



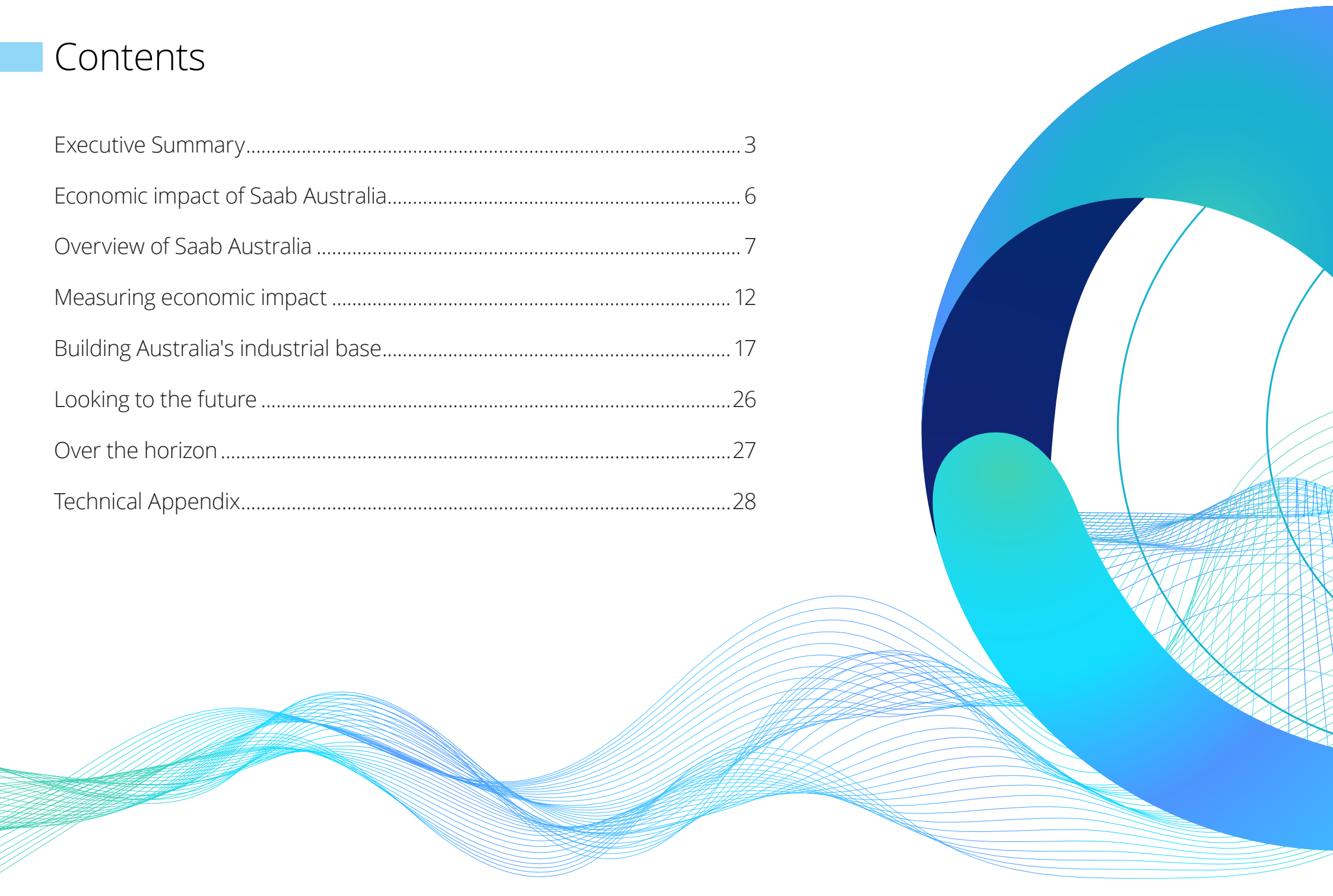
**Deloitte.**

# Economic impact of Saab Australia

November 2024

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# Executive Summary

With over three decades of Australian operations, Saab Australia has established itself as a leader in the development and integration of complex systems. Deloitte Access Economics has found that over the last two decades, the presence of Saab Australia has lifted GDP by \$1.6 billion and lifted net employment in the national economy by over 1,000 FTE jobs.

Australia and the world face the most complex geopolitical circumstances since the end of the Second World War, driving a reassessment of Australia's strategic posture.

The 2024 National Defence Strategy (NDS) and Integrated Investment Program (IIP) emphasise the importance of delivering capabilities for today's security needs, including the integration of defence domains to address security risks. Private sector partners will play a key role: to enable the collaborative design of advanced defence systems to keep Australia at the technology frontier.

Saab Australia is uniquely positioned to meet the evolving needs of national defence. With a clear focus on expanding national sovereign knowledge and enhancing the industrial base, Saab is committed to growing a highly skilled workforce. Leveraging their mature yet agile presence in Australia, their services, products, and relationships are designed to enable rapid deployment of world-class naval combat management systems and seamlessly integrate and ensure interoperability across a diverse array of large, complex systems, attributable to their modular and open-architecture technology.

This strategic approach ensures that Saab Australia delivers on the transforming requirements of Australian warfighting capabilities, solidifying their role as a pivotal partner in national defence.

## Saab Australia overview

**Saab is a global defence and security** business with its origins in the aircraft manufacturing industry of 1930s Sweden. **Since 1988, Saab has operated in Australia, primarily as a defence and maritime company**, kickstarted by its role in supplying the base design for the Collins-class submarine and the Combat Management System for the Anzac-class frigates.

These projects marked the beginning of Saab Australia's expansion across a range of products including combat management systems, submarine sustainment, deployable health, civil security systems and air traffic management.

As at the end of 2023, Saab Australia has grown to a **workforce of more than 900 people – doubling over the past five years** – and is a leading, trusted partner to the Australian Defence Force.

## The economic impact of Saab Australia

The economic impact of this growth, over the last two decades has lifted Australia's GDP by \$1.6 billion and added 1,000 net additional FTE jobs across the economy. Almost three quarters of this impact has been in South Australia and has also spread to other states as the company has evolved.

Over and above capital and operating expenditure activity, Saab's modelled economic impact over the last 20 years reflects the benefits that arise from **fostering sovereign capability in a critical niche** – systems integration. Investing in highly technical capability is associated with a **higher-than-average labour productivity, alongside continued investment in R&D (equivalent to \$50 million over the modelled period)** that has underscored **total factor productivity improvements** over time.

The largest GDP impacts stem from Saab's core manufacturing activity (including software development), representing almost \$1.2 billion of the total economic impact to Australia over the modelled period.

# Executive Summary

Adding to Saab's direct activity, a highly skilled workforce and deliberate approach to innovation has lifted the quality of Saab's products.

## Building Australia's knowledge and industrial base

As a sovereign systems integration business, Saab Australia plays a significant role in ensuring the effectiveness, efficiency and responsiveness of a range of defence systems. As technological sophistication increasingly determines the outcome of contingencies, having established on-shore capabilities in systems integration offers a confident advantage for Australia's national defence.

Across its operations, Saab Australia has invested in partnering with local SMEs to maximise sovereign capability development. The Multi-Function Console is a leading example of this, being **100% Australian manufactured** (60% industry partner content and 40% Saab Australia design and personnel expertise). The combined effort has resulted in significant commercial success around the world, being exported 100 times to countries in Europe and North America.

Strong systems integration capability on shore also **enables value add to customers' systems by enhancing their ability to expedite their capabilities**. Saab Australia actively supports the development of Australia's industrial base to unlock capabilities across its supply chain, with a **supplier network spanning more than 1,300 businesses**. Saab Australia has also **joined forces** with other major industry partners to deliver complex systems for Defence.

Saab Australia's **Triple Helix approach to innovation** through collaboration and partnership has positioned the organisation as a well networked proponent of Australia's defence ecosystem. **Saab Australia has spent \$50 million on core R&D**, with broader innovation activities spanning research partnerships and product development.

Investments such as the Sovereign Combat System Collaboration Centre (SCSCC) demonstrate the proactive role Saab takes in the development of advanced defence technologies and capabilities to support Defence. Through the SCSCC ecosystem, Saab Australia will accelerate its existing program of R&D and product innovation, strengthening Australia's defence industry capabilities.

## Investing in a highly skilled workforce

Beyond the sectoral impacts, Saab Australia's impact on the economy also lies in its **significant investment in a highly skilled workforce, with more than 60% of staff in highly technical roles** (such as software engineers, systems engineers, DevOps, integrated logistics support specialists, and hardware technicians).

The nature of Saab's high-tech products and systems integration activity requires active problem solving, which Saab achieves through continuous investment and focus on its workforce, pushing forward both underlying technological capabilities and their applications. For example, such capability is a necessity to support the development of the highly complex sovereign combat management system (CMS) for the Royal Australian Navy's (RAN) Surface Fleet.

Saab Australia's investment in its workforce and industry partnerships has ensured that there is a depth of sovereign capability and experience in systems integration. Such high capability is reflected in Saab's wages, which exceed the industry average for manufacturing and software engineering in South Australia.

Saab Australia recognises the diverse perspectives different groups bring to their workforce, emphasising equity and inclusion. In acknowledgement of the valuable insights and experience veterans contribute, Saab Australia employs around 100 veterans and won the Large Employer category of the Prime Minister's National Veterans' Employment Awards 2023. The company also prioritises developing the next generation of defence professionals, with a graduate program that employs 53 students from **various engineering backgrounds**.

At a time when Australia is facing significant gaps in experience of highly skilled people in cybersecurity, data science and software engineering, Saab's continued investment in its workforce will play an important role in ensuring there are opportunities for Australian workers to build their capabilities here at home.

# Executive Summary

Saab Australia has spent over three decades developing sovereign systems integration and technology capabilities that can enable a once-in-a-generation transformation of Australia's defence force.

## Looking ahead

Over the past decade, changes in Australia's strategic landscape have prompted major revisions to defence policy. The 2023 Defence Strategic Review (DSR), which instigated a broad reassessment of Australia's defence posture, has been followed by a wave of strategic and investment planning. Captured in the 2024 National Defence Strategy (NDS), and supported by the 2024 Integrated Investment Program (IIP) and 2024 Defence Industry Development Strategy (DIDS), key shifts in Australia's defence posture include:

- **Greater integration of domains and systems:** Defence will transform into an integrated, focused force, requiring sophisticated systems integration capabilities.
- **Formalisation of AUKUS Pillars I and II:** Australia will acquire and sustain nuclear-powered, conventionally-armed submarines and a range of other critical technologies aligned to Saab's long-standing focus areas.
- **Minimum viable capability to be delivered as quickly as possible:** Speed will be a priority for new defence capabilities, underscoring the importance of workforce maturity.

**Saab Australia has spent over three decades developing sovereign systems integration and technology capabilities through a workforce and supplier network that is ready for the next wave of challenges.**

## This study

Deloitte Access Economics was engaged by Saab Australia to estimate the economic impact of Saab's activities in Australia over the last 20 years.

This report has sought to capture the wider economic activities of the organisation using Deloitte Access Economics in-house computable general equilibrium model (DAE.RGEM).

The analysis has been informed by Saab's historical financial data capturing capital and operating expenditure, and employment.



# Economic impact of Saab Australia

# \$1.6B

Since 2004, Saab Australia has lifted GDP by \$1.6 billion relative to a world without Saab Australia.

As a systems integration and manufacturing business, Saab Australia creates value for its customers through time and cost savings, better decision-making, and access to new capabilities.

To deliver its products and services, Saab employs a large technical workforce, and engages with a diverse network of Australian suppliers.

The impact of Saab's direct activity, economic spillovers and long-term benefits is higher GDP, more jobs, and a greater share of complex, high value-adding work performed in Australia.

**1,000**  
Additional FTE jobs  
*Both headcount and net employment impact doubling over past 5 years*

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**\$50M**  
R&D Expenditure  
Since 2004

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**118**  
Veterans in Saab's workforce

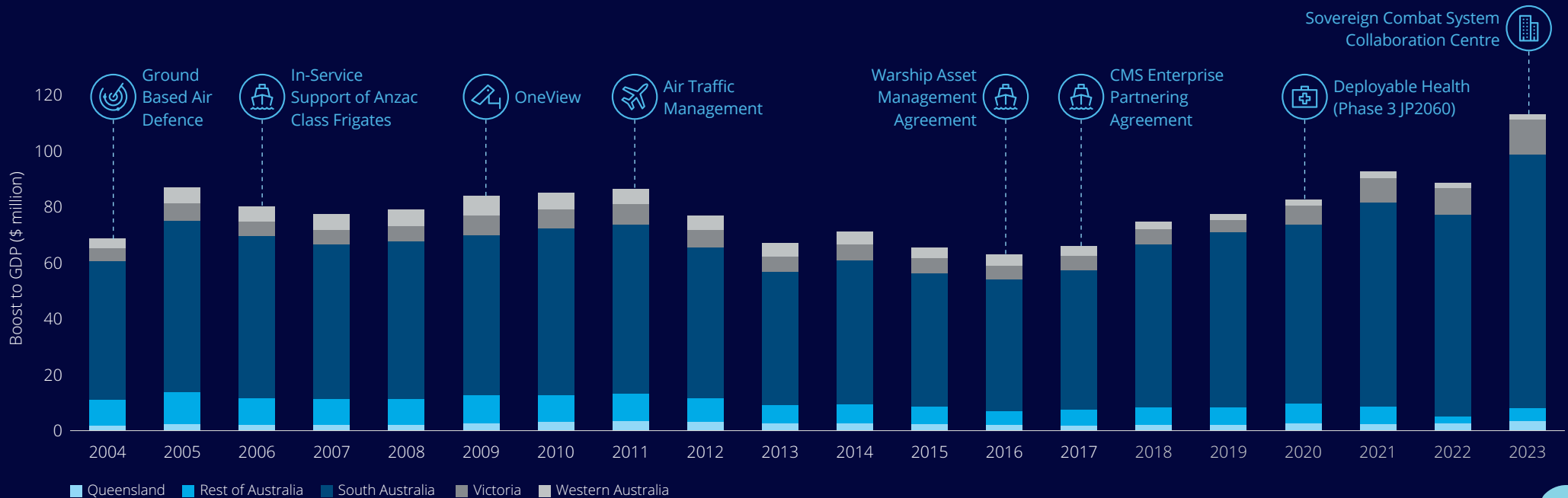
**+1,300**  
Suppliers  
2020 - 2024

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**60%**  
Share of workforce in technical roles

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**53**  
Graduates in Saab's workforce





# Overview of Saab Australia

# Saab Australia's growth story

Since its establishment in Australia in 1988, Saab Australia has strategically invested in its development as a leading systems integration and combat management systems specialist, partnering with government, and a broad range of industry and research institutions to support development of sovereign capability and on-shore product creation.

Saab Australia is a subsidiary of the Swedish defence and security company Saab AB. Established in 1988, the company's Australian operation was kickstarted by supplying the base design for the **Collins-class submarine and the Combat Management System (CMS)** for the Anzac-class frigates.

At the time, the contract was the **largest single combat systems task undertaken by the Australian government and became the basis of Saab Australia's most significant offering**. Today, AusCMS is the product of an evolution in Saab's technological capabilities, delivering modular combat management solutions that are integral to the Royal Australian Navy's (RAN) operations.

After 15 years in Australia, throughout the 2000s, Saab began to innovate across a range of different areas, broadening capability in both defence and civil markets. The organisation began expanding into products including ground-based air defence, submarine sustainment, deployable health, civil security systems and air traffic management.

Key contracts and activities during this period include the in-service contract to support the Collins-class submarine program (to supply the Integrated Ship Control Management and Monitoring System (ISCMMS)), the development of the Tactical Command and Control System (TaCCS) and the establishment of Saab Security.

The most recent decade has seen Saab Australia cement itself as a **leading defence systems integrator** in the Australian market, with key activities such as the Situational Awareness System Contract for the RAN, collaborations with Microsoft to develop mixed battlefield visualisation tools, the Combat System Integration partnership and new contracts to equip and sustain the RAN. In the latest iteration of Saab's **long-standing combat systems** offering, the organisation is now delivering the Australian Interface for the combat systems fitted in the Hobart-class destroyers and new Hunter-class frigates. Saab's interface is being supplied under a Combat System Integration (CSI) Collaboration Agreement (CCA), through an Integrated Project Team (IPT) comprising industry partners BAE Systems and Lockheed Martin Australia.

In sustainment, under the Warship Asset Management Agreement (WAMA) Alliance, Saab Australia **joined industry partners** BAE Systems and Babcock to deliver essential maintenance and upgrades to Australia's fleet.

Saab Australia has also further expanded its civil offering, winning contracts to supply OneView to correctional facilities, and broadening into other domains such as space and deployable health.



## Extensive supplier network

Saab Australia has developed its sovereign industrial capability through a mature network of 1,300 suppliers, three-quarters of which are SMEs.



## Depth of workforce capability

Of the over 900 personnel at Saab Australia, two-thirds of roles are technical specialists, reflecting the depth of experience and a mature sovereign systems integration workforce.



## Collaborative approach to delivery

Bringing together complex systems and suppliers to meet user needs is an essential feature of Saab Australia's work. Saab's approach to delivery is inherently collaborative, drawing in partners across industry, government and academia to support Defence to achieve its capability ambitions at pace.



## Innovation in systems integration

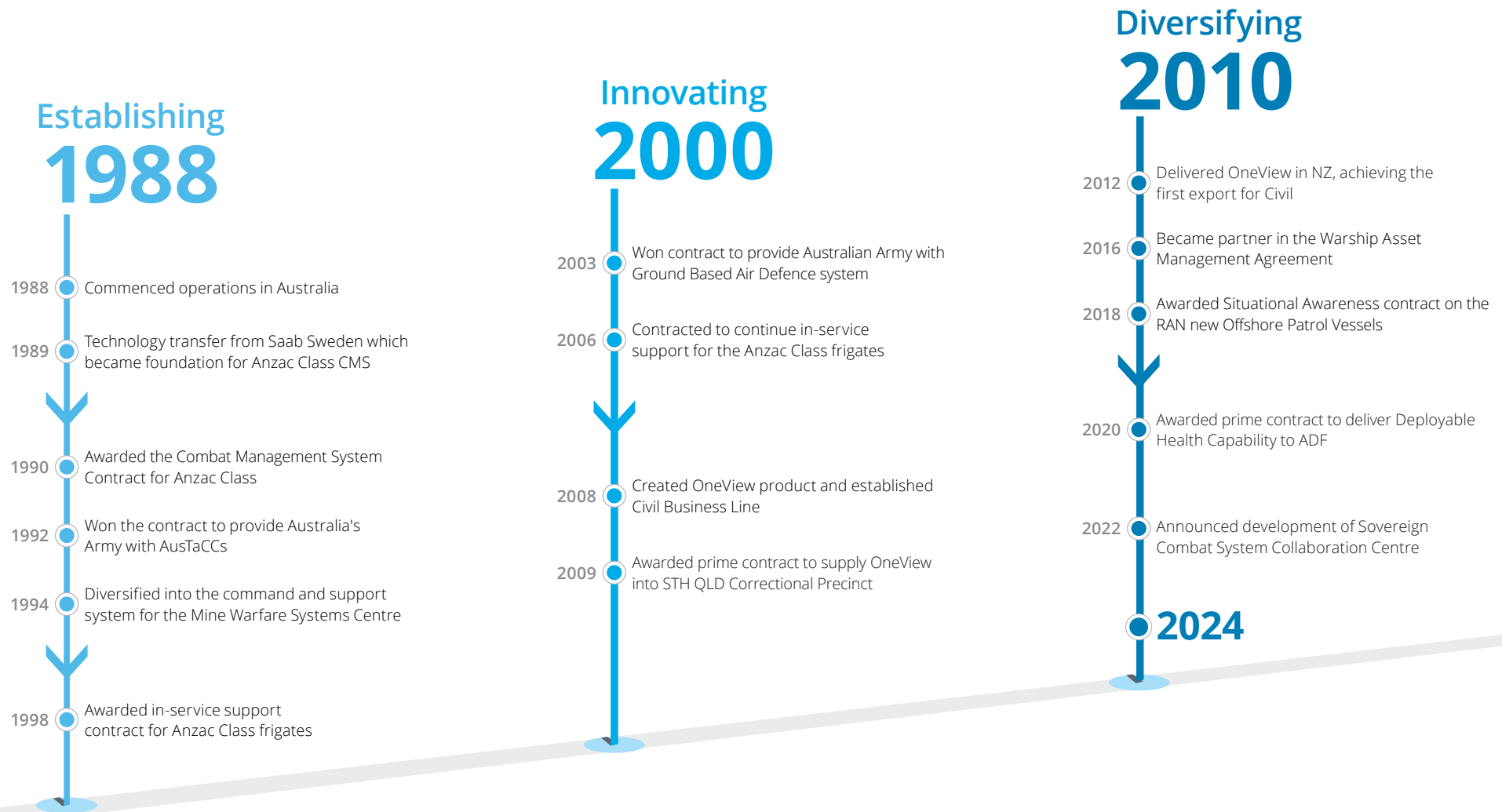
Saab Australia, alongside partners in academia, industry and government continuously invests in R&D. Saab has also expanded its product line to take leading systems integration capability into new contexts such as cyber security offerings in civil settings.



# Saab Australia's growth story

Saab has progressively invested in its core capabilities, enabled by its global connectedness, collaborative business culture and local talent.





Figure 1: History of Saab Australia



# Overview of Saab Australia

Saab has operated in Australia for 35 years, expanding its diverse products through local capability.

Figure 2: Overview of Saab Australia's activities

Domain	Activity	Underlying capabilities and assets
 <b>Naval Combat Systems</b> <i>Design, installation, integration and support of naval combat systems (surface fleet)</i>	<ul style="list-style-type: none"> <li>Development of Australia's <b>Combat Management System (CMS) capability</b>, planned for installation on every current surface combatant vessel in the RAN</li> <li><b>Manufacture and export of the Multi Function Console</b> into countries in Europe and North America</li> <li>Delivering <b>combat systems integration, sustainment and maintenance</b> for the RAN</li> </ul>	<ul style="list-style-type: none"> <li>Software engineering capability to develop and maintain advanced software for CMS</li> <li>Engineering design, manufacturing and technical capabilities for physical hardware, including MFC</li> <li>State-of-the-art R&amp;D, testing and training facilities, such as the Sovereign Combat System Collaboration Centre</li> </ul>
 <b>Land and Aerospace</b> <i>Ground-based air defence, live simulation, ground combat weapons, signature management, deployable health</i>	<ul style="list-style-type: none"> <li>Contracted to deliver <b>JP2060-3 deployable field hospital solution</b> through sovereign Australian capability in deployable health and infrastructure</li> <li>System provider for <b>Giraffe AMB and Ground Based Air Defence</b></li> <li>Positioned to support <b>Army's transition to a littoral force</b> spanning theatre logistics, theatre command and control, and advanced weapons systems</li> </ul>	<ul style="list-style-type: none"> <li>Deployable Health Centre of Excellence and Deployable Health Capability Support Centre</li> <li>Integrated logistics support specialists to execute large projects such as JP2060</li> <li>Software developers to build and maintain software for training simulations and control communications</li> <li>Technical Officers and warehousing to support sensor, weapon and C4 systems</li> </ul>
 <b>Civil</b> <i>Security solutions, asset management systems and operations centres</i>	<ul style="list-style-type: none"> <li>Original product developer of <b>OneView platform</b>, providing physical security information management systems used in correctional facilities, hospitals, banks and public buildings</li> <li>Saab has become a trusted provider of <b>Air Traffic Management (ATM)</b> solutions to Air Services Australia</li> </ul>	<ul style="list-style-type: none"> <li>Software and systems engineering capability to design, integrate and maintain products</li> <li>Field technicians to provide onsite installation, support and maintenance for upgraded towers and PSIM platforms</li> <li>Cybersecurity solutions of robust tools and protocols to protect sensitive data</li> </ul>
 <b>Future Naval Systems and Autonomy</b> <i>Development of sovereign systems integration into advanced robotic and autonomous systems (underwater)</i>	<ul style="list-style-type: none"> <li>Submarine <b>technology</b> upgrades</li> <li>Developing <b>underwater systems</b> for mine hunting and anti-submarine warfare training.</li> </ul>	<ul style="list-style-type: none"> <li>Marine engineers to focus on designing and upgrading capabilities of underwater systems</li> <li>Testing facilities of high-level simulators and testing environments for underwater vehicles and systems</li> <li>System engineers that integrate various subsystems into underwater solutions</li> </ul>

# Overview of Saab Australia

Australia's changing strategic posture demands a high degree of interoperability and partners that are experienced, agile and inherently innovative. Saab Australia has highly relevant experience that aligns to new strategic and investment priorities.

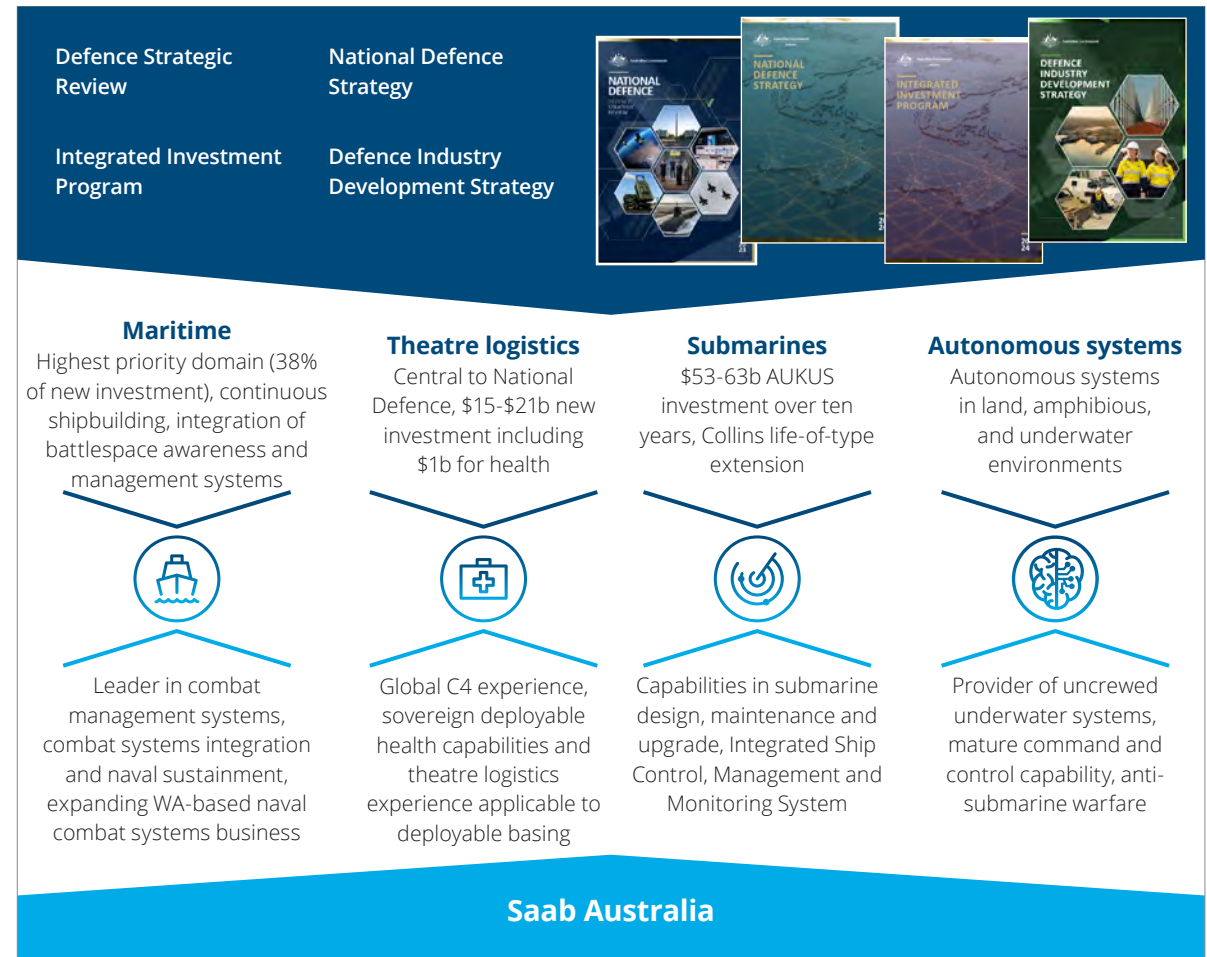
## Australia's response to a shifting strategic environment

Over the past decade, changes in Australia's strategic landscape have prompted major revisions to the strategic assumptions and investment decisions underpinning defence policy.

Key shifts in Australia's defence posture include:

- Greater integration of domains and systems:** To defend against complex threats in the region, Defence will transform into an integrated, focused force, bridging gaps and overcoming barriers between navy, army, air force, cyber and space. As a systems integration business, **Saab Australia offers highly-relevant capabilities that can support Defence to achieve this transformation.** Saab's maturity in current focus areas such as maritime and theatre logistics, also position the organisation to rapidly scale and develop its newer offerings, such as space and cyber.
- Formalisation of AUKUS Pillars I and II:** The NDS and IIP put into practice Australia's ambitions under the AUKUS partnership, including the acquisition of conventionally-armed, nuclear- powered submarines under Pillar I and **a range of critical technologies** under Pillar II. Saab continues to develop globally significant defence technologies, particular in the area of undersea warfare, and has a strong history of technology transfer to Australia.
- Minimum viable capability to be delivered as quickly as possible:** Speed is a priority for acquisition of new defence capabilities, which will require defence industry to draw on a mature, skilled workforce. Saab Australia **employs a highly effective workforce of over 900 people with deep experience in maritime, combat management systems, submarines and theatre logistics,** with a range of other focus areas that can be scaled to meet Defence's needs.

**Figure 3:** Alignment of Saab Australia's capabilities to the defence and defence industry landscape





# Measuring economic impact

# Economic impact framework

Using Deloitte Access Economics' whole-of-economy model, the historical economic impact of Saab Australia's activities have been estimated.

## Estimating the impact of legacy

This study sought to capture the economic impact of Saab Australia over the last 20 years. Understanding the economic impact of a company over time can be challenging, as stopping at only directly observable impacts (such as headcount and revenue) would limit our understanding of the true economic story.

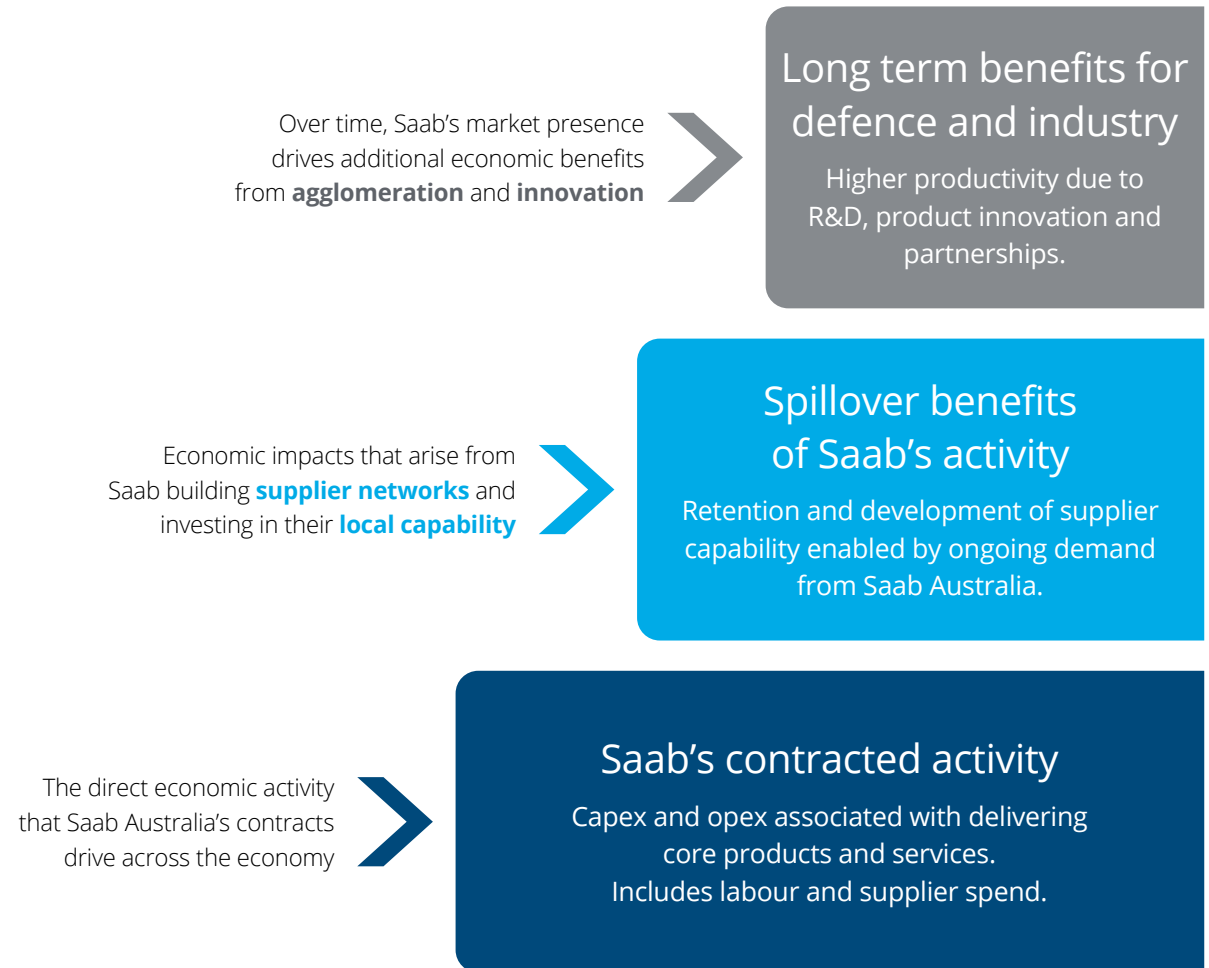
This is especially true for a company like Saab Australia, which performs extensive R&D, exports products overseas, and draws on a wide network of suppliers.

Developing an economic framework for Saab's unique operating context called for two challenges to be overcome:

- 1. Defence industry activity is hard to measure:** The supply and demand relationships that underscore standard economic transactions are different in a defence industry context where government is the primary customer. As such, mapping economic activity can be misleading, and the full spectrum of activity occurring across the defence industrial base can be missed.
- 2. The economic impacts of highly technical, complex systems take time to manifest:** Investments in advanced technologies – particularly those used for national defence – typically have highly prohibitive cost barriers, long lead times and require extremely specialized capability. This means that the economic relationships and spillovers are often hard to map across standard industry relationships.

**To ensure the full extent of Saab's economic impact was captured, the economic framework for this study was designed to account for multiple channels of impact, realised over time.**

**Figure 4:** Economic impact of Saab Australia (modelling framework)



# Saab Australia's impact on GDP

Since 2004, Saab Australia has lifted Australia's GDP by \$1.6 billion relative to a world without Saab Australia.

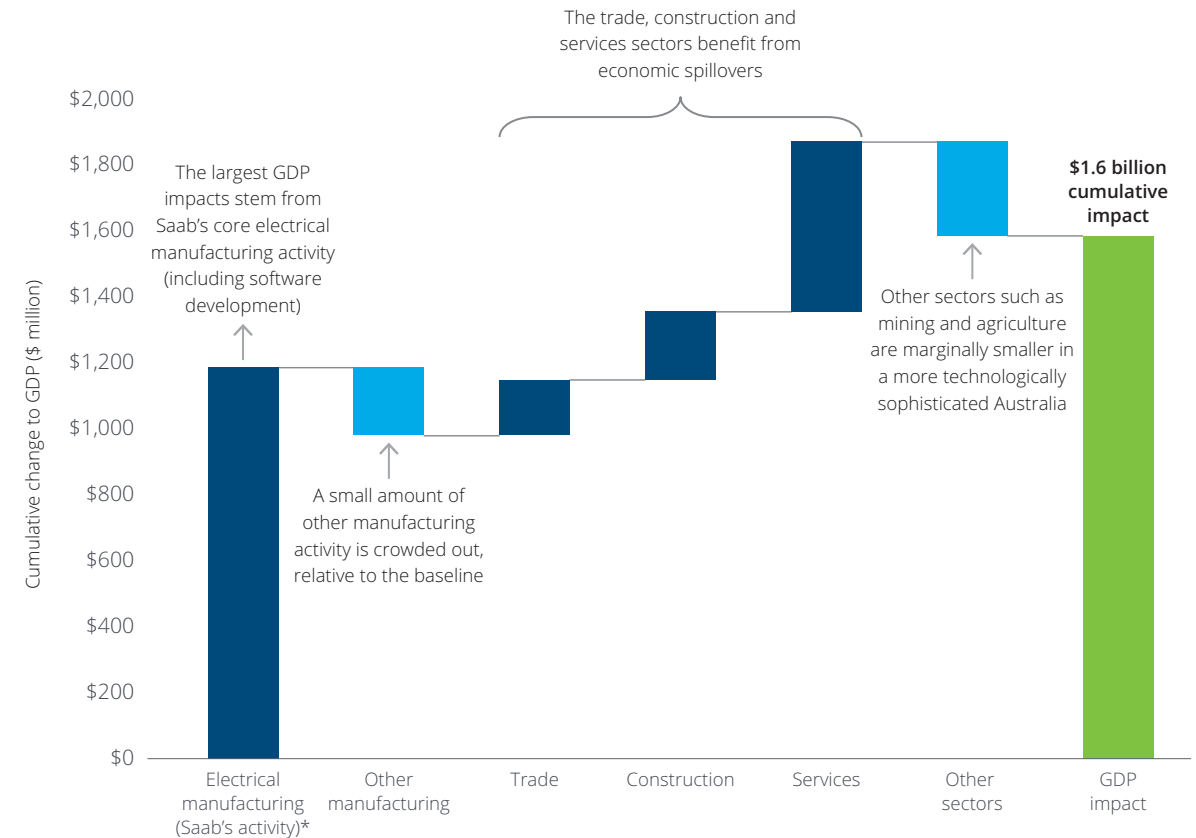
Understanding Saab's economic impact goes beyond estimating its contribution to GDP today – it requires asking what Australia would look like if Saab never entered the market.

Based on 20 years of data, Deloitte modelled the difference between today's economy, and a world without Saab Australia.

The difference between these scenarios is explained by three main factors:

- 1. More demand met locally:** Saab Australia delivers its products and services through local economic activity, displacing imports that would otherwise have occurred. Saab's capabilities also enable exports to other markets.
- 2. Higher labour productivity:** Output per worker is higher, compared to a world where Saab's workforce is employed elsewhere in the economy. This is reflected in Saab's wages, which exceed the industry average.
- 3. Total factor productivity growth:** Also understood as the 'stock of knowledge', total factor productivity is higher due to Saab Australia's investment in R&D and product innovation.

**Figure 5:** Sectoral breakdown of Saab's impact on gross domestic product (GDP)



## \*Customising the model to reflect Saab's capabilities

As the activities of Saab Australia are reflected across several distinct standard industries, a unique 'Saab sector' was defined. Informed by Saab's activity profile, this sector 'carves out' Saab's share of economic activity, enabling the inclusion of a specific (and therefore more accurate) depiction of Saab's economic contribution. The bespoke Saab sector in this analysis captured activities such as electrical and machinery manufacturing, software engineering and navigation system capability, as well as physical manufacturing (such as console manufacturing and other hardware-related activity).

# Saab's use of local talent

As at the end of 2023, Saab Australia directly employed 946 FTE staff and supports over 1,300 suppliers.

Highly productive companies go hand in hand with a highly productive workforce, driven by a system that filters workers with the most skills into organisations that can afford to pay above-market salaries.

Saab's workforce comprises a range of skillsets and diverse backgrounds. This includes **two-thirds technical specialists, such as software engineers, systems engineers, DevOps, integrated logistics support specialists, and hardware technicians.**

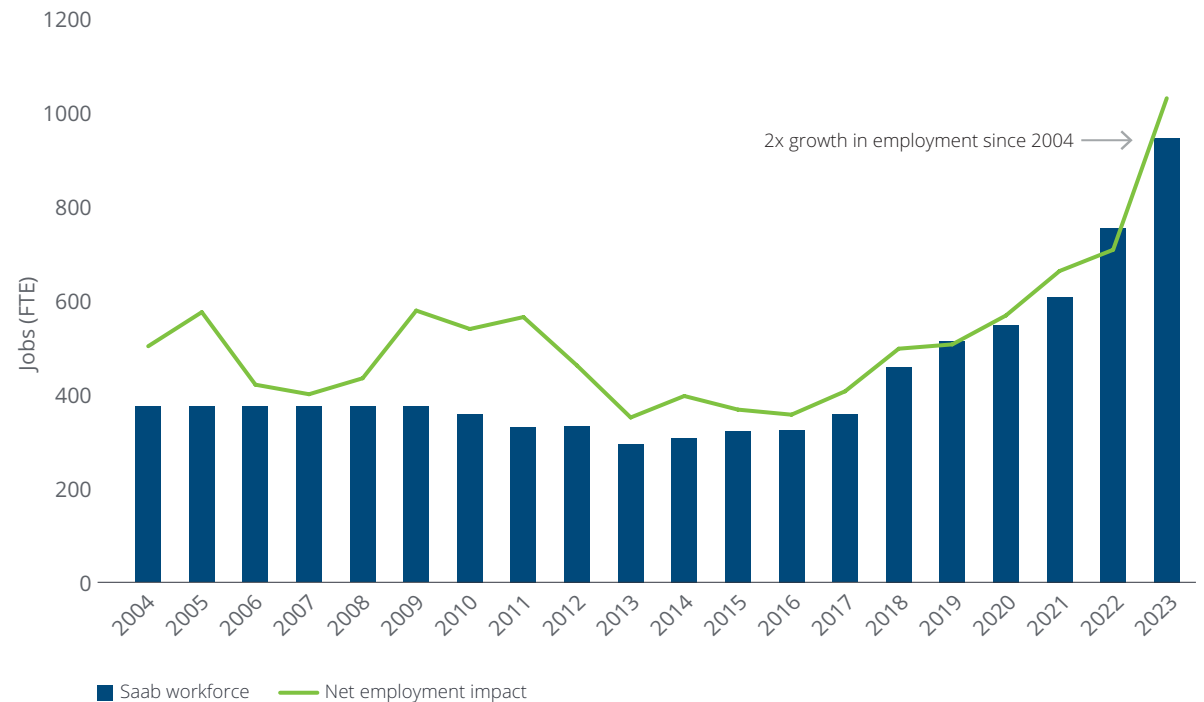
Saab Australia has doubled its headcount over the past 20 years, as the company has launched new product offerings and expanded into new regions of Australia.

This relationship holds for Saab Australia's **net employment impact**, which represents the additional jobs that would not exist in a world without Saab Australia. Without Saab Australia, net employment would be lower by over 1,000 FTE jobs.\*

## Saab Australia's key workforce groups:

Technical specialists	<b>638</b>
Women	<b>216</b>
Veterans	<b>118</b>
Graduates	<b>53</b>

**Figure 6:** Saab's impact on national employment\* over time



Note: Saab's workforce figures are indicative only between 2004 and 2009.

### \*Employment figures in this report

Unlike impacts to GDP, which can be reported cumulatively over time, employment impacts are best represented by the **net additional jobs that exist each year** in the modelled period. This avoids double-counting permanent jobs, while still capturing the long-term impacts of Saab's economic activity, which enables a higher number of jobs to be sustained over time.

# Saab's national footprint

Saab Australia has permanent operations in South Australia, Victoria, Western Australia, Queensland and the Australian Capital Territory. Other States and Territories also benefit from economic spillovers from Saab's expenditure and investments.

## Economic activity in South Australia makes up 74% of Saab's impact on Australia's GDP.

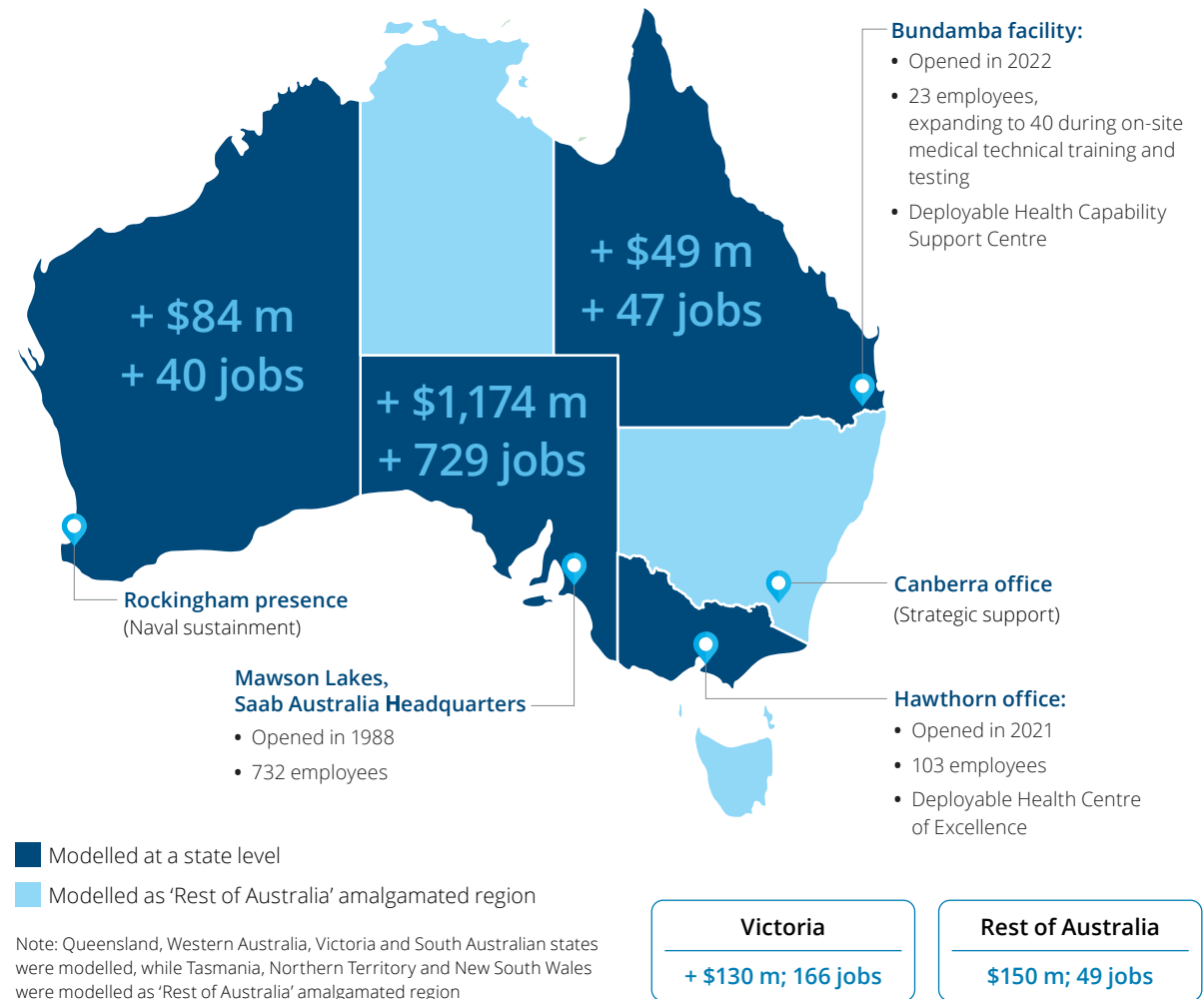
Headquartered in Adelaide, Saab's greatest economic impacts are felt in South Australia where most of the company's operations and investment have occurred since 2004.

## Economic uplift occurring outside of South Australia makes up the remaining 26% of Saab's impact.

Over the past five years, Saab has expanded its core activity into other regions, opening new sites in Queensland and Victoria. This expansion is linked with the growth of Saab's Deployable Health Capability, with Saab's Hawthorn office hosting the Deployable Healthcare Centre of Excellence, and its Bundamba facility home to the Deployable Health Capability Support Centre.

Suppliers around the country also benefit from Saab's purchasing activity – and direct collaboration – to deliver its suite of products and services.

Figure 7: Overview of Saab Australia's national footprint







# Building Australia's industrial base

# Enabling speed to capability

Saab Australia invests in capability uplift of suppliers and customers to support the long-term development of Australia's sovereign industrial base.

## Accelerating capability

The update to the NDS, IIP and DIDS made speed to capability a clear priority for Defence going forward, with a focus on timely acquisition. The DIDS includes highly focused priorities for industry development, that support delivery of increasingly complex systems. For example, the Sovereign Defence Industrial Priority 2 (SDIP 2) explicitly calls for sovereign design, development and integration of combat management systems.

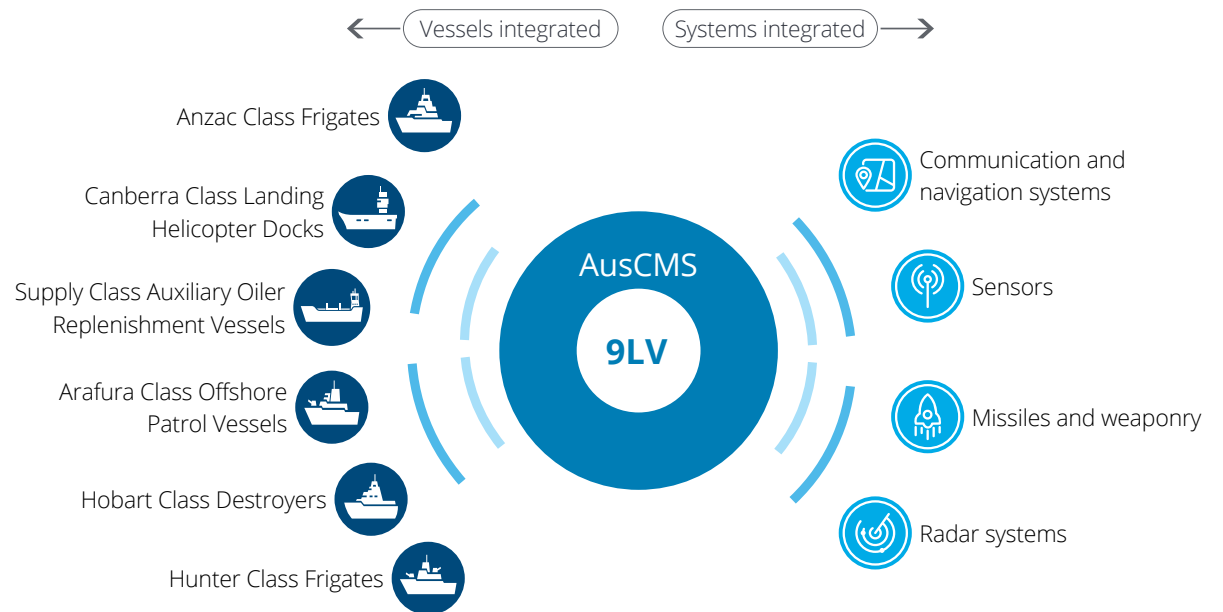
Responding quickly and innovatively to problems as they appear, requires defence industry to be well coordinated, highly collaborative and agile in its approach to solutions development. Building such networks and capability takes time.

Over the past 35 years, Saab has worked closely with Defence and other industry partners to develop value-adding products, services and innovations. To deliver this, Saab has leveraged existing global capabilities to rapidly transfer technology while continuing to develop new capabilities in Australia – making a demonstrable impact on users and the broader economy.

## AusCMS

Saab Australia has progressively developed the AusCMS (9LV) system – effectively the 'brain' of a combat ship – over the life of its Australian operations. Commencing with technology transfer from Sweden, subsequent product iterations have been developed in Australia, as the total employees working in Naval Combat Systems has grown to match Saab Sweden. The AusCMS is now installed on Anzac-class frigates, Canberra-class landing helicopter docks, Arafura-class offshore patrol vessels, Supply-class auxiliary oil replenishment vessels and will provide the Australian Interface for the Aegis combat system on the Hobart-class air-warfare destroyers and Hunter-class frigates. Utilising a common CMS across the RAN surface fleet provides significant efficiencies for acquisition, sustainment and operation. The development of the sovereign AusCMS has led to major export opportunities for Saab into Europe and Asia.

**Figure 8:** Combat management systems: at the centre of warfighting networks



*Saab's CMS has been mandated by the Commonwealth as the single CMS for all non-Aegis platforms in the RAN*

## In focus: Contemporary warfighting

Contemporary warfighting is fundamentally multi-domain. Alongside the impact of information technology, defence must be at the forefront of cutting-edge technologies with capability that spans the air, land, sea, space and cyber domains simultaneously. This concept is often referred to as network centric warfare, where C4ISR systems are ubiquitous across the battlespace.

The imperative to integrate complex systems has led to a collapse of the comparably more linear systems of the last few decades. Stages of production are now much more dynamic in nature, which has cemented the importance of having leading expertise in systems integration capability that is on-shore.



# Supporting suppliers around Australia

Over 1,300 suppliers benefited from Saab Australia's annual spend of over \$143 million in 2023. With more than 75% of suppliers being Australian, and a further 75% being SMEs, Saab's expenditure impacts are felt across the Australian economy.

## Building supplier networks

Through its supplier network, Saab achieves an economic impact that is greater than simply the sum of its purchases. The primary channel for this impact is providing crucial access to the defence market.

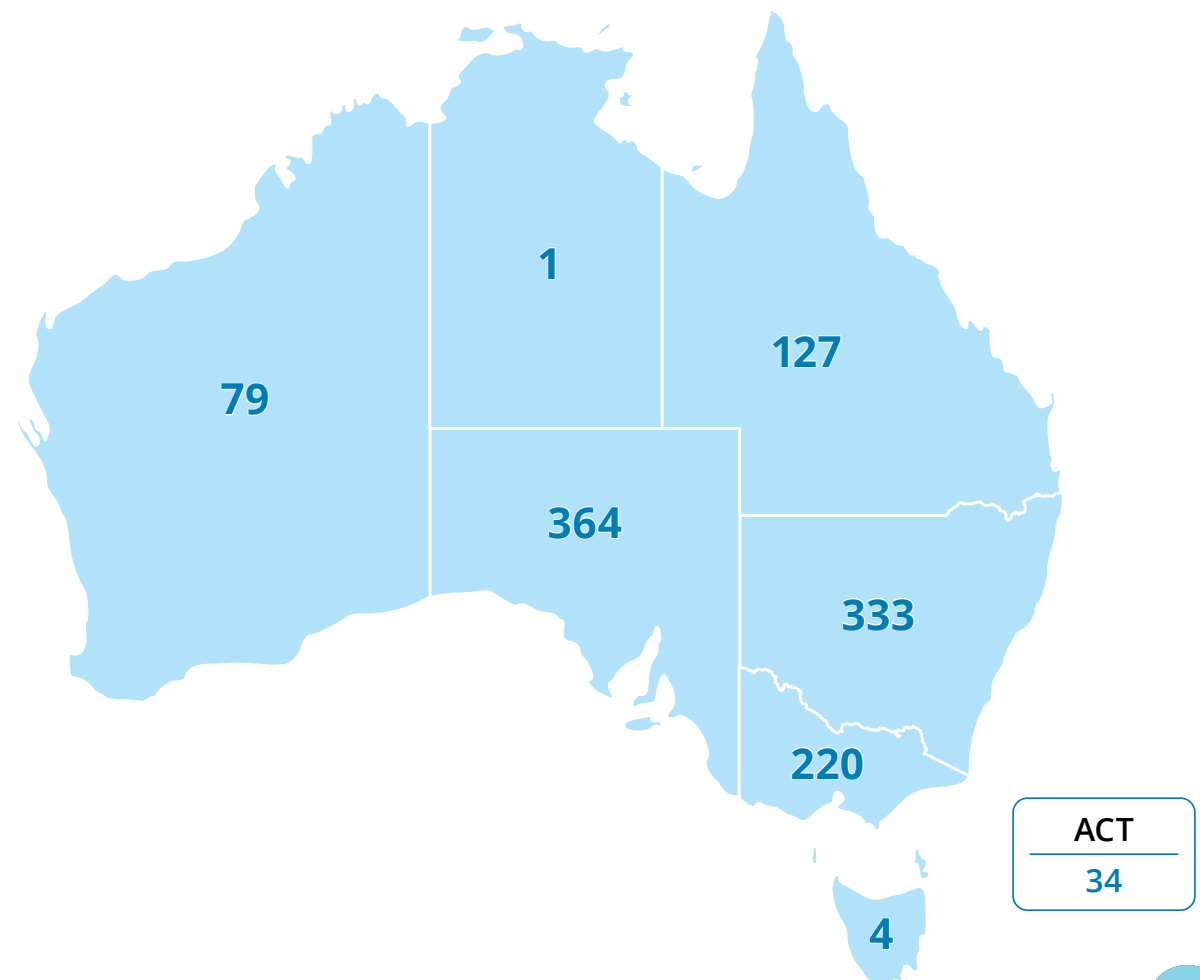
Defence spending now makes up over 2% of Australia's entire GDP, or 6% of the Federal Budget. By size alone, this means the defence industry is home to a range of contracting opportunities – a fact which is bolstered by the over-representation of certain types of sophisticated products and services, such as technology and manufacturing.

However, for small to medium-sized enterprises (SMEs), accessing this market is often complicated by contracting and security requirements, or the fact providers of a small component or other input cannot supply to defence without a lead contractor.

Offering a resolution to these barriers, Saab Australia acts as a conduit for SMEs, channeling defence demand into purchasing activity that supports jobs in a range of industries.

Through its long-term presence in the market, Saab also enables both its direct suppliers and broader supply chains to retain and develop capability.

Figure 9: Breaking down Saab's extensive supplier network



# Case Study: Multi-Function Console

Adelaide, South Australia; exported internationally

## The opportunity

Today, both military and civilian naval operations alike are governed by complex systems, ranging from combat management to navigation and communications. Under the IIP, Defence plans to spend between \$8.5b and \$11b to deliver modern, secure and survivable networks to enhance interoperability and connectivity with allies and partners that will support communications, situational awareness and targeting. These systems can generate enormous value for their users, but also bring challenges in enabling those users to effectively interact with multiple systems at the same time. As a systems integration business, Saab Australia not only has a unique stake in ensuring that its products are accessible but brings global manufacturing expertise that positions the company to innovate and lead in creating the hardware solutions that users need.

## Saab Australia's response

Saab Australia designed, developed, and now manufactures the Multi Function Console (MFC) in Adelaide, providing a cutting-edge physical platform for the monitoring and control of multiple complex systems simultaneously.

When used in conjunction with its command and control software (for example the Saab Combat Management System), its characteristics culminate to reduce operator mental load and fatigue. The MFC is now used by the RAN and exported to countries in Europe and North America.

## Economic benefits of the MFC

The production process for the MFC supports high-skilled manufacturing jobs in South Australia and beyond. With a 60% share of inputs from Saab Australia's domestic supply chain and the remaining 40% of inputs from Saab Australia itself, the MFC is a fully sovereign product delivering flow-on benefits throughout the Australian economy. For the MFC's users, the availability of a platform that brings together diverse systems is a boon for customer choice – enabling users to combine the right systems for their operations – combatting the risk of vendor lock-in.

## In focus: Leveraging Australia's manufacturing capability



One of the drivers of Saab's continued investment in Australia is the depth and breadth of industry capability available across the country. While historical examples of manufacturing – such as the automotive industry – have declined, defence and technology manufacturing remains a thriving and growing sector.

To develop the MFC, Saab Australia was able to draw on a manufacturing ecosystem that is ready to deliver – successfully engaging with homegrown businesses that helped deliver the first consoles in 2021. These businesses include Mitchell and Cheeseman, a former Holden manufacturer based in South Australia, and Sage Automation, which has expanded from its Adelaide base to multiple states.

These examples demonstrate the power of leveraging existing capabilities to deliver the products of the future, while facilitating the transition of legacy industries.

## In focus: Future operator workspace



Building on the MFC's cutting-edge capabilities, Saab Australia is working closely with its counterparts in Sweden and Denmark to develop the Future Operator Workspace (FOW). The FOW is the outcome of extensive R&D, enabled by the strength of Saab Australia's local capability.

This revolutionary console puts the user at the heart of decision-making – starting with the physical. The FOW demonstrator product – launched at DSEI London – immerses the operator as an active part of the console, rather than as an observer at the front. This design leap ensures the FOW sits at the frontier of interactive defence technology, offering an enhanced operator experience and greater operational effectiveness.

Integrates complex systems,  
including by other companies....



...reducing vendor lock-in and  
boosting competitiveness.

Supports jobs in console  
manufacturing...



...and in design,  
support and sales.

Innovation propels Australian  
products to the tech frontier...



...keeping contracts in Australia  
and growing defence exports.

# Integration capability for a stronger defence ecosystem

Saab Australia integrates complex systems, maximising operational capabilities for the Australia Defence Force.

As a systems integration business, Saab Australia sells customers the option for disparate systems – both digital and physical – to function as an integrated platform. In the modern, interconnected economy, this service is a fundamental driver of value for end users, who benefit from time and cost savings, better decision-making, and access to new capabilities.

For defence customers, systems integration also offers unique advantages in today's operating environment, where operational and technological readiness now determine the outcome in many conflicts and contingencies.

Beyond direct user value, systems integration can also unlock broader economic benefits:

- **Higher productivity:** A flow-on effect of more efficient operations is higher productivity – or achieving the same outcome with fewer resources. Productivity is fundamental to lifting Australia's living standards into the future and is particularly important in the context of defence, health and government services, which are only growing more complex and have experienced low productivity growth over recent decades.
- **More competitive markets:** Systems integration also offers an answer to the challenge posed by vendor lock-in, where a lack of interoperability between systems leads customers to continue purchasing from the same provider. This reduces competition and can lead to suboptimal outcomes where market power – rather than product quality – determines who succeeds in the market.
- **Greater economic complexity:** In the information age, economic complexity – or the steps taken to add value in an economy – is closely related to both productivity and national resilience. While Australia has prospered in recent years due to high commodity prices, its economic complexity has fallen from 60th in the world in 2000, to 93rd today (Harvard Atlas of Economic Complexity). Selling systems integration as a service therefore goes beyond the value of the systems in question, making the provision of complex systems a staple of the Australian economy.

**Figure 10:** Systems integration across a sample of Saab Australia product

Product	Systems integrated	How it creates user value
AusCMS (9LV)	Sensors, effectors, communication systems	Achieves operational efficiencies, leading to faster and more effective naval combat
OneView	Security cameras, electronic doors, other sensors	Lowers security costs, reduces risk and improves incident response
Deployable Health	Over 550 health modules, from surgery to medical imaging	Enables healthcare to be delivered in challenging environments

# Case Study: Deployable Health Capability (JP2060 Phase 3)

Adelaide, South Australia; Hawthorn, Victoria; and Bundamba, Queensland

## The opportunity

Deployable health provides the ability to treat patients and deliver health care in remote, hostile or otherwise unequipped environments. This concept is easily understood through the example of a field hospital, however deployable health solutions can range in size and scope. Defence's Integrated Investment Program has prioritised the acquisition of further health capabilities to bolster Australia's safety, committing ~\$1 billion to developing and enhancing health support in the theatre logistics domain. Delivering on this investment will be highly complex, characterised by the cross-cutting challenges of delivering healthcare in a defence context and coordinating a large number of suppliers, creating opportunities for Saab Australia to bring its expertise.

## Saab Australia's response

Saab Australia has been developing the world leading JP2060-3 deployable health capability since 2022. As part of JP2060 Phase 3 contract, Saab Australia's Deployable Health Capability brings together thousands of complex components and systems, to deliver

over 550 separate health modules, streamlining the supply chain and ensuring that when it counts, healthcare can be delivered seamlessly and effectively. To maximise value for its users, Saab Australia has established partnerships with industry and academia through the Deployable Health Capability Centre of Excellence and works closely with Defence for product testing and training, through the Deployable Health Capability Support Centre.

## Economic benefits of the deployable health capability

The principal benefit of Saab Australia's Deployable Health Capability is its contribution to the safety and wellbeing of troops and civilians in complex environments. However, successfully bringing together the inputs for a field hospital has a wide range of flow-on economic impacts as well. With over 300 approved Australian suppliers, Saab has built strong partnerships with a range of Australian companies. These extensive relationships see commercial benefits accrue to businesses operating in all corners of Australia, meeting the needs of the IIP, DIDS and NDS.

## In focus: Expanding across Australia

Saab Australia's Deployable Health Capability has been central to its expansion into Victoria and Queensland, marked by the addition of new roles to develop and deliver Saab's Deployable Health product offering, and the opening of new specialist facilities to invest in product innovation and user training.



The Deployable Health Capability Centre of Excellence hosts partners from industry and academia to undertake relevant research and commercialise new ideas through Saab's products. Enabled by the CoE, Saab is now pursuing export opportunities in Europe and Asia.

At Saab's site in Bundamba, Queensland, Saab will manage and maintain the equipment at its recently established Deployable Health Capability Support Centre (DHSCS). The DHSCS is now fully operational and has been used to deliver training to over 2,500 Defence personnel.

Transfer of Deployable Health technology, skills and IP from Europe to Australia...



...has built sovereign capability and enabled Australia to diversify its economy.

Training of over 2,500 defence personnel...



...boosts skills in the ADF and ensures the highest value product for end users.

Extensive inputs to deployable health system flow through supply chain comprising over 100 SMEs.



60%

of Saab's supplier spend on deployable health occurs within Australia

# Joining forces

Since Saab's entry to Australia, the organisation has partnered with Defence and within industry to deliver greater capabilities and efficiency.

Collaboration can be a powerful driver of economic outcomes, ranging from simple cost savings through to spurring new ideas and ventures. Recognising these benefits, the Defence Industry Development Strategy (DIDS) emphasises the importance of ongoing collaboration with industry to 'make Defence a better customer' and achieve its capability ambitions at pace.

Saab's history in Australia is marked by examples of collaboration that demonstrate the benefits sought under the DIDS – beginning with the joint venture that kick-started Australia's sovereign submarine capability through the Australian Submarine Corporation (ASC).

More recently, Saab's collaborative approach has extended beyond its core defence customer, as the organisation has partnered with companies from across the defence industry, to deliver products and services together.

## **Anti-Ship Missile Defence capabilities**

Since the early 2000s, Saab and CEA have collaboratively delivered world-leading Anti-Ship Missile Defence (ASMD) capabilities for the RAN.

CEA's CEFAR radar and CEAMOUNT missile illuminator have been integrated into the Saab's 9LV Combat Management System (AusCMS) along with the Evolved Sea Sparrow Missile and deployed on Australia's Anzac Class frigates.

Through this work, Saab has continued developing its highly capable sovereign combat systems integration workforce, creating export opportunities and positioning itself to deliver future integration work for the Defence.

## **Warship Asset Management Agreement (WAMA) Alliance**

This 2016 Warship Asset Management Agreement (WAMA) Alliance combined the skills of Saab Australia, BAE Systems Australia and Naval Ship Management Australia, creating a long-term partnership in naval sustainment, maintenance and upgrade. Under the agreement, the RAN successfully acquired new capabilities for the ANZAC-class frigates, such as the leading Anti-Ship Missile Defence (ASMD) capability (and achieved greater access to its naval assets, through lower downtime).

## **Combat System Integration-Integrated Project Team**

Building on the success of the WAMA Agreement, in 2023 Saab Australia signed a Combat System Integration (CSI) Collaboration Agreement (CCA) to integrate combat systems for the Hobart-class destroyers and new Hunter-class frigates. The agreement brings together Saab Australia, BAE Systems Australia and Lockheed Martin Australia, unlocking the collective potential of defence industry to supply a high-quality, integrated combat system that meets the challenges of today's operating environment.

# Driving productivity spillovers through innovation and partnership

Saab's approach to innovating in their local markets through partnerships in research, technology and innovation builds networks of knowledge partners that can contribute to national productivity and growth ambitions over the long-term.

Innovation is a priority for Saab Australia, which has retained the Swedish parent company's culture of cooperation, transparency and a flat hierarchy. By bringing together universities, industry and government, Saab is an example of the **Triple Helix approach** to collaboration and partnerships.

Applying this approach over time leads to the retention of highly productive labour, accelerates the development of new products or technologies by **lowering friction in the ecosystem**. Saab's approach enables faster deployment of innovation to market, enhancing readiness for export, thereby contributing significantly to Australia's economy beyond Saab Australia's direct contributions to GDP.

Saab Australia's investments in R&D are aligned to several of Australia's critical technologies both inside and outside of Defence, including:

- Human factors research
- Space
- Command and control
- Autonomous systems
- Existing strengths in naval, land systems and deployable health.



The unique thing about Saab Australia is that most of our organisation is building sovereign capabilities. This means that innovation isn't just expected, there's a strong connection between innovation, our products and the defence force. We're not huge, we're still nimble, but we're big enough to be trusted to lead capability development and delivery. – **Graham Smith, Chief Engineer at Saab Australia**

## Triple Helix approach

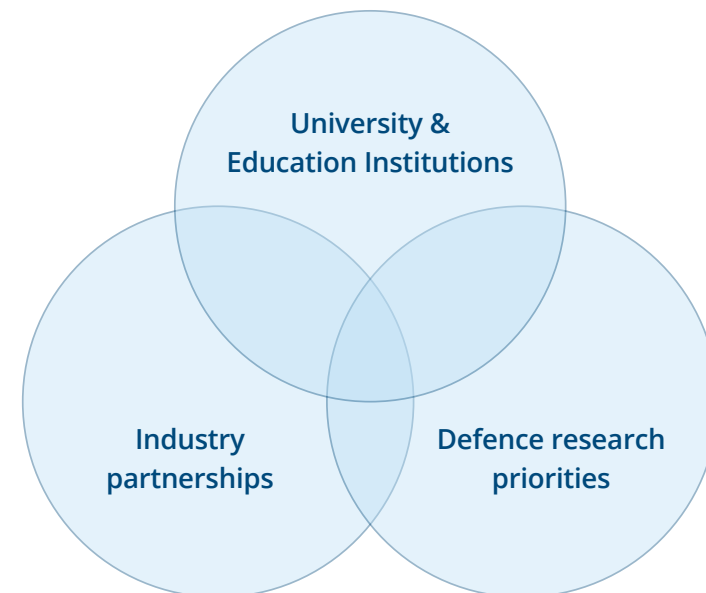
### Bringing the approach to new domains

Saab's ongoing partnership with the Defence, Science and Technology (DST) Group has contributed to two key projects to date in the areas of Space Mission Control System and Space Domain Awareness.

- Using the company's specialised expertise in systems and software engineering, the Mission Control System was developed in collaboration to support DST's scientists to manage their space-based research assets now and into the future.
- Likewise, Saab's expert engineering skills are supporting the collaborative development of software for Space Domain Awareness. This expertise enabled the development and enhancement of algorithms to detect and monitor objects in Earth's orbit, objects launched into space from Earth, and decaying objects re-entering Earth's atmosphere.

Delivery of these programs provides two examples of Saab's **ongoing Research and Development investment in a sovereign Australian Space capability**. Furthermore, they demonstrate the company's ability to transfer significant experience in command and control capabilities, developed over more than 30 years in defence applications, to support innovation in ground-based elements of space technologies.

**Figure 11:** Overview of Saab's Triple Helix approach to innovation





# Case Study: Sovereign Combat System Collaboration Centre

Adelaide, South Australia

## The opportunity

Australia faces an increasingly complex security environment, characterised by great power competition, reduced strategic warning time, and the use of new technologies by both allies and adversaries. In response to these circumstances, the National Defence Strategy and Integrated Investment Program aim to lift Australia's defence capabilities through a \$330 billion injection over 10 years. The maritime domain will receive the largest share of this funding, with 38% of the total, creating new opportunities for defence industry to supply the cutting-edge naval systems Australia needs. To seize these opportunities, Australian industry – including the many small and medium-sized enterprises (SMEs) that form the supply chain for large defence primes – must overcome barriers to testing and integration that currently exist due to high security requirements and related access challenges.

## Saab Australia's response

Saab Australia is establishing the Sovereign Combat System Collaboration Centre ("SCSCC") to develop the next generation of naval combat systems within a collaborative ecosystem, including university and SME partners.

Enabled through co-investment from Saab Australia and the Federal Government's Modern Manufacturing Initiative, this state-of-the-art centre will house a Combat System School, among purpose-built facilities for prototyping, production, systems integration and testing. Through the SCSCC ecosystem, Saab Australia will accelerate its existing program of R&D and product innovation, strengthening Australia's defence industry capabilities.

## Economic benefits of the SCSCC

Beyond uplifting Australia's naval defence capabilities, the SCSCC will deliver a range of economic benefits. These include supporting over 500 jobs during construction, and over 450 ongoing jobs across Saab's direct employees and network of suppliers. The SCSCC will also enable Saab Australia to grow its product offering by creating new value for defence, securing a pipeline of work for both the Australian Defence Force and defence export markets.

## In focus: Defence trailblazer program



Alongside the University of Adelaide, UNSW Sydney, and other industry partners, Saab Australia is among the first cohort of participants in the Defence Trailblazer program, which seeks to foster innovation and research in the defence sector.

The program brings together complementary organisations to receive grant funding for faster commercialisation of R&D activities in priority areas for defence. This will also provide students and researchers with the opportunity to work alongside industry experts, gain practical experience, and contribute to cutting-edge projects in defence technology.

To date, projects funded through the Trailblazer program are developing methods to improve sonar detection (multistatic and bi-static localisation of underwater targets) and developing target motion analysis solutions for moving platforms using doppler sensors.

## In focus: Combat system school



Hosted within the SCSCC, the Combat System School is an investment by Saab Australia in upskilling the next generation of combat systems engineers.

Commencing in 2024, the School provides specialised courses and micro-credentialling to address skills gaps in priority areas. These include Safety, Cybersecurity, Maritime Platform Integration, and Electromagnetic Environment Effects.

This initiative demonstrates Saab's commitment to nurturing talent and fostering collaboration to support Australia's sovereign capability ambitions.

Stronger defence capabilities  
improve Australia's security...



...and protect vital economic  
interests, such as maritime trade.

500 jobs during  
construction



450 ongoing  
jobs

Innovation propels Australian  
products to the tech frontier...



...keeping contracts in Australia  
and growing defence exports.



# Looking to the future

# Over the horizon

Saab Australia's market position at the nexus of defence, manufacturing and technology means it is well-placed to respond to the increased complexity of national security challenges.

## Aligning to macro trends



### Navigating a complex geopolitical landscape

Australia and the world face complex geopolitical circumstances, prompting an overall increase in defence investment, coupled with a greater focus on multi domain capabilities. Private sector partners will play a key role in meeting these needs, through servicing local demand and growing defence exports. **The highly interoperable systems offered by Saab depend on an adaptable, experienced and innovative systems integration capability and workforce.**

### Saab Australia as an APAC leader

APAC is near US\$35 trillion economy and 60% of the world's population, the Asia Pacific represents the single greatest market opportunity for global companies. Defence and security are of growing importance, and a growing middle class is demanding the security that Saab sells through its products. **Saab global is seizing this opportunity, positioning Saab Australia as a leader in the Asia Pacific, while Saab Australia is already exporting a range of products to region.**

### Speed to capability

There is a tension at the heart of defence procurement between sovereign industrial capability and timely acquisitions. Against this backdrop, a best-case scenario is achieving rapid delivery through a local workforce and supply chain, enabling both closer alignment with end users while retaining broader economic benefits. **Saab Australia has experience in delivering capabilities quickly, leveraging the Saab global network as required and adapting its Australian workforce to meet delivery timeframes.**

## Aligning to government priorities



### National Defence Strategy & Integrated Investment Program

Through the 2024 National Defence Strategy and Integrated Investment Program, Defence has signaled a clear shift to an **integrated, focused force**. For defence industry, this means bringing the best of Australian capability and international expertise, ensuring product is fit-for-purpose by operating closely with end users. **Saab Australia has the sovereign systems integration and technology capabilities to meet these challenges.**

### Future Made in Australia

The Federal Government has committed to capturing a greater share of the industrial activity that will underpin shifts in the global economic structure over coming decades. Under the plan for a Future Made in Australia, the government will prioritise sectors that are critical to economic resilience, granting access to a range of investment. **Saab Australia's manufacturing activity, coupled with its experience in critical technologies, position it to support this ambitious reindustrialisation.**

### Tech jobs

A target of 1.2 million tech jobs by 2030 has been adopted by the Federal Government to create a thriving tech workforce in Australia. Tech jobs deliver a range of advantages, including higher than average productivity, however skills shortages mean there are challenges linking the right people with the right opportunities. **Over the past 35 years, Saab Australia has established a record of growing and retaining a workforce of highly skilled digital and engineering roles and is delivering tech-focused micro-credentials and research collaborations.**



# Technical Appendix

# Economic framework

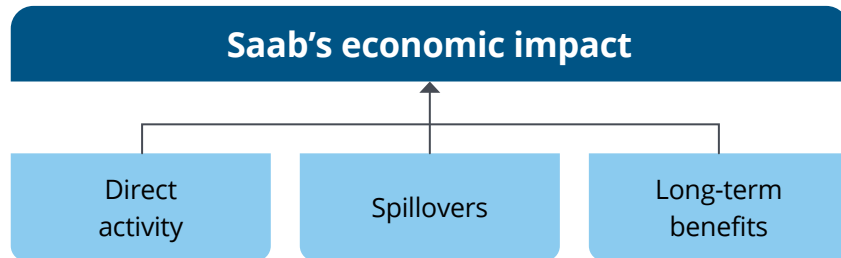
This study uses computable general equilibrium (CGE) modelling to provide a 'backward look' at how Saab Australia has contributed to Australia's economic growth over time. Saab's economic benefits are defined within the broad categories of direct activity, spillovers and long-term benefits.

## How Saab adds value to the Australian economy

Saab Australia adds value to the economy through its direct activity, spillovers, and long-term embedded benefits:

- 1. Direct activity:** Through purchases from suppliers and direct employment of its workforce, Saab Australia contributes to Australia's gross domestic product (GDP). Saab's exports of products and services also contribute to Australia's national income and diversify the country's export profile beyond traditional strengths in agriculture and mining.
- 2. Spillovers:** Saab enables both its core suppliers and broader Australian supply chains to retain and develop their own capabilities.
- 3. Long-term (embedded) benefits:** A combination of investment in R&D, new product development and competition with established players lifts national productivity relative to a world where Saab Australia never entered the market.

**Diagram:** Representation of how Saab Australia adds value to the economy

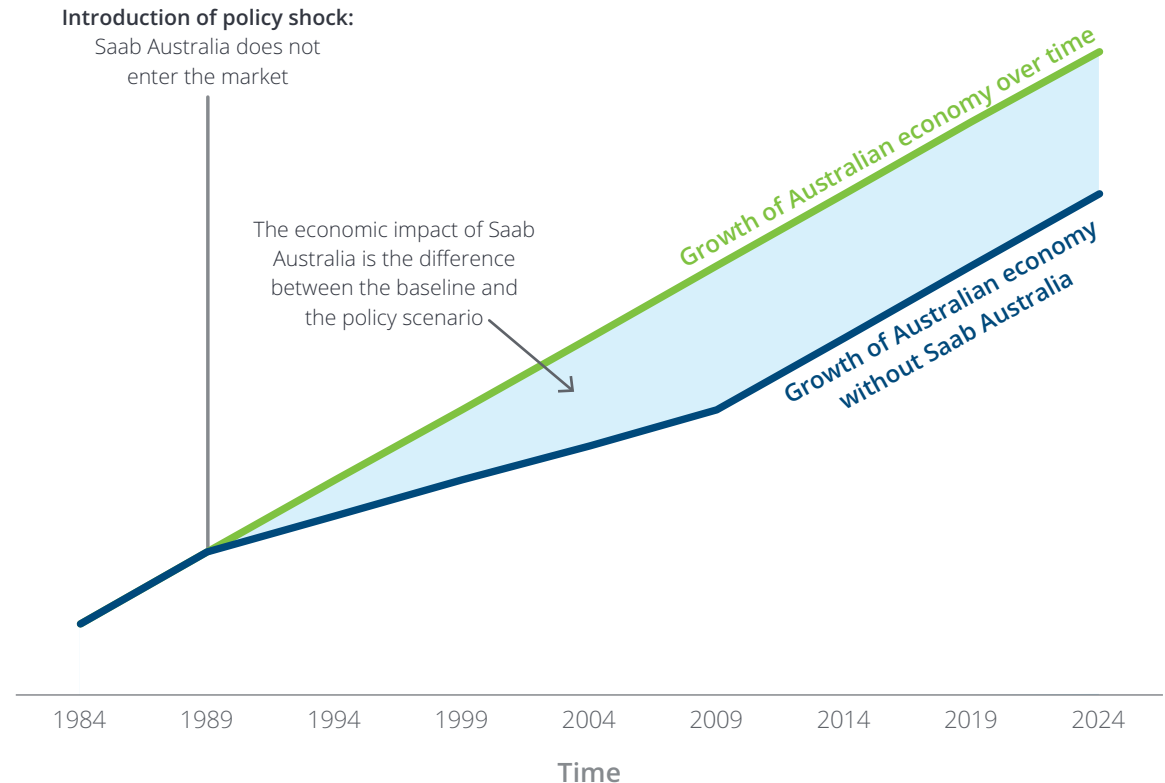


## Modelling historical impact

The modelling approach for this study uses Deloitte Access Economics' regional general equilibrium model (DAE-RGEM), which measures the impact of 'shocks' or scenarios representing a change from the status quo.

While this approach is traditionally used as a 'forward-looking' tool to evaluate the impact of potential changes (e.g., policies or new investments), this study uses general equilibrium modelling to provide a 'backward look' at how the economy would have developed if Saab Australia never entered the market.

**Diagram:** Stylised representation of the interpretation of CGE model outputs



# Deloitte Access Economics' CGE model

Deloitte Access Economics' CGE model, DAE-RGEM, estimates of the impact of investment or policy shocks and how they flow through the economy.

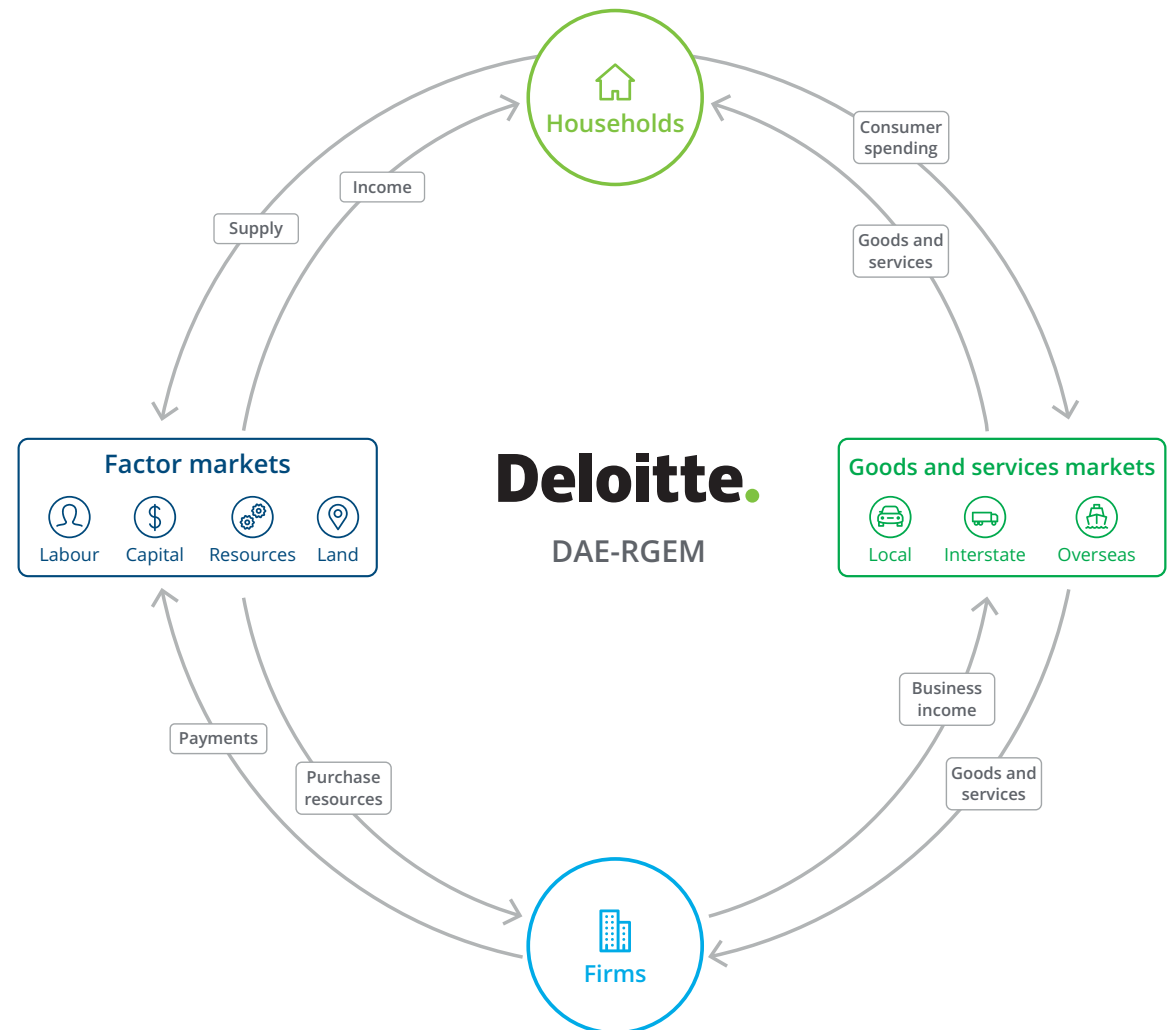
## What is CGE modelling and how does it work?

Computable General Equilibrium (CGE) modelling is a dynamic model which can show how an economy might transition over time in response to a shock or policy change. This work has used the Deloitte Access Economics Regional General Equilibrium Model (DAE-RGEM), which is a CGE model of Australia and the world economy. DAE-RGEM represents the interactions of households and firms with factor markets and goods markets over time.

CGE models, including DAE-RGEM, have the following features that make them uniquely suited to quantifying how the economy, as a whole, could react to potential changes in policy, technology or other external factors:

- **A general equilibrium framework** that is underpinned by a substantial body of accepted microeconomic theory. The CGE model recognises that there is a finite number of resources (such as labour) in the economy, and that a change in one part of the economy will have flow-on impacts on other sectors of the economy. Consequently, the model is appropriate for examining changes that affect the whole economy (such as tax policy, productivity improvement, and free trade agreements).
- **Data driven and geographically customizable** as the CGE model is parameterised with real-world data on the structure of the economy, such as the population, labour force, and industry composition. This allows the insights to be tailored to the specific circumstances faced by a particular economy. For this analysis, the model has been disaggregated to reflect the States in which Saab operates, to provide both a state-based and national overview.
- **Potential synergies with other existing capabilities/models** as the CGE model is flexible enough to be 'shocked' with a range of inputs. This includes but is not limited to time savings (or other forms of productivity gain) from transport models, price changes from electricity and energy models, output changes in particular industries, and emissions and water restrictions.

Figure 12: Structure of Deloitte Access Economics' whole-of-economy model



# Inputs to the CGE model in this study

A series of 'shocks' were developed for DAE-RGEM. These shocks are summarised below.

Shock	Variable	How it is modelled	Mapping to economic framework		
			Direct activity	Spillovers	Long-term benefits
Additional output of Saab <ul style="list-style-type: none"> <li>• Domestic sales</li> <li>• Exports</li> </ul>	Sector output is targeted, via a swap with a subsidy variable which is then endogenously determined by the model	Revenue figures were used to simulate the additional output of Saab (approximately \$2.6 billion over the modelling timeframe). OPEX (as a subset of total costs) is endogenously captured by using total revenue to target the change in the value of sector output. The investment response was also endogenously determined. This allows the model to implicitly capture the economy wide investment in addition to Saab's CAPEX data.	✓	✓	✓
Imports substitution	Share of imports	Shocks were applied to ensure that the additional output from Saab's presence was captured via increased demand for domestic manufactures, substituted for imported manufactures. The size of the shift from importing overseas manufactures to purchasing domestic is equivalent to the size of Saab.	✓	✓	✓
Local content share	Share of imports	A shock was applied to increase the local content share of Saab's expenditure on intermediate inputs. This was based on the assumption that Saab's supply chain comprises a higher local share of local inputs than the industry average. It is assumed that Saab's expenditure on local manufactures is 80% of their total.	✓	✓	✓
Productivity (R&D)	Total factor productivity (sector specific)	R&D expenditure was used to shock the productivity of the Saab sector. Total R&D expenditure in South Australia over the period was approximately \$38 million. This shock has only been applied to South Australia.	✓		✓
Productivity (Labour productivity)	Labour productivity (sector specific)	Saab's average wages (informed by client data) were found to be higher than the industry average. These higher wages informed a labour productivity shock to reflect the higher spending Saab employees would have in the economy. This shock has only been applied to South Australia.	✓		✓

**Note on migration:** Migration has also been 'turned on' in this modelling exercise to allow for employment flows that may respond to Saab's economic activity.



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