

# Chevron Corp (CVX)

## Vote Yes: Item 5 - Shareholder Proposal

### Seeking Report on Impact of Reduced Plastic Demand

Annual Meeting: May 29, 2024

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## THE RESOLUTION

**RESOLVED:** Shareholders request that Chevron issue a report, at reasonable cost and omitting proprietary information, addressing whether and how a significant reduction in virgin plastic demand, as set forth in *Breaking the Plastic Wave's* System Change Scenario (SCS,) would affect the Company's financial position and the assumptions underlying its financial statements.

**Supporting Statement:** Proponents recommend that, at Board discretion, the report include:

- Quantification of the Company's polymer production for single-use plastic (SUP) markets;
- A summary of the Company's existing and planned investments that may be materially impacted by the SCS;
- Disclosure of key metrics for chemical recycling processes including inputs, outputs/yield, energy use, carbon and waste emissions, and measures taken to ensure safe operations.

## SUMMARY

Plastic, with a lifecycle social cost at least ten times its market price, threatens the world's oceans, wildlife, and public health.<sup>1</sup> Concern about the growing scale and impact of global plastic pollution has elevated the issue to crisis levels.<sup>2</sup> Of particular concern are single-use plastics, which make up the bulk of the 24-34 million metric tons of plastic ending up in waterways annually.<sup>3</sup> Without drastic action, this amount could triple by 2040.<sup>4</sup>

A significant reduction in virgin plastic demand is critical to curbing the flow of plastic waste.<sup>5</sup> The leading peer-reviewed plan for plastic pollution reduction is the widely respected *Breaking the Plastic Wave* report, published by Pew Charitable Trusts ("the Pew report,") which identifies solutions that could cut the annual flow of plastic pollution into oceans by 80% by 2040 under its System Change Scenario (SCS). A key component will require a significant (30%) absolute reduction in use of virgin SUP.<sup>6</sup>

Chevron Phillips Chemical, co-owned by Chevron (hereafter Chevron) with Phillips 66, has been cited as the 16th largest producer of resins bound for single-use plastics (SUPs), resulting in an estimated 4.6

<sup>1</sup> [https://wwfint.awsassets.panda.org/downloads/wwf\\_pctsee\\_report\\_english.pdf](https://wwfint.awsassets.panda.org/downloads/wwf_pctsee_report_english.pdf), p.15

<sup>2</sup> <https://www.unep.org/resources/pollution-solution-global-assessment-marine-litter-and-plastic-pollution>

<sup>3</sup> <https://www.eurekalert.org/news-releases/871061>

<sup>4</sup> <https://www.nationalgeographic.com/science/article/plastic-trash-in-seas-will-nearly-triple-by-2040-if-nothing-done>

<sup>5</sup> <https://www.theguardian.com/environment/2021/jul/01/call-for-global-treaty-to-end-production-of-virgin-plastic-by-2040>

<sup>6</sup> [https://www.pewtrusts.org/-/media/assets/2020/07/breakingtheplasticwave\\_report.pdf](https://www.pewtrusts.org/-/media/assets/2020/07/breakingtheplasticwave_report.pdf)



million tons of SUP resins and 1.8 million tons of plastic waste annually.<sup>7</sup> Shareholders ask Chevron to follow through on its stated ambition to combat plastic pollution by assessing how the projected 30% reduction in plastics demand necessary to cut plastic pollution 80% by 2040 will impact the Company's business.

Nearly a decade after plastic pollution in oceans was recognized as a global crisis, the petrochemical industry has failed to propose a plan to help ensure reduced ocean pollution by a specific amount. The Pew study is the only comprehensive peer-reviewed study to provide such a plan and provide scientific backup. That is why proponents ask the Company to use the Pew report as the basis for analyzing the impact of reduced demand on the Company. Chevron maintains it has addressed the proposal by publishing a summary of a long-term demand outlook study. Proponents strongly disagree; our proposal seeks analysis of a plan to cut plastic pollution by a specific amount – 80%. **The Company did something fundamentally different** -- an analysis of future demand with no specific reduction goal. That is why proponents have pursued this proposal.

The Pew report's projected one-third demand reduction and its call for immediate reductions in new investments in virgin production, are at odds with Chevron's recent investments. The Company's rapid expansion of facilities producing polyethylene, a top polymer used to make single-use plastic, increasingly conflicts with both countries and consumer brands that are beginning to drive reductions in virgin plastic use and call for reduced plastic production.<sup>8</sup> It also conflicts with multiple analyst projections that the polyethylene market currently is and will be oversupplied for many years, and thus risks creation of overbuild and stranded assets.<sup>9</sup> Together, these could have significant implications for the Company.

Finally, the Company uses chemical recycling technologies including pyrolysis to turn waste plastic into new plastic feedstock. This process has been cited as inefficient, greenhouse gas-intensive, and responsible for releasing toxic byproducts which can increase financial and reputational risk to Chevron. The proposal seeks disclosure of the impact of these operations.<sup>10</sup>

## RATIONALE FOR A YES VOTE

1. **Chevron is exposed to economic risks including potential reduced demand, as the world transitions away from virgin and single-use plastics to combat plastic pollution.**
2. **Chevron has not provided adequate information to investors on the impact of potential plastic demand reductions.**

<sup>7</sup> <https://cdn.minderoo.org/content/uploads/2023/02/04205527/Plastic-Waste-Makers-Index-2023.pdf>

<sup>8</sup> <https://www.pbs.org/newshour/science/bold-single-use-plastic-ban-kicks-europes-plastic-purge-into-high-gear> ; <https://www.unep.org/resources/report/legal-limits-single-use-plastics-and-microplastics> ; <https://www.unilever.com/news/press-releases/2019/unilever-announces-ambitious-new-commitments-for-a-waste-free-world.html>

<sup>9</sup> <https://www.icis.com/asian-chemical-connections/2023/08/global-pe-capacity-may-have-to-be-23m-tonnes-year-lower-in-2023-2030-to-end-the-downturn/>

<sup>10</sup> <https://eandt.theiet.org/content/articles/2022/11/is-chemical-recycling-greenwashing>



3. **Chevron continues to expand its production of virgin plastics despite both the likelihood of single-use plastic demand reduction and recent analyst projections of global polyethylene overcapacity.**
4. **Chevron has not disclosed the safety and efficacy of the recycling technologies it uses to produce new plastic feedstocks from plastic waste.**

## DISCUSSION

1. **Chevron is exposed to economic risks, including potential reduced demand, as the world transitions away from virgin and single-use plastics to combat plastic pollution.**

A drastic absolute reduction in SUP and virgin plastic use is critical to addressing the global plastic pollution crisis. Global community leaders have declared that the current rate of expansion of virgin plastic production is unsustainable, recycling improvements alone are inadequate, and absolute demand reductions are critical. These conclusions are reflected in recent reports by the United Nations Environment Program (UNEP), the Organization for Economic Co-operation and Development (OECD), and the US National Academies of Science, Engineering, and Medicine (NAS), and built into the System Change Scenario of Pew's *Breaking the Plastic Wave*.<sup>11</sup>

According to UNEP, a reduction in avoidable, unnecessary, and problematic plastic is crucial to addressing the global plastic pollution crisis. The OECD has called for restraints on demand, and the NAS suggests a national cap on virgin plastic production. While the petrochemical industry has no specific plans to reduce plastic production or pollution by a specific amount, countries and consumer brands are beginning to drive reductions in virgin plastic use and call for reduced plastic production.<sup>12</sup>

Governments around the world have passed policies taxing corporations for single-use packaging, and have the potential to significantly impact demand for the Company's products, including new laws in the U.S. in the states of Maine, Oregon, and Colorado. California passed the first U.S. law mandating specific cuts in the use of plastic packaging: 25% over ten years.<sup>13</sup> The European Union has banned 10 single-use plastic products commonly found in ocean cleanups and imposed a tax on non-recycled plastic packaging waste.<sup>14,15</sup> The UN Environment Assembly approved a process for creating the first legally binding Global Plastics Treaty by 2024.<sup>16</sup> A recent survey of citizens across 19 countries, conducted ahead of the most recent round of Global Plastics Treaty negotiations, found overwhelming public support for measures aimed at ending SUP.<sup>17</sup> 90% of respondents endorse transitioning away from SUP

<sup>11</sup> <https://www.unep.org/news-and-stories/press-release/comprehensive-assessment-marine-litter-and-plastic-pollution>; <https://www.oecd.org/newsroom/plastic-pollution-is-growing-relentlessly-as-waste-management-and-recycling-fall-short.htm>; <https://www.washingtonpost.com/climate-environment/2021/12/01/plastic-waste-ocean-us/>

<sup>12</sup> <https://www.weforum.org/agenda/2020/10/canada-bans-single-use-plastics/>; <https://www.pbs.org/newshour/science/bold-single-use-plastic-ban-kicks-europes-plastic-purge-into-high-gear>

<sup>13</sup> <https://oceanconservancy.org/wp-content/uploads/2023/01/22.09.26-OC-SB54-OnePager.pdf>

<sup>14</sup> <https://eur-lex.europa.eu/legal-content/EN/LSU/?uri=CELEX:32019L0904>

<sup>15</sup> [https://commission.europa.eu/strategy-and-policy/eu-budget/long-term-eu-budget/2021-2027/revenue/own-resources/plastics-own-resource\\_en](https://commission.europa.eu/strategy-and-policy/eu-budget/long-term-eu-budget/2021-2027/revenue/own-resources/plastics-own-resource_en)

<sup>16</sup> <https://www.nytimes.com/2022/03/02/climate/global-plastics-recycling-treaty.html>

<sup>17</sup> <https://www.greenpeace.org/international/press-release/66210/8-in-10-people-support-cut-in-plastic-production-ahead-of-global-plastics-treaty-talks-in-ottawa/>



packaging, 80% support cutting plastic production to stop plastic pollution, and 75% support a ban on single-use plastic packaging.

Notable consumer brands, among the largest users of SUPs, are reducing their use of virgin plastic and calling for cuts in plastic production which could impact demand for Chevron's plastic products. Coca-Cola Co, Nestle, Mars, PepsiCo, Unilever, and Walmart are members of The Business Coalition for a Global Plastics Treaty. This coalition has stated that the top priority of a global plastics treaty should be "reduction of plastic production and use . . . focusing on virgin fossil fuel-based plastic."<sup>18</sup> This coalition also includes investors with \$5.5 trillion in assets under management (AUM): ASN Bank, BNP Paribas Asset Management, Fidelity International, and Robeco. **The actions of this coalition alone provide impetus for Chevron to further assess its dependence on virgin and single-use plastics.** Taken together, these governmental and corporate actions could have significant implications for Chevron as one of the world's largest producers of SUP resins.

A recent study funded by the plastics industry (Plastics Europe) shows that the plastics industry and companies within it, including Chevron, can feasibly respond to changes in demand. It states that "it is technically feasible and environmentally beneficial to reduce 38% (7.2 million tons) of projected plastic packaging demand by 2050," through elimination actions and development of reuse models without compromising on functionality.<sup>19</sup>

Given these developments, and in response to economic risk stemming from changes in demand and feasible industry responses, shareholders expect major polymer producers like Chevron to begin positioning their businesses for a world in which single-use plastic demand is declining, and disclose the potential risks and impacts to Chevron's petrochemical investments, with specific consideration of the most comprehensive existing reduced demand scenario -- the Pew Scenario.

## **2. Chevron has not provided adequate information to investors on the impact of potential plastic demand reductions.**

Chevron has not provided an analysis of how a significant reduction in virgin plastic demand, as set forth in *Breaking the Plastic Wave's* System Change Scenario, would affect the Company's financial position. The Company maintains that it undertook a form of scenario analysis, but the analysis was fundamentally different from what the Proponent requests.

In a similar proposal filed last year, proponents requested an analysis of how a specific 30% reduction in virgin plastic demand, deemed an essential element to achieve an 80% reduction in ocean plastic pollution as set forth in the System Change Scenario, would affect the Company's financial position.<sup>20</sup> The Pew study used a first-of-its-kind economic model to quantify the flow and amount of plastic in the global system and estimate reduction in ocean plastic pollution under several scenarios.

The Company ignored the Proposal's request to test the impact of the 30% reduction scenario and instead provided an opaque long-term demand forecast in its 2021 Sustainability Report.<sup>21</sup> The Pew process is goal-oriented, projecting cuts in plastic demand needed to achieve an 80% drop in plastic

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<sup>18</sup> <https://www.plasticsnews.com/public-policy/plastics-treaty-talks-open-push-restrain-virgin-resins>

<sup>19</sup> <https://plasticseurope.org/reshaping-plastics/>

<sup>20</sup> <http://www.asyousow.org/resolutions/2022/11/30-phillips-66-petrochemical-risk>

<sup>21</sup> [https://www.cpchem.com/sites/default/files/2023-07/2021%20Sustainability%20Report%20-%20Final\\_0.pdf](https://www.cpchem.com/sites/default/files/2023-07/2021%20Sustainability%20Report%20-%20Final_0.pdf)



waste. The Company's analysis of future demand does provide any information to investors about the impact of a projected 30% drop in demand on Chevron's operations.

Instead of addressing the 30% scenario, Chevron offered the red herring of a demand outlook stating that a 30% drop in demand is not likely based upon a vague set of projected plastics and recycling related policy changes. The analysis provided by Chevron further did not peg its projected changes to a level of reduced plastic pollution - the focus of the Pew study. We could provide a detailed review of other problems with the Chevron analysis, but that would imply that the two efforts are comparable; they are not. The Pew study is an apple; the Chevron analysis is an orange.

Finally, the Company's analysis of continued growing future demand has been challenged during the past year by analyst projections of current and ongoing long-term reduction in demand growth and global oversupply of polyethylene as discussed in Section 3 below. Thus, the Company's actions to date have not been responsive to our proposal.

### **3. Chevron continues to expand its production of virgin plastics despite both the likelihood of single-use plastic demand reduction and recent analyst projections of global polyethylene overcapacity.**

Chevron has set a circular polymer target of 1 billion pounds (roughly 450,000 metric tons) by 2030. This goal is dwarfed by the nearly 1.6 million metric tons of *additional* virgin plastic capacity it is estimated to begin adding from its recently approved, multi-billion dollar Golden Triangle Polymers and Ras Laffan petrochemical projects.<sup>22</sup> These two "world-scale" plastic growth projects are estimated to increase the Company's virgin plastic production capacity by roughly 35% – **an expansion more than three times greater than its 2030 circular polymer target.**<sup>23</sup>

Additionally, **Chevron is investing heavily in expanding polyethylene capacity at a time of significant global polyethylene overcapacity.** According to the Institute for Energy Economics and Financial Analysis (IEEFA), Chevron has announced \$14.5 billion in investments that expand ethylene and polyethylene capacity in the U.S. and Middle East.<sup>24</sup> The sobering, long-term outlook for polyethylene was summarized by ICIS (Independent Commodity Intelligence Services) in an August 2023 analysis stating that average annual capacity exceeding demand was 10 million tons in 2000-2022 (resulting in an 86% average operating rate,) and average annual capacity exceeding demand is forecast to be 26 million tons in 2023-2030 (resulting in an 80% operating rate.)<sup>25</sup> Much of the drop in demand growth can be attributed to a major economic slowdown in China, which is dealing with massive debt and bankruptcy of the Evergrande property developer. As recently as three years ago, consensus views were that China's chemicals and polymers demand would grow at 6-8% per year over the long term. "But we see China's polyethylene demand growth falling to 3.3% in 2023-2030 versus 8.7% in 2000-2022," according to the ICIS analysis. This evidence contrasts sharply with the Company's analysis cited above that indicated

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<sup>22</sup> <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/petrochemicals/010823-qatar-moves-ahead-with-6-billion-ras-laffan-petrochemicals-project>; <https://www.cpchem.com/media-events/news/news-release/chevron-phillips-chemical-and-qatarenergy-construct-integrated>

<sup>23</sup> [https://s22.q4cdn.com/128149789/files/doc\\_presentations/2022/02/07/Investor-Update-February-2022-vF.pdf#page=22](https://s22.q4cdn.com/128149789/files/doc_presentations/2022/02/07/Investor-Update-February-2022-vF.pdf#page=22); <https://www.minderoo.org/plastic-waste-makers-index/>

<sup>24</sup> [https://ieefa.org/sites/default/files/2024-01/Petrochemicals%20Losing%20Financial%20Appeal\\_January%202024.pdf](https://ieefa.org/sites/default/files/2024-01/Petrochemicals%20Losing%20Financial%20Appeal_January%202024.pdf)

<sup>25</sup> <https://www.icis.com/asian-chemical-connections/2023/08/global-pe-capacity-may-have-to-be-23m-tonnes-year-lower-in-2023-2030-to-end-the-downturn/>



continued steady growth in demand. Released in May 2020, that analysis appears to be outdated particularly due to the events cited by ICIS and others.

According to a lead chemicals researcher at S&P, ethylene use rates -- the amount converted into new materials like plastic -- have fallen to their lowest level in four decades because of “a gross overbuild” of production capacity.<sup>26</sup> Chemical & Engineering News reports that “every major commodity chemical market, with a few exceptions, like chlorine, is now entering a period of severe overcapacity that will make it difficult to eke out profits.”<sup>27</sup> This puts Chevron at high risk of possible overbuild and stranded assets, a major concern for shareholders.

#### **4. Chevron has not disclosed the safety and efficacy of the recycling technologies it uses to produce new plastic feedstocks from plastic waste.**

Chevron touts ‘chemical’ or ‘advanced recycling’ as the solution to the plastic pollution problem, recognizing limitations in mechanical recycling. The most developed forms of chemical recycling are pyrolysis and gasification, which convert plastic waste into liquid or gaseous hydrocarbon products that can be converted back into plastics or fuels.

The Company lacks disclosure on the safety and efficacy of the advanced recycling technologies it uses to produce recycled resins. Advanced recycling has several concerning impacts that must be addressed before investors can be assured the process will meet the global demand for reduced plastic pollution. As petrochemical companies begin to commit to using recycled plastics, it is important to understand if the proposed processing technologies are cost-effective, process and energy efficient, and environmentally sound.

Chevron’s recycled polymer Marlex® Anew™ Circular Polyethylene is made using a pyrolysis-based recycling process. There are numerous concerns about pyrolysis, including high energy use, toxic residues, and low processing efficiency. A recent study published by the US Department of Energy (DOE) found that the two most common technologies (pyrolysis and gasification) both have very low plastic material yields: only 0.1% – 5.7% of the plastic material was recovered after pyrolysis.<sup>28</sup> Low yields suggest that pyrolysis may not be an efficient or cost-effective recycling process to use as scale. Pyrolysis oil, a product of pyrolysis, often needs further refining to remove impurities before it can be converted into plastic products, requiring more cost and effort. Investors are concerned that a large majority of input materials and energy may be consumed in the process of converting plastic waste into much smaller outputs of hydrocarbons and potential plastic product.

Furthermore, while the chemical recycling process is likely to be understood by the general public to facilitate the recycling of used plastics into new plastic products, this is rarely done in practice. Rather, the process most often creates material that is later burned – a practice that is not considered recycling. Creating fuels and incineration destroy materials by burning them which means they cannot be used to make new products. Braven Environmental has a long-term agreement to supply Chevron with pyrolysis-

<sup>26</sup> <https://www.ft.com/content/6b3f4405-a994-4fb1-b667-1f49c5357db8>

<sup>27</sup> <https://cen.acs.org/business/petrochemicals/Fallow-days-loom-petrochemical-firms/101/i36#:~:text=It%20will%20take%20%E2%80%93,several%20years%2C%E2%80%9D%20he%20said.>

<sup>28</sup> <https://doi.org/10.1021/acssuschemeng.2c05497>





derived feedstock.<sup>29</sup> While Braven claims its pyrolysis oil could be used as plastic feedstock, it has been found that Braven is supplying pyrolysis oil to the Chevron refining facility in Mississippi to turn into jet fuel.<sup>30</sup> According to the U.S. Environmental Protection Agency's records, "the production of one of the [Chevron produced] fuels could emit air pollution that is so toxic, 1 out of 4 people exposed to it over a lifetime could get cancer."<sup>31</sup>

Pyrolysis can also generate ash containing halogens and heavy metals that need to be properly managed. There are significant environmental justice concerns regarding hazardous waste, air pollutants, and greenhouse gas emissions from chemical recycling facilities, which are often sited in low-income communities, communities of color, or other marginalized communities. According to a nationwide poll released in 2023, 76% of American voters, the vast majority, are concerned about the disproportionate impact on neighborhoods near "chemical recycling" plants, and 79% of voters are concerned about the serious health risks associated with toxic chemical emissions from "chemical recycling" plants. Over 70% of voters are concerned about the negative impacts of "chemical recycling," 73% are concerned about how "chemical recycling" of plastic contributes to climate change, and 73% are concerned that it often requires more energy and emits more pollution than conventional recycling.<sup>32</sup> These could all pose reputational risk.

These widespread concerns highlight the impetus for disclosure to ensure safe and responsible operations and to protect nearby residents from harmful plant emissions to air, water, and land. To the extent that Chevron relies on advanced recycling to address global concerns about plastic pollution, it should also disclose the type of technology, inputs, outputs, energy use, carbon emissions, hazardous waste generation, and importantly, processing efficiency (i.e. yield of usable material versus loss), so investors can be assured that the Company's investments in these technologies are economically viable rather than economic risks.

Aside from these issues, there is concern that chemical recycling will scale too slowly to have a substantial impact. A National Academy of Sciences study concluded that chemical recycling technologies are "unproven to handle the current plastic waste stream and existing high-production plastics."<sup>33</sup> A survey of more than 60 technology providers found that it took 17 years, on average, for them to reach growth scale.<sup>34</sup> The Pew report states that plastic-to-plastic chemical recycling at scale is likely to begin only after 2030 and can handle only 6% of plastic waste by 2040. A September 2023 report by the Nordic Council of Ministers models the impact of 15 potential global policy interventions on plastic pollution through 2040.<sup>35</sup> The report concludes that, at best, chemical recycling will only recycle 15.4 million tons of plastic waste in 2040 — a mere 3% of all plastic waste generated, casting doubt on the relevance and utility of chemical recycling to the management of plastic waste into the future.<sup>36</sup>

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<sup>29</sup> <https://bravenenvironmental.com/news/braven-environmental-executes-long-term-pyrolysis-derived-feedstock-supply-agreement-with-chevron-phillips-chemical/>

<sup>30</sup> <https://theintercept.com/2023/09/28/braven-plastic-recycling-toxic-waste/>

<sup>31</sup> <https://www.propublica.org/article/chevron-pascagoula-pollution-future-cancer-risk>

<sup>32</sup> <https://usa.oceana.org/americans-are-concerned-about-chemical-recycling/>

<sup>33</sup> <https://nap.nationalacademies.org/catalog/26132/reckoning-with-the-us-role-in-global-ocean-plastic-waste>, p. 71

<sup>34</sup> <https://www.closedlooppartners.com/tag/chemical-recycling/>

<sup>35</sup> <https://www.norden.org/en/publication/tag/towards-ending-plastic-pollution>

<sup>36</sup> [https://static1.squarespace.com/static/5eda91260bbb7e7a4bf528d8/t/655791f76ad9bb07d10e1290/1700237880522/10-30-23\\_Chemical-Recycling-Report\\_web.pdf](https://static1.squarespace.com/static/5eda91260bbb7e7a4bf528d8/t/655791f76ad9bb07d10e1290/1700237880522/10-30-23_Chemical-Recycling-Report_web.pdf)



## RESPONSE TO CHEVRON'S BOARD OF DIRECTORS' STATEMENT IN OPPOSITION

Chevron argues that this proposal is substantially addressed by a circularity analysis and global polyethylene outlook provided in response to last year's proposal, which concluded that even with increased regulation, polyethylene demand, production, and revenue would generally continue to grow.<sup>37</sup> The studies upon which the analysis was based were released in 2020.<sup>38</sup> Since that time, as discussed above, growth in demand for polyethylene has declined significantly and capacity will exceed demand annually by a projected 26 million tons between 2023 and 2030. In addition to the fact that Company's cited data appears outdated, it is not relevant to our request to assess how a 30% reduction in virgin plastic demand by 2040, as set forth in *Breaking the Plastic Wave's* System Change Scenario, would affect the Company's financial position and underlying financial statements.

The Company further states that it tests its portfolio against different possible futures and "according to the International Energy Agency's *World Energy Outlook 2023* Stated Policies Scenario, oil use as a feedstock for petrochemicals is projected to increase to 2030 and then only slightly decline to 2050, even in the event of an increase in policies to reduce single-use plastics, improve recycling, and promote alternative feedstocks." We note that this scenario which addresses oil used for a much broader category – **petrochemicals** -- does not address the question of the impact to Chevron of a decline in demand for **plastics** and what separate impact such a decline would have. Plastic production is only one element of petrochemical production which can have its own trajectory within broader petrochemical production. Operations related to plastics may be separate from other petrochemical operations. Such operations may be at risk of stranding when plastic demand declines, for example during this current time of historic polyethylene oversupply. In the **peer-reviewed** Pew Scenario, virgin plastic demand would peak by 2027 – leaving an estimated \$400 billion of global investment in virgin plastic production potentially stranded, according to one analysis.<sup>39</sup>

Chevron's report answers a question the proposal did not ask. We asked the Company to analyze a 30% reduction in virgin plastic demand discussed in the System Change Scenario which is part of a vetted plan to cut ocean plastic pollution by a specific amount – 80% by 2040. We discuss above that such cuts are increasingly likely and already being called for by governments, by multi-lateral agencies like UNEP and the OECD, and, importantly, by the downstream customers of the Company's products – global brands like Coca-Cola, Unilever, and Walmart. Chevron's outdated and irrelevant conclusion regarding future demand is insufficient. Thus, proponents have continued to pursue the proposal. Given the world's intense focus on meeting strong plastic reduction goals, like those proposed by Pew, we believe this will provide important information to investors.

## CONCLUSION

In conclusion, Chevron is exposed to economic risk as governments and consumer brands transition away from single-use plastics. The Company has not yet done a scenario analysis of the impact of demand

<sup>37</sup> [https://www.cpchem.com/sites/default/files/2023-07/2021%20Sustainability%20Report%20-%20Final\\_0.pdf](https://www.cpchem.com/sites/default/files/2023-07/2021%20Sustainability%20Report%20-%20Final_0.pdf)

<sup>38</sup> [https://www.cpchem.com/sites/default/files/2023-07/2021%20Sustainability%20Report%20-%20Final\\_0.pdf](https://www.cpchem.com/sites/default/files/2023-07/2021%20Sustainability%20Report%20-%20Final_0.pdf)

<sup>39</sup> <https://carbontracker.org/reports/the-futures-not-in-plastics/>





reductions associated with an 80% cut in ocean plastic pollution by 2040. The Company provided an analysis based on outdated studies and information irrelevant to our request.

A Company analysis of the Pew report's System Change Scenario, discussing how the 30% reduction in virgin plastic demand would affect Chevron's financial position, would provide shareholders with a better understanding of demand-related risk and mitigation actions. Further, risks and opportunities associated with the Company's investments in advanced recycling technologies to process plastic waste, which can pose efficiency, emissions, and safety concerns, should be disclosed to avoid reputational risk, and assure investors they are economically viable rather than economic risks.

**We recommend a "Yes" vote on Item #5.**

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For questions, please contact: Genevieve Abedon, *As You Sow*, [gabedon@asyousow.org](mailto:gabedon@asyousow.org)

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