

ACT Government

Outcome and impact reporting in environment protection regulation

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AELERT and INECE Global summit
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Overview

- Goal
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- Disclaimer
- Examples
 - Tier 4 – Resource Efficiency
 - Tier 3 – Activities and Outputs
 - Tier 2 – Behavioural change
 - Tier 1 – Impacts and outcomes
- Calls to action



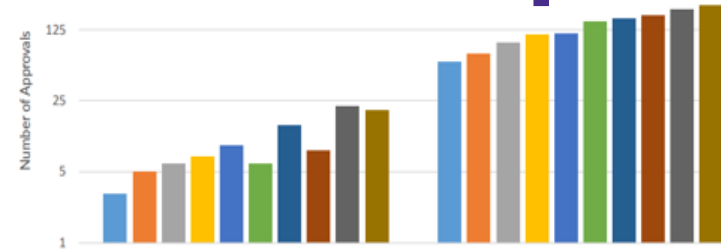
Goal

- Explore tiers of regulatory activities
- Develop capacity to deliver and report on outcomes



Definitions

- **Tier 4: Resource efficiency**
 - Agency resources and authority
 - Regulated community's resources,
- **Tier 3: Activities and outputs**
 - Enforcement actions (numbers, seriousness, penalties etc),
 - Inspections (numbers, nature, findings etc),
 - Education, outreach, collaborative partnerships,
- **Tier 2: Behavioural change**
 - Compliance and non-compliance,
 - Other changes such as adoption of best practice and other risk reduction activities.
- **Tier 1: Impacts and outcomes**
 - Environmental emissions, health effects, declines in injury and accident rates.



Disclaimer

- Examples are excerpts from broader legislation and reports
- Selected for:
 - Demonstration of the model
 - Compelling graphics
- Do not represent:
 - The best or only examples, or
 - Full extent of agencies' efforts or reporting



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Tier 4



Resource efficiency

- Agency resources and authority
- Regulated community's resources
- State authority

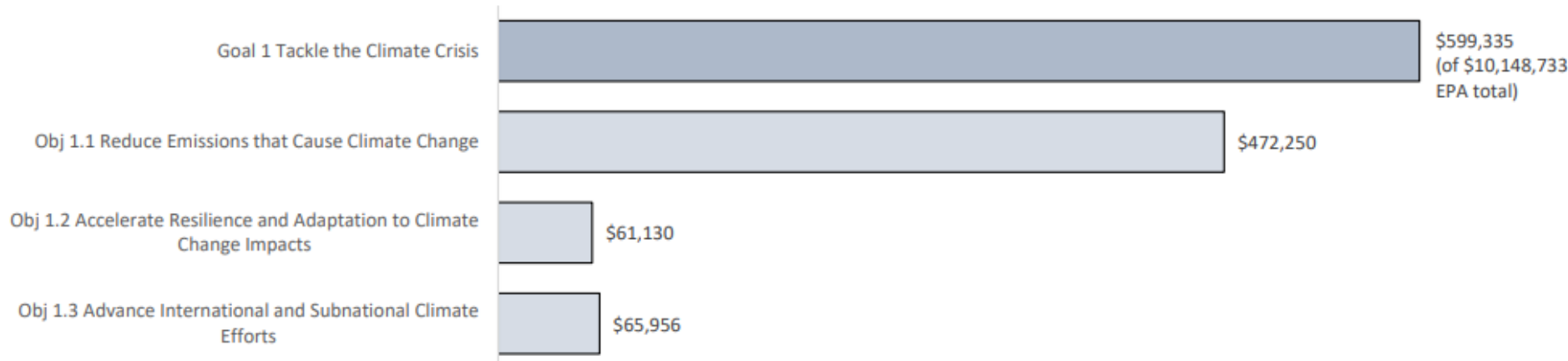
USA EPA Annual Performance Report 2023

- Progress towards the 2022-2026 USA EPA Strategic plan.
- Deliver programmatic and financial performance reports on an annual basis.

Goal 1 at a Glance

Tackle the Climate Crisis: Cut pollution that causes climate change and increase the adaptive capacity of Tribes, states, territories, and communities.

FY 2023 Enacted Budget (in thousands) by goal and objective



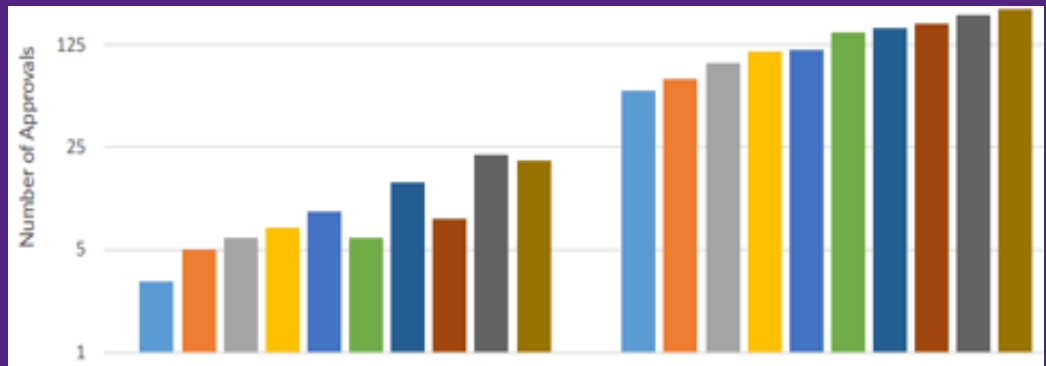
NZ Environment Protection Authority Act 2011

Establish an EP Authority and provide for its functions and operations.

Non-departmental output expenses for the year ended 30 June 2024

In thousands of NZD	Actual 2024	Budget 2024	Actual 2023
EPA functions	29,799	27,999	24,473
Emissions Trading Scheme	7,266	6,837	7,021
EEZ Major Prosecutions Fund	–	–	–
Non-departmental output expense	37,065	34,836	31,494
Capital funding for the Register	600	600	1,800
Non-departmental capital expenditure	600	600	1,800
TOTAL CROWN FUNDING	37,665	35,436	33,294

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Tier 3

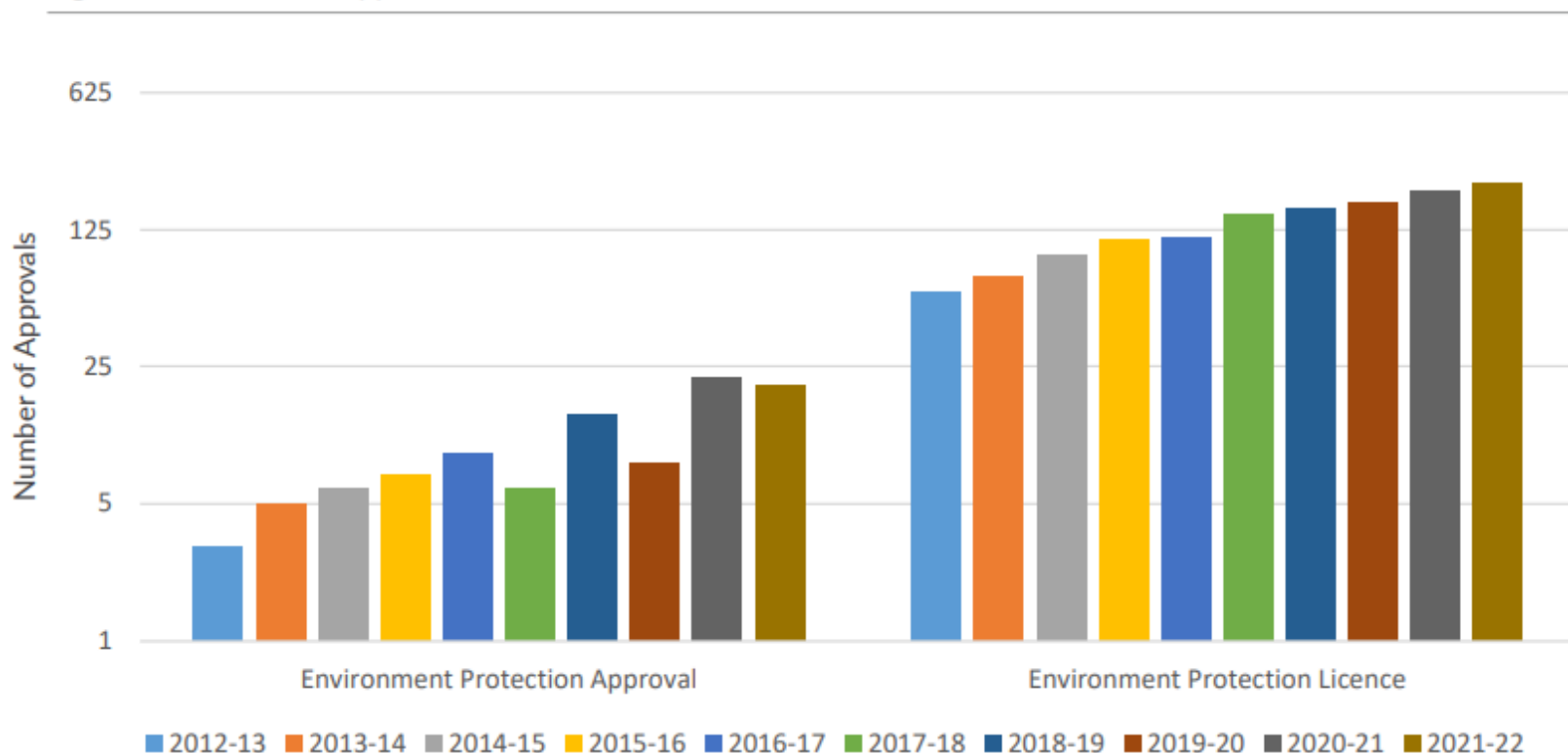
Activities and outputs

- Enforcement actions (numbers, seriousness, penalties etc),
- Inspections (numbers, nature, findings etc),
- Education, outreach, collaborative partnerships,

Northern Territory EP Authority Act 2012

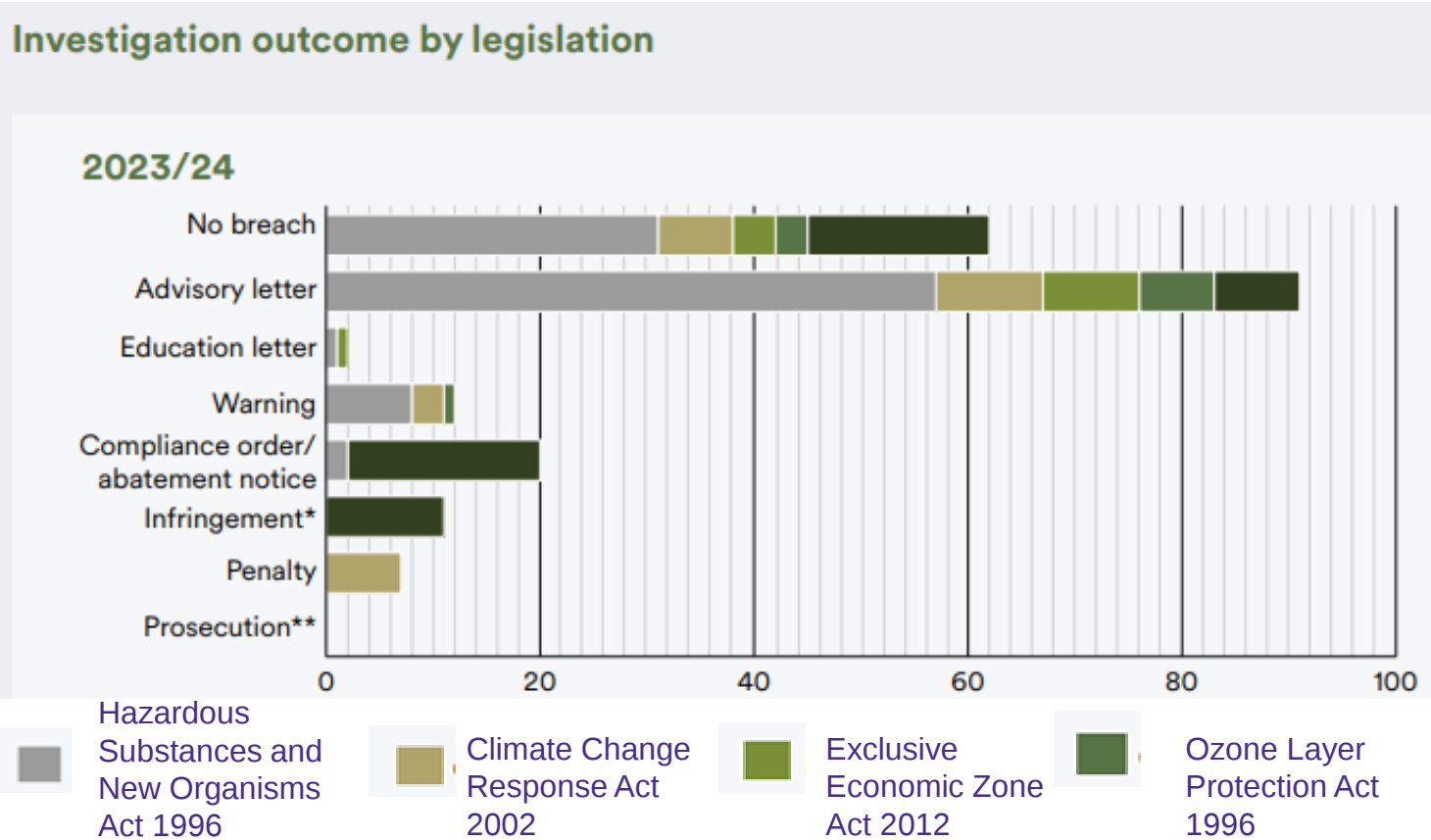
Administer licences and approvals

Figure 1: Licences and approvals administered



New Zealand Environmental Protection Authority

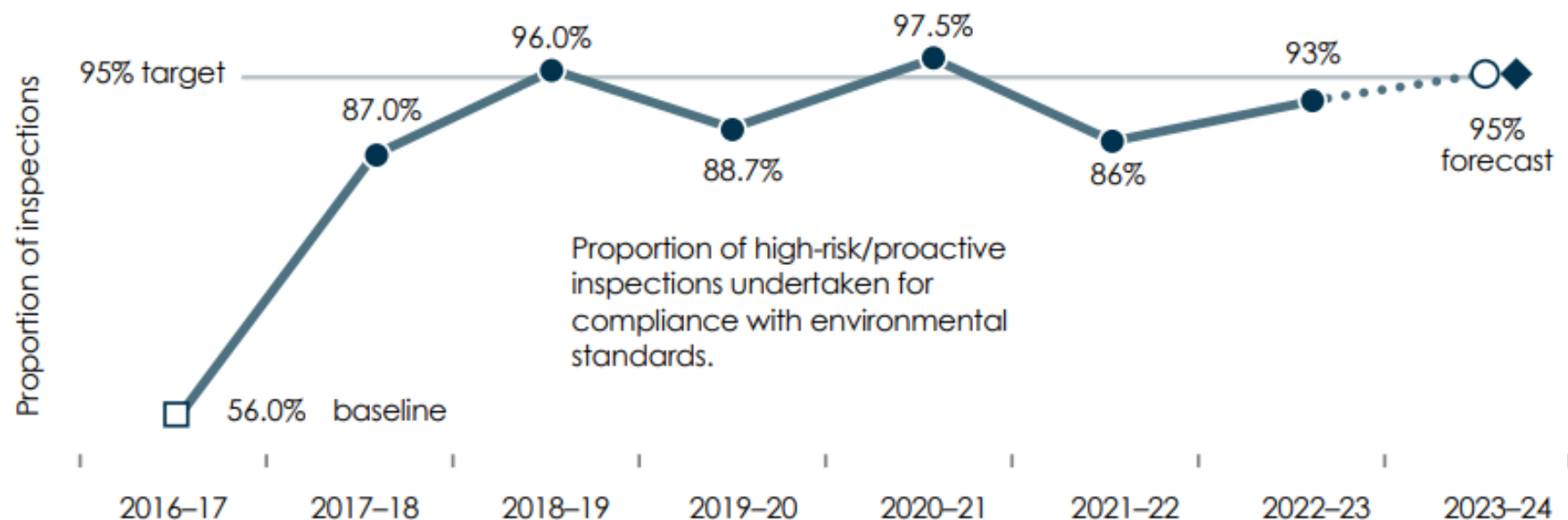
Regulate the use of chemicals and hazardous substances, manage rules for new organisms, regulate offshore activities, administer Emissions Trading Scheme.



NSW Protection of the Environment Operations Act 1997

Reduce risks to human health and prevent the degradation of the environment by promoting pollution prevention and cleaner production.

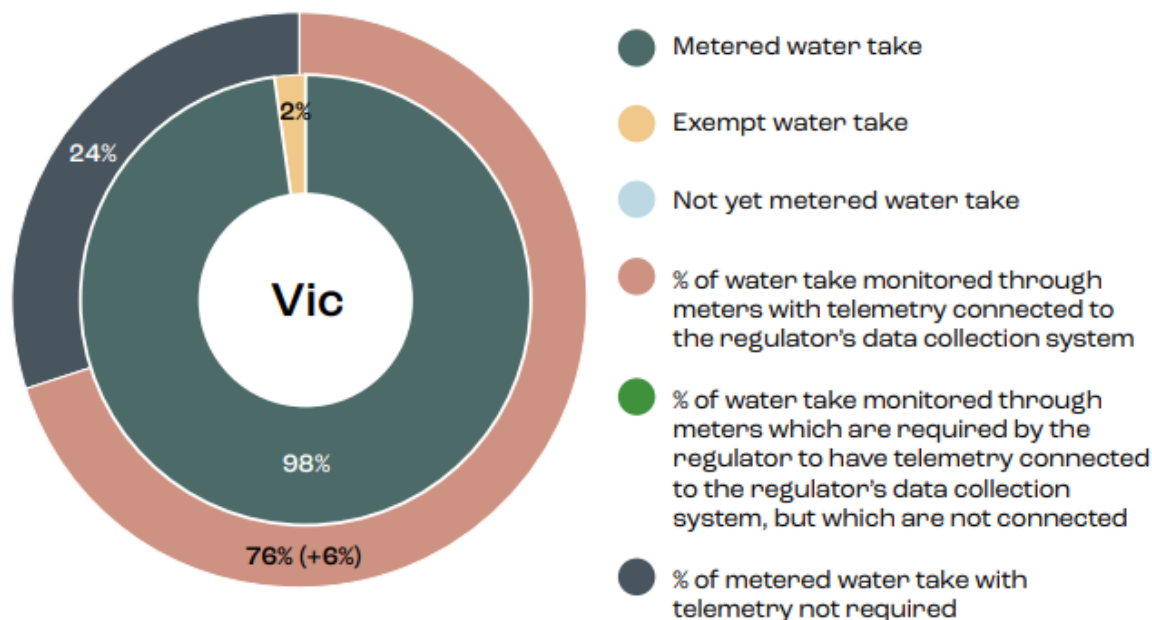
Proportion of inspections



Australian Inspector-General of Water Compliance

Monitor and provide independent oversight of water compliance.

Percentage of water take metered and telemetered in Victoria



The inner graph highlights percentage of meterable water take across the Murray-Darling Basin by each State that is metered. As this metric is influenced by water user behaviour, year-on-year change is not displayed in brackets. The outer graph represents percentage of water take monitored through meters equipped with telemetry.

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Tier 2

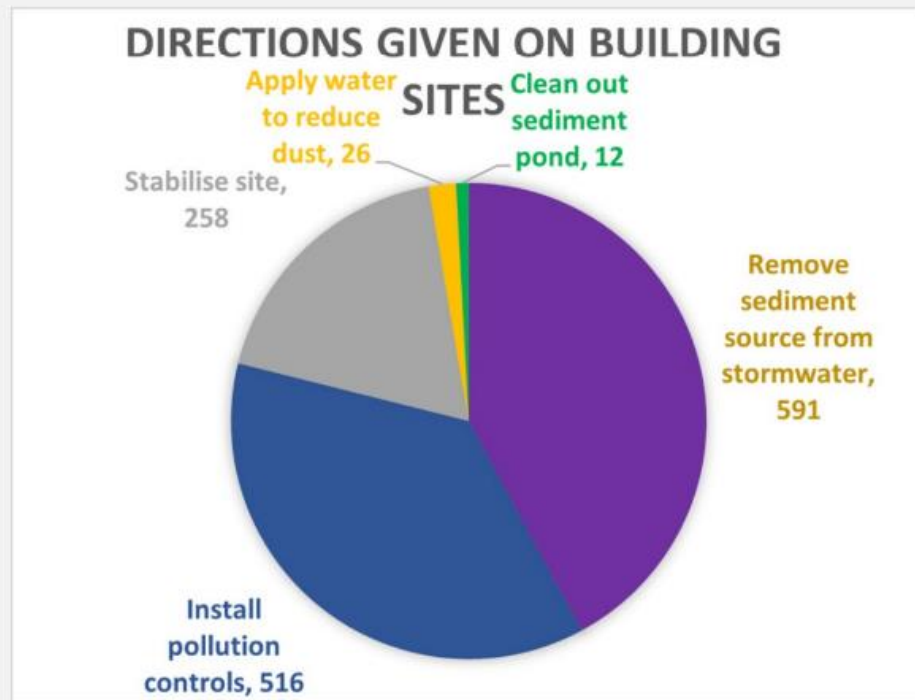
Behavioural change

- Compliance and non-compliance,
- Other changes such as adoption of best practice and other risk reduction activities.

ACT EPA – Environment Protection Act 1997

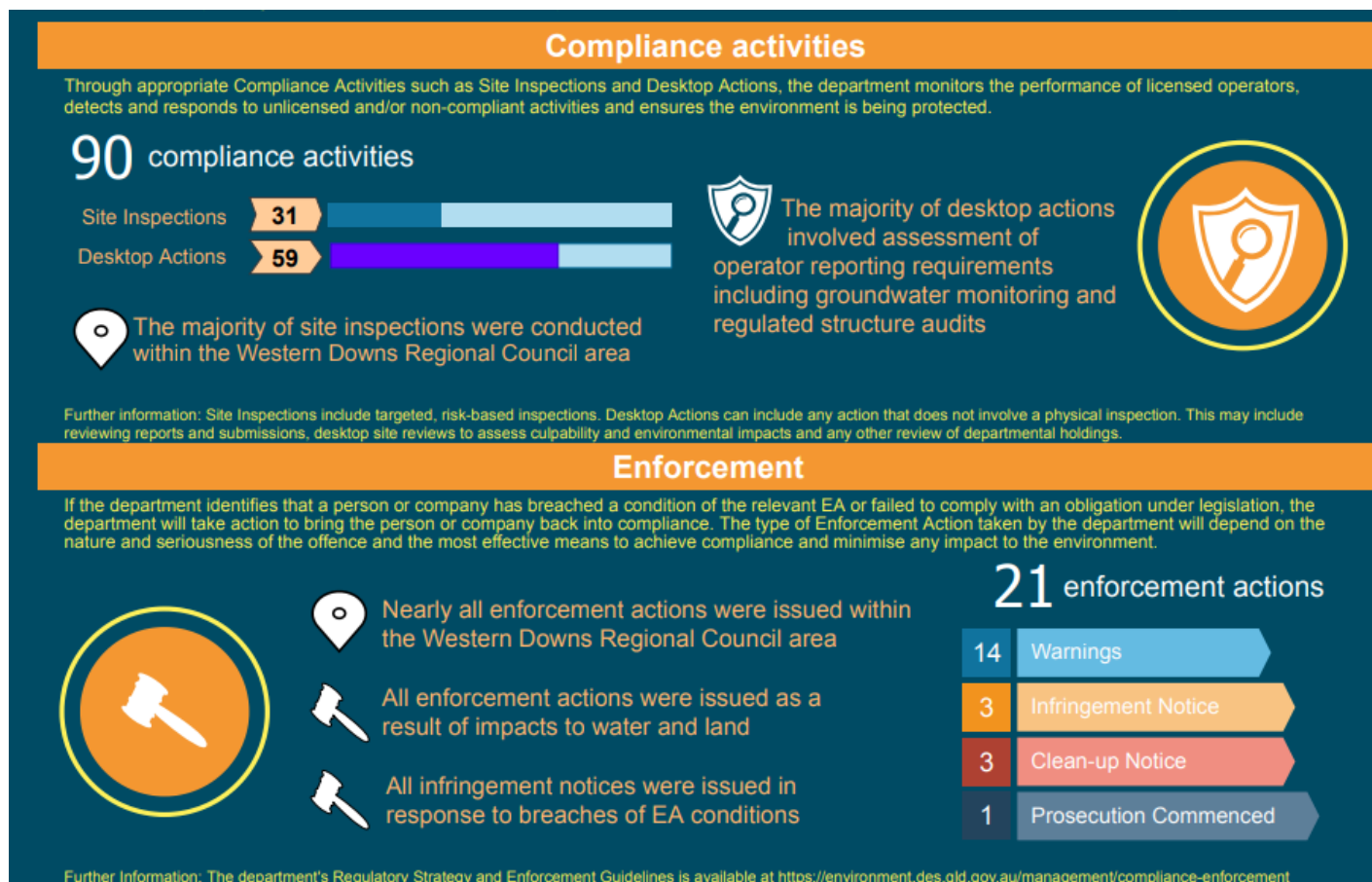
Require people engaging in polluting activities to make progressive environmental improvements.

Figure 1: Directions given on building sites



Qld Environment Protection Compliance and Enforcement

Educate about laws and how to comply, encourage compliance, monitor and respond to breaches of the legislation with consistent and proportionate enforcement action



https://environment.desi.qld.gov.au/_data/assets/pdf_file/0026/254654/coal-seam-gas-compliance-enforcement-report-2020-21.pdf,
<https://environment.desi.qld.gov.au/management/compliance-enforcement>

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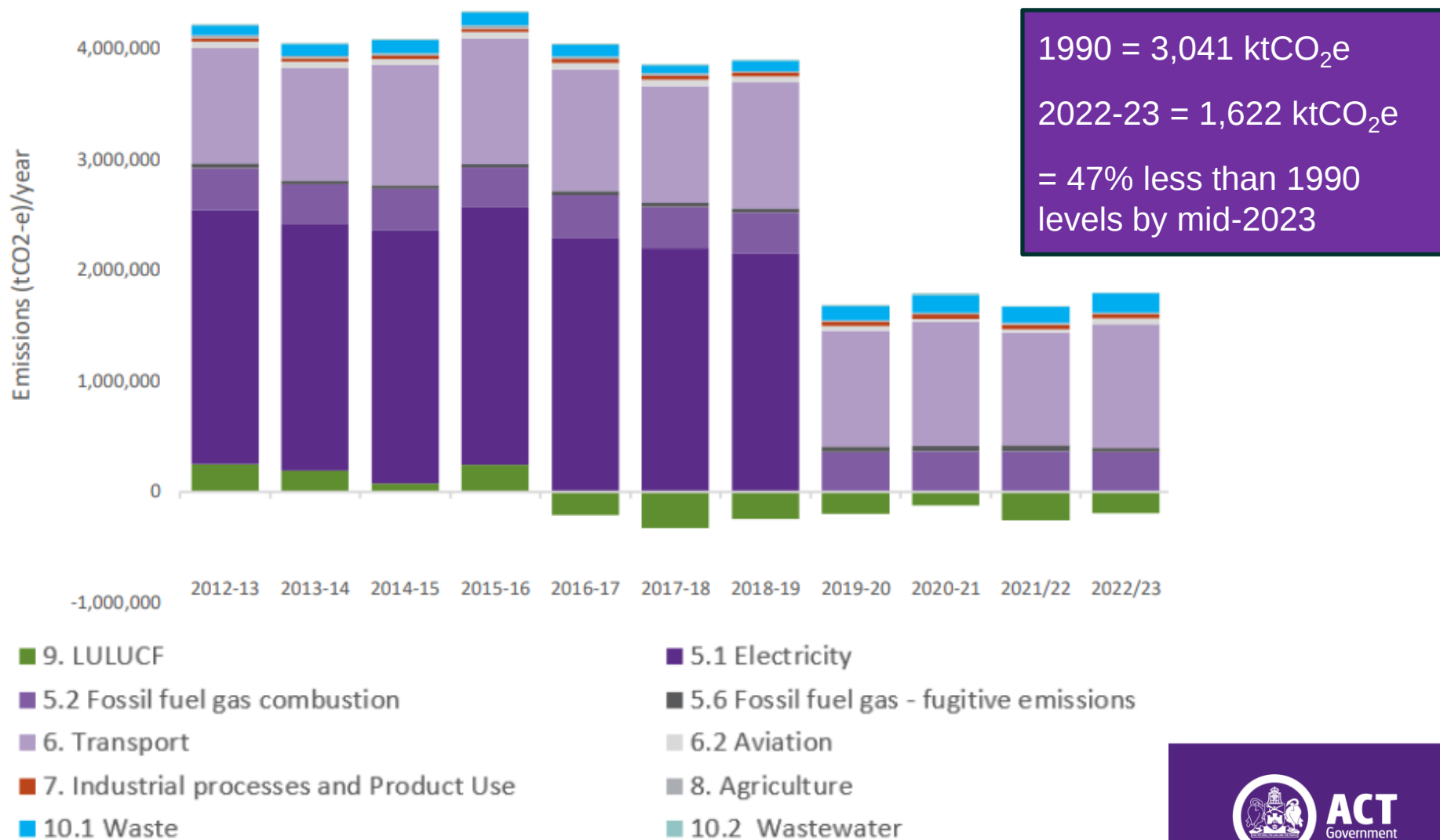
Tier 1

Impacts and outcomes

- Environmental emissions, health effects, declines in injury and accident rates.

ACT Greenhouse Gas Emission Reduction

Emissions to be 50-60% less than 1990 by mid-2025



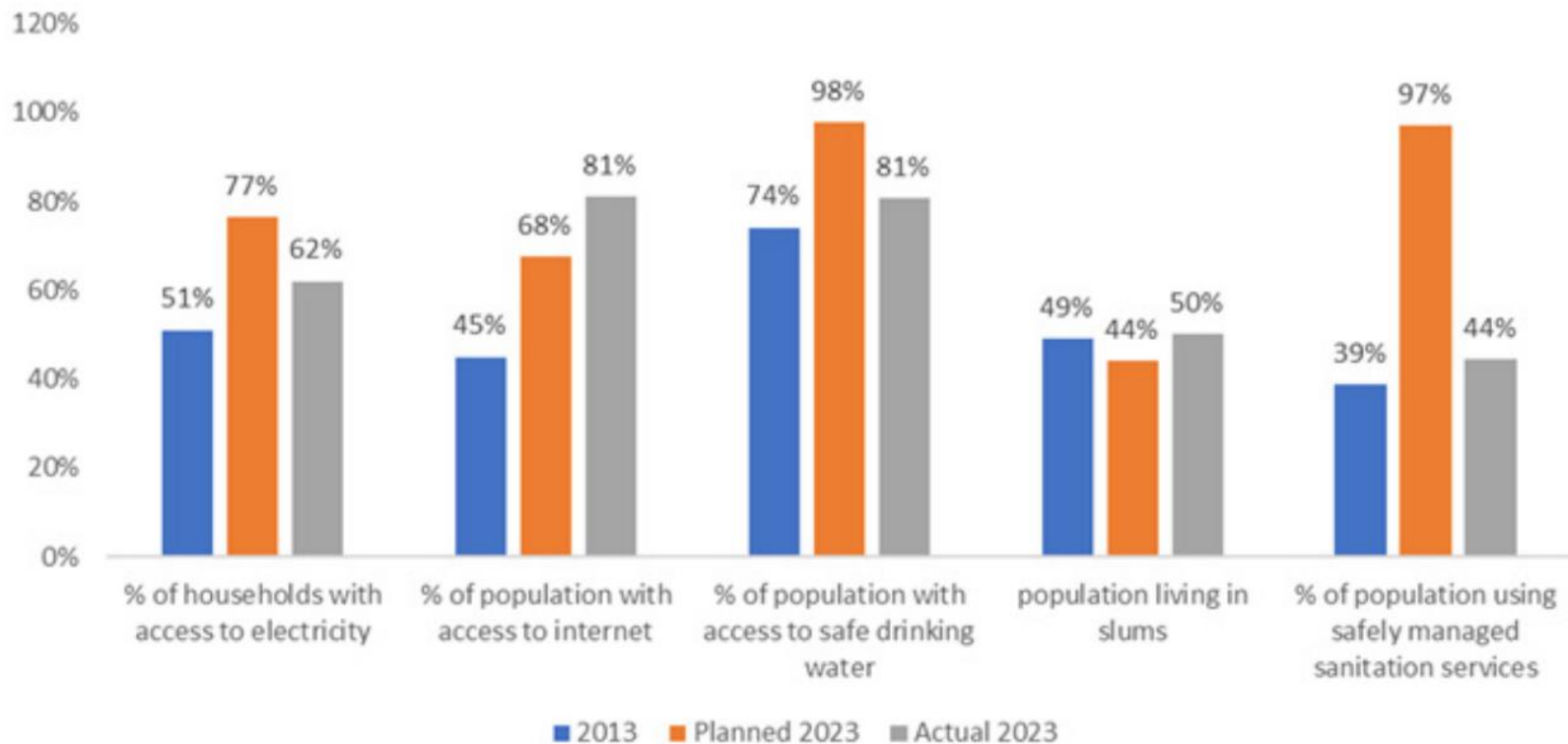
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African Union Commission and African Union

Report on initiatives that embody the Union's efforts and lie at the heart of its actions

Example of findings on effectiveness

Provision of Basic Services

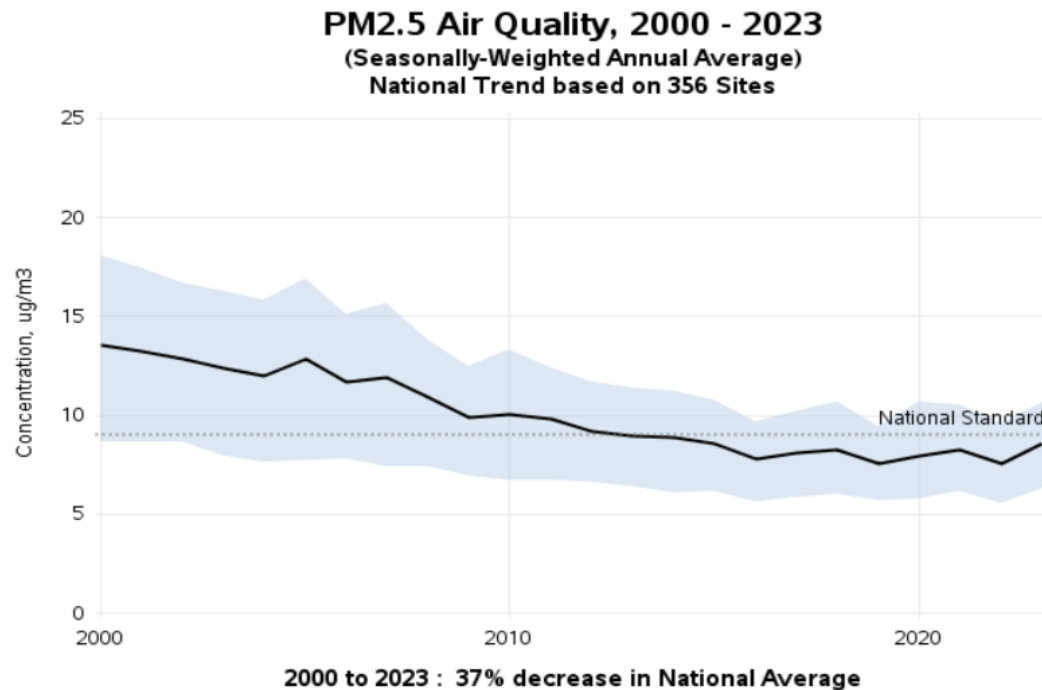


USA Clean Air Act 1970

Set and review national air quality standards for PM. Air quality monitors measure concentrations of PM throughout the country.

National Trends

Starting in 2000 | 2010

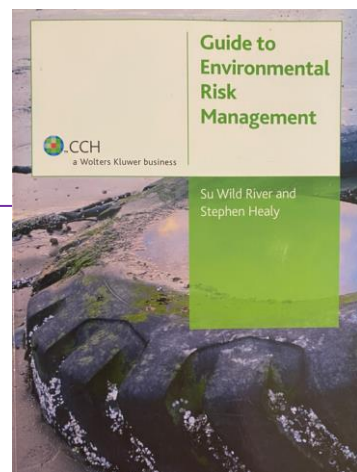


Risk framework is hardwired into EP Act definitions of environmental harm

- S137 ACT EPA - A person must not knowingly or recklessly pollute the environment causing serious environmental harm or **likely** serious environmental harm.



Inherent and residual risk



Inherent risk: the likelihood and consequences of environmental harm from the activity if there were no risk control measures in place.

Residual risk: the likelihood and consequences of environmental harm occurring, taking account of risk control measures



Risk analysis example: Groundwater pollution from landfills accepting hazardous wastes

Likeli-

Consequences

hood ↓

1_(negligible)

2_(minor)

3_(severe)

A_(certain)

8(M)

16 (M)

32 (H)

B_(likely)

4 (L)

8(M)

16 (M)

C_(moderate)

2 (N)

4 (L)

8(M)

D_(unlikely)

1 (N)

E_(rare)

0 (N)

A5:128



D4:8



16 (M) 32 (H)
8(M) 16 (M)
4 (L) 8(M)

• note the 'real' top and bottom of scale

Outcomes from ANU

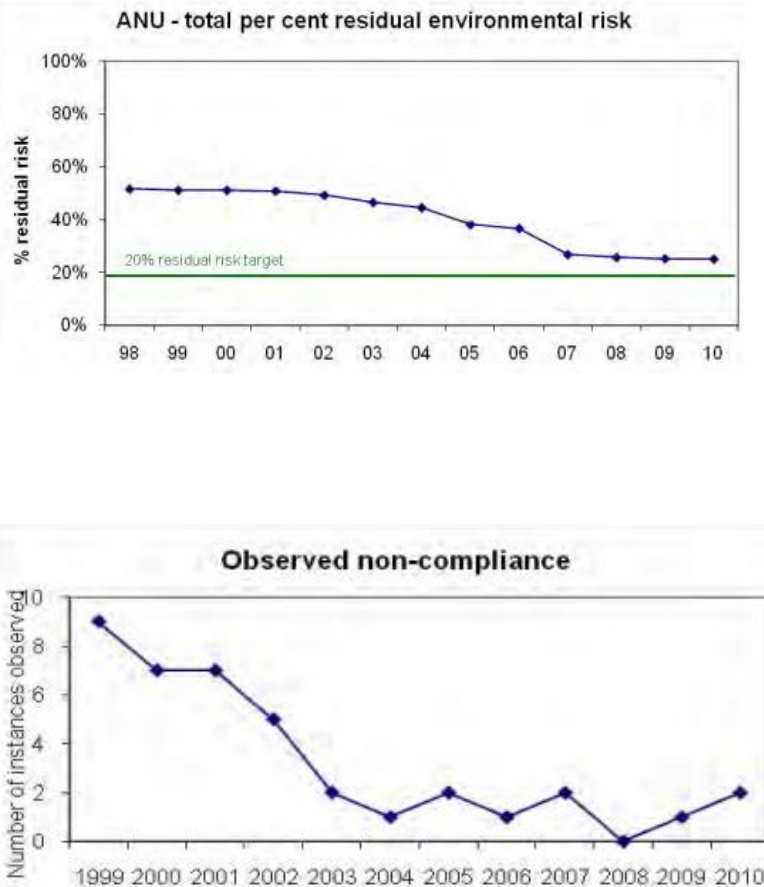
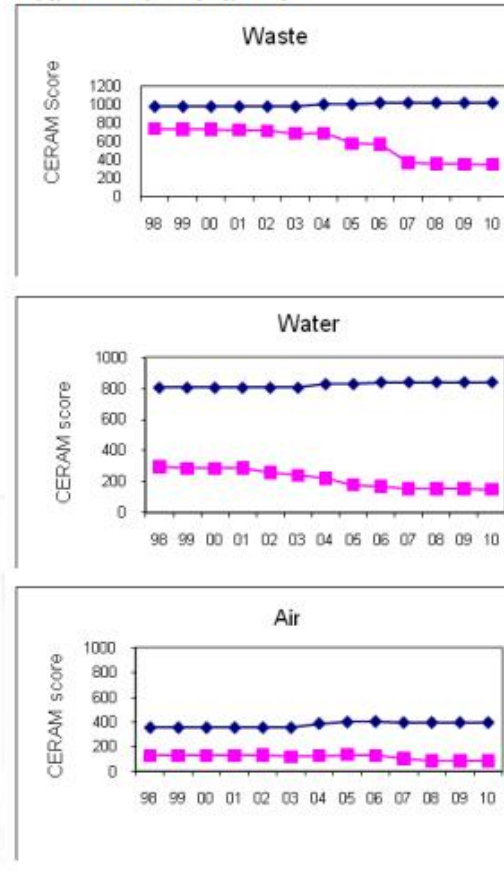
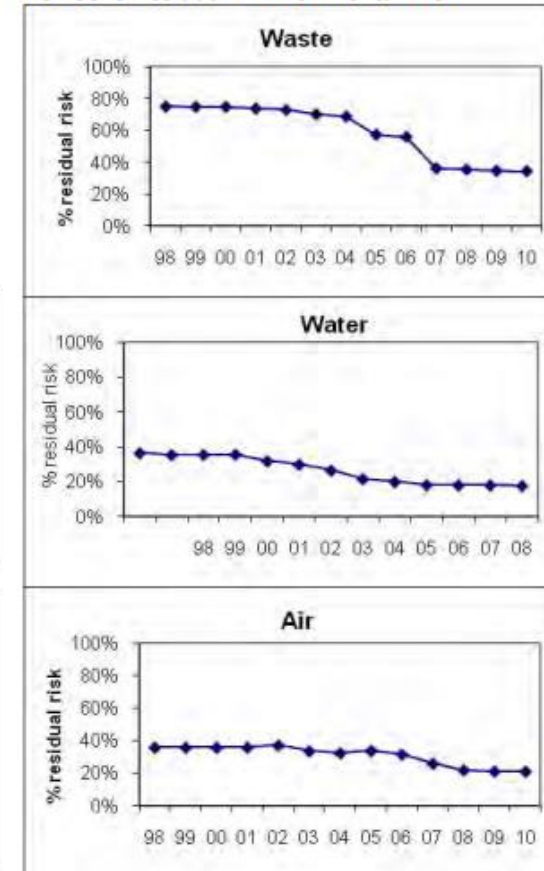


Figure 4.4 ANU Environmental Risk by Receptor
Total Environmental Risk



Per Cent Residual Environmental Risk



South Australia – EPA administration

Pursue sustainable practices that protect the environment and people's health, safety and wellbeing, while also supporting economic growth.

Tier 3 – Activities and outputs



Tier 2 – Behavioural change



Community & Industry



Tier 1 – Outcomes and impacts

Tier 4 – Resource efficiency

Service & performance



Positive increase Negative increase Positive decrease Negative decrease Steady

https://www.epa.sa.gov.au/files/15769/annualreport_2022-23.pdf

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Calls to action

Calls to action

- Apply the model
 - Be aware of what you are targeting and reporting,
 - Tier 4 – Resource efficiency,
 - Tier 3 – Activities and outputs,
 - Tier 2 – Behavioural change,
 - Tier 1 – Impacts and outcomes.
- Increase outcome delivery and reporting
 - Ask how resources, activities, outputs and behaviour change drive outcomes,
 - Connect regulatory activities to outcomes, and
 - Report on the outcomes.