

# Tracking progress to Australia's 2020 target

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# Australia's 2020 target

- Quantified economy-wide emission reduction
  - **5% below 2000 levels by 2020**
  - Coverage:
    - All inventory sectors (KP classifications)
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# Coverage

7 gases (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>).

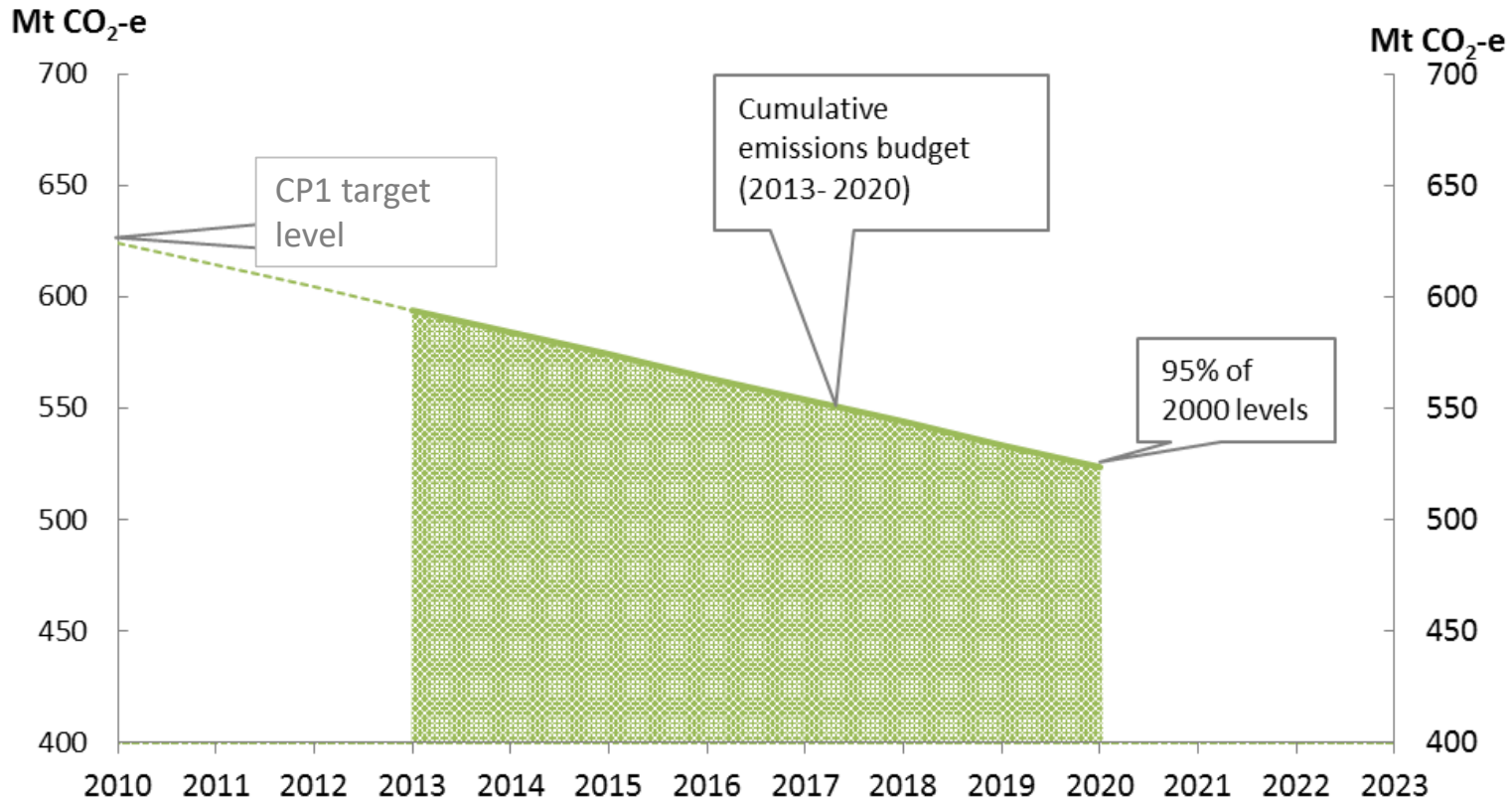
## Sectors – 2006 IPCC Guidelines:

- energy
  - industrial processes and product use
  - agriculture
  - waste
  - LULUCF – KP classifications
    - deforestation, afforestation, reforestation, forest management, cropland management, grazing land management and revegetation
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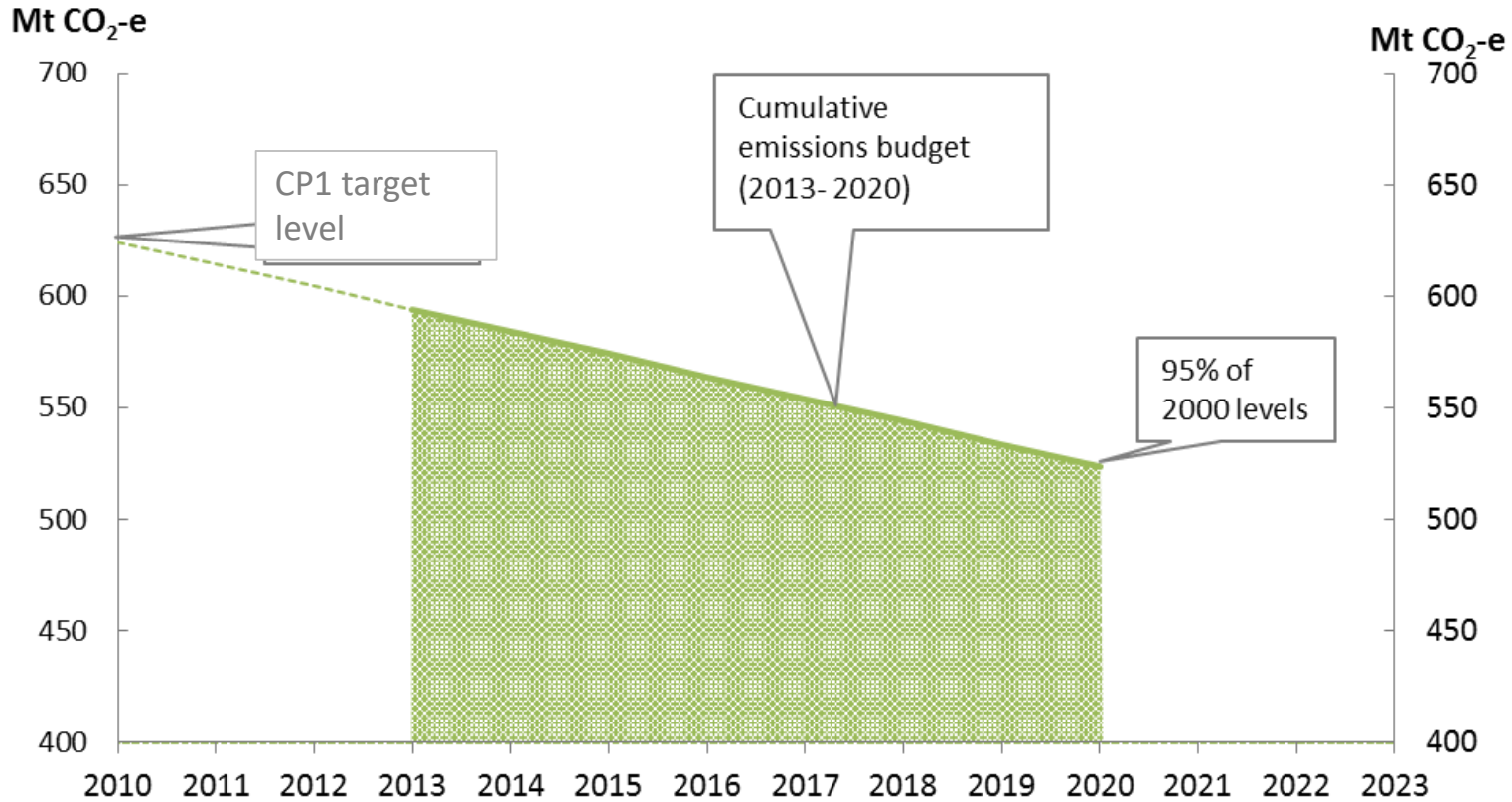
# Accounting

- Same treatment of all sectors
    - Included in base year, and reported years
    - LULUCF: KP classifications
  - Emissions budget 2013- 2020
    - Cumulative emissions over the period
    - Calculated as a trajectory to 2020
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# Emissions budget – 4,500 Mt CO<sub>2</sub>-e



# Emissions budget – 4,500 Mt CO<sub>2</sub>-e



2013	2014	2015	2016	2017	2018	2019	2019	2020
529.5	530.7	537.9						

# Progress towards 2020 target

	Emissions (Mt CO <sub>2</sub> -e)
Emissions budget 2013-2020	4500
Cumulative emissions 2013-2015	1598
<b>Emission budget for remaining period (2016-2020)</b>	<b>2902</b>

- Projected emissions 2016-2020 = 2755
  - Estimated end of period balance = -145
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# Progress towards 2020 target

CALCULATION OF 2020 EMISSIONS REDUCTION TASK	EMISSIONS (MT CO <sub>2</sub> -E)
Cumulative emissions 2013-2020	4354
Target trajectory 2013-2020	4500
<b>Unadjusted emissions reduction task</b>	<b>-145</b>
Voluntary action	8
Waste Protocol units (CERs)	-28
<b>Emissions reduction task</b>	<b>-166</b>
Carryover 2008-2012	-128

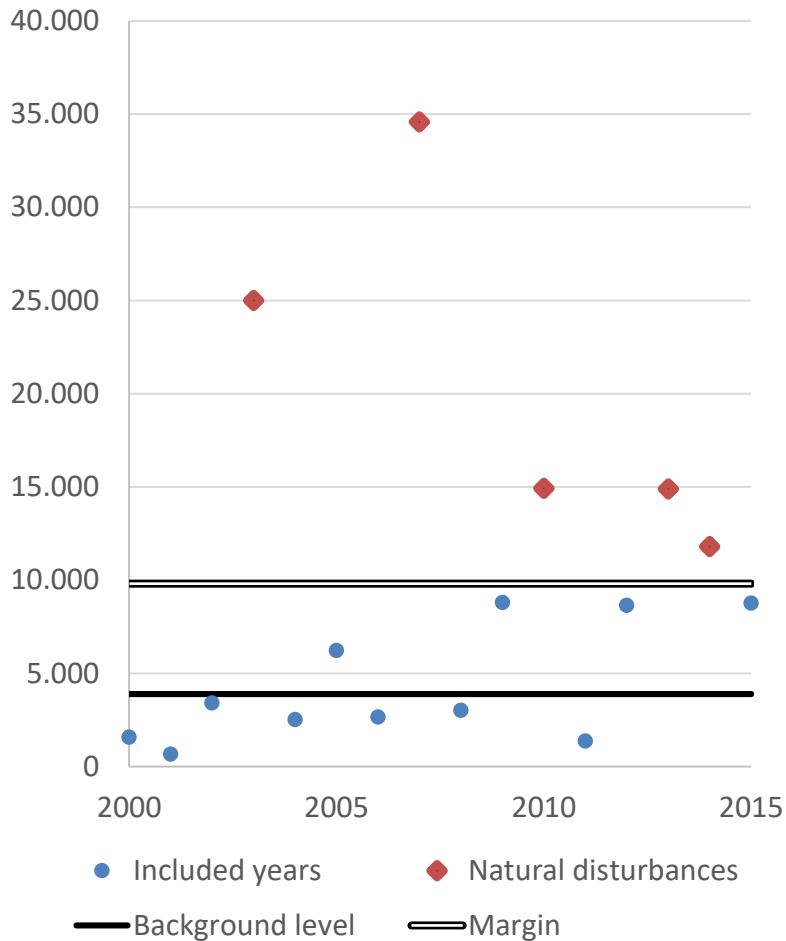


# LULUCF

- **KP land activity classifications.**
- For all LULUCF classifications, emission estimates of net emissions in the reporting period compared with estimates of net emissions in the base-year, 2000

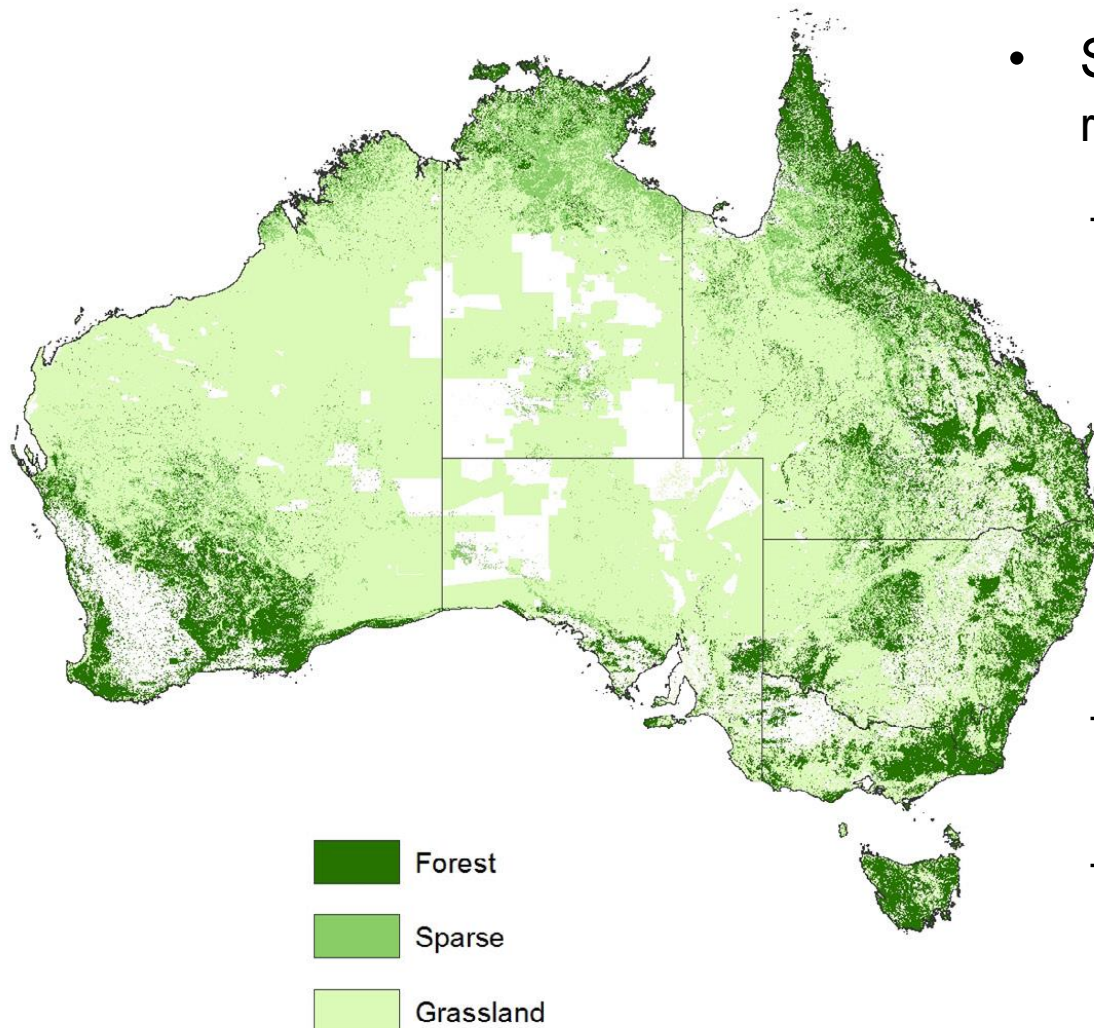
Net emissions / removals (Kt CO <sub>2</sub> -e)	2000	2015
<b>Land Use, Land-Use Change and Forestry KP</b>	<b>69,565</b>	<b>4,568</b>
Deforestation	68,754	31,138
Afforestation and reforestation	-7,130	-12,614
Forest management	-7,517	-18,394
Cropland Management	1,063	-4,180
Grazing land management	14,218	8,730
Revegetation	178	-112

# KP LULUCF – Natural disturbances



- Applied to Wildfires on FM lands
- IPCC Default method
  - Background level: average of 2000-2012 excluding outliers. Margin: 2x standard deviation
  - Natural disturbances (beyond control) when BL + M exceeded. Only report background level of fires
  - Excludes subsequent recovery. Include emissions from salvage logging, subsequent land use change
- Applied consistently to Base Year and reporting period

# LULUCF – KP LULUCF / UNFCCC



- Scope differences, but can be reconciled:
  - *Narrow approach to Forest Management*: management practices for sustainable production of wood and wood fibre occur
    - : FL-FL = 132 Mha;
    - : FM = 11 Mha (*NIR 2015*)
  - UNFCCC Voluntary reporting of *Wetlands supplement* activities
  - Classification differences

# Inventory coverage

	NIR	2020 target	CP2 target	Paris NDC (2030)
<b>Sectors</b>	Energy IPPU Agriculture Waste	Energy IPPU Agriculture Waste	Energy IPPU Agriculture Waste	Energy IPPU Agriculture Waste
<b>LULUCF</b>	UNFCCC land categories <i>forestland, cropland, grassland, wetlands, settlements, other</i>	KP Classifications <i>D, AR, FM, CM, GM, RV</i>	KP Classifications <i>D, AR, FM, CM, GM, RV</i>	UNFCCC land categories <i>forestland, cropland, grassland, wetlands, settlements, other</i>

# Mitigation actions

## Summary:

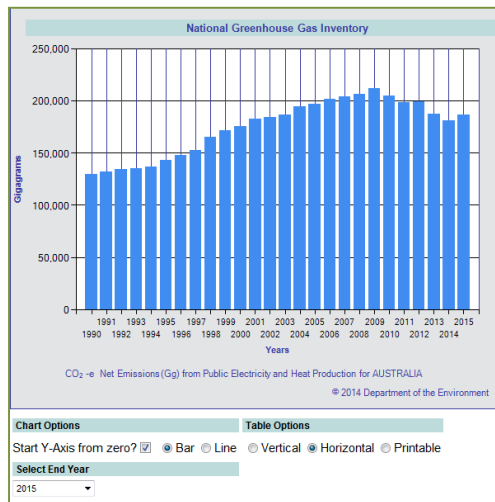
- Emissions Reduction Fund
    - Safeguard mechanism
  - HFC phase-down
  - Ministerial on Vehicle Emissions
  - Renewable Energy Target
  - National Energy Productivity Plan
  - Australian Renewable Energy Agency
  - Clean Energy Finance Corporation
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# National Greenhouse Accounts

## National Inventory Report

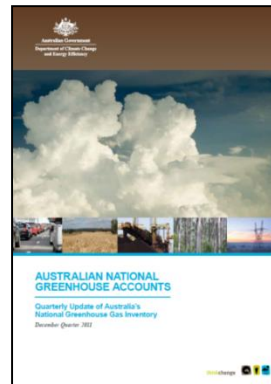


## AGEIS

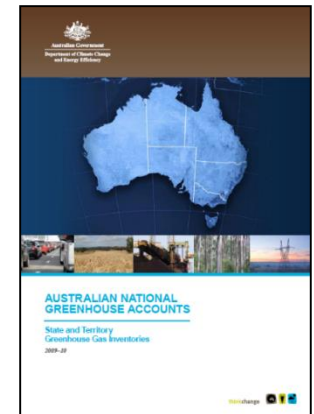


## Economic Sector Reporting

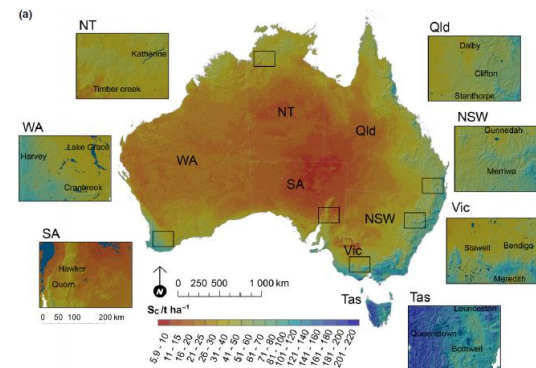
### Quarterly Updates



### State & Territory Reporting



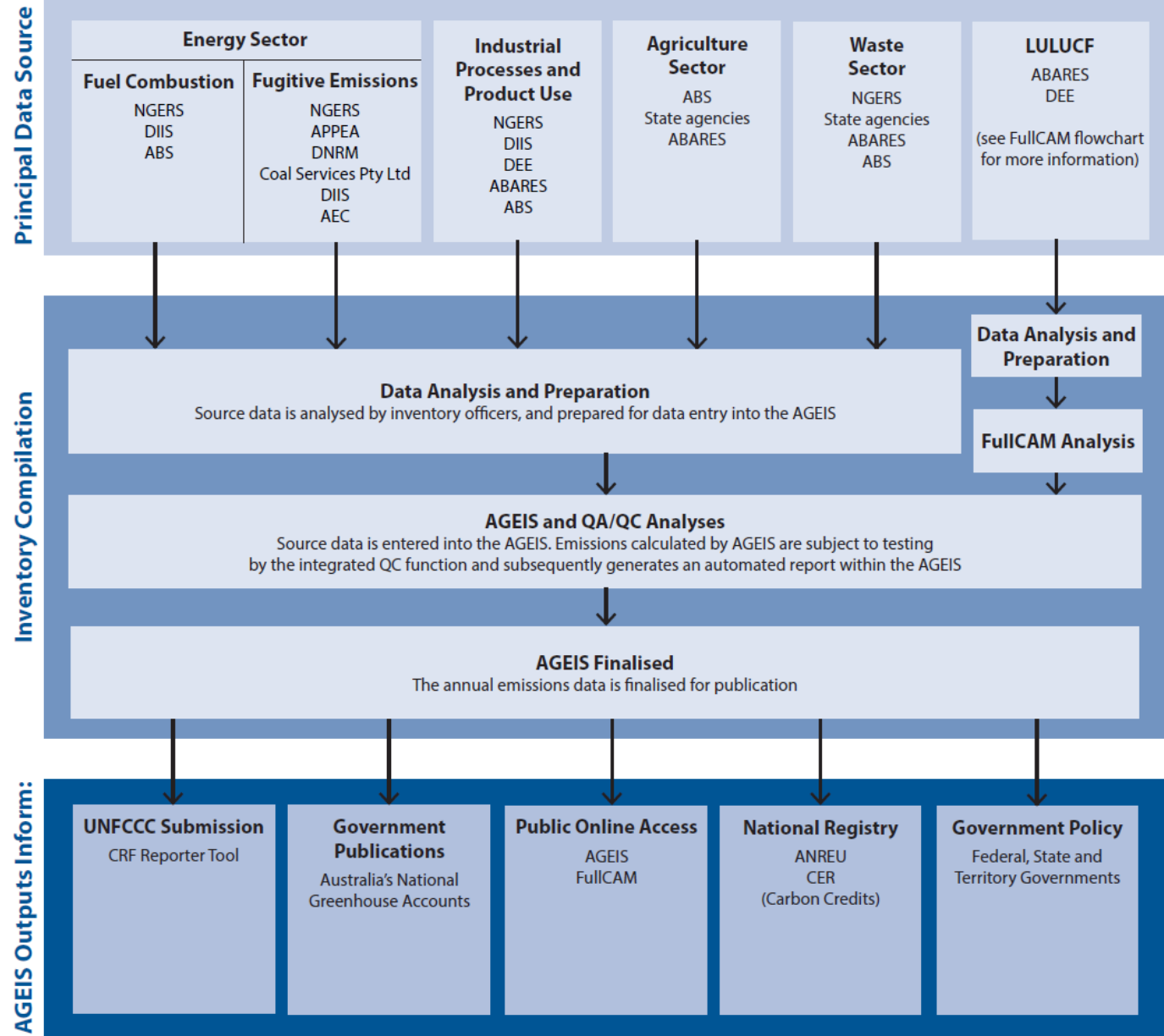
## FullCAM



# National Inventory Asset Structures and Relationships

## Acronym Key

ABARES	Australian Bureau of Agricultural Resource Economics and Sciences
ABS	Australian Bureau of Statistics
AEC	Australian Energy Council
AGEIS	Australian Greenhouse Emissions Information System
ANREU	Australian National Registry of Emissions Units
APPEA	Australian Petroleum Production and Exploration Association
BoM	Bureau of Meteorology
CER	Clean Energy Regulator
CRC	Cooperative Research Centres
CRF	Common Reporting Format
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DEE	Department of the Environment and Energy
DIIS	Department of Industry, Innovation and Science
DNRM	Department of Natural Resources and Mining (Queensland)
FullCAM	Full Carbon Accounting Model
NGERS	National Greenhouse and Energy Reporting Scheme
QA	Quality Assurance
QC	Quality Control



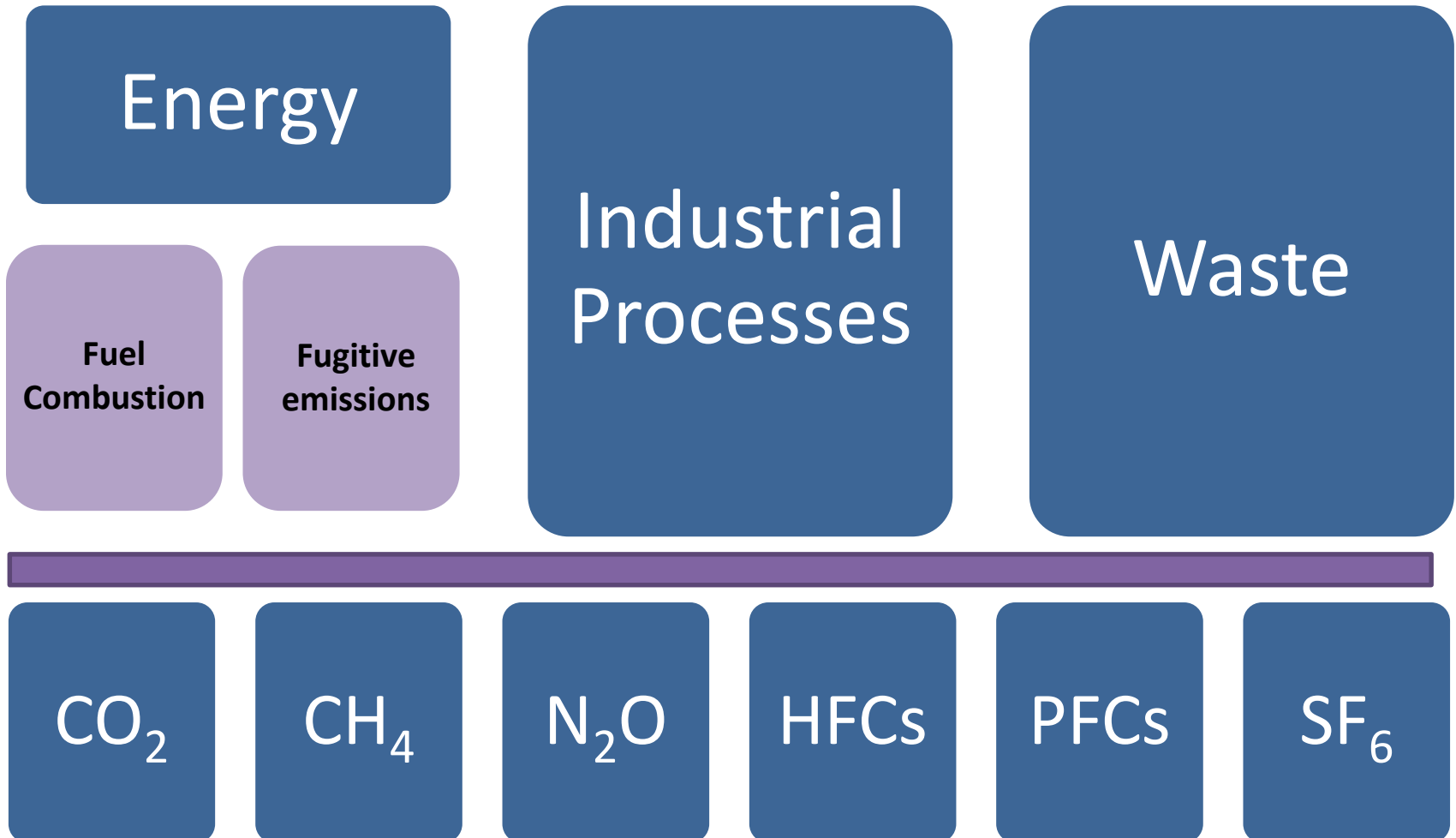
# National Greenhouse and Energy Reporting Scheme (NGERS)

- National system for emissions and energy reporting, since 2008
- Obligation to report by facilities or corporate groups above a threshold
- Detailed rules for reporting emissions, energy consumption and energy production





# National Greenhouse and Energy Reporting Scheme (NGERS)



# National Greenhouse and Energy Reporting Scheme (NGERS)

- NGER Regulations set out all the detail that must be reported
- Online reporting tool
- Must report detail such as calculations, methods, criteria, emissions factors

Summary Report for Erin Riley Wednesday, 6 April 2011

Average Efficiency Rating:  Lessons Completed: 90

**YEAR 6**

NUMBER, PATTERNS & ALGEBRA	Lessons in Topic	Lessons Attempted	Lessons Passed	Topic Progress	Avg. Eff. Rating
✓ Number 1	8	8	8	<div style="width: 100%;"></div>	98
✓ Addition and Subtraction	9	9	9	<div style="width: 100%;"></div>	97
✓ Multiplication	8	8	8	<div style="width: 100%;"></div>	93
✓ Division 1	9	9	9	<div style="width: 100%;"></div>	96
✓ Division 2	9	9	9	<div style="width: 100%;"></div>	96
✓ Number 2	5	4	4	<div style="width: 80%;"></div>	95
✓ Fractions	4	4	4	<div style="width: 100%;"></div>	95
✓ Decimals	4	3	3	<div style="width: 75%;"></div>	96

MEASUREMENT	Lessons in Topic	Lessons Attempted	Lessons Passed	Topic Progress	Avg. Eff. Rating
Units of Measure	6	6	5	<div style="width: 83%;"></div>	94
✓ Area and Volume	3	3	3	<div style="width: 100%;"></div>	96

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# Questions

