

Composting and Carbon Sequestration in Soil - recognising the potential in the climate change debate



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National Executive Officer

19 May 2021

Strategies from Lockdown

1. New **Strategic Plan 2020-23** (commenced 1 July)
2. **Industry Contribution Study** (March 2020)
3. **Industry Capacity Study** (January 2021)
4. **National Industry Policy** Document

Strategic Plan 2020-23

Three Objectives

1. AORA is the **national voice** of the organics recycling industry and is **recognised as such** by government and the community
2. AORA **defines and champions a future** where recycling of organic materials is **maximised and optimised**
3. AORA is a **successful and sustainable business** with **outstanding delivery** of member needs

Industry Study

The Economic Contribution of the Australian Organics Recycling Industry

The Economic Contribution of the Australian Organics Recycling Industry



aora
australian organics recycling association

March 2020

A E A S Australian Economic Advocacy Solutions



An Industry Snapshot

- In 2018-19 Australia produced **14.6 million tonnes of organic waste** of which:
 - **5.6 million tonnes** was sent to **landfill**
 - **7.5 million tonnes** was **recycled**
 - **1.5 million tonnes** was recovered as **energy**
- Australia's overall **organic recycling rate** was **51.5%**
- **South Australia** has the highest organics material recycling rate at **78.9%** and the **Northern Territory** the lowest organics recycling rate at **19%**



Industry Study

The Economic Contribution of the Australian Organics Recycling Industry

Economic Contribution of the Australian Organics Recycling Industry (2018-19)

- **4,845 jobs** to Australian residents, paying over a **\$366 million in wages** and salaries (€233 million)
- **Livelihood** to each employee within the industry of **\$75,540** (€48,100)
- **Collective industry turnover above \$2 billion** (€1.27 billion+)
- **Sourcing \$1.9 billion+** across its supply chain (€1.21 billion+)
- **Investing \$175 million** in land, buildings, plant and equipment and vehicles each year (€112 million)
- **\$724 million in industry direct value add** to the Australian economy annually (€461 million)

Environmental Contribution of the Australian Organics Recycling Industry (2018-19)

- **Greenhouse gas saving** from organics recycling is approximately **3.8 million tonnes of CO2** annually
- Equivalent to **planting 5.7 million trees** each year
- Or taking **876,663 cars off the road** annually

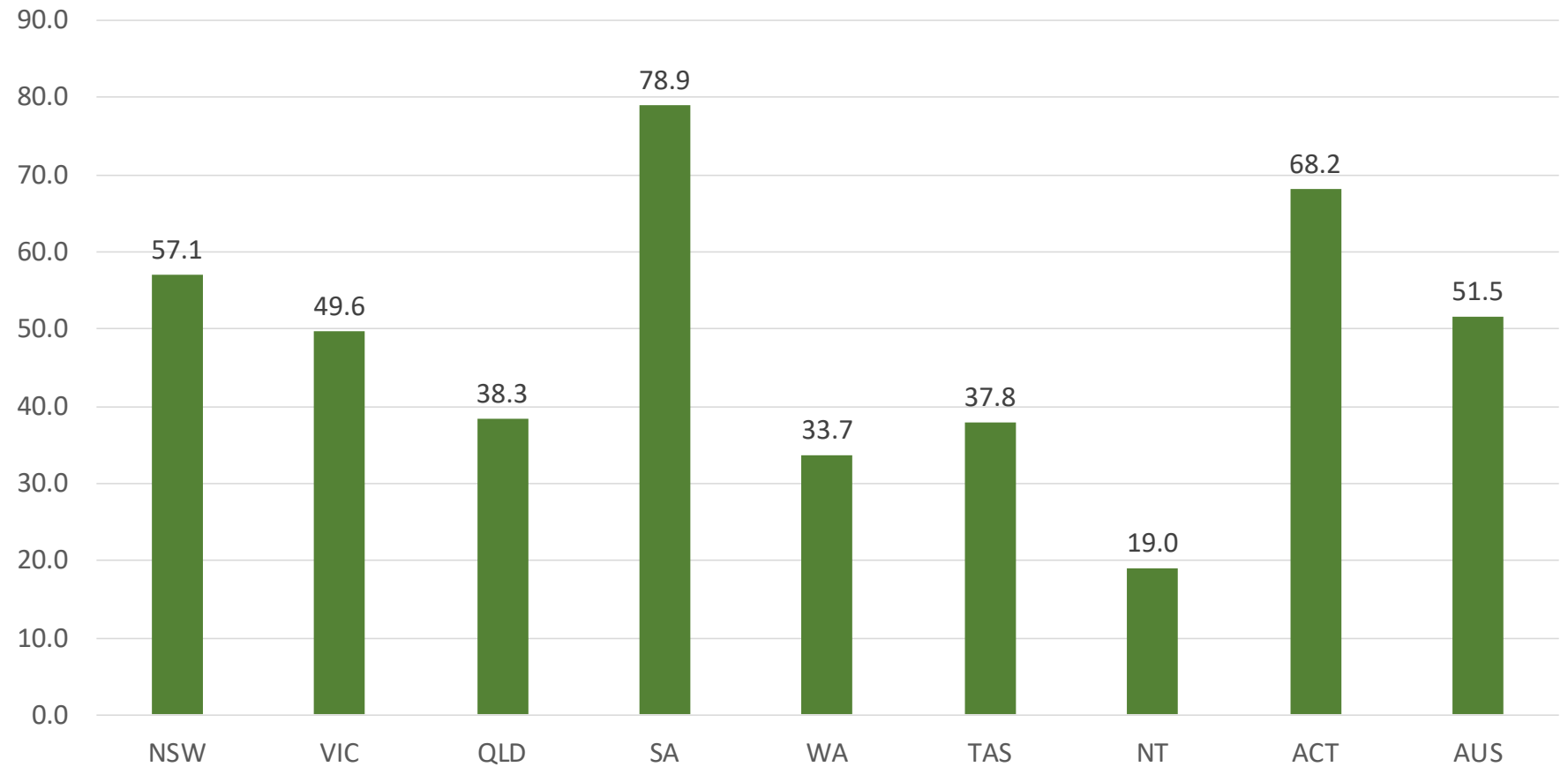
Industry Study

The Economic Contribution of the Australian Organics Recycling Industry



State v State

Organic material recycling rates in 2018-19 (%)



“What If”
modelling:
recycling rates of
70%, 80%, 90%
and 95%

Economic Gain by State (\$ millions) @ 95% recycling rate

	Employment at end of June (FTE)	Wages and salaries	Sales	Expenditure	Capital expenditure	Operating profit before tax	Industry value added
NSW	1,181	89	497	459	43	56	177
VIC	878	66	369	341	32	41	131
QLD	1,068	81	449	415	39	50	160
SA	166	13	70	64	6	8	25
WA	566	43	238	220	20	27	85
TAS	109	8	46	42	4	5	16
NT	58	4	24	23	2	3	9
ACT	69	5	29	27	3	3	10
AUS	4,094	309	1,722	1,590	148	193	612

“What If”
modelling:
recycling rates of
70%, 80%, 90%
and 95%

Environmental Gain by State @ 95% recycling rate

	Greenhouse gas emissions saved (tonnes)	Equivalent trees planted required for carbon absorption	Equivalent cars off the road each year
NSW	925,170	1,383,479	213,851
VIC	688,101	1,028,900	159,025
QLD	837,003	1,251,461	193,403
SA	129,735	194,114	30,031
WA	443,387	662,924	102,446
TAS	85,540	127,897	19,765
NT	45,032	67,325	10,403
ACT	54,483	81,487	12,599
AUS	3,208,451	4,797,587	741,524

The **Growth** Equation


The right **policy** settings
+
industry **capacity** to take up the opportunities
=
enormous economic and environmental **benefits**

Industry Study

Australian Organics Recycling


Industry Capacity Assessment 2020-21


Australian Organics Recycling Industry
Capacity Assessment: 2020-21



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australian organics recycling association

In partnership with

 Australian Government
Department of Agriculture,
Water and the Environment

 Government of South Australia
Green Industries SA

AEAS Australian Economic
Advocacy Solutions

Snapshot of Survey Responses

Organic feedstock sources:

- Councils 51.5%
- Commercial contracts 47.4%
- Other 1.1%

Organic feedstock content:

- Garden organics 52.2%
- Other organics 15.3%
- Waste grease 14.8%
- Timber 7.7%
- Food organics 5.2%
- Waste sludge 3.3%
- Meat render 1.5%

Snapshot of Survey Responses

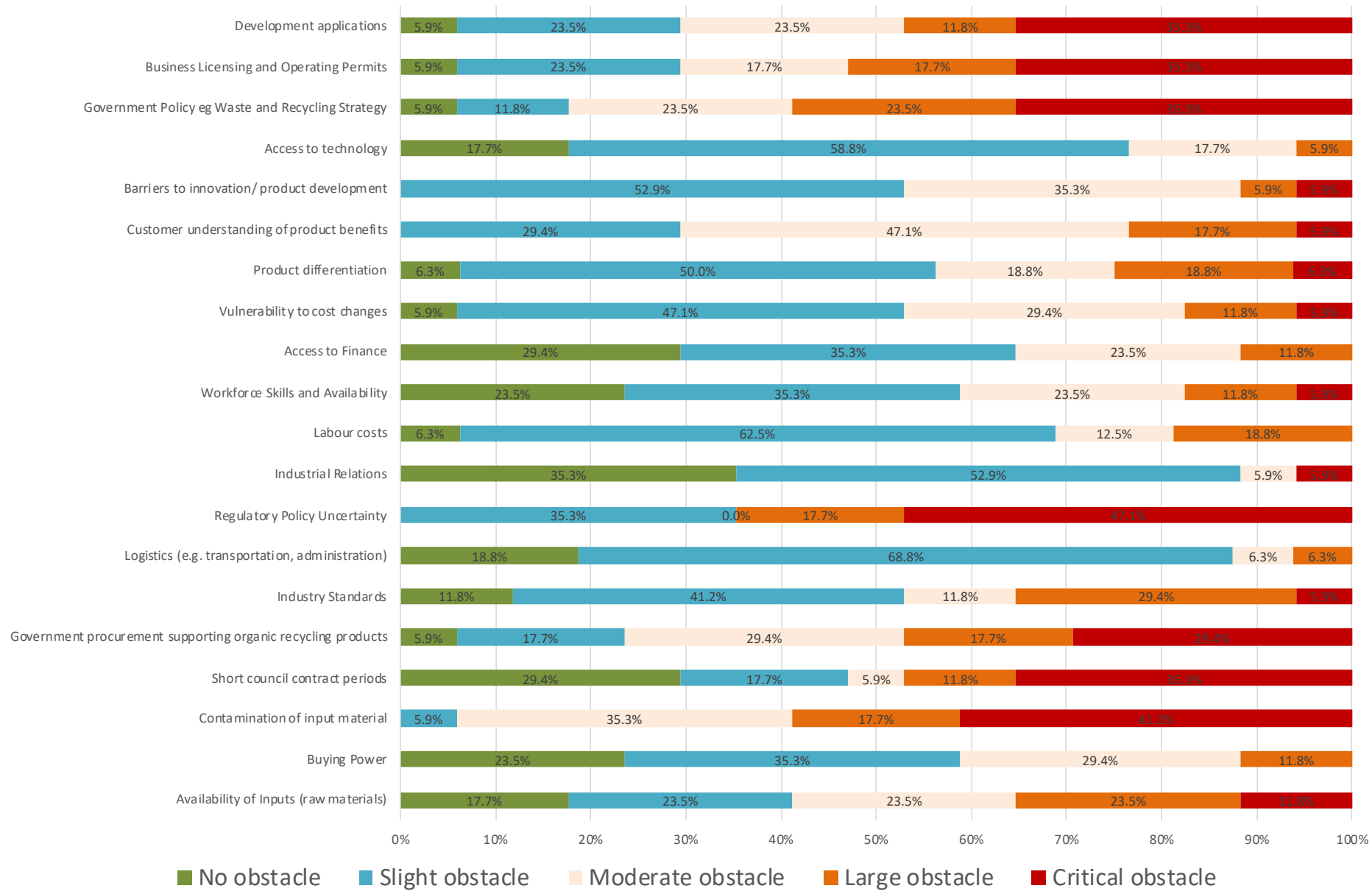
Products sold:

- Composted soil conditioners 40.1%
- Soil and soil blends 33.7%
- Composted mulches 11.2%
- Pasteurised mulches 10.7%
- Raw mulch 2.4 %
- Potting Mix 1.9%

End user markets:

- Urban amenity 52.5%
- Intensive agriculture 26.2%
- Enviro-remediation 4.1%
- Rehabilitation 2.3%
- Other 15.0%

Obstacles to Growth



Industry Processing Capacity: State v State

	Additional Capacity	70%	80%	90%	95%
NSW	1,406,249	782,414	299,078	-184,258	-425,926
VIC	759,365	147,413	-152,882	-453,178	-603,326
QLD	569,900	-357,171	-649,371	-941,571	-1,087,671
SA	642,079	784,338	624,665	464,993	385,157
WA	245,669	-274,464	-417,638	-560,811	-632,398
TAS	57,149	-38,161	-67,798	-97,434	-112,252
NT	11,394	-48,433	-60,174	-71,915	-77,785
ACT	139,789	132,473	92,241	52,008	31,892
AUS	3,831,593	1,128,408	-331,879	-1,792,166	-2,522,310

Key

Capacity is sufficient to meet target

Capacity is just short of target

Capacity is insufficient to meet target

Industry Capacity

- Businesses in the industry **occupy 49.2% of their operating sites** on average
- If businesses were **not constrained by obstacles, they would occupy 73.6%** of their operating sites
- To **achieve a 95% national recycling rate** the industry is required to **process an additional 84.5%** more organic material
- The industry is **capable of processing an additional 51% more organic materials** given physical capacity of their sites if unconstrained by obstacles
- This means there is capacity for both **growth for the existing industry** and **room for new businesses**
- Industry businesses say that on average they would **each invest \$9.3 million over the next 5 years** if unconstrained by obstacles

National Industry Policy

Vision 2031:

The 10 Year
Roadmap for
Australia's
World Leading
Organics Recycling
Industry

How do we get to 80% recycling of organics
by 2026 and 95% by 2031?

How do we remove the obstacles?

The Inputs: Quality In, Quality Out

The Roadmap

- **Align policy, legislation and regulations** governing organics waste collection and supply to national and state strategic objectives for waste reduction, recycling and food waste reduction
- **Nationally standardised** and consistent Government policy, legislation and regulation
- **Each state to develop plans** to show how its collection systems will ramp up to collect at least 80% of organics for recycling by 2026 and 95% by 2031 with annual performance audits
- **Ban organics to landfill** if interim targets not met
- Each state to ensure the **delivery of feedstock to processors free of contaminants** and on **realistic economic terms**
- Broad based, ongoing **community education programs** to encourage sorting at source
- **Increase penalties and policing** following substantive community education
- **Waste levies standardised** nationally and funds directed towards those areas delivering the greatest benefits in waste reduction and recycling
- **Ban single-use plastics** which are not compostable
- **Ban persistent chemicals**

The Industry: Turning Australia's Organics Waste into a National Resource

The Roadmap

- **Each state to:**
 - ensure its approvals **guarantee industry capacity** by creating an environment for long term certainty around investment and employment
 - recognise recycling facilities as a **critical industry requiring clear planning pathways, designated precincts and protected buffer zones**
 - ensure that recycling **operator requirements** are **included in state infrastructure plans**
 - ensure decisions are made with triple bottom line understanding of their costs and benefits and a **genuine appreciation of the economics of the industry**
 - mandate and require local governments to support **zoning and approvals allowing for organics processing facilities within a maximum 90-minute travel radius** of all significant population centres
- **National funding stream for industry capacity** development
- National process, in partnership with the industry, to oversee and monitor activity on an ongoing basis to **define and encourage best practice**

The Outputs: World Class Products Improving Australia's Soils

The Roadmap

- **Align policy, legislation and regulations** governing organics recycling industry products to be nationally consistent
- National Soil Improvement and Drought Mitigation Strategies to include long-term **government funding for subsidised (or free) soil conditioners for primary producers** most likely to benefit from them, but unable to afford the cost
- **Improved government procurement practices** to ensure the purchase of quality soil conditioners meeting the Australian Standard
- Federal Government to fund and collaborate with the industry to deliver an **industry-led product certification system**, beyond the Australian Standards, to provide greater clarity to end users on the value and limitation of different products
- **Government funding stream for industry and product development**, research, seminars and workshops, to ensure that the industry innovates its product lines to deliver to the requirements of its major end user groups, especially in the agriculture industry

The Progress

Federal Budget 2021-22

- **\$67 million for new food organic and garden organic waste (FOGO) initiatives**, establishing a *Food Waste for Healthy Soils Fund*
- The fund will **divert 3.4 million tonnes** of organic material from landfill, generate **\$401 million in industry value**, create **2,700 additional jobs** and establish a model for wider recycling and soil partnerships
- **\$5 million** to supporting small and medium business to adopt the **Australasian Recycling Label**
- **\$5.9 million for industry-led product stewardship** schemes to reduce waste and increase resource recovery
- **\$196.9 million over four years to implement the *National Soil Strategy*** and associated measures
- The ***National Soil Strategy*** sets out how Australia will value, manage and improve its soil for the with three overarching goals:
 1. prioritise soil health
 2. empower soil innovation and stewardship
 3. strengthen soil knowledge and capability



(\$1.00 = €0.64)



Questions and Feedback

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