

**MANUFACTURING IN THE  
PRINTING AND GRAPHIC  
ARTS INDUSTRIES**



# Understanding the Printing and Graphic Arts Industry in Queensland

The Printing and Graphic Manufacturing industry in Queensland represents a vital component of Australia's manufacturing sector, combining creative design with advanced production technologies to serve both commercial and consumer markets. This sector integrates traditional printing methods with digital technologies to deliver a diverse range of products and services.

## COMMERCIAL AND PACKAGING PRINTING IN QUEENSLAND

Queensland's commercial printing sector combines digital technology with traditional printing processes. In the business sector, manufacturers produce a comprehensive range of products including marketing materials, business stationery, and promotional items. Many manufacturers specialise in packaging printing, with particular emphasis on food and beverage packaging. Large format printing has grown significantly, reflecting Queensland's robust advertising and events industries.

The packaging printing sector serves diverse market segments including retail, food and beverage, and industrial packaging. Queensland manufacturers have developed expertise in producing packaging that meets the specific requirements of Australia's tropical and subtropical environments. This includes considerations for moisture resistance and durability in coastal areas.

## SPECIALTY AND CUSTOM MANUFACTURING IN QUEENSLAND

The specialty printing sector encompasses a broad range of specialised production activities. Promotional products form a substantial segment, with manufacturers producing customised apparel, promotional merchandise, and specialty items suited to Queensland's business and tourism sectors. Many of these manufacturers have developed niche markets by focusing on products adapted to local conditions and requirements.

Specialised product manufacturing includes textile printing, embroidery, and custom graphic production. These subsectors often combine traditional manufacturing techniques with advanced technology, particularly in areas such as direct-to-garment printing and sublimation printing. Queensland's specialty printing industry has evolved to incorporate digital technology while maintaining capabilities in traditional printing methods.

### Manufacturing Support Industries

The industry is supported by a network of specialised facilities including pre-press operations, binding and

finishing workshops, and digital production units. These support industries are crucial to the sector's success, providing essential services and materials. Paper suppliers and equipment manufacturers form an integral part of the supply chain, often developing custom solutions for specific manufacturing requirements.

### Advanced Manufacturing Technologies

Contemporary printing and graphic manufacturing in Queensland relies heavily on advanced technologies. Digital printing systems and Computer-Aided Design software are now standard in most facilities. These technologies enable precise production methods while maintaining cost-effectiveness. Quality control systems and colour management procedures have been developed to meet international standards while addressing local market needs.

### Skills and Workforce

The industry depends on a highly skilled workforce including graphic designers, printer operators, production technicians, and digital imaging specialists. Production supervisors and quality control specialists play crucial roles in maintaining quality and efficiency. The sector actively collaborates with training institutions to develop these essential skills.

### Manufacturing Locations

Manufacturing facilities are strategically positioned throughout Queensland, with significant concentrations in Brisbane's industrial precincts and the Gold Coast's manufacturing zones. The Sunshine Coast and Ipswich regions have developed specialised printing capabilities, often focused on particular market segments or production techniques.

### Sustainable Practices

Sustainability has become increasingly important in the sector. Manufacturers are implementing sustainable paper sourcing practices, energy-efficient processes, and waste reduction programs. Water-based inks and eco-friendly materials are becoming standard, reflecting both environmental concerns and workplace safety requirements.

The industry provides significant employment opportunities and contributes to Queensland's domestic production while supporting related sectors such as advertising, retail, and commercial services industries.



Clean high-volume printing facilities with equipment and machinery for the graphic printing industry.



Printing technician proof-checking print quality before production run.



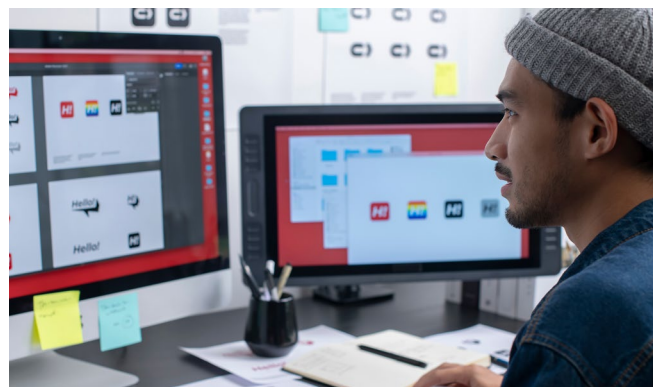
Large offset printing press running a continuous roll of paper in production.



Printed books transported through facility on conveyor system.



Printed materials awaiting distribution in manufacturers store facility.



Graphic designer working on graphic elements for print and digital processing.

Images in this document have been supplied by Manufacturing Skills Queensland and industry partners. Additional images have been sourced through Adobe Stock or generated using Adobe and Google AI software. Design layout by Liveworm, Queensland College of Art and Design, Griffith University.

## Career Stories

# Operations Manager

I work as an Operations Manager in a printing and graphic arts company based in Newstead. Our core business interprets design documents and generates visual content, print layouts and production data for publication. We serve multiple sectors including furniture and other products, polymers, plastic and rubber, timber and wood, and transport and machinery.

Students may interact with our work indirectly - they might study using materials we printed or use public signage we designed. Looking ahead, AI will likely make its way into design in some form. While I'm not sure how this will impact our work yet, technology has generally been designed to help us. It's not really anything to be concerned about, but you need to know it exists.

I manage personalities, not people. Everyone is different and I need to understand the person to know their place in the business, so we get the most out of them and they enjoy what they do. In our small business, I know all staff well. I make a point to see how everyone is doing, and we have weekly production meetings to check job progress and staff wellbeing. It's important that everyone has enough work but not too much.

I've learnt on the job over 30 years in industry. Being an early adopter of technology helped pave my career direction and gave me opportunities. My prior knowledge came from my dad, who was a graphic designer, and I worked with computers as a young person, so I had a decent understanding of digital arts. I have a passion for anything creative.

The most valuable knowledge I brought to my role was understanding the design workflow from information receipt to delivery. If you don't understand the job end-to-end, it's difficult to manage others and projects while expecting positive outcomes. The industry evolves every year. While day-to-day operations remain stable, technical aspects of delivery and client needs change. For example, digital workflow integration is now possible, and our systems can enable automated production, saving print hours many work hours.

For students considering this career, my advice is: "Embrace change and keep up with technological advances. This is the area which grows every year and if you don't understand it you will fall behind. We get a lot of repeat business because we understand what the industry needs and continue to do so as industry evolves."

***"Being an early adopter of technology helped pave my career direction and gave me opportunities."***



## Industry Map



### FINDING INDUSTRY NEAR YOU

Want to see what Industry is around you? Here's how to do it on Google Maps!

Start by going to:

[maps.google.com](https://maps.google.com)

**Quick tip:** Sign in if you want to save places for later!

Begin finding Pathways to Industry by typing what you're looking for using the knowledge you have, and include where you want to find it, for example:

**"commercial signage facility QLD"**

For this specific industry here are some terms to try:

- Commercial printer
- Screen printing
- Industrial Print Production
- Flexographic printer
- Commercial Signage
- Commercial Graphic Arts

Add "industrial" or "commercial" to filter out small print shops

Include "production" or "facility" for larger operations

Use "manufacturing" for equipment producers

### Some general search tips:

- Always include both "QLD" and "Queensland" in separate searches
- Add your postcode or "near me" to find stuff nearby
- Moving around the map? Click "search this area" to find new places
- Want to see how big a place is? Switch to Satellite View!
- Use Street View to get a closer look
- Found something interesting? Save it to your lists

Don't forget to check regular Google Search too! Sometimes you'll find different results there.

### EXTENDING YOUR INDUSTRY KNOWLEDGE ONLINE

Here are some useful web search queries to find out more about this industry:

- digital printing innovations
- additive printing technology
- variable data printing
- UV printing advances
- nano graphic printing
- intelligent print systems
- substrate developments
- colour management technology
- conductive ink applications
- smart label technology

### EXPLORING INDUSTRY PATHWAYS ONLINE

Search for manufacturing jobs in Queensland using platforms like Seek, Indeed, and LinkedIn. Filter results by location and experience level to find opportunities ranging from production line work to engineering roles. Use specific keywords like "advanced manufacturing careers" to discover industry trends and requirements.

[seek.com.au](https://seek.com.au)

[au.indeed.com](https://au.indeed.com)

[linkedin.com](https://linkedin.com)

## Industry Pathways

In Queensland, an industry training pathway blends secondary school education with hands-on vocational training, allowing students to gain practical skills and qualifications while completing their high school certificate.

These pathways often involve partnerships between schools, TAFEs (Technical and Further Education), and industry, providing students with apprenticeships, traineeships, or work experience in their chosen field.

This combination of classroom learning, and real-world experience gives students a head start in their careers and helps them transition smoothly into the workforce or further tertiary education.

### What does an industry training pathway look like?

The four education and training levels serve as a general guide and represent the most common educational and/or entry-level requirements for these roles.



#### LEVEL 1

Typically requires skills equivalent to the completion of Year 10, a Senior Secondary Certificate of Education, or a Certificate I or II. Australian Apprenticeships may be available at this level.



#### LEVEL 2

Typically requires skills equivalent to a Certificate III or IV, or at least three years of relevant experience. Australian Apprenticeships may also be available at this level.



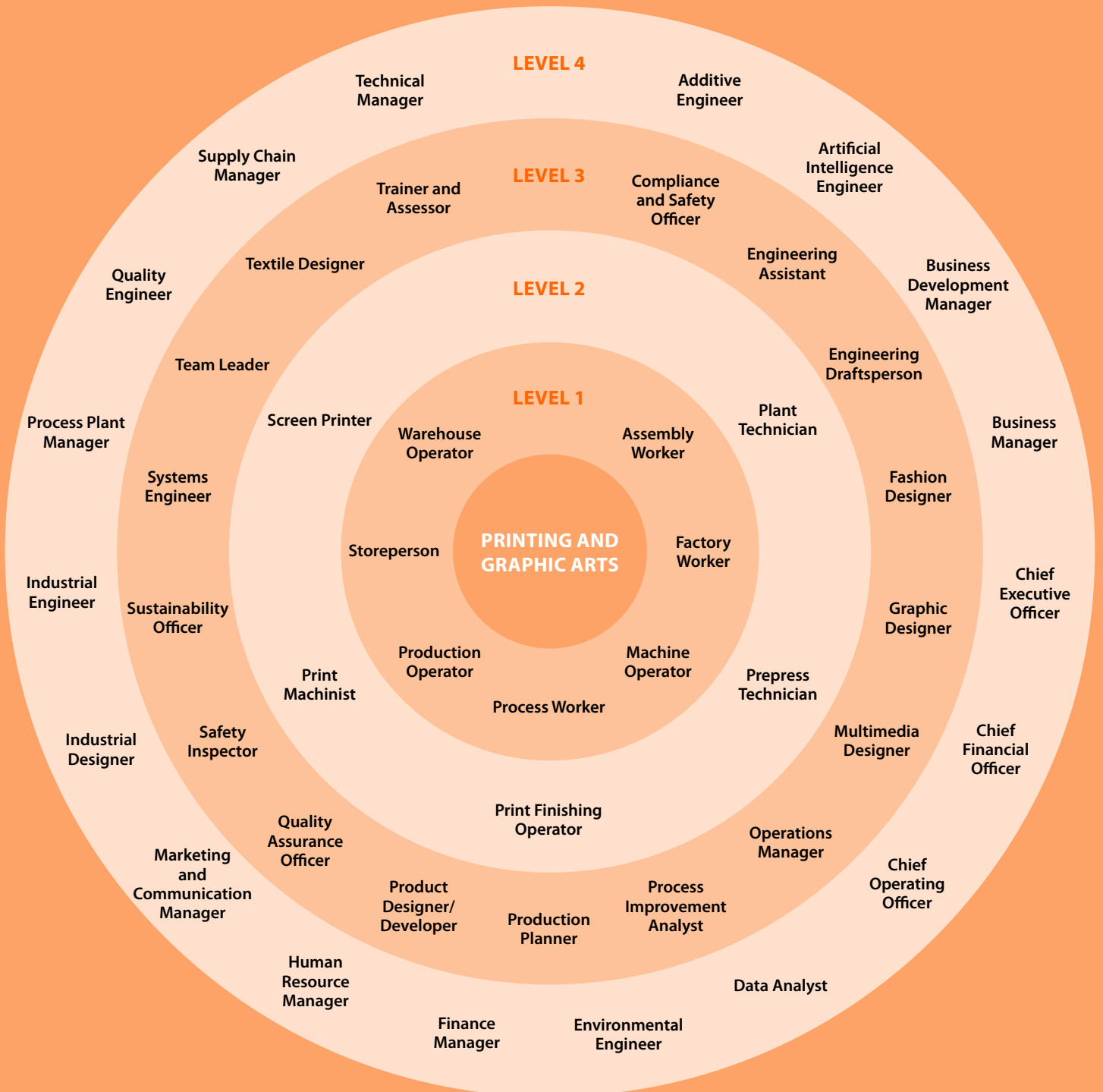
#### LEVEL 3

Typically demands a level of expertise equivalent to a Diploma or Advanced Diploma, often gained through TAFEs or Registered Training Organisations. Some universities also offer programs at this level.



#### LEVEL 4

Typically requires qualifications equivalent to a Bachelor's Degree or higher. This level of education is usually pursued at a university.



**CORE INDUSTRIES**

- Aerospace and Defence
- Chemicals, Hydrocarbons and Refining
- Food and Beverage
- Furniture and Other Products
- Meat and Seafood Processing

- General Manufacturing and Engineering
- Pharmaceutical and Medical Technology
- Polymers, Plastic and Rubber
- Printing and Graphic Arts

- Pulp, Paper and Packaging
- Renewables
- Textiles, Clothing and Footwear
- Timber and Wood
- Transport Equipment and Machinery

**SUPPORTING INDUSTRIES**

- Laboratory Operations
- Process Plant Operations
- Sustainable Operations

For further information, visit:

[manufacturingmatters.com.au/careers](http://manufacturingmatters.com.au/careers)

## Industry Pathways - Leading Teams



Leading a team is about more than just managing tasks; it's about inspiring, motivating, and guiding a group of individuals towards a shared goal. A good team leader fosters a collaborative and supportive environment where everyone feels valued and empowered to contribute their best.

### ROLE OF A TEAM LEADER

- **Setting a Vision:** Clearly define goals and objectives, and communicate them effectively to the team.
- **Providing Direction:** Guide the team's efforts, ensuring everyone understands their roles and responsibilities.
- **Motivating and Inspiring:** Encourage and support team members, recognising their achievements and fostering a positive work environment.
- **Facilitating Collaboration:** Promote teamwork, open communication, and constructive conflict resolution.
- **Delegating Effectively:** Assign tasks based on individual strengths and skills, empowering team members to take ownership.
- **Monitoring Progress:** Track the team's performance, providing feedback and making adjustments as needed.
- **Developing Individuals:** Support the growth and development of team members through mentoring, coaching, and training opportunities.

### QUALITIES AND ATTRIBUTES OF A GOOD TEAM LEADER

- **Strong Communication Skills:** Clearly and effectively convey information, actively listen to team members, and provide constructive feedback.
- **Integrity and Trustworthiness:** Act with honesty and ethical principles, building trust and respect among team members.

- **Emotional Intelligence:** Understand and manage their own emotions and those of others, fostering empathy and positive relationships.
- **Decisiveness:** Make informed and timely decisions, even in challenging situations.
- **Accountability:** Take responsibility for the team's performance, both successes and failures.
- **Problem-Solving Skills:** Identify and analyse challenges, develop creative solutions, and guide the team through obstacles.
- **Adaptability:** Adjust to changing circumstances, embrace new ideas, and remain flexible in their approach.

### JOB TITLE

Industry roles where qualities of leadership, effective communication and specialist knowledge are valued.

- Chief Executive Officer
- Chief Operating Officer
- Chief Financial Officer
- Process Plant Manager
- Technical Manager
- Supply Chain Manager
- Human Resource Manager
- Finance Manager
- Marketing and Communication Manager
- Business Manager
- Business Development Manager
- Operations Manager
- Team Leader
- Production Planner
- Safety Inspector

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[manufacturingmatters.com.au/careers/](https://manufacturingmatters.com.au/careers/)

## Industry Pathways - On the Tools



Jobs involving hands-on work with technology are increasingly common, blending technical expertise with manual dexterity and problem-solving skills. These roles often involve building, repairing, installing, or maintaining technological equipment and systems.

### QUALITIES NEEDED FOR THESE ROLES:

- **Manual Dexterity:** Skilled and precise use of hands and tools to manipulate small components and perform intricate tasks.
- **Technical Knowledge:** Understanding of the technology they work with, including its principles, operation, and maintenance.
- **Problem-Solving Skills:** Ability to diagnose issues, identify solutions, and apply critical thinking to resolve technical challenges.
- **Attention to Detail:** Accuracy and precision in their work, ensuring that equipment is assembled and functioning correctly.
- **Patience and Persistence:** Ability to work through complex tasks methodically and remain focused, even when facing setbacks.
- **Communication Skills:** Clearly explain technical issues to colleagues or clients and work effectively in a team.
- **Physical Stamina:** May involve lifting, bending, and standing for extended periods.
- **Up-to-date Knowledge:** A willingness to learn and stay current with rapidly evolving technologies.
- **Adaptability:** Adjust to changing circumstances, embrace new ideas, and remain flexible in their approach.

### JOB TITLE

Industry roles that can be considered 'on the tools' which requires different levels of training and specialist knowledge.

- Industrial Engineer
- Industrial Designer
- Quality Engineer
- Artificial Intelligence Engineer
- Additive Engineer
- Data Analyst
- Environmental Engineer
- Textile Designer
- Sustainability Officer
- Process Improvement Analyst
- Quality Assurance Officer
- Fashion Designer
- Product Designer/Developer
- Engineering Draftsperson
- Engineering Assistant
- Systems Engineer
- Compliance and Safety Officer
- Graphic Designer
- Trainer and Assessor
- Multimedia Designer
- Print Machinist
- Screen Printer
- Print Finishing Operator
- Prepress Technician
- Plant Technician
- Process Worker
- Factory Worker
- Storeperson
- Warehouse Operator
- Machine Operator
- Assembly Worker
- Production Operator

For further information, visit:

[manufacturingmatters.com.au/careers/](https://manufacturingmatters.com.au/careers/)

# Future Industry



## FUTURE TRENDS AND INNOVATION

The future of Queensland's Printing and Graphic Arts manufacturing industry aligns with Australia's national economic priorities, particularly in digital transformation, sustainable manufacturing, and advanced manufacturing technologies. These changes support the Future Made in Australia plan's goals of strengthening sovereign manufacturing capabilities and developing advanced skills.

### KEY TRENDS INCLUDE:

**Digital Manufacturing:** Integration of artificial intelligence and automation in print production, enabling variable data printing and mass customisation. This includes advanced workflow systems that optimise production scheduling and improve equipment utilisation.

**Sustainable Print Technologies:** Development of new eco-friendly inks, substrates, and printing processes, aligned with the growing demand for sustainable packaging and marketing materials. This includes water-based inks, biodegradable substrates, and energy-efficient printing systems.

**Advanced Processing Technologies:** Implementation of Industrial Internet of Things (IIoT) sensors and automated quality control systems in print production, supported by industry-specific digital skills training programs.

**Smart Packaging Solutions:** Adoption of integrated technologies including augmented reality printing, near-field communication (NFC), and radio-frequency identification (RFID) in packaging production.

## FUTURE ROLES IN THE INDUSTRY

### Leadership Roles:

- Digital Print Production Manager: Oversees automated printing systems

- Smart Factory Director: Leads digital transformation initiatives
- Sustainability Coordinator: Manages eco-friendly production processes
- Digital Skills Development Leader: Implements workforce training programs

### Technical Roles:

- Print Technology Specialist: Maintains advanced digital printing equipment
- Workflow Systems Technician: Programs automated production systems
- Sustainable Materials Specialist: Develops eco-friendly printing solutions
- IoT Systems Engineer: Services connected printing equipment
- Digital Integration Trainer: Supports workforce upskilling

## FUTURE SKILLS FOCUS

Emerging skills requirements across all levels include:

- Digital workflow management and data analysis
- Automated print systems operation
- Sustainable production practices
- Advanced colour management
- Cross-platform communication
- Smart packaging technology integration
- Digital asset management
- Augmented reality implementation

These emerging roles emphasise the integration of digital technologies and sustainable manufacturing processes. The industry offers new career pathways through technical training programs and micro-credentials, with particular focus on developing digital skills in traditional printing roles.

## Other Resources

For further information, visit:

### MANUFACTURING MATTERS

[manufacturingmatters.com.au](http://manufacturingmatters.com.au)

### MANUFACTURING SKILLS QUEENSLAND

[msq.org.au](http://msq.org.au)

### QUEENSLAND STATE GOVERNMENT

Department of State Development, Infrastructure and Planning

[statedevelopment.qld.gov.au/industry/critical-industry-support/industry-roadmaps](http://statedevelopment.qld.gov.au/industry/critical-industry-support/industry-roadmaps)

Department of Natural Resources and Mines, Manufacturing, and Regional and Rural Development

[nrmrdd.qld.gov.au/manufacturing](http://nrmrdd.qld.gov.au/manufacturing)

### BUSINESS QUEENSLAND

[business.qld.gov.au/industries](http://business.qld.gov.au/industries)

### REGIONAL DEVELOPMENT AUSTRALIA

[rdabrisbane.org.au](http://rdabrisbane.org.au)

### INDUSTRY ASSOCIATIONS

Australian Graphic Design Association (AGDA)

[agda.com.au](http://agda.com.au)

Design Institute of Australia

[design.org.au](http://design.org.au)

Visual Media Association

[visualmediaassociation.org.au](http://visualmediaassociation.org.au)

## Other Core Industries to Discover

Check out these other core manufacturing industries to understand the similarities and differences between them!

<b>M1</b>	<b>M2</b>	<b>M3</b>	M1 Aerospace and Defence
<b>M4</b>	<b>M5</b>	<b>M6</b>	M2 Chemicals, Hydrocarbons and Refining
<b>M7</b>	<b>M8</b>	<b>M9</b>	M3 Food and Beverage
<b>M10</b>	<b>M11</b>	<b>M12</b>	M4 Furniture and Other Products
<b>M13</b>	<b>M14</b>		M5 Meat and Seafood Processing
			M6 General Manufacturing and Engineering
			M7 Pharmaceutical and Medical Technology
			M8 Polymers, Plastic and Rubber
			<b>M9 Printing and Graphic Arts</b>
			M10 Pulp, Paper and Packaging
			M11 Renewables
			M12 Textiles, Clothing and Footwear
			M13 Timber and Wood
			M14 Transport Equipment and Machinery