we secure partner and government agreements and subsidies.
-Increasing Use of Clean Energy and Steam: We expanded our access to renewable power capacity to more than 1000 MW, enabling approximately 40% of our purchased electricity to come from renewable sources, and reduced our Scope 2 GHG emissions by 1.1 MMT. We announced a collaboration with X-energy with the intent to utilize zero-carbon-emissions advanced nuclear technology at our Seadrift, Texas site by the end of the decade.
-Investing in Transformative, Next-Generation Solutions: We are investing in manufacturing technology innovations, such as fluidized catalytic dehydrogenation

(FCDh), ethane dehydrogenation (EDH) and electric cracking technology (e-cracking), that will help us transition to cleaner manufacturing facilities by 2050. We completed construction and began final commissioning of our FCDh unit in Louisiana. This breakthrough propylene technology features up to 25% lower capital outlay while reducing energy usage and greenhouse gas emissions by up to 20% versus conventional propane dehydrogenation units. We continue to advance our collaborative e-cracking technology program with Shell, which is on track to start up in 2025. We started up an experimental unit at the Energy Transition Campus Amsterdam, the Netherlands, a key milestone in the companies' joint technology program to electrify steam cracking furnaces.
Dow expects our decarbonization reduction path progress to be variable over the course of our target time frame. See our 2022 INtersections Progress report page 16 for more details.

List the emissions reduction initiatives which contributed most to achieving this target

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Net-zero target(s)
Other climate-related target(s)

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number

Oth 1

Year target was set

2015

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Energy consumption or efficiency
Other, please specify

MW

Target denominator (intensity targets only)

Base year

2015

Figure or percentage in base year

5.85

Target year

2025

Figure or percentage in target year

750

Figure or percentage in reporting year

1,036

% of target achieved relative to base year [auto-calculated]

138.4331116038

Target status in reporting year

Achieved

Is this target part of an emissions target?

One of Dow's 2025 Sustainability Goals is to procure 750 MW of renewable power capacity to support our sites by 2025. Increasing our renewable power capacity reduces our Scope 2 (market based) GHG emissions, which is directly tied to our corporate target to reduce GHG emissions by 5MMT by 2030.

Is this target part of an overarching initiative?

No, it’s not part of an overarching initiative

Please explain target coverage and identify any exclusions

Our ambition is to become the most innovative, customer-centric, inclusive and sustainable materials science company in the world, so that we can achieve our purpose to deliver a sustainable future for the world through our materials science expertise and collaboration with our partners. One of Dow's 2025 Sustainability Goals is to procure 750 MW of renewable power capacity to support our sites by 2025. Dow is a leading user of renewable power in our industry (Source: BNEF, PPA Top Offtakers by Capacity). Under our 2025 Sustainability Goals, Dow has committed to obtain 750 MW of renewable power capacity by 2025.

Plan for achieving target, and progress made to the end of the reporting year

List the actions which contributed most to achieving this target

Dow purchases renewable energy in Europe, Latin America and North America. Because the economics for renewables vary, we have wind, solar, hydro, biomass and landfill gas, depending on the location. All projects are selected based on the lowest long-term cost of power or steam from available alternatives. We support contract-based additionality of renewable power where our assets operate, helping industry and residents alike. Brazil site beginning in 2024, 25 MW of solar power capacity to support the Dow Prentiss, Canada site beginning in 2022, and six agreements across eight sites across Spain, U.K, Sweden, France, and Germany.

Target reference number

Oth 2

Year target was set

2020

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Engagement with suppliers

Percentage of suppliers (by procurement spend) disclosing their GHG emissions

Target denominator (intensity targets only)

Base year

2020

Figure or percentage in base year

0

Target year

2025

Figure or percentage in target year

80

Figure or percentage in reporting year

41

% of target achieved relative to base year [auto-calculated]

51.25

Target status in reporting year

Revised

Is this target part of an emissions target?

Engagement with suppliers on projects to reduce emissions is a subset of Dow's longer term CO2 reduction efforts (target Abs 2).

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions

Dow has a 2025 goal of obtaining ESG data for 80% of procurement spend by 2025, including collecting data on GHG emissions and climate strategy.

Plan for achieving target, and progress made to the end of the reporting year

Dow leverages EcoVadis and CDP as platforms to gather GHG emissions data from its suppliers. Since implementing its supplier ESG data collection program in 2021, Dow has made remarkable progress. The number of environmental, social, and governance assessments has significantly increased from 105 supplier CDP disclosures in 2021 to over 3,300 assessments by CDP and EcoVadis in 2022.

List the actions which contributed most to achieving this target

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Target reference number

Oth 3

Year target was set

2020

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

R&D investments

Percentage of R&D budget/portfolio dedicated to low-carbon products/services

Target denominator (intensity targets only)

Base year

2020

Figure or percentage in base year

80

Target year

2025

Figure or percentage in target year

85

Figure or percentage in reporting year

87

% of target achieved relative to base year [auto-calculated]

140

Target status in reporting year

Achieved

Is this target part of an emissions target?

Yes

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions

Advancement in sustainable technology and products are key component of Dow's climate targets. In 2022, >87% of Dow's R&D Portfolio had alignment to sustainability. These projects are aligned with the following sustainability focus areas: climate protection, circular economy, and safer materials. All of which are part of our 2025 sustainability targets portfolio.

Plan for achieving target, and progress made to the end of the reporting year

List the actions which contributed most to achieving this target

We have developed and implemented an approach that documents the primary alignment of each innovation project to Dow's sustainability priorities. The approach uses a rigorous and well-defined process that includes training, review and approval of the data, as well as an annual evaluation to drive improvement. 2022 was the third year for the evaluation approach and we will continue to evolve to ensure alignment of innovation with our sustainability targets. The following are just a couple of examples of how Dow is investing in improved technology aimed to reach our GHG emission targets. Dow aims to be a leader in the development of lower emissions technology consistent with the recent announcement of a net-zero emissions facility in Alberta, Canada. To get to net-zero carbon emissions for the Alberta site, we also will invest in capabilities to convert cracker off-gas into circular hydrogen to be used as a clean fuel in the production process. We also initiated a joint development project with Shell to develop electrified cracking technology powered by clean energy.

Target reference number

Oth 4

Year target was set

2020

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Other, please specify

Other, please specify

% of enabled packaging applications we sell into that are recyclable or reusable

Target denominator (intensity targets only)

Base year

2020

Figure or percentage in base year

82

Target year

2035

Figure or percentage in target year

100

Figure or percentage in reporting year

87

% of target achieved relative to base year [auto-calculated]

27.7777777778

Target status in reporting year

Underway

Is this target part of an emissions target?

Moving to circular and renewable solutions will require us to transform waste into alternative feedstocks which will gradually displace fossil feedstocks and associated emissions. Further, in a world that is also targeting carbon emissions reduction, plastic packaging offers significant GHG savings over their lifecycle versus available alternatives Thus, improving circularity of plastics through reuse and recycling is critical to preserve the societal and climate benefits of plastic.

Is this target part of an overarching initiative?

No, it’s not part of an overarching initiative

Please explain target coverage and identify any exclusions

Through our Close the Loop (CTL) target, we are tracking our progress toward enabling 100% of the packaging applications we sell to be recyclable or reusable by 2035. The Close the Loop metric is based on secondary market research data and a set of internal assumptions that estimate the regional breakdown of packaging applications, the polyethylene market size of each application and compliance with regional recyclability guidelines. While polyethylene on its own is recyclable, it is often incorporated by our customers into multi-material structures that may not be recyclable. That is why we are committed to helping our customers and brand owners redesign and create packaging solutions that are both high-performance and recyclable. Dow's methodology counts an application as being "enabled" to be recyclable based on Dow Packaging and Specialty Plastics polyethylene product developments AND public announcement or commercialization of a new packaging format (with or without Dow involvement). The Close the Loop metric accounts for global industry polyethylene and does not account for other materials sold into packaging by Dow or other industry participants.

Plan for achieving target, and progress made to the end of the reporting year

Progress made to the end of the reporting year: In 2022, we tracked the transition to recyclability of 22 packaging applications in our industry that were previously considered unrecyclable. Plans for achieving target include support of, and collaboration with, our value chain partners and customers, with whom we are aligning our innovation and application development programs so our products are recycle-ready at the outset or enable circularity in our customers' products and processes. Designing for circularity at the molecular level expands the possibilities for recycling across a variety of applications, and ultimately reduces the environmental impact of our customers' products.

List the actions which contributed most to achieving this target

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs2

Target year for achieving net zero

2050

Is this a science-based target?

No, but we anticipate setting one in the next two years

Please explain target coverage and identify any exclusions

Our emissions reduction targets are scientifically based and in alignment with, and ahead of, the International Energy Agency's 2050 Net Zero Emissions Scenario for the chemical industry. For example, under the recently released Net Zero by 2050 report from the International Energy Agency (IEA), an approximate 95% reduction in energy-related emissions is required by 2050 from the chemicals sector. However, Dow, like other carbon-intensive industries, does not currently have an emissions target pathway that has been approved by the Science Based Targets Initiative. Currently, SBTi does not have chemical sector specific guidance for emissions reductions and decarbonization. Dow is a member of the SBTi expert advisory group (EAG) providing input into the development of this guidance. Dow also collaborates with SBTI/members to bring carbon-intensive industries together to accelerate target setting and adoption. In 2020, Dow announced the following climate protection targets: By 2030, Dow will reduce its net annual GHG emissions by 5 million metric tons vs. its 2020 baseline (15% reduction). By 2050, Dow intends to be carbon neutral (Scope 1 + 2 + 3 plus product benefits). The 2020 baseline represents our Scope 1 + 2 emissions. The value of the Scope 1 plus Scope 2 baseline equals 35.01 million metric tonnes of CO2e. The covered emissions in base year represented here also include approximately 85.90 million metric tonnes of Scope 3 emissions at baseline.

These targets are in addition to our 2025 Sustainability Goals, which have the following climate-related objectives: Dow will obtain 750 MW of its power demand from renewable sources by 2025, which Dow has already exceeded, and Dow will reduce its waste intensity footprint by 20 percent.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Unsure

Planned milestones and/or near-term investments for neutralization at target year

Planned actions to mitigate emissions beyond your value chain (optional)

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	13	
To be implemented*	8	2,855,000
Implementation commenced*	4	436,000
Implemented*	5	1,227,000
Not to be implemented	0	

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Low-carbon energy consumption

Low-carbon electricity mix

Estimated annual CO2e savings (metric tonnes CO2e)

1,052,000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

0

Payback period

No payback

Estimated lifetime of the initiative

3-5 years

Comment

Sourcing cleaner power to support Dow operations at multiple locations in Germany. The estimated annual CO2e savings of 1,052,000 metric tons are related to Scope 2 (market-based) emissions only. While sourcing cleaner power to support our operations also results in a reduction of our Scope 3 category 3 (upstream energy) emissions, that emissions savings is not reflected here.

Initiative category & Initiative type

Non-energy industrial process emissions reductions

Process material efficiency

Estimated annual CO2e savings (metric tonnes CO2e)

76,000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

10,000,000

Investment required (unit currency – as specified in C0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative

Ongoing

Comment

Improved catalyst efficiency in EO production.

Initiative category & Initiative type

Waste reduction and material circularity

Waste reduction

Estimated annual CO2e savings (metric tonnes CO2e)

20,000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

Voluntary/Mandatory

Mandatory

Annual monetary savings (unit currency – as specified in C0.4)
3,500,000

Investment required (unit currency – as specified in C0.4)
29,000,000

Payback period
4-10 years

Estimated lifetime of the initiative
Ongoing

Comment
TX7 Flare Gas Recovery project

Initiative category & Initiative type
Energy efficiency in production processes
Automation

Estimated annual CO2e savings (metric tonnes CO2e)
20,000

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
547,000

Investment required (unit currency – as specified in C0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
Ongoing

Comment
Increase in H2 firing limits at St Charles (Olefins 2 NHVcz controller)

Initiative category & Initiative type
Energy efficiency in production processes
Machine/equipment replacement

Estimated annual CO2e savings (metric tonnes CO2e)

59,000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

10,200,000

Investment required (unit currency – as specified in C0.4)

25,000,000

Payback period

1-3 years

Estimated lifetime of the initiative

Ongoing

Comment

TA-1 installed new high efficiency steam turbine for cracked gas compressor, Tarragona. Emission savings estimates are for Scope 1 only, though there will be impact to Scope 3, Category 3.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	Dow is subject to regulatory requirements at our operating facilities. Maintaining compliance with regulatory requirements and standards is an important driver for potential investments in emission reduction activities.
Financial optimization calculations	Dow strives to manage our facilities in the most cost-effective way, while continuing to ensure the safety of our employees, the environment, and the communities in which we operate. Cost of emissions, as well as cost savings that can occur during optimization projects, is factored into financial optimization evaluations for our projects. Looking for the most cost effective, lowest carbon emitting mode of transportation is another analysis we perform. We calculate emissions by supplier, transportation mode, source and destination locations in order to identify the most carbon efficient means of transport.

Internal price on carbon	Dow has an internal price on carbon that is used when prioritizing capital projects.
Internal incentives/recognition programs	Incentives are provided to all Dow employees through the Annual Performance Award Program. Payouts are determined by measuring actual performance against each metric goal, including progress towards our 2025 Sustainability Goals via an Environmental Stewardship index, which includes our climate-related targets and is part of our World Leading Operations Index metric. In addition, Dow has other incentive programs that award individual projects. For example, the Sustainable Environmental Engagement at Dow (SEED) award recognizes individuals annually who find innovative ways to save money while proactively reducing waste or emissions at Dow.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

Taxonomy used is based off the avoided emissions, see "Methodology used to calculate avoided emissions" for more information.

Type of product(s) or service(s)

Chemicals and plastics

Other, please specify

Interior Insulation

Description of product(s) or service(s)

ENGAGE for PV Modules

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify

A planned benefit reduction strategy was adopted to model the GWP of energy use linearly declining to zero by 2050 and a 5% per year social value reduction.

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Use stage

Functional unit used

1 kg ENGAGE used in PV units

Reference product/service or baseline scenario used

Comparison is against the next best available material for the film.

Life cycle stage(s) covered for the reference product/service or baseline scenario

Use stage

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

2.29

Explain your calculation of avoided emissions, including any assumptions

Benefit of ENGAGE pellets for ENLIGHT film vs. ethylene-vinyl acetate (EVA) film for solar PV panels. This increased the lifetime and efficiency of the panel. It is over a 30-year time horizon.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

1.57

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

Taxonomy used is based off the avoided emissions, see "Methodology used to calculate avoided emissions" for more information.

Type of product(s) or service(s)

Chemicals and plastics

Other, please specify

Exterior Insulation

Description of product(s) or service(s)

Binder for Exterior Insulation Finishing Systems (EIFS)

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify

A planned benefit reduction strategy was adopted to model the GWP of energy use linearly declining to zero by 2050 and a 5% per year social value reduction.

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Use stage

Functional unit used

1kg of binders in 1 m2 of insulation, insulating life over 30 years

Reference product/service or baseline scenario used

EIFS is compared with insulated vinyl sidings (next best chemical solution) – comparable insulation thicknesses (2 inches)

Life cycle stage(s) covered for the reference product/service or baseline scenario

Use stage

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

13.5

Explain your calculation of avoided emissions, including any assumptions

EIFS is compared with Brick wall (non-use) and insulated vinyl sidings (next best chemical solution) – comparable insulation thicknesses (2 inches). No credible non-chemical solution was found. Product benefits are cumulative over 30 years assuming same benefits every year. Heating and cooling days where Dow PU formulations sold used to calculate total benefits.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

0.31

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

Taxonomy used is based off the avoided emissions, see "Methodology used to calculate avoided emissions" for more information.

Type of product(s) or service(s)

Chemicals and plastics

Other, please specify

Packaging

Description of product(s) or service(s)

Plastic packaging

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify

A planned benefit reduction strategy was adopted to model the GWP of energy use linearly declining to zero by 2050 and a 5% per year social value reduction.

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Cradle-to-gate + end-of-life stage

Functional unit used

1 kg of plastic packaging

Reference product/service or baseline scenario used

Plastic packaging vs. other technologies (steel, aluminium, glass, paper, etc.)

Life cycle stage(s) covered for the reference product/service or baseline scenario

Cradle-to-gate + end-of-life stage

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

0.003

Explain your calculation of avoided emissions, including any assumptions

Benefit is based on the 2018 Franklin report for N. America showing the benefit of plastic versus other technologies. Benefit would be the same over any time horizon (i.e., 1 year or 30 years).

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

23.6

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

Taxonomy used is based off the avoided emissions, see "Methodology used to calculate avoided emissions" for more information.

Type of product(s) or service(s)

Chemicals and plastics

Other, please specify

Window sealants

Description of product(s) or service(s)

Silicones for window sealing

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify

A planned benefit reduction strategy was adopted to model the GWP of energy use linearly declining to zero by 2050 and a 5% per year social value reduction

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Cradle-to-grave

Functional unit used

1 kg Silicone Product

Reference product/service or baseline scenario used

Silicone Window Sealant (outside-facing IG window units) vs. Polyurethane and Polysulfide Window Sealant

Life cycle stage(s) covered for the reference product/service or baseline scenario

Cradle-to-grave

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

0.192

Explain your calculation of avoided emissions, including any assumptions

30-year timeframe used in assessment; benefit is due to less seal failure with silicone sealant and therefore less building energy use. Benefit is based on the case study originally completed in the Global Silicones report. Silicone sealant carbon footprint is higher than PU alternative, but after 20 years seal failures begin with PU, so benefit for silicone sealant occurs during last 10 years of a 30-year window life span.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

0.19

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

Taxonomy used is based off the avoided emissions, see "Methodology used to calculate avoided emissions" for more information.

Type of product(s) or service(s)

Chemicals and plastics

Other, please specify

Interior Insulation

Description of product(s) or service(s)

PU for Insulated metal panels (IMP)

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify

A planned benefit reduction strategy was adopted to model the GWP of energy use linearly declining to zero by 2050 and a 5% per year social value reduction.

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Use stage

Functional unit used

1 kg formulated PU insulation product sold for IMP.

Reference product/service or baseline scenario used

Comparison is same thickness mineral wool-based IMP.

Life cycle stage(s) covered for the reference product/service or baseline scenario

Use stage

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

0.0611

Explain your calculation of avoided emissions, including any assumptions

Benefit of PU based IMP is calculated compared to mineral wool-based IMP using annual energy flow reduction with same thickness while PU IMP having lower density than mineral wool IMP. Product benefits is cumulative over 30 years assuming same benefits every year. Heating and cooling days where Dow PU formulations sold used to calculate total benefits.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

0.7

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

No

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	Yes, a change in methodology	Dow continues to improve its calculation methodologies for GHG emission accounting globally as part of an effort to align with the GHG protocol standard. Scope 1 and Scope 2 changes, which in aggregate were higher than our 0.5% threshold, resulted in baseline year changes. Specifically, Scope 1 revisions have been made to reflect identified data corrections and methodology improvements at low-emitting facilities aligning with the GHG protocol standard. Scope 2 improvements have been made to reflect the GHG Protocol's hierarchy of using utility/supplier-specific emissions factors or residual mix factors when available. All changes are immaterial to the 2022 INtersections report and its disclosures as a whole. Scope 3 methodologies also significantly improved in 2022 through the inclusion of suppliers' emissions data for the first time.

		Additional details on Scope 3 changes are noted throughout section 6.5.

C5.1c

(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Scope(s) recalculated	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	Yes	Scope 1 Scope 2, market-based	If changes occur in the configuration of Dow assets or if significant emissions changes are found that make a material impact to its global footprint, the baseline year will be recalculated to include the new configuration. Dow's internally recognized threshold for significant changes is 0.5% of the previous year's global total. These changes include, but are not limited to, transfer of ownership, improvement of calculation methodologies or the accuracy of emissions factors, and discovery of significant errors, single or collectively.	Yes

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

28,790,000

Comment

The baseline provided here is associated with Dow's 2030 carbon emission target to reduce emissions by 5 million metric tonnes (Scope 1 + Scope 2). Dow's baseline emissions represent emissions in 2020.

Scope 2 (location-based)

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

3,950,000

Comment

The baseline provided here is for reference. Dow utilizes our Scope 2 (market-based) value to track progress against our targets, including Dow's 2030 carbon emission target to reduce emissions by 5 million metric tonnes (Scope 1 + Scope 2).

Scope 2 (market-based)

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

6,220,000

Comment

The baseline provided here is associated with Dow's 2030 carbon emission target to reduce emissions by 5 million metric tonnes (Scope 1 + Scope 2). Dow's baseline emissions represent emissions in 2020.

Scope 3 category 1: Purchased goods and services

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

45,170,000

Comment

Dow is actively working to set a Scope 3 baseline while also working to enhance its processes and value chain engagement to ensure transparent reporting and identification of emission reduction opportunities.

Scope 3 category 2: Capital goods

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

240,000

Comment

Dow is actively working to set a Scope 3 baseline while also working to enhance its processes and value chain engagement to ensure transparent reporting and identification of emission reduction opportunities.

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

4,750,000

Comment

Dow is actively working to set a Scope 3 baseline while also working to enhance its processes and value chain engagement to ensure transparent reporting and identification of emission reduction opportunities.

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

2,590,000

Comment

Dow is actively working to set a Scope 3 baseline while also working to enhance its processes and value chain engagement to ensure transparent reporting and identification of emission reduction opportunities.

Scope 3 category 5: Waste generated in operations

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

410,000

Comment

Dow is actively working to set a Scope 3 baseline while also working to enhance its processes and value chain engagement to ensure transparent reporting and identification of emission reduction opportunities.

Scope 3 category 6: Business travel

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

7,100

Comment

Dow is actively working to set a Scope 3 baseline while also working to enhance its processes and value chain engagement to ensure transparent reporting and identification of emission reduction opportunities.

Scope 3 category 7: Employee commuting

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

46,000

Comment

Dow is actively working to set a Scope 3 baseline while also working to enhance its processes and value chain engagement to ensure transparent reporting and identification of emission reduction opportunities.

Scope 3 category 8: Upstream leased assets

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

17,000

Comment

Dow is actively working to set a Scope 3 baseline while also working to enhance its processes and value chain engagement to ensure transparent reporting and identification of emission reduction opportunities.

Scope 3 category 9: Downstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 11: Use of sold products

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

9,520,000

Comment

Dow is actively working to set a Scope 3 baseline while also working to enhance its processes and value chain engagement to ensure transparent reporting and identification of emission reduction opportunities.

Scope 3 category 12: End of life treatment of sold products

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

19,120,000

Comment

Dow is actively working to set a Scope 3 baseline while also working to enhance its processes and value chain engagement to ensure transparent reporting and identification of emission reduction opportunities.

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 15: Investments

Base year start

January 1, 2020

Base year end

December 31, 2020

Base year emissions (metric tons CO2e)

4,030,000

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Smart Freight Centre: GLEC Framework for Logistics Emissions Methodologies
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
The Greenhouse Gas Protocol Agricultural Guidance: Interpreting the Corporate Accounting and Reporting Standard for the Agricultural Sector
The Greenhouse Gas Protocol: Scope 2 Guidance
The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard
US EPA Emissions & Generation Resource Integrated Database (eGRID)
Other, please specify
Together for Sustainability Product Carbon Footprint Guideline for the Chemical Industry, WBCSD Pathfinder Framework

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

27,290,861

Start date

January 1, 2022

End date

December 31, 2022

Comment

The GHG emissions covered by this inventory are based on the calendar year January 1, 2022, to December 31, 2022. Dow reports GHG emissions under the operational control approach criteria described in this standard. In cases where asset ownership is shared, a company has operational control over an asset if they have the full authority to introduce and implement its operating policies at the facility. For operations where Dow is a 50-50 partner or less and does not have full authority to implement its policies, emissions are excluded from this inventory. The company reports GHG emissions at approximately 100 sites globally, with approximately 25 of those sites accounting for over 95% of its total GHG emissions.

The following accounting includes four of the seven GHG emissions covered by the UNFCCC/Kyoto Protocol: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), and hydrofluorocarbons (HFCs). Dow does not have emissions of perfluorocarbons (PFCs), sulfur hexafluoride (SF6), or nitrogen trifluoride (NF3). GHG emissions are reported in millions of metric tons of carbon dioxide equivalents (CO2e).

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)

28,389,713

Start date

January 1, 2021

End date

December 31, 2021

Comment

The GHG emissions covered by this inventory are based on the calendar year January 1, 2021, to December 31, 2021

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)

28,790,000

Start date

January 1, 2020

End date

December 31, 2020

Comment

Dow measures its progress for Scope 1 emissions toward its current reduction target by its baseline year, 2020. If changes occur in the configuration of Dow assets or if significant emissions changes are found that make a material impact to its global footprint, the baseline year will be recalculated to include the new configuration. Dow's internally recognized threshold for significant changes is 0.5% of the previous year's global total. These changes include, but are not limited to, transfer of ownership, improvement of calculation methodologies or the accuracy of emissions factors, and discovery of significant errors, single or collectively.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

For tracking against its targets to reduce GHG emissions, Dow utilizes the market-based methodology for Scope 2 accounting. Emissions are calculated by multiplying the amount of company-purchased steam and electricity consumed by supplier or utility-specific emissions factors or factors denoted through energy attribute certificates, when available. For U.S. sites, where supplier or utility factors are not available, Green-e® Residual Mix factors are used, as these are readily available. In all other cases, Dow utilizes location-based emissions factors. The impacted portion of electricity purchases is insignificant to overall Scope 2 emissions. Dow also reports Scope 2 emissions using the location-based method in which quantities of company-purchased steam and electricity are multiplied by the appropriate emissions factors for that geographic area, rather than supplier-specific factors. For U.S.-based locations, Dow used the location-

based emissions factors from the EPA EGrid (2020) and for non-U.S. locations Dow used the International Energy Agency (IEA) (2020, released in 2022).

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

3,447,079

Scope 2, market-based (if applicable)

4,192,403

Start date

January 1, 2022

End date

December 31, 2022

Comment

Scope 2 emissions, baselined in 2020, reflect power and steam purchases to supply manufacturing operations around the world. These are calculated according to the GHG Protocol Scope 2 Guidance, including both location-based and market-based methods. The Scope 2 emissions included in the corporate total used for tracking progress against Dow's GHG emissions reduction targets are calculated using the market-based method. For Scope 2 emissions, Dow requests, but does not verify, emission factors in CO2e per unit energy from its suppliers. Dow assumes the most recent IPCC assessment report (AR6) 100-year GWP values for all data if not provided. Dow will continue to improve its understanding of the factors used by its suppliers to represent the information as accurately as possible in the future. The data below includes three of the seven GHG emissions covered by the United Nations Framework Convention on Climate Change (UNFCCC)/Kyoto Protocol: CO2, CH4 and N2O. Emissions of HFCs, PFCs, SF6 or NF3 are not material to Scope 2 emissions.

Past year 1

Scope 2, location-based

3,943,188

Scope 2, market-based (if applicable)

5,802,348

Start date

January 1, 2021

End date

December 31, 2021

Comment

Scope 2 emissions, baselined in 2020, reflect power and steam purchases to supply manufacturing operations around the world. These are calculated according to the GHG Protocol Scope 2 Guidance, including both location-based and market-based methods. The Scope 2 emissions included in the corporate total used for tracking progress against Dow's GHG emissions reduction targets are calculated using the market-based method. For Scope 2 emissions, Dow requests, but does not verify, emission factors in CO2e per unit energy from its suppliers. Dow assumes the most recent IPCC assessment report (AR6) 100-year GWP values for all data if not provided. Dow will continue to improve its understanding of the factors used by its suppliers to represent the information as accurately as possible in the future. The data below includes three of the seven GHG emissions covered by the United Nations Framework Convention on Climate Change (UNFCCC)/Kyoto Protocol: CO2, CH4 and N2 O. Emissions of HFCs, PFCs, SF6 or NF3 are not material to Scope 2 emissions.

Past year 2

Scope 2, location-based

3,950,000

Scope 2, market-based (if applicable)

6,220,000

Start date

January 1, 2020

End date

December 31, 2020

Comment

Dow measures its progress for Scope 2 emissions toward its current reduction target by its baseline year, 2020. If changes occur in the configuration of Dow assets or if significant emissions changes are found that make a material impact to its global footprint, the baseline year will be recalculated to include the new configuration. Dow's internally recognized threshold for significant changes is 0.5% of the previous year's global total. These changes include, but are not limited to, transfer of ownership, improvement of calculation methodologies or the accuracy of emissions factors, and discovery of significant errors, single or collectively.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source of excluded emissions

A subset of scope 3 downstream emissions from 3.9 Downstream Transportation is not currently included in Dow's scope 3 accounting.

Scope(s) or Scope 3 category(ies)

Scope 3: Downstream transportation and distribution

Relevance of Scope 1 emissions from this source

Relevance of location-based Scope 2 emissions from this source

Relevance of market-based Scope 2 emissions from this source

Relevance of Scope 3 emissions from this source

Emissions are not relevant

Date of completion of acquisition or merger

Estimated percentage of total Scope 1+2 emissions this excluded source represents

Estimated percentage of total Scope 3 emissions this excluded source represents

3

Explain why this source is excluded

According to guidance from leading NGOs such as WBCSD and CDP, categories 3.9 and 3.10 are not considered relevant for the chemical sector. Additionally, the CDP Technical Note: Relevance of Scope 3 Categories by Sector indicates that only categories 3.11 and 3.12 are relevant for the chemicals sector in terms of downstream scope 3 emissions. However, Dow is committed to ensuring transparent and comprehensive scope 3 accounting and has plans to account for these categories in the future. Dow is actively to build meaningful models of downstream value chain emissions and is collaborating with the industry to enhance the data and methodologies.

Explain how you estimated the percentage of emissions this excluded source represents

The value provided here is equivalent to Dow's 3.4 upstream emissions, which may provide a benchmark for downstream emissions.

Source of excluded emissions

A subset of scope 3 downstream emissions from 3.10 Process of Sold Products is not currently included in Dow's scope 3 accounting.

Scope(s) or Scope 3 category(ies)

Scope 3: Processing of sold products

Relevance of Scope 1 emissions from this source

Relevance of location-based Scope 2 emissions from this source

Relevance of market-based Scope 2 emissions from this source

Relevance of Scope 3 emissions from this source

Emissions are not relevant

Date of completion of acquisition or merger

Estimated percentage of total Scope 1+2 emissions this excluded source represents

Estimated percentage of total Scope 3 emissions this excluded source represents

3

Explain why this source is excluded

According to guidance from leading NGOs such as WBCSD and CDP, categories 3.9 and 3.10 are not considered relevant for the chemical sector. The WBCSD Chemical Sector Guidance advises chemical companies to disregard category 3.10 due to the complexities associated with data gathering and the resulting uncertainty in values. Additionally, the CDP Technical Note: Relevance of Scope 3 Categories by Sector indicates that only categories 3.11 and 3.12 are relevant for the chemicals sector in terms of downstream scope 3 emissions. However, Dow is committed to ensuring transparent and comprehensive scope 3 accounting and has plans to account for these categories in the future. Dow is actively to build meaningful models of downstream value chain emissions and is collaborating with the industry to enhance the data and methodologies.

Explain how you estimated the percentage of emissions this excluded source represents

The relevance of scope 3.10 is based on analysis of the chemical sector's scope 3 in the 2022 report: CDP Technical Note: Relevance of Scope 3 Categories by Sector.

Source of excluded emissions

A subset of scope 3 downstream emissions from 3.13 Downstream leased assets emissions is not currently included in Dow's scope 3 accounting.

Scope(s) or Scope 3 category(ies)

Scope 3: Downstream leased assets

Relevance of Scope 1 emissions from this source

Relevance of location-based Scope 2 emissions from this source

Relevance of market-based Scope 2 emissions from this source

Relevance of Scope 3 emissions from this source

Emissions are not relevant

Date of completion of acquisition or merger

Estimated percentage of total Scope 1+2 emissions this excluded source represents

Estimated percentage of total Scope 3 emissions this excluded source represents

0

Explain why this source is excluded

Dow does not have any materially significant downstream leased assets.

Explain how you estimated the percentage of emissions this excluded source represents

Dow does not have any materially significant downstream leased assets.

Source of excluded emissions

A subset of scope 3 downstream emissions from 3.14 Franchises emissions is not currently included in Dow's scope 3 accounting.

Scope(s) or Scope 3 category(ies)

Scope 3: Franchises

Relevance of Scope 1 emissions from this source

Relevance of location-based Scope 2 emissions from this source

Relevance of market-based Scope 2 emissions from this source

Relevance of Scope 3 emissions from this source

Emissions are not relevant

Date of completion of acquisition or merger

Estimated percentage of total Scope 1+2 emissions this excluded source represents

Estimated percentage of total Scope 3 emissions this excluded source represents

0

Explain why this source is excluded

Dow does not have any franchises.

Explain how you estimated the percentage of emissions this excluded source represents

Dow does not have any franchises.

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

40,650,000

Emissions calculation methodology

Hybrid method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

1

Please explain

This category encompasses all upstream emissions (from extraction, production, and distribution) associated with the products Dow purchased or acquired in 2022, as recorded on invoices. These products include both tangible goods and intangible services. Dow calculates the greenhouse gas emissions on an invoice-by-invoice basis; the resulting emissions from each invoice are then aggregated to determine the total 3.1 emissions for 2022.

Regarding raw materials, Dow multiplies the actual purchased quantities by a weight-based emissions factor that represents the emissions generated from the extraction to the point where Dow takes control of the material (cradle-to-gate emissions). The conversion to CO2e is based on either product carbon footprint data reported by the supplier, a custom emissions factor representative of supply chain conditions, or an industry average emissions factor that closely matches the purchased item in terms of geography and manufacturing processes. This methodology is applied to more than 95% of the quantity of raw materials purchased in 2022. For the remaining 5%, which are materials purchased in small quantities, a weighted average emissions factor is used that represents the average carbon intensity of the materials purchased by Dow in 2022. For purchased services and packaging, Dow adopts a spend-based accounting approach. This involves multiplying the dollars spent with a revenue intensity factor provided by the supplier or an industry average factor. Non-invoiced spend was excluded from this accounted due to lack of data.

Dow's accounting practices adhere to the Greenhouse Gas Protocol and the Together for Sustainability Product Carbon Footprint Guideline for the Chemical Industry, which includes specifications for 3.1 accounting. Additionally, considerations for evaluating supplier product carbon footprints are based on the WBCSD Pathfinder Framework. Emissions factors are sourced from Ecoinvent 3.9, Carbon Minds, EIO LCA, CDP, and Dow's suppliers.

Capital goods

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

290,000

Emissions calculation methodology

Hybrid method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

1

Please explain

This category encompasses all upstream emissions arising from the extraction, production, and transportation of capital goods that were purchased or acquired by Dow in 2022. Notably, Dow achieved a substantial enhancement in the accuracy of reporting for this category during 2022. Now, the assessment of Capital Goods emissions aligns with the methodology used for 3.1 Purchased Goods & Services, employing an invoice-by-invoice analysis. Wherever possible, activity-based accounting was aligned with purchased quantity data. In some cases, the specific materials purchased by contractors are not visible within purchasing records; in those cases, a spend-based analysis is used. As a result of these accounting improvements, the reported emissions related to Capital Goods have significantly decreased compared with previous estimates, providing a more reliable reflection of Dow's emissions in this category. Accounting is aligned with the Greenhouse Gas Protocol; emissions factors are sourced from Ecoinvent 3.9, EIO LCA, CDP, and Dow's suppliers.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

4,420,000

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

This category encompasses emissions associated with the extraction, production, and transportation of fuels and energy that were purchased and consumed by Dow in 2022. To calculate these emissions, the average-data method is utilized, leveraging internal records of fuel and energy purchases during 2022. For purchased fuels, quantities of fuels are obtained from Dow's internal purchasing records. These quantities are then converted to CO2e by using emissions factors that match the location of purchase. Regarding purchased electricity, the quantity of electricity is derived from purchasing records. The CO2e calculation involves multiplying country/grid-specific emission factors, excluding emissions from combustion. For purchased steam, scope 2 emissions data is utilized to find the amount of fuel used to generate the steam. This amount is then multiplied by the emissions factor of the specific fuel type per location. Additionally, transmission and distribution losses are taken into account. The scope 3 country-specific transmission and distribution losses for electricity generation are multiplied by the quantity of non-renewable electricity at each site, as well as the loss rate. Accounting is aligned with the Greenhouse Gas Protocol; emissions factors are sourced from Ecoinvent 3.9 and World Bank.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

2,630,000

Emissions calculation methodology

Hybrid method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

57

Please explain

This category includes emissions from third-party transportation and distribution services purchased by Dow in 2022 (either directly or through an intermediary), including inbound logistics, outbound logistics (e.g., of sold products), and third-party transportation and distribution between Dow's own facilities. The majority of GHG emissions in this category were estimated using Dow's shipment data. Specifically, tonne-kilometers were calculated using actual shipment weight and modelled distance by shipping type. For other transport services, such as storage, logistics planning, and pipeline transport, spend-based estimates are used. The following were not included in the accounting due to limited data availability: site logistics emissions, reverse logistics, and purchased logistics of feedstock outside of Europe.

Supplier transport carbon footprint data was used for all maritime and air shipments. For land surface shipments, primary data was only used for complex modes of transport, such as intermodal shipments. Primary data was converted to emission factors specific to the scope of activities at the transport leg level. Primary data was obtained through direct supplier engagement and industry associations such as Sea Cargo Charter, CDP, and Smart Freight Centre Data Sharing Proof of Concept. Carbon accounting in this category is aligned with the Greenhouse Gas Protocol and Global Logistics Emissions Council Framework; the evaluation of supplier freight carbon footprints considered the WBCSD Pathfinder Framework.

Waste generated in operations

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

410,000

Emissions calculation methodology

Average data method

Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Category 5 encompasses the emissions resulting from the third-party disposal and treatment of waste generated in Dow's owned or controlled operations in 2022. The accounting is a mix between waste-type-specific method, with a differentiation between hazardous and non-hazardous materials, and the average-data method, where emissions estimates are based on the average carbon intensity of the treatment method used to dispose of Dow's waste and the region where the activity took place. Significant improvements were made in this category during 2022, including enhanced estimations of waste quantities and the incorporation of regional emissions factors for waste treatment. Accounting is aligned with the Greenhouse Gas Protocol; emissions factors are sourced from Ecoinvent 3.9. Notably, emissions from waste that is recycled (negative emissions) and emissions from waste incinerated in waste-to-energy facilities are excluded, in accordance with the principles outlined by the Greenhouse Gas Protocol.

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

20,000

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

83

Please explain

This category includes emissions from the transportation of Dow employees for business-related activities in airplanes, rental cars, and hotels operated by a third party. For rental cars, the number of days that cars were rented was shared by Dow's travel agency. An average number of miles driven per day was used, then converted to CO2e using an average emissions factor for passenger cars. For hotels, the number of nights in hotels was shared by Dow's travel agency; an average emissions factor was used to estimate CO2e. For air flights, each origin-destination pair was accounted for, then converted to kilometers using great circle distance. Average emissions factors were used to find CO2e, assigned based on the distance for each air travel leg, such as long, medium, and short haul flights. Of note, car transport book through third-party apps and business travel booked outside of Dow's travel agency was not included here due to data availability. Accounting is based on the Greenhouse Gas Protocol, with average data sourced from Ecoinvent 3.9, AAA Foundation, and Defra. Note that business travel emissions from Dow's owned assets, such as cars or planes, are included in our Scope 1 accounting.

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

60,000

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

This category comprises emissions resulting from the transportation of employees between their homes and Dow worksites. The calculation for this category relies on two primary data points. Firstly, the count of employees who reported to Dow labs and offices in 2022 was determined based on badge-in records. Badge data is currently available only for US labs and offices, which means that employees commuting to labs/offices in other regions are presently not included in the calculation. Secondly, an estimate was made for the number of staff commuting to Dow's global manufacturing facilities and the number of days per year they are expected to commute. Given that most employees considered in this category are based in the US, it was assumed that commuting distances and vehicles emissions are consistent with US averages. Accounting follows the Greenhouse Gas Protocol; average data were sourced from the AAA Foundation and the US EPA.

Upstream leased assets

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

8,000

Emissions calculation methodology

Hybrid method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

This category includes emissions from the operation of assets leased by Dow in 2022 that were not already accounted for in Dow's scope 1 or scope 2 inventories. It specifically refers to leased office spaces managed by Dow's Corporate Facilities where Dow has no operational or financial control over the property. In these cases, the lessor is responsible for paying the energy bill, and the cost and consumption details are not directly visible to Dow. To estimate emissions, Dow utilizes the average energy use per

square meter across its leased and owned sites where detailed energy consumption data is available. It then multiplies this average energy use per square meter by the square meter measurement of each relevant leased office space. The calculated average energy use is subsequently converted to CO2e emissions using energy grid factors that match the region of each office location. This approach ensures that the emissions calculations align with the specific characteristics of the energy grid in the respective office's geographical area. Accounting is aligned with the Greenhouse Gas Protocol, with emissions factors sourced from Ecoinvent 3.9.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

This category includes emissions from transportation and distribution of sold products in vehicles and facilities not owned, controlled, or subcontracted by Dow. This is a highly uncertain category, with significant limitations in available data and guidance for model downstream transportation for intermediates. According to guidance from leading NGOs such as WBCSD and CDP, categories 3.9 and 3.10 are not considered relevant for the chemical sector. Additionally, the CDP Technical Note: Relevance of downstream Scope 3 Categories by sector indicates that only categories 3.11 and 3.12 are relevant for the chemicals sector. However, Dow is committed to ensuring transparent and comprehensive scope 3 accounting and has plans to account for these categories in the future. Dow is actively to build meaningful models of downstream value chain emissions and is collaborating with the industry to enhance the data and methodologies.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

This category includes emissions from the processing of sold intermediate products by third parties after sale by Dow. Intermediate products are products that require further processing, transformation, or inclusion in another product before use and therefore result in emissions from processing after sale by Dow and before use by the end consumer. According to guidance from leading NGOs such as WBCSD and CDP, categories 3.9 and 3.10 are not considered relevant for the chemical sector. The WBCSD Chemical Sector Guidance advises chemical companies to disregard category 3.10 due to the complexities associated with data gathering and the resulting uncertainty in values. Additionally, the CDP Technical Note: Relevance of Scope 3 Categories by Sector indicates that only categories 3.11 and 3.12 are relevant for the chemicals sector in terms of downstream scope 3 emissions. However, Dow is committed to ensuring transparent and comprehensive scope 3 accounting and has plans to account for these categories in the future. Dow is actively to build meaningful models of downstream value chain emissions and is collaborating with the industry to enhance the data and methodologies.

Use of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

10,430,000

Emissions calculation methodology

Methodology for direct use phase emissions, please specify

See methodology explanation.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

This category includes emissions from the use of products sold by Dow in 2022. Here we include only Dow's sold products that have direct use phase emissions, namely hydrocarbons and carbon black that are sold for use in fuels and are combusted in their use phase. All other Dow sold products are included in 3.12 End of Life; the sum of sold products included in 3.11 and 3.12 equals the total quantity of Dow's sold products. Emissions were calculated based on the carbon content of each sold product, found by multiplying the weight of sold products by the ratio of elemental carbon to molecular weight. It is assumed that this total product weight was converted to 100% carbon dioxide with no side reactions. Accounting is aligned with the Greenhouse Gas Protocol.

End of life treatment of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

17,460,000

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Category 12 encompasses emissions resulting from the disposal and treatment of products sold by Dow at the end of their life cycle. It's important to note that this category focuses on the expected end-of-life emissions from intermediate products, not the final product itself. The products included in this category represent all Dow products that are not accounted for in scope 3.11. As a global company with diverse sales across various sectors, it is often challenging to determine with certainty how sold products are

treated at the end of their life cycles. To establish a reasonable estimate, we utilize internal data on the types of products Dow sells, the sectors in which they are sold, and the regions of sales. Additionally, global estimates of end-of-life treatment rates from the OECD are considered. These data points are used to create a model that estimates the quantity of Dow products that undergo recycling, incineration, landfilling, wastewater treatment, or other treatment methods. The resulting GHG emissions are estimated using regional, industry average emissions factors. Accounting is aligned with the Greenhouse Gas Protocol; emissions factors were sourced from Ecoinvent 3.9. It's important to note that negative emissions resulting from the recycling of sold products are not included in this category, following the guidelines set forth by the Greenhouse Gas Protocol.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Dow does not have downstream leased assets.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Dow does not have franchises.

Investments

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

4,170,000

Emissions calculation methodology

Investment-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

This category considers Principle Nonconsolidated Affiliates (PNA), or Investments. A listing of the PNAs and Dow’s ownership percentage were taken from the 2022 10-K report. The following PNAs are included in 3.15: EQUATE, Kuwait Olefins Company, Kuwait Styrene Company, Map Ta Phut Olefins Company Limited, Sadara Chemical Company, Siam Polyethylene Company Limited, Siam Polystyrene Company Limited, Siam Styrene Monomer Company Limited, and Siam Synthetic Latex Company Limited.

Each of these PNAs report their 2022 scope 1 and 2 data to Dow. Dow's scope 3.15 emissions are based on the % share of ownership in those companies applied to the sum of 2022 scope 1 and 2 emissions. For example, if Dow owns 45% of an investment company, Dow claims 45% of that company's 2022 scope 1 and 2 emissions. Accounting is based on the Greenhouse Gas Protocol.

Other (upstream)

Evaluation status

Please explain

Other (downstream)

Evaluation status

Please explain

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

Start date

January 1, 2021

End date

December 31, 2021

Scope 3: Purchased goods and services (metric tons CO2e)

41,650,000

Scope 3: Capital goods (metric tons CO2e)

230,000

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

5,220,000

Scope 3: Upstream transportation and distribution (metric tons CO2e)

2,680,000

Scope 3: Waste generated in operations (metric tons CO2e)

380,000

Scope 3: Business travel (metric tons CO2e)

4,500

Scope 3: Employee commuting (metric tons CO2e)

51,000

Scope 3: Upstream leased assets (metric tons CO2e)

14,000

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e)

10,000,000

Scope 3: End of life treatment of sold products (metric tons CO2e)

18,150,000

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

3,700,000

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

Dow is committed to providing clear, current and transparent data for our emissions reporting following industry-standard methods and data. We align our methods to industry-standard ecoinvent emissions factors, which are updated yearly with expanded sectorial and geographic coverage. As a result, Dow has restated certain data to ensure transparent interpretation of year-over-year changes as we applied the most current version of ecoinvent emissions factors and continue to evolve our approach by leveraging more specific supplier and product data.

Past year 2

Start date

January 1, 2020

End date

December 31, 2020

Scope 3: Purchased goods and services (metric tons CO2e)

45,170,000

Scope 3: Capital goods (metric tons CO2e)

240,000

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

4,750,000

Scope 3: Upstream transportation and distribution (metric tons CO2e)

2,590,000

Scope 3: Waste generated in operations (metric tons CO2e)

410,000

Scope 3: Business travel (metric tons CO2e)

7,100

Scope 3: Employee commuting (metric tons CO2e)

46,000

Scope 3: Upstream leased assets (metric tons CO2e)

17,000

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e)

9,520,000

Scope 3: End of life treatment of sold products (metric tons CO2e)

19,120,000

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

4,030,000

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

Dow is committed to providing clear, current and transparent data for our emissions reporting following industry-standard methods and data. We align our methods to industry-standard ecoinvent emissions factors, which are updated yearly with expanded sectorial and geographic coverage. As a result, Dow has restated certain data to ensure transparent interpretation of year-over-year changes as we applied the most current version of ecoinvent emissions factors and continue to evolve our approach by leveraging more specific supplier and product data.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Yes

C6.7a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	460,000	In accordance with the Greenhouse Gas Protocol, biogenic emissions are reported separate from our Scope 1 GHG emissions accounting.

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.00055

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

31,483,264

Metric denominator

unit total revenue

Metric denominator: Unit total

56,900,000,000

Scope 2 figure used

Market-based

% change from previous year

25

Direction of change

Decreased

Reason(s) for change

Change in renewable energy consumption
Other emissions reduction activities

Please explain

GHG Intensity by revenue decreased due to a reduction in Dow's overall Scope 1 and Scope 2 emissions. Scope 1 emissions decreased in 2022 relative to 2021, primarily due to reductions supported by our emissions reduction projects, planned maintenance outages, and impacts of macro-economic conditions, particularly in Europe. " and "In 2022, Dow’s Scope 2 market-based emissions were reduced by approximately 1.6 million metric tons CO2e (28% reduction). Approximately 1.1 million metric tons of this reduction can be attributed to Dow’s efforts to procure cleaner sources of energy to support its sites. In 2022, Dow implemented cleaner power agreements which consisted of renewable power sources to support its operations in Europe, resulting in a material decrease in its Scope 2 emissions from 2021 to 2022. The remaining reduction is largely attributed to reduced production due to macro-economic conditions, primarily in Europe, which resulted in decreased power and steam consumption.

More information can be found on Dow's GHG emission reduction initiatives completed in 2022 in our 2022 INtersections Progress Report on page 131.

Intensity figure

0.53

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

26,030,278

Metric denominator

metric ton of product

Metric denominator: Unit total

49,113,732

Scope 2 figure used

Market-based

% change from previous year

2

Direction of change

Decreased

Reason(s) for change

Change in renewable energy consumption
Other emissions reduction activities

Please explain

GHG Intensity: Scope 1 + Scope 2 (Market) GHG Emissions – Excluding Emissions Associated with the Production of Power and Steam Not Consumed by the Company. GHG Intensity by production decreased due to a reduction in Dow's overall Scope 1 and Scope 2 emissions. Scope 1 emissions decreased in 2022 relative to 2021, primarily due to reductions supported by our emissions reduction projects, planned maintenance outages, and impacts of macro-economic conditions, particularly in Europe. " and "In 2022, Dow's Scope 2 market-based emissions were reduced by approximately 1.6 million metric tons CO2e (28% reduction). Approximately 1.1 million metric tons of this reduction can be attributed to Dow's efforts to procure cleaner sources of energy to support its sites. In 2022, Dow implemented cleaner power agreements which consisted of renewable power sources to support its operations in Europe, resulting in a material decrease in its Scope 2 emissions from 2021 to 2022. The remaining reduction is largely attributed to reduced production due to macro-economic conditions, primarily in Europe, which resulted in decreased power and steam consumption.

More information can be found on Dow's GHG emission reduction initiatives completed in 2022 in our 2022 INtersections Progress Report on page 131.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	26,540,000	IPCC Sixth Assessment Report (AR6 - 100 year)

CH4	530,000	IPCC Sixth Assessment Report (AR6 - 100 year)
N2O	158,000	IPCC Sixth Assessment Report (AR6 - 100 year)
HFCs	62,000	IPCC Sixth Assessment Report (AR6 - 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
United States of America	18,216,951
Netherlands	3,480,435
Germany	1,754,166
Canada	1,134,326
Spain	1,046,872
Argentina	883,188
Brazil	257,652
United Kingdom of Great Britain and Northern Ireland	159,488
Thailand	110,049
China	51,049
Portugal	47,850
Other, please specify Rest of world	148,835

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division
By facility
By activity

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
HYDROCARBONS & ENERGY	22,882,901
PACKAGING & SPECIALTY PLASTICS	1,067,326

POLYURETHANES & CONSTRUCTION CHEMICALS	776,527
COATINGS & PERFORMANCE MONOMERS	761,979
INDUSTRIAL SOLUTIONS	714,617
CONSUMER SOLUTIONS	598,648
CORP OPERATIONS/SHARED SERVICES	488,863

C7.3b

(C7.3b) Break down your total gross global Scope 1 emissions by business facility.

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
PLAQUEMINE, LA	4,981,063	30.2842	-91.2406
FREEPORT, TX	5,685,411	28.9539	-95.3594
ST. CHARLES OPERATIONS	2,864,581	29.9424	-90.3964
TERNEUZEN, NLD	3,468,272	51.3381	3.8275
DOW CENTRAL GERMANY, DEU	1,165,060	51.39	11.9851
TARRAGONA, ESP	1,046,872	41.12	1.24
FORT SASKATCHEWAN, CAN	1,103,370	53.7089	-113.2124
BAHIA BLANCA, ARG	879,005	-38.7144	-62.2674
SEADRIFT,TX	973,287	28.415	-96.7133
STADE, DEU	572,394	53.5988	9.4747
DEER PARK, TX	637,096	29.705	-95.1236
TEXAS CITY, TX	69,473	29.3836	-94.9025
SOUTH CHARLESTON, WV	95,208	38.3683	-81.6997
CARROLLTON, KY	179,862	38.6809	-85.1794
CABANGU, BRA	17,043	30.289083	-91.234274

BREU BRANCO, BRA	14,709	-3.771692	-49.564957
MIDLAND, MI	131,372	43.6156	-84.2472
ARATU, BRA	177,427	-22.3302	-42.5578
ESTARREJA, PRT	47,850	40.7528	-8.5709
ZHANGJIAGANG, CHN	41,733	31.8756	120.556
REST OF THE WORLD	611,136	43.6156	-84.2472
SABINE, TX	2,358,256	30.066	-93.757
BARRY, UK	144,422	51.412	-3.24
PRENTISS, CAN	25,954	52.387	-113.599
ELIZABETHTOWN, KY	5	37.667	-85.835

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Process activities	15,610,049
Energy and steam stationary combustion	11,618,691
Blowing agents	62,121

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Comment
Chemicals production activities	21,837,874	Dow operates combined heat and power (CHP) plants to support our operations. At some sites, we also generate power and steam for third parties or to sell to the grid. Emissions

		associated with power and steam sales to third parties or to the grid are excluded from this number.

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Germany	1,347,241	2,504,875
United States of America	1,032,410	782,054
China	195,031	230,925
Thailand	220,334	201,807
Canada	71,912	83,105
Spain	86,394	62,170
Brazil	195,041	80,813
Argentina	102,593	82,820
Portugal	17,800	9,951
United Kingdom of Great Britain and Northern Ireland	21,226	19,105
France	1,965	611
Netherlands	7,909	3,321
Italy	9,880	6,275
Other, please specify Rest of world	137,342	124,572

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By facility

C7.6b

(C7.6b) Break down your total gross global Scope 2 emissions by business facility.

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
STADE, DEU	821,661	2,069,268

DOW CENTRAL GERMANY, DEU	475,250	410,194
TERNEUZEN, NLD	296	286
MIDLAND, MI	89,165	134,449
FREEPORT, TX	62,848	56,988
MT MEIGS, AL	95	128
CARROLLTON, KY	61,676	136,065
BAHIA BLANCA, ARG	100,299	80,325
TEXAS CITY, TX	60,910	173,709
TARRAGONA, ESP	52,442	62,167
ARATU, BRA	94,901	13,356
REST OF THE WORLD	832,813	356,450
ZHANGJIAGANG, CHN	131,256	206,642
MAP TA PHUT	220,319	201,792
BREU BRANCO, BRA	39,464	52,109
FORT SASKATCHEWAN	14,501	16,851
SOUTH CHARLESTON, WV	24,564	35,779
ESTARREJA, PRT	7,849	9,951
ST CHARLES OPERATIONS	11,551	10,915
BARRY, UK	20,980	19,105
ELIZABETHTOWN, KY	11,474	25,307
PLAQUEMINE, LA	617	583
CABANGU, BRA	56,318	13,384
DEER PARK, TX	194,698	38,951
SEADRIFT, TX	4,158	1,238
SABINE, TX	2,424	3,020
PRENTISS, ALBERTA, CAN	54,550	63,392

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Not relevant as we do not have any subsidiaries

C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Chemicals production activities	3,407,782	4,144,609	The majority of Dow's emissions are related to chemical production activities, however, a small percentage is assumed to be related to general facilities management. This amount has been excluded from the numbers presented here.

C-CH7.8

(C-CH7.8) Disclose the percentage of your organization's Scope 3, Category 1 emissions by purchased chemical feedstock.

Purchased feedstock	Percentage of Scope 3, Category 1 tCO2e from purchased feedstock	Explain calculation methodology
Naphtha	8.5	Dow calculates scope 3.1 emissions from feedstocks based on the quantity of each material purchased in the reporting year matched with an emissions factor most closely fitting the conditions under which the material was produced. More information is provided in the scope 3 accounting section.
Propane liquid	17.5	Dow calculates scope 3.1 emissions from feedstocks based on the quantity of each material purchased in the reporting year matched with an emissions factor most closely fitting the conditions under which the material was produced. More information is provided in the scope 3 accounting section.
Ethane	23	Dow calculates scope 3.1 emissions from feedstocks based on the quantity of each material purchased in the reporting year matched with an emissions factor most closely fitting the

		conditions under which the material was produced. More information is provided in the scope 3 accounting section.
Butane	1.3	Dow calculates scope 3.1 emissions from feedstocks based on the quantity of each material purchased in the reporting year matched with an emissions factor most closely fitting the conditions under which the material was produced. More information is provided in the scope 3 accounting section.
Waste biofuel	0.1	Dow calculates scope 3.1 emissions from feedstocks based on the quantity of each material purchased in the reporting year matched with an emissions factor most closely fitting the conditions under which the material was produced. More information is provided in the scope 3 accounting section.

C-CH7.8a

(C-CH7.8a) Disclose sales of products that are greenhouse gases.

	Sales, metric tons	Comment
Carbon dioxide (CO2)	0	
Methane (CH4)	1,589,237	Approximately 70% of this amount is related to Natural Gas that Dow purchases and resells among tenants in our sites. In Argentina, Dow has extraction and sales of natural gas. Dow also has interests in natural gas extraction in the United States. The content of methane in the natural gas was considered to answer this question.
Nitrous oxide (N2O)	0	
Hydrofluorocarbons (HFC)	0	
Perfluorocarbons (PFC)	0	
Sulphur hexafluoride (SF6)	0	
Nitrogen trifluoride (NF3)	0	

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	1,013,456	Decreased	2.96	Change in emissions (1,013,456)/Total scope 1 + scope 2 emissions for previous year (2021) (34,192,061) x100% Scope 2: Barry, UK and Tarragona, ESP did not have 100% renewable in 2022; Germany sites such as DCG, Stade and Bitterfeld sourced clean power; Estarejja had a full year of renewables.
Other emissions reduction activities	131,486	Decreased	0.38	Change in emissions (131,486)/Total scope 1 + scope 2 emissions for previous year (2021) (34,192,061) x100% Scope 2: Excess power contracted under an existing Power Purchase Agreement was resold to the grid at our Stade site; lower steam purchase demand at Tarragona due to higher efficiency of steam generation.
Divestment				
Acquisitions				
Mergers				
Change in output	1,556,252	Decreased	4.55	Change in emissions (1,556,252)/Total scope 1 + scope 2 emissions for previous year (2021) (34,192,061) x100% Scope 1: Decreased production and major planned outages: Terneuzen,

				Freeport, Plaquemine, DCG, Stade Stade's operational decrease due to turnaround. Scope 2: Sabine decreased purchases of electricity as it had no unplanned cogen outages in 2022; total shutdown of Mt. Megis in mid-2022.
Change in methodology				
Change in boundary				
Change in physical operating conditions				
Unidentified				
Other				

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 10% but less than or equal to 15%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes

Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	158,308,333	158,308,333
Consumption of purchased or acquired electricity		4,018,169	6,187,386	10,205,556
Consumption of purchased or acquired steam		130,782	1,124,774	1,255,556
Consumption of self-generated non-fuel renewable energy		338		338
Total energy consumption		4,149,290	165,620,493	169,769,783

C-CH8.2a

(C-CH8.2a) Report your organization's energy consumption totals (excluding feedstocks) for chemical production activities in MWh.

Consumption of fuel (excluding feedstocks)

Heating value

HHV (higher heating value)

MWh consumed from renewable sources inside chemical sector boundary

0

MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

158,299,175

MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

9,158.33

Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

158,308,333

Consumption of purchased or acquired electricity

MWh consumed from renewable sources inside chemical sector boundary

4,018,169.4

MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

6,187,386.16

MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

0

Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

10,205,556

Consumption of purchased or acquired steam

MWh consumed from renewable sources inside chemical sector boundary

130,782

MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

1,124,773.56

MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

0

Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

1,255,556

Consumption of self-generated non-fuel renewable energy

MWh consumed from renewable sources inside chemical sector boundary

338.34

MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

0

MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

0

Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

338

Total energy consumption

MWh consumed from renewable sources inside chemical sector boundary

4,149,289.74

MWh consumed from non-renewable sources inside chemical sector boundary (excluding recovered waste heat/gases)

165,611,334.71

MWh consumed from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary

9,158.33

Total MWh (renewable + non-renewable + MWh from recovered waste heat/gases) consumed inside chemical sector boundary

169,769,783

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No

Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

Other biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

Coal

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

Oil

Heating value

HHV

Total fuel MWh consumed by the organization

176,725.28

MWh fuel consumed for self-generation of heat

176,725.28

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

Gas

Heating value

HHV

Total fuel MWh consumed by the organization

86,400,000

MWh fuel consumed for self-generation of heat

28,512,000

MWh fuel consumed for self-generation of steam

34,732,800

MWh fuel consumed for self- cogeneration or self-trigeneration

23,155,200

Comment

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

HHV

Total fuel MWh consumed by the organization

71,477,777.78

MWh fuel consumed for self-generation of heat

4,288,666.67

MWh fuel consumed for self-generation of steam

38,598,000

MWh fuel consumed for self- cogeneration or self-trigeneration

28,591,111.11

Comment

Total fuel

Heating value

HHV

Total fuel MWh consumed by the organization

158,054,503.06

MWh fuel consumed for self-generation of heat

32,977,391.94

MWh fuel consumed for self-generation of steam

73,330,800

MWh fuel consumed for self- cogeneration or self-trigeneration

51,746,311.11

Comment

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	19,983,641	7,968,538	0	0
Heat	0	0	0	0
Steam	6,867,974	5,939,324	0	0
Cooling	0	0	0	0

C-CH8.2d

(C-CH8.2d) Provide details on electricity, heat, steam, and cooling your organization has generated and consumed for chemical production activities.

Electricity

Total gross generation inside chemicals sector boundary (MWh)

19,983,641

Generation that is consumed inside chemicals sector boundary (MWh)

7,968,538

Generation from renewable sources inside chemical sector boundary (MWh)

0

Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

0

Heat

Total gross generation inside chemicals sector boundary (MWh)

0

Generation that is consumed inside chemicals sector boundary (MWh)

0

Generation from renewable sources inside chemical sector boundary (MWh)

0

Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

0

Steam

Total gross generation inside chemicals sector boundary (MWh)

6,867,974

Generation that is consumed inside chemicals sector boundary (MWh)

5,939,324

Generation from renewable sources inside chemical sector boundary (MWh)

0

Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

0

Cooling

Total gross generation inside chemicals sector boundary (MWh)

0

Generation that is consumed inside chemicals sector boundary (MWh)

0

Generation from renewable sources inside chemical sector boundary (MWh)

0

Generation from waste heat/gases recovered from processes using fuel feedstocks inside chemical sector boundary (MWh)

0

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

Country/area of low-carbon energy consumption
Argentina

Sourcing method
Physical power purchase agreement (physical PPA) with a grid-connected generator

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
78,976

Tracking instrument used
Other, please specify
Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute
Argentina

Are you able to report the commissioning or re-powering year of the energy generation facility?
Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2019

Comment

Country/area of low-carbon energy consumption
Argentina

Sourcing method
Physical power purchase agreement (physical PPA) with a grid-connected generator

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

16,685

Tracking instrument used

Other, please specify

Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute

Argentina

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Country/area of low-carbon energy consumption

Belgium

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Low-carbon energy mix, please specify

Wind, solar, hydro, biomass

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

30,951

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

Belgium

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Country/area of low-carbon energy consumption

Belgium

Sourcing method

Purchase from an on-site installation owned by a third party (on-site PPA)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

3,742

Tracking instrument used

Other, please specify

Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute

Belgium

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2012

Comment

Country/area of low-carbon energy consumption

Belgium

Sourcing method

Purchase from an on-site installation owned by a third party (on-site PPA)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

3,311

Tracking instrument used

Other, please specify

Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute

Belgium

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2019

Comment

Country/area of low-carbon energy consumption

Brazil

Sourcing method

Physical power purchase agreement (physical PPA) with a grid-connected generator

Energy carrier

Electricity

Low-carbon technology type

Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

141,756

Tracking instrument used

I-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

Brazil

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2021

Comment

Country/area of low-carbon energy consumption

Brazil

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

Wind, biomass, hydro, solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

75,347

Tracking instrument used

Other, please specify

Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute

Brazil

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Country/area of low-carbon energy consumption

Brazil

Sourcing method

Physical power purchase agreement (physical PPA) with a grid-connected generator

Energy carrier

Electricity

Low-carbon technology type

Large hydropower (>25 MW)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

708,251

Tracking instrument used

Other, please specify

Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute

Brazil

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1954

Comment

Country/area of low-carbon energy consumption

Brazil

Sourcing method

Physical power purchase agreement (physical PPA) with a grid-connected generator

Energy carrier

Electricity

Low-carbon technology type

Large hydropower (>25 MW)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

515,135

Tracking instrument used

Other, please specify

Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute

Brazil

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1963

Comment

Country/area of low-carbon energy consumption

Brazil

Sourcing method

Direct line to an off-site generator owned by a third party with no grid transfers (direct line PPA)

Energy carrier

Steam

Low-carbon technology type

Sustainable biomass

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

130,782

Tracking instrument used

Other, please specify

Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute

Brazil

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2014

Comment

Country/area of low-carbon energy consumption

Canada

Sourcing method

Physical power purchase agreement (physical PPA) with a grid-connected generator

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

99,289

Tracking instrument used

Other, please specify

Alberta Offsets (TIER)

Country/area of origin (generation) of the low-carbon energy or energy attribute

Canada

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2022

Comment

Country/area of low-carbon energy consumption

France

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

Hydro, Solar, Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

24,630

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

France

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Country/area of low-carbon energy consumption

Germany

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

Solar, Wind, Hydro, Biomass

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

1,170,069

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

Germany

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Country/area of low-carbon energy consumption

Italy

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

13,571

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

Italy

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Country/area of low-carbon energy consumption

Portugal

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

42,208

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

Portugal

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Country/area of low-carbon energy consumption
Spain

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify
Hydro, Solar, Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
200,760

Tracking instrument used
GO

Country/area of origin (generation) of the low-carbon energy or energy attribute
Spain

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Country/area of low-carbon energy consumption
Sweden

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Hydropower (capacity unknown)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

4,761

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

Sweden

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Country/area of low-carbon energy consumption

United Kingdom of Great Britain and Northern Ireland

Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

Hydro, Solar, Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

55,636

Tracking instrument used

GO

Country/area of origin (generation) of the low-carbon energy or energy attribute

United Kingdom of Great Britain and Northern Ireland

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Country/area of low-carbon energy consumption

United States of America

Sourcing method

Physical power purchase agreement (physical PPA) with a grid-connected generator

Energy carrier

Electricity

Low-carbon technology type

Other biomass

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

11,351

Tracking instrument used

US-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

United States of America

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2011

Comment

Country/area of low-carbon energy consumption
United States of America

Sourcing method
Physical power purchase agreement (physical PPA) with a grid-connected generator

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
945,728

Tracking instrument used
US-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute
United States of America

Are you able to report the commissioning or re-powering year of the energy generation facility?
Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2015

Comment

Country/area of low-carbon energy consumption
United States of America

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type

Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

5,886

Tracking instrument used

US-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

United States of America

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area

Argentina

Consumption of purchased electricity (MWh)

374,940.39

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

374,940.39

Country/area
Brazil

Consumption of purchased electricity (MWh)
2,077,597.21

Consumption of self-generated electricity (MWh)
0

Consumption of purchased heat, steam, and cooling (MWh)
131,675.02

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

2,209,272.23

Country/area
Canada

Consumption of purchased electricity (MWh)
181,398.17

Consumption of self-generated electricity (MWh)
477,413.32

Consumption of purchased heat, steam, and cooling (MWh)
57,460.35

Consumption of self-generated heat, steam, and cooling (MWh)
156,611.33

Total non-fuel energy consumption (MWh) [Auto-calculated]

872,883.17

Country/area
China

Consumption of purchased electricity (MWh)
220,163.83

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

108,835.06

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

328,998.89

Country/area

France

Consumption of purchased electricity (MWh)

38,236.6

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

38,236.6

Country/area

Germany

Consumption of purchased electricity (MWh)

4,078,333.88

Consumption of self-generated electricity (MWh)

781,667

Consumption of purchased heat, steam, and cooling (MWh)

87,733.12

Consumption of self-generated heat, steam, and cooling (MWh)

140,736.11

Total non-fuel energy consumption (MWh) [Auto-calculated]

5,088,470.11

Country/area

Italy

Consumption of purchased electricity (MWh)

37,186.37

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

37,186.37

Country/area

Netherlands

Consumption of purchased electricity (MWh)

26,030.97

Consumption of self-generated electricity (MWh)

828,009.63

Consumption of purchased heat, steam, and cooling (MWh)

31,763.28

Consumption of self-generated heat, steam, and cooling (MWh)

761,640.19

Total non-fuel energy consumption (MWh) [Auto-calculated]

1,647,444.07

Country/area

Portugal

Consumption of purchased electricity (MWh)

42,330.98

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

13,156.91

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

55,487.89

Country/area

Other, please specify

Rest of the World

Consumption of purchased electricity (MWh)

473,438.68

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

33,410.28

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

506,848.96

Country/area

Spain

Consumption of purchased electricity (MWh)

341,055.46

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

41,556.73

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

382,612.19

Country/area
Thailand

Consumption of purchased electricity (MWh)
245,982.82

Consumption of self-generated electricity (MWh)
0

Consumption of purchased heat, steam, and cooling (MWh)
251,693.46

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

497,676.28

Country/area
United Kingdom of Great Britain and Northern Ireland

Consumption of purchased electricity (MWh)
108,661.14

Consumption of self-generated electricity (MWh)
0

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

108,661.14

Country/area
United States of America

Consumption of purchased electricity (MWh)
1,958,986.15

Consumption of self-generated electricity (MWh)
5,881,447.76

Consumption of purchased heat, steam, and cooling (MWh)
497,571.73

Consumption of self-generated heat, steam, and cooling (MWh)
4,880,336.44

Total non-fuel energy consumption (MWh) [Auto-calculated]

13,218,342.08

C-CH8.3

(C-CH8.3) Does your organization consume fuels as feedstocks for chemical production activities?
Yes

C-CH8.3a

(C-CH8.3a) Disclose details on your organization's consumption of fuels as feedstocks for chemical production activities.

Fuels used as feedstocks
Naphtha

Total consumption
5,247,059

Total consumption unit
metric tons

Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit
3.08

Heating value of feedstock, MWh per consumption unit
13.12

Heating value
HHV

Comment

Fuels used as feedstocks

Propane liquid

Total consumption

4,831,175

Total consumption unit

metric tons

Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit

3

Heating value of feedstock, MWh per consumption unit

14.08

Heating value

HHV

Comment

Fuels used as feedstocks

Ethane

Total consumption

10,786,418

Total consumption unit

metric tons

Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit

2.93

Heating value of feedstock, MWh per consumption unit

14.34

Heating value

HHV

Comment

Fuels used as feedstocks

Butane

Total consumption

415,178

Total consumption unit

metric tons

Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit

3.03

Heating value of feedstock, MWh per consumption unit

13.67

Heating value

HHV

Comment

Fuels used as feedstocks

Other, please specify

Circular Feed

Total consumption

8,135

Total consumption unit

metric tons

Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit

1.3

Heating value of feedstock, MWh per consumption unit

13.1

Heating value

HHV

Comment

Circular Feedstock (plastic waste and waste lubricant)

Fuels used as feedstocks

Other, please specify

Bio-based liquids

Total consumption

7,708

Total consumption unit

metric tons

Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit

0.92

Heating value of feedstock, MWh per consumption unit

13.1

Heating value

HHV

Comment

Bio-based liquid feed (tall-oil, Hydrotreated Vegetable Oils) Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit is: -2.1 (including biogenic carbon captured in plastic product). Value reported here is 0.92 which excludes this biogenic carbon captured.

C-CH8.3b

(C-CH8.3b) State the percentage, by mass, of primary resource from which your chemical feedstocks derive.

	Percentage of total chemical feedstock (%)
Oil	32.12
Natural Gas	67.8
Coal	0
Biomass	0.04
Waste (non-biomass)	0.04
Fossil fuel (where coal, gas, oil cannot be distinguished)	0
Unknown source or unable to disaggregate	0

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description

Other, please specify

Dow will achieve 1 percent per year average increase in production index from our most-utilized facilities from the 2015 baseline.

Metric value

1.06

Metric numerator

Corporate Production Index

Metric denominator (intensity metric only)

Not an intensity metric. Rather a % growth YoY.

% change from previous year

0.3

Direction of change

Increased

Please explain

The Production Index is a measure of the non-capital capacity increases for existing Dow facilities. Dow will achieve a 1 percent production growth year-over-year from 2015 (1.00 baseline) to 2025 (1.10 target) without the use of capital from our most-utilized facilities from the 2015 baseline.

Description

Other, please specify

Dow will reduce the freshwater intake intensity at key water-stressed sites by 20 percent between 2015 (baseline year) to 2025.

Metric value

6.1

Metric numerator

Freshwater lbs.

Metric denominator (intensity metric only)

Production lbs.

% change from previous year

65

Direction of change

Increased

Please explain

The freshwater intake intensity at six key water-stressed sites (KWSS) is aligned with the physical risk of climate change and changing weather patterns. The changing patterns in supply of water, caused by events such as extended droughts, have led to low river levels posing challenges for some manufacturing sites (e.g., ability to ship products).

Dow has developed a methodology to evaluate water risk at Dow sites. Dow has also engaged in developing optimization tools to understand the relationship between water and its climate adaptation strategy. This metric was adopted in recognition of the criticality of fresh water as a shared resource and to ensure that water does not become a constraint on community prosperity. Dow's six KWSS, which all comply with ISO 14001-2015 standards, include: Freeport, Texas (Brazos River); Seadrift, Texas (Guadalupe River); Bahia Blanca, Argentina (purchased fresh water); Terneuzen, the Netherlands (Rivers Rhine and Meuse); Böhlen, Germany (River Weisse Elster and Lake Witznitz); and Tarragona, Spain (purchased freshwater supply source from Ebro River diversion).

The freshwater intake intensity metric is calculated by taking the sum of KWSS fresh water withdrawn directly from the environment divided by the sum of the production volume. Dow has set a target to reduce freshwater intake intensity at KWSS by 20% from its 2015 baseline before the end of 2025.

Dow's freshwater intake intensity increased in 2022 due to two primary factors. First, three of Dow's KWSS experienced drought conditions in 2022 (Freeport, Texas; Seadrift, Texas; and Terneuzen, the Netherlands). Reduced water quality associated with low water availability requires cooling towers to consume higher amounts of water with more frequent blowdowns to maintain equipment operating with diminished water quality. Additionally, four of Dow's KWSS operated at lower production rates as a result of macroeconomic conditions. Because certain processes such as cooling systems operate at the same rate regardless of reduced production rate, water intensity increases.

Description

Waste

Metric value

0.02

Metric numerator

Waste lbs.

Metric denominator (intensity metric only)

Production lbs.

% change from previous year

1

Direction of change

Decreased

Please explain

Total waste generated in 2022 has decreased compared with 2021 due to fewer planned maintenance events, combustion activities due to unplanned events and reduced production. Another contributor to the reduction is reflected by Dow's effort to increase recycling and reuse of waste materials during the production process.

C-CH9.3a

(C-CH9.3a) Provide details on your organization's chemical products.

Output product

High Value Chemicals (Steam cracking)

Production (metric tons)

15,965,938.91

Capacity (metric tons)

17,739,932

Direct emissions intensity (metric tons CO2e per metric ton of product)

0.51

Electricity intensity (MWh per metric ton of product)

0.38

Steam intensity (MWh per metric ton of product)

0.15

Steam/ heat recovered (MWh per metric ton of product)

0

Comment

Capacity based on average mid-cycle enterprise-wide operating rates.

Output product

Other, please specify

Valued Chemicals from Hydrocarbon Production

Production (metric tons)

6,917,714

Capacity (metric tons)

7,686,349

Direct emissions intensity (metric tons CO2e per metric ton of product)

0.46

Electricity intensity (MWh per metric ton of product)

0.34

Steam intensity (MWh per metric ton of product)

0.13

Steam/ heat recovered (MWh per metric ton of product)

0

Comment

Capacity based on average mid-cycle enterprise-wide operating rates.

Output product

Aromatics extraction

Production (metric tons)

3,743,482

Capacity (metric tons)

4,159,424

Direct emissions intensity (metric tons CO2e per metric ton of product)

0.001

Electricity intensity (MWh per metric ton of product)

0

Steam intensity (MWh per metric ton of product)

0

Steam/ heat recovered (MWh per metric ton of product)

0

Comment

Capacity based on average mid-cycle enterprise-wide operating rates.

Output product

Other, please specify

Other Hydrocarbons Production

Production (metric tons)

1,044,367

Capacity (metric tons)

1,160,408

Direct emissions intensity (metric tons CO2e per metric ton of product)

0.29

Electricity intensity (MWh per metric ton of product)

0.22

Steam intensity (MWh per metric ton of product)

0.09

Steam/ heat recovered (MWh per metric ton of product)

0

Comment

Capacity based on average mid-cycle enterprise-wide operating rates.

Output product

Butadiene (C4 sep.)

Production (metric tons)

295,632

Capacity (metric tons)

328,480

Direct emissions intensity (metric tons CO2e per metric ton of product)

0.002

Electricity intensity (MWh per metric ton of product)

0

Steam intensity (MWh per metric ton of product)

0

Steam/ heat recovered (MWh per metric ton of product)

0

Comment

Capacity based on average mid-cycle enterprise-wide operating rates.

Output product

Polymers

Production (metric tons)

7,577,230

Capacity (metric tons)

8,419,144

Direct emissions intensity (metric tons CO2e per metric ton of product)

0.21

Electricity intensity (MWh per metric ton of product)

0.16

Steam intensity (MWh per metric ton of product)

0.06

Steam/ heat recovered (MWh per metric ton of product)

0

Comment

Capacity based on average mid-cycle enterprise-wide operating rates.

Output product

Specialty chemicals

Production (metric tons)

1,578,465

Capacity (metric tons)

1,753,850

Direct emissions intensity (metric tons CO2e per metric ton of product)

0.75

Electricity intensity (MWh per metric ton of product)

0.55

Steam intensity (MWh per metric ton of product)

0.22

Steam/ heat recovered (MWh per metric ton of product)

0

Comment

Capacity based on average mid-cycle enterprise-wide operating rates.

Output product

Other base chemicals

Production (metric tons)

11,990,905

Capacity (metric tons)

13,323,228

Direct emissions intensity (metric tons CO2e per metric ton of product)

0.85

Electricity intensity (MWh per metric ton of product)

0.62

Steam intensity (MWh per metric ton of product)

0.25

Steam/ heat recovered (MWh per metric ton of product)

0

Comment

Capacity based on average mid-cycle enterprise-wide operating rates.

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	On an annual basis, R&D project leaders, who are the subject matter experts and trained in sustainability fundamentals, assess the alignment of their projects to Dow's sustainability goals. Responses are approved by leadership and, for continuing projects, compared with the previous year's response. More mature projects are expected to have more rigorous assessments, which can include formal LCAs. A multi-generational plan is being executed to increase accuracy and transparency, with 2022 being the third year.

C-CH9.6a

(C-CH9.6a) Provide details of your organization's investments in low-carbon R&D for chemical production activities over the last three years.

Technology area

Unable to disaggregate by technology area

Stage of development in the reporting year

Average % of total R&D investment over the last 3 years

84

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

Average % of total R&D investment planned over the next 5 years

87

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Over the last three years approximately 84% of the total R&D investment has been aligned to Dow's sustainability focus areas: climate protection, circular economy, stop the waste and protect earth and life. These areas have either a direct or indirect impact to decrease carbon impact throughout the products life cycles. For example, circular economy includes recycling, stop the waste includes material efficiency, and protect earth and life includes lower environmental impact for healthier environments. This number is expected to increase over the next 5 years.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

2022 INtersections Progress Report.pdf

Page/ section reference

Limited Assurance Review performed by Deloitte & Touche LLP, on both the GRI Disclosure and the GHG Protocol Disclosure in accordance with applicable GRI standards and the GHG Protocol Corporate Reporting Standard (Revised) which included the Scope 1 emissions being disclosed herein. Reference: 2022 Intersections Progress Report. Assurance statements are on page 175 (for GRI Assurance) and 182 (for GHGP)

Relevant standard

Attestation standards established by AICPA (AT105)

Proportion of reported emissions verified (%)

100

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

2022 TIER Verification Report Dow.pdf

Page/ section reference

Dow has provided the attached example of verification associated with our emissions reported in jurisdictions where there exists a carbon emission price. The attached report was provided by RWDI AIR Inc. for Dow's Fort Saskatchewan, Alberta, Canada site for the period of January 1, 2022 to December 31st, 2022. The verification conclusion can be found on page 27. The emissions indicated in 'Total Regulated Emissions' include both direct (Scope 1) and indirect (Scope 2) emissions.

Relevant standard

Alberta Technology Innovation and Emissions Reduction (TIER)

Proportion of reported emissions verified (%)

4

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

2022 INtersections Progress Report.pdf

Page/ section reference

Limited Assurance Review performed by Deloitte & Touche LLP, on both the GRI Disclosure and the GHG Protocol Disclosure in accordance with applicable GRI standards and the GHG Protocol Corporate Reporting Standard (Revised) which included the Scope 1 emissions being disclosed herein. Reference: 2022 Intersections Progress Report. Assurance statements are on page 175 (for GRI Assurance) and 182 (for GHGP)

Relevant standard

Attestation standards established by AICPA (AT105)

Proportion of reported emissions verified (%)

100

Scope 2 approach

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

2022 TIER Verification Report Dow.pdf

Page/ section reference

Dow has provided the attached example of verification associated with our emissions reported in jurisdictions where there exists a carbon emission price. The attached report was provided by RWDI AIR Inc. for Dow's Fort Saskatchewan, Alberta, Canada site for the period of January 1, 2022 to December 31st, 2022. The verification conclusion can be found on page 27. The emissions indicated in 'Total Regulated Emissions' include both direct (Scope 1) and indirect (Scope 2) emissions.

Relevant standard

Alberta Technology Innovation and Emissions Reduction (TIER)

Proportion of reported emissions verified (%)

4

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3: Purchased goods and services
Scope 3: Capital goods
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
Scope 3: Upstream transportation and distribution
Scope 3: Waste generated in operations
Scope 3: Business travel
Scope 3: Employee commuting
Scope 3: Upstream leased assets
Scope 3: Investments
Scope 3: Use of sold products
Scope 3: End-of-life treatment of sold products

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

2022 INtersections Progress Report.pdf

Page/section reference

Limited Assurance Review of the GHG Protocol Disclosure performed by Deloitte & Touche LLP in accordance with the GHG Protocol Corporate Reporting Standard (Revised) which included the Scope 3 emissions for all categories being disclosed herein. Reference: 2022 Intersections Progress Report. Assurance statement provided on page 182.

Relevant standard

Attestation standards established by AICPA (AT105)

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

2022 INtersections Progress Report.pdf

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C8. Energy	Energy consumption	AICPA Attestation Standards	Dow engaged Deloitte & Touche LLP to perform a review in accordance with the attestation standards established by the American Institute of Certified Public Accountants (AICPA) of management's assertion that the environmental, social, and governance disclosures referenced or included within the Global Reporting Initiative Content Index ("GRI Index"), included within the Dow 2022 INtersections Progress Report as of, and for the year ended December 31, 2022 (the "2022 INtersections Progress Report") are presented in accordance with the Global Reporting Initiative Sustainability Reporting Standards. The data points included within the CDP disclosure question C8.2a that are part of

			the environmental, social, and governance disclosures referenced or included in the GRI Index are: - Consumption of fuel (excluding feedstock) - Consumption of purchased or acquired electricity (as converted) - Consumption of purchased or acquired steam (as converted)

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

Alberta TIER - ETS
Canada federal fuel charge
EU ETS
Netherlands carbon tax
UK Carbon Price Support
UK ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

Alberta TIER - ETS

% of Scope 1 emissions covered by the ETS

4.14

% of Scope 2 emissions covered by the ETS

4.34

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

895,998

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

939,636.31

Verified Scope 2 emissions in metric tons CO2e

182,096.95

Details of ownership

Facilities we own and operate

Comment

100% of Dow's emissions in Alberta are covered by the ETS. The Dow Fort Saskatchewan Site is projected to receive Emission Performance Credits for 2022.

EU ETS

% of Scope 1 emissions covered by the ETS

22.53

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

4,286,154

Allowances purchased

1,862,958.35

Verified Scope 1 emissions in metric tons CO2e

6,149,112.35

Verified Scope 2 emissions in metric tons CO2e

0

Details of ownership

Facilities we own and operate

Comment

Dow's emissions covered under the EU ETS represent 22.53% of the total Scope 1 from Dow.

UK ETS

% of Scope 1 emissions covered by the ETS

0.4

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

150,263

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

117,505

Verified Scope 2 emissions in metric tons CO2e

0

Details of ownership

Facilities we own and operate

Comment

Dow's emissions covered under the EU ETS represent 0.4% of the total Scope 1 from Dow

C11.1c

(C11.1c) Complete the following table for each of the tax systems you are regulated by.

Canada federal fuel charge

Period start date

January 1, 2022

Period end date

December 31, 2022

% of total Scope 1 emissions covered by tax

0.02

Total cost of tax paid

203,000

Comment

Netherlands carbon tax

Period start date

January 1, 2022

Period end date

December 31, 2022

% of total Scope 1 emissions covered by tax

9

Total cost of tax paid

0

Comment

Dow's emissions covered under the EU ETS represent 9% of the total Scope 1 from Dow

UK Carbon Price Support

Period start date

January 1, 2022

Period end date

December 31, 2022

% of total Scope 1 emissions covered by tax

0

Total cost of tax paid

0

Comment

UK Carbon Price support was not applicable in 2022 due to not electricity export during that period

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

The trading schemes in which Dow participates apply to almost all segments of its business. The EU ETS covers Dow's power and steam plants, as well as chemical installations for multiple business segments. The Alberta Technology Innovation Emissions Reduction (TIER) ETS covers Dow's power and steam plant in Fort Saskatchewan, as well as chemical installations from two business segments, Dow's Hydrocarbons & Energy Business and Packaging & Specialty Plastics. Dow has an internal team that manages its participation in both schemes and ensures emissions regulated under each ETS are accurately measured and verified. In conjunction, Dow's Government Affairs team monitors the political landscape across

all areas of the world where Dow operates to understand the status of emerging regulation as it relates to emissions trading schemes (ETS) or carbon taxes in order to understand any potential impact to its business.
The oversight for action as to relates to reducing GHG emissions lies with the Climate Program Management Office (Climate PMO), which reports to the CEO. The Climate PMO includes Senior Leaders responsible for Dow's participation in ETS, as well as Dow's Vice President of Government Affairs and the Vice President of Energy and Climate.

Dow's current strategy to achieve its objectives around carbon and climate change include: implementing energy efficiency projects, sourcing cost-advantaged renewable power to support its operations and evaluating low GHG emissions technology options for the maximum affordable footprint reduction.
Our Protect the Climate targets reflect our commitment to accelerate our work with our suppliers, customers and value chain partners to ensure Dow's ecosystem is carbon neutral by 2050. By 2025, we intend to reduce our GHG emissions by 2 million metric tons versus our 2020 baseline. By 2030, we will reduce our net annual GHG emissions by 5 million metric tons versus our 2020 baseline. By 2050, we intend to be carbon neutral (Scopes 1+2+3 plus product benefits).

The following show Dow's 2022 actions to support its Decarbonize and Grow Strategy:
· Dow outlined detailed roadmaps for each of its 25 highest carbon-emitting sites, representing over 95% of its Scope 1 and Scope 2 emissions.
--Dow secured partner and government agreements and subsidies for its Terneuzen 2030 project, where it has a clear road map to reduce GHG emissions by more than 30% by 2030.
-- Dow announced a joint development agreement with X-energy to install advanced small modular nuclear technology at its Seadrift, Texas, site, to provide the site with safe, reliable low-carbon power and steam.
· Dow continues to advance its collaborative e-cracking technology program with Shell, which is on track to start up in 2025.
· Dow, in a partnership with Shell, started up an experimental unit at the Energy Transition Campus Amsterdam, the Netherlands. This represents a key milestone in the companies' joint technology program to electrify steam cracking furnaces, bringing the companies one step closer to decarbonizing one of the most carbon-intensive aspects of petrochemical manufacturing.
· Dow implemented cleaner power agreements, which consisted of renewable power sources to support its operations in Europe, resulting in a material decrease in its Scope 2 emissions of approximately 1 million metric tons. This brought Dow's access to renewable power capacity to more than 1,000 megawatts (roughly ~40% of its purchased electricity). Though we expect variation in this amount year over year, we expect achievement of our target to be maintained.
· Dow Installed a new high-efficiency steam turbine for cracked gas compressor at its Tarragona Spain ethylene plant. This resulted in an energy savings of ~1 million KJ/year (~60,000 MT reduction of CO2e).

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits canceled by your organization in the reporting year.

Project type

Other, please specify

REDD+ Project

Type of mitigation activity

Emissions reduction

Project description

The Pacajai REDD+ Project is a project based in Brazil and is focused on the prevention of deforestation within private parcels amounting to 135,105 Ha at the edge of the deforestation frontier in Brazil.

Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

500

Purpose of cancellation

Voluntary offsetting

Are you able to report the vintage of the credits at cancellation?

Yes

Vintage of credits at cancellation

2016

Were these credits issued to or purchased by your organization?

Purchased

Credits issued by which carbon-crediting program

VCS (Verified Carbon Standard)

Method(s) the program uses to assess additionality for this project

Barrier analysis

Other, please specify

Identification of credible alternative land use scenarios, common practice analysis

Approach(es) by which the selected program requires this project to address reversal risk

Other, please specify

Projects prepare a non-permanence risk report; use of buffer credits

Potential sources of leakage the selected program requires this project to have assessed

Ecological leakage

Provide details of other issues the selected program requires projects to address

Detailed project requirements for issuance of VCS credits can be found on Verra's website. In order to complete the VCS Program certification process, projects must demonstrate compliance with Verra's requirements.

Comment

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price

Shadow price

How the price is determined

Alignment with the price of allowances under an Emissions Trading Scheme
Alignment with the price of a carbon tax

Objective(s) for implementing this internal carbon price

Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Identify and seize low-carbon opportunities
Navigate GHG regulations
Stress test investments

Scope(s) covered

Scope 1
Scope 2

Pricing approach used – spatial variance

Differentiated

Pricing approach used – temporal variance

Evolutionary

Indicate how you expect the price to change over time

Dow assesses that carbon policy will continue to be fragmented across the globe in the short to medium term timeframes, and as such, Dow uses a range of carbon price outlooks across the Company depending on each geography/country. Pricing is aligned with European and Canadian climate related regulation and increases accordingly.

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

41

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

105

Business decision-making processes this internal carbon price is applied to

Capital expenditure
Operations
Product and R&D
Opportunity management

Mandatory enforcement of this internal carbon price within these business decision-making processes

Yes, for some decision-making processes, please specify
Capital Expenditure

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

Utilizing a regionally differentiated and evolutionary pricing scheme for our internal carbon price allows Dow to mitigate risk and prioritize investment across its global operations. This has driven increased consideration of energy efficiency and emission reduction opportunities at our manufacturing facilities overall. Our carbon price forecasts are used when considering larger capital projects that have an impact on emissions. For example, based on our internal pricing forecasts, Dow has prioritized larger emission reduction projects and potential future mitigations in jurisdictions where there is a higher projected carbon price and more incentives such as in Canada and Europe.

Carbon pricing also factors into our assessments of operational costs to run our production facilities. Based on our carbon pricing projections and projections for emissions reductions at our sites, we can optimize our portfolio of emission allowances accordingly, to maximize value to Dow.

For large capital allocation projects and smaller R&D assessments, Dow conducts a sensitivity analysis, varying the internal carbon price applied to evaluate the impact of changing carbon prices on the project economics.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers
Yes, our customers/clients
Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect GHG emissions data at least annually from suppliers
Collect targets information at least annually from suppliers
Collect climate-related risk and opportunity information at least annually from suppliers
Collect climate transition plan information at least annually from suppliers
Collect other climate related information at least annually from suppliers

% of suppliers by number

2.2

% total procurement spend (direct and indirect)

50

% of supplier-related Scope 3 emissions as reported in C6.5

80

Rationale for the coverage of your engagement

Dow recognizes the critical role of its extensive global supply chain, which involves more than 30,000 suppliers providing materials and services annually. As a leader in sustainable supply chain practices, Dow is committed to reducing GHG emissions and promoting responsible and ethical business conduct.
Dow's Code of Business Conduct for Suppliers, integrated into all contracts and purchase orders, mandates that suppliers track and continually improve their environmental performance across all operations, products, and services. This includes quantifying and reporting meaningful ESG metrics using established methodologies such as the Greenhouse Gas Protocol, Global Logistics Emissions Council Framework, and WBCSD Pathfinder Framework. To encourage best practices, Dow will favor suppliers to set near and long-term targets for carbon neutrality and disclose their ESG metrics and goals, starting with key climate metrics like annual scope 1, 2, and 3 GHG

emissions and product carbon footprints.
To streamline the reporting process, Dow leverages two platforms, Ecovadis and CDP, to gather climate-related data. Ecovadis evaluates suppliers based on a comprehensive sustainability criteria, encompassing corporate emissions, climate goals, and intensity metrics. Dow encourages these suppliers to publicly disclose their CDP responses, particularly focusing on scope 1, 2, and 3 emissions, product carbon footprints, renewable energy utilization, climate goals, intensity metrics, and collaboration opportunities.
Through these assessments, Dow gains valuable insights into the sustainability performance of its suppliers, identifying areas for improvement and developing action plans accordingly. The collected data enables Dow to engage with suppliers in developing ambitious climate strategies, enhancing reporting practices as needed, and fostering collaborations aimed at decarbonization.

Impact of engagement, including measures of success

In 2022, Dow achieved an A rating for supplier engagement from CDP for the second consecutive year. This accomplishment was accompanied by twofold increase in the number of suppliers invited to participate in CDP, reflecting Dow's commitment to expanding its reach and impact. In 2022, Dow invited 399 suppliers, responsible for approximately 80% of emissions from scope 3 categories 3.1 and 3.4, to participate in CDP. Dow received responses from 235 suppliers, accounting for around 40% of emissions from categories 3.1 and 3.4. Furthermore, through its partnership with EcoVadis, Dow obtained a wealth of new supplier data, , receiving EcoVadis ratings from 3,261 suppliers, enabling it to enhance our understanding of the climate impacts within our value chain.

This diligent focus on collecting supplier ESG data has equipped Dow with valuable tools to assess and address our scope 3 emissions. By incorporating supplier-reported data into our scope 3 accounting for the first time in 2022, Dow has made significant strides in improving its understanding of the climate impacts associated with our supply chain and our ability to track these improvements over time. Most notably, 57% of Dow's scope 3 category 4 emissions from Upstream Transportation, were calculated using supplier carbon footprint data. These advancements are a direct result of our leadership efforts in data collection both directly with our suppliers and with industry groups like WBCSD Partnership for Carbon Transparency, Sea Cargo Charter, and the Smart Freight Centre. Overall, our continuous commitment to supplier engagement, data collection, and analysis has empowered Dow to gain deeper insights into our value chain's climate impacts, refine our scope 3 accounting practices, and inform the development of our climate goals.

Comment

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Offer financial incentives for suppliers who develop/adopt a climate transition plan

% of suppliers by number

2.2

% total procurement spend (direct and indirect)

50

% of supplier-related Scope 3 emissions as reported in C6.5

80

Rationale for the coverage of your engagement

In 2022, Dow took proactive steps to engage with key suppliers related to approximately 80% of its scope 3 category 1 and 4 emissions across the company as a whole as well as by business. These suppliers were identified and prioritized based on Dow's internal assessment of the upstream emissions of purchased materials and logistics, and the subsequent allocation of those emissions to specific suppliers based on invoice data.

Dow engaged these suppliers through mechanisms like direct engagement, CDP, EcoVadis, Together for Sustainability, Smart Freight Centre, Sea Cargo Charter, and WBCSD Partnership for Carbon Transparency. Dow invited suppliers to an annual training on climate change and emissions disclosure, and directly engaged with a subset of suppliers to offer tailored advice and guidance on developing effective climate strategies, helping them to identify opportunities for emission reduction, resource efficiency, and sustainable practices. Further, Dow provides suppliers with specific insights and support in improving their carbon accounting practices, ensuring accurate measurement and reporting of emissions. Dow suppliers also have access to the Together for Sustainability Supplier Academy and other resources from our industry group engagements.

Impact of engagement, including measures of success

Dow is committed to engaging with its key suppliers to address greenhouse gas emissions and drive collaboration and knowledge sharing. This proactive approach strengthens sustainability efforts throughout the supply chain by fostering closer alignment. Dow provides personalized support to suppliers, empowering them to improve their climate performance, achieve their climate goals, and contribute to the collective fight against climate change.

To measure the success of supplier engagement, Dow has set specific targets; for example, Dow's Purchasing Team has key performance indicators (KPIs) included in their annual Scorecard. One of these targets is to have ESG assessments (such as Ecovadis or CDP questionnaires) conducted for suppliers representing 35% of the company's spend. Additionally, Dow's Purchasing Team has set a goal to have 60% of key suppliers establish a climate goal. Dow is also in the process of developing goals related to supplier product carbon footprint disclosure. Apart from these specific KPIs set for Purchasing to achieve, Dow tracks various responses from suppliers on key

sustainability metrics. These include scope 1, 2, and 3 emissions, the percentage of renewable energy utilized each year, revenue carbon intensity, capital expenditure on emissions reduction projects, as well as collaboration opportunities initiated by the supplier.

The KPIs on the Purchasing Team's Scorecard provide clear guidance to Dow's buyers on the areas to engage suppliers in, while the supporting metrics, such as the percentage of renewable energy used, provide deeper context for discussions during supplier engagements. These metrics also indicate the direction Dow expects its suppliers to move in. Moreover, these KPIs and metrics help track the maturity of suppliers on important sustainability topics, enabling Dow to identify areas where additional direct engagement and education are required. By continuously monitoring these metrics, Dow ensures effective supplier engagement and works towards achieving its sustainability objectives throughout the supply chain.

Comment

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Offer financial incentives for suppliers who develop/adopt a climate transition plan

% of suppliers by number

100

% total procurement spend (direct and indirect)

100

% of supplier-related Scope 3 emissions as reported in C6.5

100

Rationale for the coverage of your engagement

In accordance with Dow's updated Code of Business Conduct for Suppliers in 2022, it is mandatory for all suppliers to take proactive measures to establish targets and enhance their environmental performance, specifically in reducing GHG emissions. Dow emphasizes its preference for suppliers that set both short-term and long-term objectives towards achieving carbon neutrality. Adherence with the Code is part of every supplier selection process, contract, and purchase order.

Impact of engagement, including measures of success

In 2022, Dow made significant enhancements to its Code of Business Conduct for Suppliers to provide more comprehensive and rigorous guidance on environmental, social, and governance matters, including setting and achieving climate targets. As part of this update, Purchasing took measures to ensure that the Code is now included in

100% of contracts and purchase orders. Dow monitors and verifies the adherence to the Code through robust supplier relationship management practices, as well as by leveraging reporting platforms such as CDP and EcoVadis. For suppliers with high CO2 emissions, climate goals are tracked as part of Purchasing's annual KPIs, with the goal of having 60% of targeted suppliers with climate targets by the end of 2023. Setting a Purchasing goal around supplier climate targets sends a clear message internally and externally as to Dow's specific expectation of Dow's suppliers. The bar will continue to be raised in subsequent years, providing Dow with quantifiable metrics to measure suppliers' progress on their climate ambitions each year.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Collaboration & innovation

Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number

15

% of customer - related Scope 3 emissions as reported in C6.5

Please explain the rationale for selecting this group of customers and scope of engagement

We are proactively engaging with key and priority customers that are strategic for the businesses or have defined sustainability strategies and targets. Since our materials go in several downstream markets, the dynamics in each market segment is difference. We have a segment driven strategy to engage with important and like-minded sustainability driven customers who have shown a keen interest in decarbonization and in tracking and reducing their scope 3 emissions efficiently.

Scope of engagement often includes- Sharing PCF data as per ISO 14040, 14044 and 14067, discussing decarbonization roadmap for those products in Customer's scope 3 and designing new products with Handprint benefits.

Impact of engagement, including measures of success

There are multiple impacts of engagement, which include an increase in business continuity and providing a better understanding of Dow and customer's decarbonization goals leading to better alignment of new product development and existing formulation development that will result in lower carbon footprint for the customer and Dow. This

helps Dow become an innovation leader with sustainability driven new product launches.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Dow expects all suppliers to set environmental targets and track their progress towards them, as detailed in the previous section. We are engaging suppliers to review their decarbonization plans that may lower the carbon footprint of their products and services that we source (e.g. Dow upstream Scope 3). In addition, we are seeking voluntary development and submission PCF data on existing products supplied to us from our suppliers. We are also working with NGOs such as WBCSD Partnership for Carbon Transparency and Together for Sustainability to share and receive PCF data with our customers and suppliers along the value chain.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization’s purchasing process?

Yes, climate-related requirements are included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization’s purchasing process and the compliance mechanisms in place.

Climate-related requirement

Complying with regulatory requirements

Description of this climate related requirement

In relation to regulatory requirements, Dow's Code of Business Conduct for Suppliers states: Each of Dow’s suppliers has a responsibility to ensure that its products and operations meet applicable government or international standards, whichever are more stringent. Compliance with the Code is essential for collaboration with Dow, and suppliers are expected to maintain necessary documentation and cooperate with assessments, monitoring, and audits. Failure to comply may result in termination of collaboration and the need for corrective actions.

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

100

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment
First-party verification
Second-party verification
Off-site third-party verification
On-site third-party verification
Grievance mechanism/Whistleblowing hotline
Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement

Exclude

Climate-related requirement

Climate-related disclosure through a public platform

Description of this climate related requirement

As part of the Code's best practices, Dow recommends that suppliers publicly disclose their ESG metrics and goals via platforms like CDP and EcoVadis, beginning with the key climate metrics of annual scope 1, 2 and 3 GHG emissions and product carbon footprints. Suppliers with high GHG emissions are requested to participate in CDP directly; the metrics below represent this subset of suppliers.

% suppliers by procurement spend that have to comply with this climate-related requirement

50

% suppliers by procurement spend in compliance with this climate-related requirement

18

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment
Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Climate-related requirement

Implementation of emissions reduction initiatives

Description of this climate related requirement

Emissions reduction is a mandatory provision in Dow's Code: Supplier must take actions to track and continuously improve their environmental performance across their operations, products, and services. Suppliers should quantify and report meaningful

ESG metrics following established methodologies like the Greenhouse Gas Protocol, Global Logistics Emissions Council Framework, WBCSD Pathfinder Framework, and the Global Reporting Index that they can continually measure over time.

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

100

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment

Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Climate-related requirement

Measuring product-level emissions

Description of this climate related requirement

Dow indicates in its Code that reporting product carbon footprints is a best practice. For high GHG suppliers, Dow request product carbon footprints via the CDP platform or through direct reporting.

% suppliers by procurement spend that have to comply with this climate-related requirement

50

% suppliers by procurement spend in compliance with this climate-related requirement

33

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment

Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Climate-related requirement

Purchasing renewable energy

Description of this climate related requirement

Dow includes the following mandatory provision in its Code: Dow expects its suppliers to develop, adopt and promote cleaner production processes, pollution prevention technologies, leakage monitoring technologies using next generation technologies wherever possible.

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

100

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment
Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement

Retain and engage

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers
Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate
Yes, we fund organizations or individuals whose activities could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

Attachment Page 123- Dow supports the Paris Agreement and its goal to keep global temperature rise to well below 2°C and to pursue efforts to limit the increase to 1.5°C. Consistent with this commitment, we have set an ambitious target of being carbon neutral by 2050 (Scope 1+2+3 plus product benefits). We have also set a medium-term goal to reduce our net annual carbon emissions by 5 million metric tons by 2030 versus our 2020 baseline (15% reduction). This builds upon an already achieved 15% emissions reduction since 2005 (~30% total reduction by 2030 vs. 2005). Our emissions

reduction targets are scientifically based and in alignment with, and ahead of, the International Energy Agency's 2050 Net Zero Emissions Scenario for the chemical industry. Our ability to meet these commitments, while enabling business growth, will require effective management of our energy consumption and the implementation of new technologies. In addition, we will need the appropriate infrastructure and policy developments to support emissions reductions; Dow is actively engaged in constructive advocacy to advance pragmatic policies to enable a successful path to zero.

More information on Dow's Climate & Carbon Policy can be found at https://corporate.dow.com/en-us/about/legal/public-policy/climate-carbon.html

2021-esg-report.pdf

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

Dow's overall strategy as it relates both to systems we are currently regulated by, as well as areas of the world where we foresee the potential for future regulation, is to actively reduce GHG emissions in the most cost-efficient way, while engaging with policy makers worldwide to offer insight into opportunities to accelerate carbon reduction with manufacturers similar to Dow. The oversight for action as it relates to reducing our GHG emissions lies with Dow's cross-business, cross functional "Program Management Office" (PMO), which reports to a Climate Steering Team led by a variety of senior leaders with direct alignment to the CEO. Dow's Vice President of Government Affairs and Chief Sustainability Officer are directly involved in these actions and ensure alignment of government engagement across the entire PMO.

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Dow is actively engaged in the pursuit of efforts to create common approaches to climate policy globally, both to encourage global economic growth and to establish open markets for exports and innovation. For example, Dow supports an economy wide market-based price on carbon. Dow also supports the aims of the Paris Agreement. Dow actively engages with policy makers to support policies with the aim to accelerate the development of all forms of clean energy technologies (advanced nuclear, hydrogen, carbon capture and storage, etc.), while making investments to modernize the transmission grid, and support industry's deployment of energy efficient manufacturing processes and building materials.

Dow's global public policy advocacy covers a wide range of specific topics in

geographies where we do business. Dow makes available our top public policy priorities globally, and by geographic region, at:
https://corporate.dow.com/enus/about/legal/public-policy.html

Category of policy, law, or regulation that may impact the climate

Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate

Climate-related targets

Policy, law, or regulation geographic coverage

Global

Country/area/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

Dow engages with policymakers in jurisdictions where climate legislation and regulation is being considered. Dow's advocacy may occur through trade associations, coalitions or on our own direct behalf. Our advocacy is always aligned with our stated policy positions (dow.com). Our engagement (and subsequent reporting of our engagement) is consistent with local laws and regulations.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Our ability to meet these commitments (of being carbon neutral by 2050 (Scope 1+2+3 plus product benefits). We have also set a medium-term goal to reduce our net annual GHG emissions by 5 million metric tons by 2030 versus our 2020 baseline (15% reduction), while enabling business growth, will require effective management of our energy consumption and the implementation of new technologies. In addition, we will need the appropriate infrastructure and policy developments to support emissions reductions; Dow is actively engaged in constructive advocacy to advance pragmatic policies to enable a successful path to zero.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Dow has set an ambitious target of being carbon neutral by 2050 (Scope 1+2+3 plus product benefits). We have also set a medium-term goal to reduce our net annual GHG emissions by 5 million metric tons by 2030 versus our 2020 baseline (15% reduction). These policy focus areas are critical to Dow's success in achieving our climate targets.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Dow supports an economy wide market-based price on carbon and are advocating for public policies that incentivize and enable society's transition to net-zero. We believe an Emissions Trading System is the most efficient policy tool to do so. With no federal regulatory price on carbon in the U.S., Dow believes a voluntary emissions trading system for hard-to-abate sectors would achieve greater carbon reduction for less cost than a clean-energy standard approach.

To the extent other carbon reduction policies are pursued, funds from carbon pricing should be invested towards process technology breakthroughs, deliver demand-driven scale-up opportunities, and deployed in strategic infrastructure investments.

In the absence of a global carbon market, carbon border adjustment mechanisms will be important to protect the competitiveness of domestic, trade-exposed manufacturers and prevent investment leakage across borders.

Dow makes available our top public policy priorities globally, and by geographic region, at: https://corporate.dow.com/en-us/about/legal/public-policy.html

Category of policy, law, or regulation that may impact the climate

Carbon pricing, taxes, and subsidies

Focus area of policy, law, or regulation that may impact the climate

Emissions trading schemes

Policy, law, or regulation geographic coverage

Global

Country/area/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

Beginning in late 2022 and throughout 2023, we have engaged with interested parties, as well as other companies in the hard to abate sector, in discussions to start a voluntary emissions trading system. A market-based mechanism like an emissions trading system (ETS) is a positive way for U.S. manufacturers to maintain competitiveness, clarify the impact and act as a price signal to accelerate deployment of decarbonization technologies. A voluntary framework created by a coalition of companies would provide clarity to the investment community that the decarbonization of industry will happen, alleviating the perceived risk to investing in our sectors. This framework could also help ease customer sentiments around sustainability, which have added pressure to U.S. manufacturers to decarbonize. We continue to actively engage and collaborate with governments and community partners to help our industry achieve carbon neutrality faster — because we know that public policy will be a key

consideration in our investment decisions. There are technologies available today that would lower carbon emissions, but they need supportive policy and incentives to scale up, ensure affordability, and improve access.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Beginning in late 2022 and throughout 2023, we have engaged with interested parties, as well as other companies in the hard to abate sector, in discussions to start a voluntary emissions trading system. A market-based mechanism like an emissions trading system (ETS) is a positive way for U.S. manufacturers to maintain competitiveness, clarify the impact and act as a price signal to accelerate deployment of decarbonization technologies. A voluntary framework created by a coalition of companies would provide clarity to the investment community that the decarbonization of industry will happen, alleviating the perceived risk to investing in our sectors. This framework could also help ease customer sentiments around sustainability, which have added pressure to U.S. manufacturers to decarbonize.

We continue to actively engage and collaborate with governments and community partners to help our industry achieve carbon neutrality faster — because we know that public policy will be a key consideration in our investment decisions. There are technologies available today that would lower carbon emissions, but they need supportive policy and incentives to scale up, ensure affordability, and improve access.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is not aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Dow has set an ambitious target of being carbon neutral by 2050 (Scope 1+2+3 plus product benefits). We have also set a medium-term goal to reduce our net annual GHG emissions by 5 million metric tons by 2030 versus our 2020 baseline (15% reduction). These policy focus areas are critical to Dow's success in achieving our climate targets.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Dow is actively engaged in public policy areas in pursuit of innovation that changes how an industry works to make a profound impact on global and social challenges, including sustainability. Dow's global public policy advocacy covers a wide range of specific topics in geographies where we do business. Dow makes available our top public policy priorities globally, and by geographic region, at:
https://corporate.dow.com/enus/about/legal/public-policy.html

Category of policy, law, or regulation that may impact the climate

Low-carbon products and services

Focus area of policy, law, or regulation that may impact the climate

Circular economy

Policy, law, or regulation geographic coverage

Global

Country/area/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

Our Approach to Advancing a Circular Economy: At Dow, our vision for turning the tide on plastic waste is centered on solving challenges from designing for recyclability at the beginning of a product's life to encouraging local infrastructure to closing the loop. The issue is complex, and through partnerships, we are working across the value chain to improve collection, access to recycling and processing infrastructure. We also are creating new business models that will impact the overall recycling rates of plastics. Improving circularity of plastics through recycling and reuse is critical to a world that is also targeting carbon emissions reduction. The lower-carbon emissions benefits of polyethylene-based packaging (versus other polymers, paper, glass, and metal) serve as a key driver and source of value. Moving to circular products means incorporating recycled feedstocks from waste instead of more extraction of fossil fuels.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

-Achieve widespread access to waste collection.
-Recognize the role plastics play in a lower carbon future.
-Support life cycle analysis as a means to evaluate impacts of plastics and alternatives.
-Support innovation in product design and recycling technology.
-Develop global guidance, with industry input, on product design, recycled content, and optimizing resources.
-Measure progress.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Dow has set an ambitious target of being carbon neutral by 2050 (Scope 1+2+3 plus product benefits). We have also set a medium-term goal to reduce our net annual GHG emissions by 5 million metric tons by 2030 versus our 2020 baseline (15% reduction).

Improving circularity of plastics through recycling and reuse is critical to a world that is also targeting carbon emissions reduction.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Dow is actively engaged in public policy areas in pursuit of innovation that changes how an industry works to make a profound impact on global and social challenges, including sustainability. Dow's global public policy advocacy covers a wide range of specific topics in geographies where we do business. Dow makes available our top public policy priorities globally, and by geographic region, at:
https://corporate.dow.com/enus/about/legal/public-policy.html

Category of policy, law, or regulation that may impact the climate

Low-carbon products and services

Focus area of policy, law, or regulation that may impact the climate

Extended Producer Responsibility (EPR)

Policy, law, or regulation geographic coverage

Global

Country/area/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

Dow considers EPR a viable, transparent way of ensuring there is sufficient, focused funding for waste management systems. In 2022 Dow actively participated in the passage of California Senate Bill (SB) 54, also known as the California Plastic Pollution Prevention and Packaging Producer Responsibility Act. Senate Bill 54 (SB 54) which aims to reduce single-use plastics, improve recycling, and remove plastic from the environment. Dow aligned and worked alongside NGOs, recycling partners and other similar-minded companies and stakeholders to advocate for the passage of SB 54. Ultimately, we were successful and SB 54 passed the California Legislature and was signed into law by Governor Newsome.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Dow supports EPR systems that meet three criteria:
1. Fixes the Problem: Funds should be dedicated to waste management infrastructure, and fees should be sufficient to cover the full costs of the program. Recycling targets should be set using the best available science while taking into consideration local realities.

2. Flexible: Enables industry to innovate to find the most effective and efficient way to meet our legal responsibilities while adhering to harmonized reporting requirements and standardized definitions.
3. Fair: Accountability and enforcement that discourage free-riders (imports), and is equally applied in a material neutral way to all products in a category (i.e. paper, glass, plastic and aluminum packaging).
We believe EPR systems that meet these criteria would reduce the amount of waste ending up in the environment, and we are committed to advancing policy solutions that can make a real difference.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

These policy focus areas are critical to Dow's success in achieving our circularity targets.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Dow is actively engaged in public policy areas in pursuit of innovation that changes how an industry works to make a profound impact on global and social challenges, including sustainability. Dow's global public policy advocacy covers a wide range of specific topics in geographies where we do business. Dow makes available our top public policy priorities globally, and by geographic region, at:
https://corporate.dow.com/enus/about/legal/public-policy.html.

Category of policy, law, or regulation that may impact the climate

Low-carbon products and services

Focus area of policy, law, or regulation that may impact the climate

Other, please specify

International Trade Agreement

Policy, law, or regulation geographic coverage

Global

Country/area/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

We are committed to protecting our planet by addressing climate change, including contributing to a lower carbon future, both in our operations and value chains. Dow supports the Paris Agreement and its goal to keep global temperature rise to well below 2°C and to pursue efforts to limit the increase to 1.5°C.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Implementing a finalized Paris Rulebook is essential to drive progress and create global carbon markets.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Dow has set an ambitious target of being carbon neutral by 2050 (Scope 1+2+3 plus product benefits). We have also set a medium-term goal to reduce our net annual GHG emissions by 5 million metric tons by 2030 versus our 2020 baseline (15% reduction). These policy focus areas are critical to Dow's success in achieving our climate targets.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Dow is actively engaged in public policy areas in pursuit of innovation that changes how an industry works to make a profound impact on global and social challenges, including sustainability. Dow's global public policy advocacy covers a wide range of specific topics in geographies where we do business. Dow makes available our top public policy priorities globally, and by geographic region, at: https://corporate.dow.com/enus/about/legal/public-policy.html.

Category of policy, law, or regulation that may impact the climate

Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate

Low-carbon, non-renewable energy generation

Policy, law, or regulation geographic coverage

Global

Country/area/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

Dow is committed to advance the development of cost-effective clean energy alternatives and reduce carbon emissions. To achieve global climate change targets, all sources of low carbon electricity generation should be considered.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Dow considers nuclear energy, especially the promising technology of advanced small modular reactors, to be a long-term viable source of low carbon-emitting sustainable energy.
- Advanced small modular reactors offer the advantage of baseload replacement and renewable supplement and can alleviate intermittent capacity issues due to the nature of renewable power.

In August 2022, Dow and X-energy announced a signed letter of intent to collaborate and deploy an advanced reactor at a Dow site along the U.S. Gulf Coast by approximately 2030. The small modular reactor (SMR) would provide cost-competitive, carbon free process heat and power to the Dow facility.

Advanced small modular nuclear technology is going to be a critical tool for Dow's path to zero-carbon emissions and our ability to drive growth by delivering low-carbon products to our customers.
-Technologies that are still under commercial development, such as hydrogen and natural gas connected with carbon capture, will be required for the clean energy transition.
-Dow believes BLUE hydrogen also has an important role to play in the energy transition pathway – our need for competitively priced, consistent energy supply to produce high process heat and steam is a critical consideration.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Dow has set an ambitious target of being carbon neutral by 2050 (Scope 1+2+3 plus product benefits). We have also set a medium-term goal to reduce our net annual GHG emissions by 5 million metric tons by 2030 versus our 2020 baseline (15% reduction). These policy focus areas are critical to Dow's success in achieving our climate targets.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Dow is actively engaged in public policy areas in pursuit of innovation that changes how an industry works to make a profound impact on global and social challenges, including sustainability. Dow's global public policy advocacy covers a wide range of specific topics in geographies where we do business. Dow makes available our top public policy priorities globally, and by geographic region, at: https://corporate.dow.com/enus/about/legal/public-policy.html.

Category of policy, law, or regulation that may impact the climate

Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate

Other, please specify

Mandatory Climate Related Reporting

Policy, law, or regulation geographic coverage

Global

Country/area/region the policy, law, or regulation applies to

Your organization's position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

Dow has been a member of the Task Force on Climate-related Financial Disclosures (TCFD) since its beginnings. Dow's member role has been as Data Preparers and we are currently leading TCFD's work group to define guidance on metrics for non-financial companies. Dow has voluntarily reported on our Sustainability objectives, following GRI guidance since 2003. We have also participated in CDP since 2003 when it started as the Carbon Disclosure Project. Other voluntary reporting in which we participate in are Ecovadis, Dow Jones Sustainability Index, Just Capital, amongst others. Dow supports making climate change risk and opportunities, as well as ESG reporting, mandatory. Dow is also a long-standing and active member of the World Economic Forum, particularly its initiatives addressing climate change. Dow actively participates in the WEF's Alliance of CEO Climate Leaders; mandatory carbon reporting, and TCFD are among the topics of the alliance.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Support;

- Utilization of existing standards and frameworks – notably the framework developed by the Task Force on Climate-related Financial Disclosures ("TCFD") and the Greenhouse Gas ("GHG") Protocol Corporate Accounting and Reporting Standard.
- Efforts to provide consistent, comparable, and decision-useful information to investors while providing companies with clear reporting obligations and guidelines along with safe harbor protections for Scope 3 disclosures.

- Adoption of standard reporting practices that will help ensure investors and business counterparts have similar and/or comparable information across international jurisdictions.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Dow has set an ambitious target of being carbon neutral by 2050 (Scope 1+2+3 plus product benefits). We have also set a medium-term goal to reduce our net annual GHG emissions by 5 million metric tons by 2030 versus our 2020 baseline (15% reduction). These policy focus areas are critical to Dow's success in achieving our climate targets.

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

American Chemistry Council

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

The American Chemistry Council issued a set of policy recommendations to enable dramatic reductions in greenhouse gas (GHG) emissions. The plan is built around three imperatives – developing and deploying clean manufacturing technologies, pricing carbon, and promoting the adoption of emissions-reducing solutions. To support climate progress ACC calls on Congress to enact legislation to:

- Increase government investment & scientific resources to develop & deploy lower emissions technologies in the manufacturing sector
- Adopt transparent, predictable, technology- & revenue-neutral, market-based, economy-wide carbon price signals
- Encourage adoption of emissions-avoiding solutions & technologies to reduce

emissions throughout the economy to achieve significant emissions savings

Dow endeavours to participate actively in the leadership of key trade associations. With respect to the ACC, in 2021 Dow's CEO was Chair of ACC's Board, and co-led the ACC Board Sustainability Committee. Other Dow executives participate in the Energy and Climate Change Policy Working Groups, among other working groups within ACC.

Engagement with trade and business associations, whose purpose is to promote common business interests, assists us in managing priorities relevant to Dow and the chemical industry. However, Dow may from time to time find itself in disagreement with the prevailing views of the majority of the association's membership. It is Dow's practice, and preference, to work within the association policy process to assure that Dow's views are adequately communicated and represented in association policy, strategy and tactics. In all cases, any Dow public position on a matter of public policy is the prevailing company position, irrespective of any trade association position to the contrary.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

National Association of Manufacturers

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

The National Association of Manufacturers (NAM) supports the objectives of the Paris Climate Agreement to significantly reduce the risks and impacts of global climate change. Manufacturers are committed to helping address climate change and achieving meaningful global GHG reductions in an equitable, timely, and cost-effective manner, while increasing the global competitiveness of U.S. industries. There is a clear

governmental role in addressing climate change. Some of the actions recommended by NAM to address climate change include (but are not limited to):

- One Unified Policy
- Ensuring a Level Playing Field and Avoiding Carbon Leakage
- Preserve Consumer Choice and Manufacturing Competitiveness

Immediate Actions
- Massively invest in public- and private-sector energy and water efficiency.
- Fund and expand climate and clean energy R&D federal programs at the Department of Energy and elsewhere
- Pave the way for a smart grid.
- Commercialize and deploy carbon capture, utilization and storage technology
- Ratify the Kigali Amendment.

Dow endeavours to participate actively in the leadership of key trade associations. Dow is part of NAM's Energy and Resources Policy Committee that works on Climate Change Policy.

Engagement with trade and business associations, whose purpose is to promote common business interests, assists us in managing priorities relevant to Dow and the chemical industry. However, Dow may from time to time find itself in disagreement with the prevailing views of the majority of the association's membership. It is Dow's practice, and preference, to work within the association policy process to assure that Dow's views are adequately communicated and represented in association policy, strategy and tactics. In all cases, any Dow public position on a matter of public policy is the prevailing company position, irrespective of any trade association position to the contrary.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

European Chemical Industry Council (CEFIC)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

The European chemical industry has the ambition to become climate neutral by 2050 and is uniquely positioned at the heart of European manufacturing to contribute to realizing a climate neutral society. The European chemical industry supports the Paris Climate Agreement and strong action on climate change in line with the scientific advice provided by the Intergovernmental Panel on Climate Change (IPCC).
An entirely new industrial policy focus must be deployed to unlock the huge scale of investments required. Cefic calls for the recommendations of the Industrial Transformation Master Plan, towards creating an enabling framework for the chemical industry to kick-start its transformation as soon as possible:
1. Managing the different global speeds. To maintain industry competitiveness, climate policies need to consider the global perspective, especially when the speed of transformation is different from the rest of the world and cost of carbon is expected to increase further.
2. Abundant access to climate-friendly energy and feedstock at an affordable price.
3. Infrastructure and integration. National governments need to collectively prioritise investments in infrastructure for energy as well as for the transport and storage of CO2.
4. Innovation towards climate-friendly technologies.
5. Supportive financial and market frameworks for large and small companies.
6. Leverage inter-sectoral symbiosis potential. Frameworks should encourage large industrial clusters to realise synergies between different industry sectors.
Cefic has welcomed the EU Climate Law which enshrines the EU objective of climate-neutrality by 2050 and highlights, in particular, the importance of sectorial roadmaps that will assist sectors in planning the necessary investments.

Engagement with trade and business associations, whose purpose is to promote common business interests, assists us in managing priorities relevant to Dow and the chemical industry. However, Dow may from time to time find itself in disagreement with the prevailing views of the majority of the association's membership. It is Dow's practice, and preference, to work within the association policy process to assure that Dow's views are adequately communicated and represented in association policy, strategy and tactics. In all cases, any Dow public position on a matter of public policy is the prevailing company position, irrespective of any trade association position to the contrary.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.3c

(C12.3c) Provide details of the funding you provided to other organizations or individuals in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization or individual

Non-Governmental Organization (NGO) or charitable organization

State the organization or individual to which you provided funding

International Emissions Trading Association (IETA)

Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4)

26,000

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

To deliver the Paris Agreement's climate protection goals, IETA advocates the power of markets to price carbon effectively and deliver net-zero targets. We will -

• Seek to strengthen the credibility and functionality of today's carbon markets promote accelerated growth of high-integrity voluntary markets

• Expand work on new market-based initiatives, including emissions trading systems (ETS, tax-and-offset programmes and UN FCCC carbon trading mechanisms

• Promote linked carbon pricing systems as a valuable means of channelling increased finance to the climate transition

• Convene the carbon market to build the professional community and networks that can deliver a net zero future - and herald the benefits of market cooperation in our communications.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Type of organization or individual

Non-Governmental Organization (NGO) or charitable organization

State the organization or individual to which you provided funding

Center for Climate and Energy Solutions (C2ES)

Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4)

35,000

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

C2ES mission is to advance strong policy and ambitious action to: reduce greenhouse gas emissions; promote and accelerate the clean energy transition; strengthen adaptation and resilience to climate impacts; and facilitate the necessary financial investments to do so. A range of solutions, including market-based approaches and other complementary policies will be critical to achieve each of these goals. We believe a sound climate strategy must reflect the urgent need for ambitious action. Solutions developed through inclusive stakeholder engagement, informed by the latest science focused on the long-term goals of the Paris Agreement, which are equitable and just leaving no one behind, and which create good jobs, are essential to ensure a strong, sustainable domestic and global economy.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In voluntary sustainability report

Status

Complete

Attach the document

2022 INtersections Progress Report.pdf

Page/Section reference

2022 INtersections Progress Report: Pages 12-17, GRI pages 126-131, GHG Protocol Report beginning on page 176, and TCFD beginning on page 183

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures

Emission targets
Other metrics

Comment

Dow publishes publicly our response to climate change, our GHG emissions progress towards our targets, as well as other metrics and reporting relevant to climate in our annual INtersections Progress Report. These topics are also reported in other annual reports including our annual Proxy statement as well as our 10-K.

Publication

In mainstream reports

Status

Complete

Attach the document

2022 Dow 10K.pdf

Page/Section reference

2022 10- K Report: Sustainable investments: page 8, Climate Strategy and Targets: Pages 15-16, and 51, Climate Related Risks: Page 20.

Content elements

Governance
Strategy
Risks & opportunities
Emission targets
Other metrics

Comment

Dow publishes publicly our response to climate change, risks and opportunities, and our climate strategy and targets, as well as other metrics and reporting relevant to climate in our annual 10-K filing. These topics are also reported in other annual reports including our annual proxy statement as well as our voluntary sustainability reports.

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Task Force on Climate-related Financial Disclosures (TCFD)	Signatory of UN Global Compact and World Economic Forum.

	Task Force on Nature-related Financial Disclosures (TNFD) UN Global Compact World Business Council for Sustainable Development (WBCSD) Other, please specify American Chemistry Council (ACC), Green Chemistry and Commerce Council, International Council on Chemical Associations (ICCA), Together for Sustainability (TfS), World Economic Forum (WEF), Water Resilience Pledge, Plastics Europe,	(WEF). Signed by our CEO. All others are memberships.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, both board-level oversight and executive management-level responsibility	Under the climate efforts tied to recognizing the changing climate as a key stressor for biodiversity, Dow has made the commitment to achieving the goal of keeping temperature rise well below 2°C and pursuing efforts to limit the increase to 1.5°C. Dow is also committed to comply with national regulations on the protection of biodiversity as countries develop and implement their regulatory framework in fulfilment of their commitment to the Convention on Biological Diversity and to the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization. One of Dow's 2025 Sustainability Goals is the pioneering Valuing Nature Goal. By 2025, Dow will deliver $1 billion in Net Present Value (NPV) through business-driven projects that enhance nature. Dow also has opportunities to enhance biodiversity with the rivers we interact with, the lands we own, the communities we operate in and the innovative products we offer. For example, Dow is collaborating with The Nature Conservancy (TNC) and the Peabiru Institute to analyse the biodiversity within Dow's preserved native Amazon forests and identify a local community to manage the commercial cooperative.

		Dow's Sustainability External Advisory Council (SEAC) reviews critical issues regarding our sustainability objectives, which includes biodiversity. In the short- to medium-term timeframe (<10 years), biodiversity impacts are managed through a combination of technological, commercial, and operational activities. The management principles governed by Dow's Operating Discipline Management System are included in order of priority: avoid, reduce, reuse, regenerate, restore and transform. Biodiversity impacts are also evaluated and managed on long-term timelines (10+ years) by including impacts to nature as part of our capital allocation process. We screen all capital projects for opportunities to use nature-based solutions.

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Other, please specify Under the climate efforts tied to Recognizing the changing climate as a key stressor for biodiversity, Dow has made the commitment to achieving the goal of keeping temperature rise well below 2°C	SDG

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Tools and methods to assess impacts and/or dependencies on biodiversity

IBAT – Integrated Biodiversity Assessment Tool

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

Locate the Interface with Nature

Dow has completed an assessment and screening of locations that are most likely to present critical dependencies, substantial impact and material risks and opportunities. Dow established a priority site list focusing on directly owned and operated assets that represents two key areas of impacts – GHG emissions and water withdrawal at key water stressed sites. The list of high-priority sites defined is tied to Dow's TCFD disclosures and represents 95% of GHG Scope 1 and Scope 2 emissions and the six key water-stressed sites. The materiality of indirect impacts (i.e., supply chain and product use phase) and the importance of including additional key biodiversity metrics, are currently being assessed. Such efforts include defining priority suppliers with which to engage as part of the sustainable purchasing program with a specific focus on bio-based raw materials. For reference, site sizes vary from approximately 160 acres to 20 square miles. In addition, Dow is piloting the TNFD LEAP process to locate, evaluate, prioritize and use nature methodology and tools to ensure business decisions consider nature, building on the work of Dow's Valuing Nature goal.

Evaluate Priority Dependencies and Impacts

To define the potential for impacts on nature, a screening process was completed by mapping the location of manufacturing assets and importance of the area from a biodiversity perspective. The Integrated Biodiversity Assessment Tool (IBAT) was used to establish the importance of the area. The IBAT provides location-based global biodiversity datasets, which include the World Database on Protected Areas, International Union for Conservation of Nature (IUCN) Red List of Threatened Species and the World Database of Key Biodiversity Areas, using the GIS coordinates of each site. Dow also screened all its sites against the UNESCO World Heritage dataset to identify any site within a 5 km buffer area. Note, per the UNESCO World Heritage dataset, Dow identified Moscow and Vladimir in Russia; however, Dow has not retained these sites for further assessment since dependencies and impacts are not significant from a Dow global perspective. The IUCN categories referenced below are defined as IV - habitat or species management area, V - protected landscape or seascape and VI - protected area with sustainable use of natural resources.

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Tools and methods to assess impacts and/or dependencies on biodiversity

ReCiPe
TNFD – Taskforce on Nature-related Financial Disclosures

Other, please specify

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

Within the last two years, Dow has initiated the complex process of developing an understanding of nature-related dependencies, recognizing the potential risk to business continuity as the basis for establishing a robust biodiversity strategy. Biodiversity is the subject of ongoing research and efforts by other companies alongside the scientific community and organizations. Dow's process for identifying and assessing dependency- and impact-related biodiversity risks is part of the integrated risk management process across multiple disciplines. Dow is tackling this effort with its long-time partner TNC and as a member of the TNFD forum. Dow is piloting the LEAP process (LEAP – the risk and opportunity assessment approach » TNFD□) across all identified phases as developed by TNFD and will adjust when additional decisions by Dow leadership and external guidance are made available. Dow is defining the methodology to locate and evaluate priorities and use the nature methodology and tools to ensure business decisions consider nature. Key focus areas of biodiversity are evaluated across Dow's sites and businesses. Dow's Consumer Solutions business has had particular focus on this topic due to the significance of the biome and resource extraction processes. Timber products, such as charcoal and woodchips, are used by Dow's Consumer Solutions business. Dow procures these inputs from the market and produces them in its Natural Resources Operation in Brazil. The Natural Resources Operation includes Dow-owned land located in Minas Gerais and Pará states. Dow's farm in Pará, where charcoal is sourced, is located on the Amazon Biome. Minas Gerais, its smaller eucalyptus plantation used for resourcing woodchips, is located on the Cerrado and Mata Atlantica biomes. Dow's consumption of timber products as a raw material could cause resource scarcity and have potential to impact habitat loss. To address that risk, Dow has been auditing all the raw material suppliers to avoid any illegal deforestation and to have Forest Stewardship Council (FSC) certification in its own lands. The tools and methods used to date to screen for dependencies across the value chain include WRI Aqueduct tool for water stress, CDP reporting to access nature related disclosures from our suppliers. Life Cycle Assessment of products and of processes also use the ReCiPe method.

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity-sensitive areas in the reporting year?

Yes

C15.4a

(C15.4a) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.

Classification of biodiversity -sensitive area

Other biodiversity sensitive area, please specify

IUNC protected landscape (category V) ; National Protected Area

Country/area

Brazil

Name of the biodiversity-sensitive area

Area de protecao ambient do lago de tucurui (https://ideflorbio.pa.gov.br/unidades-de-conservacao/4/area-de-protecao-ambiental-do-lago-de-tucurui)

Proximity

Up to 5 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Using that framework to prioritize Dow's top impacts and dependencies and IBAT tool results, Dow identified the Breu Branco – Pará – Brazil location as a critical biodiversity site and progress to do further assessment in 2022. Dow's Feedstocks operation in Pará-Brazil is in one of the most threatened regions in the Amazon biome. Approximately 70% of its Amazon forests have already been cleared to make way for cities and low-productivity agriculture. Dow owns land as part of our Natural Resources Operation in the Pará states in Brazil. Dow owns a total of 100,000 acres of land here, with 20% used for eucalyptus farming and 80% maintained as native Amazon Forest in permanent preserved as defined by the Brazilian government. Dow produces silicon metal using charcoal and woodchips originating from the eucalyptus plantation. The farm in Pará also has the charcoal operation and is Forest Stewardship Count (FSC) certified.

Dow's presence in this region and ownership of this land is a major enabler for forest and local biodiversity preservation. Dependency and impact analysis included both the farm and conservation area. To perform this work, Dow hired EcoMetrix Solutions Group, LLC (EMX). This work also served as a pilot for the enhancement of an existing ESII Tool to include the additional biodiversity modelling capabilities. The intent of the study was to understand the percent performance of the nature forest when compared to the farming activities to assess Dow's current sustainable land management practices.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area

Physical controls

Operational controls

Abatement controls

Restoration

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Dow owns a total of 100,000 acres of land at our Breu Branco-Para location in Brazil. 80% of the land is maintained as native Amazon forest, while 20% is used for eucalyptus farming which introduces a non-invasive but non-native tree species to the area.

To understand how Dow's activities could negatively affect biodiversity, Dow hired EcoMetrix Solutions Group, LLC (EMX). This work also served as a pilot for the enhancement of an existing ESII Tool to include the additional biodiversity modelling capabilities. The intent of the study was to understand the percent performance of the nature forest when compared to the farming activities to assess Dow's current sustainable land management practices. The results from ecosystem service and biodiversity found that the current Dow rainforest land management practices and stewardship program delivers and sustains 34 key ecosystems services, such as temperature regulation, soil health, water filtration, soil erosion control and biodiversity through overall health of habitat. Dow is also a member of the strategy committee of Partnership Platform for Amazon (PPA). The PPA seeks to build innovative, tangible and practical solutions for sustainable development and the conservation of biodiversity, forests and natural resources in the Amazon.

Classification of biodiversity -sensitive area

Other biodiversity sensitive area, please specify

IUCN category IV (habitat or species management area); National Protected Area; Ramsar Protected Area

Country/area

Netherlands

Name of the biodiversity-sensitive area

The Ramsar and national protected areas sites identified as "Westerschelde & Saeftinghe"

Proximity

Up to 5 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Dow Terneuzen is Dow's second largest chemical manufacturing location in the world occupying 440 hectares of land situated along the Westerschelde River. It operates 16 different chemical manufacturing plants within the I-Park producing polyethylene, ethylene oxide, cumene, polyol and polyglycol. Activities that could negatively affect biodiversity include the quantity of water withdrawn from the local surface water body (WESTERSCHELDE RIVER), the emissions and temperature increase on the water

discharged from the manufacturing facilities, the GHG emissions and other priority compounds emitted to air.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area

Site selection
Project design
Scheduling
Physical controls
Operational controls
Abatement controls
Restoration
Other, please specify

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Activities that could negatively affect biodiversity include the quantity of water withdrawn from the local surface water body (WESTERSCHELDE RIVER), the emissions and temperature increase on the water discharged from the manufacturing facilities, the GHG emissions and other priority compounds emitted to air. A reduction of species can be caused by habitat conversion from the land occupied by Dow's manufacturing assets, solid waste sent to landfills and raw material sourcing. Dow could have direct and indirect impacts on biodiversity and the health of ecosystems. It works diligently to manage these potential impacts. The impacts are assessed in collaboration with the local authorities that regulate the amount of water withdrawals, the emissions to air and water, the temperature of the effluent. Waste sent to landfills is also tightly regulated to ensure proper facilities to minimise potential impacts. Recognising the sensitivity of the local watershed, Dow Ternezuen has been working since 2007 in reaching its objective to be 100% circular on water withdrawn from a freshwater water body serving the local community in drinking water (The Biesboch watershed). It currently operates with 75% circular water.

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments

Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management Species management Education & awareness Law & policy Livelihood, economic & other incentives Other, please specify Collaborated with TNC, EcoMetrix Solutions Group (EMX) to incorporate biodiversity modelling capabilities within an existing ecosystem service tool. As a member of the TNFD forum, Dow is leading the development of the chemical sector guidance.

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No	

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Governance Impacts on biodiversity Details on biodiversity indicators Risks and opportunities Biodiversity strategy	2022 INtersections Progress Report: Pages 20, 21, 30, 61, 111, 123-128 https://corporate.dow.com/en-us/seek-together/valuing-nature.html 1

[1]2022 INtersections Progress Report.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

Dow appreciates the opportunity to report to CDP on our climate-related initiatives. Dow has a long history of leadership in reporting transparency and sustainability disclosures, and we see CDP as a critical report driving transparency on climate-related issues.

Cautionary Statement about Forward-Looking Statements

Certain statements in this report are “forward-looking statements” within the meaning of the federal securities laws, including Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Such statements often address expected future business and financial performance, financial condition, and other matters, and often contain words or phrases such as “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “opportunity,” “outlook,” “plan,” “project,” “seek,” “should,” “strategy,” “target,” “will,” “will be,” “will continue,” “will likely result,” “would” and similar expressions, and variations or negatives of these words or phrases.

Forward-looking statements are based on current assumptions and expectations of future events that are subject to risks, uncertainties and other factors that are beyond Dow’s control, which may cause actual results to differ materially from those projected, anticipated or implied in the forward-looking statements and speak only as of the date the statements were made. These factors include, but are not limited to: sales of Dow’s products; Dow’s expenses, future revenues and profitability; any global and regional economic impacts of a pandemic or other public health-related risks and events on Dow’s business; any sanctions, export restrictions, supply chain disruptions or increased economic uncertainty related to the ongoing conflict between Russia and Ukraine; capital requirements and need for and availability of financing; unexpected barriers in the development of technology, including with respect to Dow's contemplated capital and operating projects; Dow's ability to realize its commitment to carbon neutrality on the contemplated timeframe; size of the markets for Dow’s products and services and ability to compete in such markets; failure to develop and market new products and optimally manage product life cycles; the rate and degree of market acceptance of Dow’s products; significant litigation and environmental matters and related contingencies and unexpected expenses; the success of competing technologies that are or may become available; the ability to protect Dow’s intellectual property in the United States and abroad; developments related to contemplated restructuring activities and proposed divestitures or acquisitions such as workforce reduction, manufacturing facility and/or asset closure and related exit and disposal activities, and the benefits and costs associated with each of the foregoing; fluctuations in energy and raw material prices; management of process safety and product stewardship; changes in relationships with Dow’s significant customers and suppliers; changes in consumer preferences and demand; changes in laws and regulations, political conditions or industry development; global economic and capital markets conditions, such as

inflation, market uncertainty, interest and currency exchange rates, and equity and commodity prices; business or supply disruptions; security threats, such as acts of sabotage, terrorism or war, including the ongoing conflict between Russia and Ukraine; weather events and natural disasters; disruptions in Dow's information technology networks and systems; and risks related to Dow's separation from DowDuPont Inc. such as Dow's obligation to indemnify DuPont de Nemours, Inc. and/or Corteva, Inc. for certain liabilities.
Where, in any forward-looking statement, an expectation or belief as to future results or events is expressed, such expectation or belief is based on the current plans and expectations of management and expressed in good faith and believed to have a reasonable basis, but there can be no assurance that the expectation or belief will result or be achieved or accomplished. A detailed discussion of principal risks and uncertainties which may cause actual results and events to differ materially from such forward-looking statements is included in the section titled "Risk Factors" contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2022 and the Company's subsequent Quarterly Reports on Form 10-Q. These are not the only risks and uncertainties that Dow faces. There may be other risks and uncertainties that Dow is unable to identify at this time or that Dow does not currently expect to have a material impact on its business. If any of those risks or uncertainties develops into an actual event, it could have a material adverse effect on Dow's business. Dow Inc. and The Dow Chemical Company ("TDCC") assume no obligation to update or revise publicly any forward-looking statements whether because of new information, future events, or otherwise, except as required by securities and other applicable laws.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	CEO	Chief Executive Officer (CEO)

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public