

Effective Innovation

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The specialists in recycling, waste and planning



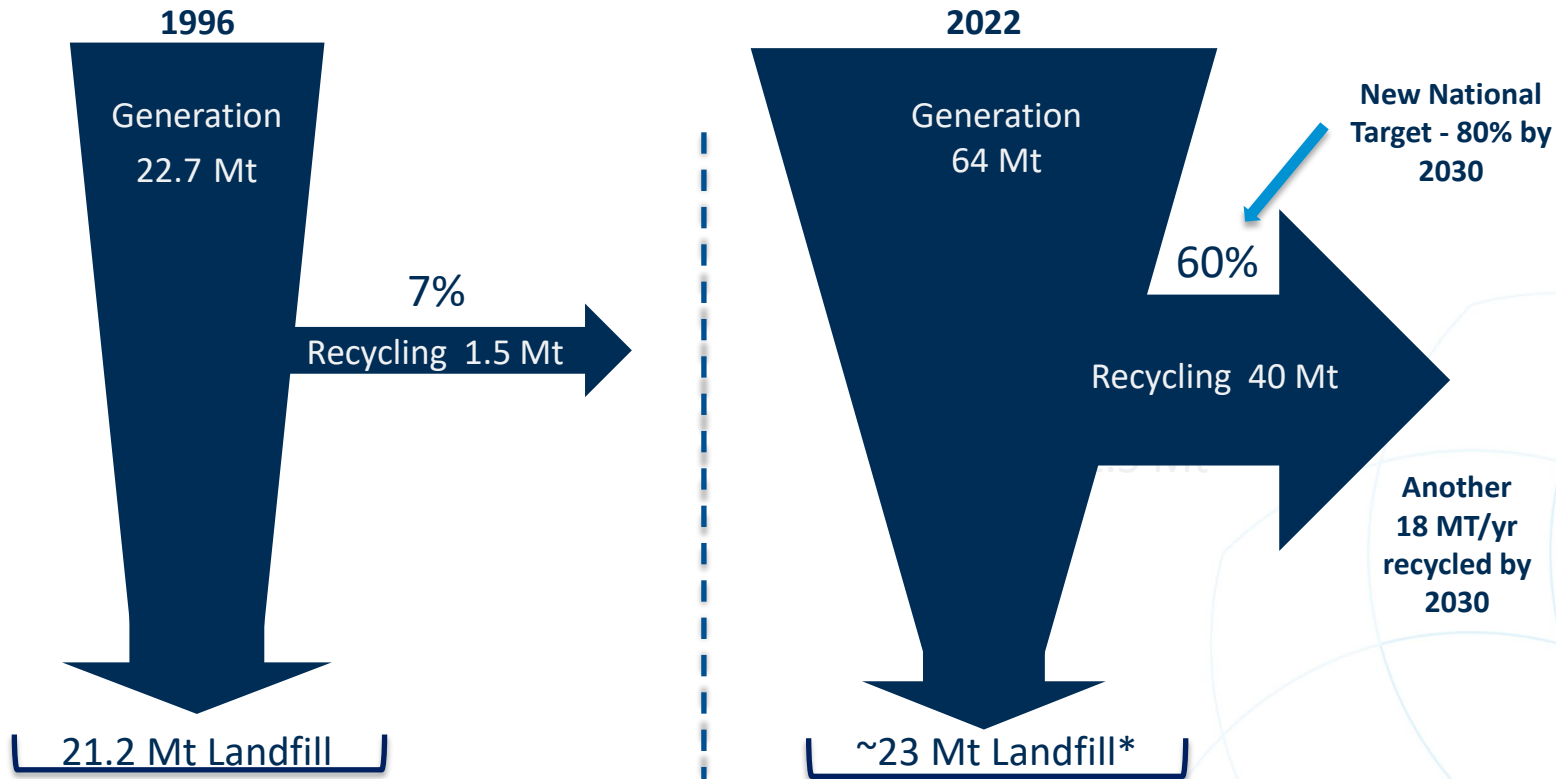
Why innovate?



CSIRO Website:

- Innovation is crucial in realising Australia's largest economic gains.
- Increasing Australia's material recovery rate by just 5 per cent would add an estimated \$1 billion to GDP.
- The recycling sector currently generates 9.2 jobs per 10,000 tonnes of waste, compared with only 2.8 jobs for the same amount of waste sent to landfill.

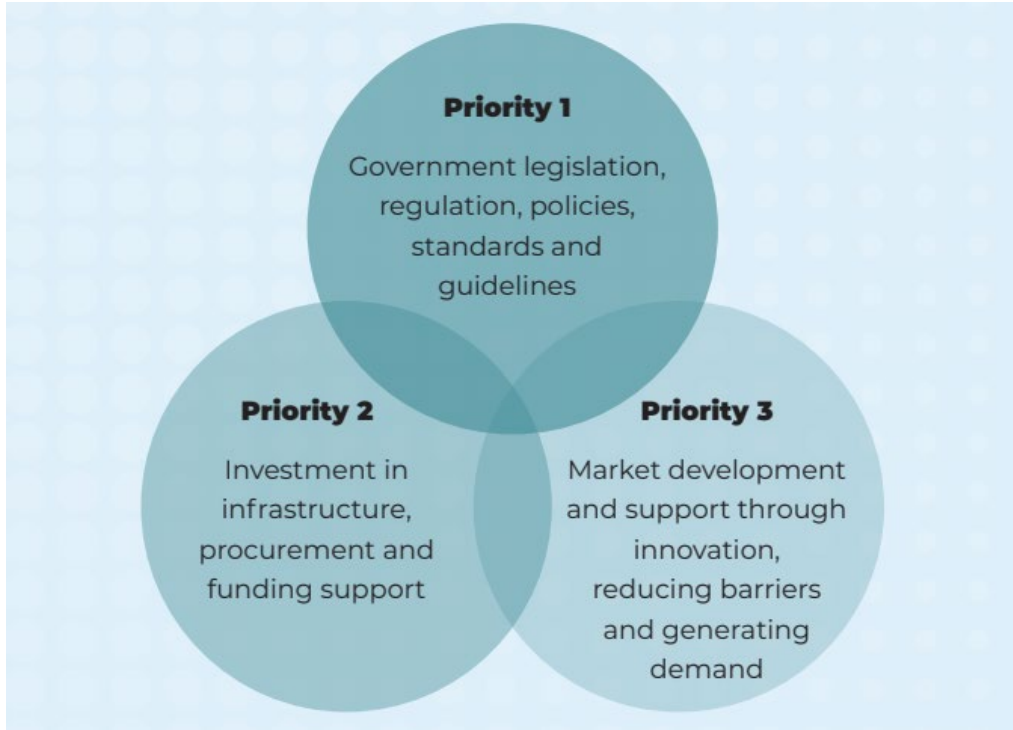
Waste Generation and Recycling



Source: ABS Year Book 2014; National Waste Report 2018

* The balance of landfilled/recycled is waste recovered as energy, including via LFG.

National Waste Policy Action Plan 2024



“Government support for innovation seeks to drive changes in the supply chain while working with industry to resolve challenges.”

Circular economy



Challenges with Innovation

The Valley of Death



The Valley of Death occurs at the transition between original scientific research and the commercialisation of associated technologies.

Innovation vs Research



Research:

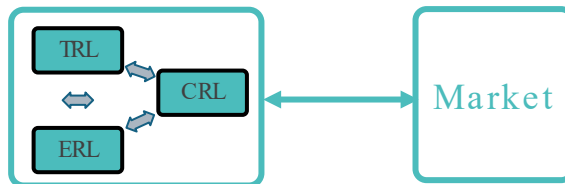
- Technical domain, the fundamental basic science and engineering research.

Innovation:

- The creation of new technologies, products and all services from the research, from the known knowledge, and that's kind of the creation of new knowledge, be it pure or applied.

Scimita's Innovation Governance Framework aligns ERL TRL and CRL

This framework synchronises these tools to steer technological innovations ensuring technical feasibility, commercial viability, and environmental sustainability.



The CRL(Commercial Readiness Level)

A decision-making tool which guides and tracks a commercial opportunity to be realised with a technological product, from low-fidelity assessment of an opportunity (CRL 1) to revenue generation (CRL 9).

It evaluates commercial viability focusing on market demand, competitive advantage needed, customer validation, regulator frameworks and suitability of a technological path to support revenue generation.

Employing the CRL tool aligns innovations with business growth strategies and targets, ensuring products and technology solutions meet technical specifications, fulfill market needs & financial goals, maximizing investment returns and accelerating transitions from innovation to market success.

It proactively guides the Technical development

The ERL(Environmental Readiness Level)

Is a decision-making tool to assess, guide, and track the maturity and credibility of environmental claims associated with technical innovations, required by the identified commercial opportunity.

It evaluates compliance with environmental regulations, and societal expectations integral to competitive advantage and commercial success.

It identifies environmental opportunities at (ERL 1) and validates benefits once the products have matured and are operating in the market (ERL 9).

ERL embeds environmental considerations early and consistently using methodologies such as Lifecycle / Circularity assessments and environmental footprint.

It proactively informs CRL and TRL

The TRL(Technical Readiness Level)

A decision-making tool to assess, guide and track the maturity of technical aspects of innovation from conceptualization to deployment.

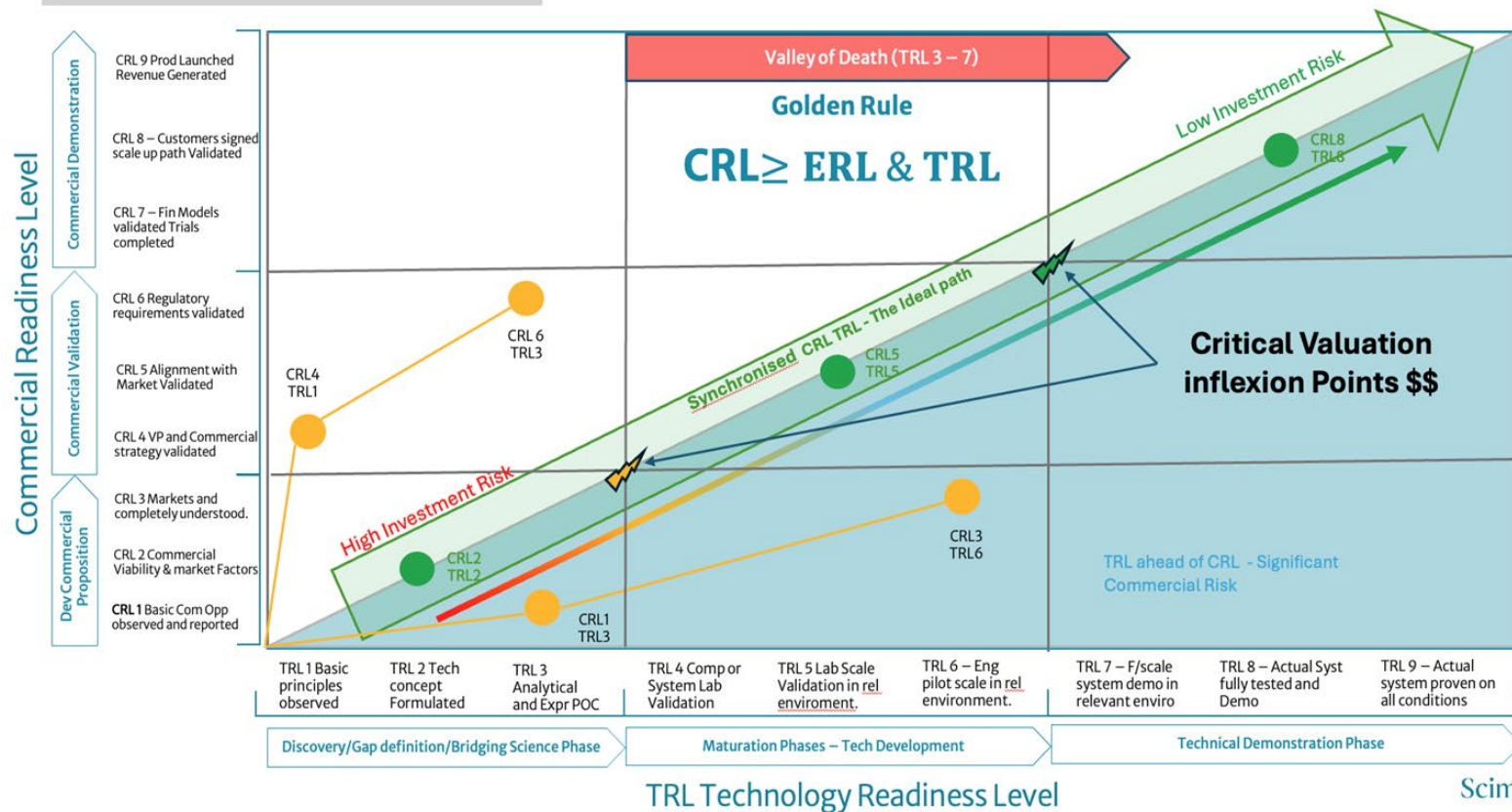
It encompasses nine distinct levels, progressively advancing from basic scientific observations (TRL 1) that can underpin a technological product to a full-scale market-ready implementation (TRL 9) of resultant products.

The tool manages the development process with early identification of potential risks, providing a clear metric for technical maturity ensuring innovations are systematically developed and validated.

It provides clear Technical objectives for each phase of innovation

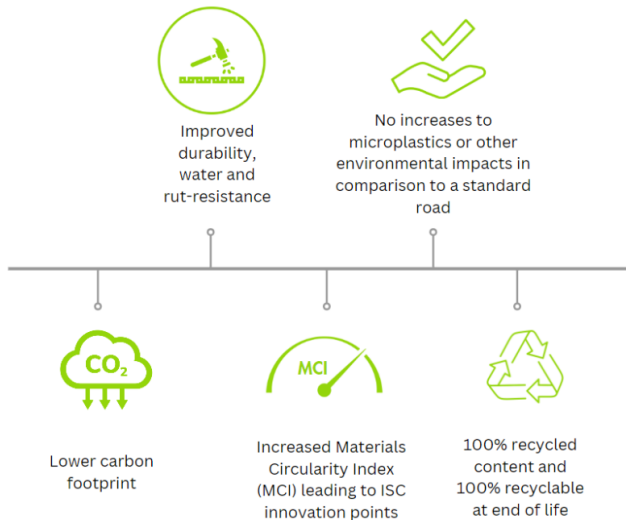
By defining clear synchronised maturity stages for each stage of development, Scimita's IGF enables organizations to manage risks effectively accelerating innovation in line with strategic business goals.

The Scimita Innovation Governance Framework™ (IGF) guides your investment decisions



Case Study – Close the Loop

TonerPlas



Circular Food

SMH 2017



Case Study – IQ Renew

Soft Plastics collection and remanufacture



Plastics



Virgin Plastic

Recycled Plastic

Difficulties



Money is no small matter

How important is money?

Scimita Ventures:

Derisking and creating value.

Close the Loop:

The project needs to stand on own.

IQ Renew:

Extremely important. Should be a pool of funds.



Inspirational quote

Steve Morris



“ Some people make things happen while others wonder what just happened. These are important times, the human species is at risk of extinction due to the majority being blissfully unaware that many planetary boundaries have already reached a point of no return.

We must increase our investment in innovation that stops the species decline, the destruction of natural systems, and speeds our transition to a Circular Economy. Innovate or die, literally.”

Thank you

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