NSW advanced manufacturing industry development strategy



Manufacturing in NSW

Manufacturing industry statistics summary

Indicator	NSW	Breakdown
Number of businesses	26,127	NSW manufacturers make up 31% of the Australian sector, more than any other state or territory
*Industry value-added	\$33 billion	NSW manufacturers contribute almost 30% of Australia's total manufacturing output and employ nearly 30% of Australia's direct manufacturing labour force
Employment	253,000	7% of NSW's total workforce have jobs in manufacturing
Research and development	\$6.76 billion (2013)	NSW manufacturers account for 27% of national direct expenditure on R&D. They contributed 1.32% to gross state product (GSP) in 2013. R&D and design roles make up 15% of all direct manufacturing jobs in NSW
Exports	\$2.4 billion (for 2017 calendar year)	NSW contributes around 16% of Australian manufacturing exports



Source: ABS cat. no. 8155.0, ABS cat. no. 5368.0, Department of Industry internal analysis and Compustat analysis. Conducted by AlphaBeta Advisors and McKinsey & Co. 2017.

^{*}Industry gross value-added (IGVA) measures the value of goods produced in an industry. It is used to measure the contribution of individual industries to the gross product of a state or territory.

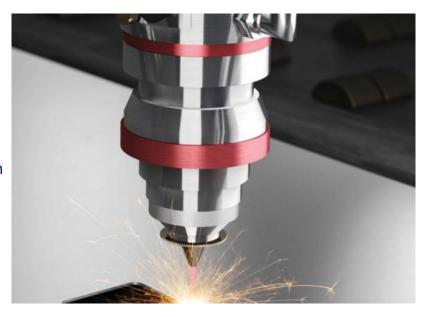
Unlocking the future

The NSW Government believes our state needs a strong manufacturing sector to unlock the opportunities the future holds.

- Manufacturing is undergoing a transformation across the industrialised world.
- Manufacturing companies in NSW increasingly focus on high-value and high-skill services in pre- and post-production processes, such as research and development (R&D) and design.

As the sector is changing, manufacturing businesses that use new technology or advanced business models are increasingly being termed 'advanced manufacturers'.

The NSW Government wants NSW manufacturing firms to be running ahead of change and is working with industry to activate this approach.



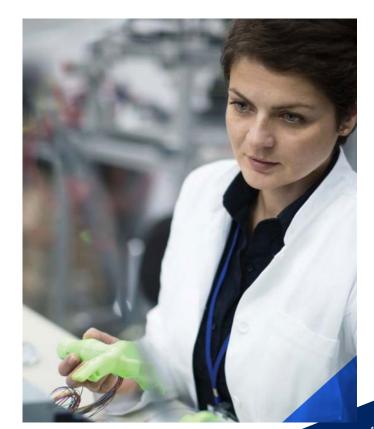


Strategy development

In developing this strategy, the NSW Government held extensive consultations with industry and key stakeholders.

Key insights gained included:

- NSW manufacturers can gain a competitive advantage by focusing on value creation.
- Advanced manufacturing is no longer about what you make, but how you make it. NSW manufacturers can take advantage of largely untapped opportunities to become more advanced, and every NSW manufacturer has the potential to be 'advanced'.
- To create value, NSW manufacturers can access the state's large, highly skilled, cost-competitive labour force.





Key strategic themes and initiatives

Key themes

Facilitate the development of advanced knowledge to foster collaboration and research within the industry and with research institutions

Drive the adoption of advanced processes to support and facilitate skills development in the NSW manufacturing industry

Support the implementation of advanced business models that lead to high-value manufacturing solutions and create products that fulfil previously unmet needs

4 Grow exports and attract investment into the NSW advanced manufacturing industry



Emerging industry sectors in NSW with advanced manufacturing capabilities

Emerging industry sectors in NSW with advanced manufacturing capabilities include:



Construction technologies



Defence industries



Aerospace



Medical technologies



Food and beverage manufacturing



Transport and mobility



Energy technology



Creative industries



Advanced Manufacturing Connect program

Purpose: The Connect program aims to strengthen engagement and collaboration across the advanced manufacturing industry, as well as facilitate connections to other sectors such as aerospace, the defence industry, medical technology, cyber security, and food and beverage manufacturing.

Benefits: By joining the Connect program, you will receive updates and newsletters, be informed about support from NSW government, and be invited to participate in programs designed to help your business grow.

To register: NSW Treasury invites NSW businesses to register to participate in in the Connect program.

Visit: https://www.industry.nsw.gov.au/invest-in-nsw/industry-opportunities/advanced-manufacturing/connect-registration





Department of Industry

Additional resources

Investment concierge

Our dedicated Investment Concierge team work with experts across all levels of government and business networks to provide customised information for businesses.

Get in touch: www.invest.nsw.gov.au/contact-us

Industry Grants programs

Find out more on **grant programs** available to help support businesses to grow. Visit: www.industry.nsw.gov.au





Contact



Our Office

MLC Centre, 19 Martin Place Sydney NSW 2001



Get in touch

Industry.nsw.gov.au/manufacturing

For assistance by phone, contact NSW Concierge:

02 8222 4888



Social Media

Linkedin.com/company/nsw-department-of-industry





Energy Saver

Discover ways to reduce your business energy use

Wed, 21 August

Presented by

David Hoffmann

NSW Dep. Planning, Industry and Environment



Energy Saver business offers



Manufacturing efficiency funding

Energy management services

Energy Savings Scheme

Funding for energy efficiency equipment upgrades and metering projects

Support for manufacturers to improve their energy management

Support for manufacturers to improve their energy management



Manufacturers had the ability to access up to

\$120,000

in matched funding to save energy and money

- Funding was available to:
 - Upgrade energy monitoring systems,
 - Replace or retrofit old, inefficient equipment with new energy efficient equipment,
 - Improve manufacturing processes.

Who could apply

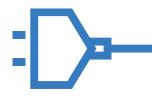
- Australian Business Number (ABN) and be registered for GST
- Eligible if you manufacture product and your project relates to that process
- Site must be located in NSW
- Businesses can apply for multiple sites



Food and beverage manufacturer in Moorebank

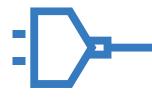
- Replaced a burner on a boiler with a high efficiency burner with help from NSW Government funding
- Saving around \$16,000 a year in gas bills.

What we funded in the previous round



- ✓ Projects that saved electricity or gas
- ✓ Some renewables like solar thermal, biogas and biomass were eligible
- ✓ Hardware, software, installation and commissioning, project management, analysis
- ✓ Measurement and verification
- ✓ Invoiced costs from suppliers and service providers

What we didn't fund



- Costs incurred prior to application, internal project management costs, feasibility studies or subscriptions to services
- × Losses from production interruptions
- Lighting projects, steam traps, solar PV, power factor correction or battery storage
- You can't double dip with other schemes such as the Energy Savings Scheme
- Nor should the project be clearly suited to another funding source

Value for money



Offer 1 – metering, we'll pay up to:

\$600 per MWh of electricity saved per year

\$60 per GJ of gas saved per year

*Based on the amount of energy use that you are metering

Offers 2a & 2b – equipment upgrades, we'll pay up to:

\$350 per MWh of electricity saved per year

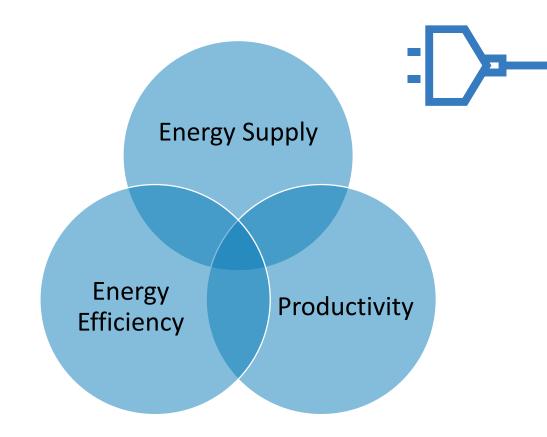
\$35 per GJ of gas saved per year



What is energy management?

Energy management is a discipline which includes the nexus between:

- 1. Energy supply
- 2. Energy efficiency
- 3. Productivity





"By implementing energy management programs, organisations can save up to 20% on their energy bill and achieve further savings up to 5%–10% with minimal investment, effectively cutting operational costs"

(Carbon Trust, 2011)

Energy Management Services

- Online and face-to-face training courses.
- Energy coaching understand energy management through subsidised oneon-one expert support.
- Benchmarking for energy intensive manufacturing

Access to post training support

Development of your energy efficiency business case*

\$150-\$300 / business case report / 8-15 hours of advisor support

Based on the ability to save at least 12mWh of energy/year.



^{*}available to training course participants

Free training for small business -

https://energysaver.nsw.gov.au/

Free monthly webinars covering a variety of energy topics.

Businesses with <50 employees can access **two hours of direct support** for a minimal fee.

We also offer a free **1** hour energy management basics training for all small businesses.

Multiple **free online modules** offering guidance on a range of energy topics.

Energy coaching for small business

Energy coaching for small business

- 1-1 coaching for businesses to identify ways to save energy and money.
- Increase energy reduction measures and direct businesses to additional support from OEH.

Benchmark and support for energy intensive manufacturers

The EMS program delivers **free energy management**

system (EnMS) benchmarking

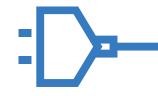
We identify priorities to be targeted by tailored support projects.

Delivered by industry experts the support projects assist participating businesses to improve their strategic approach to energy management and increase their energy productivity.



\$30,000 funding per business

NSW Energy Savings Scheme (ESS)



NSW's largest energy efficiency program

The scheme creates between \$50M and \$100M in incentives for energy efficiency projects every year

Individual incentives are based on the amount of energy saved

Industrial projects often require energy savings to be verified

Eligible upgrades include, but are not

limited, to:

- **OLighting**
- Refrigeration
- OHot water and steam systems
- OMotors, fans and pumps
- oProcess change and control system upgrades
- ONABERS rating improvements
- Compressed air systems
- oPower systems
- **o**Furnaces
- oBundled upgrades

ESS - what's next?

Contact an approved supplier before the start of your project

To find one, go to:

https://energysaver.nsw.gov.au/business/discoun ts-and-incentives



Refrigeration



systems



Motors, pumps and fans



Lighting



HVAC systems



Process change and control system upgrade



NABERS rating mprovements



Compressed air systems



Furnaces



Power systems





Savings Scheme



Next steps



For information about energy management, training, coaching or any other current programs available to businesses through NSW Government, go to http://energysaver.nsw.gov.au

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