PQ Corporation SASB Disclosures

The Sustainable Accounting Standards Board (SASB) is an independent, private sector organization with a mission is to develop and disseminate sustainability accounting standards that help public corporations disclose material, decision-useful information to investors. (For additional information on SASB, please visit www.sasb.org.)

The information and references provided below based on the SASB accounting metrics for the Chemicals industry.

Our reporting period spans 2018 and 2019 as 2018 is our baseline year for greenhouse gas reporting and is our first fully assured environmental data set. Assurance of the 2019 dataset was delayed due to Covid-19 pandemic. This Index will be updated upon conclusion of the 2019 Assurance process.

Topics	Accounting Metrics	Code	References
Greenhouse Gas Emissions	Scope 1 emissions (and % covered under emissions-limiting regulations)	RT-CH-110a.1 ✓ **Third-party assured**	In 2018, Scope 1 emissions were 1,424,229 metric tons of carbon dioxide equivalents (CO2e). PQ Corporation operates in jurisdictions, including California and the European Union, where cap-and-trade and other forms of emissions regulatory frameworks are currently in place.
	Long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	RT-CH-110a.2	We have set a 2020 target to implement energy management plans at all sites by 2025. Initiatives to lessen air emissions are also a priority for PQ. We monitor emissions including greenhouse gases (GHG), hazardous air pollutants (HAPs), and nitrogen oxides (NOX) and sulfur oxides (SOX), among other significant air emissions. Recent efforts to limit our impacts in this area include the following. Our Winschoten site reduced particulates in the flue gas to < 10 mg/Nm3 through installation of a new dust filter. By installing a Luhr dust filter in the spray tower, we reduced the size of particulates in the flue gas to < 5 mg/Nm3 at our Eijsden site.
Air Quality	Air emissions for NO_X (excluding N_2O), SO_X, VOCs and hazardous air pollutants (HAPs)	RT-CH-120a.1	In 2018 PQ's SOx and NOx emissions were 2,378,699.9 kg and 1,961,048.9 kg, respectively.
Energy Management	Total energy consumed (including % grid electricity and % renewable energy) and total self-generated energy	RT-CH-130a.1	In 2018, energy consumption was 5,465,476 megawatt hours (MWhs). 7.3% of energy consumption was from grid electricity. (PQ self-generates significant energy to support the refining services business with excess energy sold to the grid. The total self-generating energy was not included in the 2018 assurance but will be reviewed and considered in future years.) While a number of facilities are located in regions with renewable energy mix, PQ has not begun tracking renewable energy consumption.

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Water Management	Total water withdrawn and consumed (including % of each in regions with high or extremely high baseline water stress)	RT-CH-140a.1 ✓ **Third-party assured**	In 2018, water consumption was 23,224,125 cubic meters. At PQ, water consumption is defined as water withdrawn from all sources (municipal, well, etc.) and does not include amounts subsequently incorporated into products nor amounts discharged. We estimate that approximately 4.4% of total water withdrawn and consumed was in regions identified as having high or extremely high baseline water stress. Currently 38% of applicable sites in high-stress regions have completed water balances.
	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	RT-CH-140a.2	We had no significant incidents of noncompliance concerning water quality permits, standards or regulations in 2018.
	Description of water management risks and discussion of strategies and practices to mitigate those risks	RT-CH-140a.3	PQ is committed to taking steps to minimize our impacts on water systems, reduce water consumption, and improve water efficiency within our operations. We actively monitor water performance at each facility, utilizing historical, market and industry data to identify where improvements can be made and work to address the opportunities. PQ has a 2025 goal to complete water balances for all sites in high water stress areas. Further detail on our management approach can be found in PQ Corporation's Mission Statement and Guiding Principles for Health, Safety and Environment and on our Sustainability webpage.
Hazardous Waste Management	Amount of hazardous waste generated (including % recycled)	RT-CH-150a.1 ✓ **Third-party assured**	In 2018, we generated 11,492 metric tonnes of hazardous waste. Hazardous waste currently includes catalyst wash water with less than 5% organic loading. A 2020 initiative to significantly reduce water content of this stream will reduce hazardous waste disposal to waste treatment by over 90%. We continue to responsibly manage the handling, transport and disposal of this stream and other hazardous wastes in compliance with regulatory requirements and Good Management Practices. A significant proportion of PQ's sites are either small quantity generators or, in some cases, very small quantity generators of hazardous waste as defined by the U.S. Environmental Protection Agency. Our goal is to reduce process-related hazardous waste disposal by 40% from our 2018 Baseline by the end of 2023.

Topics	Accounting Metrics	Code	References
			Recycled hazardous waste was not fully assured during the reporting period. Total recycled non-hazardous and hazardous waste was 35,760 metric tonnes.
Community Relations	Discussion of engagement processes to manage risks and opportunities associated with community interests	RT-CH-210a.1	Further detail on how we engage with communities to manage risks and opportunities can be found on PQ Corporation's Sustainability webpage. In our 2020 Sustainability report, we detail numerous representative activities from our global sites, including our goal to have all sites participating to create shared value by 2022. PQ's community engagement process is aligned with Responsible Care® principles and includes participation with mutual aid associations, community advisory panels, and local partnerships. Beyond compliance, and to ensure the health and safety of local environments and communities where we manufacture, we have fully implemented all Responsible Care® modules, including Process Safety and Transportation.
Workforce Health & Safety	Total recordable incident rate (TRIR) and fatality rate for both direct employees and contract employees	RT-CH-320a.1	In 2018 and 2019, the recordable incident rate for employees and supervised contractors were 0.71 and 0.58, respectively. No fatalities were reported in 2018 or 2019.
	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	RT-CH-320a.2	Further detail on our management approach can be found in PQ Corporation's Mission Statement and Guiding Principles for Health, Safety and Environment.
Product Design for Use-Phase Efficiency	Revenue from products designed for use-phase resource efficiency	RT-CH-410a.1	We have embedded our commitment to circular design across our Refining Services, Catalysts, Performance Materials and Performance Chemicals segments. Currently products with sustainable attributes account for over 65% of revenues. PQ is striving to quantify that percentage of revenues specifically derived from products designed for use-phase resource efficiency. For additional information, please refer to our Sustainability webpage and our most recent Investor Presentation (page 12).

Topics	Accounting Metrics	Code	References
Safety & Environmental Stewardship of Chemicals	% of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances, and % of such products that have undergone a hazard assessment	RT-CH-410b.1	In 2019, none of our products contained inputs that are classified as GHS Category 1 hazardous substances. Among these products, all have undergone hazard assessments in accordance with regulatory requirements and Responsible Care® Product Safety module.
	Discussion of strategy to manage chemicals of concern and develop alternatives with reduced human and/or environmental impact	RT-CH-410b.2	2019 10-K Filing ("Chemical Product Regulation", page 20) Our core products are used in a wide range of industries. These chemicals are generally classified as safe, low-risk chemicals that are not included on regulatory Chemicals of Concern Lists or Toxic Chemicals Lists. Based on their chemical and physical properties and combined with their toxicological and ecotoxicological profiles, PQ products are not considered a significant risk to the environment or consumer for their intended use. Across our total products: • 0% are known or presumed (Cat1) Carcinogens for humans • Our products do not contain endocrine disruptors • Our products are not Persistent Bioaccumulative Toxic (PBT) Chemicals All of our products are classified according to the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). At our Catalyst sites, we produce over nine million pounds of products, of which approximately 75% have been classified by the GHS of product labeling as not requiring a hazardous label. We are dedicated to delivering products that are safe for their intended use throughout the life of the product. We implemented a comprehensive product safety and product stewardship process to assure that the hazards of our products, if any, are periodically evaluated and that the risks identified are appropriately managed to: ▪ Minimize potential impacts to health, safety, and the environment; ▪ Ensure that relevant information and assistance regarding the proper use of our products is provided to our commercial partners and other relevant stakeholders; and

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			▪ Make certain that our products are sold in compliance with the laws and regulations that govern them.
Genetically Modified Organisms	% of products by revenue that contain genetically modified organisms (GMOs)	RT-CH-410c.1	The use of genetically modified organisms is not currently applicable to our products.
Management of the Legal & Regulatory Environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	RT-CH-530a.1	Our corporate positions align with and follow those of the American Chemical Council and its Responsible Care® program.
Operational Safety, Emergency Preparedness & Response	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	RT-CH-540a.1	We had no significant process safety incidents in 2019.
	Number of transport incidents	RT-CH-540a.2	We had no transport incidents in 2019.

To facilitate analysis and comparison on PQ Corporation's SASB accounting metrics, please refer to the following activity metric disclosure for the Chemicals industry:

Activity Metric	Code	Notes
Production by reportable segment	RT-CH-000.A	In 2019, we had over 16,000,000 metric tonnes of production in our environmental data reporting boundary.