



UK Prime Minister
Margaret Thatcher addresses the UN General Assembly about climate change, proposing to extend the Inter-Governmental Panel on Climate Change so it can "provide an authoritative scientific base" for negotiation around targets to reduce greenhouse gases.

Concord Council in
Sydney's inner west introduces kerbside recycling crates to Australia.

BHP takes a "leading role
for Australian industry" by voluntarily signing a \$9 million anti-pollution bond with the NSW State Pollution Control Commission.

Australian Waste Management Association (WMAA)
established "to encourage increased professionalism in waste management and provide a forum to develop the exchange of information and ideas".

Federal Environmental Protection Agency (EPA)
launched, with an initial staff of 130 and budget of about \$38 million annually.

CRC for Waste Management & Pollution Control
established. Closes in 1998.

Sydney Water
launches a 20-year, \$7 billion Clean Waterways Project - one of the biggest such programs in the world, designed to clean up inland rivers and streams, as well as the ocean.

The Australian New Zealand Environment and Conservation Council
endorses an all-state proposal to establish a national framework for kerbside recycling while the Commonwealth proposes a national target to halve waste to landfill by 2000.

A \$2 million MEMBIO
facility opens at the Cronulla sewage treatment plant to trial "revolutionary technology" involving the use of a biological reactor followed by a series of hollow fibres to filter sewage.

Baulkham Hills Council
in Sydney's west introduces the state's first 'wheelie bin' recycling service, a fortnightly commingled 240lt bin processed at Cleanaway's new Blacktown MRF.

The Local Government Recycling Cooperative
formed in Sydney, a world first initiative to investigate the issues of oversupply of recyclable materials due to falling world commodity prices.

Development of a National Pollutant Inventory
begins with a public discussion paper.

1989

1990

1991

1992

1993

1994

Environment ministers



Graham Richardson

Sydney trade waste
discharge costs rise 20-180% and raise an extra \$15m for environmental protection and pollution control. Sydney Water Board chair David Harley hopes to eliminate discharge of toxic waste in Sydney waters, eventually.



Ros Kelly

Victoria is first to
establish a comprehensive set of controls based on the national *Strategy for Ozone Protection*, with fines of \$10,000 for companies using CFCs and halons irresponsibly, and \$500,000 for aggravated pollution.

Environment Minister
Ros Kelly commits to developing a coordinated National Strategy on Waste Minimisation and Recycling. It goes nowhere.

Australia becomes
the 20th nation to join the Basel Convention to control the movement of hazardous wastes across borders.

The Environment Management Industry Association
of Australia is launched by Prime Minister Bob Hawke. Now called Sustainable Business Australia.

Queensland Recycling Advisory Council
formed to ensure every community has access to recycling.

Incineration becomes
a topic of hot interest as the Independent Panel on Intractable Waste wrapped up a national study. A WME survey found 97% of industry respondents did not believe "Australian waste minimisation strategies are so clever that incineration is not needed".

NSW goes with a Build Own Operate
strategy for the construction of a \$195 million water filtration plant at Prospect Reservoir, the first of four such plants in Sydney and an early use of the private sector.

NSW EPA transport
regulations are amended and the Lidcombe Aqueous Waste Plant begins taking waste in 20 to 200 litre drums, the first non-sewer way for small business to dispose of hazardous liquid waste.



John Faulkner

The ANU and the Australia Institute
dispute claims a carbon tax would cause a 2% drop in GDP, proposing a tax of \$23/tonne on emitted carbon, much like the \$25 expected in 2008's Carbon Pollution Reduction Scheme.

The World Bank's VP
for environmentally sustainable development visits Australia and claims within 10 years it could produce "green" national accounts. He says economists, within three to five years will overcome technical problems of valuing such things as clean air and water.

The Environment
Management Industry Association delivers the government a 10-year blueprint for developing exports from the environment industry and sets an export goal of \$1 billion to Asia by 2000.

A WME survey finds wastewater treatment represents a "significant cost" for manufacturers, who spent an average \$172,000 annually on treatment and \$94,000 on capital.

The National
Association of Testing Authorities billion by 2011. (NATA) launches a program "to enable companies to demonstrate environmental commitment" by certifying them to ISO 14001. NEC Australia first to take it up.

The NSW Waste Minimisation and Management Act overhauls waste regulations, sets a target to cut waste to landfill 60% by 2000 (ACT sets No Waste by 2010) and introduces licensing requirements for those in "controlled waste".

First National Conference on Life Cycle Assessment takes place in Melbourne.

RMIT director Chris Ryan launches a report that highlights the growing problem of (electronic) e-waste and calls for European-style Extended Producer Responsibility (EPR) schemes.

EcoRecycle Victoria, created the year before to "reflect the shift towards a more comprehensive recycling program in the state", launches Australia's first database of products made from recycled materials.

The ABS estimates \$6.5 billion was spent on protection of the environment in 1993 to 1994, about 1.5% of GDP.

AGL contracted to build a \$5.7 million cogeneration facility at Sydney's Malabar sewerage treatment plant, which will provide 60% of the site's power.

The Company Law Review Act make a number of key changes to the Corporations Law, including a requirement for annual director's reports to disclose information about a company's environmental performance. The Parliamentary Joint Standing Committee soon recommends it be deleted.

"Australian companies risk erosion of asset values if they ignore the rapid developments in greenhouse policy arising from the Kyoto Protocol," warns PwC analyst Steven Drummond. Sydney Futures Exchange, meanwhile, says it hopes to open the world's first centralised carbon trading market.

Reserve Bank assistant governor Glenn Stevens claims the environment will become a key issue in setting economic policy. He's now the top man.

Australian Greenhouse Office, formed in 1998, releases a discussion paper entitled *National Emission Trading: Establishing the Boundaries*.

The Sustainable Energy Development Authority launches the Building Greenhouse Rating tool.

AGO figures show a 16.9% jump in the nation's greenhouse emissions in the eight years to 1998. Environment Minister Robert Hill says there is no need to panic, but a stiff challenge ahead; Industry Minister Nick Minchin wants to water down the Kyoto target, which he says could cut GNP by 1.4% over the next decade.

The Federal Government sides with the US in refusing to back the Kyoto Protocol, despite some 80% of the Australian population supporting its ratification.

Nolan ITU and SKM release a report commissioned by EcoRecycle Victoria that for the first time quantifies the environmental benefits of recycling in monetary terms, putting it at \$226 million a year nationally.

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2001



Robert Hill



David Kemp

Federal budget promises \$220 million in 1995 to 1996 for a range of environment programs, a 21% increase. Soon after the National Environment Protection Council is formed, consisting of all the country's environment ministers, to set national goals, standards, guidelines and protocols.

CSIRO models wind flow across NSW and decide Crookwell is the best site for Australia's first grid-connected wind farm.

WME cover story, 'Trickles and flows', says demand for wastewater projects is dropping off, with a slowing economy to blame. "Most worrying ... is suspicion in some circles that enforcement in Sydney and Melbourne is not what it was."

The \$100 million project to clean up the Maralinga nuclear test site gets underway and is labelled 'the remediation project of the century'. The clean up of the Sydney Olympic Park site also in full swing.

Thiess Environmental Services opens Queensland's first private waste facility, the \$14 million Swanbank Landfill and the Grindler Rd transfer station.

Two "giant, scaled concrete eggs" are completed at Woodman Point wastewater treatment plant south of Perth. The anaerobic digesters are designed to double the plant's capacity and treat 16,000m³ of sludge at once.

National standards for the management of clinical and related wastes released.

Port Stephens Council in NSW first to chose an alternative waste treatment (AWT) system, signing a 20-year contract for a Bedminster composting plant that diverts 65% of material from landfill.

Chemical Oxidations Wastewater Treatment Technology (CHEMOX) introduced to Australia.

Prime Minister John Howard launches the \$400 million Greenhouse Gas Abatement Program.

NSW amends the Pollution Control Act 1970 and introduces load based licensing based on 'polluter pays' principles.

Tony Wright issues a seminal report on waste management in NSW claiming that, for an extra \$29 million on top of the \$571 million annual industry spend, landfill diversion rates can be increased from 38% to 54%. WMAA establishes an Energy from Waste division following widespread discussion about potential applications.

Australian Local Government Assoc refuses to sign the National Packaging Covenant, saying it was not "viable" for councils and a "total loss of taxpayers' money".

The Commonwealth Environment Protection and Biodiversity Conservation Act comes into force, replacing five separate acts.

Prime Minister John Howard commits the nation to sourcing 2% of energy from renewable sources by 2010. The 9,500MW MRET is expected to generate at least \$2 billion in renewable energy investment.

Victorian Government orders all public agencies to buy at least 5% of their power from wind farms. EnergyAustralia freezes its renewable energy scheme at 14,500 customers, citing short supply of green energy and booming demand.

Environment Industry Action Agenda released to drive a five-fold increase in the sector and reach annual sales of \$40 billion by 2011.

The ABS says

Australian councils spent \$2.5 billion on measure to protect the environment in 1999-2000, with most (\$2 billion) spent on waste management.

Victoria moves to

introduce "sustainability covenants" in a bid to introduce flexibility and innovation in the way businesses interact with the EPA on major environmental issues.

The NSW EPA

releases a draft statement that takes the first steps toward applying EPR to 16 key waste of concern, including batteries and packaging. Progress is slow.

The Federal

Government releases a guide to corporate environmental reporting as figures reveal only 11% of Australia's top 500 companies report compared to 45% of the Global Fortune Top 250 companies.

The world first

national Water Efficiency Labelling and Standards (WELS) scheme is announced.

The Western Regional

Waste Management Group signs a contract that sees its nine Melbourne councils paid for their recyclables.

WA Environment

Minister Judy Edwards calls for container deposit legislation, reigniting a long running debate.

The Environment

Protection & Heritage Council ministers signal they will stick with the National Packaging Covenant until 2010. Changes are proposed, including increasing the from 48% target from 48% to 65%. A 2008 review suggests it is on track.

The CSIRO releases

Balancing Act, a seminal report looking at the triple bottom line impacts and contributions of 135 sectors of the economy. The surprise finding is mining being the big winner.

NSW Water Utilities

Minister David Campbell tables the *Water Competition Bill*, saying the monopoly held over urban water infrastructure "will soon be a thing of the past".

Qld unveils a

\$55 billion, 20-year infrastructure plan for the south east of the state and passes the *Water Act 2000* requiring all water service providers to prepare strategies to protect water supplies.

Victoria commits to

increasing the renewable component of its electricity consumption to 10% by 2010. SA becomes the first Australian government to enshrine cuts of 60% in greenhouse emission by 2050 into law.

Both Victoria and

NSW step up plans for multibillion-dollar desalination plants, sparking concerns urban water prices will double.

A Warnken-ISE report

finds the waste industry could cost-effectively reduce Australia's carbon emissions by nearly 7%. Perth's Southern Metropolitan Regional Council puts more than 110,000 tonnes of CO₂-e abatements up for sale.

Consumer watchdog

the ACCC releases a guide to green marketing in response to an increase use of green claims in advertising.

The National

Greenhouse and Energy Reporting Scheme (NGERS) requires the country's largest energy users and emitters to start tracking key carbon measures.

2002

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2006

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2008

The Australian

Environmental Labelling Association releases its first three voluntary environmental labelling standards addressing adhesives and recycled plastic or rubber products.

Victoria funds an

electricity "demand side aggregation" scheme designed to flatten price peaks.



Ian Campbell

The Federal

Government's *Securing Australia's Energy Future* statement flags a requirement for the nation's 250 largest energy users to undertake energy efficiency opportunity assessments.

The Productivity

Commission releases a draft report on energy efficiency that controversially challenges conventional wisdom in finding "the benefits of energy efficiency improvements may be overstated and costs of adoption underestimated".

The Energy Efficiency

Opportunities Bill proposes businesses using over half a petajoule of energy must assess and report their efficiency.

Allen Consulting

Group reports there is "little doubt" Australia will experience an increase in severe weather events due to climate change. It coincides with a report by the Association of British Insurers that flags a massive increase in insurance costs over the next 30-50 years.

The Ethical

Investment Association reports the value of sustainable responsible investment funds under management in Australia jumped 56% in 2005/06 to \$11.98 billion. It tops off a 3,587% increase over six years.

The little known

Business Roundtable on Sustainable Development weighs into the Productivity Commission debate over waste management, arguing for a major rethink on volume reductions, costs and EPR. The commission agrees, but the recommendations are roundly rejected.

The Business

Roundtable on Climate Change releases *The Business Case for Early Action* report, saying Australia can take early and aggressive action on climate change. It is a turning point in the carbon debate.

Malcolm Turnbull



Peter Garnett

The Business Council

of Australia calls for companies to redefine corporate social responsibility as part of core business.

Opposition leader

Kevin Rudd says he would commit Australia to sourcing 20% of power from renewable sources by 2020. By the end of the year he is the PM and ratifies Kyoto as one of his first acts, winning international applause.

Hyder Consulting

reports the total economic contribution of Australia's recycling industry was conservatively worth \$55 billion in 2006. Every \$1 of direct turnover provides \$4 in downstream benefits.

Professor Ross

Garnaut's report on the economics of emissions trading says the scale and urgency of the problem is greater than previously thought, but action would only shave some 0.1% per annum from GNP growth to 2050. The Commonwealth introduces its detailed plan for an emissions trading scheme and target cuts of 5-15%.

The Carbon Pollution

Reduction Scheme Bill is introduced to Parliament twice (in May and October) by the Rudd government, and is passed through the House of Representatives but fails to pass through the Senate on both occasions.

The Victorian

Government launches the VEET scheme, promoted as the Energy Saver Incentive, designed to make energy efficiency improvements more affordable for business and reduce greenhouse emissions.

The National Water

Commission calls for greater use of recycled water as part of Australia's urban drinking supplies to contribute to a more "secure and sustainable urban water supply system".

An independent

report reveals that planning restrictions on the volumes that landfills can accept are a growing problem for Sydney's landfill capacity.

Kevin Rudd

announces his government will delay its emissions trading scheme until at least 2013, a move that pundits claim contributed to Rudd's subsequent dumping as Labor leader and prime minister.

The Government's

Clean Energy Bill passes through the Senate paving the way for the introduction of a price on carbon pollution through the Carbon Pricing Mechanism.

Computers and

televisions will be the first products subject to a stewardship scheme with the passage of the Product Stewardship Bill.

A massive earthquake

and subsequent tsunami hits Japan, leading to a meltdown at Fukushima nuclear power plant. It's estimated the radioactive isotopes released from reactor containment vessels, could cause up to 130 deaths from cancer globally (most of which are estimated to occur in Japan).

The Carbon Pricing

Mechanism comes into effect (at a price of \$23 per tonne), commonly referred to as a carbon tax, requiring entities that emit over 25,000 tonnes per year of CO₂-e and which were not in the transport or agriculture sectors to obtain emissions permits - affecting around 350 businesses.

Ten global energy and

climate "megaforces" are doubling the costs of environmental impacts on businesses every 14 years, currently equalling 40% of average profits, and could significantly affect corporate growth by 2030, says a report by KPMG International.

Renewable energy

supplies a record 13.14% of Australia's electricity in 2012, or 29,678 gigawatt-hours, according to Clean Energy Council figures. It shows energy efficiency and renewable energy are making a difference to the way electricity is produced and consumed.

For the first time in

WA, large quantities of domestic waste are to be converted to electricity after New Energy receives environmental approval for its \$180m waste-to-energy facility near Port Hedland. It is expected to process up to 255,000 tonnes of waste a year.

The water industry is

moving to get ahead of what it sees as an inevitable privatisation of the sector. Ozwater14 is dominated by an agenda that has emerged out of nowhere, not even rating a mention at the peak conference last year.

The 25th anniversary

of possibly the worst environmental disaster in history, the Exxon Valdez oil spill in Alaska.

The Council of

Australian Governments axes its regular meetings of environment ministers, which had run since 1972, stating: "too much bureaucracy and red tape has grown up around COAG".

2009

The NSW government

launches the Energy Efficiency Scheme to create financial incentives to reduce electricity consumption and encourage energy-saving activities within industry.

The latest report card

on urban water supplies predicts that authorities will have to spend \$30 billion by 2013 to supplement traditional water catchments and that urban water prices will double in some cities over the next four years.

The National Waste

Policy, agreed by all Australian environment ministers in November 2009, sets Australia's waste management and resource recovery direction to 2020 including an initial stewardship focus on e-waste recovery - the first national policy of its kind.

Tony Burke



Climate Change Ministers

Penny Wong



Greg Combet



A series of floods hits

Queensland, forcing the evacuation of thousands of people from towns and cities from affected areas covering more than 75% of the state. The waste and recycling industry joined thousands of volunteers to help the massive clean up effort that saw some landfills operating 24 hours a day.

The Coasts and

Climate Change Council calls on the Federal Government to be more proactive in progressing a 10-year agenda to address climate risks to coastal communities - estimates suggest up to \$63 billion of existing buildings are at risk of inundation by 2100.

Senator Bob Brown

resigns as Parliamentary leader of the Australian Greens and announces he will resign from the Senate in June, following nearly 30 years in politics starting in the Tasmanian Parliament.

Perth groundwater is

set to receive a regular injection of treated wastewater following the successful, 18-month 'groundwater replenishment trial' in the Leederville aquifer. At full scale it could deliver 28-35GL of treated water per year back into the city's aquifers.

NGO The Boomerang

Alliance accuses big beverage companies of profiteering from container deposit schemes (CDS) running in NT and SA, claiming costs rose 20 cents on average in those states when the CDS was only 10 cents per container.

2013



Greg Hunt

South Australia

opens Australia's last major metropolitan desalination plant, the 100GL a year Port Stanvac plant.

Newly elected Prime

Minister Tony Abbott promises swift action on the carbon tax and begins culling senior public servants as well as dismantling government departments and authorities related to energy and climate change.

2014

Alcoa's decision to

close Australia's only aluminium can re-processing facility "is a catastrophic blow for aluminium recycling in this country, and recycling in general," according to the Australian Council of Recycling.

Almost half of CEOs

in an Australian Industry Group survey say environment, waste and energy regulations impose a "medium to high-cost burden on their business", up from a third in 2011.

The Prime Minister

Tony Abbott welcomes the repeal of the "carbon tax", but doesn't rule out ever introducing a carbon pricing mechanism in the future.