

## When we collaborate we can go further: Insights from the Australia India research and industry collaboration to reduce plastics waste

CSIRO Ending Plastics Waste Symposium 2023 in Sydney

Heinz Schandl, CSIRO Environment, Canberra

# A three-year collaborative project funded by the Australian government

Six research institutes and over 40 researchers

With participants form industry, government and community

A circular economy roadmap for plastics in India



### India's plastics material flow in 2019







### Two possible futures for India's plastics material flows





### The seven elements of India's circular economy of plastics





## **Overall strategy**

- 1. Set a single, clear framework and implementation plan: a practical policy framework for circular economy, in which all initiatives and information have a place, and a plan to put it into action.
- 2. **Develop a circular economy transition body** to connect industry and government.
- 3. Include all plastic types: municipal solid waste, industrial waste, hazardous waste, e-waste, medical waste, and so on.
- 4. **Recognise and engage all stakeholders,** especially the informal sector of waste pickers and recyclers. They are the backbone of the Indian waste management system through their door-to-door collection yet are excluded from formal policy support and recognition. Collaboration must encompass the strengths and opportunities of the entire ecosystem: across the petrochemical industry, ULBs, informal cooperatives, PIBOs and regulators.



## **Overall strategy**

- 5. Streamline effective regulations: make regulations and guidelines for recycling, materials re-use and energy, clear enough to be effective for developing CBMs and fostering circular consumption behaviours.
- 6. Create systems to support state governments to design and implement action-plans for circular economy of plastics that encourage decentralised governance and implementation at municipal and panchayat levels, leveraging local skills, networks and enabling local contextual responses.
- **7. Integrate learning along the supply chain.** Enable continuous bottom-up learning, feedback and knowledge to all stakeholders across the plastic value chain.
- 8. Phase out plastics: set dates beyond which the manufacture of certain plastics is banned, and support manufacturers of these materials to transition to alternative products and businesses.
- **9. Support the circular economy** with public procurement policies and fiscal and tax incentives that prefer secondary plastic waste-based products and businesses.





## Thank you

#### https://research.csiro.au/rpwi/

Environment Heinz Schandl heinz.schandl@csiro.au

please get in touch if you would like to discuss further https://people.csiro.au/S/H/Heinz-Schandl

Australia's National Science Agency