#### Overview





Waste and Resource Recovery overview

Site contamination

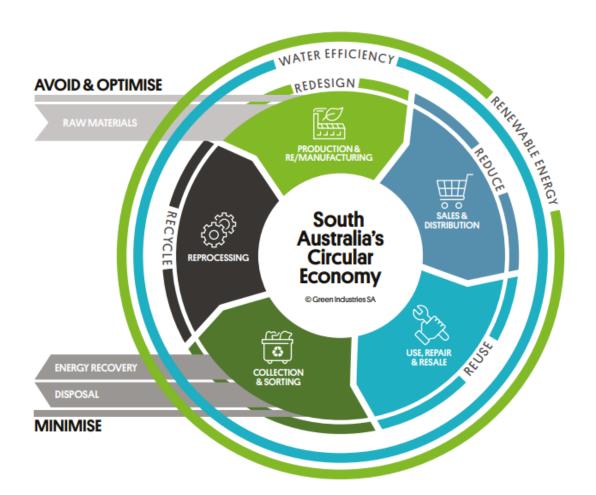
Climate Change

Radiation Protection and Control

# Overview: waste and resource recovery update







- SA Waste Strategy 2020-25 reminder of targets
- Ban on single-use plastics (updated 1 March 2022)
- Mass Balance Reporting (material flows) for waste depots (Updated 1 July 2021)
- Waste levy collection method change (Updated 1 December 2021)
- Container Deposit Scheme review (current)

### SA's Waste Strategy 2020-2025





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#### **Targets:**

- Zero avoidable waste to landfill by 2030
- 5% reduction on per capita waste generation on a 2020 baseline
- Regional Waste Management Plans for all regional areas by 2023
- Metropolitan resource recovery targets:

Sector	2018-19	2020 target	2025 target
MSW	57%	70%	75%
C&I	88%	80%	90%
C&D	91%	90%	95%

SA Food Waste Strategy released in 2021.

www.greenindustries.sa.gov.au/resources/sa-waste-strategy-2020-2025





### Ban on single-use plastics







- Banned from 1 March 2021:
  - Single-use plastic straws, cutlery & stirrers
- Banned from 1 March 2022:
  - Polystyrene cups, bowls, plates and clamshell containers
- Ban applies to sale, supply or distribution
- Ban includes oxo-degradable plastic products
- Penalties up to \$20,000 and expiation up to \$1,000 apply
- Exemptions apply for people with a disability or medical needs

Further information: Single-use and Other Plastic Products (Waste Avoidance) Act 2020

www.replacethewaste.sa.gov.au

EPA Guideline for assessing plastic products

### **Mass Balance Reporting**





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- Mass balance reporting commenced
   1 July 2021
- Applies to waste facilities receiving over 20,000 tonnes of waste p.a.

#### Mass Balance Reporting

Monthly reports

Annual surveys & stocktakes

INFORMS

www.epa.sa.gov.au/environmental\_info/ waste\_recycling/mass-balance-reporting

### Stockpile & material flow trends

- Informs if EPA action is needed, e.g.:
  - o Management plan
  - o Stockpile limit
  - o Financial assurance
  - o Compliance for breach
- Informs Government early if a sector-wide issue is arising

### Resource recovery opportunities

- Site opportunities
- Sector-wide opportunities

Levy collection at landfill

#### **Market development**



**Effective recovery** 



**Contamination** 



### Waste levy collection





Changes to solid waste levy collection commenced 1 December
 2021

- Applies to South Australian landfills
- Key features:
  - Clarity on application of levy to daily cover
  - Application of levy to unapproved operational use
  - Application of levy to unauthorised stockpiling
  - Improved powers to recover unpaid levy
  - Review of penalty provisions



www.epa.sa.gov.au/business\_and\_industry/waste-levy

### Container Deposit Scheme review







- 2019 Scoping Paper "Improving SA's Recycling Makes Cents" identified four key opportunities
- Discussion paper public consultation September-November 2021.
- Working with other jurisdictions to maintain national alignment of schemes.

www.epa.sa.gov.au/environmental\_info/waste\_recycling/container\_deposi

### Key issues



The key issues raised during consultation and discussions with stakeholders related to:

- 1. the objectives of the CDS and resource recovery and recycling of container materials within a circular economy,
- 2. scope of containers included in the CDS,
- 3. Scheme approvals and container marking,
- 4. CDS container return rates, including deposit value, container return and payment of the refund, and
- 5. the governance of the CDS and comparison to schemes in other jurisdictions.

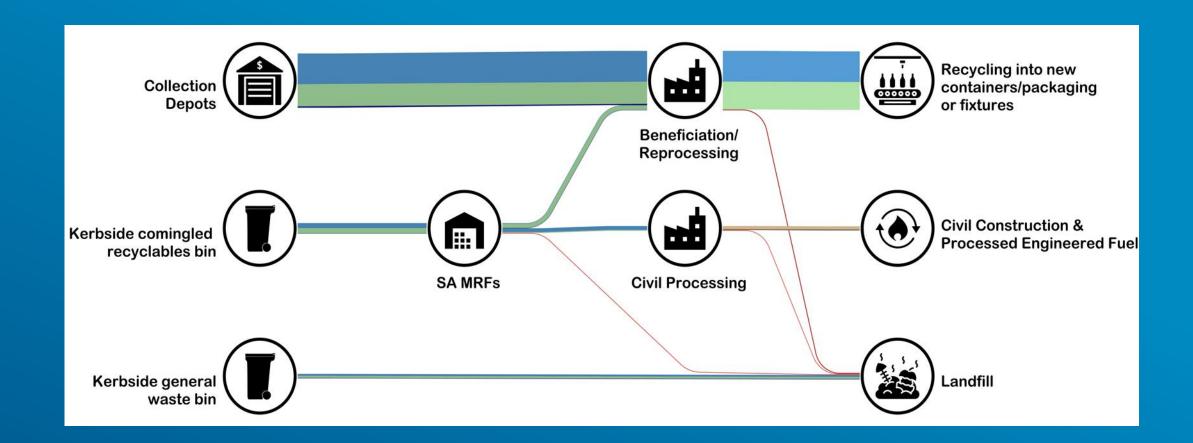
The alignment of state and territory schemes was raised as a key issue that traverses the key issues in this paper.

# Material Flow of CDS Containers per year



25 YEARS 1995-2020

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### Site contamination planning reforms

#### Objectives:

- Support urban renewal within metropolitan Adelaide
- Identify site contamination early in the planning process
- Protect the community from potential health impacts

#### Reforms:

- Site Contamination policies within the Planning and Design Code
- Prescribed classes of development for referral to EPA for site contamination assessment

If you're changing land use to a more sensitive use you need to investigate potential site contamination as part of your planning application.

plan.sa.gov.at

#### Land use sensitivity hierarchy





Residential (soil access)



Preschool/Primary school

SENSITIVE



Residential (limited or no soil access)



Residential care facility





Open space









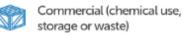
















Industrial





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# Site Contamination Update

#### Site contamination assessment scheme

#### **Objectives:**

- Protect human health
- Support urban renewal ("no surprises")

#### **Key Principles**

- Risk-based procedure
- Only triggered through land use change to a 'more sensitive use'
- Investigations & reporting based on nationally consistent approaches (ASC NEPM)
- Access to EPA scientific expertise in high-risk scenarios

#### Land use sensitivity hierarchy



#### Did you know?

If you are moving up the ladder (hierarchy) your proposal is a 'more sensitive use'

#### **Reforms commenced in March 2021**



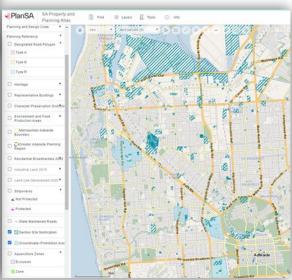
### Integrated site contamination assessment scheme:

- Planning, Development and Infrastructure (General) Regulations 2017
- State-wide Planning and Design Code
- Site Contamination Assessment Practice Direction
- Site contamination spatial layers (SAPPA)
- EPA referrals in higher risk scenarios



the application proposes a sensitive use. This practice direction also provides specified condition (pursuant to section 127(1)(b) of the Act) for development authorisations where remediation may be necessary before occupation or use of land the subject of the application.





Avoid
expensive
"surprises"
during brownfield
development

# **Process** certainty

build into financial models and timeframes

#### **Equity**

levels the playing field

Secure finance on basis of addressing legacy risks

# Benefits

Efficiency proportionate expenditure

Protection & enhancement of property values

Clear path for managing liability Enhanced market confidence





# Climate Change

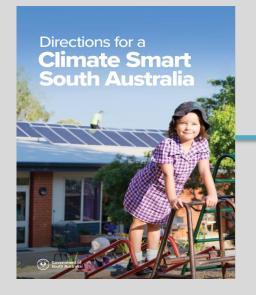
# Climate change: a whole of government approach



Climate change action in South Australia is a whole of government strategic approach.

Further information available on DEW website:

https://www.environment.sa.gov.au/topics/climatechange



Policy direction statement that sets the government's agenda for action.

Released December 2019.



Implements the policy directions.

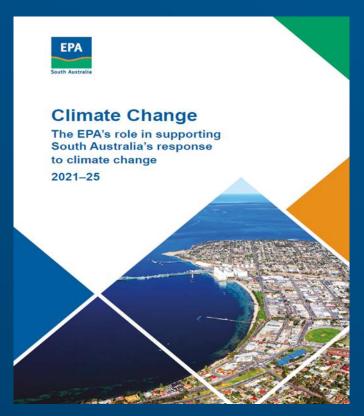
Describes the governmentled objectives and actions.

Released: December 2020.

### Climate change: EPA's role statement



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https://www.epa.sa.gov.au/files/15173 \_climate\_change\_role\_statement.pdf Released 9 February 2022.

Sets out EPA's role in supporting South Australia's response to climate change.

Includes links to EPA actions in the SA Government Climate Change Action Plan.

#### Focusses on:

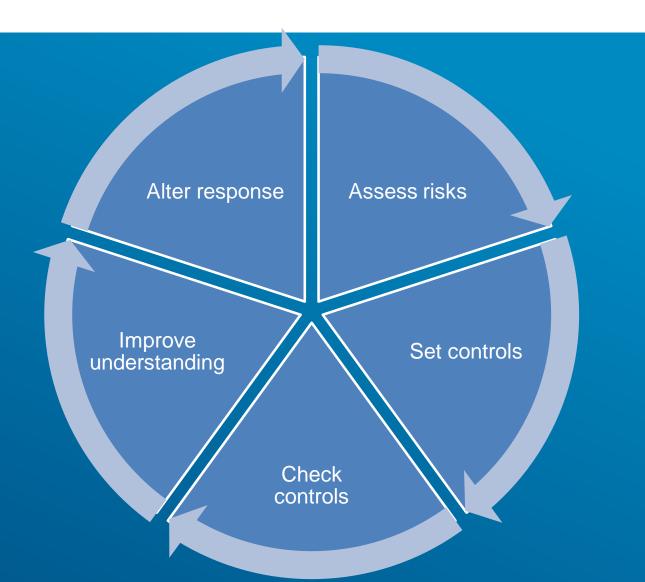
- adaptive responses
- strengthening the regulatory framework for the circulation of materials
- sharing science and trends.

# Adaptive management of licences



Using adaptive management principles and techniques to modernise our regulatory approach to environmental licensing





**Principle 1. Risks are understood** 

**Principle 2. Objectives are established** 

**Principle 3. Effectiveness is evaluated** 

**Principle 4. Adaptive management is incorporated into licence conditions** 

**Principle 5. Management actions are adjusted** 

Principle 6. Continuous improvement is supported

### Incorporating climate change risk





Integrate climate risk with resource prioritisation and risk management processes

Work with priority licensees to become aware of and understand their risks and liabilities associated with climate change





Offer assistance with climate change risk assessment and risk management strategies





Coastal flooding and inundation



Flooding from extreme rainfall events



Bushfire



Dust from drought conditions



Extreme heat

Overall climate risk rating determined from scores assigned to exposure, vulnerability and impact



#### Components of risk (likelihood and impact)

- Exposure
- Vulnerability
- Impact

#### Criteria

- Extreme weather events
- Projections to 2030 and 2050 (preferred) and 2
- RCP 8.5 emissions scenario

Guide to climate projections for risk assessment and planning in South Australia

Department for Environment and Water

November 2020



### **Beyond SA**



Jurisdictions across Australia have started to focus attention on greenhouse gas emissions and ways of working with business/industry to plan for reduction.

#### Examples include:



https://engage.vic.gov.au/new-draft-guideline-managing-greenhouse-gas-emissions



https://depws.nt.gov.au/environmentinformation/large-emitters-policy/largeemitterspolicy?SQ\_VARIATION\_1042148=0



#### Greenhouse Gas Emissions Policy for Major Projects

This Policy is designed to guide Government decision making for major projects that are assessed by the Environmental Protection Authority

#### Introduction

The McGowan Government is committed to working with all sectors of the Western Australian economy towards achieving net zero greenhouse gas emissions by 2050. Opportunities to transition Western Australia towards net zero by 2050 will be considered in the State Climate Policy currently being developed.

In adopting this aspiration of net zero by 2050, Government acknowledges the Commonwealth Government's target of reducing greenhouse gas emissions by 26 to 28 per cent by 2000 and commists to working with the Commonwealth to achieve this goal. The McGowan Government also acknowledges that businesses operating in Western Australia are bound to comply with obligations under the Australian Government's Safeguard Mechanism.

The world's transition to a low carbon economy presents significant business opportunities, with companies around the globe setting and publishing targets. This helps to ensure competitiveness, manage business risk and drive innovation.

Western Australia's emissions-intensive economy means that we need a considered and economically responsible approach if our State is to capture the benefits of low carbon industries and technologies and support confirmed economic growth.

In Western Australia, proposals which are likely to have a significant impact on the environment are assessed under the Environmental Protection Act 1868 the Act]. Under the Act, the Minister to Environment considers the report and recommendations of the Environmental Protection Authority (the EPA) in relation to proposals assessed by it, and consults with other relevant decision-making authorities as required by the Act. The Minister their determines whether or not the proposal may be implemented and if so under what conditions.

To support the State's aspiration, the policy outlined below describes the broad approach that will be taken into consideration of new proposals and project expansions that would emit significant additional generatious page emissions in Western Australia.

#### Consideration of Major Projects

Where major proposals are assessed under Part IV of the Act, the Minister for Environment will consider the particular characteristics of each project and the advice and recommendations of the EPA. The Government may then consider whether it is appropriate to apply a condition that sets out the requirements for a plan detailing the proponent's contribution towards achieving the Government's aspiration of net zero emissions by 2050.

The Chief Executive Officer responsible for administration of the Act will determine whether the plan complies with the implementation condition.

https://www.der.wa.gov.au/images/doc uments/your-environment/climatechange/Greenhouse%20Gas%20Emis sions%20Policy%20for%20Major%20P<sub>23</sub> rojects.pdf

# Climate change: legal challenges



Climate litigation is a growing field.

National Environment Defenders Office intend to investigate powers of EPAs to regulate greenhouse gas emissions, investigate government duties towards mitigation and take government and fossil fuel companies to Court in pursuit of climate justice

NSW EPA **ordered** to develop environmental quality **o**bjectives, guidelines and policies to **ensure environment protection from climate change** [Bushfire Survivors for Climate Action Incorporated v Environment Protection Authority [2021] NSWLEC 92]

Federal Court of Australia found the Commonwealth Environment Minister has a duty of care to protect Australian children from climate change
[Sharma v Minister for the Environment [2021] FCA 560] under appeal



# Radiation management

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#### Radiation Protection Control Act 2021



- 1982
  - E.T the movie released
  - Argentina invades the Falkland Islands
  - Radiation Protection and Control Act 1982 passes South Australian Parliament
- 1988 Minor amendments to the Act made
- August 2004 National Directory for Radiation Protection first published
- November 2006 Code of Practice for Security of Radioactive Sources approved
- 2011 Minor amendments to the Act made (licensing)
- 2013 Bill drafted and consulted on to modernise the Act and properly implement the National Directory and the Code of Practice for Security of Radioactive Sources
- 2015 Bill postponed due to Nuclear Fuel Cycle Royal Commission
- 2019 –2020 Time to modernise radiation protection legislation in this State review and consultation





- Graded approach to regulation based on risk profile excluding some low risk issues rather than exempting and less regulatory burden for other low risk issues.
- Flexible regulatory tools ability to use orders and expiations to achieve compliance rather than requiring prosecution for all infractions
- Utilising an appropriate Court or tribunal for administrative and criminal matters (currently Supreme Court)
- National alignment of approach (implementation of the National Directory)
- Security provisions that reflect the current security environment
- Applying a general duty for all users of radiation linked to clearly articulated principles for use (the Radiation Protection Principle)
- Reduced administrative burden wherever possible.

# Thank you

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