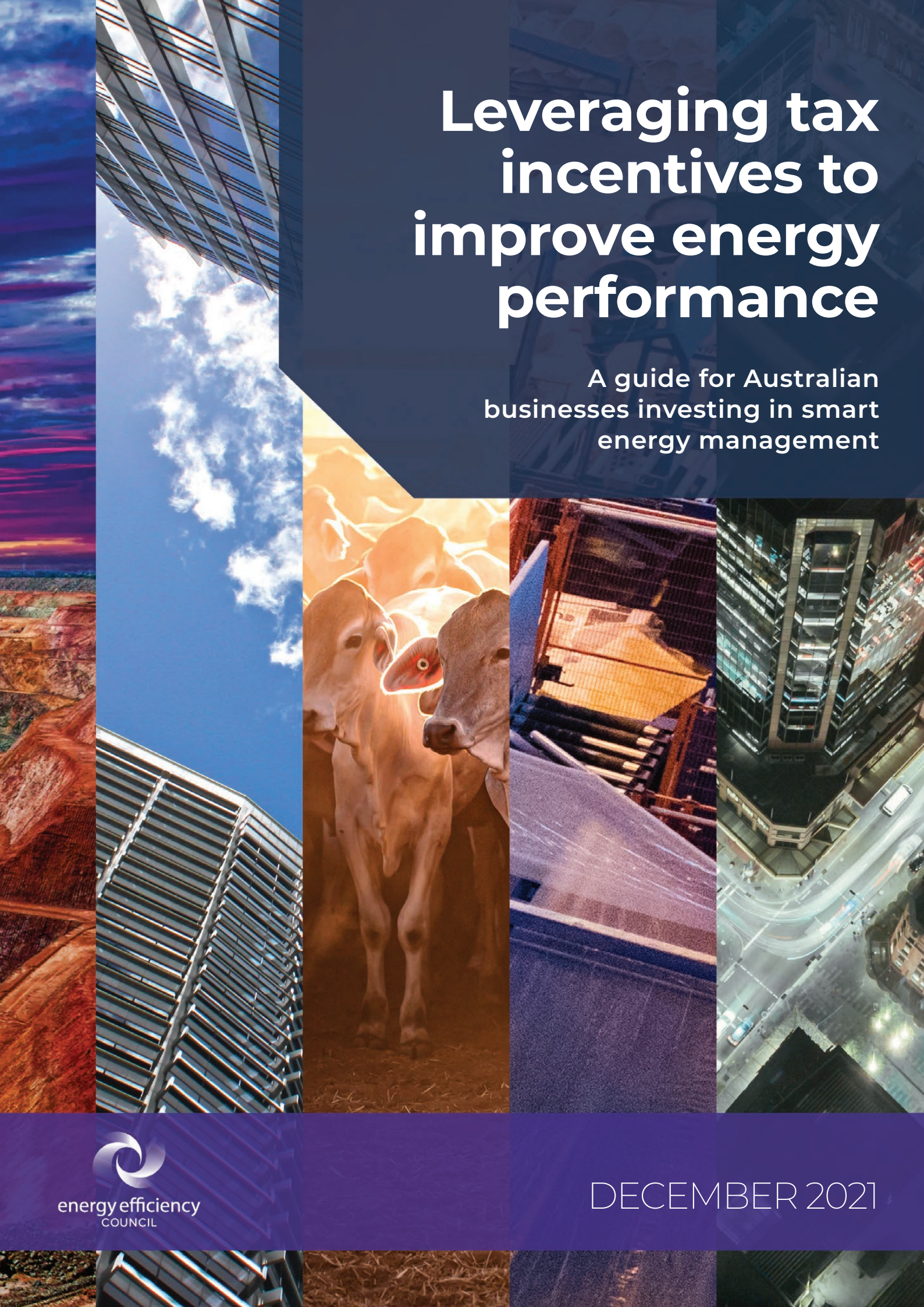
Leveraging tax incentives to improve energy performance

A guide for Australian businesses investing in smart energy management



energy efficiency COUNCIL

DECEMBER 2021

Critical insights: why energy matters

In the last ten years, the Australian energy landscape has been defined by increasingly volatile energy prices, which peaked with electricity prices doubling and gas prices tripling between 2015 and 2017. Whilst prices dropped with the onset of the COVID-19 pandemic and the biggest economic shock since the Great Depression, in 2021 they were back on the upwards trajectory. This is due to a combination of factors, including increased demand as Australia's economy returns to growth, electricity generation outages across the National Electricity Market (NEM) in the first half of 2021, and a backdrop of higher international energy prices, which impact our internationally exposed gas markets.

In this changing energy landscape, managing energy has become more and more complex. For Australian businesses, as they work on recovering from the first recession in thirty years, cost management has become more crucial than ever. Some businesses have scaled back on planned capital investments to try and improve resource efficiency through system fine tuning and optimisation. However, those that are leading on energy strategy and management have recognised that now is not the time to shy away from making capital investments, and the Australian Government is backing them. With the roll out of new and expanded tax incentives as part of a broader suite of stimulus measures to boost the economy, the time is ripe to invest in energy upgrades that deliver ongoing financial savings.

> These measures will drive economic activity in the short term and increase productivity in the long term. We know these have been highly effective... and have accelerated businesses investment plans.
>
> **The Hon Josh Frydenberg MP**
> Treasurer
> Commonwealth of Australia

The new and expanded tax incentives provide businesses with an unprecedented opportunity to immediately deduct the full cost of eligible assets and to make improvements to existing depreciating assets. Businesses can leverage these tax incentives to make strategic investments that drive major productivity improvements in their operations, the kind of changes that may not have been feasible without the savings from these measures.

These tax depreciation incentives have been designed to help businesses unlock their potential and stimulate growth by investing in new assets and upgrades to existing assets. They can help make the difference to businesses in unstable times by facilitating increased efficiency and smarter management of resources and assets. By leveraging the tax depreciation incentives to improve energy performance, businesses are able to achieve much more than just financial savings.

Beyond the significant decreases in operational expenditure (OpEx) from reduced energy bills, investing in energy upgrades can boost profitability and reduce risk, as well as support sustainability and corporate social responsibility (CSR) goals.

Businesses that are leading in energy strategy and management are weighing their investment options to ensure they are managing the risks and capturing the opportunities of Australia's dynamic energy landscape. These leading businesses are optimising their energy position in three key areas:

1. **Leveraging data** to unlock performance improvements, drive strategic decision-making and investment, and enable reporting and communication of progress against targets;

2. **Calibrating investment** across energy efficiency, demand management technologies and renewable energy; and

3. **Optimising procurement** by exploring innovative energy contracting strategies to source the remainder of their energy requirements.

For businesses that are creating or advancing their energy strategy, the Australian Government's new and expanded tax incentives provide an unprecedented opportunity to follow in the steps of energy management leaders and make strategic investments in assets that drive major energy productivity improvements in their operations.

This guide outlines how energy upgrades can benefit businesses and explores three specific tax incentives that can be used to improve the feasibility of such investments. It offers information and examples that demonstrate how the tax incentives can be applied in different business circumstances to support businesses with beginning or advancing their energy management journey.

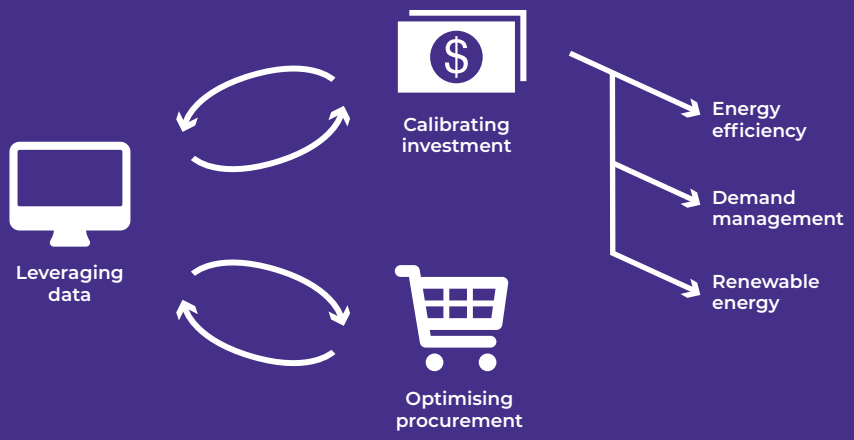


Figure 1: Leaders in energy strategy are leveraging their energy data to drive investments behind-the-meter and to optimise their energy procurement. They are actively monitoring the performance of these initiatives, which yields fresh data, informs future actions, and enables continuous improvement.

Tax incentives guide: December 2021

This guide considers the specific tax incentives available to Australian businesses that can be leveraged to improve energy performance. It accompanies ***Navigating a dynamic energy landscape: a briefing for Australian businesses*** and sector spotlights that consider the specific issues faced by Australian farms, government agencies, manufacturers, and office-based businesses, and guides them in improving their energy management strategy.

To download these briefings and other resources, sign up for updates or provide feedback, visit **energybriefing.org.au**

Navigating this guide

This guide is a companion to the annual ***briefing for Australian businesses***. It is designed to provide businesses with the information and tools to leverage the Australian Government's tax incentives to improve energy performance.

Section 1 Understanding the opportunity

Pages 5 - 10

The Australian Government has introduced and extended several tax depreciation incentives to support businesses with recovering from the impacts of COVID-19. Businesses can leverage these measures for energy upgrades to amplify energy bill savings, improve productivity, and realise wider benefits.

Section 2 Available tax incentives

Pages 11 - 24

There are three key tax incentives available to businesses that present a unique opportunity for supporting energy upgrades. These include:

- Temporary full expensing;
- Instant asset write-off; and
- Backing business investment - accelerated depreciation.

Section 3 Next steps: connecting with experts and accessing finance

Pages 25 - 28

Businesses successfully navigating Australia's dynamic energy landscape have relationships with external experts that complement their internal expertise; they are working with financial and energy advisors to leverage tax incentives and other government support for energy upgrades.

Section 4 Financial disclosure statement

Pages 29 - 30

This guide has been developed to inform businesses about the available tax incentives and the opportunity to use them for energy upgrades. This guide is not intended to replace, and should not be relied on for, formal tax, legal and/or accounting advice.

Energy pulse check

We talked to Australian businesses that are leading the field in energy strategy and management about the questions directors and executives should pose internally to ensure they are proactively managing their energy position. Three key questions came up again and again:

Do we have a granular understanding of how and when we are using energy across our business, and how our usage drives our energy costs?

Leaders in energy strategy and management have advanced metering, submetering and analytics that give them a granular understanding of energy use across their operations, broken down not just by site but by particular subsystems and equipment, which internal and external experts can monitor in real-time.

Leaders in energy strategy are leveraging their energy data. They are making sure the right data is captured, and that it drives decision making – see Section 3.1 of the ***briefing for Australian businesses***.

Are we actively monitoring efficiency, demand management and generation opportunities, and investing where it is cost-effective to do so?

Leaders in energy strategy and management have re-calibrated their approach to energy investment. They are ensuring that their energy data is actively monitored and analysed by experts in relation to:

- Current energy cost profile;
- Key business performance metrics;
- Energy market outlook and risk; and
- Opportunities to achieve a more cost-effective outcome through investments in energy efficiency, demand management technologies and generation.

Leaders in energy strategy are controlling everything possible behind-the-meter at their sites, and taking a proactive approach to investment in efficiency, demand management and generation – see Section 3.2 of the ***briefing for Australian businesses***.

Are we exploring the full range of energy procurement options?

Having reduced their exposure to energy market volatility through energy efficiency, demand management and renewables, leaders in energy strategy and management are exploring alternative contracting strategies to optimise energy costs and balance market risks when sourcing the remainder of their energy.

Rather than defaulting to the traditional procurement option of a contract with a fixed price, they are assessing the solutions available in the marketplace against their individual needs.

Leaders in energy strategy have optimised their energy procurement. They have ensured their businesses are not passive price-takers, and are effectively managing energy market exposure by properly assessing all available procurement options – see Section 3.3 of the ***briefing for Australian businesses***.

Understanding the opportunity

To learn more about Australia's energy transition, read the latest edition of the ***briefing for Australian businesses***.

The Australian Government has long supported businesses with improving their productivity and competitiveness, facilitating their growth in Australia and overseas. Following the onset of the COVID-19 pandemic, the Australian Government introduced several new and expanded tax incentives that bolster this goal, supporting businesses with recovering from the economic and financial impacts of COVID-19. By leveraging these tax incentives to improve energy performance, Australian businesses can further improve their profits and productivity, and support Australia's energy transition.

This guide explores how businesses can leverage tax incentives for energy upgrades, amplifying the financial and other benefits by doing so.

1.1 Amplifying profits and productivity with energy upgrades

Energy upgrades offer businesses a range of benefits that can amplify profits and productivity, whilst managing the risks – and capturing the opportunities – of Australia's energy transition and net zero transformation.

Significantly, the benefits of energy upgrades extend well beyond just simple energy cost savings. Lower maintenance costs, process improvements, enhanced product quality and cheap emissions abatement are often by-products of smart energy management.

Whether upgrading to LED lighting, installing rooftop solar PV, or undertaking a more complex process upgrade, energy upgrades support businesses with:

Figure 2: Energy upgrades offer a multitude of benefits.

1.1.1 Common energy upgrade opportunities

Energy upgrades offer businesses anywhere between ten and 80 per cent in energy savings; typical energy savings include:

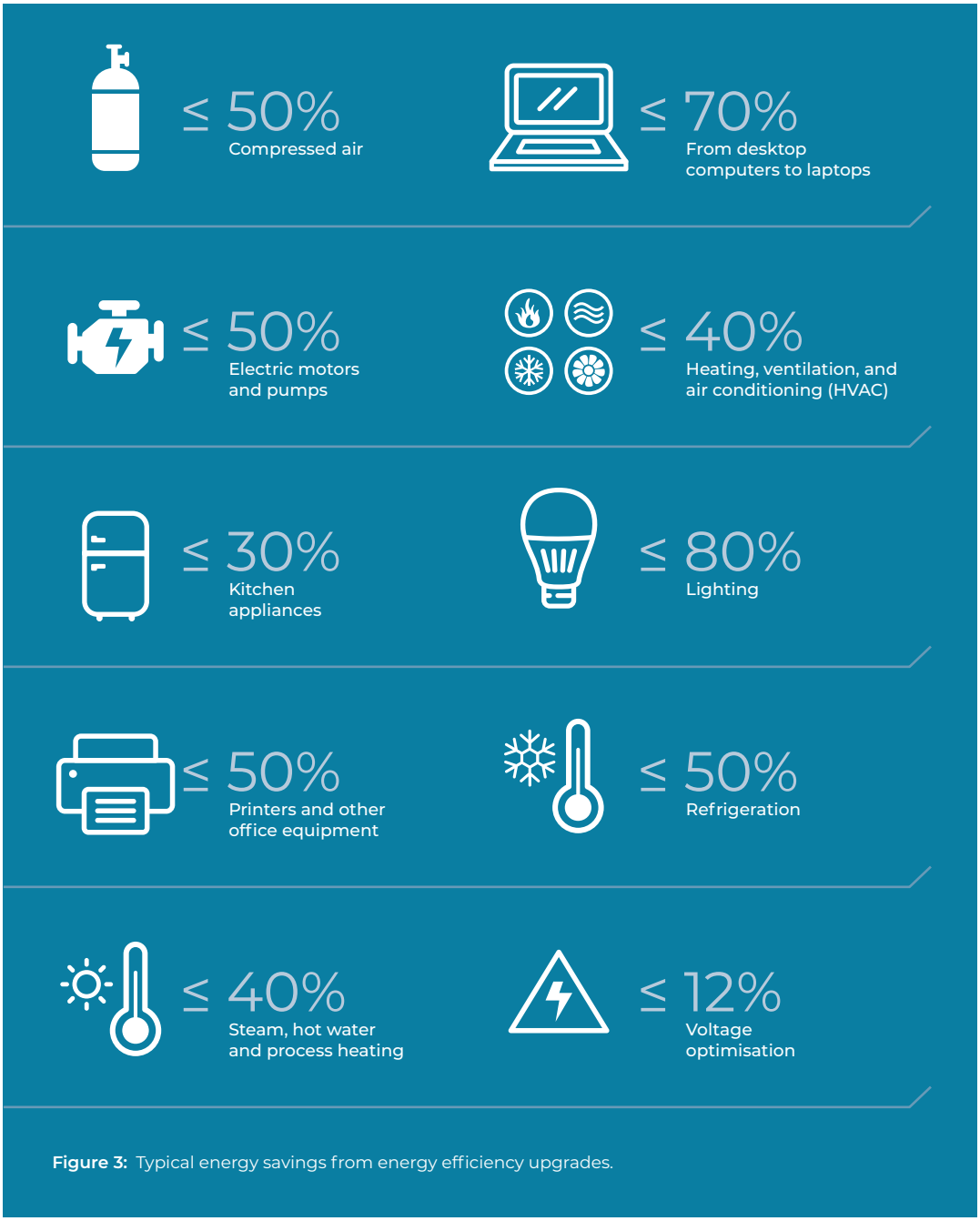


Figure 3: Typical energy savings from energy efficiency upgrades.

Beyond the energy efficiency opportunities described above, energy upgrades that enable demand management or implement on-site renewable energy won't lower the amount of energy used, but they will lead to businesses being offered more favourable network tariffs by reducing demand from the grid – and therefore lowering how much a business pays.

To review industry best practice in energy management and understand the benefits of upgrading equipment go to **energybriefing.org.au/case-studies**

1.2 Tax depreciation incentives for business

The Australian Government's FY20/21 and FY21/22 Budgets offered businesses several tax depreciation incentives including an extension of the existing ***instant asset write-off*** and new, time-limited ***temporary full expensing*** provisions to encourage capital investment in upgrading or replacing depreciating assets. ***Backing business investment – accelerated depreciation*** is also available for assets purchased and first used or installed during a select period between 2020 and 2021.

	Temporary full expensing [1]	Instant asset write-off [2 3]		Backing business investment - accelerated depreciation
		To 11 March 2020	From 12 March 2020	
Applicable to assets held, first used or installed ready for use	At or after 7.30pm AEDT on 6 October 2020 until 30 June 2022	1. Asset purchased at or after 7:30pm AEDT 2 April 2019 AND 2. First used or installed ready for use between 2 April 2019 and 11 March 2020	1. Asset purchased on or after 2 April 2019 and by 31 December 2020 AND 2. First used or installed ready for use between 12 March 2020 and 30 June 2021	1. Asset purchased AND 2. First used or installed ready for use between 12 March 2020 and 30 June 2021
Eligibility thresholds	Aggregated turnover under $5 billion [4]	Aggregated turnover under $50 million	Aggregated turnover under $500 million	Aggregated turnover under $500 million
New assets	Yes	Yes		Yes
Second-hand assets	Yes, if an aggregated turnover is under $50 million	Yes		No
Asset upgrades	Yes	Yes		Yes
Asset or upgrade cost	Unlimited	Less than $30,000	Less than $150,000	Unlimited
Depreciation rate	100% in year 1	100% in year 1		Accelerated
When to use each tax depreciation incentive	Only one incentive can apply for an asset. If more than one incentive could apply, the order of application – subject to opt out choices – is: • Temporary full expensing; • Instant asset write-off; • Backing business investment; and then • General depreciation rules. For some incentives, businesses can choose to opt out on an asset-by-asset basis. Refer to the ATO or a financial advisor for further advice.			
More details	**Section 2.1**	**Section 2.2**		**Section 2.3**

Figure 4: Interaction of tax depreciation incentives.

For more information, go to **ato.gov.au/bounceback**

Available tax depreciation incentives are correct at the time of publication but are subject to change; businesses should refer to **ato.gov.au** or contact a financial advisor for the most up to date information.

1 The FY21/22 Federal Budget extended this measure until 30 June 2023; however, this has not passed into law at the time of publication.

2 The instant asset write-off has been available for several years; the thresholds and relevant application periods can be found on the ***ATO website***. The period has been further extended with an increased threshold of an asset and it has also been expanded to businesses with an aggregated turnover of less than $500m as an economic stimulus measure in response to the COVID-19 pandemic.

3 Small business entities – those with an aggregated turnover of less than $10 million – need to choose the simplified depreciation rules to use the instant asset write-off; for those businesses, eligible assets can be purchased at or after 7.30pm AEST on 12 May 2015.

4 Corporate tax entities – like businesses – with aggregated turnovers greater than $5 billion may be eligible under the ***alternative income test***.

Depreciating assets

Australian tax law defines a depreciating asset as an asset that has a limited effective life and can reasonably be expected to decline in value over the time it is used. Examples of depreciating assets include:

- Machinery, plant and equipment;
- Office furniture; and
- Computers, phones and externally purchased software.

To learn more, read the ATO's ***Guide to depreciating assets 2021***.

1.3 Measuring savings and building the business case

Whilst energy upgrades may appear to be a 'no brainer', facilities managers and other team members often have difficulty convincing executives and directors to make the upfront capital investment needed to realise the ongoing operational savings. Understanding the savings potential of energy upgrades assists them with building the business case.

The simple payback method is often used to determine the viability of a new project as it provides a simplified approach to assessing project feasibility. It can also be effectively used by businesses to build the business case for capital investment into energy management equipment, programs, and upgrades. This method compares the upfront cost of the capital investment with the energy savings generated, enabling a business to evaluate how long it will take for the project to pay for itself.

The business case can be enhanced by incorporating additional savings from tax incentives and maintenance costs to decrease the payback period. Businesses can even consider additional revenue from productivity improvements to further bolster the business case. They may consider other methods for calculating savings including net present value (NPV) and internal rate of return (IRR); for an accountant's perspective on behind-the-meter investments see **Section 3**.

Energy efficiency: the first fuel

Energy efficiency is getting more output or service from each unit of energy – e.g. LEDs can use up to 80 per cent less electricity than incandescent light bulbs.

The International Energy Agency (IEA) refers to energy efficiency as the 'first fuel', as energy efficiency investments are often more cost-effective than investments in other energy upgrades, like on-site renewable generation or battery storage.

Energy efficiency is where smart businesses start before considering other investments, and not just because it immediately cuts energy bills. Importantly, as energy efficiency lowers a business' energy demand, it can reduce the size of generation and demand management technologies required by businesses, reducing the risk of over-investment.

To learn more about the benefits of taking an efficiency-first approach, see Section 3.2.1 of the latest edition of the ***briefing for Australian businesses***.

Calculating simple payback periods for energy upgrades

Simple payback

A simple payback period is calculated by dividing the initial investment value by the estimated annual energy savings of the project. Estimated annual energy savings are calculated by multiplying the anticipated energy savings – in kWh for electricity and GJ for gas – by the price paid per kWh or GJ.

cost of project or investment ($) ÷ (savings per annum (kWh or GJ) x energy tariff ($))
= payback period (years)

As an example, a $2 million capital investment in new LED lighting and rooftop solar, which has been assessed to yield annual savings of $350,000 in electricity costs, will enable the business to recover the costs of the upgrade in just under six years without any benefit from a tax incentive:

LED lighting and rooftop solar upgrade payback period
$2,000,000 ÷ $350,000 = 5.7 years

Simple payback including a tax incentive

To calculate the payback period when incorporating a tax incentive, subtract the tax incentive from the initial investment, and then divide that amount by the estimated annual energy savings of the project:

(cost of project or investment ($) – value of tax incentive ($))
÷ (savings per annum (kWh or GJ) x energy tariff ($))
= payback period (years)

When a tax incentive – like the temporary full expensing – is added ($2 million x 30% company tax rate), the payback period is reduced to four years:

LED lighting and rooftop solar upgrade payback period
with tax incentive
($2,000,000 – $600,000) ÷ $350,000 = 4 years

The payback period may be further reduced by calculating additional savings not included in the simple payback method, such as savings on maintenance costs and productivity gains.

For further information on how to calculate the energy savings of a project or upgrade, read the *Calculating energy savings 101* found at
energybriefing.org.au/calculating-energy-savings-101

1.3.1 Company tax rates

When calculating how tax incentives can apply to businesses, it is important to consider the applicable company tax rates as this will determine the value of any given tax incentive.

Cost of project or investment ($) x company tax rate (%) = value of tax incentive ($)

Financial year	Aggregated turnover threshold	Tax rate for companies under the threshold	Tax rate for other companies
2017/18	$25 million	27.5%	30%
2018/19 to 2019/20	$50 million	27.5%	30%
2020/21	$50 million	26%	30%
2021/22 and future years	$50 million	25%	30%

Figure 5: Company tax rates for base rate entities have progressively decreased in recent years. Businesses should consult with a financial advisor for more information about the eligible tax rate for their company.

Please note, the above tax rates are applicable for all base rate entities. For more information, go to ato.gov.au/rates/company-tax

1.3.2 Deductions for the cost of depreciating assets

Under income tax law, businesses are generally allowed to claim deductions for expenditure incurred on depreciating assets that are used to generate income over their effective life. In addition to these general depreciation rules, the Government may introduce special rules that enable business to claim an immediate deduction for the expenditure. Calculating the deductible value of depreciating assets is therefore important for determining tax benefits.

To learn more, read the ATO's ***Guide to depreciating assets 2021***.

Calculating the deductible value of depreciating assets

Calculating the deductible value of a depreciating asset using the diminishing value (DV) method

Under the DV method, businesses use the following formula:

asset base value x (days held ÷ 365) x (200% ÷ asset's effective life)
= deductable value of depreciating asset

An asset's base value can be calculated in two ways based on timing:

1. For the financial year the asset is first used or installed ready for use: its cost; or
2. For a later year: the sum paid to hold the asset and any amount paid that year to bring the asset to its present condition, less any decline in value.

As an example, a $500,000 investment in a new solar PV system that has an ATO determined effective life of 20 years, and would have been held for the entire period – i.e. 365 days during the first year of ownership – would be eligible for a tax deduction of $50,000.

$500,000 x (365 ÷ 365) x (200% ÷ 20) = $500,000 x 1 x 10% = $50,000

Based on the decline in value of the asset each year, the deductible value of the asset in the second year – and each year onwards – should consider the previous years' deductions. For example, in the second year, the asset's opening adjustable value would be $450,000, made by deducting the $50,000 decline in value for the first year from the initial cost of $500,000. This means that the second-year depreciation would be $45,000, provided that it is not a leap year.

($500,000 – 50,000) x (365 ÷ 365) x (200% ÷ 20) = $450,000 x 1 x 10% = $45,000

Available tax depreciation incentives

The Australian Government has made available several tax incentives for depreciating assets, including:

1. Temporary full expensing;
2. Instant asset tax write-off; and
3. Backing business investment - accelerated depreciation.

Businesses can only claim one tax incentive per asset.

Only one incentive can apply for an asset. If more than one incentive could apply, the order of application – subject to opt out choices – is:

- Temporary full expensing;
- Instant asset write-off;
- Backing business investment; and then
- General depreciation rules.

For some incentives, businesses can choose to opt out on an asset-by-asset basis; refer to **ato.gov.au/bounceback** or a financial advisor for guidance. It is also important to note that some assets are not eligible for these tax incentives. Each measure outlined below has a link to the relevant ATO page that explains what types of assets are excluded.

To learn more, visit the ATO's ***Capital works deductions*** webpage.

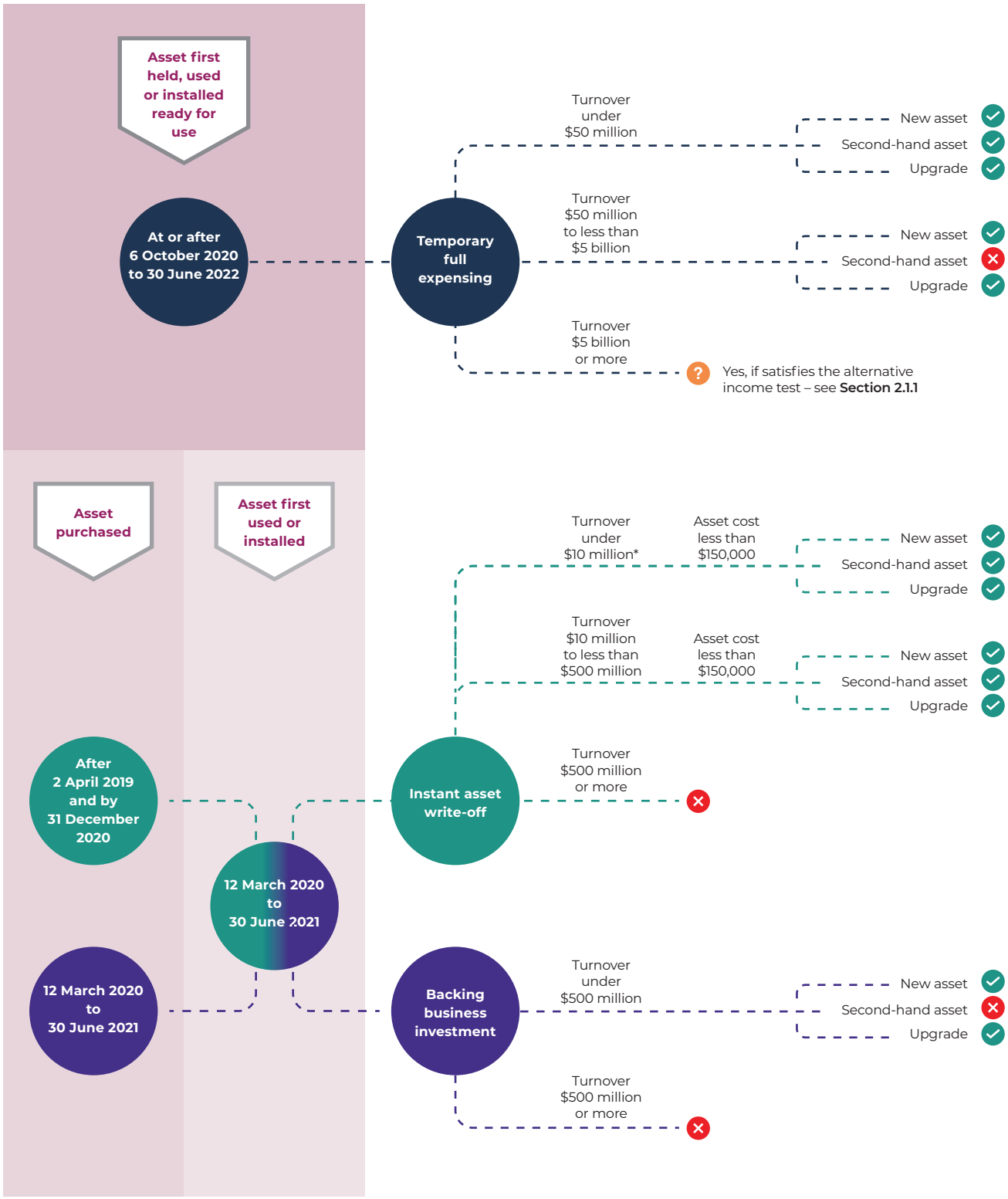


Figure 6: Eligibility checker for the Australian Government's new and expanded tax incentives.

Note: this is only a high level overview of the tax depreciation incentives; notably, all turnover figures represented aggregated turnovers. For further details, please refer to the rest of this section or **Section 1**. You can also find more information at **ato.gov.au/bounceback**

*For businesses with turnovers under $10 million that are using simplified depreciation rules, the asset could have been purchased as early as 7:30pm AEST on 12 May 2015. For further guidance on eligibility prior to 2019, refer to the thresholds table on the ATO's ***Instant asset write-off for eligible businesses*** webpage.

Key:

- Eligible
- Ineligible
- Potentially eligible

2.1 Temporary full expensing

Temporary full expensing allows eligible businesses to claim an immediate depreciation deduction on the cost of eligible depreciating assets. The threshold for the cost of the asset is uncapped, providing business owners with the opportunity to invest in eligible assets or asset upgrades/improvements that may not have been feasible without the immediate deduction. This measure can enable businesses to unlock potential opportunities otherwise unavailable or cost-prohibitive for them.

Some depreciating assets have specific 'treatments' or rules for the application of the temporary full expensing measure; for example, car limits apply to passenger vehicles. For more information on these rules and temporary full expensing more broadly, visit the ATO's ***temporary full expensing*** webpage.

Using the temporary full expensing provisions for investment in energy upgrades means that the tax savings can be included alongside energy cost savings, amplifying the financial benefits for the business. Businesses can use a simple payback method to build the business case for investing in energy upgrades by calculating how many years of energy savings will pay back the original investment. An example of how a business can leverage temporary full expensing to maximise the potential benefits can be found in **Section 2.1.3**.

> Over 99 per cent of businesses will be able to write off the full value of any eligible asset they purchase for their business.
>
> A trucking company will be able to upgrade its fleet, a farmer will be able to purchase a new harvester and a food manufacturing business will be able to expand its production line.
>
> **The Hon Josh Frydenberg MP**
> Treasurer
> Commonwealth of Australia

2.1.1 Eligibility for the temporary full expensing tax depreciation incentive

Eligibility for temporary full expensing is dependent on two factors:

- Aggregated turnover; and
- Factors specific to the asset.

	Businesses with an aggregated turnover under $50 million	Businesses with an aggregated turnover between $50 million and $5 billion
New assets[5]	Yes • 100% in year 1 • Unlimited asset cost	Yes • 100% in year 1 • Unlimited asset cost
Second-hand assets[6]	Yes • 100% in year 1 • Unlimited asset cost	No
Asset improvements	Yes • 100% in year 1 • Unlimited asset cost	Yes • 100% in year 1 • Unlimited asset cost

Figure 7: Depreciating assets that are eligible under the temporary full expensing measure.

5 Subject to the asset being held, first used or ready for use at or after 7:30pm AEDT 6 October 2020 and until 30 June 2022.

6 Ibid.

Eligible companies

Aggregated turnover <$10 million

For small business entities that use the simplified depreciation rules, temporary full expensing rules apply with some modifications. To learn more, read the ATO's ***Small business entities using simplified depreciation rules***.

For such entities that choose to stop using the simplified depreciation rules or become ineligible to use them, refer to the ATO's ***If you stop using simplified depreciation***.

Aggregated turnover $10 million - <$50 million

Businesses with an aggregated turnover under $50 million can use temporary full expensing for:

- Eligible new assets that are first held, first used and installed ready for use at and after 7.30pm AEDT on 6 October 2020 until 30 June 2022;
- Eligible second-hand assets that are first held, first used and installed ready for use at and after 7.30pm AEDT on 6 October 2020 until 30 June 2022; and/or
- Eligible improvements incurred between 7.30pm AEDT on 6 October 2020 and 30 June 2022 to eligible depreciating assets.

Aggregated turnover ≥$50 million - <$5 billion

Businesses with an aggregated turnover between $50 million and under $5 billion can use temporary full expensing for new assets that are first held, first used and installed ready for use at and after 7.30pm AEDT on 6 October 2020 until 30 June 2022..

Aggregated turnover ≥$5 billion

Businesses with an aggregated turnover equal to or above $5 billion may still be eligible for temporary full expensing under the alternative income test. To learn more, read the ATO's ***Alternative income test for temporary full expensing***.

Eligible assets

To be eligible for the temporary full expensing tax depreciation incentive, the depreciating assets must:

- Be first held, used or installed ready for use between: 7.30pm AEDT on 6 October 2020 and 30 June 2022;[7]
- Be used for a taxable purpose; and
- Not be an excluded asset.

The amount a business can claim is dependent on the proportion of the asset's use for a taxable purpose. For example, if a business purchased an industrial computer for $10,000, which was used for personal use ten per cent of the time, and for business 90 per cent of the time, the business would only be eligible for a $9,000 deduction.

There is no limit on the number of assets for which the measure can be applied, nor is there a limit on the cost of these assets. However, there may be specific cost limits on certain assets, such as passenger vehicles to which the car limit may apply.

To learn more about asset exclusions and limits, read the ATO's ***Eligibility for temporary full expensing***.

7 The FY21/22 Federal Budget extended this measure until 30 June 2023; however, this has not passed into law at the time of publication.

2.1.2 Accessing the temporary full expensing tax depreciation incentive

Businesses can claim a temporary full expensing deduction in their FY20/21 and FY21/22 tax returns, noting that eligible assets must be first held, first used or installed ready for use at or after 7:30pm AEDT on 6 October 2020 and before 30 June 2022.

From July 2021, additional labels and updated instructions became available for the 2020-21 tax return at **ato.gov.au**. Visit the ATO's ***temporary full expensing webpage*** for the latest information and discuss the opportunity with a financial advisor.

2.1.3 Implementing the temporary full expensing tax incentive: a business example

Building the business case for Simple Medicine to invest in energy upgrades

Simple Medicine Pty Ltd, a pharmaceuticals manufacturing business, has an annual aggregated turnover of $75 million and is looking to reduce energy bills by investing in a machinery upgrade of its heating, ventilation and air conditioning (HVAC) system at its main manufacturing site in New South Wales.[8] The upgrade equipment was purchased after 6 October 2020 and installed ready for use on 1 July 2021.

It will cost approximately $1.4 million to implement this upgrade to the HVAC system, which is expected to generate $185,000 in energy savings each year. Beginning from the installation date and without using the temporary full expensing tax depreciation incentive, the payback period for the upgrade is just over seven and a half years.

HVAC system simple payback period
$1,400,000 ÷ $185,000 = 7.6 years

If Simple Medicine claims temporary full expensing for the purchase and installation of the new HVAC machinery in its FY21/22 tax return, the business will be able to include a $1,400,000 tax deduction. The tax benefit resulting from that deduction would be $420,000. This is calculated by multiplying the cost of the HVAC machinery upgrade by the eligible company tax rate of 30 per cent.

Value of temporary full expensing tax incentive
$1,400,000 x 30% = $420,000

To calculate the simple payback period with temporary full expensing, Simple Medicine would subtract the tax benefit value of $420,000 from the initial investment of $1.4 million, then divide that amount by the estimated $185,000 of annual energy savings. By combining the savings from the tax deduction and the reduced energy costs, the payback period is reduced to just over five years.

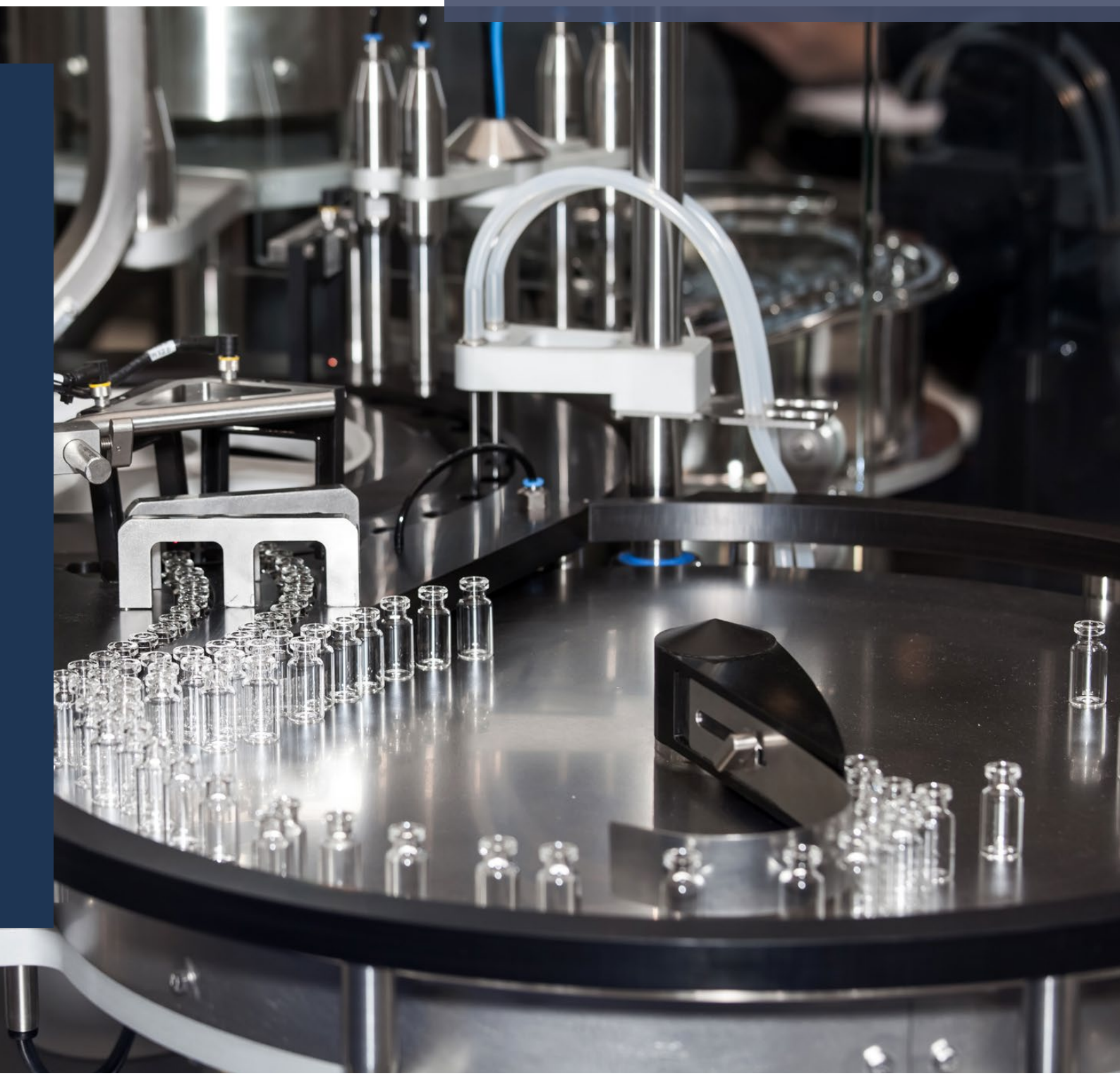
HVAC system simple payback period with tax incentive
($1,400,000 – $420,000) ÷ $185,000 = 5.3 years

The payback period and business case could be further improved by adding savings on maintenance costs and productivity gains.

8 For illustrative purposes, this example assumes the upgrade to the HVAC system is a single depreciation asset eligible for temporary full expensing.

Key figures:

- **Cost of initiative:** $1.4 million
- **Energy savings ($/year):** $185,000
- **Tax rate:** 30%
- **Tax benefit value:** $420,000
- **Payback without tax incentive:** 7.6 years
- **Payback with tax incentive:** 5.3 years



2.2 Instant asset write-off

The ***instant asset write-off*** allows eligible businesses to claim an immediate deduction for the business portion of an asset on the condition that it costs less than the relevant threshold amount in the year the asset was first used or installed ready for use. The instant asset write-off has existed for several years, but the eligibility criteria and thresholds have changed over time. From 12 March 2020, the Australian Government increased the asset threshold from $30,000 to $150,000, and the aggregated turnover threshold from $50 million to $500 million as one of the responses to the impact of the COVID-19 pandemic on businesses.

This measure allows businesses to deduct the cost of a depreciating asset immediately, rather than over a period of time. It is intended to improve the cash flow of a business – especially a small business – by releasing funds that would otherwise be held up in depreciating assets and encourage additional capital investment.

Businesses can increase the financial benefits of energy upgrades by using the instant asset write-off for energy-using equipment, adding energy and maintenance savings to the tax savings available to the business.

> Hundreds of thousands of businesses right across the country have used this program and more will into the future.
>
> **The Hon Josh Frydenberg MP**
> Treasurer
> Commonwealth of Australia

For more information on the instant asset write-off tax incentive, visit the ATO's ***instant asset write-off for eligible businesses*** webpage.

Small business pool

Small businesses must use the simplified depreciation rules to claim the instant asset write-off. If the cost of the asset is the same as or more than the relevant instant asset write-off threshold, the asset must be placed into the small business pool.

For assets first held, used, or installed ready for use for a taxable purpose from 7:30pm AEDT on 6 October 2020 to 30 June 2022, the instant asset write-off threshold does not apply. Businesses can immediately deduct the business portion of the asset under temporary full expensing.

For financial years ending between 6 October 2020 and 30 June 2022, businesses deduct the balance of small business pool under temporary full expensing. For prior financial years – those ending before 7:30pm AEDT on 6 October 2020 – different rules apply to the small business pool. Visit **ato.gov.au** for detailed information.

2.2.1 Eligibility for the instant asset write-off tax incentive

As with temporary full expensing, eligibility for the instant asset write-off is dependent on two factors:

- Aggregated turnover; and
- Factors specific to the asset.

Eligible companies

Businesses with an aggregated turnover under $500 million can use the instant asset write-off for new and second-hand assets with a cost below $150,000. Prior to 12 March 2020, the aggregated turnover threshold for a business was under $50 million.

Small business entities with an aggregated turnover of less than $10 million need to choose the simplified depreciation rules to use the instant asset write-off.

Eligible assets

To be eligible for the enhanced instant asset write-off, the new or second-hand asset must:

- Have cost less than $150,000;
- Have been purchased on or after 2 April 2019 and by 31 December 2020;
- Have been used or installed ready for use by 30 June 2021; and
- Be used for business purposes.

As with temporary full expensing, the amount a business can claim is dependent on the proportion of the asset's use for business purposes.

There is no limit on the number of assets for which this incentive can be applied where the cost of each individual asset is below the threshold of $150,000 for a period between 12 March 2020 and 30 June 2021. For assets used or installed ready for use from 7.30pm AEDT on 2 April 2019 to 12 March 2020, the asset threshold was $30,000.

For small business entities, assets are eligible if they were purchased between 7:30pm AEST on 12 May 2015 and 31 December 2020. The instant asset write-off may still be applied where temporary full expensing does not apply or a business is not eligible, as long as the asset was purchased by 31 December 2020 and was first used or installed ready for use by 30 June 2021.

There are a range of eligible assets including:

- Generators, including onsite rooftop solar PV;
- Tools and equipment; for example, compressors, refrigerators, boilers, and conveyor belts;
- Computers, laptops, and tablets;
- Office equipment; for example, printers and projectors; and
- Motor vehicles for business use, with the car limit applying to passenger vehicles.

Small businesses will need to apply the simplified depreciation rules in order to claim the instant asset write-off. It cannot be used for assets that are excluded from those rules.

2.2.2 Accessing the enhanced instant asset write-off tax incentive

Businesses can claim the instant asset write-off at the increased asset threshold of $150,000 in their FY20/21 tax return. Businesses are able to claim the instant asset write-off in tax returns prior to FY20/21, but different thresholds apply. Visit **ato.gov.au** for the latest information, keep all records and discuss the opportunity with a financial advisor.

2.2.3 Implementing the instant asset write-off tax incentive: a business example

Building the business case for Dairy to Dream to invest in energy upgrades

Dairy to Dream, a dairy farm and cheesery in regional Victoria, was in sore need of upgrading its refrigeration system. The existing system was nearly 20 years old, far less energy efficient than newer, more innovative options, and was preventing Dairy to Dream from expanding its business due to refrigeration sizing constraints. Upgrading to a new, more efficient refrigeration system will cost $120,000 for the equipment and installation and will generate energy savings of $30,000 annually.[9]

As the asset purchase took place in July 2020, the business was eligible for the instant asset write-off. This is because the new refrigeration system was purchased before the introduction of temporary full expensing and was installed ready for use by 30 June 2021. If Dairy to Dream undertook this upgrade without claiming the instant asset write-off, the simple payback would be four years.

Refrigeration system simple payback period
$120,000 ÷ $30,000 = 4 years

If Dairy to Dream applies the instant asset write-off to the purchase of the new refrigeration system in its FY20/21 tax return, the business could reduce its tax bill by $31,200. This is calculated by multiplying the cost of the initiative – the new refrigeration system – by the eligible company tax rate – 26 per cent – as the farm meets the eligibility of accessing the lower company tax rate – see **Figure 5**.

Value of instant asset write-off tax incentive
$120,000 x 26% = $31,200

To calculate the simple payback period with the instant asset write-off, Dairy to Dream would subtract the tax incentive value of $31,200 from the initial investment of $120,000, then divide that amount by the estimated $30,000 in annual energy savings. By combining the savings from the tax deduction and the reduced energy costs, the payback period is reduced by one quarter to just under three years.

Refrigeration system payback period with tax incentive
($120,000 – $31,200) ÷ $30,000 = 2.96 years

The payback period and business case could be further improved by adding savings on maintenance costs and productivity gains.

9 For illustrative purpose, this example assumes the new refrigeration system is a single depreciation asset eligible for the instant asset write-off.

Key figures:

- **Cost of initiative:** $120,000
- **Energy savings ($/year):** $30,000
- **Tax rate:** 26%
- **Tax incentive value:** $31,200
- **Payback without tax incentive:** 4 years
- **Payback with tax incentive:** 2.96 years

2.3 Backing business investment - accelerated depreciation

The ***backing business investment - accelerated depreciation*** tax incentive enables quicker depreciation of eligible assets. This means that in comparison to the general rules, businesses are eligible for a higher depreciation deduction immediately, enabling those savings to be rapidly reinvested in the business.

The backing business investment - accelerated depreciation tax incentive supports businesses where the more favourable tax incentives are unable to do so. Specifically, it can be applied to assets costing over $150,000 that were first used or installed ready for use from 12 March 2020 to 30 June 2021. Where an asset or upgrade acquired during this period cost less than $150,000, but the business was a small business not using the simplified depreciation rules,[10] the instant asset write-off does not apply and the backing business investment tax incentive could be used instead.

Different rules apply for working out the accelerated deprecation deduction, depending on whether or not the business is using the simplified depreciation rules.[11] When it is using the simplified depreciation rules, it can deduct an amount equal to 57.5 per cent – rather than 15 per cent – of the business portion of a new depreciating asset in the year the asset is allocated to the small business pool. When a business is not using the simplified depreciation rules, the value of the accelerated depreciation deduction varies depending on the usual depreciation deduction.[12]

For more information, visit the ATO's ***backing business investment - accelerated depreciation*** webpage.

10 Simplified depreciation is only available to small businesses with an aggregated turnover of less than $10 million; learn more at the ATO's ***simpler depreciation for small business*** webpage.

11 Ibid.

12 Businesses can choose to use either of two alternative methods for calculating depreciation; learn more at the ATO's ***prime cost (straight line) and diminishing value methods*** webpage.

13 For more information on excluded assets, visit the ATO's ***backing business investment - accelerated depreciation*** webpage.

2.3.1 Eligibility for the backing business investment - accelerated depreciation tax incentive

As with the temporary full expensing and instant asset write-off measures, eligibility for the backing business investment - accelerated depreciation tax incentive is dependent on two things:

- Aggregated turnover; and
- Factors specific to the asset.

Eligible companies

Businesses with an aggregated turnover of less than $500 million for FY19/20 and FY20/21 can use the backing business investment - accelerated depreciation for eligible assets.

Eligible assets

To be eligible for the accelerated depreciation tax incentive, the asset must:

- Have been new and not previously held by another entity;
- Have been held by the business at or after 12 March 2020;
- Have been first used or installed ready for use between 12 March 2020 and 30 June 2021;
- Have been used for a taxable purpose; and
- Not be an excluded asset.[13]

As with temporary full expensing and the instant asset write-off, the amount a business can claim as a deduction is dependent on the proportion of the asset's use for a taxable purpose.

There is no limit on the number of assets for which the measure can be applied, nor is there a limit on the cost of any or all of these assets under backing business investment - accelerated depreciation.

2.3.2 Accessing the backing business investment - accelerated depreciation tax incentive

Businesses can claim a deduction under the backing business investment - accelerated depreciation tax incentive in their FY19/20 or FY20/21 tax returns – determined by the year that the asset is first used or installed ready for use – noting that the usual depreciating arrangements apply in subsequent financial years that the asset is held.

Calculating the deductible value of a depreciating asset including a tax incentive using the diminishing value method

To calculate the deductible value of a depreciating asset when incorporating the rules of the backing business investment - accelerated depreciation – see **Section 2.3** – begin by applying the accelerated depreciation, which is half of the asset cost, plus the amount of the usual depreciation deduction but calculated for the balance of the asset cost.

(cost of asset or upgrade ($) x accelerated depreciation (%))
+ (cost of asset or upgrade ($) x accelerated depreciation (%)
x usual depreciation rule (%))
= value of tax deduction ($)

Using the solar PV system example from **Section 1.3.2**, the business would first deduct $250,000 – 50 per cent of the cost of the asset – and then deduct a further $25,000 – ten per cent of the remaining asset cost, or the amount that would otherwise be deducted under usual depreciation rules. This equals a total deduction of $275,000 for the depreciation of the asset in its first year.

($500,000 x 50%) + ($500,000 x 50% x 10%) = $275,000

For the second year of the asset, the solar PV system's depreciation would return to the usual depreciation rules with the asset's value, reduced by the $275,000 deducted in the previous year.

($500,000 – 275,000) x 1 x 10% = $22,500

To calculate the value of the tax incentive, subtract the value of the tax deduction under the usual depreciation rules from the value of the tax deduction under the accelerated depreciation rules. Based on these calculations, the backing business investment tax incentive would provide an extra $225,000 tax deduction for the purchase of the solar PV system.

(cost of asset or upgrade ($) x accelerated depreciation (%))
+ (cost of asset or upgrade ($) x accelerated depreciation (%)
x usual depreciation rule (%))
– (cost of asset ($) x usual depreciation rule (%))
= value of tax incentive ($)

($500,000 x 50% = $250,000) + ($500,000 x 50% x 10% = $25,000)
– ($500,000 x 10% = $50,000) = $225,000

2.3.3 Implementing the backing business investment - accelerated depreciation tax incentive: a business example

Building the business case for Creating Cities to invest in energy upgrades

Creating Cities is a small construction business with an aggregated turnover of $9.9 million for FY20/21. In 2020, Creating Cities replaced its older air compressor with a new, higher efficiency model. Because Creating Cities does not use simplified depreciation it is not eligible to use the instant asset write-off. And since Creating Cities purchased the asset before 6 October 2020, the business is also ineligible from using the temporary full expensing tax incentive. However, the new air compressor is eligible for the backing business investment - accelerated depreciation tax incentive. The air compressor, which was purchased for $70,000 on 1 June 2020, generates $14,000 in energy savings per annum. Beginning from the date it was fully installed, which was 1 July 2020, the simple payback period for the upgrade is five years.

New air compressor simple payback period
$70,000 ÷ $14,000 = 5 years

Without the accelerated depreciation tax incentive, Creating Cities could claim a 20 per cent depreciation deduction when using the diminishing value (DV) method, based on the asset's effective life of ten years. If the business applies the backing business investment - accelerated depreciation rules for the air compressor in its FY21/22 tax return, it first applies the accelerated depreciation, and then applies the standard depreciation to the asset balance. This means that Creating Cities would first deduct $35,000 – 50 per cent of the cost of the asset – and then deduct a further $7,000 – 20 per cent of the remaining asset cost, or the amount that would otherwise be deducted under usual depreciation rules. This equals a total deduction of $42,000 for the depreciation of the asset in its first year.

To calculate the value of the tax incentive, Creating Cities would subtract the value of the tax deduction under the usual depreciation rules from the value of the tax deduction under the backing business investment - accelerated depreciation rules. Based on these calculations, Creating Cities would receive an extra $28,000 tax deduction by using the backing business investment tax incentive for the purchase of its new air compressor in the first year.

Value of the backing business investment - accelerated depreciation tax incentive
($70,000 x 50% = $35,000) + ($70,000 x 50% x 20% = $7,000)
– ($70,000 X 20% = $14,000) = $28,000

To calculate the payback period with the backing business investment - accelerated depreciation, Creating Cities would subtract the tax incentive value of $28,000 from the initial investment of $70,000, and then divide that amount by the estimated $14,000 in annual energy savings. By combining the savings from the tax deduction and the reduced energy costs, the payback period is reduced to three years.

New air compressor simple payback period with tax incentive
($70,000 – $28,000) ÷ $14,000 = 3 years

The payback period and business case could be further improved by adding savings on maintenance costs and productivity gains.

Key figures:

- **Cost of initiative:** $70,000
- **Energy savings ($/year):** $14,000
- **Accelerated depreciation rate:** 50%
- **Diminishing value first year deduction rate:** 20%
- **Tax deduction:** $42,000
- **Tax incentive value:** $28,000
- **Payback without tax incentive:** 5 years
- **Payback with tax incentive:** 3 years

Next steps: connecting with experts and accessing finance

Leveraging tax incentives to improve energy performance supports businesses with undertaking a proactive approach to energy strategy and management, thereby ensuring that businesses can successfully navigate an increasingly dynamic energy landscape.

To learn more about the tax incentives described in this guide, go to **ato.gov.au/bounceback**

More broadly, **ato.gov.au/business** provides a wide range of resources, explanations, and useful tools to help businesses. But for businesses looking to move beyond quick wins to realise continuous improvement through strategic energy management, what they do next is critical. You can do this by:

- Seeking a briefing from an internal or external energy expert about energy strategy and management;
- Ensuring your business is across energy specific financing and funding options, like the tax incentives described in this guide, by seeking guidance from a financial advisor; and
- Exploring the ***briefing for Australian businesses***, sector spotlights and other resources available at **energybriefing.org.au**

3.1 Connecting with energy experts

Energy is a complex area, and it is only getting more complex over time. Managing it effectively can require domain knowledge across areas as diverse as business strategy, energy markets, engineering, and carbon accounting, to name just a few. Businesses are responding to increasing complexity by ensuring they have relationships with external experts that complement their internal expertise.

Many businesses have existing relationships with trusted experts in the areas covered in the ***briefing for Australian businesses*** – including energy efficiency, demand management and renewable energy upgrades. For those that do not, sourcing a referral from professional networks is a natural first option.

Beyond that, seeking out a member of a well-established, credible industry association – like those outlined in the ***briefing for Australian businesses*** – is a good starting point.

For a full list of relevant industry associations go to
energybriefing.org.au/industry-associations

An accountant's perspective on behind-the-meter investments

If manufacturers set the right objectives and investment criteria, the financial outcomes of behind-the-meter investments are compelling. A $2 million investment in new LED lighting and rooftop solar, which yields annual savings of $350,000 in energy and maintenance costs, is accounted for like this:

Operating statement impact:

The $2 million capital investment is depreciated over 15 years, resulting in an annual expense of $133,000. Additionally, there is an annual reduction in other expenses (energy and maintenance) of $350,000. The net result of this is a $217,000 annual improvement to the operating statement.

Balance sheet impact:

The net impact on the balance sheet at the time of investment is zero. The $2 million capital investment increases non-financial assets by $2 million. However, it either creates a liability (if you borrow to fund the project) or reduces financial assets (if you use cash to pay for the project) by $2 million.

Net debt impact:

This impact varies over time, following the net cashflow for the project. At the time of investment, there will be an increase in net debt of $2 million. Over six years, the net debt impact will reduce to zero. Over the remaining years, the annual savings will achieve a net reduction in debt.

Net present value (NPV):

NPV is used to calculate the current total value of a future stream of payments. Over a 15-year period, assuming a discount rate of four per cent (real), the NPV is $2 million. A positive NPV indicates it is worth investing in the project.

Internal rate of return (IRR):

IRR is the annual rate of growth that an investment is expected to generate. In this situation an IRR is not applicable because LED lighting and rooftop solar upgrades would not lead to productivity gains, as an upgrade to plant equipment would.

3.2 Business support

Businesses should consult with a financial advisor to understand the tax incentives available from the Australian Government, but they should also be across other government support for energy upgrades.

Further information about government support can be found in Section 4 of the ***briefing for Australian businesses***.

3.2.1 Business Energy Advice Program (BEAP)

BEAP is a free energy advisory program for small businesses – 6-20 employees, or 0-20 employees for businesses that have been adversely affected by drought – across Australia that delivers face-to-face and phone consultations, helping them to discover industry specific energy saving opportunities. BEAP is funded by the Australian Government and delivered by Business Australia.

BEAP provides advice on energy plans and energy efficiency opportunities to help small businesses manage their energy consumption and costs. The service also gives small businesses free access to information available online including case studies, fact sheets, and information on how businesses can access government grants.

For more information go to **businessenergyadvice.com.au**

3.2.2 Government support

To see the latest offers from the Commonwealth, state, and local governments, go to **business.gov.au** and **energybriefing.org.au/business-support**

3.2.3 State-specific support

At the level of states and territories, energy efficiency schemes are available to support businesses investing in energy efficiency projects. Notably, these schemes deliver discounts on energy savings products.

For more information, read the *Energy efficiency schemes 101* found at **energybriefing.org.au/energy-efficiency-schemes-101**

Many other state government funding programs for energy projects are available. Some jurisdictions have online business portals focused on energy, which can be used to access information on funding programs and other resources. These include:

- ACT: **actsmart.act.gov.au**
- NSW: **energysaver.nsw.gov.au/business**
- QLD: **business.qld.gov.au/running-business/energy-business**
- SA: **sa.gov.au/topics/energy-and-environment/using-saving-energy/for-businesses**
- VIC: **victorianenergysaver.vic.gov.au/energy-advice-for-business**

3.3 Explore energybriefing.org.au

energybriefing.org.au hosts a carefully curated set of practical resources that will help your business develop and implement an effective energy strategy.

Financial disclosure statement

The Energy Efficiency Council (EEC) and its affiliates do not provide tax, legal or accounting advice. This material has been prepared for informational purposes only, and is not intended to provide advice, and should not be relied on for, tax, legal or accounting advice.

Whilst this guide has been reviewed by an Australian Financial Services Licence holder, businesses should consult with a financial advisor in relation to tax, legal and/or accounting queries, before engaging in any transaction or project. The content contained in this publication has been prepared without consideration of a company's individual circumstances such as financial situation, risk preferences or corporate objectives.

The energy upgrades described in this guide are examples only and do not necessarily represent the financial and tax treatment available to businesses. However, the business examples have been developed based on industry best-practice and represent common energy upgrade opportunities and payback periods.[14]

14 The assumed savings were informed by insights and research from ***Navigating a dynamic energy landscape: a briefing for manufacturers***, ***NSW Office of Environment and Heritage equipment and technology guides***, and ***Sustainability Victoria research***.

In the interests of clarity and brevity, assumptions have been applied to this guide. Assumptions include the following:

- When announcing the FY21/22 Federal Budget, the Government announced its plan to extend the temporary full expensing measure by 12 months to 30 June 2023; this has not passed into law at the time of publication;
- The *temporary full expensing* rules are currently available to businesses with an aggregated turnover of less than $5 billion and corporate tax entities – like businesses – that satisfy the alternative income test if their aggregated turnover is $5 billion or more; businesses are advised to seek advice and confirmation from a financial advisor;
- For the Simple Medicine example, the calculations have assumed that:
  - The new HVAC system is an asset eligible for the tax incentive;
  - The new HVAC system will be installed and ready for use by 30 June 2022; and
  - The eligible company tax rate is 30 per cent for the FY21/22 tax year based on the annual turnover of $75 million;
- For the Dairy to Dream example, it was assumed that:
  - The upgrade to a new refrigeration system took place in July 2020;
  - The new system is an eligible asset; and
  - The eligible company tax rate is 26 per cent for the FY20/21 tax year based on an annual turnover of less than $50 million;
- For the Creating Cities example, it was assumed that:
  - The business did not use simplified depreciation rules;
  - It was ineligible for the instant asset write-off;
  - The new air compressor was installed ready for use on 1 July 2020; and
  - Based on the asset's effective life of ten years and the diminishing value, a 20 per cent accelerated depreciation deduction could be claimed;
- This material has not addressed several variables as below; consult your financial advisor to determine the right approach for your business:
  - The option and impacts of which methodology businesses use to calculate depreciation;
  - The option and impacts of choosing to opt in or out of these tax incentive schemes, including whether businesses use or do not use simplified depreciation rules; and
  - The implications of businesses using simplified depreciation rules, including the impact that a general small business pool would have on calculating depreciation deductions; and
- All figures are exclusive of GST.

Glossary

ATO	Australian Tax Office
BEAP	Business Energy Advice Program
CSR	Corporate social responsibility
DV	Diminishing value
EEC	Energy Efficiency Council
ESG	Environmental and social goals
GJ	Gigajoule
GST	Goods and services tax
HVAC	Heating, ventilation and air conditioning
IEA	International Energy Agency
IRR	Internal rate of return
kWh	Kilowatt hour
LED	Light emitting diode
NPV	Net present value
OpEx	Operational expenditure
PV	Photovoltaic
RoI	Return on investment
R&D	Research and development
SME	Small and medium sized businesses
VRE	Variable renewable energy

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To learn more visit energybriefing.org.au

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