

Concordance with CSR standards

In this document, Arkema presents the concordance tables between its Non-Financial Reporting and the main global Sustainability Reporting Standards.

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Alignment with the TCFD recommendations

As part of its commitment to climate action, Arkema supports the recommendations issued by the Taskforce for Climate-related Financial Disclosures (TCFD). These recommendations are designed to provide a framework for business communication on climate change by organizing information into four key areas: governance, strategy, risk management, as well as metrics and targets. More detailed information can be found in the Universal Registration Document and in the CDP climate change questionnaire to which Arkema responds every year and which is aligned with the TCFD recommendations.

	Further details	
	Section of this document	CDP questions
GOVERNANCE		
The presentation of CSR governance in section 4.1.2 of this chapter includes topics relating to climate change. In addition, a steering committee dedicated specifically to Arkema's climate plan was set up in 2019.	4.1.2 4.3.3	C1.3 C1.3.a C1.1.b
Every year, performance shares are granted to the Chairman and Chief Executive Officer and to the Group's executives and employees. The climate-related objective of reducing GHGs has been one of the key performance indicators since 2019.	4.4.1.5	C1.2 C1.2.a
The achievement rate of this objective therefore has an impact on the allocation of performance shares.	3.5.1	
STRATEGY		
Main risks:		C2.3.a
▪ Physical risks	2.1.3	
Acute physical risks related to climate change (extreme weather events, such as floods, droughts and storms) that could (i) cause significant damage to certain sites and therefore impact the operations carried out at those sites and (ii) generate significant costs due to insurance deductibles and damage not covered by insurance policies.		
▪ Transition risks	2.1.2	
The introduction or strengthening of regulations relating to the pricing of GHG emissions (emissions trading systems such as the ETS, carbon taxes, taxes on energy purchases, etc.) could have a negative impact on the Group's activities by increasing operating costs and reducing profitability.		
New regulations affecting the fluorogas market , which could force the Group to sharply reduce, or even cease, the sale or production of certain products.		
Main opportunities:		C2.4.a
▪ Resource efficiency		
Energy: reduced energy use thanks in particular to the Arkenergy program, driving a reduction in production costs and environmental impacts.	4.3.3.2.2 1.1.2.1	
Renewable raw materials: development of specialty materials based on renewable raw materials, such as Rilsan® polyamide 11, to preserve non-renewable resources and meet high market expectations.	4.2.3	
▪ Markets		
Electric mobility: development of new solutions to improve the performance of batteries designed for energy storage in the fast-growing low greenhouse gas emission electric vehicle market.	1.1.2.3 1.1.2.2	
Transportation: development of lightweight materials for the aeronautics and automotive industries, reducing fuel consumption and therefore greenhouse gas emissions.	1.1.2.6	
Construction: development of solutions to improve building energy efficiency, reducing heating and air-conditioning needs and therefore greenhouse gas emissions.		
Climate-related scenarios:		C.3.1.a C.3.1.b
Preliminary work on climate-related scenarios was initiated in 2018. Extreme climate-related rainfall was assessed under the RCP 2.6 and RCP 8.5 scenarios. The analysis shows that climate-related flood risks are limited for Group sites in the short term.		
RISK MANAGEMENT		
The procedures for identifying, assessing and managing financial and non-financial risks described in section 2.2 of this document cover the risks related to climate change. These risks are described under "Regulatory requirements and CSR expectations" and "Natural disasters and climate change", presented respectively in sections 2.1.2 and 2.1.3 of this document.	2.1 2.1.2 2.1.3 2.2	C.2.2 C.2.2.a
To manage the acute physical risks related to climate change, Arkema is defining scenarios and determining alternative production locations within the Group for the majority of its sites in order to ensure continuity of service to its customers. For transition risks related to new regulations on GHGs and fluorogases, the Group is supported by regulations experts to anticipate regulatory changes and by its R&D teams to develop alternative solutions with lower GHG emissions.		
METRICS AND TARGETS		
Greenhouse gas emissions (Scopes 1, 2 and 3)	4.3.3.2	C4.1, C4.1.a

Targets relating to climate and performance	4.5.2.4	C4.2, C4.2.b
▪ for Scope 1 and Scope 2 greenhouse gas emissions as defined in the Kyoto Protocol and substances listed in the Montreal Protocol:	4.5.1	C6.1, C6.3, C6.5
▪ by 2030, 38% reduction in absolute emissions compared with 2015.		
▪ for Scope 3 greenhouse gas emissions as defined in the Kyoto Protocol:		
▪ by 2030, 19% reduction compared with 2015 levels in absolute emissions related to fuel and energy (excluding Scopes 1 and 2), waste produced, and upstream and downstream transportation and distribution.		
▪ commitment that raw materials suppliers representing 82% of GHG emissions related to our purchases set Science-Based Targets (SBTs) on their Scopes 1 and 2 by 2025.		
The Group also has an intensive objective to reduce net energy purchases in terms of EFPI by 20% between 2012 and 2030. This second objective contributes directly to reducing Scopes 1, 2 and 3 greenhouse gas emissions.		
Internal carbon price used in the industrial investment analysis and approval process.		

GRI content index

Declaration of GRI compliance

Arkema Group follows the GRI Sustainability Reporting Standards and applies their principles (GRI 101). The 2020 report has been prepared in accordance with the GRI Standards: Core option.

In order to ensure a good quality approach, in line with GRI Standards expectations, Arkema ensured the implementation of the tests indicated for each principle by Materiality-Reporting, GRI DATA PARTNER for France.

The GRI content index below presents the general and specific items of information, in accordance with their materiality for the Group.

GRI standard	Disclosure	Description	Location or omission
GRI 101: Foundation – 2016			
GRI 102: General disclosures – 2016			
Organizational profile			
	102-1	Name of the organization	6.1.1 – Information about the Company Cover
	102-2	Activities, brands, products and services	1.2 – Business overview
	102-3	Location of headquarters	6.1.1 – Information about the Company 5.4.2 – Parent company financial statements/SUBSIDIARIES AND INVESTMENTS
	102-4	Location of operations	6.1.2 – Subsidiaries and shareholdings of the Company 5.4.2 – Parent company financial statements/SUBSIDIARIES AND INVESTMENTS
	102-5	Ownership and legal form	6.1.1 – Information about the Company 5.4.2 – Parent company financial statements/SUBSIDIARIES AND INVESTMENTS
	102-6	Markets served	PROFILE 1.2 – Business overview
	102-7	Scale of the organization	PROFILE KEY FIGURES OUR BUSINESS MODEL 1.2 – Business overview 6.1.1 – Information about the Company
	102-8	Information on employees and other workers	4.4.1 – Employee information
	102-9	Supply chain	1.4 – Material contracts 4.1.7 – Stakeholders and materiality assessment 4.2.1 – Management of sustainable solutions portfolio 4.2.4 – Management of the solutions portfolio
	102-10	Significant changes to the organization and its supply chain	2.2 – Global internal control and risk management procedures
	102-11	Precautionary principle or approach	2.1 – Main risks
	102-12	External initiatives	4.1.1 – CSR policy 4.1.8 – CSR key performance indicators
	102-13	Membership of associations	4.4.6 – Corporate citizenship and philanthropy
Strategy			
	102-14	Statement from senior decision-maker	Message from the Chairman and CEO in the introduction of this document
	102-15	Key impacts, risks, and opportunities	AMBITION 4.1.3 – Description of key impacts, risks, and opportunities TABLE OF THE GROUP'S CONTRIBUTION TO THE UNITED NATIONS SDGS 4.1.5 – Duty of care plan
Ethics and integrity			
	102-16	Values, principles, standards and norms of behavior	4.4.2 – Compliance and ethics 4.2.5.4 – Animal welfare
Governance			
	102-18	Governance structure	4.1.2 – CSR governance 3.2 – Composition of administrative and management bodies
Stakeholder engagement			

	102-40	List of stakeholder groups	4.1.7 – Stakeholders and materiality assessment/ OPEN DIALOGUE
	102-41	Collective bargaining agreements	4.4.1.7 – Active social dialogue with employee representatives
	102-42	Identifying and selecting stakeholders	4.1.7 – Stakeholders and materiality assessment/ OPEN DIALOGUE
	102-43	Approach to stakeholder engagement	4.1.7 – Stakeholders and materiality assessment
	102-44	Key topics and concerns raised	4.1.7 – Stakeholders and materiality assessment/ TABLE OF PRIORITY MATTERS
Reporting practice			
	102-45	Entities included in the consolidated financial statements	4.5.2.1 – Environmental reporting tools and scope 4.5.2.2 – Safety data reporting tools and scope 4.5.3.1 – Social, employee and R&D reporting tools and scope
	102-46	Defining report content and topic boundaries	4.1.7 – Stakeholders and materiality assessment
	102-47	List of material topics	4.1.7 – Stakeholders and materiality assessment
	102-48	Restatements of information	1.2.1 – Adhesive Solutions 1.2.2 – Advanced Materials 1.2.3 – Coating Solutions 1.2.4 – Intermediates
	102-49	Changes in reporting	4.5 – Reporting methodology
	102-50	Reporting period	4.5.1 – Reporting organization
	102-51	Date of most recent report	Page 1 footnote
	102-52	Reporting cycle	4.5.1 – Reporting organization
	102-53	Contact point for questions regarding the report	8.2 – Person responsible for the information
	102-54	Claims of reporting in accordance with the GRI Standards	4.5.5 – GRI content index
	102-55	GRI content index	4.5.5 – GRI content index
	102-56	External assurance	4.5.6 – Independent third-party opinion pursuant to articles L. 225-102-1 and L. 22-10-36 of the French Commercial Code
Specific items			
GRI 200: Economic standards			
GRI 103: Management approach – 2016	103-1	Explanation of the material topic and its boundary	4.1.1 – CSR policy 4.1.7 – Stakeholders and materiality assessment
	103-2	The management approach and its components	4.4 – Open dialogue and close relations with stakeholders
	103-3	Evaluation of the management approach	4.5.4 – Indicators
Economic performance			
GRI 201: Economic performance – 2016	201-1	Direct economic value generated and distributed	4.4.6.2 – Corporate citizenship
	201-2	Financial implications and other risks and opportunities due to climate change	4.2.2 – Innovation
	201-4	Financial assistance received from government	5.3.3 – Notes to the consolidated financial statements at 31 December 2020/Note 8/8.2 – Other intangible assets/Capitalized research and development costs
Market presence			
GRI 202: Market presence – 2016	202-2	Proportion of senior management hired from the local community	4.4.1.6 – Diversity, equal opportunity and equal treatment
Indirect economic impacts			
GRI 203: Indirect economic impacts – 2016	203-1	Infrastructure investments and services supported	4.4.6.1 – Supporting local communities through innovation
	203-2	Significant indirect economic impacts	4.4.6.2 – Corporate citizenship
Procurement practices			
GRI 204: Procurement practices – 2016	204-1	Proportion of spending on local suppliers	4.1.5 – Duty of care plan 4.4.4 – Suppliers and subcontractors
Anti-corruption			
GRI 205: Anti-corruption – 2016	205-1	Operations assessed for risks related to corruption	4.1.5 – Duty of care plan 4.4.2 – Compliance and ethics
	205-2	Communication and training about anti-corruption policies and procedures	4.4.2 – Compliance and ethics
	205-3	Confirmed incidents of corruption and actions taken	4.4.2 – Compliance and ethics
Anti-competitive behavior			

GRI 206: Anti-competitive behavior – 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	4.4.2 – Compliance and ethics
Taxes			
GRI 207: Tax – 2019	207-1	Approach to tax	4.4.2.6 – Tax policy
	207-2	Tax governance, control and risk management	4.4.2.6 – Tax policy
GRI 300: Environmental standards			
GRI 103: Management approach – 2016	103-1	Explanation of the material topic and its boundary	4.1.7 – Stakeholders and materiality assessment
	103-2	The management approach and its components	4.3.3.1 – Environmental management
	103-3	Evaluation of the management approach	4.5.4 – Indicators
Materials			
GRI 301: Materials – 2016	301-1	Materials used by weight or volume	4.3.3.3.3 – Raw materials use
	301-2	Recycled input materials used	4.3.3.3.4 – Circular economy and industrial operations
	301-3	Reclaimed products and their packaging materials	4.3.3.3.4 – Circular economy and industrial operations
Energy			
GRI 302: Energy – 2016	302-1	Energy consumption within the organization	4.3.3.3.1 – Energy use
	302-3	Energy intensity	4.3.3.2.2 – Energy
	302-4	Reduction of energy consumption	4.3.3.2.2 – Energy
	302-5	Reductions in energy requirements of products and services	4.3.3.2.2 – Energy
Water and effluents			
GRI 303: Water and effluents – 2018	303-1	Interactions with water as a shared resource	4.3.3.3.2 – Water use
	303-2	Management of water discharge-related impacts	4.3.3.4.2 – Emissions into air, water and soil
	303-3	Water withdrawal	4.3.3.3.2 – Water use
	303-4	Water discharge	4.3.3.4.2 – Emissions into air, water and soil
	303-5	Water consumption	4.3.3.3.2 – Water use
Biodiversity			
GRI 304: Biodiversity – 2016	304-2	Significant impacts of activities, products and services on biodiversity	4.3.3.4 – Protecting biodiversity
Emissions			
GRI 305: Emissions – 2016	305-1	Direct (Scope 1) GHG emissions	4.3.3.2.1 – Scopes 1 and 2 greenhouse gas emissions
	305-2	Energy indirect (Scope 2) GHG emissions	4.3.3.2.1 – Scopes 1 and 2 greenhouse gas emissions
	305-3	Other indirect (Scope 3) GHG emissions	4.3.3.2.3 – Scope 3 greenhouse gas emissions
	305-4	GHG emissions intensity	4.3.3.1 – Environmental management 4.3.3.2.1 – Scopes 1 and 2 greenhouse gas emissions
	305-5	Reduction of GHG emissions	4.3.1 – Health, safety and environmental management
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx) and other significant air emissions	4.3.3.4.2 – Emissions into air, water and soil
Waste			
GRI 306: Waste – 2020	306-1	Waste generation and significant waste-related impacts	4.2.3 – Circular economy 4.3.3.3.4 – Circular economy and industrial operations
	306-2	Management of significant waste-related impacts	4.2.3 – Circular economy 4.3.3.4.2 – Emissions into air, water and soil
	306-3	Waste generated	4.3.3.3.4 – Circular economy and industrial operations
	306-4	Waste diverted from disposal	4.3.3.3.4 – Circular economy and industrial operations
	306-5	Waste directed to disposal	4.3.3.3.4 – Circular economy and industrial operations
Environmental compliance			
GRI 307: Environmental compliance – 2016	307-1	Non-compliance with environmental laws and regulations	4.3.1.2 – Management system and audits
Supplier environmental assessment			
GRI 308: Supplier environmental assessment – 2016	308-1	New suppliers that were screened using environmental criteria	4.4.4.4 – Assessment of suppliers and subcontractors
	308-2	Negative environmental impacts in the supply chain and actions taken	4.4.4.3 – Selection of suppliers and subcontractors

GRI 400: Social standards			
GRI 103: Management approach – 2016	103-1	Explanation of the material topic and its boundary	4.1.7 – Stakeholders and materiality assessment
	103-2	The management approach and its components	4.2 – Sustainable solutions 4.3 – Responsible manufacturer 4.4 – Open dialogue and close relations with stakeholders
	103-3	Evaluation of the management approach	4.5.4 – Indicators
Employment			
GRI 401: Employment – 2016	401-1	New employee hires and employee turnover	4.4.1.1 – Talent management
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	4.4.1.2 – An agile and collaborative organization 4.4.1.5 – A motivating and competitive compensation system
Occupational health and safety			
GRI 403: Occupational health and safety – 2018	403-1	Occupational health and safety management system	4.3.1 – Health, safety and environmental management 4.3.2.2 – Employee health and safety
	403-2	Hazard identification, risk assessment and incident investigation	4.3.2 – Health and safety information
	403-3	Occupational health services	4.3.2.3 – Process safety
	403-4	Worker participation, consultation and communication on occupational health and safety	4.3.1.3 – Safety and environmental culture
	403-5	Worker training on occupational health and safety	4.3.1.3 – Safety and environmental culture
	403-6	Promotion of worker health	4.3.1.3 – Safety and environmental culture
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	4.3.2.1 – Safety management 4.4.1.4 – Employee engagement and well-being
	403-8	Workers covered by an occupational health and safety management system	4.3.2 – Health and safety information
	403-9	Work-related injuries	4.3.2 – Health and safety information
	403-10	Work-related ill-health	4.3.2.2.4 – Occupational illnesses
Training and education			
GRI 404: Training and education – 2016	404-1	Average hours of training per year per employee	4.4.1.3 – Personal development and training
	404-2	Programs for upgrading employee skills and transition assistance programs	4.4.1.3 – Personal development and training
	404-3	Percentage of employees receiving regular performance and career development reviews	4.4.1.3 – Personal development and training
Diversity and equal opportunities			
GRI 405: Diversity and equal opportunity – 2016	405-1	Diversity of governance bodies and employees	4.4.1.6 – Diversity, equal opportunity and equal treatment
	405-2	Ratio of basic salary and remuneration of women to men	4.4.1.6 – Diversity, equal opportunity and equal treatment – Diversity and equal treatment policy
Non-discrimination			
GRI 406: Non-discrimination – 2016	406-1	Incidents of discrimination and corrective actions taken	4.4.1.6 – Diversity, equal opportunity and equal treatment
Freedom of association and collective bargaining			
GRI 407: Freedom of association and collective bargaining – 2016	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	4.4.1.7 – Active social dialogue with employee representatives
Child labor			
GRI 408: Child labor – 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	4.4.3 – Human Rights
Forced or compulsory labor			
GRI 409: Forced or compulsory labor – 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	4.4.3 – Human Rights
Human Rights assessment			
GRI 412: Human Rights assessment – 2016	412-1	Operations that have been subject to Human Rights reviews or impact assessments	4.4.2 – Compliance and ethics 4.4.3 – Human Rights
	412-2	Employee training on Human Rights policies or procedures	4.4.2 – Compliance and ethics 4.4.3 – Human Rights
	412-3	Significant investment agreements and contracts that include Human Rights clauses or that underwent human rights screening	4.4.2 – Compliance and ethics 4.4.3 – Human Rights
Local communities			

GRI 413: Local communities – 2016	413-1	Operations with local community engagement, impact assessments, and development programs	4.4.6 – Corporate citizenship and philanthropy
Supplier social assessment			
GRI 414: Supplier social assessment – 2016	414-1	New suppliers that were screened using social criteria	4.4.4.4 – Assessment of suppliers and subcontractors
	414-2	Negative social impacts in the supply chain and actions taken	4.4.4.3 – Selection of suppliers and subcontractors
Public policy			
GRI 415: Public policy – 2016	415-1	Political contributions	4.4.5 – Institutional initiatives
Customer health and safety			
GRI 416: Customer health and safety – 2016	416-1	Assessment of the health and safety impacts of product and service categories	4.2 – Sustainable solutions
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	4.2 – Sustainable solutions
Marketing and labeling			
GRI 417: Marketing and labeling – 2016	417-1	Requirements for product and service information and labeling	4.2.1 – Management of sustainable solutions
	417-2	Incidents of non-compliance concerning product and service information and labeling	4.2 – Sustainable solutions
	417-3	Incidents of non-compliance concerning marketing communications	4.2 – Sustainable solutions
Customer privacy			
GRI 418: Customer privacy – 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	4.4.2.4 – Personal data protection
Socioeconomic compliance			
GRI 419: Socioeconomic compliance – 2016	419-1	Non-compliance with laws and regulations in the social and economic area	4.4.2 – Compliance and ethics

SASB – CHEMICALS - Industry standards, version 2018-10

The SASB Standards have been established as industry-specific standards that assist companies in disclosing financially material, decision-useful sustainability information to investors. They identify the subset of environmental, social, and governance (ESG) issues most relevant to financial performance in 77 industries.

In order to ease the understanding of Arkema's performance with regard to these standards, a concordance table has been established.

		Disclosures		Comments
		URD 2020 sections	CDP Questions	
GREENHOUSE GAS EMISSIONS				
RT-CH-110a.1	Gross global Scope 1 emissions	4.3.3.2.1		
	Percentage covered under emissions-limiting regulations		C11.1b	
RT-CH-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	4.3.3.2		
AIR QUALITY				
RT-CH-120a.1	Air emissions of the following pollutants :			
	NOx (excluding N2O)	4.3.3.4		
	SOx	4.3.3.4		
	Volatile Organic Compounds (VOCs)	4.3.3.4		
	Hazardous Air Pollutants (HAPs)			Not publicly disclosed
ENERGY MANAGEMENT				
RT-CH-130a.1	Total energy consumed	4.3.3.2.2	C8.2a	Reported in TWh
	Percentage grid electricity	4.3.3.2.2		
	Percentage renewable	4.3.3.2.2	C8.2d, C8.2e	
	Total self-generated energy			Not publicly disclosed
WATER MANAGEMENT				
RT-CH-140a.1	Total water withdrawn	4.3.3.3.2		
	Total water consumed		W1.2b	Partially
	Percentage of each in regions with High or Extremely High Baseline Water Stress	4.3.3.3.2		
RT-CH-140a.2	Number of incidents of non-compliance associated with water quality permits, standards, and regulations			Not publicly disclosed
RT-CH-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	4.3.3.3.2		Partially
HAZARDOUS WASTE MANAGEMENT				
RT-CH-150a.1	Amount of hazardous waste generated	4.3.3.3.4		
	Percentage recycled	4.3.3.3.4		
COMMUNITY RELATIONS				
RT-CH-210a.1	Discussion of engagement processes to manage risks and opportunities associated with community interests	4.1.7 4.4.6 4.3.1.2 4.4.4		
WORKFORCE HEALTH & SAFETY				
RT-CH-320a.1	Total recordable incident rate (TRIR)	4.3.3.2.2.1		Reported per Million worked hours

	Fatality rate for (a) direct employees and (b) contract employees	4.3.3.2.2.1		
RT-CH-320a.2	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	4.3.1 4.3.2.2		
PRODUCT DESIGN FOR USE-PHASE EFFICIENCY				
RT-CH-410a.1	Revenue from products designed for usephase resource efficiency	4.2.4		Included in a wider scope indicator
SAFETY & ENVIRONMENTAL STEWARDSHIP OF CHEMICALS				
RT-CH-410b.1	Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances	4.2.5.2		Reported based on SVHCs substances subject to REACH authorisation or on the REACH candidate list
	Percentage of such products that have undergone a hazard assessment			Not publicly disclosed
RT-CH-410b.2	Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact	4.2.5 4.2.4		
GENETICALLY MODIFIED ORGANISMS				
RT-CH-410c.1	Percentage of products by revenue that contain genetically modified organisms (GMOs)			Not publicly disclosed
MANAGEMENT OF THE LEGAL & REGULATORY ENVIRONMENT				
RT-CH-530a.1	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	2.1.2		
OPERATIONAL SAFETY, EMERGENCY PREPAREDNESS & RESPONSE				
RT-CH-540a.1	Process Safety Incidents Count (PSIC)			Not publicly disclosed
	Process Safety Total Incident Rate (PSTIR)	4.3.2.3		
	Process Safety Incident Severity Rate (PSISR)			Not publicly disclosed
RT-CH-540a.2	Number of transport incidents			Not publicly disclosed
ACTIVITY METRIC				
RT-CH-000.A	Production by reportable segment			Not publicly disclosed