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Unlocking Australia's R&D potential

Additional charts and analysis

JULY 2025

ATLASSIAN Cochlear® BCA Business Council of Australia

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Note: All dollar figures are Australian dollars unless indicated otherwise.

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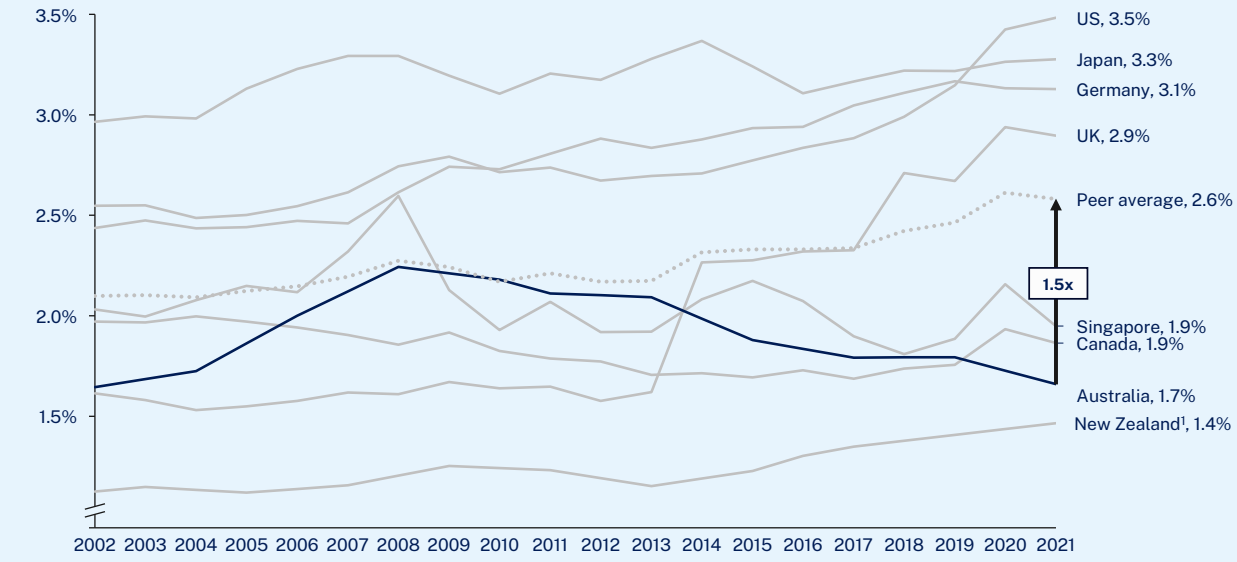
4.1
Supporting charts and analysis

EXHIBIT 13

Gross domestic expenditure on R&D, Australia vs. peer countries

% of GDP, 2021

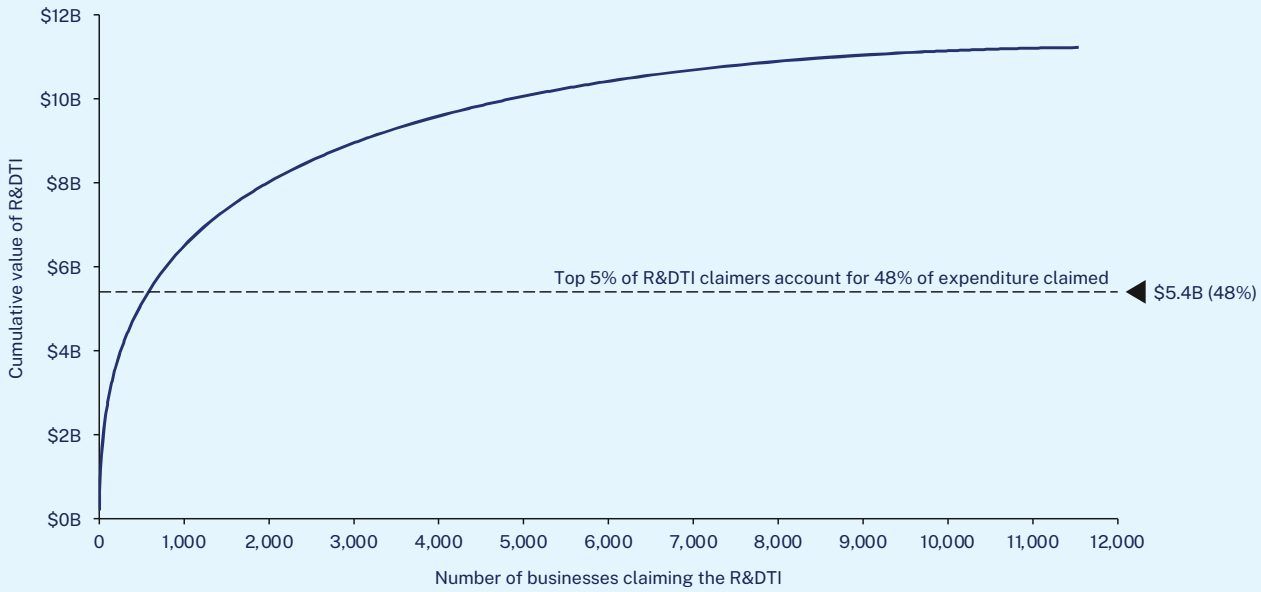


1. New Zealand collects gross domestic expenditure on R&D data biennially. To create annual data points, the missing years have been interpolated using the average of the preceding and following survey years.
Note: 'Peer average' includes a simple average of the R&D expenditure of Canada, Germany, Japan, New Zealand, Singapore, the United Kingdom, and the United States.
Source: OECD (2024) *Main Science and Technology Indicators* and Mandala analysis.

EXHIBIT 14

Cumulative distribution of R&DTI claims

$B claimed on the R&DTI, FY21-22



Source: ATO (2024) *R&DTI 2021-22* and Mandala analysis.

R&D worker identification methodology note

Analysis of R&D workers was conducted using Revelio Labs data, a bespoke dataset which provides detail on the jobs and skills of the Australian workforce. The cohort of R&D workers used in this analysis was created based on their job history and associated skills. Namely, these workers must have previously worked in an 'R&D position' and demonstrate they have 'R&D skills'.

A job position was considered an 'R&D position' if it met the following inclusion criteria:

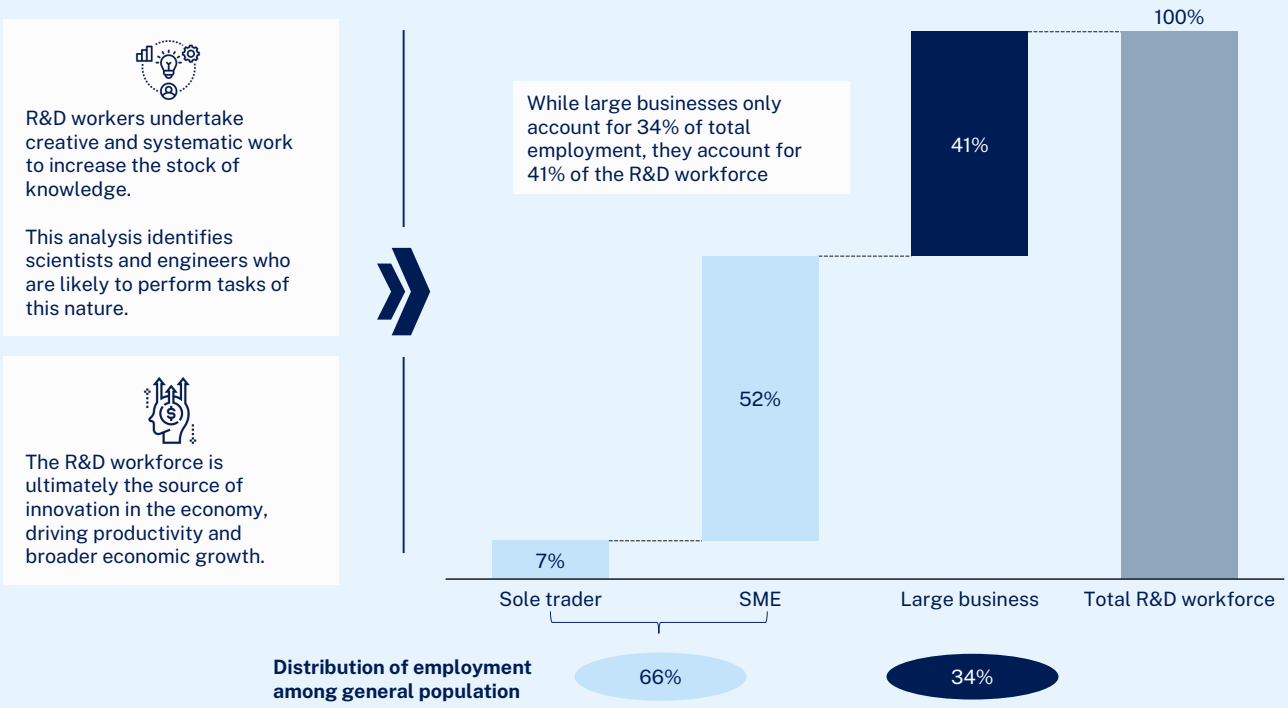
- The job category associated with the position was either 'Scientist' or 'Engineer', where these job categories are determined using Revelio's classification process.
- Furthermore, the role classification (role_k300) associated with the position matched the roles of the 'Scientists' and 'Engineers' cohort working at the top 10 R&DTI claiming companies.

To then further reduce the cohort, we only included workers who demonstrate they had 'R&D skills', by using the Revelio's skills data for each user. We similarly used the skills associated with the Scientists and Engineers working at the top 10 R&DTI claiming companies, for example, 'R&D'. This removed workers who did not list any of their skills as we could not ascertain the extent to which they were undertaking research and development.

EXHIBIT 15

Number of R&D staff by business size

# of current R&D workers based on Australian LinkedIn profiles, 2025

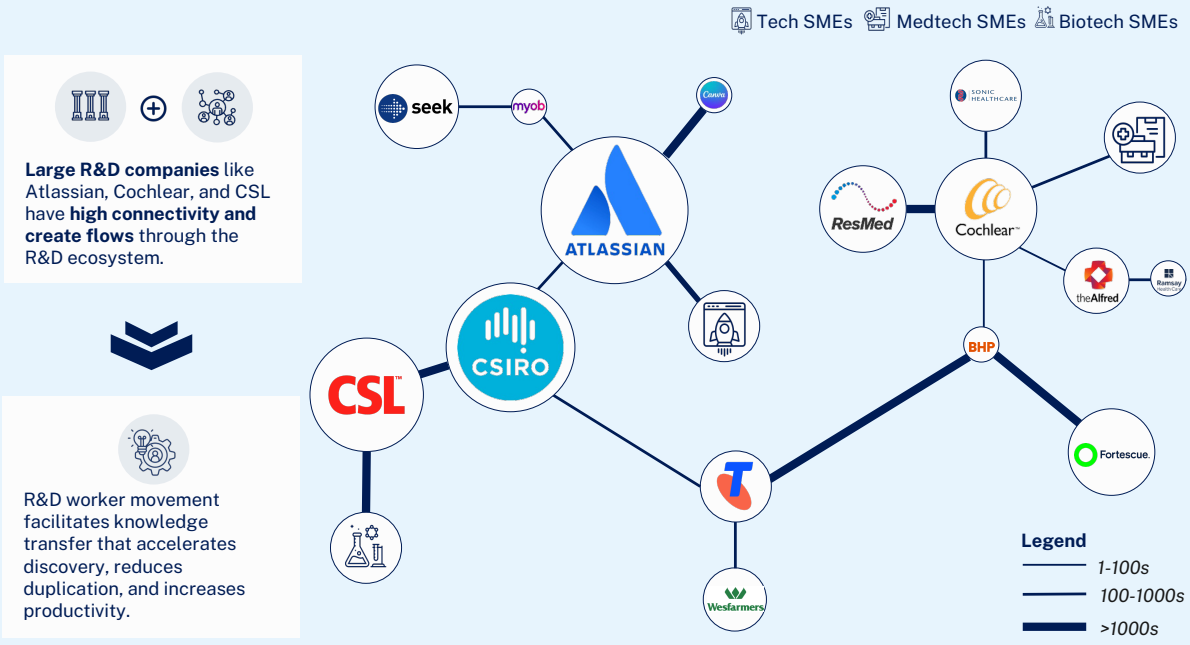


Note: It should additionally be noted that the definition of R&D workers used in this work involves only those directly performing R&D tasks in their capacity as an engineer or scientist. In reality, for every hour of labour performed by such an R&D worker, there are a number of hours of supporting R&D labour contributed by other types of workers.
Source: OECD (2015) *Frascati Manual*; Australian Small Business and Family Enterprise Ombudsman (2024) *Contribution to Australian Employment*; Revelio data; and Mandala analysis.

EXHIBIT 16

R&D movements between high R&DTI claiming businesses, research organisations and SMEs

Thickness of lines: # of R&D worker transitions between companies, size of company logos: $ of R&D investment



Note: R&D movements are determined using graph theory. The R&D interactions represent edges that form the minimum spanning tree when representing R&D staff employment transitions as a graph, with the edge weights representing the inverse of the size of the number of employment transitions.
Source: Revelio Labs and Mandala analysis.

EXHIBIT 17

Business R&D expenditure decision framework

R&D

Costs

- Costs for R&D can include labour, facilities, inputs, and utilities which can vary by country
- Additional costs may relate to regulatory complexity or country-specific operational risks
- Countries with lower costs may be more attractive for R&D investment

Productivity

- Productivity refers to how effective a country is at performing R&D, and may be a result of skill levels, agglomeration benefits, capital market depth, and strength of institutions
- Countries with higher economy-wide productivity may be more attractive for R&D investment, as higher productivity can improve the revenue potential of R&D

Commercialisation

Return on investment

- Return on investment quantifies the profitability of R&D expenditure. The primary lever available to government is the effective taxation rate; adjusted by reducing the corporate taxation rate or by offering concessional tax treatment for R&D profits.
- Countries with lower effective taxation rates attract R&D investment

Example policy levers

- Offering grants and subsidies on R&D expenditure.
- Attracting skilled migration, improving education, improving industrial relations practices and attracting FDI
- Reducing corporate taxation rate by offering concessional tax treatment for profits from R&D

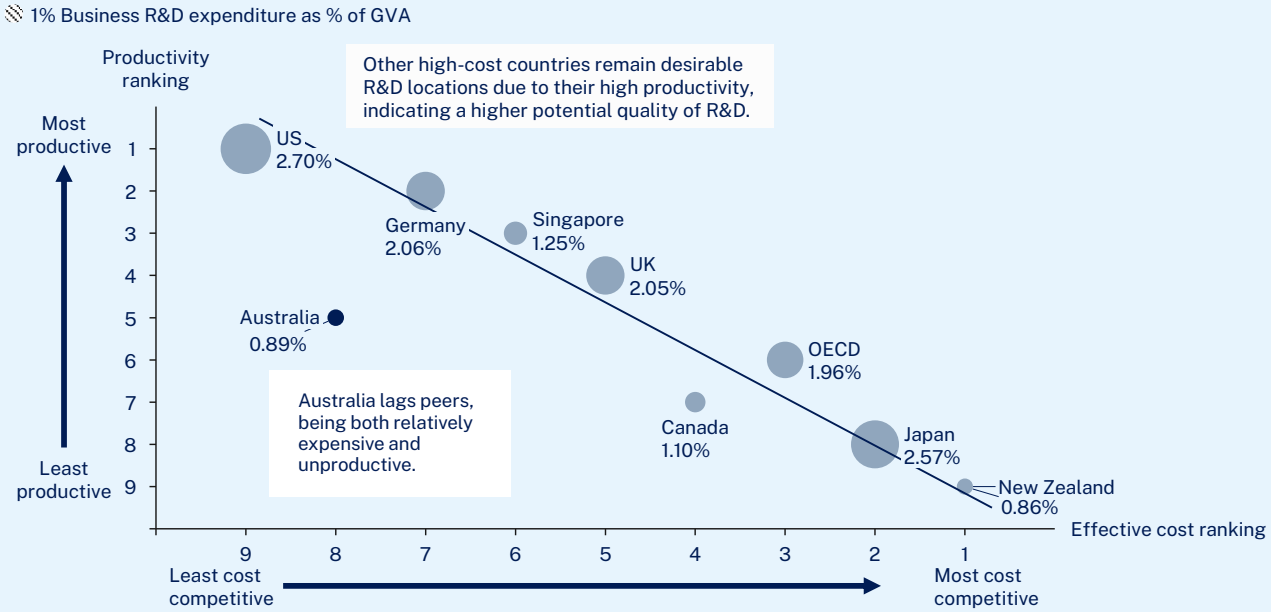
This report will focus on policy levers which will have an immediate, targeted impact on R&D activity in Australia

Source: Industry consultation and Mandala analysis

EXHIBIT 18

Relative costs of R&D and productivity across economies

x-axis: cost competitiveness ranking, y-axis: productivity ranking, size: business R&D expenditure as % of GVA, 2021

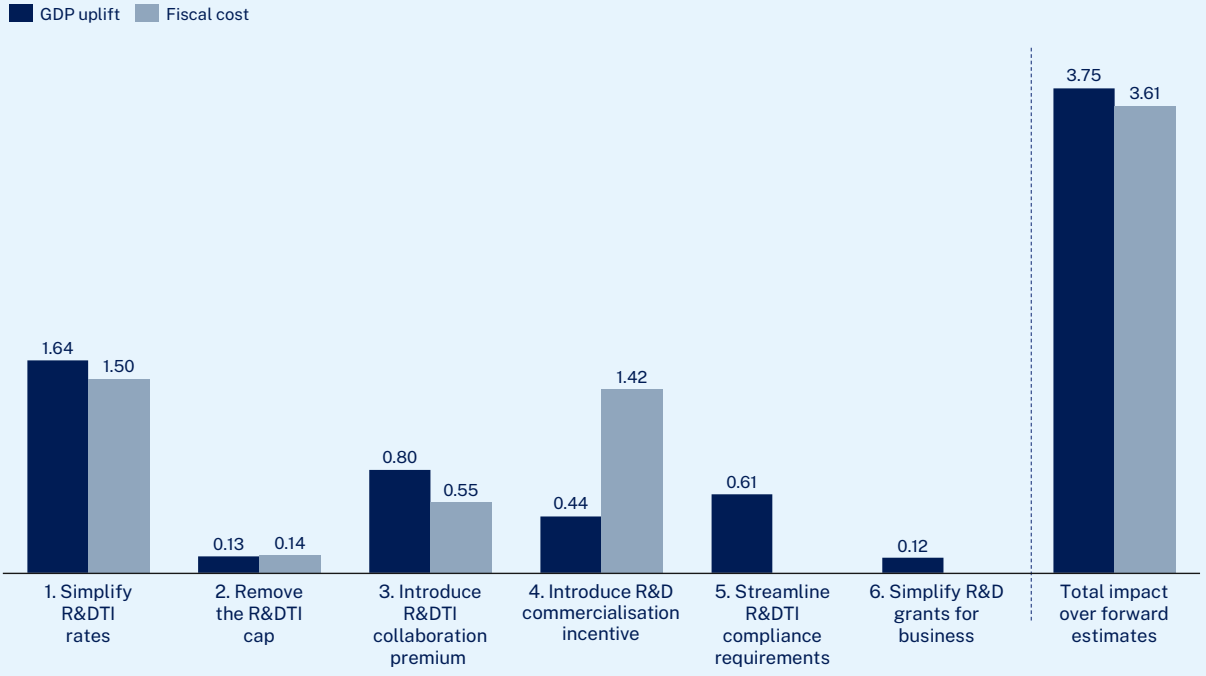


Source: OECD (2021) *Value added per hour worked*, SingStat (2021) *Value added per hour worked*; and Mandala analysis.

EXHIBIT 19

Estimated costs and benefits of proposed recommendations over the forward estimates

Fiscal cost and GDP uplift ($B), 2026-2029



Source: Mandala analysis.

EXHIBIT 20

Estimated net cost of proposed policy recommendations

Fiscal cost ($B), 2026-2035

	Forward estimates					*Medium term*					
	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	Total
Total costs (fiscal outlay)	0.45	0.50	1.22	1.44	1.56	1.67	1.80	1.81	1.83	1.84	14.12
Total benefits (GDP uplift)	0.16	0.63	1.14	1.81	2.30	7.84	9.38	15.13	19.04	19.73	77.15
Total additional tax revenue	0.03	0.12	0.22	0.34	0.44	1.49	1.78	2.87	3.62	3.75	14.66
Net cost to government	0.42	0.39	1.00	1.09	1.12	0.19	0.01	-1.06	-1.79	-1.91	-0.54

Note: Tax revenue has been estimated by applying the average ratio of Commonwealth Government taxation revenue to GDP (adjusted for inter-governmental transfers) to the estimated GDP uplifts.
Source: Mandala analysis.

EXHIBIT 21

Estimated annual costs of proposed policy recommendations

Fiscal cost ($B), 2026-2035

	Forward estimates					*Medium term*					
Recommendation	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	Total
1. Simplify the R&DTI rates	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	3.74
2. Remove the R&DTI cap	0.02	0.03	0.04	0.05	0.05	0.06	0.08	0.09	0.11	0.12	0.65
3. Introduce R&DTI collaboration premium	0.05	0.10	0.15	0.25	0.25	0.25	0.25	0.25	0.25	0.25	2.06
4. Introduce R&D commercialisation incentive	0.00	0.00	0.66	0.77	0.88	0.99	1.09	1.09	1.09	1.09	7.66
5. Streamline R&DTI compliance requirements	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6. Simplify R&D grants for business	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.45**	**0.50**	**1.22**	**1.44**	**1.56**	**1.67**	**1.80**	**1.81**	**1.83**	**1.84**	**14.12**

Source: Mandala analysis.

EXHIBIT 22

Estimated annual benefits of proposed policy recommendations

GDP uplift ($B), 2026-2035

	Forward estimates					*Medium term*					
Recommendation	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	Total
1. Simplify the R&DTI rates	0.07	0.31	0.53	0.74	0.85	4.46	5.40	5.54	5.33	4.96	28.19
2. Remove the R&DTI cap	0.00	0.02	0.04	0.06	0.07	0.35	0.42	0.43	0.41	0.39	2.19
3. Introduce R&DTI collaboration premium	0.04	0.15	0.26	0.35	0.42	0.49	0.53	2.86	3.48	3.60	12.17
4. Introduce R&D commercialisation incentive	0.00	0.00	0.08	0.36	0.61	0.84	0.98	4.19	7.80	8.90	23.77
5. Streamline R&DTI compliance requirements	0.02	0.11	0.20	0.27	0.32	1.67	2.02	2.07	1.99	1.85	10.53
6. Simplify R&D grants for business	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.30
Total	**0.16**	**0.63**	**1.14**	**1.81**	**2.30**	**7.84**	**9.38**	**15.13**	**19.04**	**19.73**	**77.15**

Source: Mandala analysis.

EXHIBIT 23

Estimated annual additional tax revenue from proposed policy recommendations

Tax revenue to Commonwealth Government ($B), 2026-2035

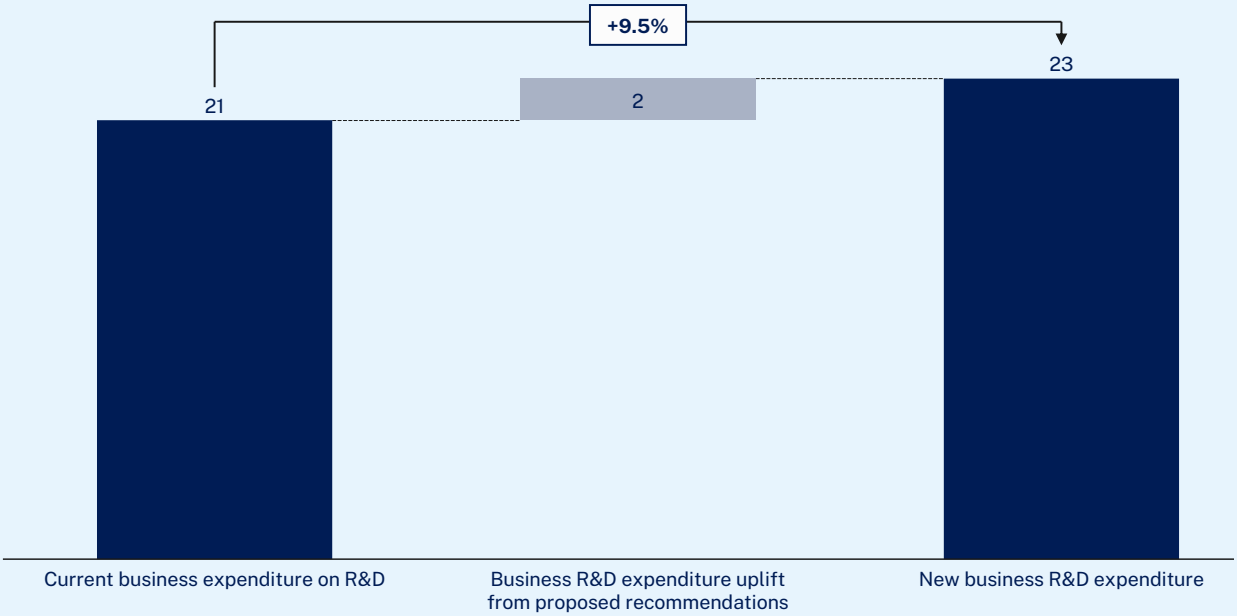
	Forward estimates					*Medium term*					
Recommendation	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	Total
1. Simplify the R&DTI rates	0.00	0.00	0.01	0.01	0.01	0.07	0.08	0.08	0.08	0.07	0.42
2. Remove the R&DTI cap	0.01	0.06	0.10	0.14	0.16	0.85	1.03	1.05	1.01	0.94	5.36
3. Introduce R&DTI collaboration premium	0.00	0.00	0.02	0.07	0.12	0.16	0.19	0.80	1.48	1.69	4.52
4. Introduce R&D commercialisation incentive	0.00	0.02	0.04	0.05	0.06	0.32	0.38	0.39	0.38	0.35	2.00
5. Streamline R&DTI compliance requirements	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.06
6. Simplify R&D grants for business	0.01	0.03	0.05	0.07	0.08	0.09	0.10	0.54	0.66	0.68	2.31
Total	**0.03**	**0.12**	**0.22**	**0.34**	**0.44**	**1.49**	**1.78**	**2.87**	**3.62**	**3.75**	**14.66**

Note: Tax revenue has been estimated by applying the average ratio of Commonwealth Government taxation revenue to GDP (adjusted for inter-governmental transfers) to the estimated GDP uplifts.
Source: Mandala analysis.

EXHIBIT 24

Estimated business expenditure on R&D uplift

Business expenditure on R&D ($B), current (2021-22) and average annual uplift over 10 years

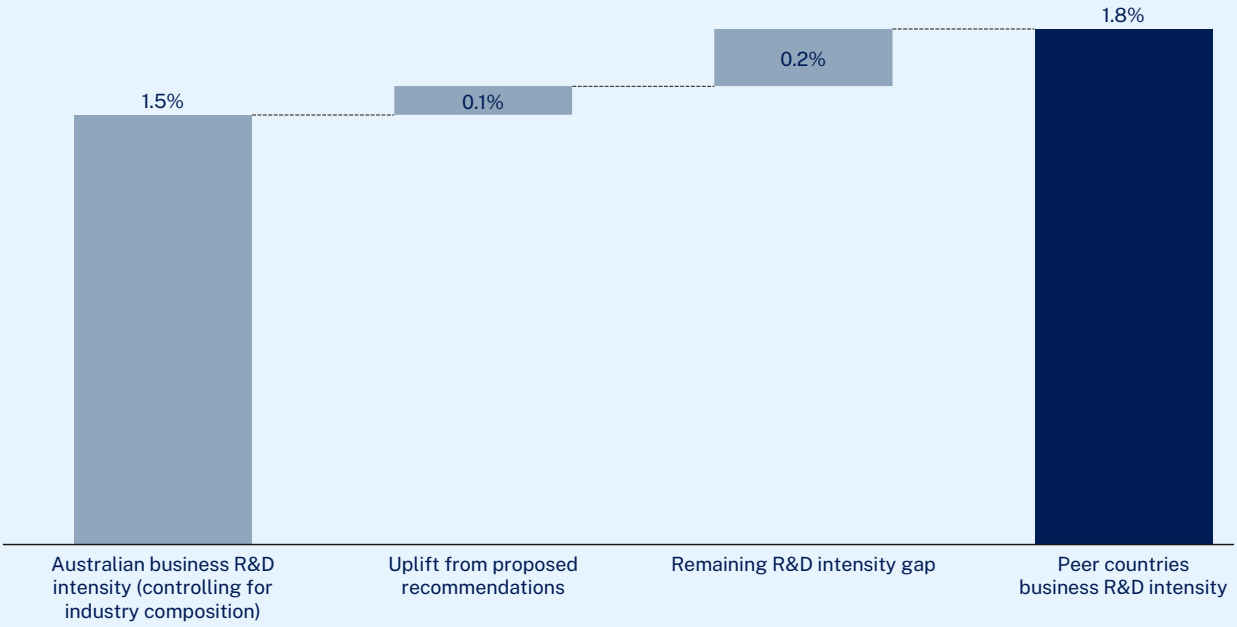


Note: R&D uplift is calculated as the average increase in business expenditure on R&D over the next 10-years from implementing the proposed recommendations.
Source: OECD (2024) *Main Science and Technology Indicators* and Mandala analysis.

EXHIBIT 25

Business R&D intensity, Australia vs international peers

Business R&D expenditure as a % of GDP, 2021



Note: Industry composition adjustment made by applying Australian industry R&D intensities to peer average industry composition.
Source: Mandala analysis.

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