

2024 Energy Matters Information Session

Alberta Securities Commission

February 1, 2024



Agenda

1	Introduction
2	Disclosure identified for improvement
3	Insights into oil and gas reserves estimates
4	Environmental sustainability disclosure
5	Energy and the Alberta capital market
6	Questions

Introduction

Alberta Securities Commission

- Administers Alberta’s securities laws
 - Entrusted to:
 - foster a fair and efficient capital market
 - protect investors
- Member of the Canadian Securities Administrators (**CSA**)
 - Improve, coordinate and harmonize regulation
- CSA’s lead oil and gas (**O&G**) regulator

Introduction

Energy Group

- “All things energy” focus:
 - O&G
 - exploration and production
 - midstream (including pipelines)
 - services
 - helium and hydrogen
 - lithium from brines
 - carbon capture, utilization and storage
 - environmental sustainability; greenhouse gas emissions
 - electrical generation (including renewables), transmission and storage
 - renewable hydrocarbons
 - energy-related environmental liabilities

Introduction

Energy Group

- Our goal is compliant disclosure, so we:
 - Conduct reviews
 - incorporate disclosure and technical evaluations
 - assess compliance with securities legislation
 - Develop and maintain
 - securities legislation
 - technical guidance
 - Communicate with market participants

Introduction

Regulatory framework: O&G

- National Instrument 51-101 *Standards of Disclosure For Oil and Gas Activities* (**NI 51-101**)
 - Applies to reporting issuers (**RI**s) engaged in O&G activities¹ (**O&GA**)
 - Addresses:
 - general standards
 - specific annual requirements
 - Technical standard: Canadian Oil and Gas Evaluation Handbook (**COGE Handbook**)

¹Secs.1.1 and 1.3 of NI 51-101

Introduction

Regulatory framework: O&G

- Related forms² for filing on SEDAR+³ include:
 - 51-101F1 *Statement of Reserves Data and Other Oil and Gas Information (F1)*
 - 51-101F2 *Report on [Reserves Data][,] [Contingent Resources Data] [and] [Prospective Resources Data] by Independent Qualified Reserves Evaluator or Auditor (F2)*
 - affirms COGE Handbook compliance
 - 51-101F3 *Report of Management and Directors on Oil and Gas Disclosure (F3)*
 - affirms content and filing of the F1 and F3 and filing of the F2

²Per sec. 2.1 of NI 51-101, to be filed no later than the date required to file audited financial statements for the most recent financial year

³System for Electronic Analysis and Retrieval (www.sedarplus.ca)

Introduction

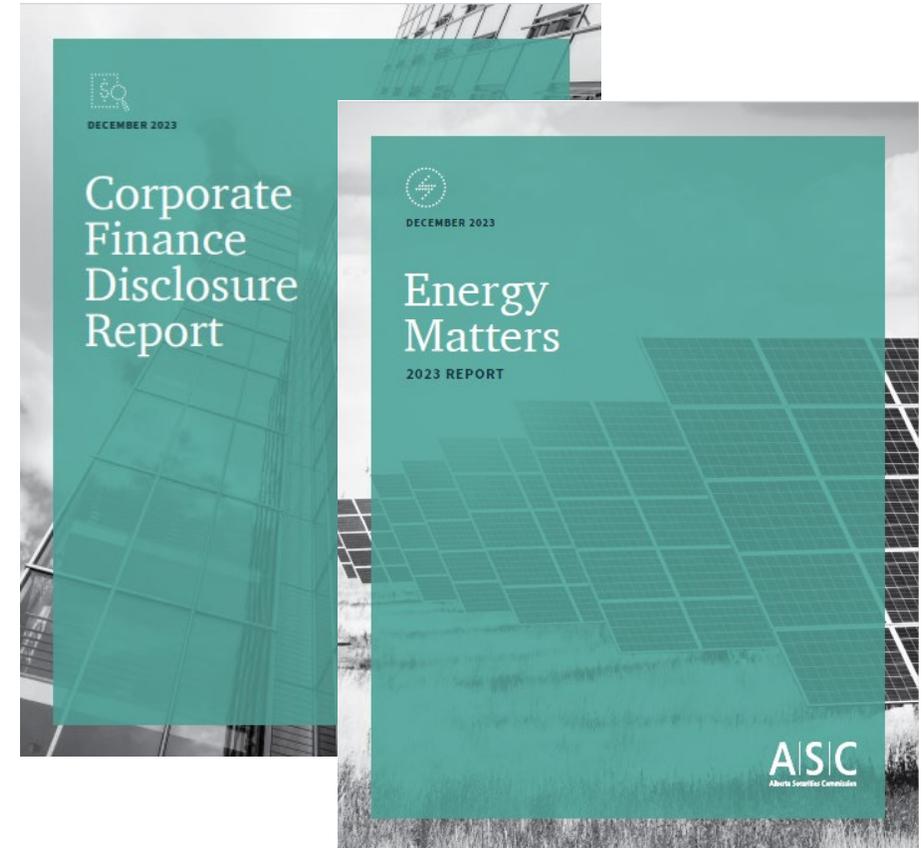
Regulatory framework: O&G

- Companion Policy 51-101CP *Standards of Disclosure For Oil and Gas Activities*
- CSA staff notices (**SN**), including:
 - SN 51-324 *Revised Glossary to NI 51-101 (CSA SN 51-324)*
 - SN 51-327 *Revised Guidance on Oil and Gas Disclosure*
- COGE Handbook
 - Society of Petroleum Evaluation Engineers (Calgary Chapter)

Introduction

Regulatory framework: Other

- Includes:
 - *Securities Act* (Alberta)
 - Energy Matters Report⁴
 - Corporate Finance Disclosure Report⁴
 - Financial Reporting Bulletins⁵
 - Office of the Chief Accountant



⁴2023 editions published in December, available at www.asc.ca

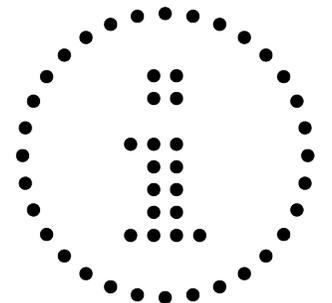
⁵Available at www.asc.ca

Disclosure identified for improvement

Disclosure identified for improvement

Introduction

- Through reviews, we assess if disclosure:
 - Is misleading, including by omission;
 - Focuses on material information; or
 - Otherwise complies with all disclosure requirements.



Disclosure identified for improvement

Introduction

- Reviews incorporate disclosure and certain support material
 - Prioritize RIs for which the ASC is the principal regulator (**PR**)
 - Assess disclosure where other jurisdictions are the PR
 - proactively assist with O&G matters
 - assist as requested with other energy-related matters

Disclosure identified for improvement

Introduction

- We'll cover energy-related disclosure from:
 - RIs engaged in O&GA, and
 - Those involved in other energy-related matters.

Disclosure identified for improvement

O&G: Introduction

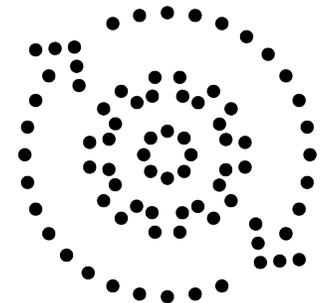
- Topics involve:
 - Royalty interests;
 - Costs to disclose per item 6.6 of the statement of the reserves data and other information specified in the F1; and
 - Independence of qualified reserves evaluators (**QREs**) and qualified reserves auditors (**QRAs**).

Disclosure identified for improvement

O&G: Royalty interests

Concern: NI 51-101 annual filings missing royalty interests.

- Some RIs:
 - aren't aware that O&GA includes royalty interests; or
 - think they aren't material, even when it's all they have.
- Mostly involves small RIs.
- Prospectus filings have been affected.



Disclosure identified for improvement

O&G: Royalty interests

- RIs with royalty interests are engaged in O&GA.
 - O&GA includes acquisition of property rights or a property to explore for or remove product types.⁶
 - “Property” includes royalty interests.⁷
 - So, O&GA includes ownership of royalty interests.

⁶Sec. 1.1 of NI 51-101

⁷CSA SN 51-324

Disclosure identified for improvement

O&G: Royalty interests

- Royalty interests include:
 - gross overriding royalties
 - lessor royalties
 - net profit interests
 - production payments

Disclosure identified for improvement

O&G: Royalty interests

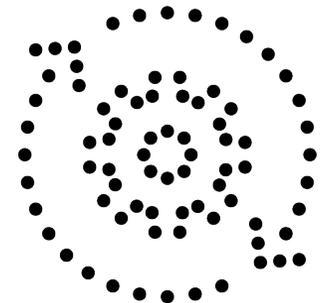
- Sec. 2.1 of NI 51-101 addresses annual filings:
 - Sec. 2.1.1 requires filing of a statement of the reserves data and other information specified in the F1.
 - Item 2.1.1 of the F1 requires specified reserves disclosure.
 - Per instruction 1, disclose all reserves in which an RI has a direct or indirect ownership, working or royalty interest.

Disclosure identified for improvement

O&G: Costs incurred

Concern: Incorrect and absent disclosure of property acquisition costs, exploration costs and development costs per item 6.6 of the F1

- Incorrect disclosure involves:
 - Information per item 6.6 not matching other, similar disclosure; or
 - Wrongly determined property acquisition costs.



Disclosure identified for improvement

O&G: Costs incurred

- Absent disclosure involves:
 - Disclosure of acquisition, exploration or development activities but no associated costs per item 6.6; or
 - Mistaken belief that property acquisition costs exclude the value of securities used to fund a property acquisition.

Disclosure identified for improvement

O&G: Costs incurred

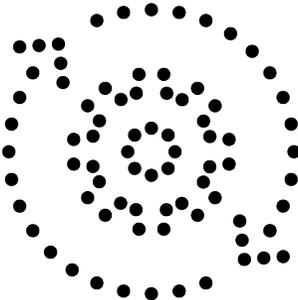
- Item 6.6 of the F1 requires the following costs to be disclosed:
 - property acquisition costs (separately for proved and unproved properties)
 - deduction of property disposition costs will lead to incorrect disclosure
 - exploration costs
 - development costs
- Alternatively, reference financial statements and related notes.

Disclosure identified for improvement

O&G: Independence of QREs & QRAs

Concern: Annual filing requirements unmet due to the filing of an F2 not executed by a QRE or QRA independent of the RI

- Directors must ensure:
 - annual filing requirements per section 2.1 of NI 51-101 are met; and
 - independence of those appointed to perform “independent” duties.



Disclosure identified for improvement

O&G: Independence of QREs & QRAs

- “Independent” in respect of the relationship between an RI and a person or company, means:

A relationship between the RI and that person or company in which there is no circumstance that could, in the opinion of a reasonable person aware of all relevant facts, interfere with that person’s or company’s exercise of judgment regarding the preparation of information used by the RI.⁸

⁸Sec.1.1 of NI 51-101

Disclosure identified for improvement

O&G: Independence of QREs & QRAs

- Part 3 of NI 51-101 addresses RI and director responsibilities:
 - Per sec. 3.2, an RI is to:
 - Appoint one or more independent QREs or QRAs (**IQREAs**); and
 - Concerning the statement of the reserves data and other information specified in the F1, direct the IQREAs to report to the board on the:
 - reserves data;
 - contingent resources data; and
 - prospective resources data.

Disclosure identified for improvement

O&G: Independence of QREs & QRAs

- Per sec. 3.4, the board must:
 - Review each IQREA appointment; and
 - Meet with management and each IQREA before filing the statement of the reserves data and other information, and the report prepared in accordance with the F2, to:
 - Determine if the IQREA(s) can report without reservation on the:
 - reserves data;
 - contingent resources data; or
 - prospective resources data.

Disclosure identified for improvement

O&G: Independence of QREs & QRAs

- Review these and the report prepared in accordance with the F2.
- Review and approve the:
 - Content and filing of the statement of the reserves data and other information specified in the F1;
 - Filing of the report prepared in accordance with the F2; and
 - Content and filing of the report prepared in accordance with the F3.

Disclosure identified for improvement

O&G: Independence of QREs & QRAs

- When directors approve the filing of a report prepared in accordance with the F2, they acknowledge responsibility for the:
 - Independence of the QREs & QRAs who've executed the report; and
 - Disclosure of the reserves data and other oil and gas information.

Disclosure identified for improvement

O&G: Independence of QREs & QRAs

- Acceptance of these responsibilities occurs with the filing of an executed report prepared in accordance with the F3.
- IQREAs mustn't be appointed if they're not independent.
 - Their responsibilities are accepted when they execute the report prepared in accordance with the F2.

Disclosure identified for improvement

O&G: Independence of QREs & QRAs

- Per the COGE Handbook, independent is:
 The state of being or acting free of the influence of other parties. Independent Reserves Evaluators and Auditors must not be influenced by any source that could prejudice their work.

Disclosure identified for improvement

O&G: Independence of QREs & QRAs

- QREs, QRAs, or any firm of consultants who are shareholders, proprietors, partners, or employees, should be independent from any company whose assets are evaluated.⁹
 - Firms include organizations that retain people to perform QRE & QRA duties per NI 51-101.

⁹Sec. 5.5 of the COGE Handbook

Disclosure identified for improvement

O&G: Independence of QREs & QRAs

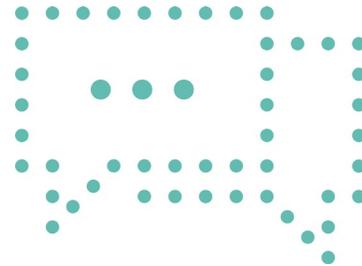
- A QRE or QRA is considered independent if they don't have, nor expect to receive, any direct or indirect interest in the properties or company securities at least 6 months before, during and after engagement.¹⁰

¹⁰Sec.5.5.6.2 of the COGE Handbook

Disclosure identified for improvement

O&G: Questions

Please post questions in the Q&A.



Disclosure identified for improvement

Other energy-related: Introduction

- Non-NI 51-101 energy-related disclosure is increasing.
- Associated subject matter in recent years includes:
 - 2022 Energy Matters Report:
 - helium
 - renewable hydrocarbons
 - geothermal

Disclosure identified for improvement

Other energy-related: Introduction

- 2021 Energy Matters Report:
 - helium
 - hydrogen
 - lithium from oilfield brines
 - carbon capture, utilization and storage

Disclosure identified for improvement

Other energy-related: Introduction

- 2023 report covers renewable electricity generation via:
 - wind
 - solar
 - hydro
 - biomass¹¹
- We'll address disclosure expectations for these, their facilities, infrastructure and technologies.

¹¹Electricity from biomass involves combusting organic material which can also be used to manufacture renewable hydrocarbons

Disclosure identified for improvement

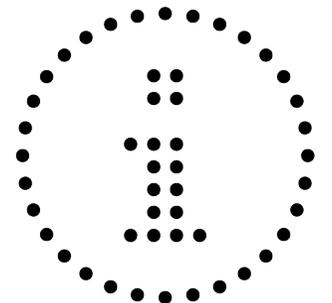
Other energy-related: Renewable electrical generation

- Rationale:
 - Growing interest.
 - Variability in disclosure quality.
 - Generally, smaller RIs should focus on more informative disclosure; individual projects will likely be more material for them.
 - Determining what specifically to disclose can be difficult.
 - NI 51-101 addresses principles and requirements for disclosure of O&GA.
 - Other energy-related topics don't have a technical instrument.

Disclosure identified for improvement

Other energy-related: Renewable electrical generation

- Key points:
 - General principles relating to balanced, complete and accurate disclosure focused on materiality, apply.
 - We assume prominently featured disclosure is material.
 - Forward-looking information should have a reasonable basis.
 - Disclose material risks and assumptions.
 - Define and explain technical terminology.



Disclosure identified for improvement

Other energy-related: Renewable electrical generation

- Project details to consider disclosing include:
 - Location
 - Size:
 - nameplate or installed capacity, if proposed
 - output for existing projects
 - number of facilities, arrays, etc.
 - if stand-alone or part of a larger project

Disclosure identified for improvement

Other energy-related: Renewable electrical generation

- Economic interest:
 - Net, gross and interest type:
 - working interest, plus whether operating or non-operating
 - royalty interest
 - other, including contractual agreements

Disclosure identified for improvement

Other energy-related: Renewable electrical generation

- Economics and capital:
 - Economic status
 - Project value or economic impact, along with the:
 - basis for the value or economic impact determination
 - methodology
 - input data, including costs, fiscal criteria, burdens and financial incentives
 - input data and value determination sources
 - effective date
 - Undiscounted development cost
 - Capital source(s)

Disclosure identified for improvement

Other energy-related: Renewable electrical generation

- Status, timeline and approvals:
 - Project status
 - General timeline, including:
 - final investment decision
 - commissioning
 - full operation
 - Status of internal and external approvals

Disclosure identified for improvement

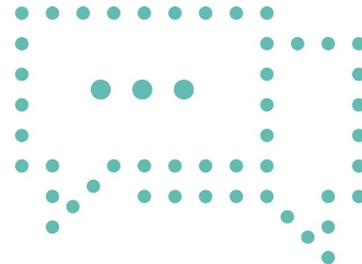
Other energy-related: Renewable electrical generation

- Market access:
 - Whether secured, including infrastructure
 - If not secured, when and how it'll be achieved
- Technology:
 - Specific technology to be used
 - Status, whether experimental, used previously, results, etc.
- Risks and uncertainties:
 - Those specific, significant and relevant to the project

Disclosure identified for improvement

Other energy-related: Questions

Please post questions in the Q&A.

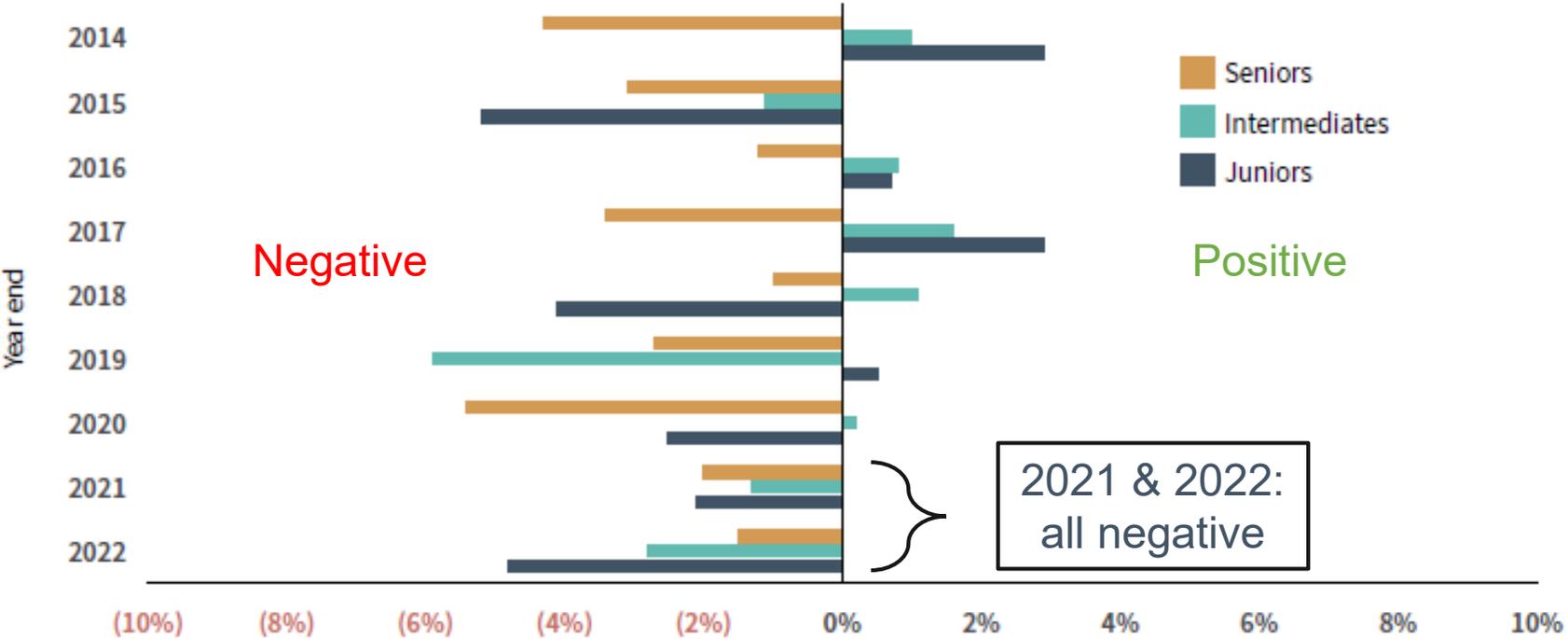


Insights into oil and gas reserves estimates

Insights into oil and gas reserves estimates

Technical revisions for gross 2P reserves for AB RIs

- Increasingly negative.

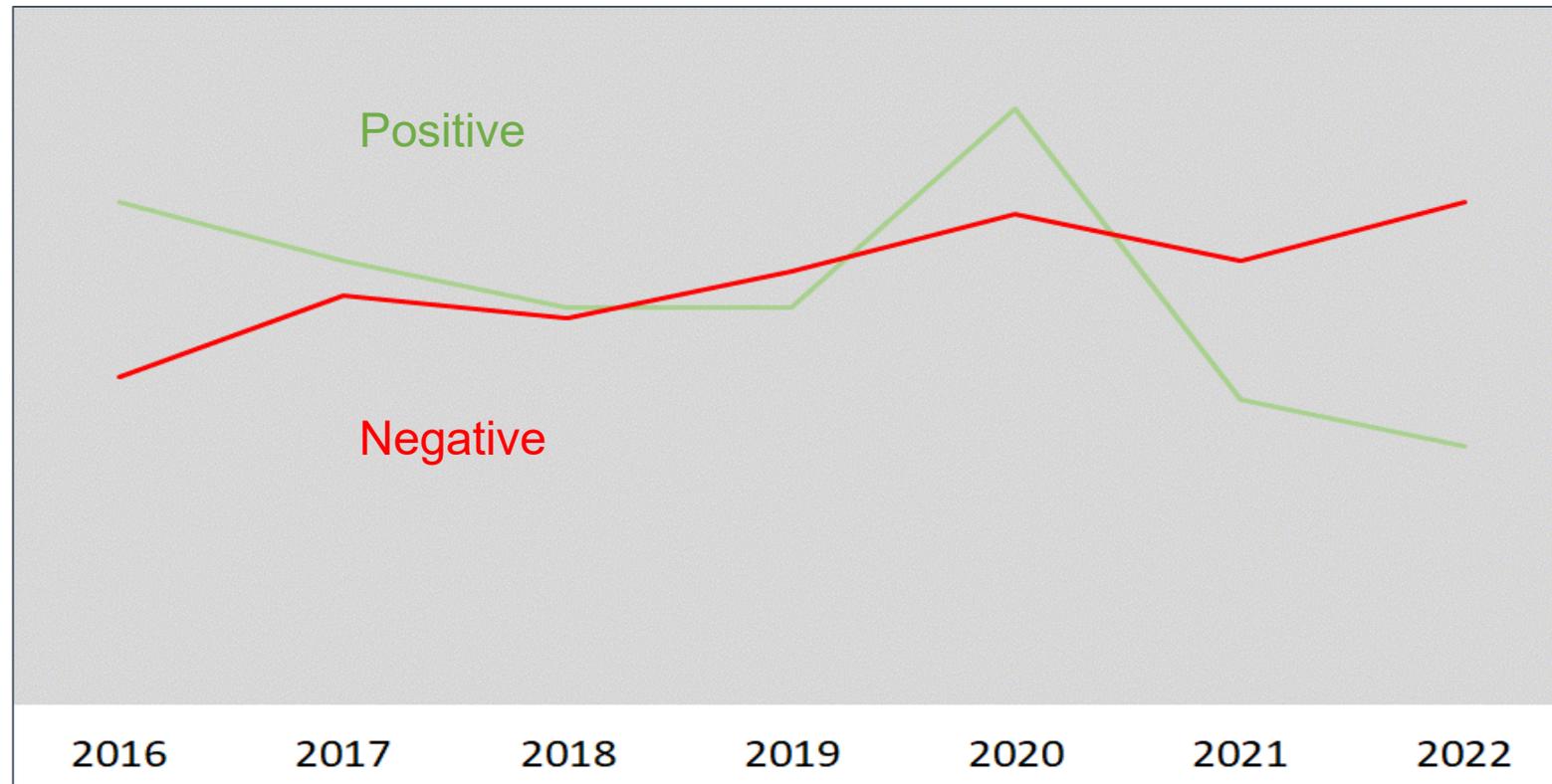


See Figure 5 on page 29 of the 2023 Energy Matters Report; see page 25 for grouping methodology.

Insights into oil and gas reserves estimates

Technical revisions for gross 2P reserves over time

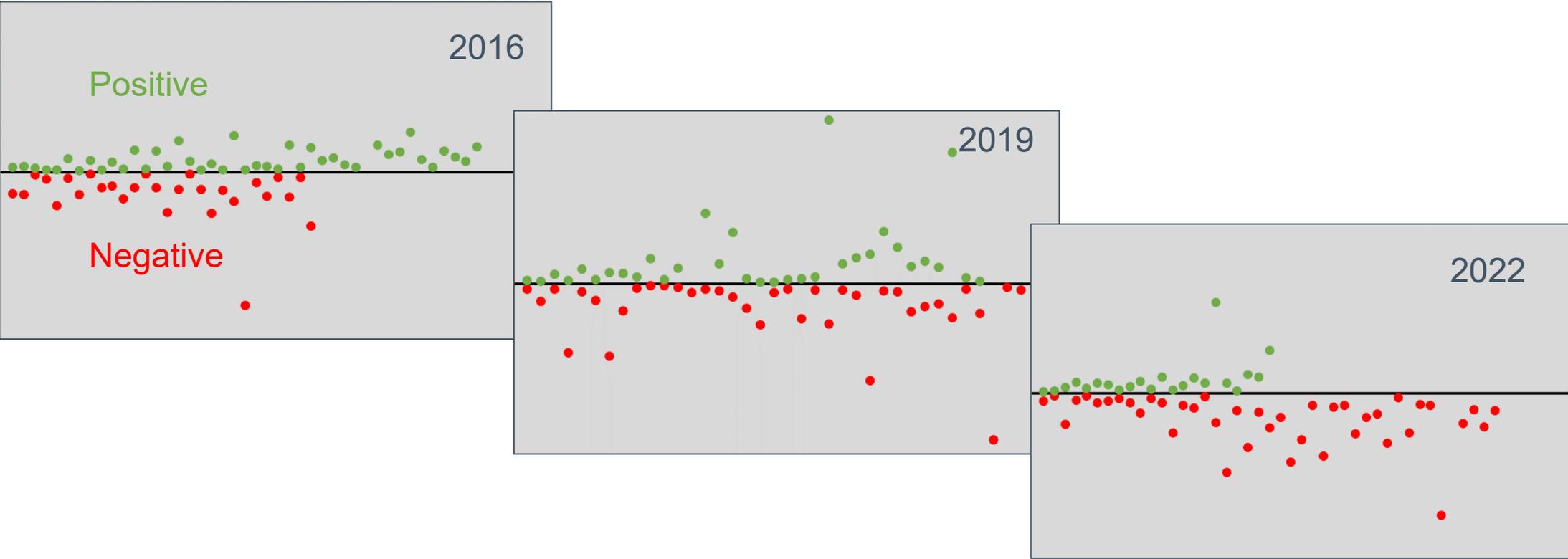
- Should balance over time; they aren't.



Insights into oil and gas reserves estimates

Technical revisions for gross 2P reserves over time

- Trend is concerning.



Insights into oil and gas reserves estimates

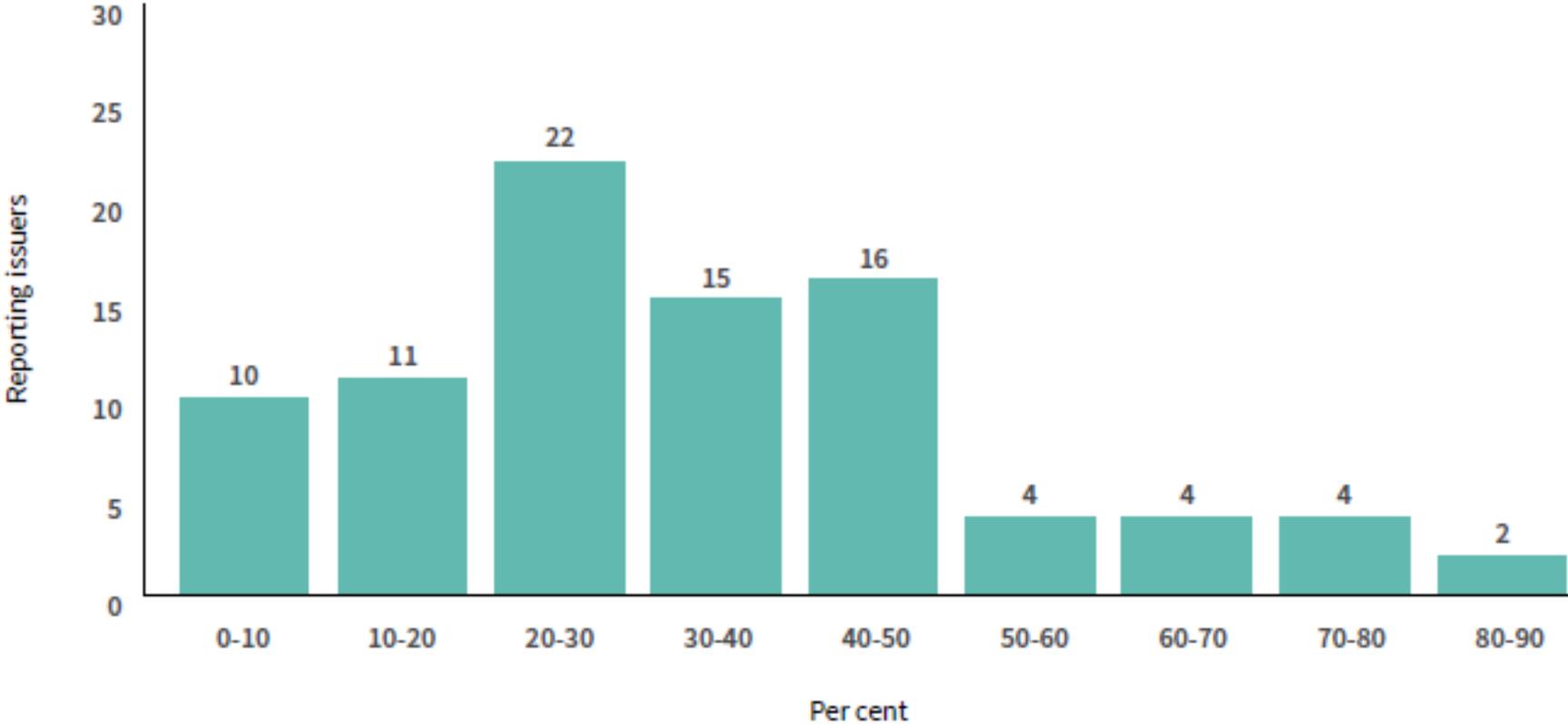
Average percentage allocation of gross 1P reserves for AB RIs

- Rising PDP reserves =

See Figure 6 on page 30 of the 2023 Energy Matters Report.

Insights into oil and gas reserves estimates

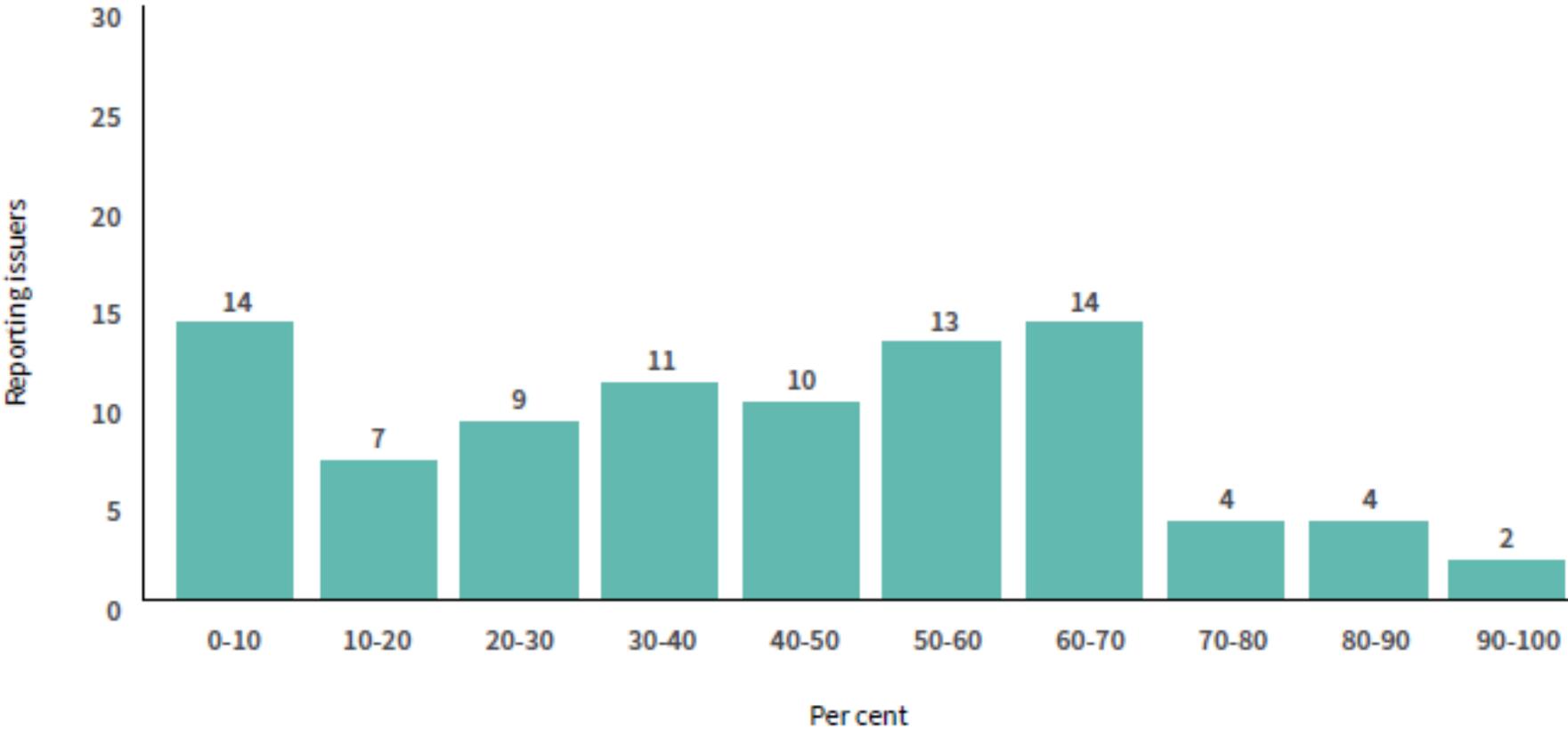
Percentage of gross PDP/2P reserves for AB RIs



See Figure 9 on page 32 of the 2023 Energy Matters Report.

Insights into oil and gas reserves estimates

Percentage of gross PUD/2P reserves for AB RIs

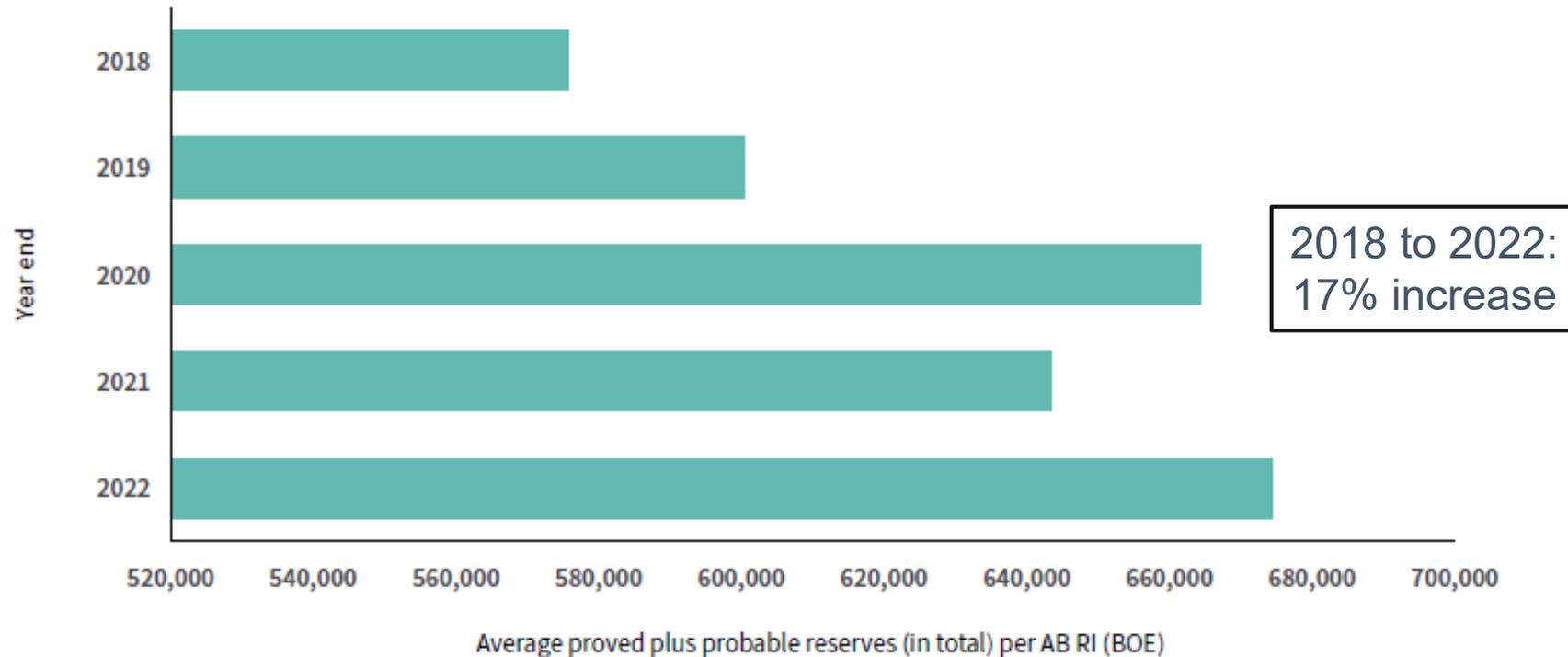


See Figure 10 on page 32 of the 2023 Energy Matters Report.

Insights into oil and gas reserves estimates

Average allocation of gross 2P reserves for AB RIs

- Has been increasing.

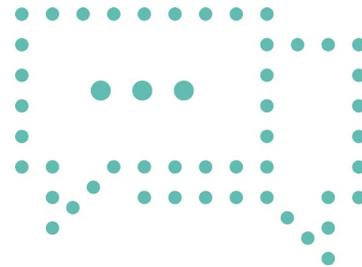


See Figure 12 on page 34 of the 2023 Energy Matters Report.

Insights into oil and gas reserves estimates

Questions

Please post questions in the Q&A.



Environmental sustainability disclosure

Environmental sustainability disclosure

Introduction

- There’s growing interest in disclosure concerning:
 - greenhouse gas (**GHG**) emissions
 - emissions reduction and climate risks
 - environmental, social and governance
 - sustainability
- The CSA doesn’t currently mandate GHG emissions disclosure.
- Since 2021, Energy Group has conducted “environmental sustainability monitoring reviews.”

Environmental sustainability disclosure

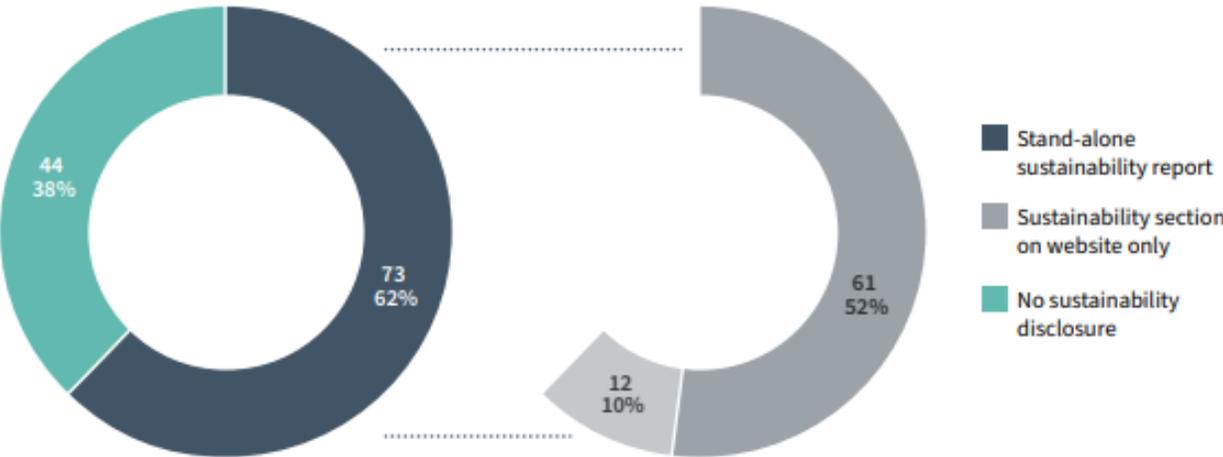
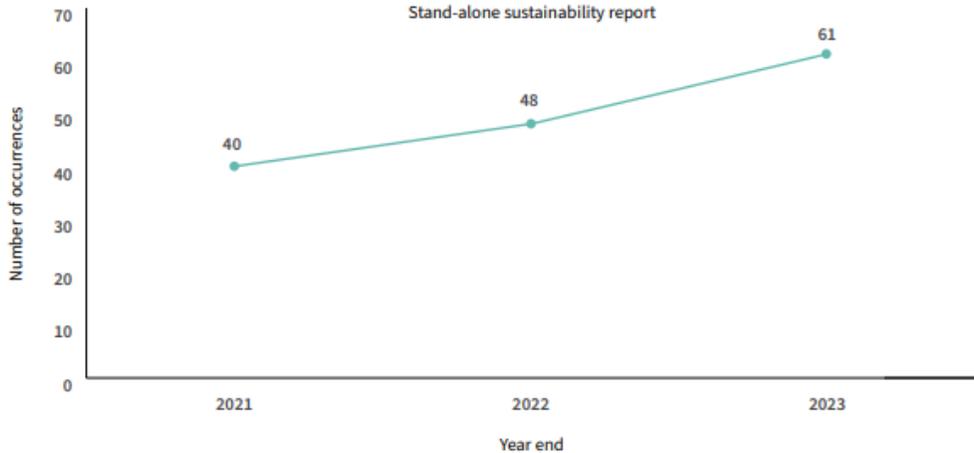
Introduction

- Reviews are conducted for energy-related AB RIs, including those engaged in O&GA; assess basic information, including:
 - Whether disclosure has occurred;
 - The disclosure method (report or website);
 - How the disclosure has been prepared (reporting frameworks); and
 - Whether specific environmental information has been disclosed.
- Reviews don't assess social or governance disclosure.
- Select findings follow.

Environmental sustainability disclosure

Disclosure occurrences and method: O&GA

- 62% of RIs have recent disclosure
 - report: 52%
 - website only: 10%

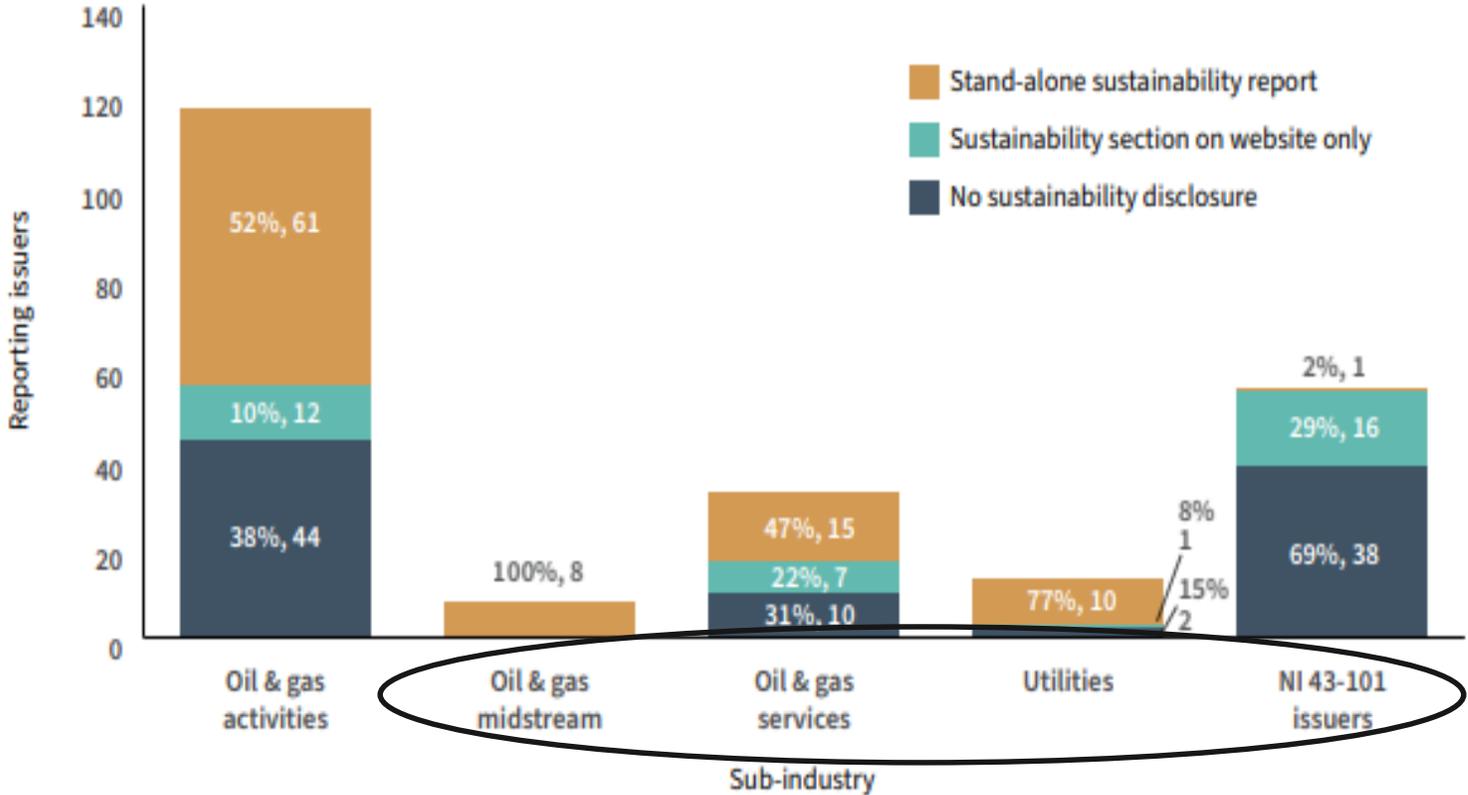


See figures 13a and 13b on page 39 of the 2023 Energy Matters Report.

Environmental sustainability disclosure

Disclosure occurrences and method: Other energy sub-industries

- RIs with recent disclosure:
 - O&G:
 - midstream: 100%
 - services: 47%
 - Utilities: 77%
 - NI 43-101: 1

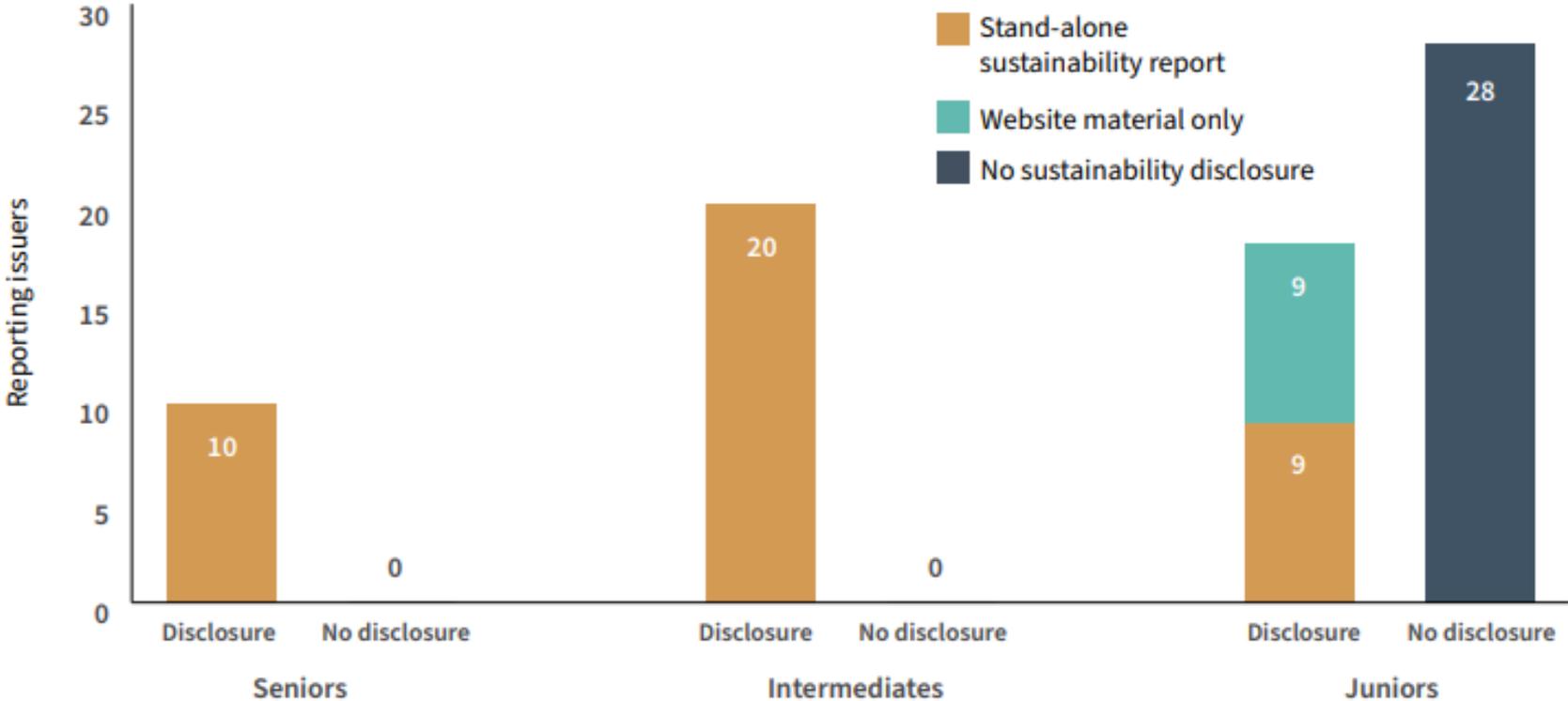


See Figure 13g on page 42 of the 2023 Energy Matters Report.

Environmental sustainability disclosure

Disclosure occurrences and method: O&GA

- All senior and intermediate RIs have a report.

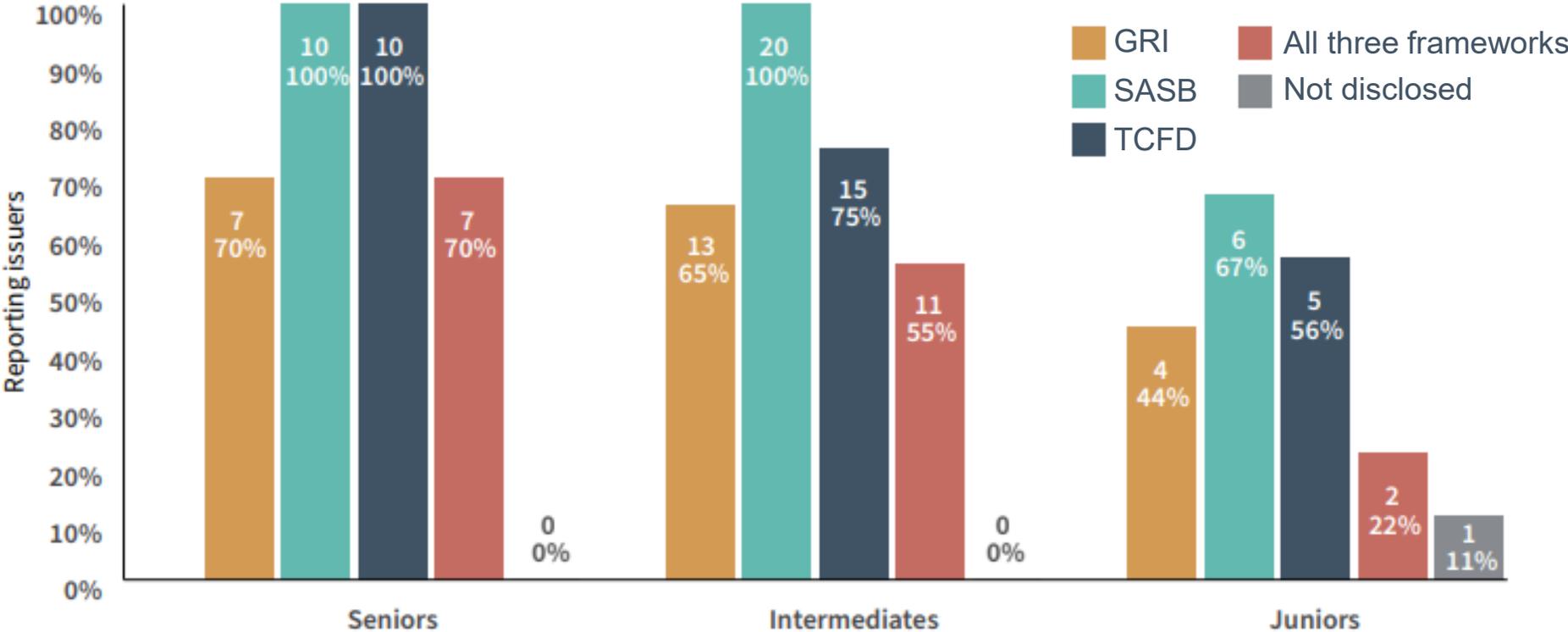


See Figure 14 on page 43 of the 2023 Energy Matters Report; see page 43 for grouping methodology.

Environmental sustainability disclosure

Use of reporting frameworks: O&GA

- Three main ones are used; many use all.

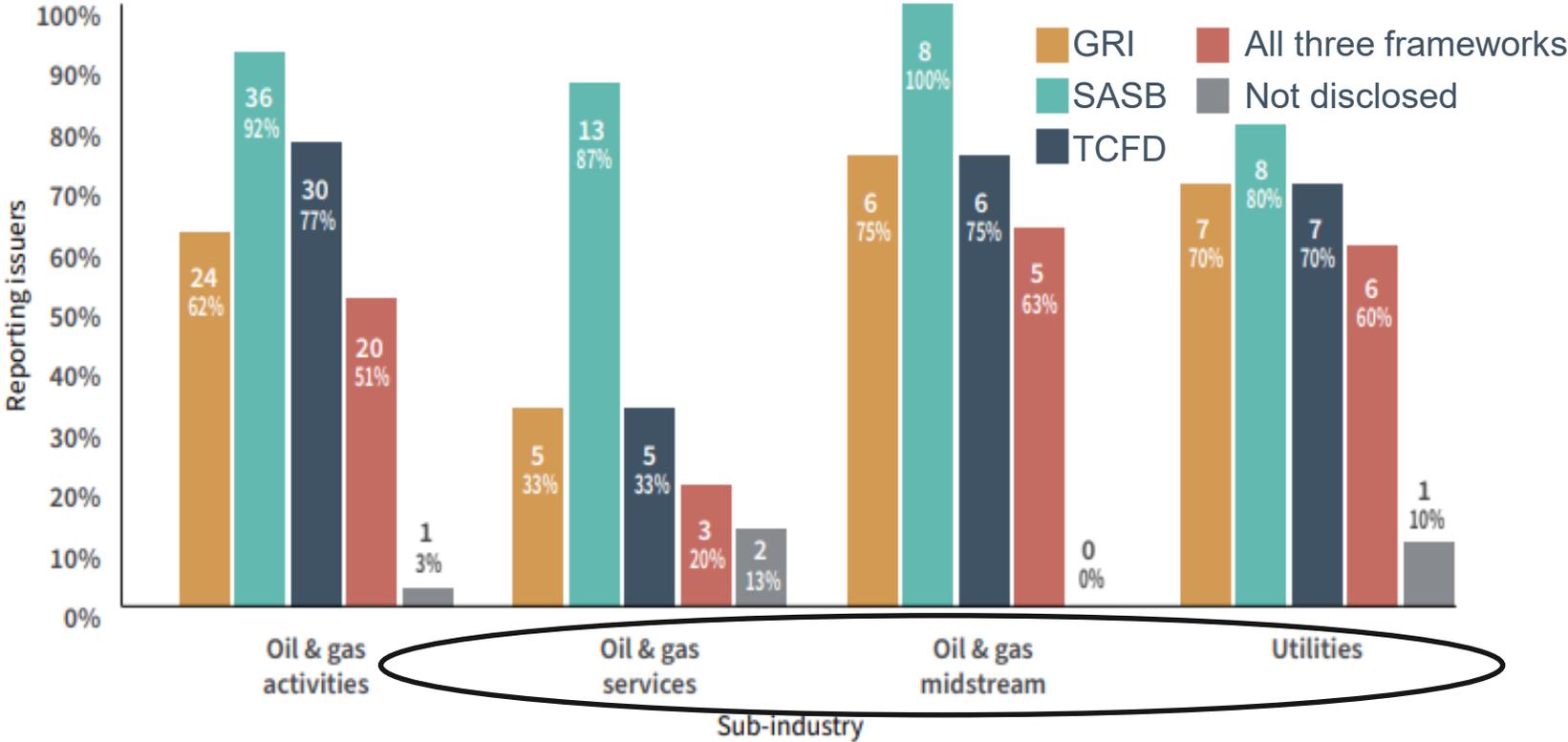


See Figure 15a on page 44 of the 2023 Energy Matters Report; see page 43 for grouping methodology.

Environmental sustainability disclosure

Use of reporting frameworks: Other energy sub-industries

- Three main ones are used, many use all.

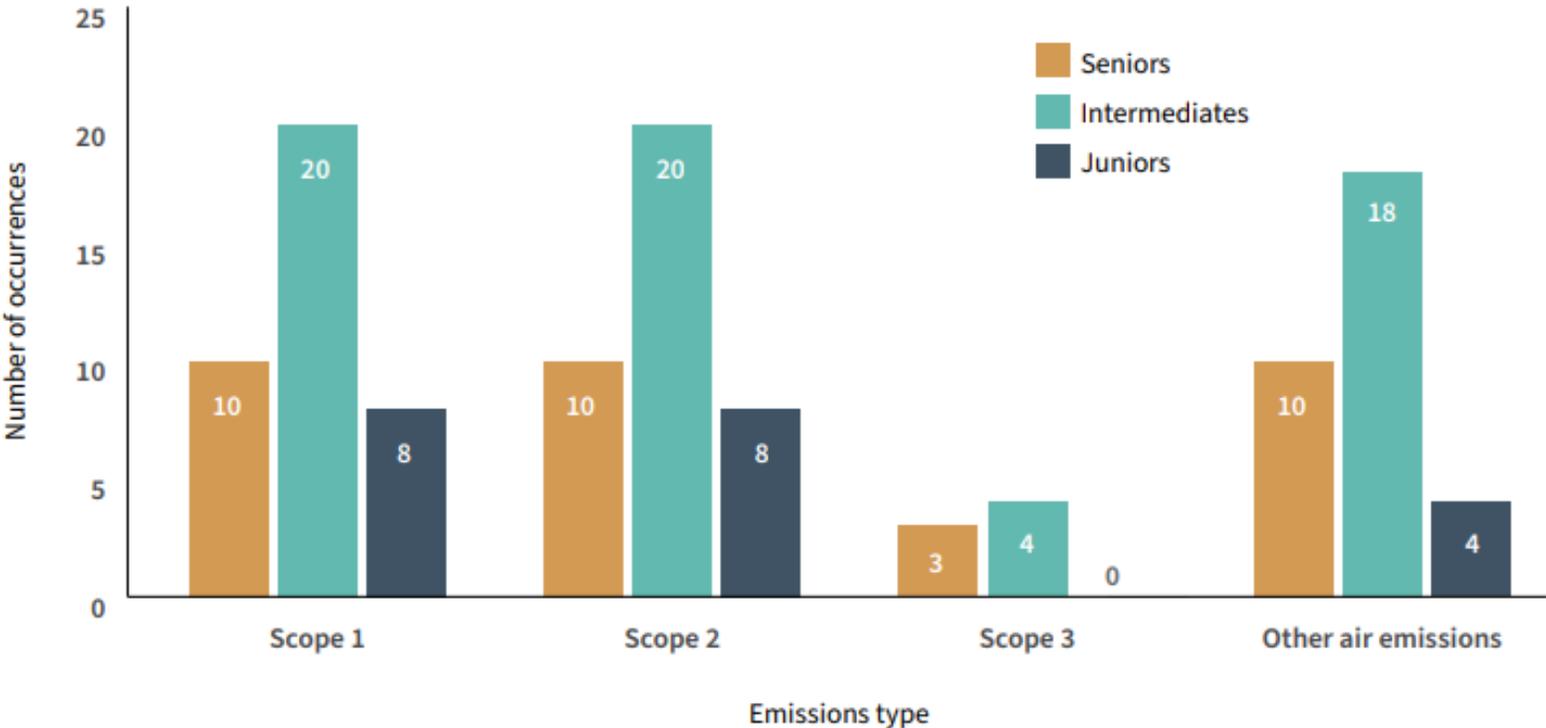


See Figure 15b on page 45 of the 2023 Energy Matters Report.

Environmental sustainability disclosure

Occurrences of emissions disclosure: O&GA

- All seniors and intermediates disclose scopes 1&2 GHG emissions.
 - Some disclose Scope 3; what's included differs.

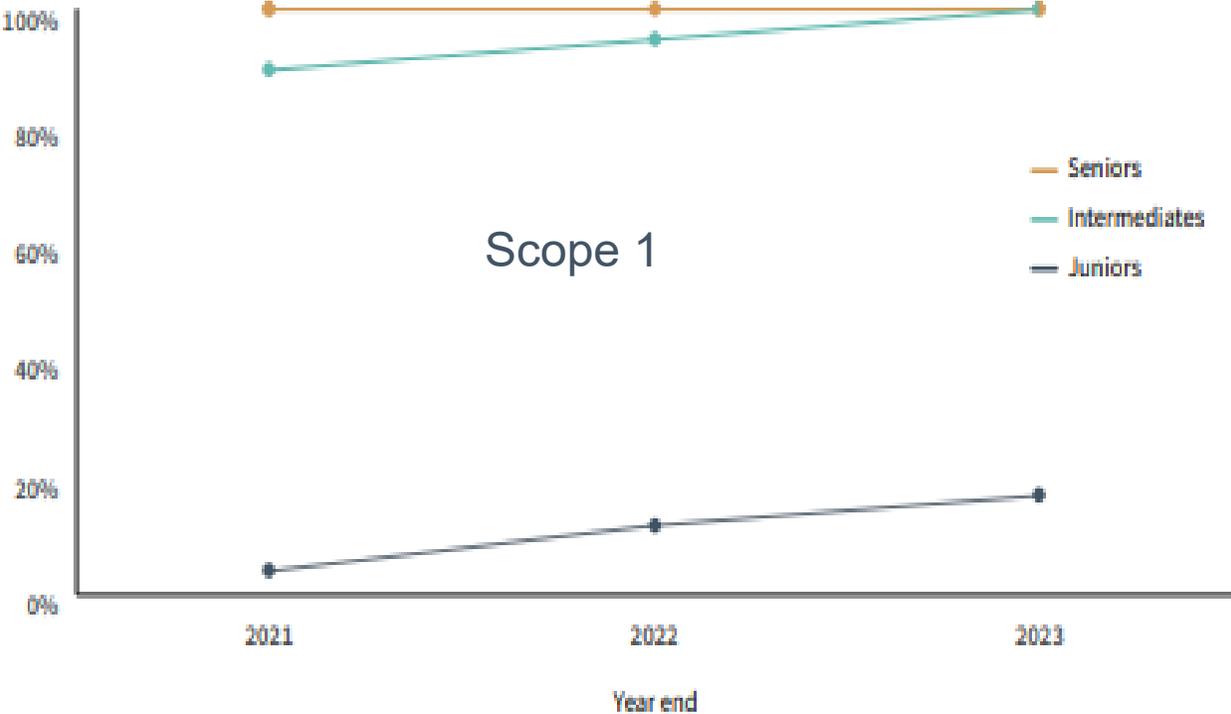


See Figure 16a on page 46 of the 2023 Energy Matters Report; see page 43 for grouping methodology.

Environmental sustainability disclosure

Occurrences of emissions disclosure over time: O&GA

- GHG emissions disclosure has increased.



See Figure 16b on page 46 of the 2023 Energy Matters Report; see page 43 for grouping methodology.

Environmental sustainability disclosure

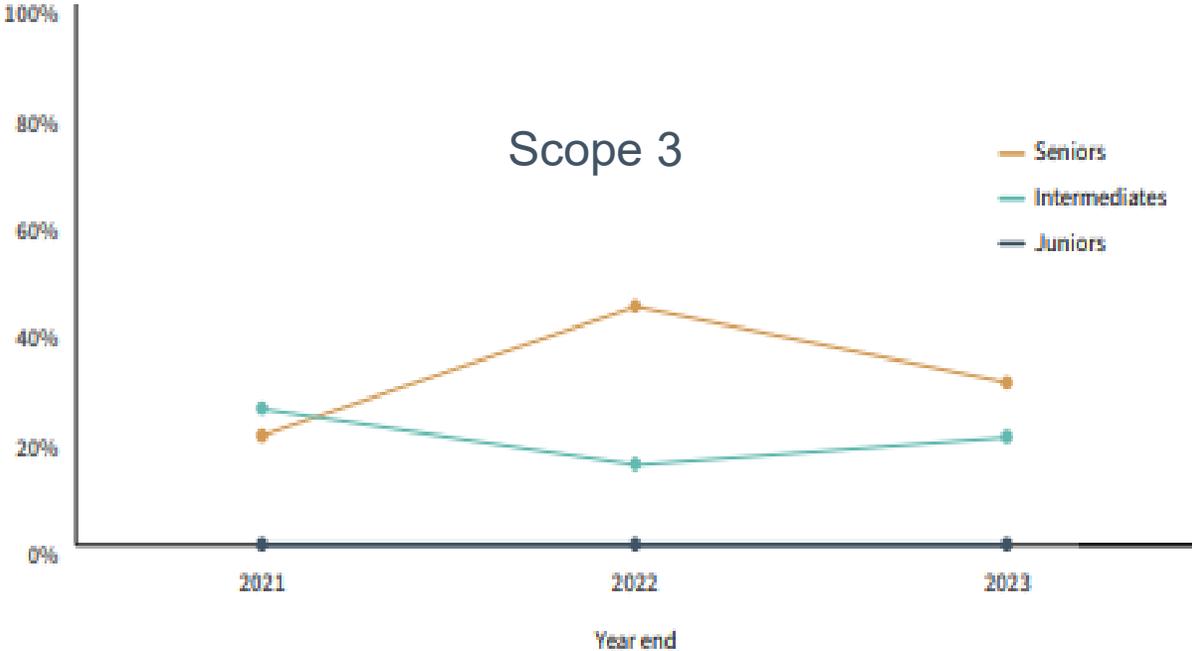
Occurrences of emissions disclosure over time: O&GA



See Figure 16c on page 47 of the 2023 Energy Matters Report; see page 43 for grouping methodology.

Environmental sustainability disclosure

Occurrences of emissions disclosure over time: O&GA

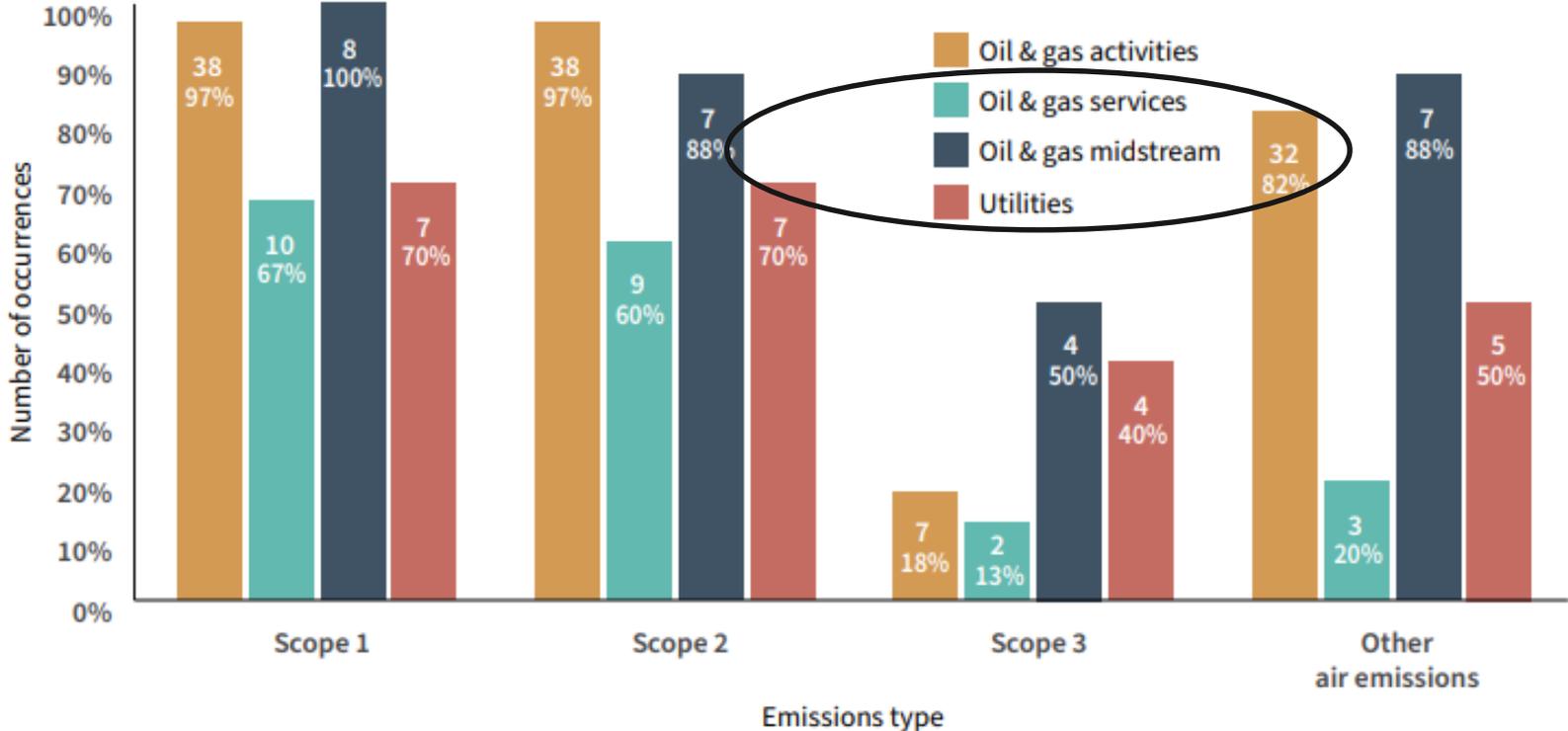


See Figure 16d on page 47 of the 2023 Energy Matters Report; see page 43 for grouping methodology.

Environmental sustainability disclosure

Occurrences of emissions disclosure: Other energy sub-industries

- For these RIs, emissions disclosure is occurring.

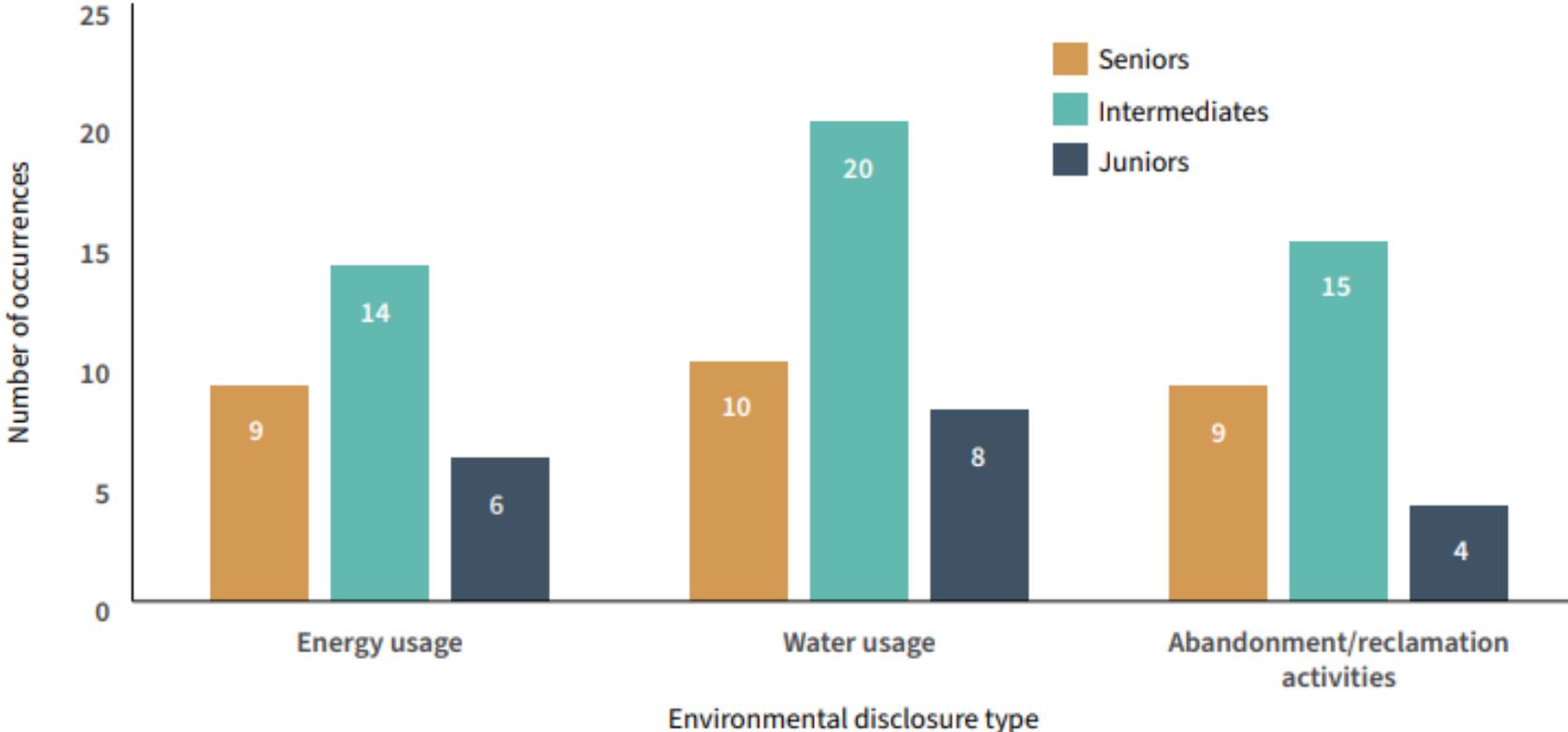


See Figure 16e on page 48 of the 2023 Energy Matters Report.

Environmental sustainability disclosure

Occurrences of other environmental disclosure: O&GA

- Other environmental disclosure is also occurring.

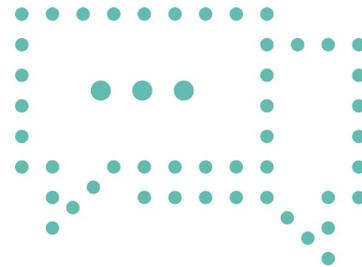


See Figure 17 on page 48 of the 2023 Energy Matters Report; see page 43 for grouping methodology.

Environmental sustainability disclosure

Questions

Please post questions in the Q&A.

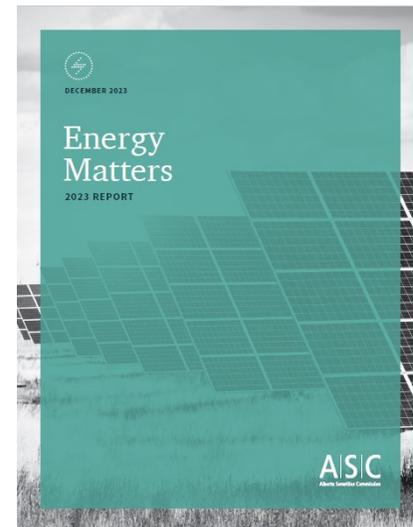


Energy and the Alberta capital market

Energy and the Alberta capital market

Introduction

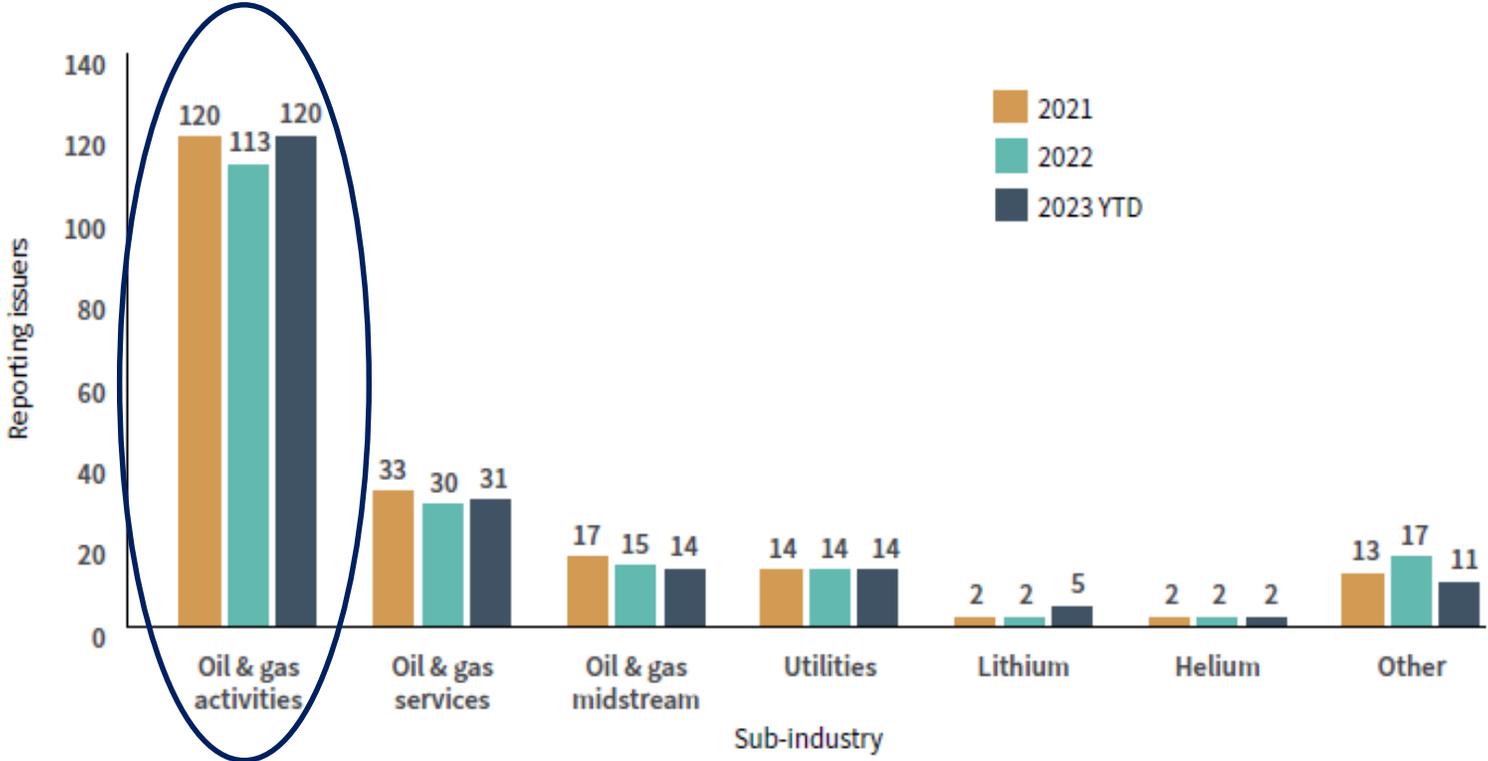
- Data informs our decisions.
- Our data is mostly sourced from regulatory filings.
- Some of our capital markets data is discussed here.
 - See the 2023 Energy Matters Report.



Energy and the Alberta capital market

Number of RIs in each energy-related sub-industry

- Most are engaged in O&GA.

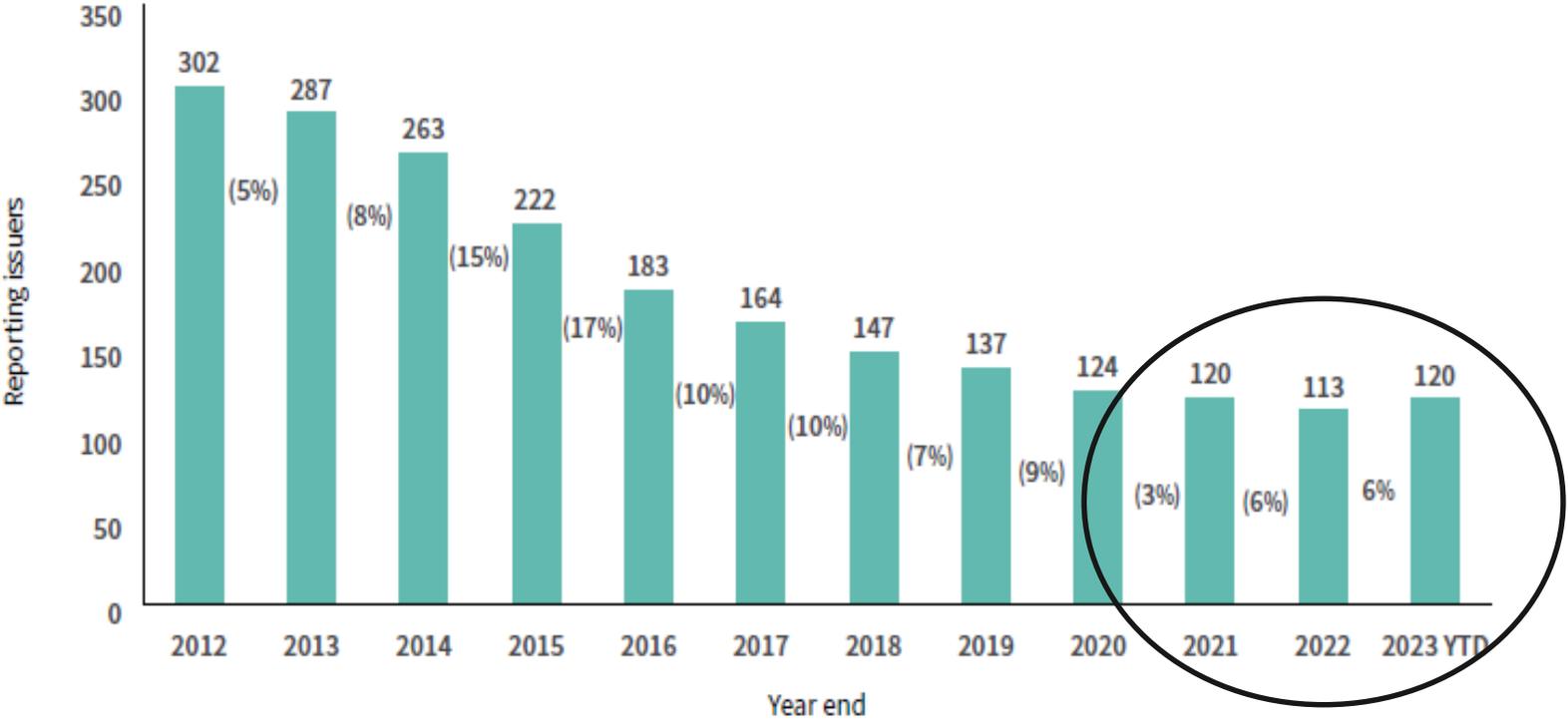


See Figure 18 on page 49 of the 2023 Energy Matters Report.

Energy and the Alberta capital market

Number of RIs engaged in O&GA

- Seems to be stabilizing.

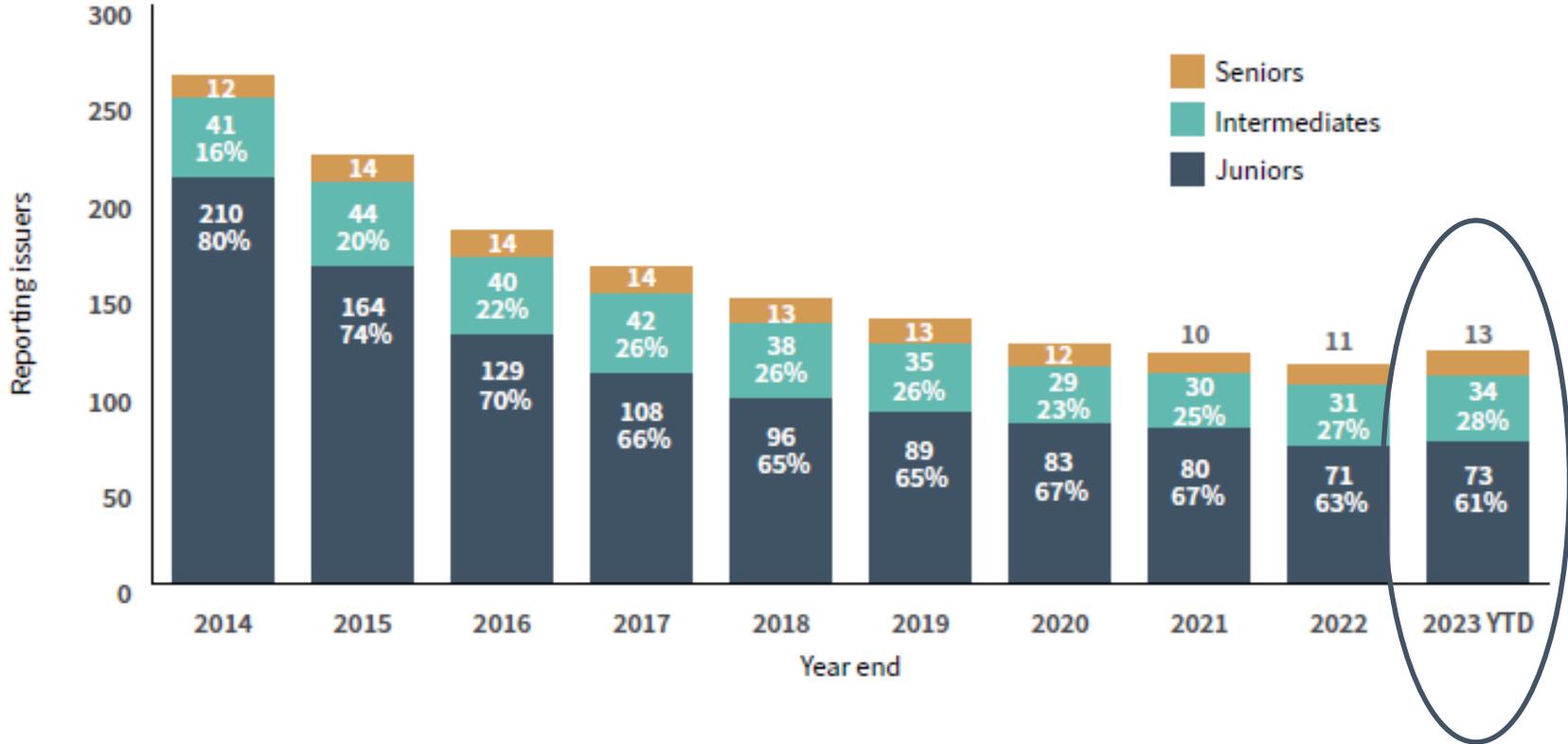


See Figure 19 on page 50 of the 2023 Energy Matters Report.

Energy and the Alberta capital market

Number of RIs engaged in O&GA by size

- Slight increase in each group in 2023.

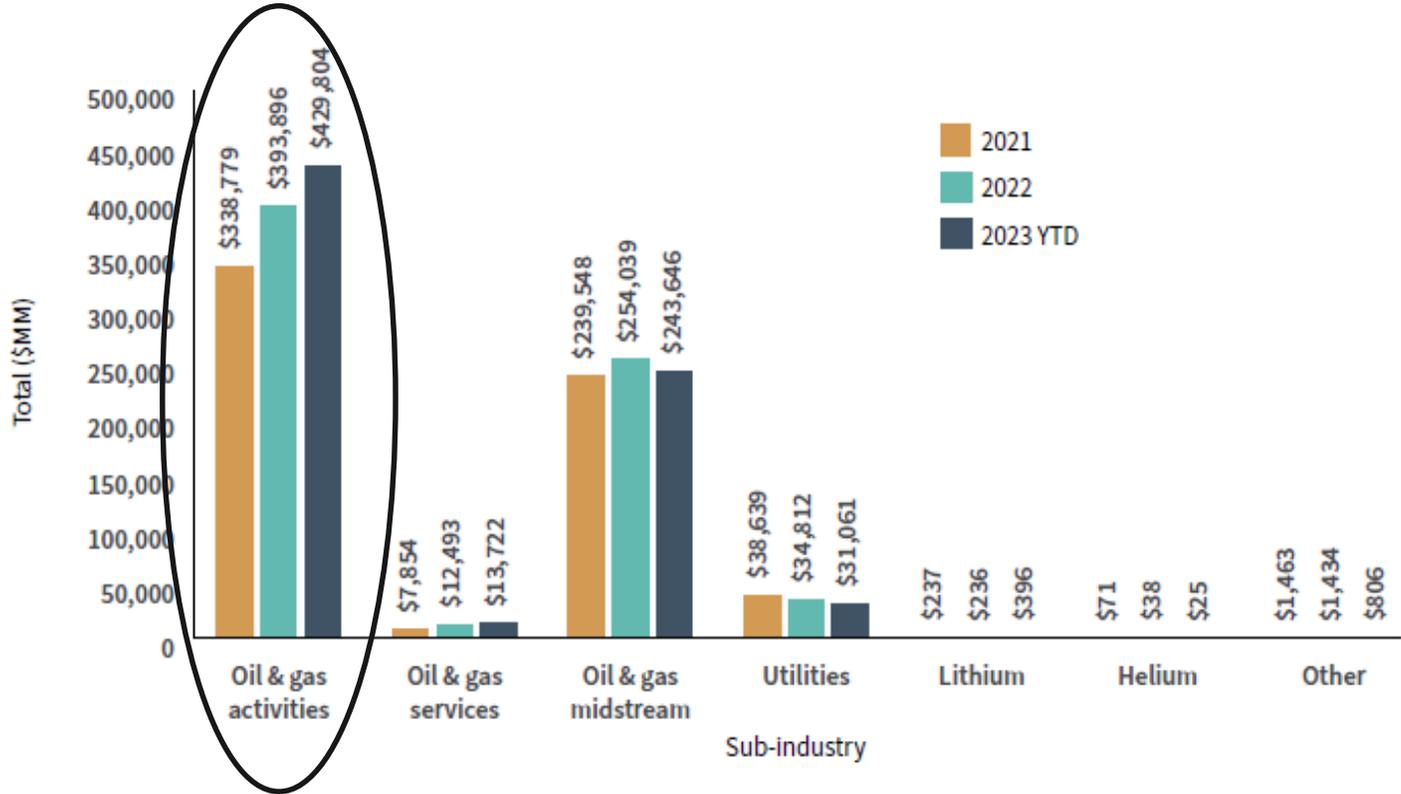


See Figure 20 on page 51 of the 2023 Energy Matters Report; see page 50 for grouping methodology.

Energy and the Alberta capital market

Market capitalization of each sub-industry

- O&GA dominates.

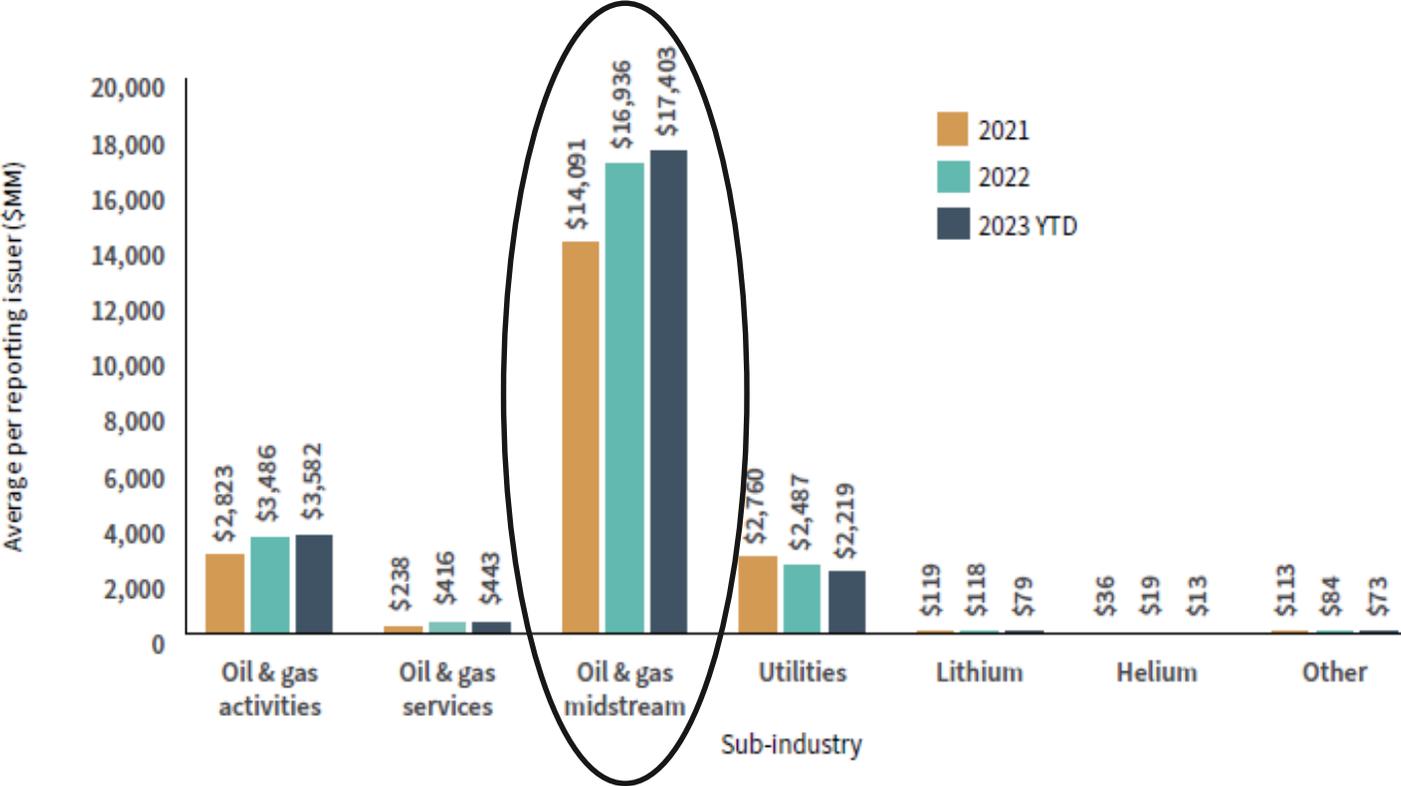


See Figure 25 on page 53 of the 2023 Energy Matters Report.

Energy and the Alberta capital market

Average market capitalization of each sub-industry

- O&G midstream dominates.

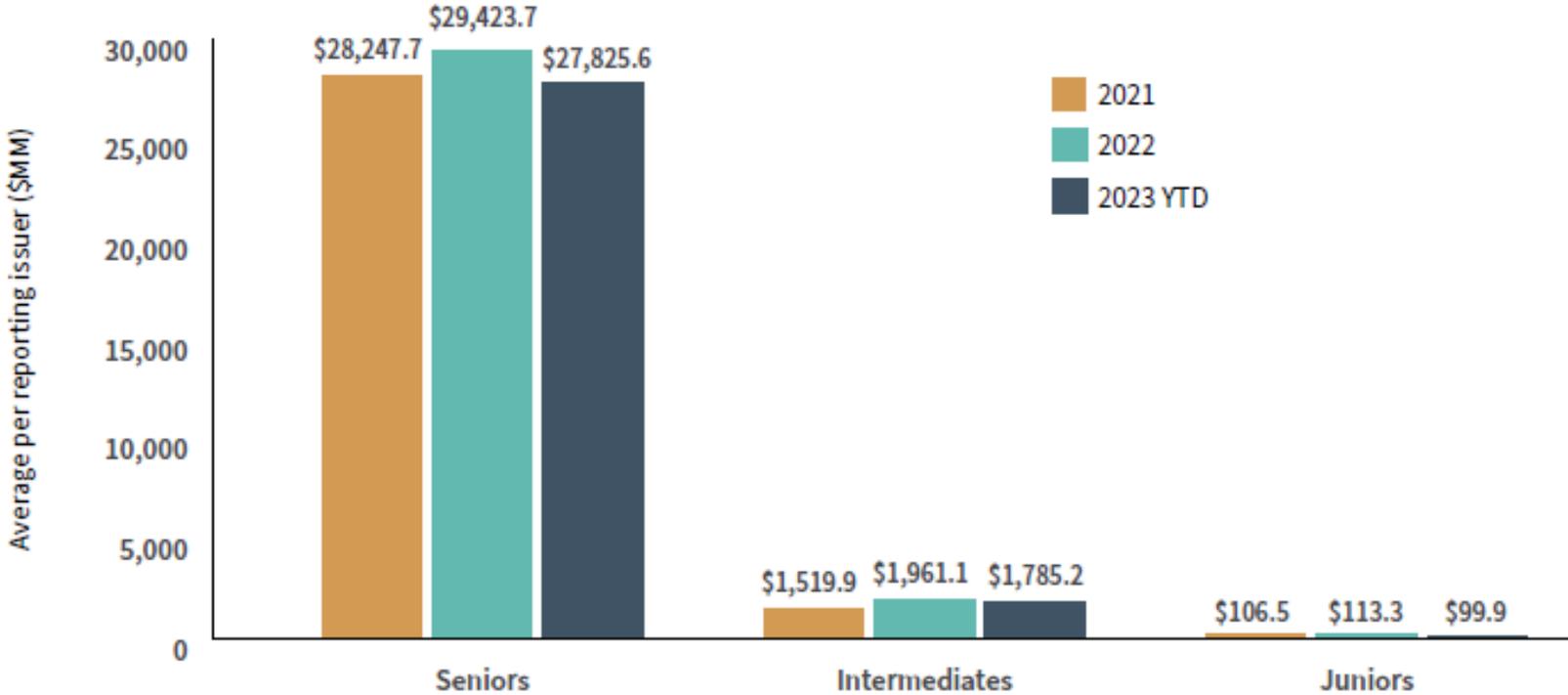


See Figure 26 on page 54 of the 2023 Energy Matters Report.

Energy and the Alberta capital market

Average market capitalization of RIs engaged in O&GA, by size

- Pretty stable within each group.

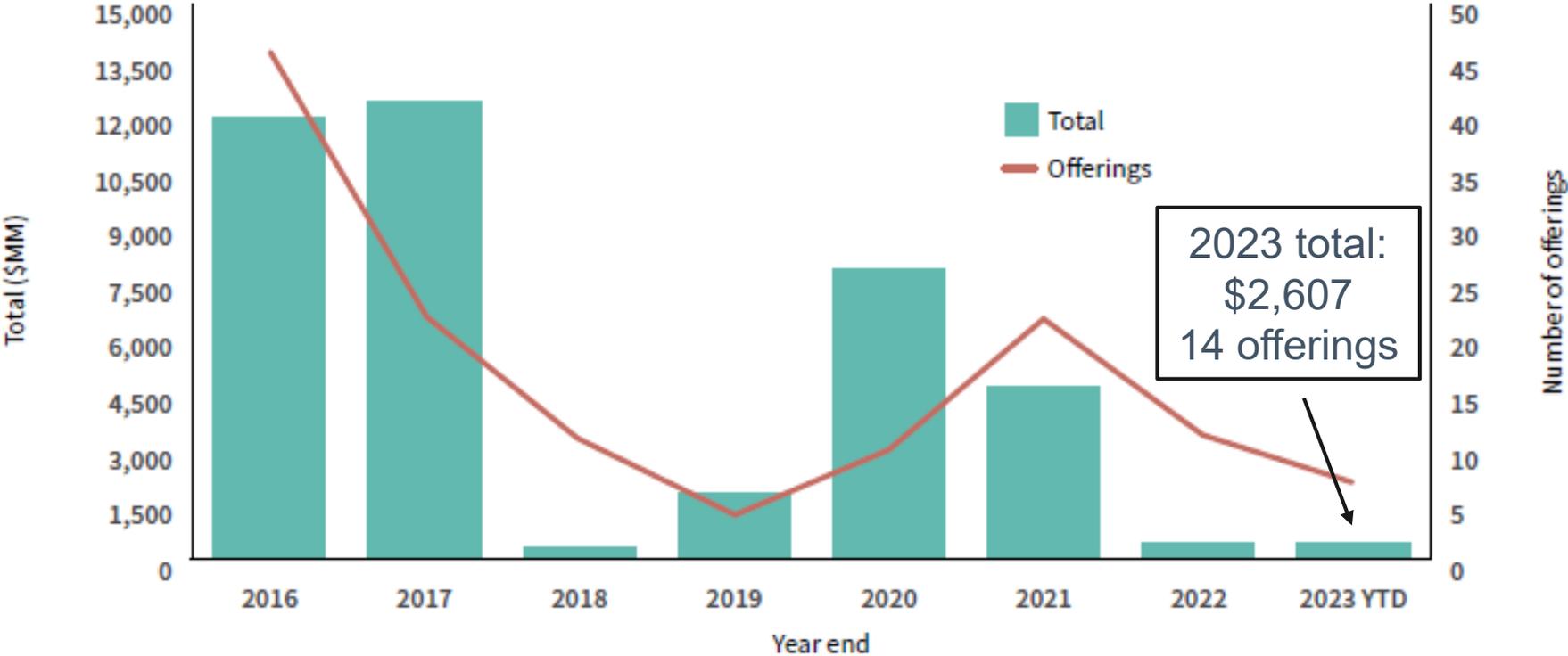


See Figure 27 on page 54 of the 2023 Energy Matters Report; see page 50 for grouping methodology/

Energy and the Alberta capital market

Capital raised via prospectus by RIs engaged in O&GA

- Long-term decline.

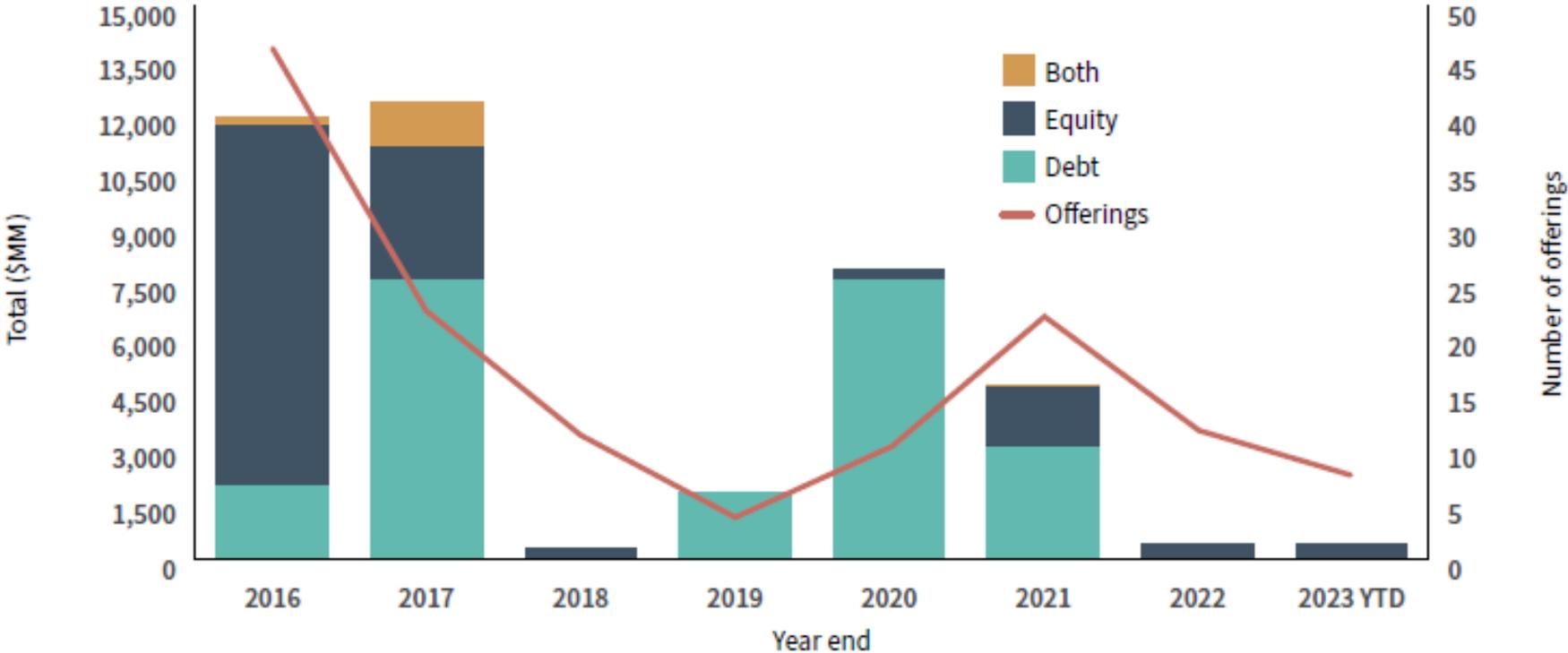


See Figure 28 on page 55 of the 2023 Energy Matters Report.

Energy and the Alberta capital market

Capital raised via prospectus by RIs engaged in O&GA, by type

- Slowdown in debt financings.

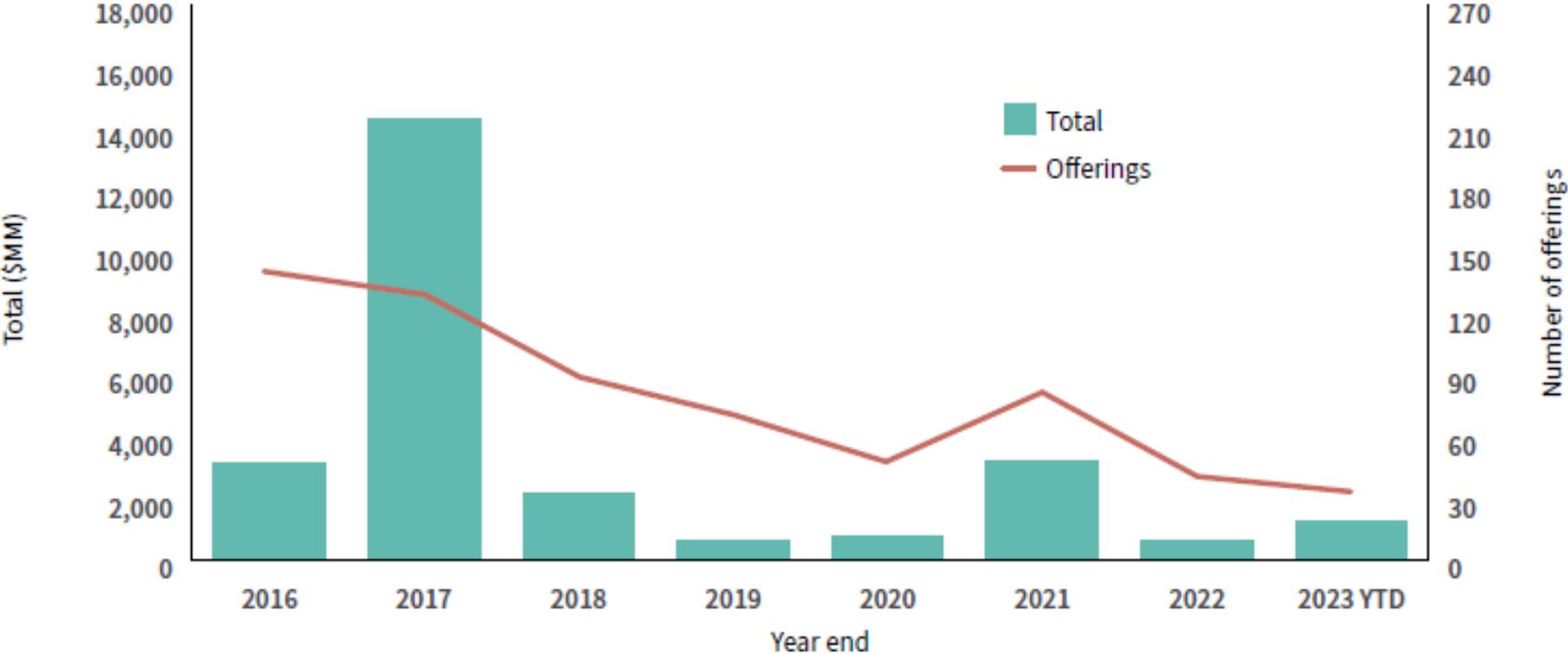


See Figure 30 on page 56 of the 2023 Energy Matters Report.

Energy and the Alberta capital market

Capital raised in the exempt market by RIs engaged in O&GA

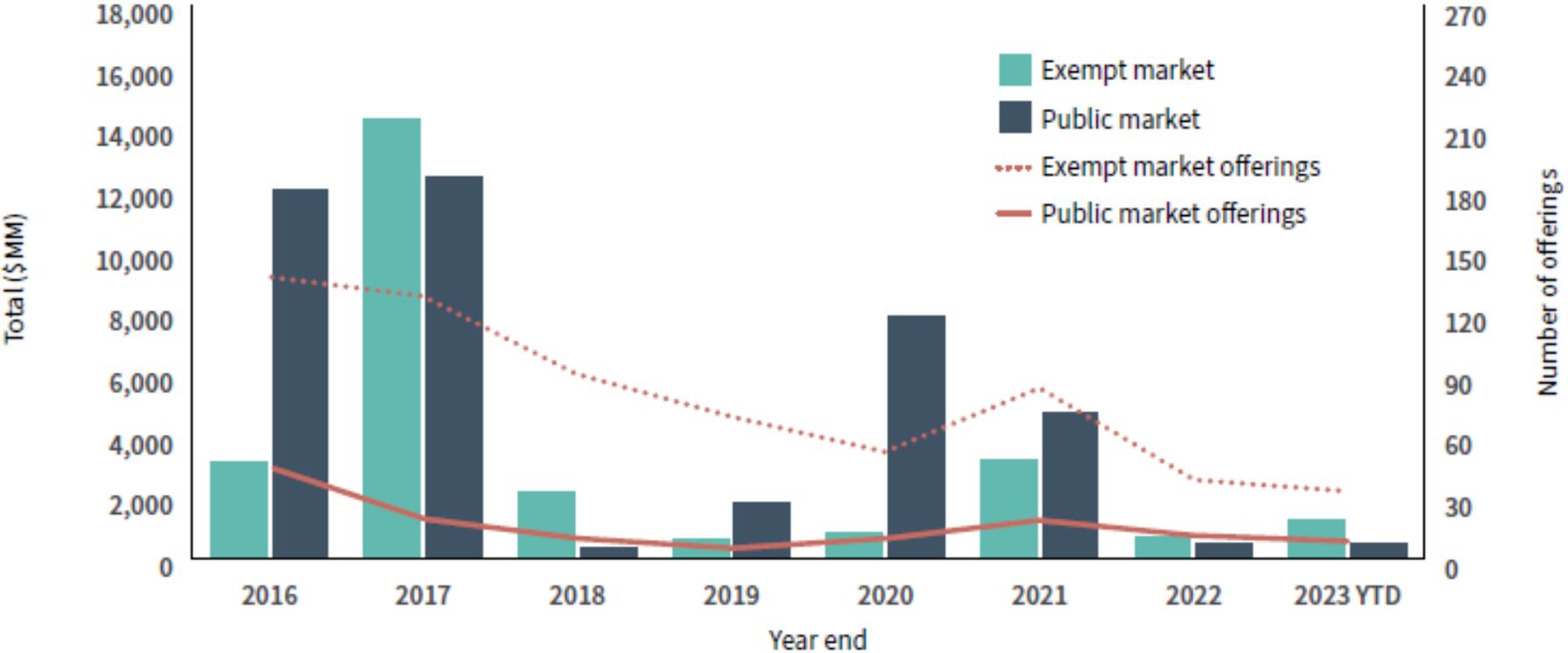
- Lower, but stable.



See Figure 31 on page 56 of the 2023 Energy Matters Report.

Energy and the Alberta capital market

Comparison of capital raised by RIs engaged in O&GA

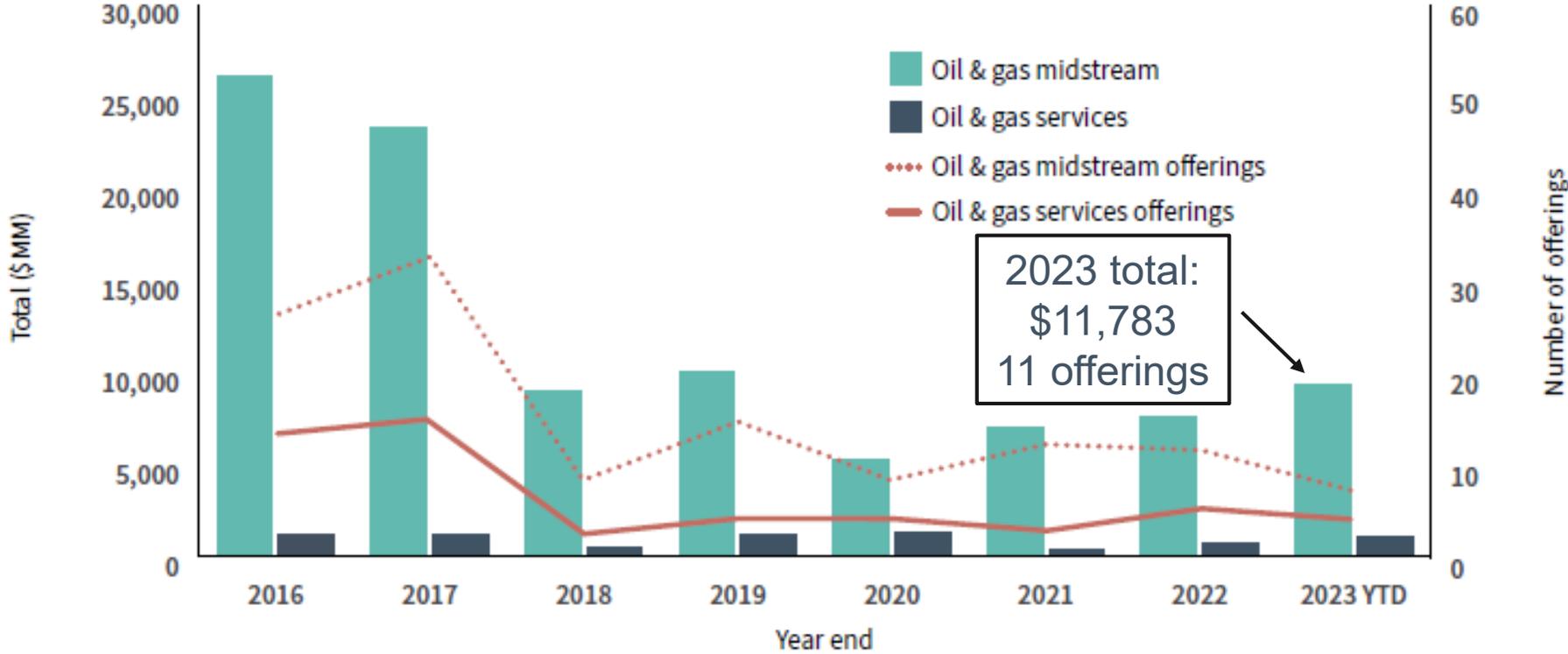


See Figure 33 on page 57 of the 2023 Energy Matters Report.

Energy and the Alberta capital market

Capital raised via prospectus by RIs in O&G services & midstream

- Lower, but stable.



See Figure 35 on page 59 of the 2023 Energy Matters Report.

Energy and the Alberta capital market

Capital raised via prospectus by RIs in other sub-industries

- Lower for utilities, flicker of light for “Other” and “Lithium.”



See Figure 39 on page 61 of the 2023 Energy Matters Report.

Questions

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Thank you!