

A WASTE RDI ROADMAP FOR SOUTH AFRICA

The Waste RDI Roadmap and the role of Research Chairs



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CSIR
our future through science

10-year Waste RDI Roadmap for SA



- **Vision**

- Increased well-being and prosperity through science, technology and innovation

- **Mission**

- To provide leadership, an enabling environment, and resources for science, technology and innovation in support of South Africa's development

The **Waste RDI Roadmap** and associated **Research Chairs** are therefore implemented in line with the DST's mandate *"to use **science** and **technology** to improve the country's economy, create employment and improve the quality of life of all citizens"* [Minister, 2014], as part of a suite of strategies including the Global Change Implementation and Bioeconomy Strategies



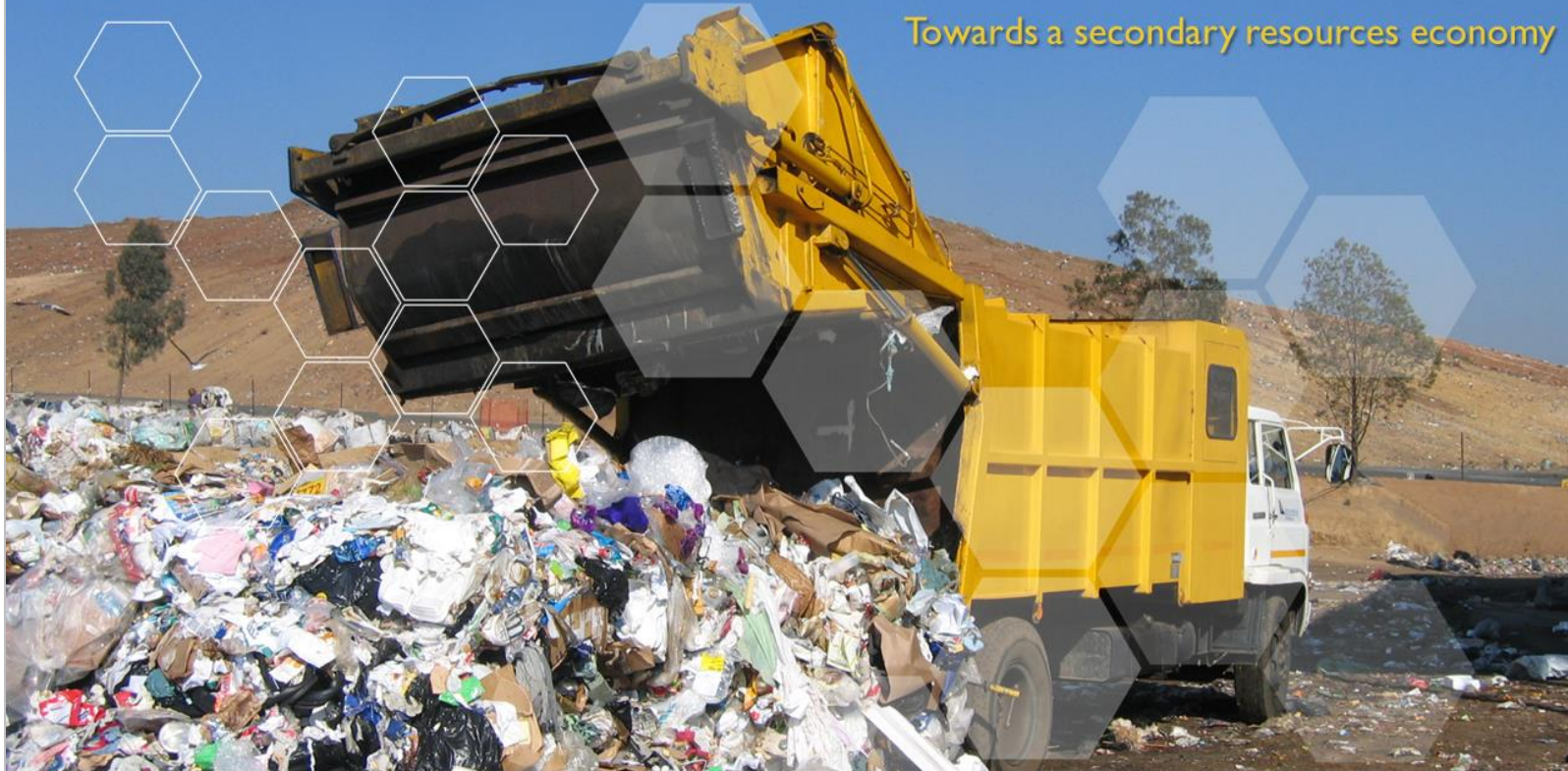
10-year Waste RDI Roadmap for SA

- The Waste RDI Roadmap, an initiative of national government, sets out a plan aimed at **guiding waste R&D and innovation**, and associated investment, in South Africa over the next 10 years
- Through a consultative process with industry and academia, stakeholders identified a number of short-, medium- and long-term **RDI objectives** necessary to achieve the goals of the Roadmap, and South Africa's national waste policy objectives
- This included the establishment of, amongst others, **Research Chairs**, aligned with the Clusters of the Waste RDI Roadmap, aimed at embedding activities of the Waste RDI Roadmap within the National System of Innovation

10-year Waste RDI Roadmap for SA

A WASTE RESEARCH, DEVELOPMENT AND INNOVATION ROADMAP FOR SOUTH AFRICA (2015-2025)

Towards a secondary resources economy



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www.wasteroadmap.co.za



10-year Waste RDI Roadmap for SA

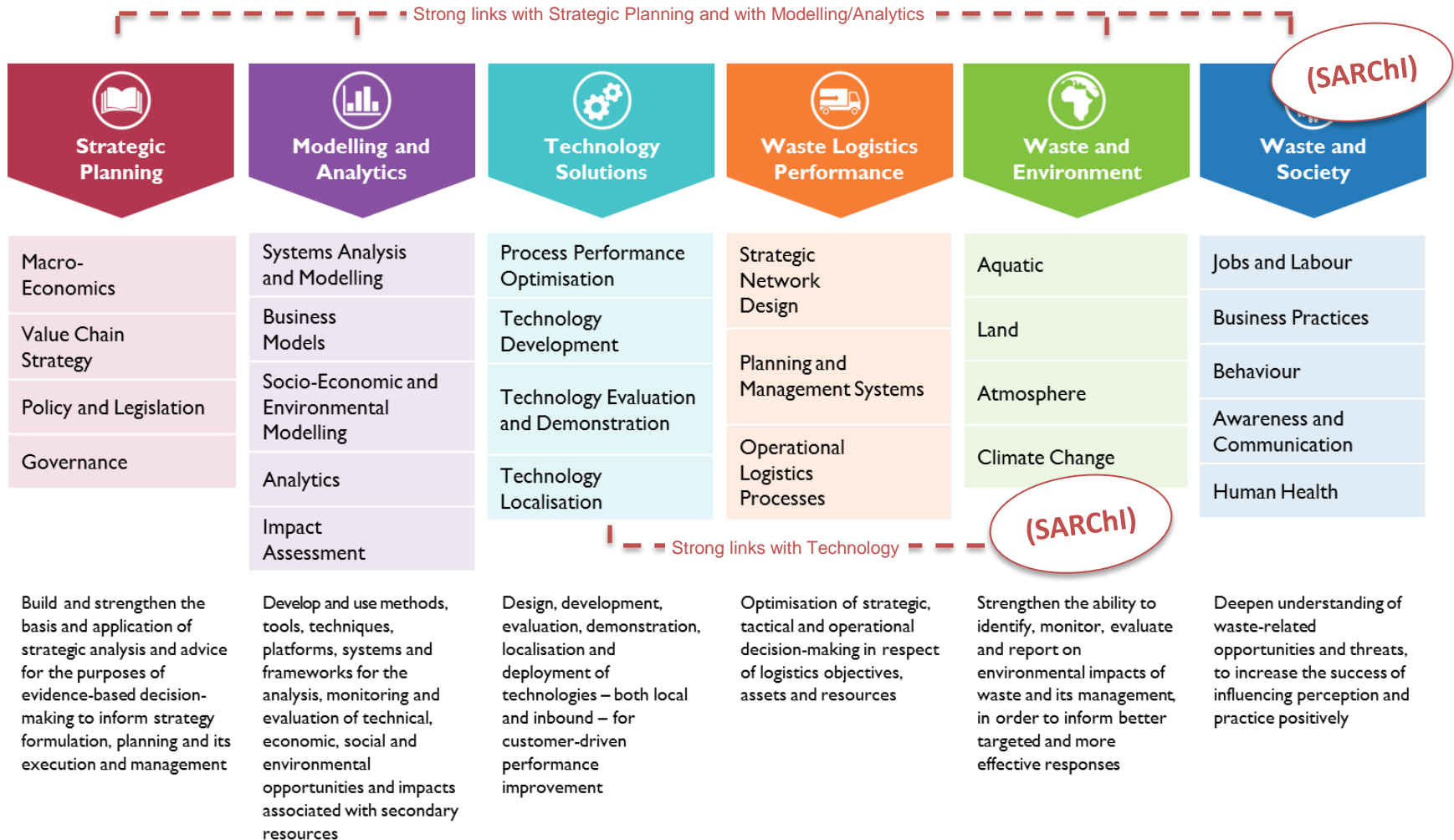
- Waste diversion away from landfill –
 - Creates opportunities to move resources into a **local** secondary resources **economy**
 - And in so doing, create **environmental**, **social** and **economic** opportunities for South Africa
- In this lies significant **opportunity** and **need** for research, development and innovation (RDI) to –
 - Unlock **new solutions** for utilising “waste”
 - Inform **policy** development and implementation
 - Inform **technology** uptake
 - Inform decision-making through **sound evidence**

Alignment of the Research Chairs

- The Waste RDI Roadmap sets out ambitious targets for a number of KPIs
- The SARChI Research Chairs are one of a number of instruments to give effect to achieving these KPIs
- As are partnerships between Government, Academia and Business

	Key Performance Indicator	Outputs Ambitious**
Technology Development	Products and services to market	4
	Technology packages	20
	Prototypes	60
Knowledge Generation	Registered patents	25
	Patent applications	70
	Publications	590
Human Capital Development	Post Docs	65
	PhDs	165
	Masters	245

Alignment of the Research Chairs





Conclusion

We look forward to working with our Research Chair holders and key partners over the next 5-10 years as we continue to strengthen South Africa's R&D and innovation with regards to social and behaviour issues, and the opportunities for job creation in the waste sector, and in exploring opportunities for climate mitigation, and greater organic waste and industrial biomass diversion to alternative waste treatment technologies both within local government and industry

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Waste RDI Roadmap

Outlines the proposed interventions, progression paths and the related instruments, and the required RDI investment over time



Trends

Describes the local and global trends in waste management and approach adopted in arriving at the priority waste streams for the Roadmap



Capabilities

Maps the nature, availability and maturity of waste RDI capability and capacity in South Africa



Opportunities

Provides an overview of the Market Opportunities we see, how attractive they are and what is required to realise them