SUPREME COURT OF THE STATE OF NEW YORK NEW YORK COUNTY

PRESENT: HON. BARRY R. OSTRAGER	PARI_	61
Justice		
PEOPLE OF THE STATE OF NEW YORK, BY LETITIA JAMES, ATTORNEY GENERAL OF THE STATE OF NEW YORK,	INDEX NO.	452044/2018
Plaintiff,		DECISION AFTER TRIAL
- V -		
EXXON MOBIL CORPORATION,		
Defendant.		
X		

Following twelve days of trial and testimony from eighteen witnesses, the Court finds that the Office of the Attorney General has failed to establish by a preponderance of the evidence that ExxonMobil either violated the Martin Act or Executive Law § 63(12) in connection with its public disclosures concerning how ExxonMobil accounted for past, present and future climate change risks.

OSTRAGER, J.:

The trial was the culmination of three and one-half years of investigation and pre-trial discovery that required ExxonMobil to produce millions of pages of documents and dozens of witnesses for interviews and depositions. During the investigation and pre-trial discovery phase of the case, ExxonMobil produced, voluntarily and at the Court's direction, reams of proprietary information relating to its historic and contemplated investments. In addition, multiple non-parties, including various financial institutions, were interviewed or deposed.

At the trial, the Office of the Attorney General made public scores of proprietary internal models and memoranda ExxonMobil used in connection with the planning and operation of its business. It is undisputed that ExxonMobil does not publish the details or the economic bases upon which ExxonMobil evaluates investment opportunities due to competitive considerations (PX001 – "Energy and Carbon – Managing the Risks" p. 16)¹. Significantly, many of the internal models published at trial related to projects that ExxonMobil either has not yet pursued or may never pursue.

The Complaint in this action asserted four claims for relief prefaced by allegations asserting, *inter alia*, that ExxonMobil engaged in a "longstanding fraudulent scheme" "sanctioned at the highest levels of the company," "effect[ively] erect[ing] a Potemkin village to create the illusion that it had fully considered the risks of climate change regulation and had factored those risks into its business operations." The Complaint further alleges that "in reality [ExxonMobil] knew that its representations were not supported by the facts and were contrary to its internal business practices" (NYSCEF Doc. No. 1, Complaint ¶ 1, 8, and 9).

The events leading up to the filing of the Complaint were detailed at length during the trial, including certain politically motivated statements by former New York Attorney General Eric Schneiderman. In 2013, ExxonMobil received various inquiries and shareholder proposals requesting more information about how ExxonMobil factored climate change risks and regulations into its business decisions. Thereafter, ExxonMobil held a meeting on December 17, 2013 with representatives of the sponsors of the inquiries and shareholder proposals. Ultimately, in exchange for the withdrawal of two shareholder proposals, ExxonMobil agreed to publish two

¹ "PX" denotes plaintiff's exhibit admitted into evidence at trial; "DX" denotes defendant's exhibit admitted into evidence at trial; and "JX" denotes joint exhibits admitted into evidence at trial. "Tr." refers to the transcript of the proceedings followed by the page and line.

reports with additional information about the manner in which ExxonMobil addresses the evolving policies and regulations governments may implement to reduce the emissions of greenhouse gases in a rapidly growing world population. Those reports, entitled *Managing the Risks* and *Energy and Climate*, were published on March 31, 2014. The Office of the Attorney General asserted at trial that beginning with the December 2013 meeting, continuing with the publication of the two March 2014 reports, and continuing further through 2016, ExxonMobil made various material written and oral misrepresentations and omissions that tended to mislead the public in violation of the Martin Act and Executive Law § 63(12). The Court finds these allegations to be without merit.

Nothing in this opinion is intended to absolve ExxonMobil from responsibility for contributing to climate change through the emission of greenhouse gases in the production of its fossil fuel products. ExxonMobil does not dispute either that its operations produce greenhouse gases or that greenhouse gases contribute to climate change. But ExxonMobil is in the business of producing energy, and this is a securities fraud case, not a climate change case. Applying the applicable legal standards, the Court finds that the Office of the Attorney General failed to prove by a preponderance of the evidence that ExxonMobil made any material misrepresentations that "would have been viewed by a reasonable investor as having significantly altered the 'total mix' of information made available." TSC Industries, Inc. v. Northway, Inc., 426 U.S. 438 (1976).

A. The Attorney General's First and Second Causes of Action

At the conclusion of the presentation of the evidence, but before the completion of summations, the Office of the Attorney General withdrew its claims of equitable fraud and common law fraud contained in the third and fourth causes of action in its hyperbolic Complaint.

See Complaint ¶¶ 320 – 329. The Office of the Attorney General relied exclusively on its claims that ExxonMobil has made materially false and material disclosures to the public in violation of the Martin Act and Executive Law § 63(12). ExxonMobil, which did not move for a directed verdict on the two fraud claims, objected to the Court's decision to grant the Office of the Attorney General's application to have those claims discontinued with prejudice (Tr. 2117-24), and the Court, in response, granted ExxonMobil leave to file a motion requiring the Court to enter judgment on the fraud counts on the merits. On November 18, 2019 ExxonMobil filed a post-trial motion (seq. no. 009) "opposing the Attorney General's request to discontinue its fraud counts."

For the following reasons, and as noted above, the Court finds that the Office of the Attorney General failed to prove by a preponderance of the evidence the allegations against ExxonMobil contained in the first and second causes of action in the Complaint, the only causes of action for which the Office of the Attorney General now seeks relief. Since the Office of the Attorney General failed to establish any liability on the part of ExxonMobil for causes of action that do not require proof of scienter and reliance — essential elements of equitable and common law fraud — the decision in this case, perforce, establishes that ExxonMobil would not have been held liable on any fraud-related claims which the Office of the Attorney General discontinued with prejudice.²

² The Court recognizes that once a defendant has filed a responsive pleading, the plaintiff cannot unilaterally discontinue its claims without permission of the Court, *see* CPLR 3217(b), and that the Court's discretion to issue such an order is not unlimited. The apparent purpose of this rule is to prevent a discontinuance for the sole purpose of warding off an adverse decision. Nevertheless, here, ExxonMobil chose to forego the opportunity to seek a directed verdict at the close of the trial which, as explained in detail in this opinion, necessarily would have ultimately been granted. The adverse decision against the Office of the Attorney General on the Martin Act and Executive Law claims establishes that the Office of the Attorney General could not have prevailed against ExxonMobil on the fraud claims, and the Court finds it unnecessary to further address ExxonMobil's motion

B. The Office Attorney General is Not Entitled to Any Relief.

The Court also finds that the Office of the Attorney General is not entitled to any monetary damages or injunctive relief because the Office of the Attorney General did not prevail on its first and second causes of action. If the Court had reached the issues of damages, the Court would have found that the Office of the Attorney General failed to prove any damages by a preponderance of the evidence for the reasons stated *infra*.

C. The Martin Act

The Martin Act, General Business Law § 352 et seq., prohibits the use of "any device, scheme or artifice . . . deception, misrepresentation, concealment, suppression, fraud, false pretense or false promise" in connection with the "issuance, exchange, purchase, sale, promotion, negotiation, advertisement, investment advice or distribution" of securities. These provisions are liberally construed, *People v. Federated Radio Corp.*, 244 N.Y. 33, 38 – 39. (1926) and extend to "all deceitful practices contrary to the plain rules of common honesty and all acts tending to deceive or mislead the public." *People v. Sala*, 258 A.D.2d 182, 193 (3d Dep't 1999), *aff'd*, 95 N.Y.2d 254 (2000); *see also Federated Radio Corp.*, 244 N.Y. 33, 38 (1926).

To establish liability under the Martin Act, the Office of the Attorney General must prove a "misrepresentation of material facts," *Federated Radio Corp.*, 244 N.Y. at 41, or an omission of material facts, *Sala*, 258 A.D.2d at 194. Thus, in addition to falsity, a Martin Act claim

opposing the Office of the Attorney General's decision to discontinue its fraud claims with prejudice, as the issue is moot. *Cf. Bremhouse v. Anthony Indus. Inc.*, 156 A.D.2d 411, 412 (1st Dep't 1989). In short, ExxonMobil, as the prevailing party on the Martin Act and Executive Law claims, has not been prejudiced by the discontinuance of the fraud counts with prejudice.

requires proof of materiality. Proof of a Martin Act violation requires proof by a preponderance of the evidence. *People v. Silinsky*, 217 A.D. 248 (2d Dep't 1926).

New York has adopted the federal standard of materiality in securities fraud cases. *State v. Rachmani Corp.*, 71 N.Y.2d 718, 727 (1988); *see also IBEW Local Union No. 58* v. *RBS*. 783 F.3d 383, 389 (2d Cir. 2015). Under that standard, "[a] statement or omission is material if there is a substantial likelihood that a reasonable shareholder would consider it important in deciding how to act." *Id.* (internal quotation marks omitted). In other words, courts must determine whether there is "a substantial likelihood that the [misrepresentation or the] disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the 'total mix' of information made available." *TSC Industries, Inc. v. Northway, Inc.*, 426 U.S. 438, 449 (1976); *see also ECA, Local 134 IBEW Joint Pension Tr. of Chicago* v. *JP Morgan Chase Co.*, 553 F.3d 187, 198 (2d Cir. 2009). "The standard of a 'reasonable investor,' like the negligence standard of a 'reasonable man,' is an objective one." *United States v. Litvak*, 889 F.3d 56, 64 (2d Cir. 2009). The "total mix" of information looks to "the sum of all information reasonably available" to investors. *Koppel v. 4987 Corp.*, 167 F.3d 125, 132 (2d Cir. 1999) (internal quotation marks omitted).

Applying these standards, the New York Court of Appeals has held that a material misstatement must assume "actual significance in the deliberations of the reasonable shareholder." *Rachmani Corp.*, 71 N.Y.2d 726 (*quoting TSC Indus. v. Northway, supra*, 426 U.S. at 449). However, actual reliance need not be established. *State v. Sonifer Realty Corp.*, 212 A.D.2d 366, 367 (1st Dep't 1995).

D. Executive Law § 63(12)

Fraudulent acts that violate the Martin Act also violate Executive Law § 63(12) when they are repeated or persistent. Executive Law § 63(12) prohibits "repeated fraudulent or illegal acts" and "persistent fraud or illegality in the carrying on, conducting or transaction of business." The definitions of fraud under § 63(12) and the Martin Act are "virtually identical." *Rachmani*, 71 N.Y.2d at 721 n.1. "Repeated" fraud or illegality is defined in § 63(12) to include "repetition of any separate and distinct fraudulent . . . act, or conduct which affects more than one person." "Persistent" fraud is defined by § 63(12) to include the "continuance or carrying on of any fraudulent...act."

Section 63(12) is construed liberally to effectuate its remedial purpose. *State v. Maiorano*, 189 A.D.2d 766, 767 (2d Dep't 1993). As with the Martin Act, neither intent nor reliance need be proven to establish fraud under § 63(12). *People v. Trump Entrepreneur Initiative LLC*, 137 A.D.3d 409, 417 (1st Dep't 2016), *citing People v. American Motor Club* 179 AD 2d. 277, 283 (1st Dep't 1992). Ultimately, "the test for fraud" under § 63(12) "is whether the targeted act has the capacity or tendency to deceive or creates an atmosphere conducive to fraud." *People v. General. Elec. Co., Inc.*, 302 A.D.2d 314 (1st Dep't 2003).

I. The Office of the Attorney General's Allegations

The core allegation sponsored by the Office of the Attorney General is that ExxonMobil made misrepresentations and omissions, material to investors, during the period from late 2013 through 2016, about how ExxonMobil managed the risks of climate change and increasing regulations. The alleged misrepresentations are principally contained in two thirty-plus page publications dated March 31, 2014 titled "Energy and Carbon - Managing the Risks"

("Managing the Risks") and "Energy & Climate" (together, the "March 2014 Reports") (PX001 and PX002). Portions of the March 2014 Reports are repeated almost verbatim in other ExxonMobil sponsored publications and presentations. See e.g. PX130 (Presentation "The Outlook for Energy and GHG's: A View to 2040"); JX912 p. 36 (2013 Outlook for Energy: A View to 2040); PX006 p.54 (2013 Corporate Citizenship Report); PX007 p.27 (2014 Corporate Citizenship Report); PX008 p.54 (2015 Corporate Citizenship Report). The March 2014 Reports make extensive references to another publication that ExxonMobil publishes annually entitled "Outlook for Energy."

The Office of the Attorney General also alleges that misrepresentations were made at two investor presentations in New York City in December 2013 and December 2014, in ExxonMobil's Carbon Disclosure Project ("CDP") Responses, in ExxonMobil's Corporate Citizenship Reports, and by former ExxonMobil CEO Rex Tillerson at the March 25, 2016 ExxonMobil shareholder meeting. (PX130 Presentation "The Outlook for Energy and GHG's: A View to 2040"; PX010 ExxonMobil 2011 CDP Submission; PX014 ExxonMobil 2016 CDP submission; PX005 2012 Corporate Citizenship Report; PX006 2013 Corporate Citizenship Report; PX007 2014 Corporate Citizenship Report; PX008 2015 Corporate Citizenship Report; JX918 Transcript of ExxonMobil Annual Shareholder Meeting). Complaint ¶ 52, 54, 75 and 272. The Office of the Attorney General submitted into evidence the Carbon Disclosure Project Responses and Corporate Citizenship Reports without significant accompanying testimony.

As discussed *infra*, there was no evidence adduced at trial that the publication of the March 2014 Reports had any market impact at the time they were published or that investment analysts took note of the contents of these documents which were widely disseminated on

ExxonMobil's website and otherwise. *See e.g.* Tr. 1233:6-13; Tr. 1849; Tr. 1967; JX988 57:3 and 59:16.

It is undisputed that ExxonMobil recognized more than a decade ago that climate policies and regulations could affect its business by reducing the demand for its products and by increasing the costs of bringing those products to market.

At least as early as 2007, separate teams in ExxonMobil's Corporate Strategic Planning group developed planning assumptions for different contexts. Tr.1615-1616.³ The team that worked exclusively on the *Outlook* developed a proxy cost of carbon assumption for use in assessing demand for ExxonMobil products. Tr. 1615:7-13. A separate team, the Corporate Planning Group, developed GHG cost assumptions that could be applied as direct expense items in evaluations of specific investments which, *if funded*, would emit greenhouse gases. Tr. 1614, 1706. The proprietary and undisclosed results of the work that the Corporate Planning Group did were circulated internally in ExxonMobil's Corporate Planning DataGuide which, of course, remained non-public until this trial except to the extent it was reported in the *Outlook* and in the March 2014 Reports and related presentations and publications.

II. ExxonMobil's Public Disclosures

The Office of the Attorney General had the burden to prove that ExxonMobil made misrepresentations and that ExxonMobil investors would have considered any alleged misrepresentations important in light of the "total mix of information" available to them. *TSC Industries, Inc. v. Northway, Inc.*, 426 U.S. 438, 449 (1976). The Court finds there was no proof

³ Prior to the commencement of any testimony, the Office of the Attorney General acknowledged that ExxonMobil utilized a proxy cost of carbon for purposes of projecting the demand for its products and separate GHG calculations for the purpose of projecting costs on specific projects. Tr. 74. The Office of the Attorney General thus framed the issue to be decided in this case as "how that was portrayed to investors." Tr. 74-75.

offered at trial that established *material* misrepresentations or omissions contained in any of ExxonMobil's public disclosures that satisfy the applicable legal standard. The total mix of information available to ExxonMobil investors during the relevant period included an annual, publicly-filed report called the *Outlook for Energy*, the two March 2014 Reports, ExxonMobil's Form 10-Ks, ExxonMobil's annual Corporate Citizenship Reports, and a host of other publicly available information that was not the subject of testimony at trial (including ExxonMobil's Annual Shareholder reports).

A. The Outlook for Energy

The *Outlook for Energy* (the "*Outlook*") is a document that ExxonMobil has published annually since about 2007. Tr. 1086:11-13; see e.g. JX910 2010 *Outlook for Energy* and JX912 2013 *Outlook for Energy*. The *Outlook* is available to ExxonMobil's investors and the public. In 2010 the *Outlook* was subtitled "A View to 2030" and in 2013 it was subtitled: "A View to 2040." The 2010 and 2013 *Outlooks*, the only versions of the *Outlook* offered in evidence, are over fifty pages long and contain numerous forward-looking statements about how ExxonMobil expects the energy industry and the world to look in the future. ExxonMobil has no obligation to issue the *Outlook* to the public but does so to help guide ExxonMobil's investment decisions and in recognition of ExxonMobil's status as an industry leader. The foreword to the 2010 *Outlook* (JX910 p. 3) by then-CEO Rex Tillerson states:

Prepared by a team of experts using both publicly available and propriety information, *Outlook for Energy: A View to 2030* helps guide ExxonMobil's global investment decisions. We [ExxonMobil] share it publicly to encourage broader understanding about energy issues.

The introduction to the 2013 Outlook (JX912 p. 3) states:

The *Outlook for Energy* is ExxonMobil's long-term view of our shared energy future. We [ExxonMobil] develop the *Outlook* annually to assess future trends in energy supply,

demand and technology to help guide the long-term investments that underpin our business strategy. (Emphasis added).

The *Outlook* expressly states: "The Outlook for Energy is ExxonMobil's long-term global view of our shared energy future. [ExxonMobil] develops the Outlook annually to assess future trends in *energy supply, demand,* and technology to help guide the long-term investments that underpin our business strategy." (emphasis added) PX912 p.3.

The 2010 *Outlook* further provides that its purpose is to answer questions such as "In 2030, what types of energy will the world use and how much? How will demand patterns and sources of supply evolve in countries around the world? What will be the role of new technologies in affecting the energy mix and overall effect? How much progress will have been made in curbing carbon dioxide (CO2) emissions?" JX910 p. 4.

The 2010 *Outlook* is broken down into sections on residential and commercial energy, transportation energy, and industrial energy. It also includes sections specifically about power generation, greenhouse gas emissions, energy supply, and natural gas. JX910 p. 2.⁴ A significant assertion in both the 2010 and 2013 *Outlooks* is ExxonMobil's assessment that the global demand for energy will continue to rise significantly along with the global population. *See generally* JX910 p. 8-9. and JX912 p. 5.

The 2013 *Outlook* (JX-912 p. 36) states:

Policies related to GHG emissions, and carbon emissions in particular, remain uncertain. But, for purposes of the outlook to 2040, ExxonMobil assumes a cost of carbon as a proxy for a wide variety of potential policies that might be adopted by governments over

⁴ Todd Onderdonk, a Senior Energy Advisor in the Corporate Strategic Planning Department, noted in his trial testimony that the *Outlook* also talks about "migration of people from rural areas and cities and the impact that has on the infrastructure required to build these cities; steel, cement, glass, roads, bridges, and its impact on energy demand. We've talked about demographics within the population and their impact. Most recently we talked about the growing middle class and how people in many developing countries can now afford for the first time to get a motorcycle, a car, get access to electricity. So we try to bring more clarity to some of these challenges through our reports."

time to help stem GHG emissions such as carbon emissions standards, renewable portfolio standards and others.

For example, in most [Organisation for Economic Co-operation and Development ("OECD")] nations, ExxonMobil expects the implied cost of CO₂ emissions to reach about \$80 per ton in 2040. OECD nations will continue to lead the way in adopting these policies, with developing nations gradually following, led by China.

The introduction of rising CO₂ costs will have a variety of impacts on the economy and energy use in every sector and region within any given country. Therefore, the exact nature and pace of the GHG policy initiatives will likely be affected by their impact on the economy, economic competitiveness, energy security and the ability of individuals to pay the related costs. (emphasis added).

Robert Bailes, a former ExxonMobil Greenhouse Gas Manager from 2009 to 2014, testified at trial (Tr. 534:12-25):

[T]he Energy Outlook is looking across the entire global energy system and projecting that policymakers will impose a cost on the entire energy system for greenhouse gas emissions. We [ExxonMobil] don't know exactly what form that will take. It might be a carbon tax. It might be cap and trade. It might be renewal portfolio standard. It might be a low carbon fuel standard. There's a lot of different instruments they could use, but, but, it's -- it's our [ExxonMobil's] effort to quantify a cost that we [ExxonMobil] believe[s] regulators will impose across the energy system on society.

The *Outlooks* also contain color coded maps depicting estimates of potential future costs associated with fossil fuel emissions in various areas of the world in 2030 and 2040. PX001 p. 17 and PX002 p.6.⁵ The *Outlook* maps provide no information for years other than 2030 and 2040.

Well, the *Energy Outlook* is something the corporation did annually. It was our view of how energy markets would unfold around the world. In detail I was looking at about 100 countries or country regions for the world. Approximately 15 different demand sectors within those countries. And then looking at all the different types of energy that could be used, roughly 20 different types of energy. So, oil products, natural gas, coal, nuclear, renewables. Tr. 1776:9-16.

We're trying to forecast demand. We're trying to look at, based on fundamentals of population growth, economic growth, how we see technologies unfolding, government policies and how they might influence the view to the future, exactly what demand would be in different parts of the world for oil, for gas, for the different types of oil products and how things like nuclear and renewables may come into play as well as coal. That was then a foundation for how we saw opportunities to the business. Areas where we saw markets growing. Areas where we saw demand for certain products decreasing over time. And that would help inform our decisions. Tr. 1777:4-14 (emphasis added).

⁵ Todd Onderdonk described the *Outlook* as follows:

B. The March 2014 Reports

At trial, the Office of the Attorney General examined as an adverse witness David Rosenthal, who was Vice President of Investor Relations at ExxonMobil from 2008 to 2017. Tr. 298:17-20. In this role, Mr. Rosenthal was responsible for corresponding with ExxonMobil's shareholders and responding to shareholder proposals. Tr. 300:1-8. As noted above, and as Mr. Rosenthal testified, in late 2013 ExxonMobil began receiving inquiries from certain investors asking for more information about how ExxonMobil manages the risks of climate change and increasing regulations.

In September 2013, ExxonMobil received a letter from Ceres, an international group of institutional investors collectively representing nearly three trillion dollars in assets at the time. Tr. 303:3-8; Tr. 304:10-13; PX194; PX194 p. 9; PX194-N-13; Tr. 310:7-13. Ceres indicated that it was specifically interested in how ExxonMobil managed risks related to carbon capture and storage as well as the possibility of stranded assets. Tr. 306:10-23 and Tr. 307:5-21. In an email addressed to Mr. Rosenthal, Ceres wrote (Tr. 305:1-5; PX 194:9):

Our goal is obviously not to attempt to convince ExxonMobil to get out of the fossil fuel business, but instead to help long-term investors understand how their company is addressing climate change in its business planning and comparable allegation processes.

That same month, ExxonMobil received a letter from Walden Asset Management. Tr. 311:19-20. PX 150. At the time, Walden Asset Management was a longtime shareholder in ExxonMobil. Tr. 312:407. Walden Asset Management requested information about a variety of topics, including the subjects of the Ceres request. Tr. 313:17-20.

In December 2013, ExxonMobil received a letter from the Christopher Reynolds Foundation. PX149; Tr. 314:16-20. The Christopher Reynolds Foundation letter, signed by

Stephen Viederman, included a shareholder proposal for inclusion in ExxonMobil's 2014 proxy statement ("Christopher Reynolds Foundation Proposal"). Tr. 315: 4 – 19. The proposal requested that ExxonMobil release a report that "describes the company's strategic plan in the context of" "[p]rojections of global temperature increases over the next 35 years and resulting impacts of climate change that our company is using in its strategic planning" and "[r]isk management steps [the] company is taking or planning to take to address climate change." PX149; Tr. 316:4 – 15. Shortly thereafter, ExxonMobil received a letter from Arjuna Capital which also contained a proposed shareholder resolution ("Arjuna Proposal"), signed by Natasha Lamb (who testified at trial). PX382; Tr. 82; Tr. 317:10-19. The Arjuna Proposal requested that ExxonMobil prepare a report "on the company's strategy to address the risk of stranded assets presented by global climate change, including analysis of long and short term financial and operational risks to the company." PX382. Tr. 318:12-17. The Arjuna Proposal was co-signed by Danielle Furgere from the organization As You Sow. Tr. 319:25-3:20:4.

In response to these various shareholder proposals and inquiries, ExxonMobil hosted a meeting in New York City in December 2013. Mr. Rosenthal testified that about 25 people attended the meeting, including representatives from the organizations described above and others. Tr. 326: 7-16. At this meeting, Pete Trelenberg, a senior member of ExxonMobil's Corporate Strategic Planning Group, presented a slideshow. PX130-N; Tr. 94; Tr. 326:20-23. The slideshow contained information about the proxy cost of carbon similar to the information in ExxonMobil's 2013 *Outlook*.

The Christopher Reynolds Foundation and Arjuna Capital ultimately agreed to withdraw their proposed shareholder resolutions based on the information shared at the December 2013

meeting and ExxonMobil's undertaking to address the concerns contained in the inquiries and shareholder proposals ExxonMobil had received. Tr. 114. Mr. Rosenthal testified that the Arjuna Proposal led to the publication of *Managing the Risks* and that *Energy and Carbon* addressed the issues identified in both the Ceres Letter and the Arjuna Proposal. Tr. 319: 4-8. *Managing the Risks* and *Energy and Climate* are discussed in detail in Section III. A, *infra*.

C. ExxonMobil's Form 10-K

ExxonMobil annually submits a Form 10-K to the Securities Exchange Commission, disclosing detailed financial information about its earnings, expenses, reserves, profits and all the other disclosures required by the Securities and Exchange Commission ("SEC"). ExxonMobil's Form 10-Ks for calendar years 2010, 2014, 2015 and 2016 were introduced as trial exhibits (JX901 ExxonMobil's 2010 Form 10-K; JX905 2014 Form 10-K; JX906 2015 Form 10-K; JX907 2016 Form 10-K). A section about the risks to the business of ExxonMobil is contained in each Form 10-K, together with more than 100 pages of detailed financial information and related disclosure. For example, the "Business Environment and Risk Assessment: Long-Term Business Outlook" section of ExxonMobil's 2014 10-K (JX905 p. 43) states:

By 2040, the world's population is projected to grow to approximately 9 billion people, or about 2 billion more than in 2010. Coincident with this population increase, the Corporation expects worldwide economic growth to average close to 3 percent per year. As economies and populations grow, and as living standards improve for billions of people, the need for energy will continue to rise. Even with significant efficiency gains, global energy demand is projected to rise by about 35 percent from 2010 to 2040. This demand increase is expected to be concentrated in developing nations (*i.e.* those that are not members of nations of the Organisation for Economic Co-operation and Development).

As expanding prosperity drives global energy demand higher, increasing use of energy-efficient and lower-emission fuels, technologies, and practices will continue to help significantly reduce energy consumption and emissions per unit of economic output over time. Substantial energy efficiency gains are likely in all key aspects of the world's

economy through 2040, affecting energy requirements for transportation, power generation, industrial applications, and residential and commercial needs.

Likewise, the "Risk Factors" Section of the 2015 10-K (JX906 p. 5) states:

Climate change and greenhouse gas restrictions. Due to concern over the risk of climate change, a number of countries have adopted, or are considering the adoption of, regulatory frameworks to reduce greenhouse gas emissions. These include adoption of cap and trade regimes, carbon taxes, restrictive permitting, increased efficiency standards, and incentives or mandates for renewable energy. These requirements could make our products more expensive, lengthen project implementation times, and reduce demand for hydrocarbons, as well as shift hydrocarbon demand toward relatively lower-carbon sources such as natural gas. Current and pending greenhouse gas regulations may also increase our compliance costs, such as for monitoring or sequestering emissions.

In addition, the "Business Environment and Risk Assessment" section of the 2016 10-K (JX907 p. 42) states:

International accords and underlying regional and national regulations covering greenhouse gas emissions continue to evolve with uncertain timing and outcome, making it difficult to predict their business impact. For many years, the Corporation has taken into account policies established to reduce energy-related greenhouse gas emissions in its long-term *Outlook* for Energy, which is used as a foundation for assessing the business environment and business strategies and investments. The climate accord reached at the recent Conference of the Parties (COP 21) in Paris set many new goals, and many related policies are still emerging. Our *Outlook* reflects increasingly stringent climate policies and is consistent with the aggregation of Nationally Determined Contributions which were submitted by signatories to the United Nations Framework Convention on Climate Change (UNFCC) 2015 Paris Agreement. Our Outlook seeks to identify potential impacts of climate related policies, which often target specific sectors, by using various assumptions and tools including application of a proxy cost of carbon to estimate potential impacts on consumer demands For purposes of the Outlook, a proxy cost on energy-related CO2 emissions is assumed to reach about \$80 per tonne on average in 2040 in OECD nations. China and other leading non-OECD nations are expected to trail OECD policy initiatives. Nevertheless, as people and nations look for ways to reduce risks of global climate change, they will continue to need practical solutions that do not jeopardize the affordability or reliability of the energy they need. Thus, all practical and economically viable energy sources, both conventional and unconventional, will need to be pursued to continue meeting global energy demand, recognizing the scale and variety of worldwide energy needs as well as the importance of expanding access to modem energy to promote better standards of living for billions of people.

The information provided in the Long-Term Business *Outlook* includes ExxonMobil's internal estimates and forecasts based upon internal data and analyses as well as publicly available information from external sources including the International Energy Agency.

(Emphasis added.)

The "Risk Factors" section of the 2016 10-K (JX907 p. 7) states:

Climate change and greenhouse gas restrictions. Due to concern over the risk of climate change, a number of countries have adopted, or are considering the adoption of, regulatory frameworks to reduce greenhouse gas emissions. These include adoption of cap and trade regimes, carbon taxes, restrictive permitting, increased efficiency standards, and incentives or mandates for renewable energy. These requirements could make our products more expensive, lengthen project implementation times, and reduce demand for hydrocarbons, as well as shift hydrocarbon demand toward relatively lower-carbon sources such as natural gas. Current and pending greenhouse gas regulations may also increase our compliance costs, such as for monitoring or sequestering emissions.

Government sponsorship of alternative energy. Many governments are providing tax advantages and other subsidies to support alternative energy sources or are mandating the use of specific fuels or technologies. Governments and others are also promoting research into new technologies to reduce the cost and increase the scalability of alternative energy sources. We are conducting our own research both in-house and by working with more than 80 leading universities around the world, including the Massachusetts Institute of Technology, Princeton University, the University of Texas, and Stanford University. Our research projects focus on developing algae-based biofuels, carbon capture and storage, breakthrough energy efficiency processes, advanced energy-saving materials and other technologies. For example, ExxonMobil is working with Fuel Cell Energy Inc. to explore carbonate fuel cells to economically capture CO₂ emissions from gas-fired power plants. Our future results may depend in part on the success of our research efforts and on our ability to adapt and apply the strengths of our current business model to providing the energy products of the future in a cost-effective manner.

There is no claim in this case that the disclosures in any of ExxonMobil's Form 10-K's or books and records are in any way false or misleading. Previously, the SEC investigated the propriety of ExxonMobil's Form 10-K filings, and it is undisputed that the SEC subsequently dropped that investigation without requiring ExxonMobil to restate or amend any of ExxonMobil's financial disclosure.

D. ExxonMobil's Corporate Citizenship Reports

ExxonMobil's Public and Government Affairs group annually publishes a Corporate Citizenship Report. Tr. 528:4-13. Mr. Rosenthal testified that the report covers a "broad swath of corporate citizenship activities" ranging from corporate giving, to sustainability, to what ExxonMobil is doing to help local economies. Tr.423:21-424:3. ExxonMobil has an External Citizenship Advisory Panel, a group of knowledgeable experts from academic and socially responsible groups, that gives ExxonMobil feedback on its Corporate Citizenship Reports. Tr. 528:18-25.

ExxonMobil's annual Corporate Citizenship Reports expressly refer to the proxy cost of carbon. *See e.g.* PX007 2014 Corporate Citizenship Report; PX008 2015 Corporate Citizenship Report. For example, both ExxonMobil's 2014 (PX007 p.37) and 2015 Corporate Citizenship Reports (PX008 p. 38) provide:

[ExxonMobil] addresses the potential for future climate change policy, including the potential for restrictions on emissions, by estimating a proxy cost of carbon. This cost, which is in some geographies, may approach \$80 per ton by 2040 has been included in our Outlook for several years. This approach seeks to reflect potential policies governments may employ related to the exploration, development, production, transportation or use of carbon-based fuels. We believe our view on the potential for future policy action is realistic and by no means represents a business-as-usual case. We require all of our business lines to include, where appropriate, an estimate of greenhouse gas related emissions costs in their economics and when seeking funding for capital investments. (emphasis added).

The greenhouse gas related emissions costs referenced in ExxonMobil's Corporate

Citizenship Reports is clearly a separate and distinct metric than ExxonMobil's proxy costs, and
the reports are clearly part of the total mix of information available to investors.

Significantly, while ExxonMobil's Corporate Citizenship were offered in evidence at trial, the Office of the Attorney General did not call any witness who claimed to have been misled by the information contained in these documents.

E. ExxonMobil's Carbon Disclosure Project Responses

As noted above, ExxonMobil's 2011 and 2016 Carbon Disclosure Project ("CDP")

Responses were offered into evidence without meaningful commentary. However, the Court notes that the 2016 CDP Response makes the same distinction between proxy costs and GHG costs that is made in the March 2014 Reports (discussed in detail *infra*). In response to the question "Does your company use an internal price of carbon?" ExxonMobil writes "Yes." And in response to the direction "Please provide details and examples of how your company uses an internal price of carbon" ExxonMobil states (PX014 p. 3):

ExxonMobil's long-range forecast, *The Outlook for Energy*, examines energy supply and demand trends for approximately 100 countries, 15 demand sectors, and 20 different energy types. The *Outlook* forms the foundation for the company's business strategies and helps guide our investment decisions. In response to projected increases in global fuel and electricity demand, our 2016 *Outlook* estimate that global energy-related CO₂ emissions will peak around 2030 and then begin to decline. A host of trends contribute to this downturn – including the slowing population growth, maturing economics and a shift to cleaner fuels like natural gas and renewables – some voluntary and some the result of policy.

ExxonMobil address the potential for future climate change policy, including the potential for restrictions on emissions, by estimating the proxy cost of carbon. This cost, which in some geographies may approach \$80 per ton by 2040, has been included in the Outlook for several years. This approach seeks to reflect potential policies governments may employ related to exploration, development, production, transportation or use of carbon-based fuels. We believe our view on the potential for future policies action is realistic by and no means a "business-as-usual" case. We require all of our business unites to include, where appropriate, an estimate of greenhouse gas-related emissions costs in their economics when seeking funding for capital investments. (emphasis added).

F. ExxonMobil's Disclosures Regarding "Proxy Costs" of Carbon

Prior to 2013, the primary public disclosure ExxonMobil made related to modeling for future demand for its fossil fuel products was in the *Outlook*. In the *Outlook*, ExxonMobil informed the public and its competitors that in assessing the future *demand* for oil, decades into the future, ExxonMobil utilized a "proxy cost of carbon." ExxonMobil's proxy cost of carbon is one of several metrics used by ExxonMobil to assess future demand for fossil fuels in order to make reasoned decisions on what the demand for its products might be in the future. The proxy cost of carbon is one of the drivers of the internal analyses ExxonMobil uses for planning and budgeting purposes. Tr. 535:15-17.

The testimony at the trial confirmed that the proxy cost of carbon is an attempt to make provision for all the possible regulations and policies that all of the countries of the world may enact to suppress the use of oil and gas, and it reflects anticipated technological innovations that would also suppress the need for oil and gas. Tr. 1004, 1054 and PX918 p. 29. *See also* Tr. 1778:12. These unquantifiable impacts of innumerable potential *future* climate change policies and regulations are developed annually by a group of scientists and engineers in a department called the Economics and Energy Outlook Group that is completely divorced from the unit at ExxonMobil that evaluates investment opportunities. Tr. 1615:5-24.

At the time relevant to this trial, the Economics and Energy Outlook Group was headed by ExxonMobil's Rob Gardner. William Colton, who served as ExxonMobil's Executive Vice President of Corporate Strategic Planning until his retirement in 2017, testified at trial that Mr. Gardner and other engineers and scientists in the Economics and Energy Outlook Group did nothing other than prepare the *Outlook* on an annual basis.

The *Outlook* quantified this CO₂ cost to approach \$60 per ton of emissions in the 36-member OECD countries by 2030 and \$80 per ton in 2040. The 2013 *Outlook* also identifies proxy costs for 2030 and 2040 for less developed countries. Critically, these quantifications relate only to the years 2030 and 2040. There is no publicly disclosed information about the proxy cost of carbon utilized by ExxonMobil for any years other than 2030 and 2040.

The evidence adduced at trial, including the testimony of former ExxonMobil CEO Rex Tillerson, confirmed that for planning and budgeting purposes, ExxonMobil incorporates proxy costs with its assessment of future energy demand, and the proxy cost is therefore embedded in the price bases that are used to evaluate new investment opportunities. Tr. 417, 1010, 1030. The price bases are calculated by matching future estimates of demand and supply. As David Rosenthal testified:

So the proxy cost is what feeds into the demand model, which then when you add supply, comes out with what that crude oil price is going to be in a particular year, that becomes our price bases. So that price bases directly reflects the proxy cost of carbon as it is pushing down demand.

Tr. 410:130-18; see also Tr. 507-08 (Bailes); Tr. 262-63 (Shores); Tr. 411 (Rosenthal).

Mr. Colton explained that other considerations relating to demand include: world population, global living standards, economic growth, and developments in technology that facilitate alternate sources of energy like battery technology and nuclear power. Tr. 1621, 1672. ExxonMobil's internal planning and budgeting analyses are, of course, planning tools that cannot be depended upon to reflect what will actually happen in the distant future. ExxonMobil's internal planning and budgeting information is, of course, confidential and proprietary, except to the extent it was made public.

As Mr. Colton testified, "[w]hat really happens" in the year 2040 "is something nobody can know sitting here today." Tr. 1699:6-15. There is no public information with respect to the proxy cost of carbon utilized by ExxonMobil in any year prior to 2030.

G. ExxonMobil's Proxy Costs and GHG Costs in its Internal DataGuide

Among the non-public internal documents ExxonMobil generates that were referenced at trial is ExxonMobil's annual Corporate Plan DataGuide ("DataGuide"). (JX919, JX919-N 2010 DataGuide Appendices, JX-921; JX 921-N 2013 DataGuide Appendices- Rev 3; JX029, JX029-N 2014 Corporate Plan Appendices to the DataGuide Rev 3; DX800, DX800-N, 2015 DataGuide Appendices – Rev 0; PX031, PX031-N 2016 Corporate Plan DataGuide and Appendices rev 3 and Cover Email). The DataGuide is distributed to about 150 ExxonMobil business units. Tr. 1751. The DataGuide is a document that provides the planning basis by which the various ExxonMobil business units should prepare their annual planning budgets. Tr. 256.The DataGuide contains a variety of guidance information, including the proxy cost of carbon, pricing information, as well as guidance about projected GHG costs that might relate to specific projects in particular jurisdictions.

Tom Eizember, who was the head of the Corporate Planning Group for ten years before he retired in 2013, testified: "the DataGuide is the assembly of all of the assumptions that businesses need to complete their plan." Tr. 1715.

The DataGuide instructs project planners to consider whether and how GHG costs might impact the operating expenses of specific potential long-lived capital investments. The DataGuide provides default assumptions for GHG costs that are a starting point for analysis, but it also instructs planners to use their judgment about whether those default assumptions are appropriate in a particular case. *See* PX 800 p. 31 2015 DataGuide Appendices – Rev 0. Mr.

Eizember testified that GHG costs were included in the DataGuide during the entirety of his tenure as head of the Corporate Planning Group. *See* Tr. 1722, *et seq*.

The proxy costs of carbon in the DataGuide were generally higher than the GHG costs in the DataGuide, because the proxy costs of carbon anticipated the cost of all climate-related policies, while GHG costs, on the other hand, capture only the subset of climate regulatory costs that might relate to future potential projects in specific jurisdictions. Tr. 244, 246, 1750. The DataGuide specifically provides that, where more precise information is available in specific geographic areas, more accurate information could be substituted for the default GHG guidance numbers contained in the DataGuide. Tr. 525:18-23; Tr. 1729.

The circumstance that ExxonMobil anticipates that energy demand will grow as the world's population grows highlights the complexity of projecting GHG costs with respect to specific projects in various parts of the world. Robert Bailes, a former ExxonMobil Corporate Greenhouse Gas Manager, explained that when countries impose direct greenhouse gas costs, business sectors in particular countries may move out of the country to a country with more favorable regulations. Mr. Bailes referred to this phenomenon as "off shoring your emissions." Tr. 544:5.

Thus, the ever evolving GHG country-by-country guidance contained in scores of pages of appendices to ExxonMobil's annual DataGuide, is no more than just that — guidance by corporate planners with the express caveat that where local specifics can be ascertained, those specifics should be substituted for the guidance. Tr. 545:18-546:24.

This point is exemplified by ExxonMobil's operations in Alberta, Canada, which was a significant focus of the Office of the Attorney General's trial presentation. As former ExxonMobil CEO Rex Tillerson explained, during the period covered by the Complaint, Alberta

had specific legislation in place that taxed only a percentage of GHG emissions and did so at levels below the guidance provided in the Corporate Plan DataGuide. Tr. 1048:2-19. For the period covered by the Complaint, ExxonMobil's internal models used the local specific legislation in Alberta for the years 2015 to 2017. Tr. 918. Dan Hoy, a planner in Alberta, responded in the affirmative to the Court's observation following 50 transcript pages of cross-examination by the Office of the Attorney General (Tr. 951-52):

Look, what I am taking away from your testimony – and tell me if I'm incorrect – that you as a planner run multiple, multiple models based on information that you received from various sources; and that ultimately, someone who is in charge tells you what to use with the GHG costs; is that a fair summary?

The Office of the Attorney General's misrepresentation claim is purportedly bolstered by the fact that, for certain projects in Canada, ExxonMobil's internal corporate models incorporated GHG costs that did not conform either to the proxy cost of carbon or to the expense guide for GHG costs contained in the DataGuide. ExxonMobil's simple rejoinder is that these internal models *did* include proxy costs of carbon. For example, Robert Bailes testified (Tr. 535:15-17) that

[T]he price bases for oil and gas are established from our *Outlook* on global demand and global energy supply sources. So, that [proxy costs of carbon] gets baked in, okay, to investment proposals.⁶

ExxonMobil further establishes that if the default assumptions in the DataGuide were not the best information available, it would hardly serve ExxonMobil's interests (or those of its shareholders) to use those assumptions uniformly. Tr. 746-47.

Rex Tillerson testified on this issue as follows:

⁶ Ms. Lamb recognized that ExxonMobil's projected revenues on a proposed project are based on price bases "and those price bases are influenced by the proxy costs of carbon through the Energy Outlook process." Tr. 149:22-150:4

[W]e purposely left [the business units] flexibility to get the best answer that they thought represented their circumstances in their location for their project.

Tr. 1096:19-20.

The DataGuide very explicitly gives to the local organization -- in fact, we encourage the local organization to go become informed about your regulatory environment; particularly, on projects where it could be important, and use your best assessment of what is this investment really going to experience over its life.

Tr. 1048 2-7.

He further testified with respect to the regulatory scheme in Alberta, Canada,

What I do know is the Alberta government doesn't want to put the oil sands out of business. It's important to them from a jobs, economic, tax revenue. And they always – in Alberta, the industry has always had a very kind of healthy dialogue with them, and they listened. And they don't want to put us out of business.

Tr. 1050:14-19.

In short, the nonpublic DataGuide expressly contemplates that the GHG cost assumptions in the DataGuide should not be uniformly applied by ExxonMobil's planners in a mindlessly consistent fashion if better information is available. Robert Bailes also testified (Tr. 525:18-23):

[W]e expect - we require that our investment proposals include specific costs, specific operating costs that might be imposed in their specific jurisdiction for that specific investment and the specific greenhouse gas emission sources increases or decreases that might occur from that project.

See also Tr. 914. It would be manifestly inappropriate for this Court to rule either that ExxonMobil's default GHG assumptions for *future projects* (none of which were ever disclosed to the public) should have been applied uniformly, or that they should have had the same values assigned to the proxy cost of carbon which were used for an entirely different purpose and which were not disclosed with any specificity, other than to indicate variation by time in the distant future and by region.

The Office of the Attorney General also claims that even if ExxonMobil used ascertainable and current GHG costs in its planning for specific projects with GHG, it is misleading for ExxonMobil to project those costs into the future in its internal models without accounting for future escalation. But, if ExxonMobil proceeded with the projects it was internally modeling that were referred to during the trial (a majority of which ExxonMobil has yet to pursue (*see* Tr. 858-63 (Iwanika)) and if ExxonMobil's GHG projections proved to be inaccurate at some future time, any discrepancy between projected and actual costs would be reflected in ExxonMobil's future financial disclosure. Tr. 1132 (Tillerson: "Once the project starts up . . . you only include what [costs] you are actually incurring.")

The internal economic models used to evaluate future projects, and the GHG assumptions incorporated in those models, do not impact ExxonMobil's financial statements and other corporate books and records. The internal models, for the most part, contain forward looking projections, whereas the ExxonMobil's financial statements reflect historical results. Critically, as the Office of the Attorney General stated in its opening statement, "this case is about what Exxon told its investors it was doing for projects out to 2030 and 2040." Tr. 36.

H. Alignment of the Proxy Costs and GHG Costs

The Office of the Attorney attaches significance to the fact that there came a time when ExxonMobil partially aligned its proxy cost assumptions in the *Outlook* with the GHG guidelines in the DataGuide for OECD countries and argues that this is probative of the Office of the Attorney General's material misrepresentation claim.

On June 13, 2014, ExxonMobil made the considered policy judgment to partially align its planning assumptions *beginning in 2030 for OECD countries*. Tr 527:5-12. Mr. Colton

explained that there was no alignment for the years 2014 – 2029, and during those years there was a difference between the DataGuide schedule for GHG costs and the DataGuide schedule for proxy costs. Tr. 1655. Every witness with knowledge of the decision to align the metrics testified that it was based on a policy assumption that developed countries would adopt a carbon tax on producers and consumers by the year 2030 (Tr. 620:8-21; Tr. 1653:23-1654:14; JX 990 (Deposition Transcript of M. Shores 372:3-15)). Most importantly, the limited modification that was made in ExxonMobil's internal guidance for 2030 was never disclosed to the public. As Guy Powell, who was ExxonMobil's Corporate GHG Manager during the relevant time period, explained:

[I]f you have a view of the world that [in] the longer term the governments . . . would get together and take coordinated action on climate change, a price on carbon would likely be the most sufficient and the best way to do that and that would supercede other regulations and the like. (Tr. 601:13-17).

So with that world view at some point in the future, the proxy costs and the GHG costs should come together (Tr. 601:17-19).

The discussion we were having about merging these two costs in the 2030 timeframe and beyond timeframe. It was much more a philosophical discussion around as we think about governments of the world coming together, take action on climate change, we had this view – at least myself and Bob Bailes had this view – that they'll take collective action. It needs to be very efficient action and the best way to do that is to impose a price on carbon, and that price on carbon would supercede other things like standards and mandates and tax subsidies and that type of thing. (Tr. 620:8-17).

That scenario at that point in time, the proxy costs becomes one in the same as the Greenhouse gas costs. (Tr. 620:18-19).

That was the discussion we were having in terms of why these things should come together. (Tr. 620:20-21).

Not a single witness supported the Office of the Attorney General's apparent contention that the partial alignment was motivated by concern about a lack of clarity in the March 2014

Reports. See, e.g., Tr. 1653. The evidence shows that ExxonMobil had been considering aligning its proxy cost and GHG cost assumptions for periods decades in the future for at least four years prior to publication of the March 2014 Reports. Tr. 518, 526-71, 573:14-574:3.

III. ExxonMobil's Public Disclosures Were Not Misleading.

A. The March 2014 Reports Were Not Misleading.

As discussed above in section II B, in 2013, as a result of a dialogue with both institutional and activist investors, including Natasha Lamb⁷, the Director of Research and Shareholder Engagement at Arjuna Capital, ExxonMobil agreed to make additional disclosure about its planning for the impact of climate change risks and regulations in consideration for the withdrawal of certain shareholder proposals. The Arjuna Proposal (PX 382 p. 2 Letter from N. Lamb to D. Rosenthal) requested a shareholder vote concerning

the Company's strategy to address the risk of stranded assets presented by global climate change, including analysis of long and short term financial and operational risks to the company

The Christopher Reynolds Foundation Proposal shareholder proposal (PX 149 EMC 0000538032 Letter from S. Viederman to D. Rosenthal) requested that ExxonMobil report on its "strategic plans to address climate change and its impacts." Toward that end, ExxonMobil issued the two March 2014 Reports. *See* Tr. 1000.

⁷ Ms. Lamb believes that ExxonMobil's business practices contribute to climate change and has supported efforts to change ExxonMobil's practices through, *inter alia*, shareholder proposals. In 2016, Ms. Lamb, who does not invest in or recommend ExxonMobil stock, Tr. 134:2-7, wrote about the Office of the Attorney General's investigation of ExxonMobil that "ExxonMobil's day of reckoning is fast approaching." DX 842 at 2. *See also* Tr. 138:13-24. Ms. Lam is manifestly biased against ExxonMobil, having co-authored an article that read in part: "Despite it's disingenuous head fake in Paris, Exxon's narrative of preferring and even encouraging inaction in the face of climate change is the oil giants well established modus operandi. As recent news accounts have show Exxon has funded organizations for decades but denied the risks of climate change despite the company's own internal research confirming those very risks." Tr. 137:11-19.

In *Managing the Risks* ExxonMobil stated (PX001 p. 17 – 18):

We also address the potential for future climate-related controls, including the potential for restriction on emissions, through the use of a proxy cost of carbon. This proxy cost of carbon is embedded in our current Outlook for Energy, and has been a feature of the report for several years. The proxy cost seeks to reflect all types of actions and policies that governments may take over the Outlook period relating to the exploration, development, production, transportation or use of carbon-based fuels. Our proxy cost, which in some areas may approach \$80/ton over the Outlook period, is not a suggestion that governments should apply specific taxes. It is also not the same as the "social cost of carbon," which we believe involves countless more assumptions and subjective speculation on future climate impacts. It is simply our effort to quantify what we believe government policies over the Outlook period could cost to our investment opportunities. Perhaps most importantly, we require that all our business segments include, where appropriate, GHG costs in their economics when seeking funding for capital *investments*. We require that investment proposals reflect the climate-related policy decisions we anticipate governments making during the Outlook period and therefore incorporate them as a factor in our investment decisions. (Footnote omitted; emphasis added).

* * *

We also require that all significant proposed projects include a cost of carbon – which reflects our best assessment of costs associated with potential GHG regulations over the Outlook period – when being evaluated for investment.

A specific response to the Arjuna Capital's shareholder proposal appears on page 1 of *Managing* the Risks:

As detailed below, ExxonMobil makes long-term investment decisions based in part on our rigorous, comprehensive analysis of the Global Energy Outlook Based on this analysis, we are confident that none of our hydrocarbon reserves are now or will become "stranded." (Emphasis added.)

ExxonMobil predicated its confidence that its resources would not become stranded on its consistently expressed view that the world's need for energy will continue to rise. Tr. 449-51 (Rosenthal).

In Energy and Climate ExxonMobil stated (PX002 p. 6-7):

A key factor in assessing the world's energy outlook is the impact of public policies. One area of significant interest in recent years relates to the policies enacted to reduce greenhouse gas emissions.

Today there are policies in effect that are designed to limit GHG growth, and we anticipate additional policies developing over time. We expect OECD nations to continue to lead the way and adopting these policies, with developing nations gradually following, led by countries like China and Mexico. Future policies related to limiting GHG emissions remain uncertain and likely will vary over time and from country to country. However, for our Outlook we use a cost of carbon as a proxy to model a wide variety of potential policies that might be adopted by governments to help stem GHG emissions. For example, in the OECD nations we apply a proxy cost that is *about* \$80 per ton in 2040. In the developing world, we apply a range of proxy costs with the more wealthy countries, like China and Mexico, *reaching about* \$30 per ton in 2040.

The exact nature and pace of future GHG policy initiatives will likely be affected by their impact on the economy, economic competitiveness, energy security, and the ability of society, including those less fortunate, to pay related costs.

This GHG cost is integral to ExxonMobil's planning and we believe the policies it reflects will increase the pace of efficiency gains and the adoption by society of lower-carbon technologies through the Outlook period, as well as accelerate growth of lower carbon sources of energy like natural gas and renewables while suppressing the global use of coal.

* * *

The language in *Managing the Risks* identifying the proxy costs of carbon and GHG costs as distinct and separate metrics was drafted and edited by William Colton (Tr. 1642 – 1649:23) for the purpose of making the disclosure "more precise in how we talk about applying CO₂ costs in project evaluations." DX 637; Tr. 1644-46.

As described *supra*, these publications extensively cross-reference the proxy cost of carbon disclosures contained in the *Outlook*. These publications referenced ExxonMobil's nearly decade-old disclosure about its proxy cost of carbon, together with the charts reproduced from the *Outlook* identifying by geographic area ExxonMobil's proxy cost of carbon for 2030

and 2040. *Managing the Risks* confirms that ExxonMobil does "not publish the economic bases upon which [it] evaluate[s] investments due to competitive considerations." PX 001 p.16.

Critically, page 18 of Managing the Risks (PX 001) stated:

Perhaps, most importantly, we require that all our business segments include, where appropriate, GHG costs in their economics when seeking funding for capital investments.

On this topic, Mr. Tillerson testified (Tr.1023:10-16):

That - so, when we dealt with this issue, as we thought about it, we wanted to capture the broadest strategic impacts at a macro level by incorporating the proxy cost of carbon into the Energy Outlook from which flows all of our views of demand, supply balances, which then impacts our view of the prices.

But at the – at the local level, when you get down to a specific investment opportunity being consistent, then there's going to be -- our expectation was there would be a cost to carbon emissions potentially put on investments that we might consider making.⁸

The reference to the utilization of GHG costs in connection with ExxonMobil's consideration of future projects was the first widely disseminated public disclosure by ExxonMobil of its consideration of identifiable, project-specific GHG costs in connection with ExxonMobil's consideration of future capital investments. Tr. 1117:2-8.

In the context of discussing the *Outlook* which ExxonMobil has published annual since 2007, Mr. Tillerson's 2016 remarks easily square with his trial testimony quoted above.

⁸ The office of the Attorney General seizes upon the following portion of Mr. Tillerson's statement at ExxonMobil's 2016 shareholder meeting:

We have, unlike many of our competitors, we have for many years included a price of carbon in our outlook, and that price of carbon gets put into all of our economic models when we make investment decisions as well. It's a proxy. We don't know how else to model what future policy impacts might be, but whatever policies are, ultimately they come back to either your revenues or your cost. So we choose to put it in as a cost. So we have accommodated that uncertainty in the future and everything gets tested against it. JX 918-29.

Significantly, in his correspondence with Ms. Lamb, Mr. Rosenthal stated that ExxonMobil would, in the forthcoming March 2014 reports, disclose "why our proxy cost of carbon is not the only factor we consider in assessing investment opportunities." JX 982 p. 2 Presentation "2014 Proxy Statement Review." Ms. Lamb testified that she believed ExxonMobil acted in "good faith" in publishing the March 2014 Reports and "lived up to the agreement" it had reached. Tr. 170:9-18.9

B. Kristen Bannister's Testimony Shows ExxonMobil's Disclosures Were Not Misleading with Respect to ExxonMobil's Reserves and Resources

In its case in chief, the Office of the Attorney General called Kristen Bannister, ExxonMobil's Technical Team Leader and Senior Technical Professional Analyst for the Global Reserves and Resources Group ("GRG"). Ms. Bannister has worked at ExxonMobil since 2001 and was previously the Global Reserves Coordinator in ExxonMobil's Research Group from 2013 to 2019. Tr. 676:10-17. The GRG is responsible for assisting all of ExxonMobil's business units with the classification of ExxonMobil's Reserves and Resources. Tr. 676:17-20.

Ms. Bannister explained how ExxonMobil classifies its Reserves and Resources. ExxonMobil's resource base is comprised of proved developed reserves, proved undeveloped reserves, probable reserves and contingent resources. Tr. 681:21-25. Proved reserves, both developed and undeveloped, are the oil and gas resources that ExxonMobil is reasonably certain it will be able to economically produce under existing operating conditions and existing government and regulatory approvals. Tr. 682:1-6. Probable reserves represent a business

⁹ Michael Garland, the Assistant Comptroller for Corporate Governance and Responsible Investment, was another witness who testified in the Office of the Attorney General's case in chief. Mr. Garland attended the December 13, 2013 meeting, but had no recollection of anything about that meeting. Tr. 216. He did not read the March 31, 2014 publications when they were published (Tr. 201-02) and he makes no investment decision on behalf of the City of New York. Tr. 201. It is unclear why he was asked to testify in this case.

estimate of what ExxonMobil would be able to economically produce. Tr. 682:8-12. Contingent resources are resources that are not yet commercially matured but are expected to become economically viable in the future. Tr. 682:24-683:3. In classifying reserves, ExxonMobil utilizes the "company plan price outlook" which is contained in the DataGuide. Tr. 689.

Ms. Bannister testified that all classifications of Reserves and Resource are used in ExxonMobil's planning and decision making, but, for public disclosure purpose, ExxonMobil is only required to report proved reserves to the SEC. Tr. 684:8-21. SEC regulations mandate the use of "existing economic conditions, operating methods, and government regulations in reporting proved reserves." 17 C.F.R. § 210.4-10(a)(22). Ms. Bannister testified that the total size of ExxonMobil's proved reserves is reflected in ExxonMobil's Form 10-K submissions. Tr. 733:15. Most significantly, Ms. Bannister testified that technological, regulatory, and economic circumstances may require the reclassification of reserves which are, of course, one of ExxonMobil's largest publicly reported assets. Tr. 739-40; Tr. 748:4-5.

As discussed *supra*, the Office of the Attorney General has the burden to prove that a *reasonable* investor would be misled by ExxonMobil's representations "in light of the total mix of information available." Form 10-K disclosures are, perhaps, the most important part of the "total mix of information" publicly available to ExxonMobil investors. *See e.g. In re Burlington Coat Factory Sec. Litig.*, 114 F.3d 1410, 1421 (3d Cir. 1997)(finding that "earnings reports are among the pieces of data that investors find most relevant to their investment decisions" and "likely to be highly material" to investors (internal quotation marks omitted); *see also In re Kidder Peabody Sec. Litig.*, 10 F. Supp. 2d 398, 410 (S.D.N.Y. 1998) (noting that profit statements and financial reports are of particular interest to investors). As Ms. Bannister testified, the purpose of reporting proved reserves in a Form 10-K is to "ensure that the public and

potential stockholders can compare on an apples-to-apples basis across the portfolios of oil and gas companies." Tr. 734:15-20. As noted *supra*, there is no claim in this case that any disclosure in ExxonMobil's Form 10-K is misleading, and Ms. Bannister's credible testimony demonstrates that ExxonMobil's public disclosures in its Form 10-K submissions were true and correct with respect to ExxonMobil's proved reserves.

IV. The Office of the Attorney General Failed to Establish Any Alleged Misrepresentation was Material to Investors.

As discussed *infra*, this Court rejects the contention that reasonable investors would attach material significance to the fact that ExxonMobil *internally* determines when it *is* appropriate to apply GHG costs with respect to specific projects. An alleged misstatement is material to a reasonable investor only if it is "sufficiently specific" to "guarantee some concrete fact or outcome." *City of Pontiac Policemen's & Firemen's Ret. Sys. v. UBS AG*, 752 F.3d 173 (2d Cir. 2014). ExxonMobil investors had no insight into the criteria ExxonMobil used to determine when or whether ExxonMobil would consider it appropriate to apply GHG costs to a specific project.

Significantly, there is no allegation in this case, and there was no proof adduced at trial, that anything ExxonMobil is alleged to have done or failed to have done affected ExxonMobil's balance sheet, income statement, or any other financial disclosure. More importantly, the Office of the Attorney General's case is largely focused on projections of proxy costs and GHG costs in 2030 and 2040. No reasonable investor during the period from 2013 to 2016 would make investment decisions based on speculative assumptions of costs that may be incurred 20+ or 30+ years in the future with respect to unidentified future projects. *See Singh v. Cigna Corp.*, 918

F.3d 57, 65 (2d Cir. 2019) (holding that reasonable investors would not rely on "tentative and generic" disclosures that "emphasize [a] complex, evolving regulatory environment").

As particularized *infra*, ExxonMobil provided only *conceptual information* about how it managed the risks of climate change in its business planning. *Managing the Risks* made clear that ExxonMobil did "not publish the economic bases upon which [it] evaluate[s] investments due to competitive considerations" PX 001 p.16. Tellingly, *Managing the Risks* contains no information about the dollar amounts assigned to GHG costs or what factors ExxonMobil uses in determining whether it is appropriate to apply GHG costs. Notwithstanding the Office of the Attorney General's claim to the contrary, *Managing the Risks* introduced the GHG cost metric at a conceptual level to let investors know about a second way, in addition to the proxy cost of carbon, that ExxonMobil addresses climate regulatory risk. The GHG cost metric was also disclosed in ExxonMobil's Corporate Citizenship Reports. PX-007 p. 37 and PX-008 p. 38.

Referring to the publication of the March 2014 Reports, William Colton explained that (Tr. 1693:1-11):

It was never our intention to give detailed numbers year by year to give people exactly the numbers we used to do our proprietary internal evaluations. It was really about concepts of how we would think about these things and how we would include these important concepts in our evaluations, but not in a discreet kind of numerical sort of way.

Publishing ExxonMobil's "economic bases" would give competitors an advantage in a world where "all of the oil and gas companies are competing against each other for access to resources." Tr. 438:10-12. This is precisely why *Managing the Risks* expressly states, "we do not publish the economic basis upon which we evaluate investments due to competitive considerations." PX001 p.16.

ExxonMobil's disclosures were not intended to enable investors to conduct meaningful economic analyses of ExxonMobil's internal planning assumptions, and no reasonable investor would have viewed speculative assumptions about hypothetical regulatory costs projected decades into the future as "significantly alter[ing] the total mix of information made available." Singh v. Cigna Corp., 918 3d 57, 64 (2d Cir. 2019). This is why the Second Circuit held in Singh that "tentative and generic" statements that emphasize the complex, evolving regulatory environment faced by a corporation cannot be material. Id. Finally, disclosures containing "generalizations" about a company's business practices cannot amount to material misrepresentations. See ECA & Local 134 IBEW Pension Tr. Of Chi. v. JP Morgan Chase Co., 553 F. 3rd 187, 206 (2d Cir. 2009). Indeed, as the Office of the Attorney General's first witness Natasha Lamb admitted, she was interested in ExxonMobil's "big-picture approach to handling the risks of climate change." Tr. 168:8-10.

At bottom, the case presented by the Office of the Attorney General is largely predicated upon the proposition, which this Court rejects, that during the period of time covered by the Complaint, ExxonMobil's disclosures led the public to believe that its GHG cost assumptions for future projects had the same values assigned to its proxy cost of carbon. The existence of ExxonMobil's DataGuide with separate sections and appendices for proxy costs and GHG costs is corroborative of ExxonMobil's assertion that proxy cost of carbon and GHG costs are different metrics, a proposition of the Office of the Attorney General conceded before any testimony was presented at trial. Explicit statements in various publications confirmed this to be the case.

The Office of the Attorney General attaches enormous significance to the circumstance that certain documents prepared by ExxonMobil employees loosely characterized the proxy cost of carbon and GHG concepts, including by using the term "GHG proxy costs." But, as Mr.

Eizember testified, the term GHG is a generic term. Tr. 1764:17-23. Both the proxy cost and GHG metrics relate to greenhouse gases. And precisely because the Economics and Energy Outlook Group is purposely separated from other groups in the Corporate Strategic Planning Group it is hardly surprising that internal documents from the different groups do not use identical terminology.

What the evidence at trial revealed is that ExxonMobil executives and employees were uniformly committed to rigorously discharging their duties in the most comprehensive and meticulous manner possible. More than half of the current and former ExxonMobil executives and employees who testified at trial have worked for ExxonMobil for the entirety of their careers. The testimony of these witnesses demonstrated that ExxonMobil has a culture of disciplined analysis, planning, accounting, and reporting.

The Court heard testimony from ten present and former ExxonMobil employees¹⁰, most of whom were called by the Office of the Attorney General as adverse witnesses. There was not a single ExxonMobil employee whose testimony the Court found to be anything other than truthful. Each ExxonMobil and Imperial Oil¹¹ employee who testified in person at trial swore under oath that he or she was unaware of any scheme at ExxonMobil to mislead investors about the manner in which ExxonMobil managed climate risk. *See e.g.* Tr. 459:2-20 (Rosenthal); Tr. 579:1-10 (Bailes); Tr. 662:15-19 (Powell); Tr. 864:23-865:5 (Iwanika); Tr. 748:23-749:6 (Bannister); Tr. 983:1-11 (Hoy); Tr. 1061-63 (Tillerson); Tr. 1659-60 (Colton); Tr. 1754:12-21

¹⁰ Robert Bailes, Kirsten Bannister, William Colton, Brant Edwards (by video deposition), Thomas Eizember, Todd Onderdonk, Guy Powell, David Rosenthal, Mark Shores (by deposition), and Rex Tillerson.

¹¹ ExxonMobil is the majority shareholder of Imperial Oil.

(Eizember); Tr. 1805:6- 1806:2 (Onderdonk). The Court has no reason to discredit the testimony of these witnesses.

A. Rodger Reed's Testimony Shows ExxonMobil's Alleged Misrepresentations Were Not Material to Research Analysts

The Office of the Attorney General presented video designations from the deposition testimony of Rodger Reed in its case in chief, to which ExxonMobil made counter-designations. The ostensible purpose of the Office of the Attorney General's advancement of Reed's testimony in its case in chief was to support the thesis that ExxonMobil's alleged misrepresentations were material and important to research analysts and the investing public. The Office of the Attorney General offered no testimony from any investor who claims to have been misled. Reed is the only analyst the Office of the Attorney General presented at trial, and at all relevant times Reed's investment evaluation of ExxonMobil was "outperform." As explained *infra*, Reed's testimony establishes the exact opposite of what the Office of the Attorney General attempted to prove.

Reed serves as a managing director and senior energy analyst at Wells Fargo. JX988 14:16-19 (Deposition Transcript of Rodger Reed). Reed provides equity research coverage of eighteen integrated oil companies, including ExxonMobil. JX988 14:23–15:4. Reed monitors news relating to ExxonMobil as part of his job, including anything issued by ExxonMobil. JX988 8:3-10.

In his role as senior energy analyst at Wells Fargo, Reed publishes equity research reports. JX088 16: 1-11. Specifically, Reed issues flash comments, which are reactive notes to specific events as they relate to a particular company. Flash comments are issued to inform investors of developments that Wells Fargo regards as significant. Reed further testified that if he became aware of information he thought was relevant to the valuation of a company he covered,

then he would include that information in his research reports. JX988 29:8-18. Reed also testified that he believes that the most important concern about a company to any investor is cash flow. JX988 27:22-24.

As discussed *supra*, the Office of the Attorney General alleges that ExxonMobil investors were misled by information contained in *Managing the Risks* and *Energy and Climate*.

Undercutting this argument is the fact that Reed testified that he did not read *Managing the Risks* and *Energy and Climate* until approximately one year after the March 2014 Reports were published. JX988 p. 57:3 and p. 59:16. Reed further testified that when he did read the March 2014 Reports, he did not recall learning anything new about ExxonMobil and the reports did not change his view of ExxonMobil. JX988 134:12-24. In addition, Reed testified that reviewing the reports did not cause him to issue a flash report. JX988 58:14 – 56:6. Reed also testified that he never referenced either of the March 2014 Reports in any research report including one that he published shortly after reading them. JX988 58:10-19.

Reed's testimony that he did not find the representations in *Managing the Risks* and *Energy and Climate* significant is important in light of his interest in how ExxonMobil managed the risks of climate change and regulation. Reed testified (JX 988 11:21-12:6):

It is clearly an issue in the investing world what potential impacts may be on future hydrocarbon demand as a result of climate change initiatives. And we have investors that within a board what we call ESG – environmental, social, governance – you know, questions such as this come up. So that's why we have an interest in it. That's why we pay attention to it.

In addition, Reed testified that he became aware of a reported California Attorney

General investigation into ExxonMobil around January 20, 2016. JX 988 61:23-15. Reed did not

publish a flash comment concerning the California Attorney General's investigation of

ExxonMobil. JX 988 61:1-5. Reed did not adjust his stock rating of ExxonMobil after media

reports about the California Attorney General's investigation were released, nor did he adjust his target price for ExxonMobil. JX988 63: 8-16.

Reed further testified that he became aware that the SEC had announced an investigation into ExxonMobil around September 20, 2016. JX988 90:14-16. Reed issued a report around that time concerning ExxonMobil due to the "headline risk" associated with the investigation. JX977 p. 1 Wells Fargo Equity Research – "Some Smoke But Likely No Fire; Lowering Valuation Range." Reed noted (correctly as it turned out) that he not believe the SEC would take any action against ExxonMobil. Id. While Reed did reduce his target price for ExxonMobil to take account for the "headline risk" of the SEC investigation, Reed continued to evaluate ExxonMobil as an "outperform" investment. Id.

Finally, Reed testified that he became aware of the New York Attorney General's lawsuit against ExxonMobil in 2018. JX 988 9:4-6. Reed did not adjust his target price for ExxonMobil as a result of the Attorney General's investigation. JX 988 63:4-8.

The Court finds that Reed's credible and unbiased testimony undercuts the assertion that information contained in the March 2014 Reports was material to investors. *Reed's job is to monitor and report on developments related to the valuation of ExxonMobil*. Reed testified that environmental risks were important to investors and that he paid attention to developments in this area. As Reed's professional analysis of ExxonMobil was unaffected by the publication of the March 2014 Reports or by any event to which the Office of the Attorney General attaches

¹² The report (JX977 p. 1) states: "We rate the likelihood of a negative outcome from a reported SEC investigation into ExxonMobil's accounting/climate practices as very slight. However, in our view the headline risks associate with an SEC investigation create enough investor angst to damage ExxonMobil's reputation and impact its share prince performance during the investigation."

significance, Reed's testimony provides no support for the Office of the Attorney General's theory of the case.¹³

B. The Office of the Attorney General's Expert Witnesses Fail to Establish Materiality

In support of its contention that the alleged misrepresentations were material to ExxonMobil investors, the Office of the Attorney General offered two expert witnesses, Dr. Eli Bartov and Mr. Peter Boukouzis.

1. Dr. Bartov's Event Study Does Not Demonstrate Materiality

Event studies are a well-recognized manner of establishing the materiality of an alleged misstatement. *See United States v. Martoma*, 993 F. Supp. 2d 452, 457 (S.D.N.Y. 2014). An event study showing that disclosure of a company's alleged fraud had an impact on that company's stock price is a method of establishing materiality in an efficient securities market. *See Oran v. Stafford*, 226 F.3d 275,282 (3d Cir. 2000) (holding that "when a stock is traded in an efficient market, the materiality of disclosed information may be measured post hoc by looking at the movement, in the period immediately following the disclosure, of the price of the firm's stock"). Passing the issue of whether disclosures such as those in the March 2014 Reports were "sufficiently specific" to 'guarantee...some concrete fact or outcome" (*City of Pontiac Policemen's & Firemen's Ret. Sys. V. UBS AG*, 752 F.3d 173, 185 (2d Cir. 2014) –

¹³ Peter Boukouzis, one of the experts called by the Office of the Attorney General, attached significance to the portion of one of Mr. Reed's reports that states "Exxon places a proxy costs of carbon on all its future developments. Depending on the project and it location, the proxy cost of carbon ranges from \$20 to \$80 per ton by 2040. This approach reduces the risks associated with future CO₂ emissions and incentivizes Exxon to reduce overall emission on all future projects. Thus we believe ExxonMobil is ahead of the curve on pricing in climate risk." PX074. Mr. Reed apparently believed that ExxonMobil's proxy cost of carbon was included on the operational or expense side of its business. Tr. 1890. Whether the specific conclusion Mr. Reed drew from his understanding of the proxy cost of carbon is correct should not have affected his overall analysis of ExxonMobil stock as ExxonMobil's expert witness Marc Zenner's testimony confirms. Tr. 1853-54.

which they were not - the parties agree that the market for ExxonMobil securities is efficient and, perforce, any material information released to the market should be reflected in its stock price. *See Oran*, 226 F.3d at 282.

To support its theory that the alleged misstatements in the March 31, 2014 publications were material, the Office of the Attorney General offered the expert testimony and expert report of Dr. Eli Bartov who concluded that there was inflation on the stock price of ExxonMobil from April 1, 2014 to June 1, 2017. Tr. 1149:25-1150:4. Dr. Bartov posited that the inflation period began after the alleged affirmative misrepresentations contained in the two March 31, 2014 publications. Significantly, the Office of the Attorney General offered no proof that there was any increase in the stock price of ExxonMobil immediately following the publication of *Managing the Risk* and *Energy and Climate* and Dr. Bartov perplexingly testified that he did not conduct an analysis of whether or not ExxonMobil's stock increased as a result of the alleged misrepresentations in the March 31, 2014 publications "because it was completely unrelated to my analysis." Tr. 1233:8-13. By contrast, ExxonMobil's expert, Dr. Frank Allen Ferrell, ¹⁴ determined that there was no increase in ExxonMobil stock on April 1, 2014. Tr. 1967. In short, there is no evidence that any misleading statements in these publications inflated the price of ExxonMobil stock. *See* DX711 ¶ 15 Expert Report of Allen Ferrell.

¹⁴ Dr. Ferrell is Greenfield Professor of Securities Law at Harvard Law School. He is also a faculty associate at the Kennedy School of Government, chairman of the Harvard Advisory Committee on Shareholder Responsibility, and a research associate at the European Corporate Governance Institute. He was previously on the Board of Economic Advisors to the Financial Industry Regulatory Authority (FINRA), a research fellow at FINRA, and a member of the ABA Task Force on Corporate Governance. He holds a law degree from Harvard Law School and a Ph.D. from the Massachusetts Institute of Technology. Early in his career, he served as a law clerk to Justice Kennedy of the United States Supreme Court. Tr. 1951.

So, without any fact witness to establish that the alleged misrepresentations in these publications were material to any investment decision by any investor, and without establishing that any alleged misrepresentations drove up the stock of ExxonMobil after March 31, 2014, the Office of the Attorney General presented an event study performed by Dr. Bartov who hypothesized that there were three events subsequent to March 31, 2014 that constituted "corrective disclosures" which operated to depress the inflated stock of ExxonMobil. 15

A corrective disclosure "is an announcement or series of announcements that reveals to the market the falsity of a prior statement." *Arkansas Teachers Ret. Sys. V. Goldman Sachs Group, Inc.*, 879 F. 3d 474, 480 n.3 (2d Cir. 2018). Materially misleading statements can be expected to drive a stock price up to an artificially high level, which then drops when the truth comes out. Dr. Bartov's theory is that (Tr.1119):

[S]tock price will change only when there is new information that is relevant to the value of the company. In other words, this information has to change the view of investors about the future cash flows that the company will be generating.

Dr. Bartov posited that there were three corrective disclosures, the most significant of which for purposes of this case was a news report in the *Los Angeles Times* on January 20, 2016 (*i.e.*, a year and a half after the March 2014 Reports) that the California Attorney General was investigating whether ExxonMobil "repeatedly lied to the public and its shareholders about the risk to its business from climate change and whether such actions could amount to securities fraud." JX970 p. 2. (Ivan Penn, "California to investigate whether Exxon Mobil lied about climate-change risks.") Significantly, as Dr. Ferrell testified, the news report is about an

¹⁵ Dr. Ferrell ran an alternate event study model which has an industry control in it because in Dr. Ferrell's view stocks can move because of the industry they are in. "So industry controls, as a general matter are typically used in event study analysis, particularly when you're talking about a single firm event study, where you really want to try to identify the firm specific price movement for this particular stock." Tr. 1960

investigation about climate change and the corrective disclosure that is the subject of Dr.

Bartov's event study is about alleged misrepresentations concerning proxy costs of carbon and GHG costs. Tr. 1976. As Dr. Ferrell noted:

I do want to emphasize so it's not lost in the shuffle, that January 20th, 2016 when you read the article, it's about the science of climate change. I just, for the life of me, do not see how that is a corrective disclosure of the alleged misrepresentation that he identifies, Dr. Bartov identifies in the – in his report.

Tr. 1986.

The other two "corrective disclosures" identified by Dr. Bartov are the September 20, 2016 news report of an SEC investigation of ExxonMobil and the June 2, 2017 filing of the Office of the Attorney General's Complaint in this action. The evidence showed that there was a statistically significant decline in ExxonMobil stock on January 21, 2016, following the report in the *Los Angeles Times*, using the generally accepted "market close to market close" window to measure the decline of a stock after a corrective disclosure. ¹⁶

However, the news report of the California Attorney General investigation came months after a front-page November 5, 2015 *New York Times* story that the Office of the Attorney General was investigating "whether the company lied to the public about the risks of climate change or to investors about how such risks might hurt the oil business". There was no statistically significant market reaction at the five percent statistical level to the earlier

¹⁶ Dr. Bartov explained that on January 20, 2016 he "found that there [was] a statistically significant response to the information at the *five percent statistical level, which is as I explained detailed in my report, this is the standard benchmark that is used in academia.*" (emphasis added) Tr. 1212. Dr. Ferrell was emphatic that the standard is five percent. Tr. 1968. When asked whether in science and academia findings that come close to five percent are statistically significant, Dr. Ferrell stated:

So, I want to back up and talk about what does the standard mean. You don't shoot an arrow and then paint a bullseye around it. You either meet the standard or you don't. If you change the standard, it means you don't have a standard. Tr. 1969.

announcement of the New York Attorney General's investigation (which the Office of the Attorney General does not contend was a corrective disclosure) and there was no statistically significant stock movement at the five percent statistical level after the subsequent news report of an SEC investigation on September 20, 2016, or the filing of the Office of the Attorney General's Complaint in this action on June 2, 2017. Dr. Bartov conceded that there was no movement in ExxonMobil stock when the SEC dropped its probe of ExxonMobil on August 3, 2019. Tr.1203. Dr. Ferrell went further and asserts that the circumstance that there was no market reaction to the termination of the SEC investigation undermines the theory that the announcement of the SEC investigation constituted corrective disclosure. Tr. 1973.

None of Dr. Bartov's corrective disclosures contain any statements from ExxonMobil acknowledging a misstatement or correcting a previous disclosure. Tr. 1208. They all pertain to regulatory investigations of ExxonMobil announced in the mainstream press. In short, the news of the California Attorney General's reported investigation is precisely the kind of news that the Office of Attorney General's witness Rodger Reed characterized as "headline risk."

Additionally, as ExxonMobil's highly credentialed expert, Dr. Ferrell, testified, there is something circular about claiming that a stock drop precipitated by the announcement of an investigation constitutes evidence of wrongdoing. Indeed, by Dr. Bartov's reasoning, any decline in the value of ExxonMobil stock after the June 2, 2017 filling of the Office of the Attorney General's complaint is the result of an ill-conceived initiative of the Office of the Attorney General.

¹⁷ Dr. Ferrell calculated that using an alternative model with an industry control, the June 2, 2017 date could not be viewed as a corrective disclosure even using a ten percent standard.

Courts have held that the announcement of a government investigation, "without more, is insufficient to constitute a corrective disclosure." *See Meyer v. Greene*, 710 F. 3d 1189, 1201 (11th Cir. 2013); *see also Loos v. Immersion Corp.*, 762 F.3d 880, 890 (9th Cir. 2014), as amended (Sept. 11, 2014). Common sense dictates that the announcement of a government investigation may have a negative, but not necessarily corrective, effect on stock prices. As Dr. Bartov conceded, "[i]t is not good news" when "it is reported in the financial press that a regulatory [agency] is investigating you." Tr. 1314-16. In short, a regulatory investigation is "bad news" for a company regardless of whether, as in this case, there is a successful outcome for the company of the regulatory investigation.

Significantly, there has apparently been no reported progress in the reported California Attorney General's investigation; it is undisputed that the SEC dropped its investigation without requiring ExxonMobil to restate anything or amend any disclosure; and this Court has found in ExxonMobil's favor.

As with Dr. Bartov's testimony about the alleged materiality of an alleged impairment in 2015 of an ExxonMobil facility in Mobile Bay, in the Gulf of Mexico, discussed *infra*, the Court rejects Dr. Bartov's expert testimony as unpersuasive and, in the case of his testimony about the Mobile Bay facility, finds Dr. Bartov's testimony to be flatly contradicted by the weight of the evidence.

2. Mr. Peter Boukouzis' Analysis Did Not Demonstrate Materiality or Damages

The Office of the Attorney General also attempted to establish materiality through its expert Peter Boukouzis. Among other aspects of his work for the Office of the Attorney General, Mr. Boukouzis, replaced ExxonMobil's GHG cost assumptions in certain internal models used by ExxonMobil in its planning and investment process with values ExxonMobil

assigned to the proxy cost of carbon. Tr. 1412. Part of his analysis consisted of selecting a sample of 27 internal economic models and replacing the GHG cost assumptions in those models with proxy cost of carbon assumptions. JX 972 ¶ 120-21; Tr.1407. The remarkably extensive data and stress tests contained in these models actually confirms ExxonMobil's assertion in *Energy and Climate* that ExxonMobil "tests investment opportunities against a broad set of economic assumptions, including low price scenarios that could be representative of a carbon-constrained environment, to help ensure that the investment will perform acceptably across a broad range of economic circumstances during its lifetime." PX 002 p. 20.

Mr. Boukouzis uniformly applied proxy cost of carbon assumptions to 100 percent of emissions, in five models for which ExxonMobil determined that only a fraction of emissions would be taxed under local regulations. *Id.* ¶ 122; Tr. 1413. *See also* Tr. 1908. Mr. Boukouzis then concluded that, leaving "[a]ll other input parameters in the models …unchanged," his adjustments reduce certain financial metrics for these projects. *Id.* ¶ 121. Mr. Boukouzis performed no assessment of whether any of ExxonMobil's disclosures affected the value of ExxonMobil stock. Tr. 1426:6-10.

In Mr. Boukouzis' report (JX972 ¶ 20), he writes "based on my experience analyzing and evaluating oil and gas companies, the investment community would likely interpret ExxonMobil's public disclosures to mean that it was consistently applying the publicly disclosed GHG emission proxy costs." This was apparently Mr. Boukousis' rationale for substituting ExxonMobil's proxy cost of carbon for ExxonMobil's GHG costs for specific projects. Passing whether Mr. Boukouzis had any basis for this assumption, ExxonMobil's credentialed expert, Dr. Marc Zenner, actually tracked S & P and Moody's and found that virtually no analysts' reports mentioned proxy costs, GHG costs, or the Office of the Attorney General's Complaint. Tr. 1849.

As a preliminary matter, no investor would have been able to perform the analysis Mr. Boukouzis performed because, as ExxonMobil explained in *Managing the Risks*, ExxonMobil does "not publish the economic bases upon which [it] evaluate[s] investments due to competitive considerations." PX 001 p.16. No investors had any insight into the evaluations ExxonMobil performed of potential investments, and no investor could have made an investment decision based on any assumption contained in those evaluations. Tr. 1444; Tr. 1854. Consequently, any purported deviations in applying assumptions in internal investment evaluations could not have altered the total mix of information available to the public. Indeed, Mr. Boukouzis conceded that the models themselves, along with their inputs and outputs, were proprietary and never publicly disclosed. *Id.* at 201:13-202:10, 204:20-205:3; *see also* DX712 ¶102.¹⁸

Mr. Boukouzis' analysis is more fundamentally flawed. First, Jason Iwanika, a development planner for Imperial Oil, demonstrated that Mr. Boukouzis did not understand how some of ExxonMobil's internal models actually worked, thereby resulting in Mr. Boukouzis doubling and tripling some of his outputs. Tr. 1933-1940. Mr. Boukouzis admitted that he did not understand some of the models. Tr. 1467. And, of the 27 economic models Mr. Boukouzis

¹⁸ Mr. Boukouzis also flagged the fact that in the transportation sector, instead of applying a proxy cost of carbon for both heavy and light duty vehicles in analyzing demand, ExxonMobil used what is known as a "CAFE standard" (Corporate Average Fuel Economy) which is the fuel efficiency standard "meaning vehicles will have better mileage" thereby suppressing demand. Tr. 1399. The Court does not find this omitted disclosure in some ExxonMobil publications to be material. Manifestly, ExxonMobil's determination to use a proxy cost as one element in assessing demand for its products is entirely consistent with using a CAFE standard projected government-mandated fuel efficiency standards in part of the transportation sector. Mr. Boukouzis' unsupported opinion that use of a CAFE standard inflated demand is counter-intuitive and the Court rejects it. Indeed, Mr. Boukouzis does not know whether if ExxonMobil had used its proxy cost of carbon instead of using increased fuel efficiency standards it would have had a bigger effect on depressing demand for oil and gas in the transportation sector. Tr. 1514. In the latter connection, Mr. Boukouzis conceded that ExxonMobil did not have any incentive to direct its project planners to understate expected expenses. Tr. 1516. And, Mr. Colton, the longtime President of Corporate Strategic Planning at ExxonMobil, testified - using projected government-mandated fuel efficiency standards was "almost universally" more aggressive than using a proxy cost. Tr. 1638. Mr. Colton's testimony was confirmed in Exhibit DX826-N.

reviewed, he conceded that 24 of the 27 related to Alberta, Canada (which has a regulatory regime for GHG emissions) (Tr. 1441 and 1925) and he admitted that at least 19 were not "investment decision models." JX 972 ¶ 125 and n.282; Tr. 1447; 1456; 1925. At trial, Mr. Boukouzis conceded he did not know whether a model he adjusted was merely a draft model or an exploratory internal working model, or if any of the models were actually funded projects. Tr. 1447; 1449-50. Critically, Mr. Boukouzis conceded that he did not know whether any of these cash flow models were presented to senior management at ExxonMobil. Tr. 1486.

Second, Mr. Boukouzis failed to establish that his adjustments would have rendered any project unprofitable. Key financial metrics that were positive before his adjustments remained positive even after his adjustments. JX 972 at Ex. 11; Tr. 1440. Indeed, on average, *after* all the adjustments Mr. Boukouzis made, the average internal rate of return for the projects Mr. Boukouzis manipulated was 12.7 percent. Tr. 1440. *Cf.* Tr. 1910. And, all of the models had positive undiscounted cash flow *after* the adjustment Mr. Boukouzis made. Tr. 1458. *See also* Tr. 1909. As ExxonMobil's expert witness, Dr. Marc Zenner, explained "the Boukouzis Report itself demonstrated that no financial decisions regarding project viability based on net present value would have been affected by Mr. Boukouzis' model adjustments." DX712 ¶ 99 Expert Report of Marc Zenner. *See also* Tr. 1853-54.

Third, Mr. Boukouzis did not demonstrate how ExxonMobil would have "presented less optimistic business projections" to the investing public had its internal models reflected Mr. Boukouzis' adjustments. DX 972 ¶ 22 Expert Report of Peter Boukouzi). Mr. Boukouzis did not identify any communications from ExxonMobil to investors that would have been different if ExxonMobil had applied its proxy cost of carbon assumptions in economic models rather than GHG costs. Tr. 1489.

Mr. Boukouzis also used the calculations from Dr. Bartov's event study and attempted to determine "damages" by estimating changes in shareholdings by institutional investors in periods correlated to Dr. Bartov's event study (which assumed that ExxonMobil stock was artificially inflated) (Tr. 1149:25-1150:4) by examining quarterly Form 13F filings institutional investors made with the SEC. Mr. Boukouzis claims to have determined the total number of impacted shares using a "last in first out" ("LIFO") methodology and then applying the inflation per share from Dr. Bartov's calculation. Mr. Boukouzis calculated damages in the range of \$460 million using the one date in which Dr. Bartov identified a decline in the price of ExxonMobil's shares due to corrective disclosure with a 95 percent confidence level. He calculated damages of \$1.6 billion using all three of Dr. Bartov's event study dates. Tr. 1420.

Passing other critiques of Mr. Boukouzis' methodology and the accuracy of these calculations as explained in Dr. Ferrell's expert report, any calculations based upon an event study that the Court totally rejects for the reasons particularized *supra*, do not constitute credible evidence. Indeed, Mr. Boukouzis agreed that if Dr. Bartov's event study is flawed, Mr. Boukouzis' aggregate damage analysis is necessarily flawed as well ("if the input is flawed, yes, the results will be flawed. That's correct.") Tr. 1507; *see also* Tr. 1993 (Dr. Ferrell). But Dr. Ferrell had a harsher critique of Mr. Boukouzis' damage calculations (Tr.1991:12-23):

[L]et's assume that there's inflation in the stock price. Let's assume that to be true. In order to calculate damages to shareholders you have to know when shareholders that actually own the shares, when they purchased, and when they sold. If you don't know when shareholders purchased and when they sold, but you're just going to make that up, that is, you're just going to make an assumption about that, then it's going to be – those numbers are going to be meaningless. So – and whether you're using the 13F Data which is what Mr. Boukouzis uses or other approaches that are not being used here, they are totally, completely unreliable because one simply does not know who purchased and when their shares were sold.

Finally, as previously indicated, Dr. Zenner and ExxonMobil's cross-examination of Mr. Boukouzis, convincingly undercut Mr. Boukouzis' opinion that investment analysts either wrote about or were concerned about ExxonMobil's treatment of GHG costs, although investment analysts did report on industrywide climate change regulatory risk. Tr. 1489-1504 (passim). The Court therefore gives no weight to Mr. Boukouzis' expert testimony.

3. Mobile Bay

The Office of the Attorney General alleges that ExxonMobil did not take impairments when required by Generally Accepted Accounting Principles ("GAAP") (Complaint ¶ 225, 236). After a four-year review of ExxonMobil's impairment disclosures, the Office of the Attorney General and its expert identified a single asset, Mobile Bay, that the Office of the Attorney General claims was impaired in 2015. JX 973 ¶ 17 Expert Report of Eli Bartov. The Office of the Attorney General's expert, Dr. Bartov, makes no specific claims about any other asset or any other year. In his view, GHG cost assumptions in the non-publicly disclosed DataGuide should have been applied to ExxonMobil's impairment assessment of Mobile Bay in 2015, and if those assumptions had been applied there would have been an impairment. Complaint ¶ 254. Significantly, there were no actual GHG costs associated with Mobile Bay in 2015 and so ExxonMobil surely had the discretion to determine that it was *not appropriate* to add a GHG cost assumption to Mobile Bay for 2015.

As established by the uncontradicted testimony of Richard Auter, a senior director of PricewaterhouseCoopers who has worked on the ExxonMobil audit for thirteen years, GAAP establishes a three-step approach to asset impairments.

First, a company must determine whether an impairment "trigger" exists for a given asset (Complaint ¶ 228; JX968 at ASC 360-10-35-1 FASB¹⁹ Accounting Standards Codification: ASC 360). Absent a trigger, a company need not conduct any further analysis.

Second, if a trigger exists, a company must assess whether an asset's current book value can be recovered through its future undiscounted cash flows. *Id.* at ASC 360-10-35-17. The accounting standards require that the impairment cash flow models created at this step use assumptions that are "reasonable in relation to" those a company uses in other aspects of its business planning. *Id.* at ASC 360-35-30.

Third, if the impairment cash flow analysis reveals that an asset's book value cannot be recovered through future cash flows, ExxonMobil must calculate the asset's fair value so it can determine the size of the required impairment. *Id.* at ASC 360-10-35-17. *See* Tr. 1537-1558. ExxonMobil did not report any impairment of the Mobile Bay Facility in its 2015 Form 10-K, and PricewaterhouseCoopers issued a "clean" opinion on ExxonMobil's 2015 Form 10-K report.

The Office of the Attorney General failed to demonstrate that ExxonMobil's impairment disclosures and accounting practices in 2015 were inconsistent with GAAP. As reported in ExxonMobil's 2015 Form 10-K (JX 906 p. 70.):

If there were a trigger event, [ExxonMobil] estimates the future undiscounted cash flows of the affected properties to judge the recoverability of carrying amounts These evaluations make use of the Corporation's price, margin, volume, and cost assumptions developed in the annual planning and budgeting process, and are consistent with the criteria management uses to evaluate investment opportunities.

Dr. Bartov *assumed* that there was a trigger event (Tr. 1257) and proceeded to do an impairment analysis incorporating GHG costs for an extended period into the future.

¹⁹ Financial Accounting Standards Board

Contrary to Dr. Bartov's testimony, ExxonMobil and its auditor PricewaterhouseCoopers, determined, as ExxonMobil's 2015 Form 10-K reflects, that there was *no trigger* event with respect to the Mobile Bay plant in 2015. JX958 p. 5 PwC Memorandum: U.S. Production - Long-lived Asset Impairment Assessment; Tr. 1540-41; 1545; 1551. As Mr. Auter explained, the Mobile Bay plant had positive cash flows in the remaining years of the asset's life. Tr. 1551. Mr. Auter testified that even though there was no trigger event and no requirement for ExxonMobil to do anything further with respect to Mobile Bay, ExxonMobil confirmed the absence of a trigger by doing more analysis than was required under the applicable accounting standard. ASC at 360; Tr. 1546, 1552. In addition, neither ExxonMobil nor PricewaterhouseCoopers believed it was "appropriate" to include GHG costs on the Mobile Bay plant in 2015. Tr. 1569. And, PricewaterhouseCoopers determined that it was not necessary to expense GHG costs in 2015. Tr. 1569, 1571; DX672 Memorandum re GHG Assumptions in ExxonMobil's 2016 asset recoverability assessments.

Significantly, the Mobile Bay facility was not impaired in 2016 when ExxonMobil *did include* GHG costs in its impairment analysis. Tr. 1556, 1567, 1171. And, equally significant, in 2017 when ExxonMobil determined that Mobile Bay was impaired, PriceWaterhouseCoopers wrote: "GHG is not considered a significant assumption. The inclusion of this assumption reflects conservatism on the part of management . . ." DX673 PwC Memorandum: 2017 Corporate Plan Dataguide and Controls over Key Assumptions.

In all events, accepting as true all of the Office of the Attorney General's vigorously disputed calculations of impairment of the Mobile Bay facility in 2015, the purported impairment would have been less than one percent of ExxonMobil's market capitalization and therefore not material. Tr. 1345:16-1346:8.

V. Conclusion

In sum, the Office of the Attorney General failed to prove, by a preponderance of the evidence, that ExxonMobil made any material misstatements or omissions about its practices and procedures that misled any reasonable investor. The Office of the Attorney General produced no testimony either from any investor who claimed to have been misled by any disclosure, even though the Office of the Attorney General had previously represented it would call such individuals as trial witnesses. ExxonMobil disclosed its use of both the proxy cost and the GHG metrics no later than 2014. Perhaps, the 2014 paragraph in *Managing the Risks* which indicated that ExxonMobil applied a GHG cost "where appropriate" and which was the subject of questioning of virtually every witness in the case could have been written in bold type, but the sentence was consistent with other ExxonMobil disclosures and ExxonMobil's business practices. The publication of *Managing the Risks* had no market impact and was, as far as the evidence adduced at trial reflected, essentially ignored by the investment community.

The testimony of all the present and former ExxonMobil employees who were called either as adverse witnesses by the Office of the Attorney General or as defense witnesses by ExxonMobil was uniformly favorable to ExxonMobil, and the Court credited the testimony of each of those witnesses. The testimony of the expert witnesses called by the Office of the Attorney General was eviscerated on cross-examination and by ExxonMobil's expert witnesses. Confronted with the disclosures in ExxonMobil's Corporate Citizenship Reports, Form 10-K's, and ExxonMobil's annually published *Outlook*, the Office of the Attorney General failed to prove by a preponderance of the evidence that any alleged misrepresentation in *Managing the Risks* and *Energy and Climate* (or any other disclosure by ExxonMobil) was false and material in the context of the total mix of information available to the public.

For all of these reasons, the claims asserted by the Office of the Attorney General under the Martin Act and Executive Law § 63(12) are denied, and the action is dismissed with prejudice.

Dated: December 10, 2019

Barry R. Ostrager, JSC
BARRY R. OSTRAGER
JSC