



THE UNIVERSITY
of ADELAIDE

150 YEARS

Centre for Sustainable Operations and Resilient Supply Chains

Transforming the supply chain for a resilient, sustainable and thriving future.



Centre for Sustainable Operations and Resilient Supply Chains (CSORSC)

We are witnessing the beginning of foundational change to global supply chains. A combination of advanced technologies, changing environmental and social values, geopolitical disruption, extreme weather and natural disasters have exposed the fragility and limitations of traditional approaches.

The simple economics of comparative costs and profit maximisation are no longer enough to compete globally. Consumers, industry, regulators and government are increasingly demanding access to products and services underpinned by modernised, resilient, sustainable, ethical, and transparent supply chains.

This presents both a significant challenge and a once-in-a-generation opportunity for Australia.

In response, the University of Adelaide is launching the Centre for Sustainable Operations and Resilient Supply Chains (CSORSC) in 2024. Our mission is bold: To accelerate the transformation of Australia's supply chains for a resilient, sustainable, and thriving future and to position South Australia as the global leader in supply chain management.

We are the first of our kind in Australia. We bring together top researchers across circular economy, supply chain, procurement, logistics, operations management, advanced modelling, AI, machine learning, engineering, policy, geopolitics, ethics, sustainability, regulation, economics, and systems design to work with government, industry and communities to re-imagine how we produce, procure and consume goods for a sustainable transition to a circular economy.

The CSORSC is led by world-renowned experts, Professor Kannan Govindan and Associate Professor Devika Kannan, whose work has helped reshape procurement and supply chains across European nations to integrate new technologies

and not just meet but exceed emerging standards in Environmental, Social, and Governance (ESG), decarbonisation, transparency, modern slavery, and ethics.

But as a policymaker or business, it can be hard to know how to start on your sustainable transition to a modernised, supply chain. What are the knowledge, regulatory, collaboration, training and technology gaps in your organisation and how should you address them?

This challenge lies at the heart of our work.

Be it unlocking the \$15B allocated by the National Reconstruction Fund, helping policymakers, government and industries reach digitisation, Sustainable Development Goals (SDGs), and net-zero goals, advising on trade agreements, improving procurement standards to prevent modern slavery, helping SMEs reduce costs and increase productivity, or working with industry towards climate adaptation and mitigation strategies, we are building the foundations needed today for a more sustainable society.

Unlocking transformative change across industries and society

Re-imagining the supply chain will have enormous impact for Australia and South Australia's key sectors and will radically accelerate our ability to expand capabilities into higher-value goods and services. This will support ambitious net-zero goals; help build productivity gains and resilience in key industries like tourism, mining, agriculture, food and wine; expand domestic capabilities for high-value goods and services across renewable energy, space and medical products; and accelerate expansion into high-priority sectors like defence through support of key partnerships like AUKUS.

Australia's leadership in supply chain transformation will not just be about goods

and services. The CSORSC is focused on educating, training, and developing a new, diverse generation of entrepreneurs in this space. We are also committed to ensuring Australia's workforce remains globally competitive through educating and upskilling workers to take advantage of all that a modernised supply chain offers to SMEs, industry and government.

Research Disciplines

- Management
- Engineering
- Computer Science
- Social Science

Key Sectors

- Waste and Recycling
- Water and Climate
- Energy
- Mining
- Food, Wine and Agribusiness
- Healthcare
- Pharmaceuticals
- Defence and Space

Key Themes

- Circular Economy
- Sustainability and Resilience
- Decarbonisation
- Reverse Logistics and Recycling
- Digitalisation
- Women's Entrepreneurship
- Sustainable Leadership

Within the University of Adelaide, CSORSC was established under the Institute for Sustainability, Energy and Resources (ISER). Subsequently, it was aligned to the Adelaide Business School within the Faculty of Arts, Business, Law and Economics.

The University of Adelaide's Foci And Magnets for Excellence (FAME) Sustainability Strategy highlights the research missions of responsible resource production and consumption, accelerated access to clean and green technologies, and effective sustainability governance and decision making. The work of CSORSC interweaves these ambitions with the promise of helping to accelerate the transformation of Australia's supply chains to a resilient, sustainable, and thriving future.

We hope you'll join us in this endeavour.



How we deliver impact:

By collaborating with us, your organisation will have the opportunity to access cutting-edge research, revolutionary discoveries, and the finest students who will be future industry leaders. We offer a diverse range of engagement models for your organisation:

- Access to multidisciplinary expertise, world-class researchers, and early-career talent
- Collaborative research that leverages third-party and government funding
- Highly effective partnership models, including research strategy advice and support
- Streamlining and optimising your supply chain operations, including forecasting, procurement, manufacturing, inventory management, warehousing, logistics, and customer service to boost productivity, cost savings, and enhance resource utilisation
- Identifying, assessing, and mitigating risks such as supply chain disruptions, geopolitical instability, natural disasters, and regulatory changes to improve resilience and ensure business sustainability
- Implementing and leveraging advanced technologies like blockchain, the Internet of Things (IoT), artificial intelligence (AI), and big data analytics in supply chain operations to provide real-time visibility, predictive insights, and automation capabilities
- Providing strategic guidance and support to your organisation in developing robust supply chain strategies that align with business objectives, including market analysis, scenario planning, network design, and performance measurement, to promote informed decision-making and agility
- Advancing expertise in sustainable supply chain practices to effectively address ESG issues through green logistics strategies, promoting ethical and sustainable sourcing, reducing carbon footprint, and ensuring social responsibility throughout the supply chain
- Implementing circular economy principles in your business models, such as waste reduction, resource efficiency and product lifecycle extension, to reduce your environmental impact, create new revenue streams and strengthen sustainability credentials
- Training, education, and professional development programs to enhance the skills and capabilities of your workforce, fostering innovation, resilience, and continuous improvement across the supply chain.

We look forward to working with you.

CSORSC Team

- Director
- Deputy Director
- Centre Manager
- Postdoctoral Fellows
- Higher Degree Research Students
- Visiting Scholars
- Title Holders / Adjunct Researchers
- Industry Partners
- Board Members

The Centre for Sustainable Operations and Resilient Supply Chains sits under portfolio of the Institute for Sustainability, Energy and Resources (ISER) and is anchored in the Adelaide Business School (ABS).



Professor Kannan Govindan
Director of the Centre for Sustainable Operations and Resilient Supply Chains



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Deputy Director of the Centre for Sustainable Operations and Resilient Supply Chains

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Kaurna acknowledgement

We acknowledge and pay our respects to the Kaurna people, the original custodians of the Adelaide Plains and the land on which the University of Adelaide's campuses at North Terrace, Waite, and Roseworthy are built. We acknowledge the deep feelings of attachment and relationship of the Kaurna people to country and we respect and value their past, present and ongoing connection to the land and cultural beliefs. The University continues to develop respectful and reciprocal relationships with all Indigenous peoples in Australia, and with other Indigenous peoples throughout the world.