

# Stormy Seas, Rising Risks

*What Investors Should Know About Climate  
Change Impacts at Oil Refineries*

[www.ucsusa.org/risingrisks](http://www.ucsusa.org/risingrisks)

Appendix B: Communications with Companies

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In this appendix, communication is documented that the Union of Concerned Scientists (UCS) has had with the five companies examined in *Stormy Seas, Rising Risks: What Investors Should Know about Climate Impacts at Refineries* at the time of the report release on February 25, 2015. This communication includes letters sent to companies, relevant shareholder resolutions, and direct email communications. UCS sent letters to four of the companies—Chevron, Exxon, Marathon Petroleum, and Valero—expressing concern about the lack of transparency about the physical risks associated with climate change in their SEC form 10-K filings. UCS did not send a letter to Phillips 66 because there was an active shareholder resolution on the subject at the time. Of the companies UCS sent letters to, only ExxonMobil responded as of February 25, 2015.

# [UCS Letters to Companies]



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1825 K Street NW, Suite 800, Washington, DC 20006-1232 t 202.223.6133 f 202.223.6162  
2397 Shattuck Avenue, Suite 203, Berkeley, CA 94704-1567 t 510.843.1872 f 510.843.3785  
One North LaSalle Street, Suite 1904, Chicago, IL 60602-4064 t 312.578.1750 f 312.578.1751

December 22, 2014  
Patricia E. Yarrington  
Vice President and Chief Financial Officer  
Chevron Corporation  
6001 Bollinger Canyon Rd.  
San Ramon, CA 94583

Dear Ms. Yarrington,

I am writing to you on behalf the Union of Concerned Scientists (UCS). UCS is a leading science based non-profit working to integrate science into public decision making.

In particular, I am writing to inquire about Chevron’s policies and disclosures regarding financial risks related to climate change. The Securities and Exchange Commission (SEC) recognized the financial impacts of climate change when it issued Interpretive Guidance on climate disclosure in February 2010, responding to more than 100 institutional investors representing \$7 trillion seeking regular reporting from companies on these risks.

The Guidance outlines expectations from companies in reporting on “material” regulatory, physical, and indirect risks, as well as opportunities related to climate change. These expectations include the following related to climate change impacts on severe weather.

“Significant physical effects of climate change, such as effects on the severity of weather (for example, floods or hurricanes), sea levels, the arability of farmland, and water availability and quality, have the potential to affect a registrant’s operations and results.

For example, severe weather can cause catastrophic harm to physical plants and facilities and can disrupt manufacturing and distribution processes.

...

Possible consequences of severe weather could include:

For registrants with operations concentrated on coastlines, property damage and disruptions to operations, including manufacturing operations or the transport of manufactured products;

...

Registrants whose businesses may be vulnerable to severe weather or climate related events should consider disclosing material risks of, or consequences from, such events in their publicly filed disclosure documents”<sup>1</sup>.

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<sup>1</sup> <http://www.sec.gov/rules/interp/2010/33-9106.pdf>

Sea level rise (SLR) projections from the National Oceanic and Atmospheric Association (NOAA) are that the Gulf of Mexico is likely to see at least one to three feet of SLR in the next 100 years, with some coastal areas potentially seeing up to 1.7 feet in the next 25 years<sup>2,3</sup>. Galveston, Texas has already experienced more than a foot of sea level rise in the past 50 years.<sup>4</sup> Added to the SLR risk posed to coastal facilities is storm surge which has been as high as 28 feet above normal tide levels in recent hurricanes<sup>5</sup>. Storm surges and SLR are an apparent physical financial risk due to climate change for vulnerable Chevron facilities, such as the Pascagoula, Mississippi and Kapolei, Hawaii refineries.

Diminished refining utilization rates, downtime or closure of these facilities due to direct damage to the facility, danger to employees, disruption in supply chains and distribution centers, and/ or power supply due to storm surges or SLR could have a material impact on production and related cash flows. This was made evident by the major damage and extended shut down of the Pascagoula, Mississippi refinery in 2005 as a result of Hurricane Katrina.<sup>6</sup>

Though the Chevron annual report filed using form 10-K on February 21, 2014 notes possible “disruptions at refineries or chemical plants resulting from unplanned outages due to severe weather,” the only direct discussion of climate impacts is on regulation expenses:

“Continued political attention to issues concerning climate change, the role of human activity in it, and potential mitigation through regulation could have a material impact on the company’s operations and financial results.”<sup>7</sup>

While Chevron’s disclosure of this and other current and potential material impacts of climate change mitigation and adaptation requirements in the company’s disclosure through form 10-K is useful, specific disclosure regarding the company’s awareness of and preparation for material risks related to storm surges or SLR should also be included, along with estimates of the potential financial costs that will be incurred. This type of information is essential for investors and of interest to members of the public, especially communities living near such facilities.

UCS notes Chevron’s consideration of climate change risks on the Chevron website:

“Chevron shares the concerns of governments and the public about climate change risks and recognizes that the use of fossil fuels to meet the world’s energy needs is a contributor to rising greenhouse gases (GHGs) in the earth’s atmosphere. We believe that taking prudent, practical and cost effective action to address climate change risks is the right thing to do. Mitigation of GHG emissions, adaptation to climate change and continuation of scientific and technological research should all be considered.”<sup>8</sup>

In this spirit, UCS would welcome the opportunity to discuss the potentially material impact that climate-related storm surges and SLR may have on Chevron’s coastal refining operations and to consider how the company’s disclosures related to the SEC’s guidance on climate risk may be enhanced to reflect the importance of these issues.

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<sup>2</sup> <http://stateofthecoast.noaa.gov/vulnerability/localthreat.html>

<sup>3</sup> Climate Central custom data provided to the Union of Concerned Scientists

<sup>4</sup> [http://tidesandcurrents.noaa.gov/sltrends/sltrends\\_station.shtml?stnid=8771510](http://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?stnid=8771510)

<sup>5</sup> <http://www.nhc.noaa.gov/surge/#FACTS>

<sup>6</sup> [http://www.nytimes.com/2005/09/22/business/RITA-FACTBOX.html?\\_r=0](http://www.nytimes.com/2005/09/22/business/RITA-FACTBOX.html?_r=0)

<sup>7</sup> <http://www.sec.gov/Archives/edgar/data/93410/000009341014000011/cvx-123113x10kdoc.htm>

<sup>8</sup> <http://www.chevron.com/globalissues/climatechange/>

We would welcome the opportunity to discuss the details of this inquiry further. Please contact Gretchen Goldman, Lead Analyst in the Center for Science and Democracy at the Union of Concerned Scientists, at 202-331-6942 or [ggoldman@ucsusa.org](mailto:ggoldman@ucsusa.org). Thank you for your time and attention to these important issues.

Sincerely,



Gretchen Goldman, Ph.D.  
Lead Analyst  
Center for Science and Democracy  
Union of Concerned Scientists

cc:

Wesley E. Lohec  
Vice President, Health, Environment and Safety  
Chevron Corporation

Andrew Rosenberg, Ph.D.  
Director  
Center for Science and Democracy  
Union of Concerned Scientists

Christina Carlson  
Policy Research Assistant  
Center for Science and Democracy  
Union of Concerned Scientists

December 22, 2014  
Andrew P. Swiger  
Chief Financial Officer & Senior Vice President  
Exxon Mobil Corporation  
5959 Las Colinas Boulevard  
Irving, Texas 75039-2298

Dear Mr. Swiger,

I am writing to you on behalf the Union of Concerned Scientists (UCS). UCS is a leading science based non-profit working to integrate science into public decision making.

In particular, I am writing to inquire about Exxon Mobil's policies and disclosures regarding financial risks related to climate change. The Securities and Exchange Commission (SEC) recognized the financial impacts of climate change when it issued Interpretive Guidance on climate disclosure in February 2010, responding to more than 100 institutional investors representing \$7 trillion seeking regular reporting from companies on these risks.

The Guidance outlines expectations from companies in reporting on "material" regulatory, physical, and indirect risks, as well as opportunities related to climate change. These expectations include the following related to climate change impacts on severe weather.

"Significant physical effects of climate change, such as effects on the severity of weather (for example, floods or hurricanes), sea levels, the arability of farmland, and water availability and quality, have the potential to affect a registrant's operations and results.

For example, severe weather can cause catastrophic harm to physical plants and facilities and can disrupt manufacturing and distribution processes.

...

Possible consequences of severe weather could include:

For registrants with operations concentrated on coastlines, property damage and disruptions to operations, including manufacturing operations or the transport of manufactured products;

...

Registrants whose businesses may be vulnerable to severe weather or climate related events should consider disclosing material risks of, or consequences from, such events in their publicly filed disclosure documents"<sup>9</sup>.

Sea level rise (SLR) projections from the National Oceanic and Atmospheric Association (NOAA) are that the Gulf of Mexico is likely to see at least one to three feet of SLR in the next 100 years, with some coastal areas potentially seeing up to 1.7 feet in the next 25 years<sup>10,11</sup>. Galveston, Texas has already experienced more than a foot of sea level rise in the past 50 years.<sup>12</sup> Added to the SLR risk posed to coastal facilities is storm surge which has been as high as 28 feet above normal tide levels in recent hurricanes<sup>13</sup>. Storm surges and SLR are an apparent physical financial risk due to climate change for vulnerable Exxon Mobil facilities, such as the Baytown and Beaumont refineries in Texas as well as the Chalmette refinery in Louisiana that is a joint venture with Petr oleos de Venezuela.

<sup>9</sup> <http://www.sec.gov/rules/interp/2010/33-9106.pdf>

<sup>10</sup> <http://stateofthecoast.noaa.gov/vulnerability/localthreat.html>

<sup>11</sup> Climate Central custom data provided to the Union of Concerned Scientists

<sup>12</sup> [http://tidesandcurrents.noaa.gov/sltrends/sltrends\\_station.shtml?stnid=8771510](http://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?stnid=8771510)

<sup>13</sup> <http://www.nhc.noaa.gov/surge/#FACTS>

Diminished refining utilization rates, downtime or closure of these facilities due to direct damage to the facility, danger to employees, disruption in supply chains and distribution centers, and/ or power supply due to storm surges or SLR could have a material impact on production and related cash flows. This was demonstrated by hurricanes Katrina and Rita in 2005. As you are aware, hurricane Katrina caused major damage to the Chalmette refinery and it was shut down for an extended period of time.<sup>14</sup> Shortly after Hurricane Katrina hit, Hurricane Rita caused the Baytown and Beaumont facilities to shut down.<sup>15</sup>

Though the Exxon Mobil annual report filed using form 10-K on February 26, 2014 notes in the “Risk Factors” section the potential for material impact of severe weather including that “hurricanes may damage our offshore production facilities or coastal refining and petrochemical plants in vulnerable areas,” the only direct discussion of climate risk is related to potential regulation expenses.<sup>16</sup>

While Exxon Mobil’s disclosure of this and other current and potential material impacts of climate change mitigation and adaptation requirements in the company’s disclosure through form 10-K is useful, specific disclosure regarding the company’s awareness of and preparation for material risks related to storm surges or SLR should also be included, along with estimates of the potential financial costs that will be incurred. This type of information is essential for investors and of interest to members of the public, especially communities living near such facilities.

UCS notes Exxon Mobil’s attention to these issues in the sustainability focus area of “managing climate risks” and the statement in the *Corporate Citizenship Report* that “most scientists agree climate change poses risks related to extreme weather, sea level rise, temperature extremes and precipitation changes.”<sup>17</sup> In this spirit, UCS would welcome the opportunity to discuss the potentially material impact that climate-related storm surges and SLR may have on Exxon Mobil’s coastal refining operations and to consider how the company’s disclosures related to the SEC’s guidance on climate risk may be enhanced to reflect the importance of these issues.

We would welcome the opportunity to discuss the details of this inquiry further. Please contact Gretchen Goldman, Lead Analyst in the Center for Science and Democracy at the Union of Concerned Scientists, at 202-331-6942 or [ggoldman@ucsusa.org](mailto:ggoldman@ucsusa.org). Thank you for your time and attention to these important issues.

Sincerely,



Gretchen Goldman, Ph.D.  
Lead Analyst  
Center for Science and Democracy  
Union of Concerned Scientists

cc:

Kenneth Cohen  
Vice President, Public and Governmental Affairs

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<sup>14</sup> [http://www.eia.gov/oog/special/eia1\\_katrina\\_091505.html](http://www.eia.gov/oog/special/eia1_katrina_091505.html)

<sup>15</sup> <http://www.nytimes.com/2005/09/22/business/RITA-FACTBOX.html? r=0>

<sup>16</sup> <http://www.sec.gov/Archives/edgar/data/34088/000003408814000012/xom10k2013.htm>

<sup>17</sup> <http://corporate.exxonmobil.com/en/current-issues/climate-policy/climate-policy-debate/overview?parentId=c7582d41-5b74-4e12-928d-643cd1ec8813>

Exxon Mobil Corporation

Andrew Rosenberg, Ph.D.

Director

Center for Science and Democracy

Union of Concerned Scientists

Christina Carlson

Policy Research Assistant

Center for Science and Democracy

Union of Concerned Scientists

December 22, 2014  
Donald C. Templin  
Senior Vice President and Chief Financial Officer  
Marathon Petroleum Corporation  
539 South Main Street  
Findlay, OH 45840

Dear Mr. Templin,

I am writing to you on behalf the Union of Concerned Scientists (UCS). UCS is a leading science based non-profit working to integrate science into public decision making.

In particular, I am writing to inquire about Marathon Petroleum's policies and disclosures regarding financial risks related to climate change. The Securities and Exchange Commission (SEC) recognized the financial impacts of climate change when it issued Interpretive Guidance on climate disclosure in February 2010, responding to more than 100 institutional investors representing \$7 trillion seeking regular reporting from companies on these risks.

The Guidance outlines expectations from companies in reporting on "material" regulatory, physical, and indirect risks, as well as opportunities related to climate change. These expectations include the following related to climate change impacts on severe weather.

"Significant physical effects of climate change, such as effects on the severity of weather (for example, floods or hurricanes), sea levels, the arability of farmland, and water availability and quality, have the potential to affect a registrant's operations and results.

For example, severe weather can cause catastrophic harm to physical plants and facilities and can disrupt manufacturing and distribution processes.

...

Possible consequences of severe weather could include:

For registrants with operations concentrated on coastlines, property damage and disruptions to operations, including manufacturing operations or the transport of manufactured products;

...

Registrants whose businesses may be vulnerable to severe weather or climate related events should consider disclosing material risks of, or consequences from, such events in their publicly filed disclosure documents"<sup>18</sup>.

Sea level rise (SLR) projections from the National Oceanic and Atmospheric Association (NOAA) are that the Gulf of Mexico is likely to see at least one to three feet of SLR in the next 100 years, with some coastal areas potentially seeing up to 1.7 feet in the next 25 years<sup>19,20</sup>. Galveston, Texas has already experienced more than a foot of sea level rise in the past 50 years.<sup>21</sup> Added to the SLR risk posed to coastal facilities is storm surge which has been as high as 28 feet above normal tide levels in recent hurricanes<sup>22</sup>. Storm surges and SLR are an apparent

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<sup>18</sup> <http://www.sec.gov/rules/interp/2010/33-9106.pdf>

<sup>19</sup> <http://stateofthecoast.noaa.gov/vulnerability/localthreat.html>

<sup>20</sup> Climate Central custom data provided to the Union of Concerned Scientists

<sup>21</sup> [http://tidesandcurrents.noaa.gov/sltrends/sltrends\\_station.shtml?stnid=8771510](http://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?stnid=8771510)

<sup>22</sup> <http://www.nhc.noaa.gov/surge/#FACTS>

physical financial risk due to climate change for vulnerable Marathon Petroleum facilities, such as the Galveston Bay and Texas City refineries in Texas as well as the Garyville refinery in Louisiana.

Diminished refining utilization rates, downtime or closure of these facilities due to direct damage to the facility, danger to employees, disruption in supply chains and distribution centers, and/ or power supply due to storm surges or SLR could have a material impact on production and related cash flows. This was demonstrated by the reduction in operating capacity of the Garyville, Louisiana refinery in the wake of Hurricane Isaac in 2012. As you are aware, Marathon Petroleum received a loan of one million barrels of crude oil from the federal government's emergency reserves to support its refining operations after the storm<sup>23</sup>.

Though the Marathon Petroleum annual report filed using form 10-K on February 28, 2014 notes in the "Risk Factors" section the potential for material impact of severe weather including "local weather conditions" and "natural disasters such as hurricanes and tornadoes" on the areas where the company's assets reside, the only direct discussion of climate impacts is related to regulation expenses:

"We believe the issue of climate change will likely continue to receive scientific and political attention, with the potential for further laws and regulations that could affect our operations."<sup>24</sup>

While Marathon Petroleum's disclosure of this and other current and potential material impacts of climate change mitigation and adaptation requirements in the company's disclosure through form 10-K is useful, specific disclosure regarding the company's awareness of and preparation for material risks related to storm surges or SLR should also be included, along with estimates of the potential financial costs that will be incurred. This type of information is essential for investors and of interest to members of the public, especially communities living near such facilities.

UCS notes Marathon Petroleum's consideration of environmental issues by working to "reduce ...Greenhouse Gas (GHG) emissions and voluntarily participat[ing] in programs such as the EPA's ENERGY STAR program to increase energy efficiency."<sup>25</sup> Additionally, the mission and vision for "Health, Environment, Safety and Security" is:

"built around the Responsible Care® philosophy of no accidents, no injuries, no harm to the environment, and a commitment to excellence and continual improvement in the areas of health, environment, safety and security.

...

To realize this vision, MPC pursues a "plan-do-check-adjust" management system to assess risks, set targets and measure progress."<sup>26</sup>

In this spirit, UCS would welcome the opportunity to discuss the potentially material impact that climate-related storm surges and SLR may have on Marathon Petroleum's coastal refining operations and to consider how the company's disclosures related to the SEC's guidance on climate risk may be enhanced to reflect the importance of these issues.

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<sup>23</sup> <http://in.reuters.com/article/2012/08/31/us-doe-reserve-marathon-idINBRE87U10Q20120831>

<sup>24</sup> <http://www.sec.gov/Archives/edgar/data/1510295/000151029514000004/mpc-20131231x10k.htm#sA5719E7262C104FE8345153A71110781>

<sup>25</sup> [http://www.marathonpetroleum.com/Corporate\\_Citizenship/Health\\_Environment\\_Safety\\_Security/Environment/](http://www.marathonpetroleum.com/Corporate_Citizenship/Health_Environment_Safety_Security/Environment/)

<sup>26</sup> [http://www.marathonpetroleum.com/Corporate\\_Citizenship/Health\\_Environment\\_Safety\\_Security/Vision\\_Mission/](http://www.marathonpetroleum.com/Corporate_Citizenship/Health_Environment_Safety_Security/Vision_Mission/)

We would welcome the opportunity to discuss the details of this inquiry further. Please contact Gretchen Goldman, Lead Analyst in the Center for Science and Democracy at the Union of Concerned Scientists, at 202-331-6942 or [ggoldman@ucsusa.org](mailto:ggoldman@ucsusa.org). Thank you for your time and attention to these important issues.

Sincerely,



Gretchen Goldman, Ph.D.  
Lead Analyst  
Center for Science and Democracy  
Union of Concerned Scientists

cc:

John S. Swearingen  
Vice President, Health, Environment, Safety & Security  
Marathon Petroleum Corporation

Andrew Rosenberg, Ph.D.  
Director  
Center for Science and Democracy  
Union of Concerned Scientists

Christina Carlson  
Policy Research Assistant  
Center for Science and Democracy  
Union of Concerned Scientists

December 22, 2014  
Mike Ciskowski  
Executive Vice President and Chief Financial Officer  
Valero Energy Corporation  
One Valero Way  
San Antonio, Texas 78249

Dear Mr. Ciskowski,

I am writing to you on behalf the Union of Concerned Scientists (UCS). UCS is a leading science based non-profit working to integrate science into public decision making.

In particular, I am writing to inquire about Valero's policies and disclosures regarding financial risks related to climate change. The Securities and Exchange Commission (SEC) recognized the financial impacts of climate change when it issued Interpretive Guidance on climate disclosure in February 2010, responding to more than 100 institutional investors representing \$7 trillion seeking regular reporting from companies on these risks.

The Guidance outlines expectations from companies in reporting on "material" regulatory, physical, and indirect risks, as well as opportunities related to climate change. These expectations include the following related to climate change impacts on severe weather.

"Significant physical effects of climate change, such as effects on the severity of weather (for example, floods or hurricanes), sea levels, the arability of farmland, and water availability and quality, have the potential to affect a registrant's operations and results.

For example, severe weather can cause catastrophic harm to physical plants and facilities and can disrupt manufacturing and distribution processes.

...

Possible consequences of severe weather could include:

For registrants with operations concentrated on coastlines, property damage and disruptions to operations, including manufacturing operations or the transport of manufactured products;

...

Registrants whose businesses may be vulnerable to severe weather or climate related events should consider disclosing material risks of, or consequences from, such events in their publicly filed disclosure documents"<sup>27</sup>.

Sea level rise (SLR) projections from the National Oceanic and Atmospheric Association (NOAA) are that the Gulf of Mexico is likely to see at least one to three feet of SLR in the next 100 years, with some coastal areas potentially seeing up to 1.7 feet in the next 25 years<sup>28,29</sup>. Galveston, Texas has already experienced more than a foot of sea level rise in the past 50 years.<sup>30</sup> Added to the SLR risk posed to coastal facilities is storm surge which has been as high as 28 feet above normal tide levels in recent hurricanes<sup>31</sup>. Storm surges and SLR are an apparent physical financial risk due to climate change for vulnerable Valero facilities, such

<sup>27</sup> <http://www.sec.gov/rules/interp/2010/33-9106.pdf>

<sup>28</sup> <http://stateofthecoast.noaa.gov/vulnerability/localthreat.html>

<sup>29</sup> Climate Central custom data provided to the Union of Concerned Scientists

<sup>30</sup> [http://tidesandcurrents.noaa.gov/sltrends/sltrends\\_station.shtml?stnid=8771510](http://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?stnid=8771510)

<sup>31</sup> <http://www.nhc.noaa.gov/surge/#FACTS>

as the Corpus Christi, Texas City, Houston, and Port Arthur facilities in Texas, as well as the Meraux and St. Charles refineries in Louisiana.

Diminished refining utilization rates, downtime or closure of these facilities due to direct damage to the facility, danger to employees, disruption in supply chains and distribution centers, and/ or power supply due to storm surges or SLR could have a material impact on production and related cash flows. This was made evident by Hurricane Katrina which caused a spill at the Meraux facility in 2005, then owned by Murphy Oil.<sup>32</sup> The facility also saw damages from the 2008 hurricane season.<sup>33</sup> In its 2010 SEC Form 10-K, Murphy Oil disclosed that its Meraux facility faced physical risks from climate change, writing, “The physical impacts of climate change present potential risks for severe weather (floods, hurricanes, tornadoes, etc.) at our Meraux, Louisiana, refinery in southern Louisiana and our offshore platforms in the Gulf of Mexico.” Valero acquired the Meraux facility from Murphy Oil on October 1, 2011 and has not disclosed risks from the physical impacts of climate change for this facility or any others since that time.<sup>33</sup>

Though the Valero annual report filed using form 10-K on February 27, 2014 notes that there could be “weather conditions that disrupt the supply of and demand for refined products,” mentioning Hurricane Sandy as an example, the only direct discussion of climate impacts is related to regulation expenses in the “Risk Factors” section:

“Compliance with and changes in environmental laws, including proposed climate change laws and regulations, could adversely affect our performance.”<sup>34</sup>

While Valero’s disclosure of this and other current and potential material impacts of climate change mitigation and adaptation requirements in the company’s disclosure through form 10-K is useful, specific disclosure regarding the company’s awareness of and preparation for material risks related to storm surges or SLR should also be included, along with estimates of the potential financial costs that will be incurred. This type of information is essential for investors and of interest to members of the public, especially communities living near such facilities.

UCS notes Valero’s consideration of climate change through a commitment to reduce greenhouse gases, the statement that Valero “participates in professional and public-policy forums that address climate change and its potential impacts” on the “Environment and Safety” page of the Valero website, and discussion of natural disaster planning and preparation in its 2013 Social Responsibility report.<sup>35,36</sup> In this spirit, UCS would welcome the opportunity to discuss the potentially material impact that climate-related storm surges and SLR may have on Valero’s coastal refining operations and to consider how the company’s disclosures related to the SEC’s guidance on climate risk may be enhanced to reflect the importance of these issues.

We would welcome the opportunity to discuss the details of this inquiry further. Please contact Gretchen Goldman, Lead Analyst in the Center for Science and Democracy at the Union of Concerned Scientists, at 202-331-6942 or [ggoldman@ucsusa.org](mailto:ggoldman@ucsusa.org). Thank you for your time and attention to these important issues.

Sincerely,

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<sup>32</sup> [http://www.epa.gov/osweroe1/docs/oil/fss/fss06/smith\\_d.pdf](http://www.epa.gov/osweroe1/docs/oil/fss/fss06/smith_d.pdf)

<sup>33</sup> <https://www.sec.gov/Archives/edgar/data/717423/000119312511049276/d10k.htm>

<sup>34</sup> <https://www.sec.gov/Archives/edgar/data/1035002/000103500214000008/vloform10-kx12312013.htm#sB8230C7869E4716607E733090035651C>

<sup>35</sup> [http://www.valero.com/environment\\_safety/pages/greenhousegas.aspx](http://www.valero.com/environment_safety/pages/greenhousegas.aspx)

<sup>36</sup> [http://media.valero.com/flash/socialreport/srr.html#/Social Responsibility Report 2011/14-15](http://media.valero.com/flash/socialreport/srr.html#/Social%20Responsibility%20Report%202011/14-15)



Gretchen Goldman, Ph.D.  
Lead Analyst  
Center for Science and Democracy  
Union of Concerned Scientists

cc:

Kirk Saffell  
Senior Vice President, Health, Safety & Environment  
Valero Energy Corporation

Andrew Rosenberg, Ph.D.  
Director  
Center for Science and Democracy  
Union of Concerned Scientists

Christina Carlson  
Policy Research Assistant  
Center for Science and Democracy  
Union of Concerned Scientists

# [Shareholder Resolution]

## Shareholder resolution filed with Phillips 66

Text as listed in the Ceres Shareholder Resolution search tool at: <http://www.ceres.org/investor-network/resolutions/phillips-66-physical-climate-impacts-2015>

**Company:** Phillips 66

**Filer:** Calvert Asset Management Co., Inc.

**Year:** 2015

**Sector:** Oil and Gas

**Subject(s):** Climate Change

**Resolved Clause Summary:** Report on mitigating physical risks from climate change

**Status:** Filed

### PHILLIPS 66 PHYSICAL CLIMATE IMPACTS 2015

**WHEREAS:** The Securities and Exchange Commission recognized the financial impacts of climate change when it issued Interpretive Guidance on climate disclosure in February 2010. The Guidance outlines expectations for reporting material regulatory, physical, and indirect risks and opportunities related to climate change. These expectations include the following related to the physical effects of climate change related to severe weather: "Significant physical effects of climate change, such as effects on the severity of weather (for example, floods or hurricanes), sea levels, the arability of farmland, and water availability and quality, have the potential to affect a registrants operations and results. . . . Registrants whose businesses may be vulnerable to severe weather or climate related events should consider disclosing material risks of, or consequences from, such events in their publicly filed disclosure documents."

Sea level rise (SLR) projections from the National Oceanic and Atmospheric Association suggest that the Gulf of Mexico is likely to see at least one to three feet of SLR in the next 100 years, with some coastal areas potentially seeing up to 1.7 feet in the next 25 years. Along the Mid-Atlantic and Northeast coastline, at least one to two feet of SLR is predicted in the next 100 years, with some areas seeing up to 14 feet in the next 25 years. Added to the SLR risk posed to coastal facilities is storm surge which has been as high as 28 feet above normal tide levels in recent hurricanes. Storm surges and SLR are physical financial risks for the Companys facilities, such as the Alliance and Lake Charles refineries in Louisiana as well as the Bayway refinery in New Jersey.

While the companys annual report filed using form 10-K on February 21, 2014 includes reference to more severe or frequent weather conditions, it fails to provide disclosure regarding the companys awareness of and preparation for material risks related to storm surges and sea level rise.

**RESOLVED:** Shareholders request that Phillips 66 issue specific disclosure regarding the companys awareness of and preparation for physical impacts and risks related to climate change including storm surges and sea level rise. The disclosure should be available by December 1, 2015, be prepared at reasonable cost, and omit proprietary information.

**SUPPORTING STATEMENT:** Diminished refining utilization rates, potential downtime or closure of facilities due to direct damage to facilities, danger to employees, disruption in supply chains, and power supply due to storm surges or sea level rise could have a material impact on the Companys production and related cash flows. This was made evident when the Companys Bayway refinery lost power after the Superstorm Sandy, was shut down for several weeks due to flood damage from the storm, and incurred significant maintenance and repair expenses.

# [UCS Email Exchanges with Companies]

## Email Response to UCS from ExxonMobil

**From:** Cohen, Kenneth P  
**Sent:** Thursday, January 22, 2015 1:20 PM  
**To:** Gretchen Goldman  
**Cc:** Andrew Rosenberg; Christina Carlson; Swiger, Andrew P  
**Subject:** Union of Concerned Scientists - Response to 12/22/14 Letter

Dear Ms. Goldman:

Thank you for your recent letter regarding risks associated with climate change. Andy Swiger asked me to respond on his behalf.

ExxonMobil is an active participant in research, operations management, and policy discussions relating to climate change, and as you note, we provide information on the topic through various publications such as our recent reports on climate change (<http://corporate.exxonmobil.com/en/environment/climate-change/managing-climate-change-risks/carbon-asset-risk?>) and hydraulic fracturing (<http://corporate.exxonmobil.com/en/engineering/hydraulic-fracturing/environment-and-safety/unconventional-resources-development-risk-management?>), as well as our annual Corporate Citizenship Report (<http://corporate.exxonmobil.com/en/community/corporate-citizenship-report>).

Our facilities are designed, constructed, and operated with safety factors built in to consider a number of engineering uncertainties, including those associated with climate change impacts. We engage with major engineering societies, international organizations, and industry groups to develop sound engineering perspectives on managing the risks of extreme weather events. For existing facilities, we use ExxonMobil's Operations Integrity Management System (OIMS) to help manage extreme weather events, both with regard to ongoing operations and for extreme weather event response activities.

I am attaching a copy of an IPIECA publication - *Addressing Adaptation in the Oil & Gas Industry* - that I believe you will find to be a helpful resource as well. ExxonMobil participated in the development of the document, and subscribes to its observations on risk management frameworks.

Sincerely,

Ken Cohen

## UCS Response to ExxonMobil sent

Wed 2/18/2015 11:57 AM

Dear Mr. Cohen,

Thank you for your response. I notice you spoke yesterday at UT-Austin's Energy Week events. I spoke there on Monday and flew back yesterday afternoon. It seems we just missed a potential opportunity where we might have spoken in person.

We note ExxonMobil's consideration of the risks posed by climate change and we appreciate the additional information you provided. In particular, we are most interested in Exxon Mobil's lack of disclosure of physical risks due to climate change in SEC Form 10-K filings.

As noted in your Corporate Citizenship report you attached, “scientists agree climate change poses risks related to extreme weather, sea level rise, temperature extremes and precipitation changes.” This report also states that it is difficult to anticipate localized events yet, despite these uncertainties, “facilities are designed, constructed and operated to withstand a variety of extreme conditions.” In addition, as noted in the IPICEA report Addressing adaptation in the oil and gas industry “adaptation to changing climates is likely to take place anyway irrespective of, or in addition to, any mitigation efforts.”

As it appears ExxonMobil is planning for physical impacts associated with climate change, we would like to inquire as to why ExxonMobil is not disclosing such risks, or disclosing specific steps it is taking to protect vulnerable facilities, in its SEC Form 10-K filings. As noted in our original letter, the SEC issued guidance in 2010 to disclose issues related to climate change, including physical risks. Additionally, in our original letter, we noted facilities that appear to face physical risks from climate change that are not disclosed.

We welcome the opportunity to discuss these issues with you further.

Sincerely,

Gretchen Goldman

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Gretchen T. Goldman, Ph.D.

Lead Analyst, The Center for Science and Democracy

Union of Concerned Scientists | 1825 K Street NW, Suite 800 | Washington, DC 20006