Chemours™

EVOLVE 2030

Sustainable Offerings Assessment Method

Version 1.0, October, 2020

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1. Purpose and Overview

At Chemours, our purpose is to help create a more colorful, capable and cleaner world through the power of chemistry. As we increasingly depend upon chemistry to fuel our progress across almost all aspects of daily life, like communications, transportation, technology, and energy generation, we must find ways to balance the essential with the opportunity to harness the power of responsible chemistry. Central to our Corporate Responsibility Commitment (CRC) are our ten goals that we aim to achieve by 2030. These goals fall into three pillars: Inspired People, Shared Planet and Evolved Portfolio.[1] As part of the Evolved Portfolio pillar of our CRC, we are reimagining our portfolio to offer solutions that are also safer, healthier, and more resilient for a world that demands more. Our Sustainable Offerings goal is that 50% or more of our revenue will be from offerings that make a specific contribution to the United Nations Sustainable Development Goals (UN SDGs).[2]

2030 CRC Goal Snapshot

50% or more of our revenue will be from offerings that make a specific contribution to the UN SDGs.

EVOLVE 2030 is Chemours' approach to inform investment decisions—in equipment, people, and innovation across our product portfolio to attain our Sustainable Offerings goal. EVOLVE 2030's objective is to integrate key sustainability information into decision-making and actions associated with strategic portfolio management, improvement in product imprints and priority projects with the ability to reshape our portfolio including projects in research and application development, mergers and acquisitions, and capital expenditures.

EVOLVE 2030 is aligned with the World Business Council's Portfolio Sustainability Assessment method (WBCSD PSA).[3] As per this method, the unit of assessment is a Product—Application Combination (PAC), which allows the combined consideration of a product and its use-phase application. Fundamental to our approach is the estimation of each PAC's Contribution to the UN SDGs and the PAC's "Imprint"—or net impact on society and environment.

- *Contribution—Each PAC is evaluated for its contribution to the targets and indicators associated with the 17 UN SDGs. Contribution is measured in two dimensions:*

  1) Significance, indicating the relative role of the Chemours' product in the complete solution helping to meet the SDG

[1] *https://www.chemours.com/en/about-chemours/corporate-responsibility/2030-goals*

[2] *https://sustainabledevelopment.un.org/sdgs*

[3] *http://docs.wbcsd.org/2017/10/Framework4Port_Sustainability.pdf*

2) Magnitude, the relative importance of the solution for achieving the SDG.

- *Imprint—Aligned with the WBCSD PSA, the "Imprint" is an approach to create an understanding of the PAC's net impact on society and environment. The Imprint includes several attributes with direct links to Chemours CRC goals, (e.g. impact on climate change, landfill intensity and emissions of fluorinated organic chemicals to air and water) as well as additional attributes covering topics such as risk to human health and public sentiment.*

The PAC's Imprint and Contribution score together determine whether a PAC's revenue may be counted as a "specific contribution," and therefore, qualify to advance the Sustainable Offerings 2030 CRC goal.

2. Principles and Scope

As stated above, the objective of creating this method is to inform our decisions—decisions about our product portfolio, our investments in innovations, and how we deploy our resources to achieve a better future for people globally, our shared planet, and our company. To effectively achieve this objective, our method must strive for accuracy, reproducibility, efficiency, speed, and balance.

For objectivity, EVOLVE 2030 is constructed to be data-driven and science-based, relying on rubrics with clear criteria for scoring. In addition, EVOLVE 2030 seeks to be holistic in its considerations because disaggregation of elements of an entire system without consideration of connectivity can lead to regrettable decisions and unintended consequences.

At the same time, speed is critically important in addressing some of the biggest global challenges we face, and an effective method must take this urgency into consideration in its design. EVOLVE 2030 strives to deliver insightful analyses as quickly as possible by utilizing existing data sources and outputs from existing processes, as well as focusing efforts on what is necessary for decision-making. For example, in comparing energy efficiency, if an analysis concluded that two options under consideration require 20 and 40 KWh to perform the same function, it's not likely one would need to refine the analysis to 20.3 and 40.7 KWh in order to reach a robust decision. Therefore, to avoid analysis paralysis, EVOLVE 2030 does not try to indiscriminately achieve the maximum possible precision. In its tiered approach, EVOLVE 2030 intends to provide the framework to quickly reach a decision, or if justified, dedicate the appropriate level of effort in refining the analysis necessary to reach a well-informed decision. In this way, we intend to steer decisions to make the biggest positive contributions with available resources.

We also recognize that bias in inevitable. To minimize bias, we developed EVOLVE 2030 in partnership with Anthesis Group, a global sustainability advisor. In 2019, we received third-party assurance from Lloyd's Register Quality Assurance Ltd (LRQA) on the EVOLVE 2030 methodology.

Because change is certain and seemingly accelerating, our approach to this method is one of flexibility and constant improvement. By quickly establishing and using our method, we aim to learn and improve from our experiences, as well as adapt to our constantly changing world–in other words, EVOLVE or become irrelevant. Therefore, this version of EVOLVE 2030 is a single frame in the motion picture of time.

The consideration of PAC Contribution and Imprint often requires

comparisons of alternatives. For pragmatic reasons, this method is not intended to consider comparisons that are outside of current societal norms. For example, we assume that society wants to have air conditioning or refrigeration rather than choosing to live without those technologies. So alternative air conditioning refrigerant options may be assessed, but we are not assessing the option of using a fan or opening a window as means to stay cool or not using a refrigerator to preserve food.

The EVOLVE 2030 method applies to existing revenue-generating PACs and to PACs in Research and Development projects. Additionally, where Chemours has a controlling interest (>50%), a joint venture's portfolio is in-scope for evaluation using EVOLVE 2030. The footprint of internal product transfers and site-limited intermediates are included in the evaluations of the finished products. The EVOLVE 2030 method is also applied within Chemours' mergers and acquisitions activities.

3. General Requirements

3.1 Business Process Overview

The PAC evaluation process consists of three stages (see Figure 1):

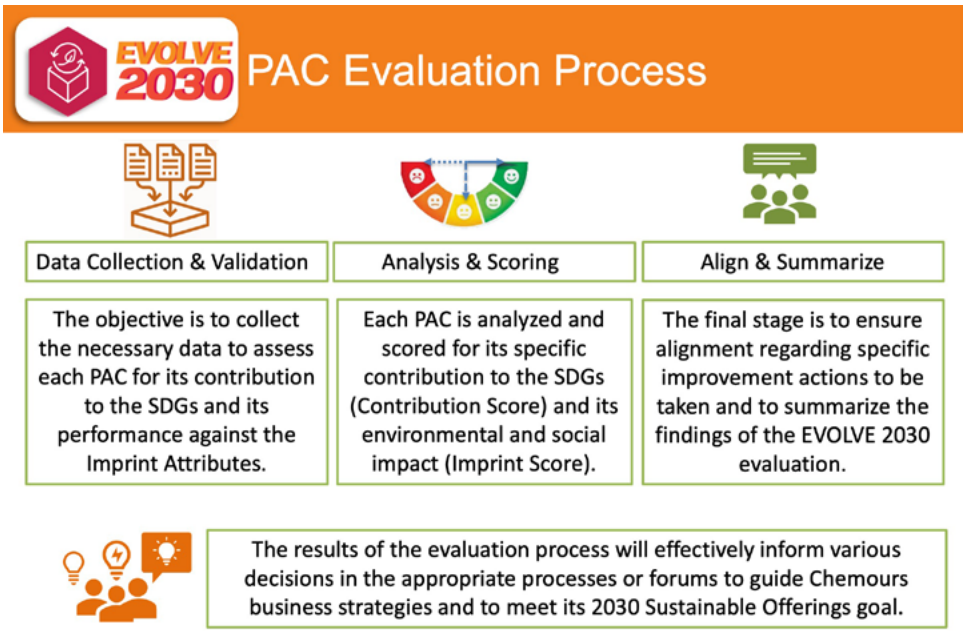
1. Data Collection & Validation—The objective of the first stage is to collect the necessary data to assess each PAC for its contribution to the SDGs and its performance against the Imprint attributes.

2. Analysis & Scoring—Each PAC is scored for its contribution to the SDGs (Contribution score) and its net environmental and social impact, assessed by the Imprint attributes (see Figure 2). Details on the scoring methodologies are described in section 3.2. These scores determine the PAC's qualification for making a specific contribution and therefore if its revenue will count towards the Sustainable Offerings goal. In addition, opportunities to increase contribution or improve net impact are identified and prioritized.

3. Align & Summarize—The final stage of the PAC evaluation process is to ensure alignment regarding specific improvement actions to be taken and to summarize the findings of the EVOLVE 2030 evaluation for effectively informing various decisions in the appropriate processes or forums and guide Chemours businesses' strategy to meet its 2030 Sustainable Offerings goal.

As mentioned above, we must account for change. Therefore, after our initial portfolio evaluation, we intend to periodically refresh our evaluations. However, significant changes, such as demonstrated process improvements or the development of macrotrends, will also trigger work to refresh evaluations that may result in improved Contribution and/or Imprint scoring or identify new opportunities to enhance the sustainability of our offerings. New research and development projects and mergers and acquisitions activities also trigger evaluations.

Figure 1. EVOLVE 2030 PAC Evaluation Process



The evaluation of products in their applications is based on the expert judgement of a range of responsibilities, supported by scientific data where available.

Experts and representatives from the following organizations are involved in the PAC evaluation process:

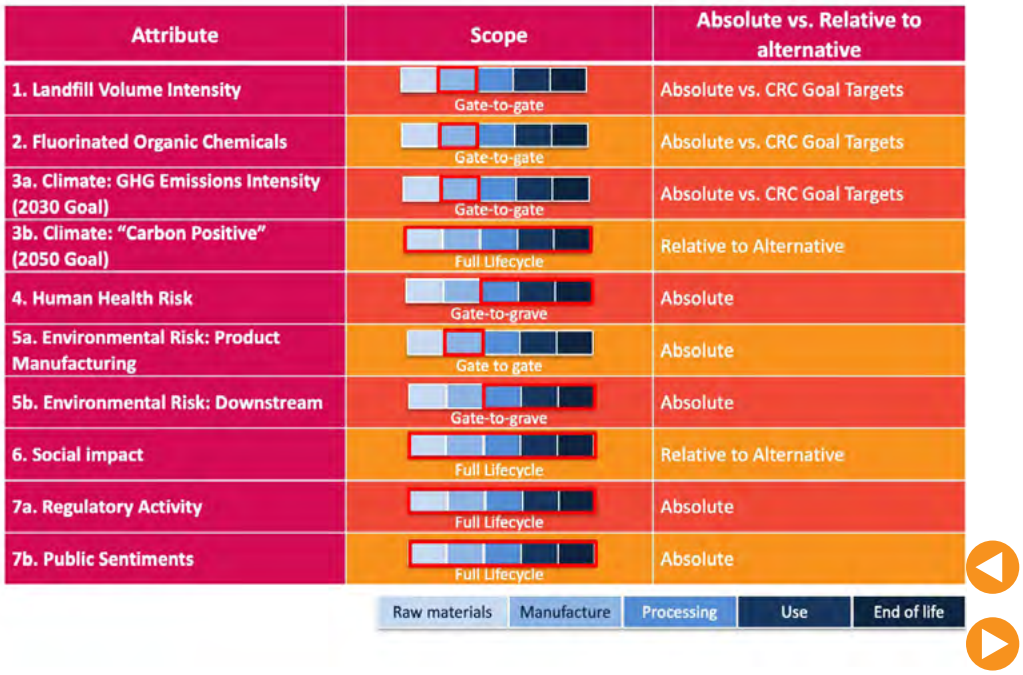
Organization	Responsibility/Expertise
Product Sustainability	Methodology owner. Leads the evaluation process and managing a prioritized queue of PACs for evaluation. Subject matter experts from this organization carry out the evaluation and scoring for specific Imprint attributes, as well as clearly documenting the process followed, sources of information, data quality, and key assumptions and uncertainties.
Engineering	Life cycle analysis and scoring for specific Imprint attributes
Business Development Director	Provides overall business strategy
Product Manager	Development and management of product portfolio; provides product and application-specific knowledge
Market Manager	Expertise on product performance, business strategy and economic figures, market overview
Technology	Expertise on manufacturing process; chemistry of the product
R&D	Expertise on new product or application development projects
Finance	Provide revenues associated with PACs consistent with finance functional practices
Procurement	Expertise related to raw material suppliers

3.2 Analysis and Scoring

3.2.1 Imprint Attributes Overview

The term "Imprint" is used to represent the net impact of a PAC on society and the environment. Any PAC's Imprint is necessarily represented by multiple attributes, whose scope and benchmarks for scoring are shown in Figure 2.

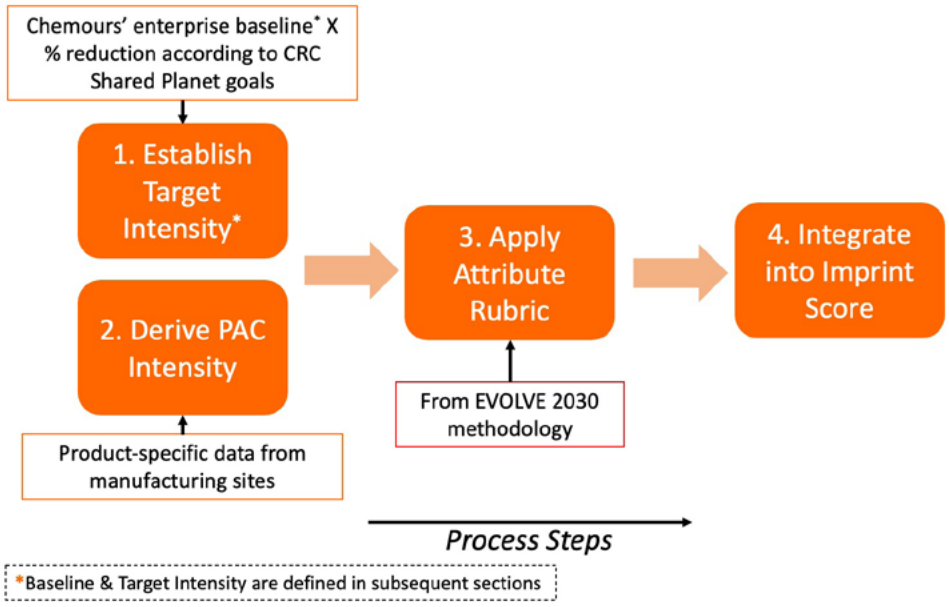
Figure 2. Scope and benchmark for attribute analysis and scoring



As noted in Figure 2, some attributes are judged against an absolute standard. For example, the manufacturing intensities (Attributes 1, 2, and 3a) of the PAC under evaluation is compared to the Chemours CRC goal target intensities. Similarly, human health and environmental risks are assessed based on chemical properties, hazards, and exposures, with no regard to those of the alternative to which this PAC is compared. In contrast, the climate impact through life cycle (Attribute 3b) score is based on the performance of the PAC relative to an alternative.

For Attributes 1-3, the overarching design principle is to be consistent with the definitions, calculations, and scope of the CRC Shared Planet goals. Figure 3 is a graphical representation of the evaluation process for these attributes.

Figure 3. Evaluation process for Attributes 1-3



3.2.1.1 Attribute 1: Landfill Volume Intensity

This attribute includes both hazardous and non-hazardous waste generated during the entire product manufacturing process. PACs are assessed regarding their performance against our goal to reduce landfill intensity by 70% by 2030.[1]

Baseline: 2018 intensity[4]

Target: 2018 Enterprise Landfill Volume intensity X 0.3 to reflect the goal of 70% reduction

Scoring Rubric:

+2	PAC intensity is an improvement over the Target by more than 15%
+1	PAC intensity is within +/- 15% of Target
0	PAC intensity is greater than the Target by at least 15%, but there is a plan to achieve Target by 2030
-1	PAC intensity is greater than the Target by at least 15% but less than the its 2018 baseline intensity, and reduction plan does not achieve Target by 2030
-2	PAC intensity is higher than the 2018 baseline level for the PAC, and reduction plan does not achieve Target by 2030

3.2.1.2 Attribute 2: Fluorinated Organic Chemicals Emissions to Air and Water

This attribute primarily applies to Fluoroproduct PACs. PACs are assessed regarding their performance against our goal to reduce air

[4]The 2018 baseline intensities for Attributes 1-3a are determined by the ratio of 2018 Enterprise-level outputs (i.e. Landfill Volume, Fluorinated Organic Chemicals, and Greenhouse Gas, respectively) to total Chemours product volume

and water process emissions of fluorinated organic chemicals by 99% or greater.[1] Note: for PACs without Fluorinated Organic Chemicals Emissions associated with manufacture, a score of "0" is assigned.

Baseline: 2018 intensity

Target: 2018 Enterprise Fluorinated Organic Chemicals Emissions intensity X 0.01 to reflect the goal of 99% reduction

Scoring Rubric:

+2	PAC intensity is an improvement over the Target by more than 15%
+1	PAC intensity is within +/- 15% of Target
0	PAC intensity is greater than the Target by at least 15%, but there is a plan to achieve Target by 2030
-1	PAC intensity is greater than the Target by at least 15% but less than the its 2018 baseline intensity, and reduction plan does not achieve Target by 2030
-2	PAC intensity is higher than the 2018 baseline level for the PAC, and reduction plan does not achieve Target by 2030

3.2.1.3 Attribute 3: Climate

The evaluation methodology for Climate is divided into two attributes: Green House Gas (GHG) Emissions Intensity (3a) and "Carbon Positive" (3b). For emission intensity (3a), PACs are assessed regarding their performance against our goal to reduce greenhouse gas intensity by 60% by 2030. For "Carbon Positive" (3b), PACs are assessed regarding their performance against our goal to become carbon positive by 2050.

- 3a. Green House Gas (GHG) Emissions Intensity (2030 Goal).[1]

Baseline: 2018 intensity

Target: 2018 Enterprise GHG emissions intensity X 0.4 to reflect the goal of 60% reduction

Scoring Rubric:

+2	PAC intensity is an improvement over the Target by more than 15%
+1	PAC intensity is within +/- 15% of Target
0	PAC intensity is greater than the Target by at least 15%, but there is a plan to achieve Target by 2030
-1	PAC intensity is greater than the Target by at least 15% but less than the its 2018 baseline intensity, and reduction plan does not achieve Target by 2030
-2	PAC intensity is higher than the 2018 baseline level for the PAC, and reduction plan does not achieve Target by 2030

▪ 3b. "Carbon Positive" (2050 Goal).[1]

+2	Carbon positive
+1	Carbon neutral
0	PAC has a very small carbon footprint relative to alternative
-1	Carbon negative with a plan in place to be carbon neutral or carbon positive
-2	Carbon negative with no plan in place to be carbon neutral or carbon positive

3.2.1.4 Attribute 4: Human Health Risk

The human health assessment focuses on the product and its specific use as defined by the PAC. Important impurities are included within the scope of this assessment. Please note that the human health risk during the manufacture of our product is not included in the scope of this assessment. Risk to workers is assessed and addressed by Environment, Health and Safety (EHS) procedures[5] in place at Chemours production sites, and inclusion here would be redundant at best, and has the potential to cause confusion.

Scoring Rubric:

+2	PAC determined to be very low human health risk.
+1	PAC determined to be low human health risk.
0	A 0 score is N/A for this attribute—PAC must fall into one of other scores.
-1	There is an opportunity for reasonably foreseeable misuse of the PAC by the general population that could result in adverse effect.
-2	Use of the PAC is tightly regulated, typically restricted to professionals. PPE is critical for the safe use of the PAC.

3.2.1.5 Attribute 5: Environmental Risk

This attribute is intended to capture the environmental risk posed from substances associated with the manufacturing, use, and end-of-life of the PAC, including degradation products.

This attribute is split into to two subparts: during the manufacture of the product (5a) and during the use and end-of-life phases of the product itself (5b). The score for the manufacture includes reviewing what substances are released to the environment, if any, with a focus on those substances that degrade slowly. The score for the product itself includes consideration of the fate of the product.

▪ 5a. Product Manufacturing

[5]Chemours uses a robust Environmental Health and Safety (EHS) management system to identify, assess and control potential human health and environmental risks from our Chemours manufacturing, processing, and mining operations. Our commitment is stated in our Environment, Health, Safety, and Corporate Responsibility Policy (https://www.chemours.com/en/-/media/files/corporate/environment-health-safety-commitment.pdf). The scope, governance, and implementation are further defined in our protocols and standards that cover specific aspects of occupational safety and health, process safety management, safe distribution of material, and protection of the environment

Scoring Rubric:

+2	The waste stream from manufacturing only contains substances that break down quickly in the environment and are not expected to harm aquatic life.
+1	The waste stream from manufacturing contains substances that break down in the environment eventually (but not as quickly as the +2 score) and are not expected to harm aquatic life.
0	The waste stream from manufacturing is effectively eliminated through collection or special treatment.
-1	The waste stream from manufacturing contains substances that break down in the environment eventually but could be harmful to aquatic life before they can break down completely.
-2	The waste stream from manufacturing contains substances that do not break down in the environment or are expected to harm aquatic life over time.

- 5b. Downstream

Scoring Rubric:

+2	At the end of the product lifecycle, the substances of the PAC break down quickly in a landfill and won't harm aquatic life if they leach out of the landfill.
+1	At the end of the product lifecycle, the substances of the PAC break down in a landfill and won't harm aquatic life if they leach out of the landfill.
0	The PAC contains some substances that do not break down, but these substances are contained within the product, so they won't leach out of the landfill.
-1	The PAC contains substances that have potential to harm aquatic life at the end of the PAC life cycle.
-2	The PAC contains substances that either do not break down (other than those categorized in score 0) or are expected to cause harm to aquatic life over time.

3.2.1.6 Attribute 6: Social Impact

The social impact attribute focuses on the holistic impact of the PAC through its life cycle (cradle to grave). The intent of the attribute is to capture positive or negative social impacts associated with the PAC (when compared to the alternative that would be used, if the PAC did not exist) which are not captured by other Imprint attributes, e.g., the social benefit of reduced carbon emissions is assumed to be captured in Attribute 3b. Climate: "Carbon Positive" and should not be considered when scoring the social impact.

The social impact assessment was developed to align with the six principles of the WBCSD Social Life Cycle Metrics for Chemical Products (Relevance, Completeness, Consistency, Transparency, Accuracy and Feasibility).[6] However, this assessment is qualitative and is based upon a review of existing data and information by a cross functional team at Chemours. As a starting point for the

[6]*https://www.wbcsd.org/Projects/Chemicals/Resources/Social-Life-Cycle-Metrics-for-Chemical-Products*

assessment this team reviews the potential impact on workers, local communities and consumers of the relevant social topics identified in the WBCSD Social Life Cycle Metrics for Chemical Products. These social topics cover a broad range of issues and which fall into the following overarching categories: Basic rights and needs, employment, health and safety, skills and knowledge, and well-being. In addition to consideration of the topics identified by WBCSD, the team also considers other negative and positive social impacts which may be unique to the PAC. Based on the topics identified, the team then scores the social impact based on the type of impact associated with the PAC, using the following definitions:

The following examples of impact type are provided for illustrative purposes and are not intended to be exhaustive.

▪ Life-changing positive impact: Alters the courses of people's lives Examples:

- Provide means (e.g. training, education, financing, jobs) for people to move out of poverty
- Reduce undernourishment[7] and stunting
- Reduce death rate
- Increase availability of potable water
- Provides access to electricity

▪ Life improving: Improves the quality of life. Examples:

- Increase the standard of living
- Increase access to healthy diets
- Ease pain and suffering from health issues
- Comfort to the extent of preventing health issues
- Improve the quality of potable water
- Improves the reliability of electrical supply

▪ Convenience/aesthetics: Timesaving or provides positive psychological response. Examples:

- Entertainment or recreational end-uses (non-drug)
- "Want" versus "need"

▪ Possible to cause negative social impacts: Possible under unusual or unexpected scenarios–unintended uses or inappropriately used. Example:

[7]Undernourishment means that a person is not able to acquire enough food to meet the daily minimum dietary energy requirements, over a period of one year. The Food and Agriculture Organization of the United Nations defines hunger as being synonymous with chronic undernourishment.

- Enabling a solution that can be used in applications that leads to health concerns (e.g. vaporizer used in many applications, but can be used for electronic cigarettes)

▪ Likely to cause negative social impacts: Intended applications has known social concerns (e.g. health). Possible under circumstances similar to misuses in the past. Examples:

- Enabling a solution that leads to health concerns (e.g. choosing to sell fruit flavors to the vaping industry)
- Extraction or production of raw material that involve human rights violations (e.g. forced or child labor) or extensive negative environmental impact (e.g. deforestation or biodiversity impact)

The justification for the attribute score for each PAC is documented by the assessment team along with any assumptions and supporting evidence as appropriate.

Scoring Rubric:

+2	**Outstanding performance**—PAC results in life changing positive impact at a local, national or global scale or life improving positive impact at a global scale. Any potential or likely negative social impact disqualifies the PAC for a +2 score.
+1	**Good performance**—PAC results in life improving positive impact at the local or national scale, and any potential or likely negative social impacts are effectively mitigated.
0	**Standard performance**—PAC impact is restricted to improved convenience for consumer and/or improved aesthetics, but social impact is limited or too small to evaluate.
-1	**Inadequate performance**—PAC has the potential to create negative social impacts at a local scale which supersede any positive social impacts.
-2	**Unacceptable performance**—PAC has the potential to create negative social impacts at a national or global scale, which supersede any positive social impacts, or PAC is likely to have a negative social impact at a local, national or global scale which supersede any positive social impacts.

**Bold font indicates the level titles from WBCSD Social Life Cycle Metrics for Chemical Products associated with each score*

3.2.1.7 Attribute 7: Stakeholder Sentiment

As noted in the WBCSD PSA, many traditional assessment tools (e.g., environmental and social life cycle assessments) don't take market perception and regulatory developments into account when assessing product and company level risks.

This attribute is unique within the EVOLVE 2030 assessment as it is based on stakeholder impressions of environmental and social impacts which may or may not be based on scientific evidence.

Nevertheless, these perceptions can lead to significant business risks and require careful consideration when evaluating PACs for their contributions to the UN SDGs. Therefore, we have taken an approach consistent with the WBCSD PSA guidance.

The evaluation methodology for Stakeholder Sentiment is divided into two attributes:

- 7a. Regulatory Activity (Current and potential regulatory scenarios)

This attribute is assessed by conducting a search using subscription-based third party tools to check for current or proposed regulatory bans or restrictions that may be relevant to the PAC, as input to score according to the rubric below.

Scoring Rubric:

+2	No component (intentional, unintentional, or degradation product) is currently banned or restricted under industrial chemical management regulations and is not associated with any proposed bans and/or restrictions.
+1	No component (intentional, unintentional, or degradation product) is currently banned or restricted under industrial chemical management regulations, but at least one component is associated with proposed bans and/or restrictions.
0	One or more components (intentional, unintentional, or degradation product) are currently banned or restricted under industrial chemical management regulations but there are reasonable indications that the ban or restriction could be removed or one or more components are proposed for regulations, but there are reasonable indications that the ban or restriction would not come into effect.
-1	An intentional component is banned or restricted in one jurisdiction.
-2	Intentional component is banned or restricted in an influential jurisdiction or in multiple jurisdictions globally or is considered a Substance of Very High Concern (SVHC) or if any component is classified as Group I by IARC.

While focus is on industrial chemical management regulations, other regulations relevant to the PAC will be considered, when appropriate.

- 7b. Public Sentiments

This attribute is assessed by conducting a search of key inputs for PAC substances and degradants using subscription-based third-party NGO activity monitoring and social media monitoring tools:

Scoring Rubric:

+2	No known perception issues and scores above neutral in all other attributes (i.e., unlikely to have perception issues based on other attributes).
+1	No known perception issues BUT scores below neutral in 1 or more other attributes (i.e., possibility of other attribute causing perception issue).
0	Public concerns have been raised in the past, but they have since been adequately addressed and are no longer issues.
-1	Localized or limited public concern identified.
-2	Severe or widespread concerns identified.

3.2.2 UN SDG Contribution Scoring and Rubrics

The Contribution score rates a PAC's contributions to the UN SDGs. It is measured in terms of Significance, how important the product is to the Solution's contribution to an SDG, and Magnitude, how important the Solution's contribution is to achieve an SDG. Adapted from WBCSD guidance, Significance and Magnitude shall be scored on a scale from 0 to 5.[8] Typically, Significance is scored in comparing to appropriate alternatives. For Magnitude, the scoring is related to the size of the PAC's contribution to the SDG, and whether this contribution is currently part of "Business as Usual" (BAU).

When considering SDG contribution, the qualified Product Steward along with relevant experts from the Business whose PAC is under evaluation are encouraged to identify as many SDGs as possible where PACs may contribute. The entire hierarchy of SDGs (Goals, targets and indicators) should be considered to gain the best understanding of the spirit and intent of the SDG framework.[9] In many cases, examining further detail (e.g. indicator level) is helpful to fully understand what was meant by the preceding level (e.g. targets). A breakdown of scoring for Significance and Magnitude is provided in the following rubrics.

[8]Scoring rubrics were adapted from WBCSD guidance with respect to the significance of the contribution of chemical products to value chain avoided emissions based on the functionality approach https://www.wbcsd.org/Projects/Chemicals/Resources/Addressing-the-Avoided-Emissions-Challenge

[9]See https://sustainabledevelopment.un.org/sdgs for complete listings of the SDG framework.

Significance Scoring Rubric

Level	Description	Score
Fundamental	The product is the key component that enables positive SDG contribution of the PAC. There are no known practical alternatives that could replace the product (or its equivalent) in the PAC's ability to deliver the stated contribution.	5
Extensive	The product is part of the key component and its properties and functions are essential for enabling positive SDG contribution of the PAC. Known practical alternatives would lead to very significant negative impacts in environmental protection or development (social or economic), and a responsible PAC provider would not use the alternative, if given the option.	4
Substantial	The product cannot be substituted easily without reducing positive SDG contribution or creating negative contribution of the PAC.	3
Minor	The product cannot be substituted easily without reducing positive SDG contribution or creating negative contribution of the PAC, but there are practical barriers to widespread adoption (e.g. economic, technical robustness, supply).	2
Insignificant	The difference in contribution between the product and alternative is measurable, but the alternatives have significant advantages (e.g. economic, technical robustness, supply).	1
None or too small to communicate	The product can be substituted by an alternative without changing the SDG contribution of the PAC.	0

Magnitude Scoring Rubric

Level	Description	Score
Fundamental	The PAC directly or indirectly contributes to closing the gap between current Business as Usual (BAU) and the 2030 SDG. Magnitude of the contribution is large. The PAC is considered a best available technology (BAT)[10] or a potential BAT. Eliminating the PAC and replacing with an alternative would be noticed internationally and garner concerns and actions by multiple stakeholders.	5
Extensive	The PAC directly contributes to an SDG as part of BAU. Magnitude of contribution is large.	4
Substantial	The PAC directly contributes to an SDG as part of BAU. Magnitude of contribution is small.	3
Minor	The PAC indirectly contributes to an SDG as part of BAU.	2
Insignificant	The difference in contribution between the PAC and BAU is measurable, but the there are alternatives that similarly contribute and are more feasible (e.g. technically, economically).	1
None or too small to communicate	Any contribution to an SDG is too small to communicate.	0

The Significance and Magnitude scores are multiplied to calculate the Contribution score. A score equal to or above the threshold of six (6)

[10]Best available technology (BAT) is used here to designate solutions that are commonly considered to be leading candidate technologies to addressing sustainable development gaps; it is not used in a formal legal or regulatory sense.

indicates that the PAC meets one of the criteria for making a specific contribution to an SDG. However, the contribution score alone does not indicate if a PAC's revenue may be counted as a specific contribution towards the 50% Sustainable Offerings goal. The PAC must also earn a non-negative overall Imprint score.

Each PAC may contribute to several UN SDGs. When multiple SDGs are considered, the highest score for one SDG will be considered to score the Contribution, i.e., there is no aggregation of multiple smaller contribution scores to several SDGs to achieve an overall higher Contribution score.

3.2.3 Imprint Scoring and Aggregation

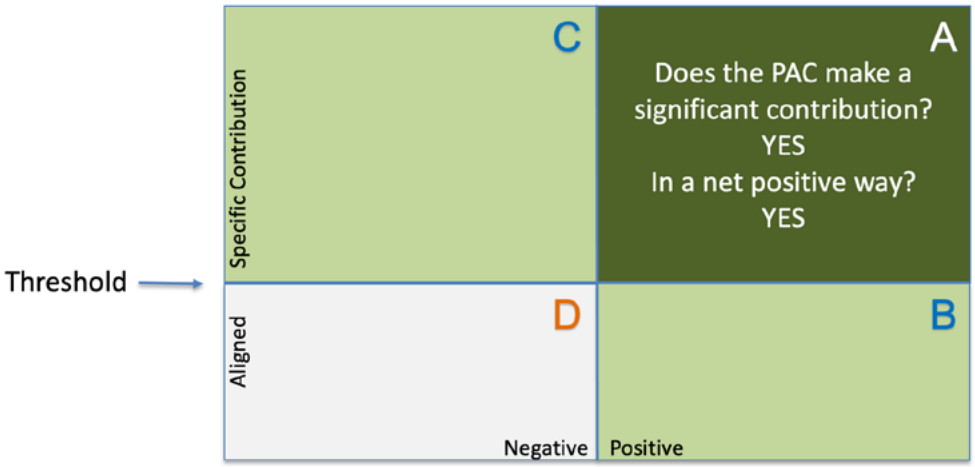
Individual PAC Imprint attribute scores (as per section 3.2.1) are aggregated to an overall score using simple summation to allow for plotting on a common matrix. We chose to use simple summation because developing weighting factors is complex, likely subjective, and often controversial. The intention of this exercise is to surface opportunities to improve and strengths to amplify, and where justified, further examination and refinement can be initiated. We feel this can be accomplished without the need for weighting factors.

Each individual Imprint attribute score of -2 must be reviewed via the Product Sustainability Risk Assessment Executive Review process to focus on improvement opportunities.

3.2.4 EVOLVE 2030 Matrix

As shown in Figure 4, the Contribution and Imprint scores can be plotted on a 2x2 matrix to identify in which quadrant each individual PAC is located. For PACs located in the upper right quadrant (quadrant A in Figure 4), their Contribution and Imprint scores meet the requirements for specific contribution and their revenue may be counted as a specific contribution towards the 50% Sustainable Offerings goal. Revenue of PACs located in quadrants B, C, and D do not count towards the 50% Sustainable Offerings goal.

Figure 4. Mapping of Imprint and Contribution Scores



While only PACs whose scores place them in quadrant A qualify their revenue to be counted toward the CRC Sustainable Offerings goal, those in quadrant B also have a net positive Imprint and contribute to UN SDGs, albeit to a lower degree than the threshold we set.

In general, our intention is to improve the Imprint scores–i.e. over time, migrate PACs from left to right on the EVOLVE 2030 matrix. Even for those in quadrants A and B, there are opportunities. As mentioned above, Imprints attributes with scores of -2, along with PACs in quadrants C and D will command greater attention for improvement.

3.3 Summarize and Report

3.3.1 PAC Summary

A key output of the PAC evaluation process is the PAC Summary. Generated for each individual PAC, the summary will include an overview of the PAC (including PAC definition, alternative considered in the PAC evaluation, functional unit, and PAC revenue), its Imprint attributes scores, and its highest Contribution score, along with its component Significance and Magnitude scores. Perhaps most importantly, this summary includes a list of opportunities for improvement. The PAC summaries will inform strategy for progressing toward achieving the Sustainable Offerings CRC goal, as well as informing business decisions in areas such as product development, application development, process improvements (investments), mergers and acquisitions, and portfolio management. The target audience includes product managers, market managers, and other key stakeholders within each business as appropriate.

4. Management Approach

EVOLVE 2030 represents a process that is anticipated to be substantially integrated into many, if not all functions, across Chemours as we transform our offerings to meet societal needs and delivering those offerings responsibly.

The EVOLVE 2030 PAC evaluation outcomes guide decision-making in the appropriate business processes and forums to shape and improve Chemours business strategies and to meet our Sustainable Offerings goal by 2030. Innovation is critical to the long-term success of our company and our ability to increasingly contribute to the SDGs. Therefore, in addition to our existing portfolio of offerings, the EVOLVE 2030 methodology is incorporated into the key business processes which have the potential to reshape our portfolio including our new product development process and new application development process. We update PAC evaluations on a specific frequency, or as material changes occur to a product or its application. Using EVOLVE 2030, we will drive rapid progress through innovation, collaboration, and partnership that can provide unmatched solutions to achieve the SDGs.

5. Definitions

Absolute–The benchmarks against which the PAC are scored are set by invariant historical values or intrinsic properties.

Alternative–To be considered as an alternative to a given PAC the solution must provide a comparable function to the PAC for the end user and be readily available in the market.

Business as Usual (BAU)–The most commercially viable alternative product/application/PAC to a given product or PAC being evaluated.

Carbon Negative–The GHG emissions generated by scope 1, 2, and 3 activities[11] using Chemours product(s) in a solution are greater than those from using an alternative in the same solution.

Carbon Neutral–The GHG emissions generated by scope 1, 2, and 3 activities[12] using Chemours product(s) in a solution are equivalent to those from using an alternative in the same solution.

Carbon Positive–The GHG emissions avoided by the use of Chemours products, offerings, and offsets are greater than the sum of the GHG emissions generated by scope 1, 2, and 3 activities.[13] This includes the consideration of Avoided Emissions, i.e., the difference in emissions between two alternative solutions.[14]

Contribution–Each PAC is evaluated for its contribution to the targets and indicators associated with the 17 UN SDGs. Contribution is measured in two dimensions: 1) Significance, indicating the relative role of the Chemours' product in the complete PAC helping to meet the SDG, and 2) Magnitude, the relative importance of the PAC for achieving the SDG.

Corporate Responsibility Commitment (CRC)–Chemours' public commitment to bring responsible chemistry to life, and to hold ourselves accountable for our progress.

Environmental Fate–How a substance distributes (e.g. to air, water, soil) and changes in the environment.

Exposure–Both the amount of, and the frequency with which, a chemical substance reaches a person, group of people or the environment.

Fluorinated Organic Chemicals Emissions–These are emissions of fluorinated organic compounds to air and water from our manufacturing processes. Fluorinated organic compounds are defined as compounds containing one or more carbon-fluorine bonds. Air emissions of these

[11] *Adapted from https://www.chemours.com/en-/media/files/corporate/crc/2017/chemours-responsibility-commitment-report.pdf*

[12] *Adapted from https://www.chemours.com/en-/media/files/corporate/crc/2017/chemours-responsibility-commitment-report.pdf*

[13] *Adapted from https://www.chemours.com/en-/media/files/corporate/crc/2017/chemours-responsibility-commitment-report.pdf*

[14] *Adapted from https://www.wbcsd.org/Projects/Chemicals/Resources/Addressing-the-Avoided-Emissions-Challenge*

compounds are tracked for GHG reporting purposes, and both air and water emissions will be tracked for our water quality goal.[15]

Functional Unit–ISO 14040 International Standard for Life Cycle Assessment (LCA) defines functional unit as, "…a measure of the performance of the functional outputs of the product system. The primary purpose of a functional unit is to provide a reference to which the inputs and outputs are related. This reference is necessary to ensure comparability of LCA results. Comparability of LCA results is particularly critical when different systems are being assessed to ensure that such comparisons are made on a common basis. EXAMPLE: The functional unit for a paint system may be defined as the unit surface protected for a specified time period."

Greenhouse Gas (GHG)–The six gases listed in the Kyoto Protocol: carbon dioxide (CO_2); methane (CH_4); nitrous oxide (N_2O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF_6).

Globally Harmonized System (GHS)–Globally Harmonized System of Classification and Labeling of Chemicals.

Global Warming Potential (GWP)–A factor describing the radiative forcing impact (degree of harm to the atmosphere) of one unit of a given[16] GHG relative to one unit of CO_2.[17]

Hazard–Hazard refers to the inherent properties that make a substance able to cause a risk, e.g., make it capable of causing harm to human health or the environment. Risk is the measure of potential harm based on both hazard and exposure. Exposure describes both the amount of, and the frequency with which, a chemical substance reaches a person, group of people or the environment. When chemicals are discussed in the context of a "risk assessment," it refers to a comprehensive evaluation of both the inherent hazard of a particular substance as well as the exposure.

Imprint–Aligned with the WBCSD PSA, the "Imprint" is a method to create an understanding of the PAC's net impact on society and environment. The Imprint includes several attributes with direct links to Chemours CRC goals, (e.g. impact on climate change, landfill intensity and emissions of fluorinated organic compounds to air and water) as well as additional attributes covering topics such as risk to human health and public sentiment.

Imprint Attribute–The Imprint includes 10 attributes which each assess a specific environmental or social impact of the PAC.

Intensity–Expression of impact per unit of physical activity or unit of

[15]As defined in https://www.chemours.com/en-/media/files/corporate/crc/2017/chemours-responsibility-commitment-report.pdf

[16]See https://www.osha.gov/dsg/hazcom/ghsguideoct05.pdf for more information on GHS.

[17]See http://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf for the full GHG Protocol.

economic value (e.g. tonnes of CO_2 emissions per unit of electricity generated).[18]

Magnitude–The relative importance of the solution for achieving the SDG.

Offerings–Refers to a specific Chemours product, service or group of products or services.

Portfolio Management–Approach that provides characterization and stratification across all products within a company's portfolio, allowing for reporting of performance (e.g. per revenue) as well as prioritization of action (e.g. putting focus on innovating new products that can replace poorly performing current products)

Portfolio Sustainability Assessments (PSA)–For the purposes of EVOLVE 2030, PSA refers to the WBSCSD PSA Methodology, a holistic approach designed to: The PSA Methodology aims to: 1. Build a common understanding of what is considered "sustainable" within product portfolios; 2. Improve robustness of existing PSA approaches, by adopting best-practice approaches applied by peers; 3. Increase credibility of externally-communicated results, by agreeing on requirements with which a high-quality PSA must comply; 4. Reduce complexity for companies starting with PSA, by providing pragmatic "how-to" guidelines and case examples; 5. Improve consistency in communication on sustainability attributes and performance.[19]

Product Application Combination (PAC)–A PAC is a set of products and applications for which environmental and social impact (both positive and negative) is similar as per the WBSCD Chemical Industry Methodology for Portfolio Sustainability Assessment (the WBCSD PSA or simply "PSA method"). It is a segmentation approach intended to allow for the evaluation of unique impacts which results from the product (offering) in specific applications across the full Lifecyle. For efficiency, products and applications are grouped as much as possible—i.e. products with similar operational footprint and benefits to society, if possible, are grouped into the same PACs.

Product Sustainability Risk Assessment Executive Review–The Product Sustainability Risk Assessment (PSRA) is a standard process designed to assist Chemours Company employees and businesses to responsibly manage the environmental, health, safety, sustainability (EHSS) and regulatory aspects and impacts of Chemours raw materials, products and services throughout the life cycle and across the value chain in order to minimize risks and maximize business value. A PSRA Executive Review is

[18]Adapted from Intensity Ratio definition from the GHG Protocol available at: http://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf

[19]See https://www.wbcsd.org/Programs/Circular-Economy/Factor-10/Sector-Deep-Dives/Resources/Chemical-Industry-Methodology-for-Portfolio-Sustainability-Assessments for the full WBCSD PSA Methodology

when participants review and accept ongoing management of action items designed to minimize risks and maximize business value.

Refresh–An update to the evaluation of a PAC (Imprint and/or Contribution) conducted either as part of a regularly scheduled update or triggered by a change occurring relative to one or more evaluation criteria, e.g., a new alternative to the PAC becomes viable in the market, a change in the manufacturing process is expected to alter the Imprint score.

Relative to alternative–For some scoring, comparison to an alternative technology is central to the evaluation. For example, "Carbon Positive", as defined as CO_2e emissions avoided less that caused by the PAC under evaluation, necessarily compares the impact of using the subject PAC with its alternative.

Revenue–For purposes of the EVOLVE 2030 method revenue refers to the total sales value (USD) of a given PAC for the fiscal year being assessed.

Risk Ratio–The ratio of a health benchmark versus the estimated concentration in an environment. The risk ratio will vary according to the population in the environment; sometimes the population is the general public (in the case of consumer goods), other times the population is workers on a manufacturing line.

Significance–Relative role of the Chemours' product/offering in the PAC helping to meet the SDG.

Solution–The WBCSD PSA defines solution as, "…Any product in its application along the value chain, a chemical product, a material from another industry, a component or a final technology which fulfills the need of the purchaser."

Specific Contribution–PACs which are considered to have a specific contribution are those which score place them in Quadrant A of the EVOLVE 2030 Matrix (Figure 4), therefore the PAC has been demonstrated to have an Imprint score greater or equal to zero and a Contribution score of 6 or greater.

Sustainable Offering–A part of Chemours' broader Corporate Responsibility Commitment, the Sustainable Offerings goal is to ensure 50% or more of our revenue will be from offerings that make a specific contribution to the United Nations Sustainable Development Goals by 2030.

Toxicity–Ability of a substance or article to cause health-related damage to an organism (both mammalian and aquatic) or the environment.

United Nations Sustainable Development Goals (UN SDGs / SDGs)–The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries—developed and developing—in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests.[20]

WBCSD–World Business Council for Sustainable Development. WBCSD is a global, CEO-led organization of over 200 leading businesses working together to accelerate the transition to a sustainable world.

[20]*See https://sustainabledevelopment.un.org/sdgs for complete listings of the SDG framework.*