Aligning around International Energy Agency World Energy Outlook Scenarios: disclosures by International Oil Companies

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October 8, 2020

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Table of Contents

Acknowledgements

The author wishes to thank Angela St. Aubin for conducting research for this paper and Ryan Perks for editing it.

Any errors or omissions are solely the responsibility of the author.

Analytica Advisors

Analytica Advisors is a boutique consulting firm engaged in building global capital markets for sustainability leaders among both long-term investors and companies. It focuses on financial and technical innovation for its clients the world over. We deliver insights into how markets are emerging to address the opportunities and risks posed by the net-zero-carbon economy. Our mission is to build, in a sustainable and ethical manner, a research and advisory firm that enables economic growth in a sustainable way.

About the Author

Céline Bak is president and founder of Analytica Advisors. She is an expert on climate change, finance, infrastructure and low-carbon innovation with 30 years of experience in more than 25 countries. Her work spans management consulting to Fortune 500 companies, research in global energy, investment and climate scenarios as well as advising national governments.

She has been honoured by French President Emmanuel Macron as Chevalier of the National Order of Merit for her work to mobilize the private sector in the run-up to the Paris Agreement. She is an Associated Partner of Kearney specializing in Sustainable Infrastructure.

As the founder and President of Analytica Advisors, she recognized that innovation-based industries to protect the environment were poorly represented through existing primary economic research. In order to change this, she authored and published seven annual evidence-based national reports that since 2007 have catalyzed the growth of Canada's emerging energy and water technology industry. Her research changed the investment and policy landscape, and has formed the basis of tens of billions of dollars in public and private investment.

This is the second in a series of reports on energy scenario disclosures by IOCs and other oil & gas companies. The first is entitled *Energy scenario disclosures in Canadian and global oil & gas capital markets* and is freely available at analytica-advisors.com.

Takeaway:

In their 2019 mainstream financial reports, seven out of 11 International Oil Companies (IOCs) referred to at least one scenario published by the International Energy Agency (IEA) in the World Energy Outlook (WEO). This was up from six out of 11 who did so in their 2018 mainstream financial reports. In 2019 mainstream reports, moreover, an additional IOC, Imperial Oil, referred to the IEA's Sustainable Development Scenario (SDS); this is carbon constrained and, as the IEA states, consistent with a 50% chance of limiting warming to 1.8°C. The addition of Imperial Oil brought the number of IOCs referring to an IEA carbon-constrained scenario up from 5 to 6 during the 2018–19 period. BP is the only IOC that referred only to the SDS among the IEA scenarios.

With the exception of Chevron and Royal Dutch Shell, who disclosed a reduction in Proved Reserves (1P) but did not refer to an IEA carbon-constrained scenario in their 2019 mainstream financial reports, IOC disclosures of carbon-constrained scenarios in 2019 mainstream financial reports were associated with disclosed reductions in 1P reserves.

In 2019 mainstream financial reports, however, disclosure of a carbon-constrained scenario was not always associated with capital allocations aligned with reduced 1P reserves. Both Total and Eni disclosed IEA carbon-constrained scenarios *and* growth in 1P reserves.

Overall, there was a net 1.5% decline in proven reserves disclosed by 11 IOCs. Repsol reported the largest reduction in 1P reserves followed by Imperial Oil, Chevron, Royal Dutch Shell, BP and Equinor. Exxon's 1P reserves did not change over the period. Total saw the largest growth in reserves, followed by Eni, Suncor Energy and ConocoPhillips.

Between 2018 and 2019 there was an uptick in references to energy scenarios published by the IEA in the mainstream financial disclosures of IOCs.

Most investment-grade IOCs disclose IEA scenarios and/or their own scenarios indicating parallels to IEA scenarios in their 2019 mainstream financial reports.

These disclosures refer to projected demand for oil & gas and to the capital expenditures required to replace reserves to meet demand for fossil fuels under different scenarios.

In 2019, Exxon included a reference to the IEA's Stated Policies Scenario (STEPs) in its mainstream financial reports, whereas it had previously referred to the IEA STEPs only outside of its mainstream reports. This raised the number of IOCs referring to IEA scenarios in mainstream reports from 6 in 2018 to 7 in 2019.

Both Royal Dutch Shell's and Chevron's references to WEO scenarios were outside of mainstream financial reports in 2018, and no mentions were made of WEO scenarios in their 2019 mainstream financial reports.

ConocoPhillips and Suncor Energy were the remaining IOCs that did not refer to IEA scenarios in 2019 mainstream financial reports.

There was also an increase in references to *carbon-constrained IEA energy scenarios* in the mainstream financial disclosures of IOCs.

In 2019, Imperial Oil made its first reference to a carbon-constrained SDS in its mainstream financial reports.

This is in contrast to Exxon's disclosure: the company holds 69.6% of Imperial Oil's shares and referred only to the STEPs scenario (which is not carbon constrained) in their mainstream financial reports in 2019, after referring to it only outside of mainstream financial reports in 2018.

Total and BP made no changes to their disclosures, with Total still mentioning both the SDS and STEPs scenarios, and BP mentioning only the SDS.

Shell once again referenced the International Panel on Climate Change's (IPCC) Special Report on 1.5°C in its mainstream financial disclosures, but did not disclose either IEA scenario in its mainstream financial reports.

Eni again mentioned the SDS in 2019 but added a reference to the STEPs, which it had not referred to in its 2018 mainstream report.

Equinor continued its inclusion of both the SDS and the STEPs in its mainstream financial reporting, adding a reference to the IPCC Special Report on 1.5°C.

Repsol continued their discussion of the SDS and also made reference to the STEPs in 2019, which, like Eni, had not been disclosed in its 2018 mainstream report.

There was no change in references to *carbon-constrained proprietary energy scenarios* in the mainstream financial disclosures of IOCs.

Shell and Equinor each published separate reports referring to proprietary scenarios, including carbon-constrained scenarios. Both companies refer to absolute carbon constraints.

BP, for its part, in addition to referring to IEA scenarios, continued to publish three scenarios in 2019, including the Rapid Transition scenario, which it states is aligned with the IEA's SDS.

There was a decrease in the number of IOCs making no reference to IEA scenarios in their mainstream financial reports

With Imperial Oil joining the companies referring to IEA scenarios, only ConocoPhillips and Suncor Energy continue to make no reference to IEA scenarios in mainstream or other disclosures to shareholders.

Notably, ConocoPhilips is the only investment-grade company that includes no reference to global energy scenarios in mainstream disclosures to shareholders.

ConocoPhilips did, however, include a reference to the Paris Agreement in its management discussion, albeit without reference to the degrees-of-warming limits described in the agreement.

Suncor Energy referred only to carbon-intensity-reduction goals in its 2019 mainstream reports.

Figure 1: 2018–19 Energy Scenario Disclosures by IOCs in mainstream financial reports

Company	S&P Bond Rating		Sustainable Development Scenario		Stated Policies Scenario / New Policies Scenario		Special Report on 1.5°C	
	2018	*2019*	*2018*	*2019*	*2018*	*2019*	*2018*	*2019*
Exxon	AA+	**AA**	no	no	outside of mainstream reports	yes	no	no
Imperial Oil	AA+	**AA**	no	yes	yes	yes	no	no
Royal Dutch Shell*	AA-	AA-	outside of mainstream reports	no	outside of mainstream reports	no	yes	yes
Equinor*	AA-	AA-	yes	yes	yes	yes	no	yes
Total*	A+	A+	yes	yes	yes	yes	no	no
BP	A-	A-	yes	yes	no	no	no	no
Eni*	A-	A-	yes	yes	no	yes	yes	no
Repsol*	BBB	BBB	yes	yes	no	yes	no	no
Chevron	AA	AA	outside of mainstream reports	no	outside of mainstream reports	no	no	no
ConocoPhillips	A	A	no	no	no	no	no	no
Suncor Energy*	A-	**BBB+**	no	no	no	no	no	no

*TCFD Signatory
S&P Bond Rating: local currency, long term
Mainstream Reports includes Annual Reports and Annual Financial Reports only. Sustainability Reports, for instance, are not included.

Companies are disclosing changes in proven reserves

During this 2018–19 reporting period, among the 11 companies described in this report, there was a total decline of 1.5% in reported 1P reserves in mainstream financial reports.

Companies reporting the greatest reduction in 1P reserves were Repsol, Imperial Oil, Chevron, Royal Dutch Shell, BP and Equinor.

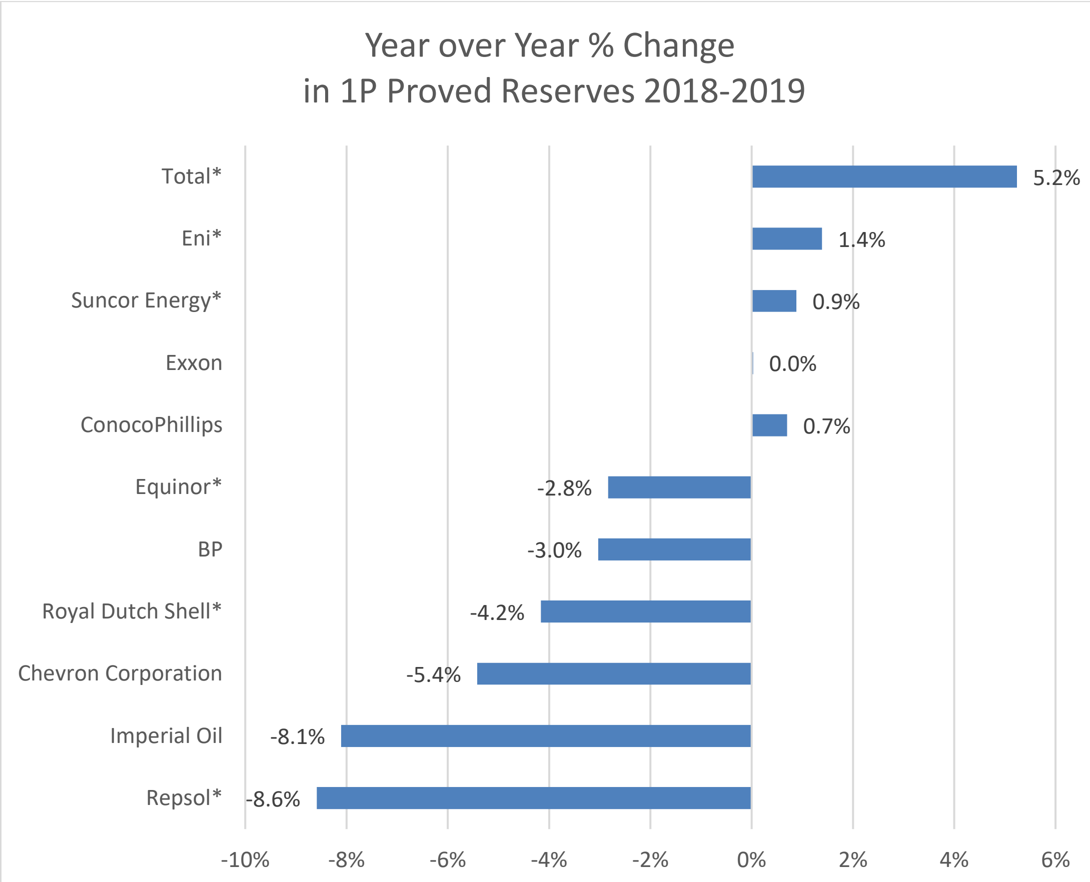
Four out of the six IOCs that did disclose a carbon-constrained scenario in mainstream financial reports also reported a reduction in 1P reserves; these were Equinor, BP, Imperial Oil and Repsol. The remaining two IOCs disclosing carbon-constrained scenarios, Total and Eni, reported growing 1P reserves.

Although Chevron did not disclose a reference to a carbon-constrained scenario, its reduced 1P reserves suggest that its allocation of capital reflects a carbon-constrained energy scenario.

Among companies that disclosed growing 1P reserves, Total reported an increase of more than 5%. Other IOCs that reported growth in 1P reserves were Eni, Suncor Energy and ConocoPhillips. Disclosures of Exxon’s 1P reserves did not change materially.

With the exception of Chevron and Royal Dutch Shell, IOC disclosures of carbon-constrained scenarios in 2019 mainstream financial reports were associated with a decline in 1P reserves. In 2019 mainstream financial reports, however, disclosure of a carbon-constrained scenario was not a guarantee of capital allocation aligned with declining reserves. Total and Eni disclosed both IEA carbon-constrained scenarios and growth in 1P reserves.

Figure 2: 2018–19 Proved Reserves (1P) Disclosures by IOCs in mainstream financial reports



*TCFD Signatory

Conclusion

With Exxon referring to the IEA Stated Policy Scenario (STEPs) in its mainstream financial reports, the number of IOCs referring to IEA energy scenarios in mainstream financial reports grew by one company during the 2018–19 period, from six to seven of eleven IOCs. With the addition of Imperial Oil, the number of companies referring to carbon-constrained IEA scenarios within mainstream financial reports also grew from five to six.

IOCs are growing their references to IEA scenarios and their references to carbon-constrained scenarios within their mainstream financial reports.

During this 2018–19 reporting period, for the 11 companies described in this report, there was a total decline of 1.5% in reported Proved Reserves (1P) in mainstream financial reports. Also, more IOCs reduced 1P reserves than grew them. Among those that reduced reserves, only Royal Dutch Shell and Chevron Corporation did not refer to IEA WEO carbon-constrained scenarios in mainstream financial reports.