

Asset Data

Presentation to EEA Asset Information managers forum

3rd November 2023

Sean McCready– Principal Advisor Engineer



Outline of presentation

- Our function
- Current workplan & future development
- Targeted information disclosure review, 2023
- Performance analysis tool and reports



Our function



- We are an Independent Crown Entity designed to implement and enforce regulation set out in legislation. We engage and coordinate with government and other relevant agencies but are not directly controlled by a Minister.
- Commissioners are appointed by the Minister for multi year terms that can be extended. These Commissioners are formed into Divisions and delegated decision-making powers from the Board.
- The Commission has an array of roles and responsibilities and is organized into 5 operational branches:
 - Fair Trading Branch (false and misleading practices)
 - Credit Branch (consumer credit and finance)
 - Competition Branch (mergers and restrictive trade practices)
 - Market Regulation Branch (telecommunications, dairy, fuel, groceries)
 - Infrastructure Regulation Branch (electricity, gas, airports, fibre broadband, water)

Introduction/overview to Information Disclosure



- The Commission amongst other things regulates the services provided by electricity distribution businesses (EDB), Transpower and Gas pipelines under Part 4 of the Commerce Act.¹ This is because there is little or no competition, and little or no likelihood of a substantial increase in competition in these sectors.
- A key tool in our “regulatory tool box” is the ability to impose Information Disclosure (ID) which provides transparency on the performance of regulated suppliers.
 - **Purpose of ID** – so that interested parties can have sufficient information on regulated suppliers to assess whether the purpose of Part 4 (long term benefits of consumers) is being promoted
 - **Form of ID** – varies across the sectors we regulate. For EDBs and Transpower, it consists of schedules which require the regulated party to provide regular information about financial and non-financial measures (eg quality - number and frequency of outages etc). We also require businesses in the energy sectors we regulate to release an Asset Management Plan which details their planning for the next 10 years
 - **Use of ID** – The Commission under Part 4 is required to publish a summary and analyse of ID information. In the last five years we have published numerous studies of EDBs ID data especially in relation to asset management practices
 - **History of ID.** ID for EDBs and Transpower came into effect in 2012. That means the Commission has a large amount of data that we can undertake summary and analyses of including a sufficient record of data to undertake time series trend analysis

1. for EDBs – all EDBs are subject to information disclosure regulation and 16/29 EDBs and Transpower are subject to price/quality regulation as well.

Current workplan and future developments



Work Programme 2023/2024

Work	Q1 - 23	Q2 - 23	Q3 - 23	Q4 - 23	Q1 - 24	Q2 - 24	Q3 - 24	Q4 - 24
Input methodologies review		June draft		Dec final decision				
Targeted Information Disclosure review	March workshop		Aug draft		Jan / Feb final decision			
EDB default price-quality path reset		TBC Process paper	TBC Issues paper			May draft		Nov final decision
Transpower individual price-quality path reset			Aug proposal received			May draft		Nov final decision
Review of Transpower NZGP major capex		May draft decision	Aug final decision					
Reopener applications from EDBs	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC
Review of EDB asset management plans & ID		AMPs due March	ID data due Sept					

Moving forward with performance analysis

- Current work programme
 - Review of asset management plans (AMPs)
 - Continue meeting with EDBs directly – site visits
 - Targeted review of information disclosure requirements
- Longer term
 - Continue to update existing analyses with updated data as it becomes available
 - In-depth analysis on specific themes

Targeted ID Review - 2024



Purpose & Timing

- To undertake a targeted review of information disclosure requirements for EDBs, focusing our efforts on making changes expected to improve the long-term benefit of consumers of regulated services in the areas relating to quality, decarbonisation, asset management and aligning ID disclosures with other rules we administer.
- **Timing**
 - August 2023: draft decision
 - September 2023: submissions
 - October 2023: cross submissions
 - Final decision: early 2024

Publications are [here](#)

Goals of TIDR

Our draft decision is designed to improve the quality of disclosed information and prepare for the future.

We have targeted the following areas:

Decarbonisation: Expand reporting requirements to capture more information on network constraints, non-traditional solutions, and pricing;

Asset management: Refine reporting requirements on vegetation management to capture more fulsome and consistent information on EDB practices and capability;

Quality of service: Extend reporting requirements on quality of service to capture more granular information on quality and reliability of EDB services; and

Other important changes: Clarifying definitions and updating assurance standards.

New data requirements

Based on DRAFT decision, (subject to change)

- Network constraints
- Work and investment on flexibility services
- Standardised pricing components including transmission costs
- Raw interruption data and information on worst-performing feeders
- Vegetation management

Vegetation Management

We proposed disaggregating opex disclosure for vegetation into further categories, such as:

- Service interruptions and emergencies.
- Routine and corrective maintenance.
- Vegetation management.

We also proposed further disclosure on vegetation hazards near EDB overhead circuit sites, and further disclosure on the causes of unplanned interruptions.

We've received feedback on the proposed categories and are considering further work on defining them. Some of the feedback included:

- There are auditability concerns around how to capture costs that the EDB incurs through a third party.
- The disclosure on vegetations hazards would capture a moment in time rather than risk exposure over the whole year.
- The level of disaggregation on causes of unplanned interruptions relies on subjective assessment and is unlikely to be auditable.

Performance Analysis tools and reports

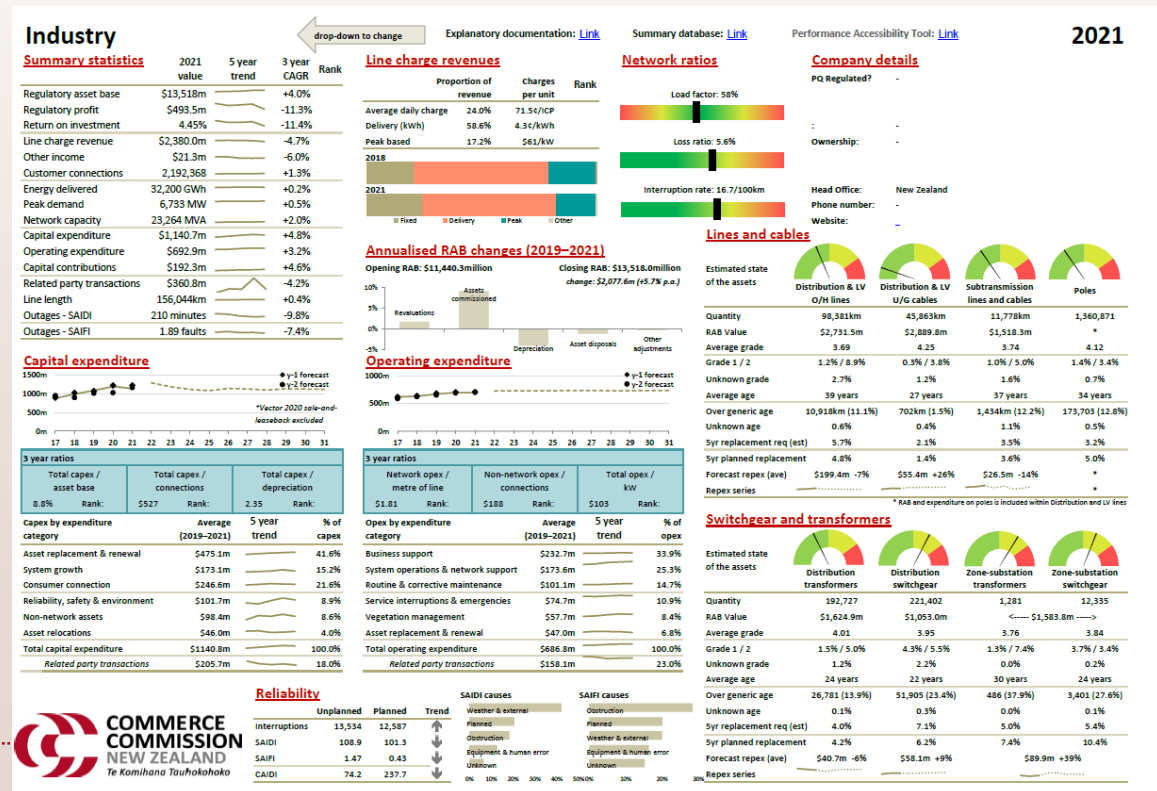


One Page Performance Summary



- At a glance metrics and measures across a range of performance outcomes
- Try to provide a broad picture for each supplier
- Updated annually

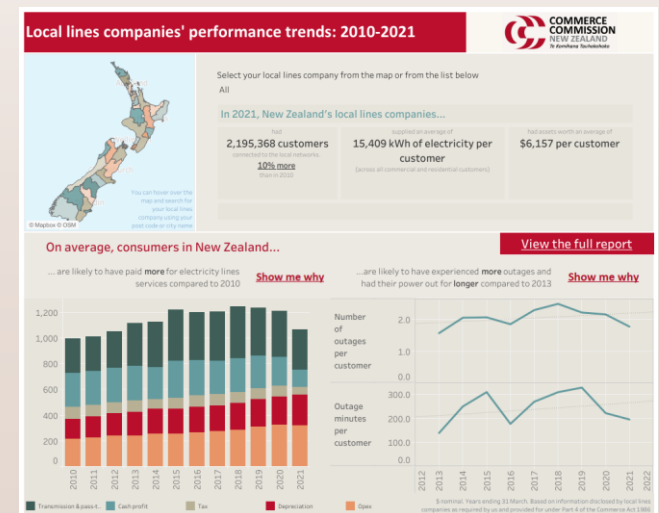
<https://comcom.govt.nz/regulated-industries/electricity-lines/electricity-distributor-performance-and-data/performance-summaries-for-electricity-distributors>



Trends in supplier performance dashboard

- Newest tool (published Jul 2022) covers trends in average price, profitability and reliability – to be updated annually
- Uses Tableau, a data visualisation software, to present information on selected range of information disclosure data from the last 10 years.
- Able to view statistics for individual suppliers
- Accompanied by industry-level report

<https://comcom.govt.nz/regulated-industries/electricity-lines/electricity-distributor-performance-and-data/trends-in-local-lines-company-performance>



Excel Database

- Excel file containing data from 2013 - 2022
- Include pivot table function to identify and export smaller datasets
- Updated bi-annually

<https://comcom.govt.nz/regulated-industries/electricity-lines/electricity-distributor-performance-and-data/information-disclosed-by-electricity-distributors>

Clear Slicer Filters

Ensure only one schedule, section, category, sub-category, and description are selected to avoid potential unwanted duplication of values

Schedule

- SCHEDULE 5i: REPORT ...
- SCHEDULE 6a: REPORT...
- SCHEDULE 6b: REPORT...
- SCHEDULE 7: COMPAR...
- SCHEDULE 8: REPORT ...
- SCHEDULE 9c: REPORT...
- SCHEDULE 9d: REPORT...
- SCHEDULE 9e: REPORT...

Section

- 1(i): Expenditure met...
- 1(ii): Revenue metrics
- 1(iii): Service intensit...
- 1(iv): Composition of ...
- 1(v): Reliability
- 10(i): Interruptions
- 10(ii): Class C Interrup...
- 10(iii): Class B Interru...

Category

- (tax additions)
- (tax deductions)
- [Select one]
- Adjusted depreciation
- Adjustment for unam...
- Adjustment for unam...
- Adjustment resulting...

Sub Category

-
- (% of total overhead l...
- [Zone Substation_01]
- [Zone Substation_19]
- > 3000, - 6.1
- > 3000, - 6.2
- 015 - 015HCA

Description

- Asbestos removal a...
- "A" Park Wairoa, swit...
- "Daisy-chained" Distri...
- \$50k or less
- % of revenue
- (tax additions)
- (tax deductions)

Disclosure year

- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
- 2019
- 2020

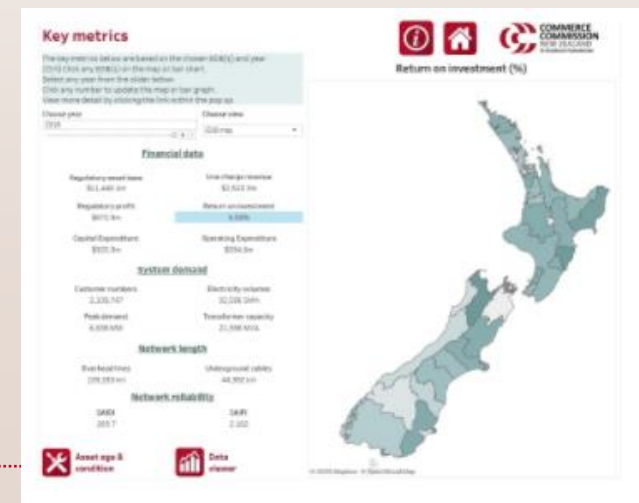
network: All

Sum of Value	Column Labels	\$/GWh	\$/ICP	\$/km
Row Labels				
Alpine Energy		0	2234151.475	3213545.678
Aurora Energy	1791599.198	2425838.662	295244.918	183268.9171
Buller Electricity	278	3702650.647	43009.13188	121844.748
Centralines	472	3005046.915	37558.62014	61338.32101
Counties Power	1658.872	2756622.097	2724498.843	189029.8931
EA Networks	1258	2087014.298	62264.07694	160936.306
Eastland Network	1302	2994642.855	32895.66449	73810.46261
Electra	1691.378	2433616.752	22815.61741	162765.6898
Electricity Invercargill	442.62	1858074.037	27508.05818	244010.6094
Horizon Energy	696	1938832.238	2308722.349	112466.134
MainPower NZ	2097.649	2624433.427	11250458.16	118047.1667
Marlborough Lines	904	4670533.723	38754.43018	123536.2292
Nelson Electricity	458.744	2021747.809	1588693.85	296424.2872
Network Tasman	2158.534	1839071.133	9041541.265	84214.36269
Network Waitaki	1100	2220172.309	322859.4382	108963.4855
Northpower	2662	1984369.38	10659054.54	96088.03845
Orion NZ	10151	2135614.514	2158128.445	187148.0683
OtagoNet	1136	2678901.988	9126748.697	74254.81835
Powerco	15580	2431483.273	961098.2133	127036.3957
Scanpower	264	2949306.239	33926.1706	82817.34278
The Lines Company	1287.144	3511698.182	2655061.383	90062.97754
The Power Company	2738.01	2572206.445	9429435.653	71551.79705
Top Energy	1003.5	4464508.606	2161646.954	150251.5609
Unison Networks	6072.88	2616246.181	1181168.304	146176.7439
Vector Lines	12925.077	2174103.131	4432817.933	336262.7549
Waipa Networks	1057.822	1911819.299	4330494.007	110695.3828
WEL Networks	4775.875	2524807.7	1718972.325	195619.7935
Wellington Electricity	7808	2234399.194	1339748.985	233535.3371
Westpower	1129	2049845.772	37810.32399	79086.99911
Grand Total	1874707.303	75051758.28	81236482.04	4165052.186

Performance Accessibility Tool (PAT)

- Uses Tableau, a data visualisation software, to present information on selected range of information disclosure data from the last 9 years.
- It covers profitability and revenue, capital and operating expenditure, and reliability
- Makes information about the performance of regulated businesses more accessible
- Updated annually

<https://comcom.govt.nz/regulated-industries/electricity-lines/electricity-distributor-performance-and-data/performance-accessibility-tool-for-electricity-distributors>

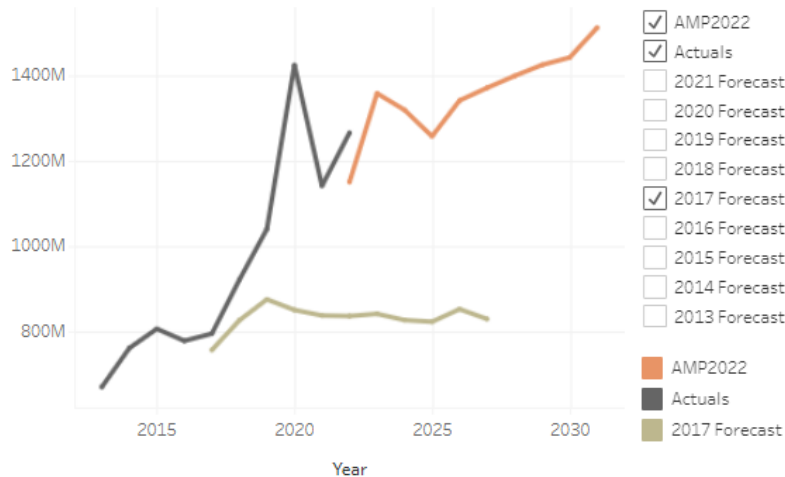
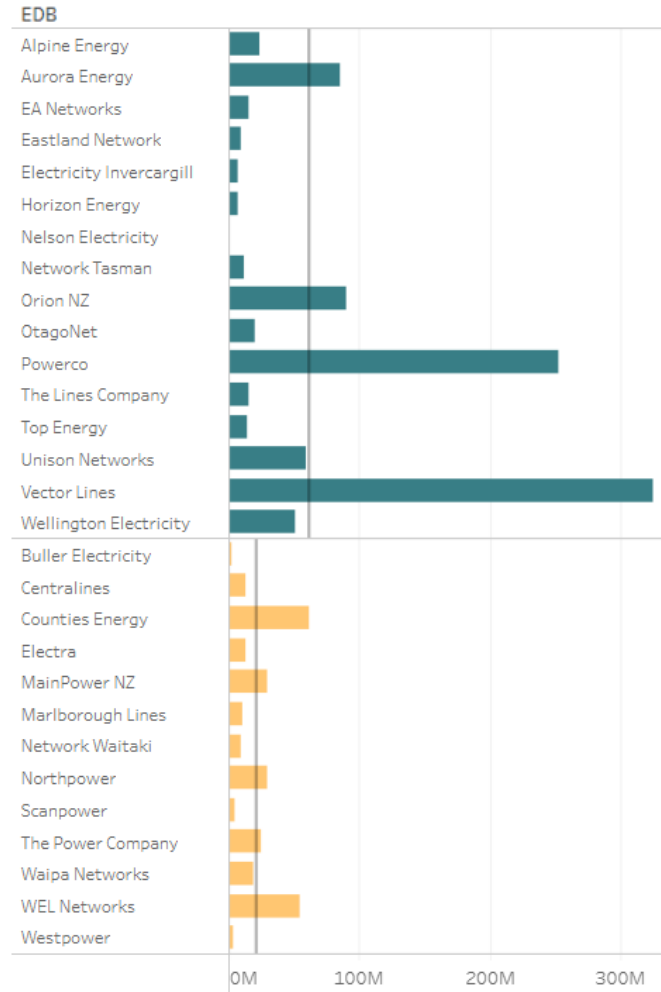


PAT: Capital expenditure

(Ctrl) click capex item(s) to filter graphs
(Ctrl) click EDB(s) to filter table and time-series
Use filter to view by year(s) or apply different inflator

Choose year: 2022 | Choose index: nominal | Choose view: Bar chart | Choose EDB grouping: Regulation type | Choose ratio: No ratio

Category	Selection	Spend	% of spend
Network assets	Asset relocations	\$42.47m	3.4%
	Asset replacement and renewal	\$526.39m	41.6%
	Consumer connection	\$372.59m	29.4%
	Reliability, safety and environment	\$69.77m	5.5%
	System growth	\$152.97m	12.1%
	Non-network assets	Atypical expenditure	\$30.51m
	Routine expenditure	\$70.66m	5.6%
Total capital expenditure		\$1,265.36m	100.0%



PAT: Renewal and growth capex

Select capex item or equipment to filter graphs
(Ctrl) click EDB(s) to filter table and time-series
Use filter to view by year(s) or apply different inflator

Choose year
2022

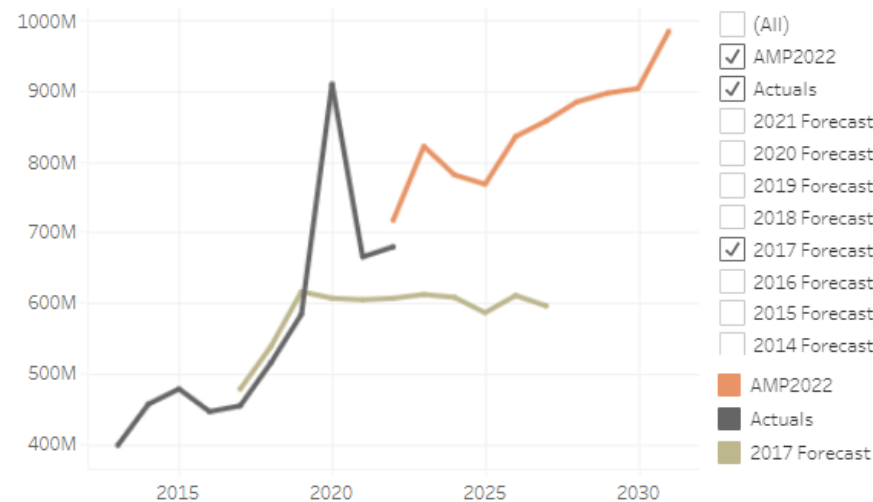
Choose index
nominal

Choose view
Bar chart

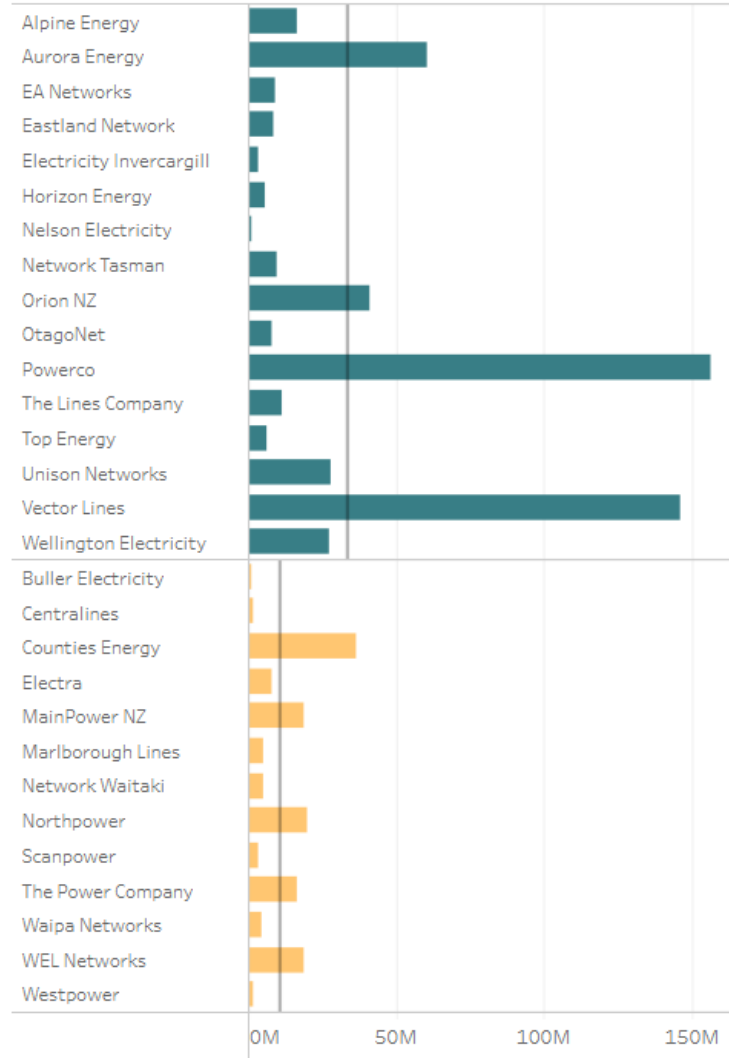
Choose EDB grouping
Regulation type

Choose ratio
No ratio

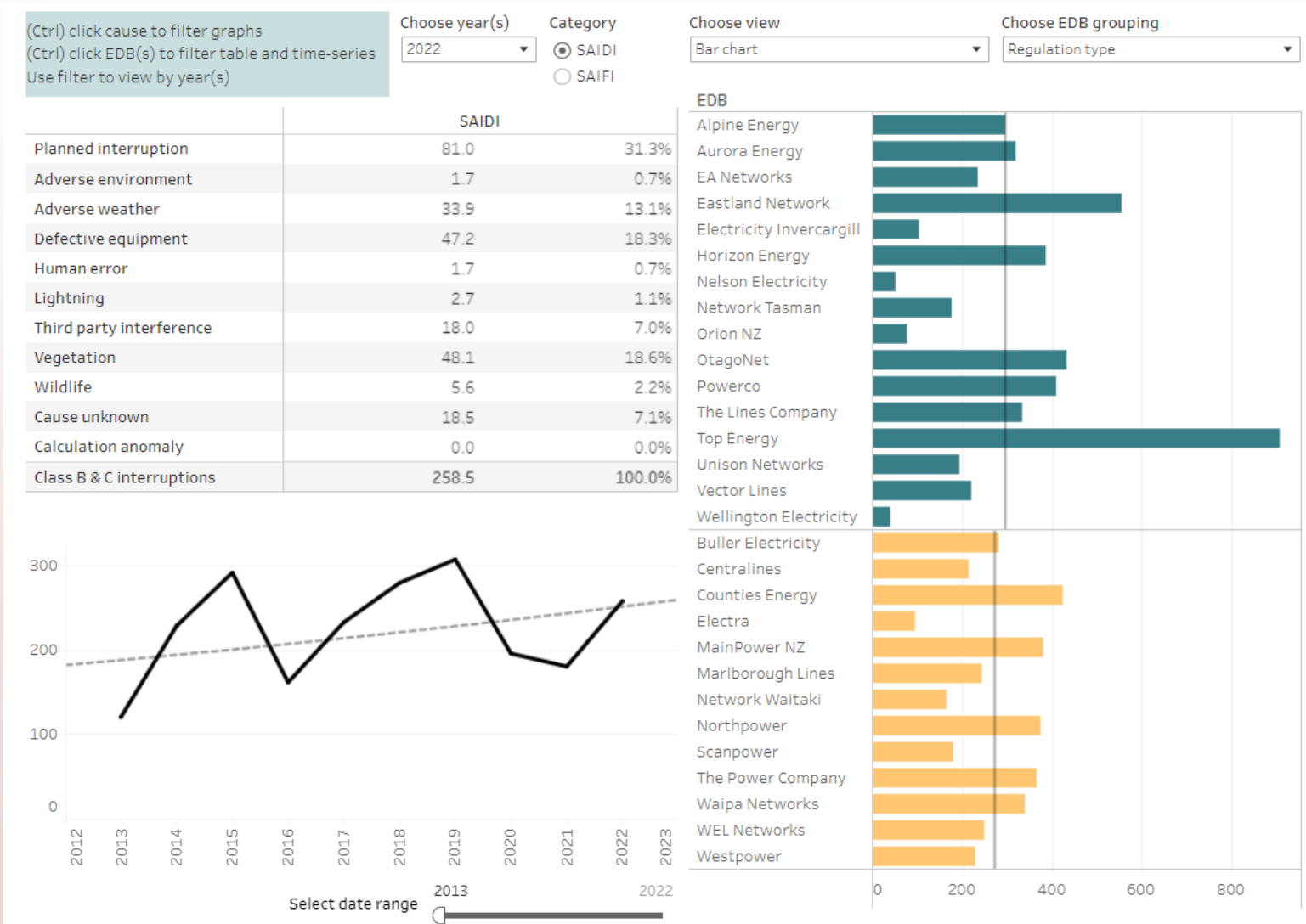
	Asset replacement and renewal	System growth
Distribution and LV cables	\$49.44m	\$19.02m
Distribution and LV lines	\$234.51m	\$11.45m
Distribution substations and transformers	\$37.65m	\$7.28m
Distribution switchgear	\$49.56m	\$2.22m
Subtransmission	\$49.52m	\$56.61m
Zone substations	\$75.87m	\$46.58m
Other network assets	\$29.89m	\$9.81m
11kV Lines and Cables	-\$0.04m	
Communications	\$0.02m	\$0.00m
Sub transmission Lines and Cables	-\$0.04m	\$0.00m
Total	\$526.39m	\$152.97m



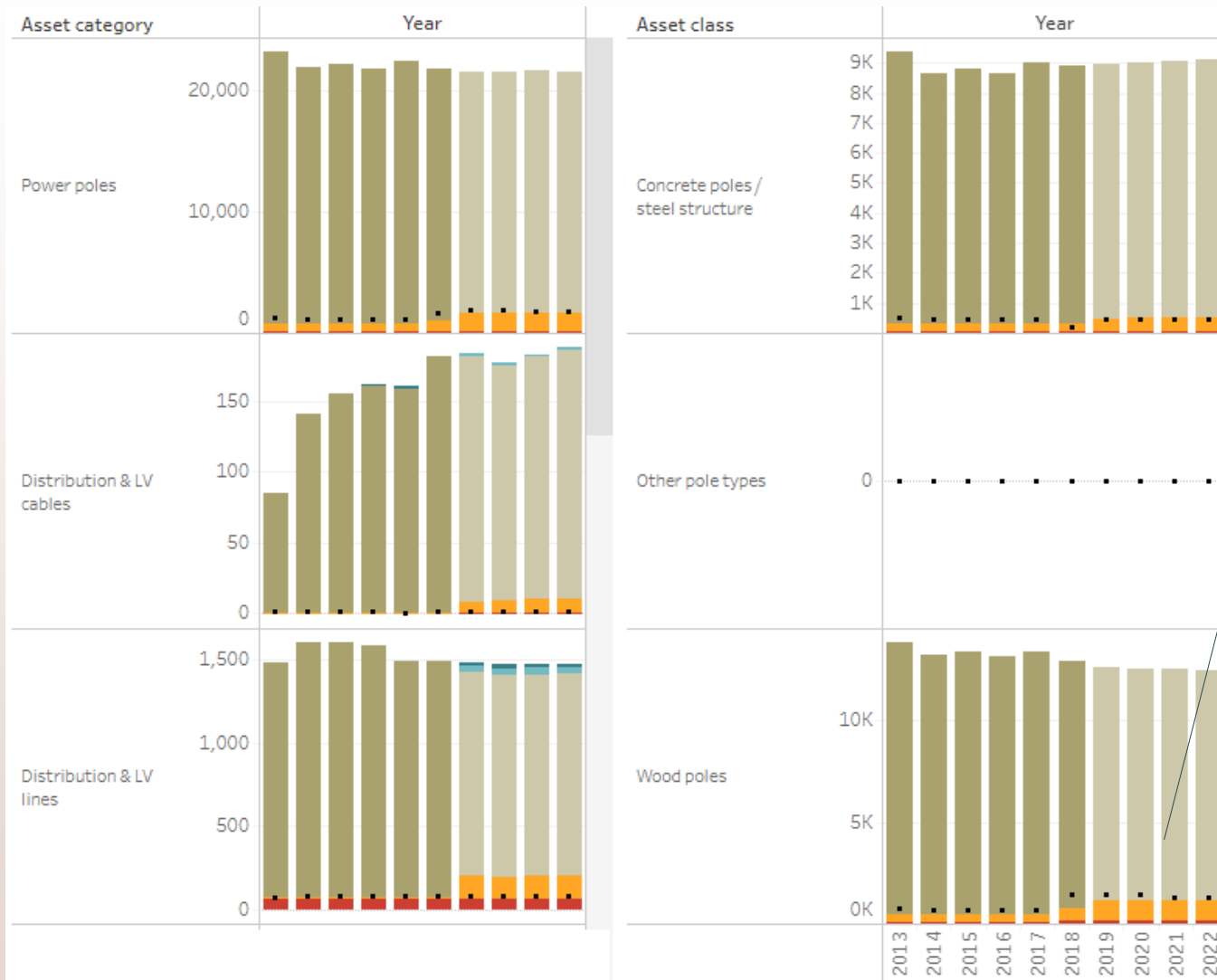
EDB



PAT: Reliability by cause (SAIDI and SAIFI)

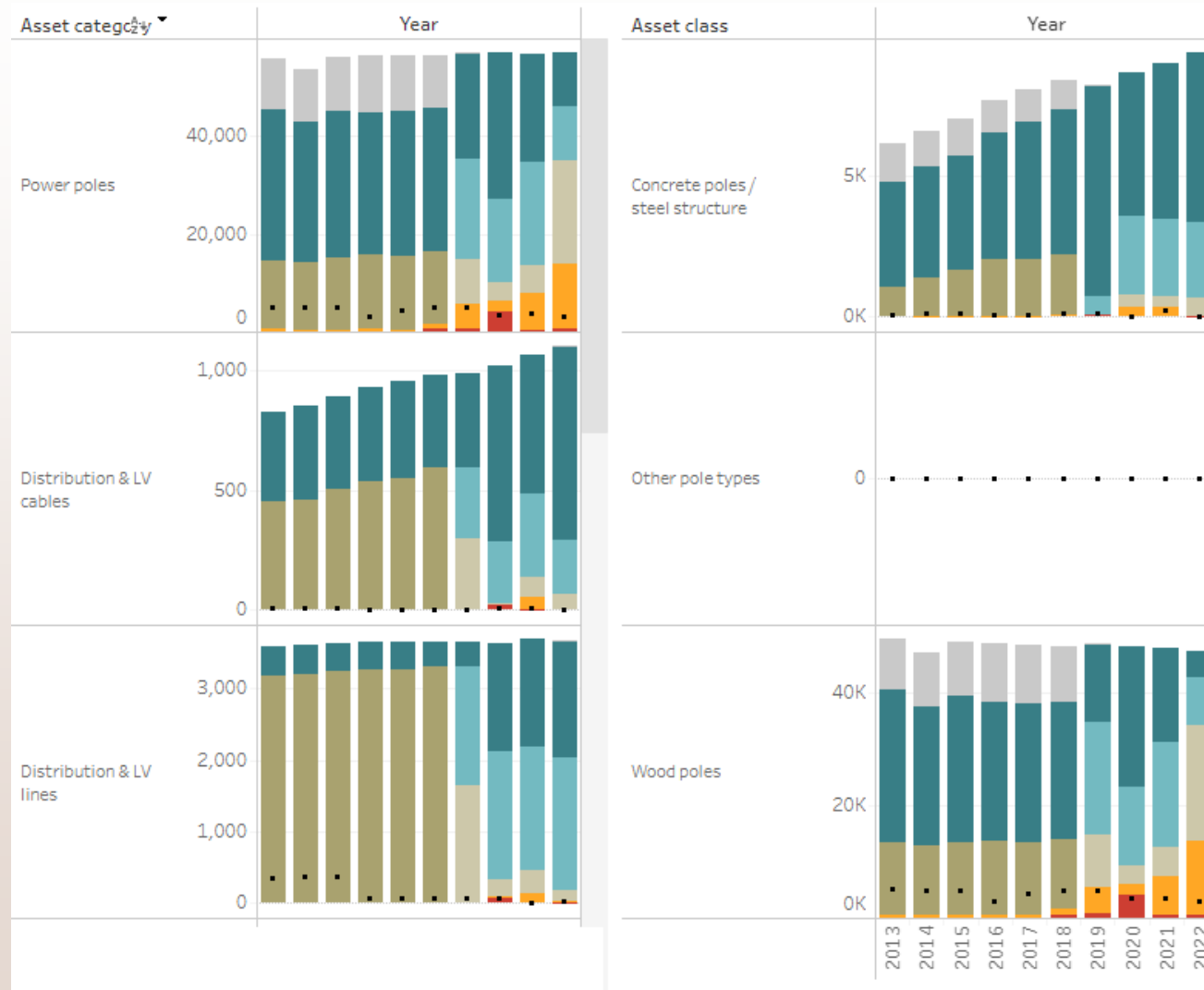


PAT: Asset condition data



Data accuracy?

PAT: Asset condition data



Development ideas

- Is there anything that industry is interested in Commerce Commission including?

