

# ICP-AGIR Best Practice for JOHANNESBURG (South Africa)

Plastic Pact	
	Johannesburg (South Africa)
Departments / Institutions involved	University of Johannesburg, Process Energy & Environmental Technology Station (UJ PEETS) City of Johannesburg (CoJ)
ICP AGIR City Coordinator and contact data	KATE JOSEPH  Deputy Director  KateJ@Joburg.org.za
ICP AGIR Pairing Manager	ANDREAS SIREN  andreas.siren@icp-agir.eu
Description of the best practice	The collective vision is a world where plastic is valued and retained in a circular economy, with benefits of job creation, economic growth and the prevention of plastic waste pollution in the environment.
Theme and sub-theme if appropriate	Circular Economy

Description of Best practice	
Challenge Addressed	Much of the plastics produced currently are drawn from virgin feedstock and are not effectively reused nor recycled. As such the environmental impact of plastic pollution globally is a serious challenge.
	Companies are facing increasing pressure from government, customers, media and other stakeholders to address the problem of plastics pollution.
Solution Implemented	The Plastics Pact Network is a globally aligned response to plastic waste and pollution, which enables vital knowledge sharing and coordinated action to implement solutions towards a circular economy for plastic, tailored to each geography ( <a href="https://ellenmacarthurfoundation.org/the-plastics-pact-network">https://ellenmacarthurfoundation.org/the-plastics-pact-network</a> ).





Both South Africa and Italy are signatories to the Plastics Pact Network.

By 2025, The SA Plastics Pact will transform the way that South Africa makes, uses and disposes of plastic by:

- 1. Taking action on problematic or unnecessary plastic packaging through redesign, innovation or alternative (re-use) delivery models
- 2. 100% of plastic packaging is designed to be reusable, recyclable or compostable in the South African context.
- 3. 70% of plastic packaging is effectively recycled.
- 4. 30% average recycled content across all plastic packaging.

The increased demand for recycled plastics is driven by South Africa's mandatory EPR (Extended Producer Responsibility) system, various economic instruments and the SA Plastics Pact's Target 4 to ensure recycled plastic is economically competitive to virgin plastic.

As a result, businesses will be aware of the impacts of their plastic-use and SA Plastics Pact members will have rationalised plastic types and formats to facilitate improved recycling efficiency, maximising the value and lifetime of plastics – thereby keeping these plastics in the economy and out of the natural environment.

At the same time, all SA Plastics Pact members' plastic packaging is to be designed, and clearly labelled for the consumer, to be recycled, reused or composted.

This will help give rise to an increase in the quantity and quality of jobs in the recyclables sector: Recyclables collectors and sorters will be able to access source-separated material, and produce well-streamed high-quality material. The formal and informal recyclables collection and sorting sectors are to be well-integrated, with informal livelihoods protected and valued. In addition, new refill businesses are expected to enter the market, and the contribution of the recycling sector generally, to national Gross Domestic Product will increase.

Plastic recyclers will be able to produce high quality recyclate due to the improved quality of inputs, which can then be reused by business; establishing a robust circular economy for plastic.

## **Partnerships**

The Alliance to End Plastic Waste is a consortium supporting the SA Plastics Pact 2025 targets, comprising representatives from the below:

GreenCape – The Secretariat of the SA Plastics Pact. An NGO facilitating growth in a green and circular economy, by assisting business and investors to remove barriers to establishment and growth; and supporting all levels of government to build a resilient green economy.

City of Johannesburg – Metropolitan government partner that has instituted a separation at source programme in the City.





JG Afrika - Engineering and Environmental Consultancy, Integrated waste management strategies and the design of waste transfer and material recovery facilities, design of alternative waste technologies, and landfill diversion strategies, who have worked extensively with CoJ.

The African Reclaimers Organisation (ARO) – Building relationships with residents, engaging with municipalities, convening "informal" reclaimers for access to better working conditions.

SAPRO – SA Plastic Recyclers Organisation, advocates for the recycling industry in government and business, is a hub of expertise in the recycling sector in SA.

UJ-PEETS – academic partner undertaking the waste characterisation study in Linbro catchment area. UJ-PEETS supports various capacity building and policy influencing initiatives to grow the green economy, while providing engineering and technology development support to SMEs.

#### **Lessons Learned**

The project has been initiated but has not yet been evaluated. The framework for implementation of the pilot project is detailed below. Within the next 12 months the following is planned:

The pilot project will target the Linbro Park catchment area which holds 30.9% of the population of the City of Johannesburg and produces 65.6% of the City's per annum waste generation. Of the 1.05 million tonnes of waste generated per annum in this area, around 74,000 tonnes (minimum) is estimated to be plastic.

Improved collection, reuse & recycling: Objective 1: Increasing collection and sorting of plastics from the Greater Alexandra area, Midrand, Norwood, and Marlboro (low to high income residential areas), by supporting the informal waste pickers and buyback centres.

### This will include:

- a. A waste characterisation study undertaken by UJ PEETS which can assist the CoJ collect data to inform future waste management business modelling and circular technologies.
- b. Buy back centre survey aimed at better integration of informal collectors.

Objective 2: Reducing direct plastic leakage into the environment in low-income areas, through a model of alternative service delivery.

#### This will include:

c. Development of satellite aggregation model.

<u>Citizen education & engagement:</u> Objective 4: Increasing citizen and business engagement in the responsible use of plastics through awareness and behaviour change campaigns.





	<ul> <li>This will include:</li> <li>d. Developing a study on consumer behaviour in SA linked to plastics.</li> <li>e. Developing citizen and business engagement strategies.</li> <li>Growing end markets for recycled plastic: Objective 3: Incentivizing and mobilising demand for recycled plastics through private and public sector.</li> <li>This will include:</li> <li>f. Partnering with PROs.</li> <li>g. End market modelling and strategy for recycled plastic.</li> <li>h. Identifying and developing high-impact business models</li> <li>i. Engaging with potential investors.</li> </ul>
Main Milestones	Increase in plastic waste collected: Developing to 50,000 tonnes per annum additional plastics collected.  Translate to ~4,000 jobs, and ~25,000 income opportunities for collectors (across informal and formal).  Plastics recycling rate increase: An estimated additional 38,000 tonnes per annum plastic packaging recycled back into high value products and packaging.  Boost SA plastics packaging recycling rate from 45% to 50%.  Divert considerable proportion of waste from landfills.

Materials for promotion	
Quote from city representative	The City of Johannesburg, an Alliance to End Plastic Waste partner, will further lobby politicians for the City to become a supporting member of SA Plastics Pact in order to engage with plastic producers to reduce plastic waste, promoting the circular economy value chain for plastics (reducing problematic waste, redirecting, recycling).  The City of Parma, will lobby politicians to become a supporting member and leverage the European Plastic Pact to engage with plastic producers to reduce plastic waste.
Graphic Material	Power Point Presentation: 20221019 Building an inclusive system to tackle plastic waste
Online links	https://ellenmacarthurfoundation.org/the-plastics-pact- network https://www.saplasticspact.org.za/ https://europeanplasticspact.org/ https://endplasticwaste.org/