

# RECYCLING AND CIRCULAR ECONOMY SOLUTIONS IN COTE D'IVOIRE



*Creating Markets, Creating Opportunities*

# Agenda

- 1. Welcome remarks**
- 2. IFC approach to circular economy in plastics  
globally and in West Africa**
- 3. Plastics Value chain and Private Sector Engagement  
Opportunities in Côte d'Ivoire**
- 4. Next Steps / Potential Areas of Collaboration**
- 5. Summary and Closing**

# Circular economy: IFC approach

## Why engage in CE:

- Optimize supply chain and diversify input materials
- Reduce operating costs
- Deliver positive impact on the environment

## What IFC does:

- Helps develop the needed market intelligence
- Provides tailored industry expertise to augment the client's capacity
- Helps improve the regulatory framework

## Why develop supply chains:

- Ensure the needed quantity of inputs materials
- Better manage quality and cost
- Help create jobs and improve social inclusion

# Circular economy: IFC offering

**Primary focus: scaling up circular economy solutions through private sector-driven solutions**

Improvement of enabling environment and policy advocacy

Market intelligence, replicable technologies and business models that help overcome barriers

Identification of longer-term project opportunities and working to remove barriers towards implementation

**Creating Markets Advisory**

Development and support in implementing bankable recycling and circularity projects

**Upstream support**

**Investment and Advisory services**

# West Africa Plastics initiative

- Objective: help increase the use of recycled content in plastic products, including bottles and other packaging, de-risk IFC investment in the petrochemicals and plastics production
- Follows the market mapping and the transaction with Engee PET in Nigeria, builds on the Cote d'Ivoire manufacturing Project
- Focus on CDI and Ghana, support in mapping plastics value chain, development of bankable recycling projects, improving readiness of industrial offtakers, strengthening value chains
- Phase I: diagnostic and scoping in the target countries
- Aimed at identifying immediate and long-term project opportunities



# Plastic waste in Côte d'Ivoire

- Over 300,000 t generated annually, mostly PE and PP (over 250,000 tpa), as well as PET (over 35,000 tpa, mostly packaging (consumer single-use bags as well as agricultural export packaging)
- Total recycling rate doesn't exceed 10%, mostly through PE or PP (30,000 tpa) and PET (2,000 tpa)
- PET recycling industry is export-oriented, PE/PP is local market-oriented
- Local recycling ecosystem is based on community-collection schemes that rely on informal waste pickers
- Scaling up of recycling is limited by lack of collection and sorting infrastructure, low bankability of projects, low local demand



# Challenges and issues for discussion

## Market and enabling environment

- Is the available market information reliable and sufficient?
- What are the regulations on the use of recycled products? Are standards in place?
- Are the issues with access to regional markets for recycled products from CI and vice versa?
- What are the environmental regulations and challenges of recycling?
- What is the status of the public-private dialogue?

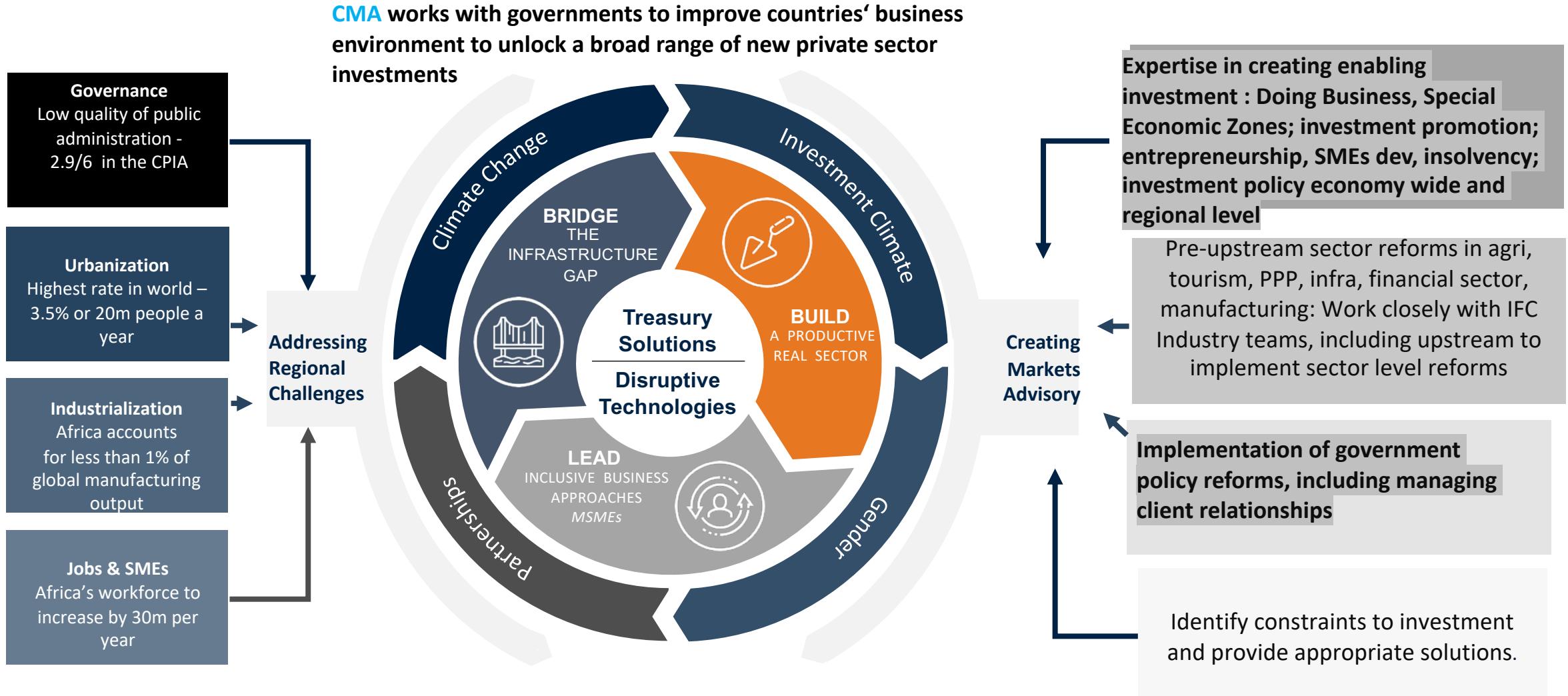


## Technology, business models and project economics

- What types of projects are currently bankable and what are the risk factors?
- What is the availability of technologies and solutions to open up new recycling opportunities (construction materials, plastic furniture, non-food grade packaging)?
- Are existing business models (community-based recycling) scalable? Will they be efficient with the introduction of EPR and/or other incentives?
- What is the role and the status of informal players?

# Annexes

# Creating markets advisory: improving the enabling environment through sector reform



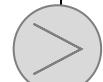
# Working Upstream: a holistic approach to tackling development challenges and mobilizing private investors

## What does it mean to work Upstream?

- Working Upstream **means unlocking and creating markets** and opportunities to invest for impact in emerging markets. Our goal is to create the conditions in low-income and fragile countries that lead to private investments
- Working Upstream **combines our roles as bank and entrepreneur** to bring private sector solutions and investment to address the world's biggest development challenges

## What is our motivation for working Upstream?

- Emerging markets need private sector investment now more than ever, especially low-income and fragile countries —particularly as they grapple with the impacts of COVID-19
- However, **there is a shortage of commercially viable opportunities** due to a range of market bottlenecks. Creating the conditions for private sector investment that otherwise would not have occurred is critical



## How do we plan on working Upstream?

### Creating markets by:

- Committing time and resources to create, deepen and expand markets, and imagine, design and implement investment projects
- Partnering systematically with the World Bank and other actors to identify and develop policies, regulations and frameworks for private sector investments where needed
- Investing in and helping develop high-impact projects at an early stage

### Mobilizing the private sector by:

- Creating solutions to development challenges by providing necessary political-risk and financial products to address gaps in commercial and financial structures
- Crowding in more patient private capital from other investors for SSA opportunities

# Working Upstream: a holistic approach to tackling development challenges and mobilizing private investors

## DEVELOP AND INVEST IN EARLY-STAGE PROJECTS



## BUILD GLOBAL DELIVERY PLATFORMS



## ENGAGE IN MARKET AND SECTORAL LEVEL SUPPORT



- Support development of innovative, scalable, replicable and high impact opportunities that address a market and/or investment gap
- Partner with private sector institutions to improve capabilities for project development

- Design, structure, and implement platforms and programmatic approaches to increase access to essential services, create jobs and introduce innovation at scale
- Collaborate with private sector companies in piloting or refining these platforms

- Convene and collaborate with partners to reduce regulatory and sector level obstacles, share risks/knowledge and mobilize funding thereby increasing the opportunity space for investment in SSA
- Develop strong linkages between private sector projects and the objectives of governments

# IFC Advisory: support in developing and implementing bankable projects



## Assessment of opportunities and business models

- ✓ Analysis and forecast of demand for raw materials that can be met with non-virgin inputs
- ✓ Comparative assessment of business models to expand collection and reduce the cost of sourcing
- ✓ Stakeholder mapping and analysis; development of partnership framework



## Project implementation support and supply chain development

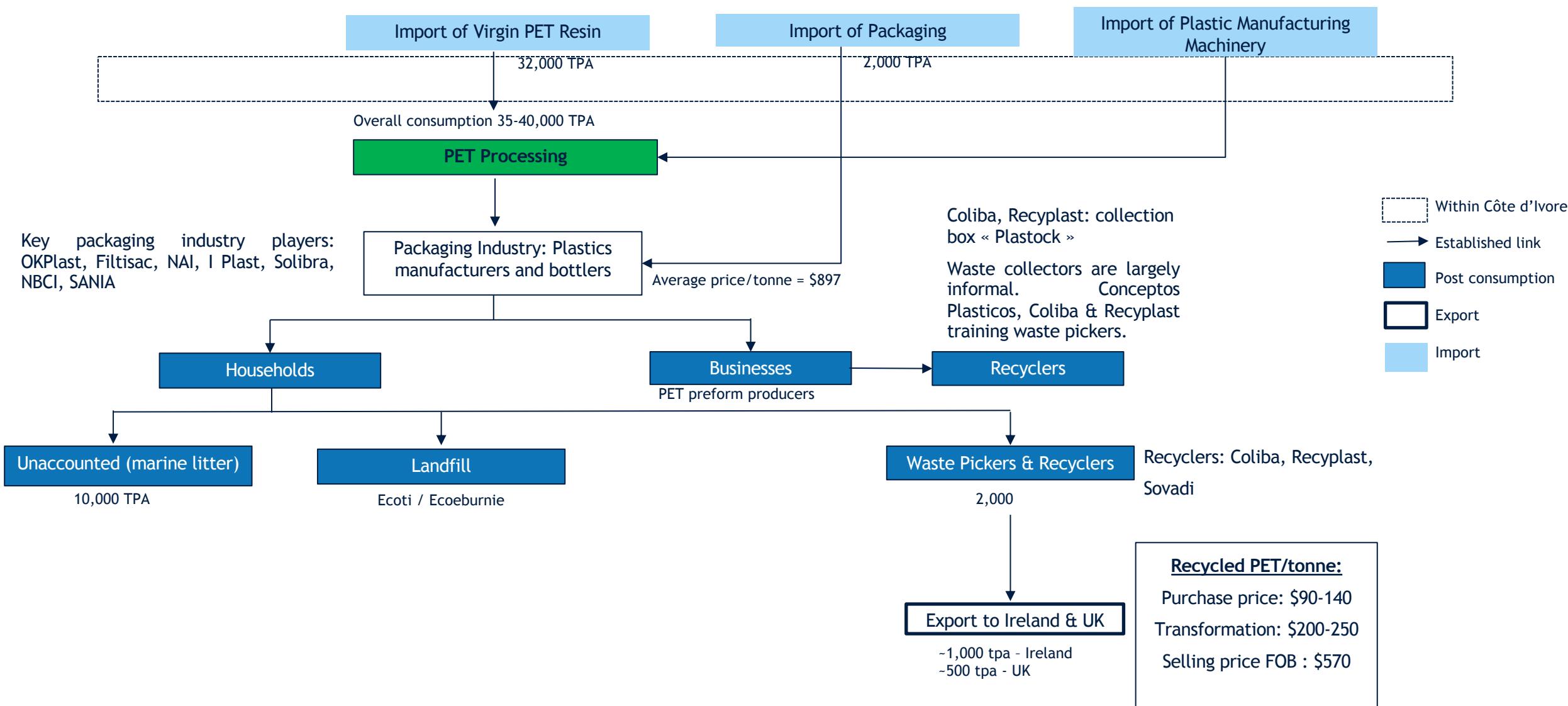
- ✓ Technical and economic feasibility assessment of specialized recycling facilities
- ✓ Contribution to the technical guidelines, environmental and occupational compliance programs for supply chain players
- ✓ Support on collaboration with existing circularity platforms



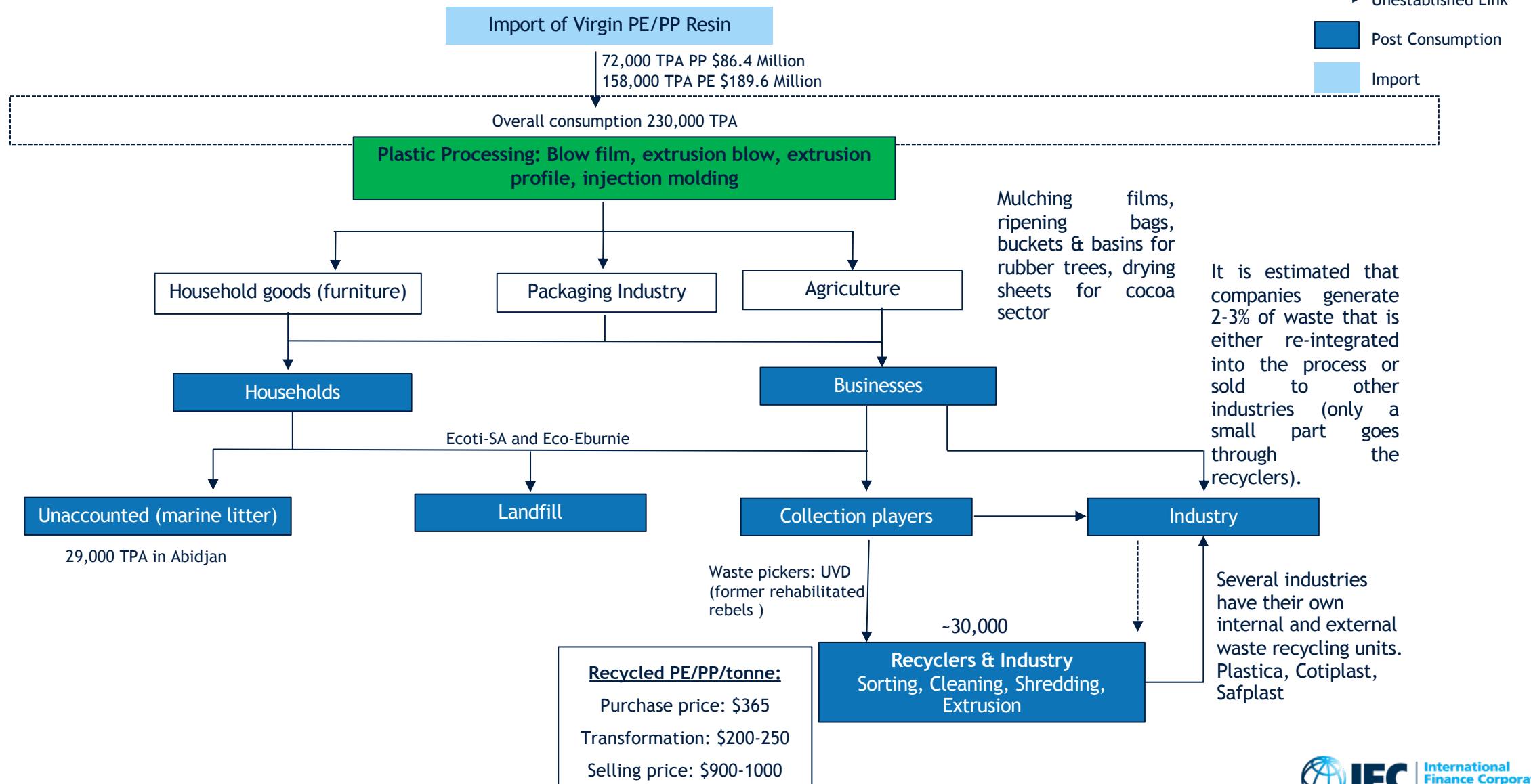
## Building knowledge & developing enabling environment

- ✓ Development of market intelligence
- ✓ Development of replicable tools, methodologies and guidelines for project assessment
- ✓ Facilitation of stakeholder and policy dialogue

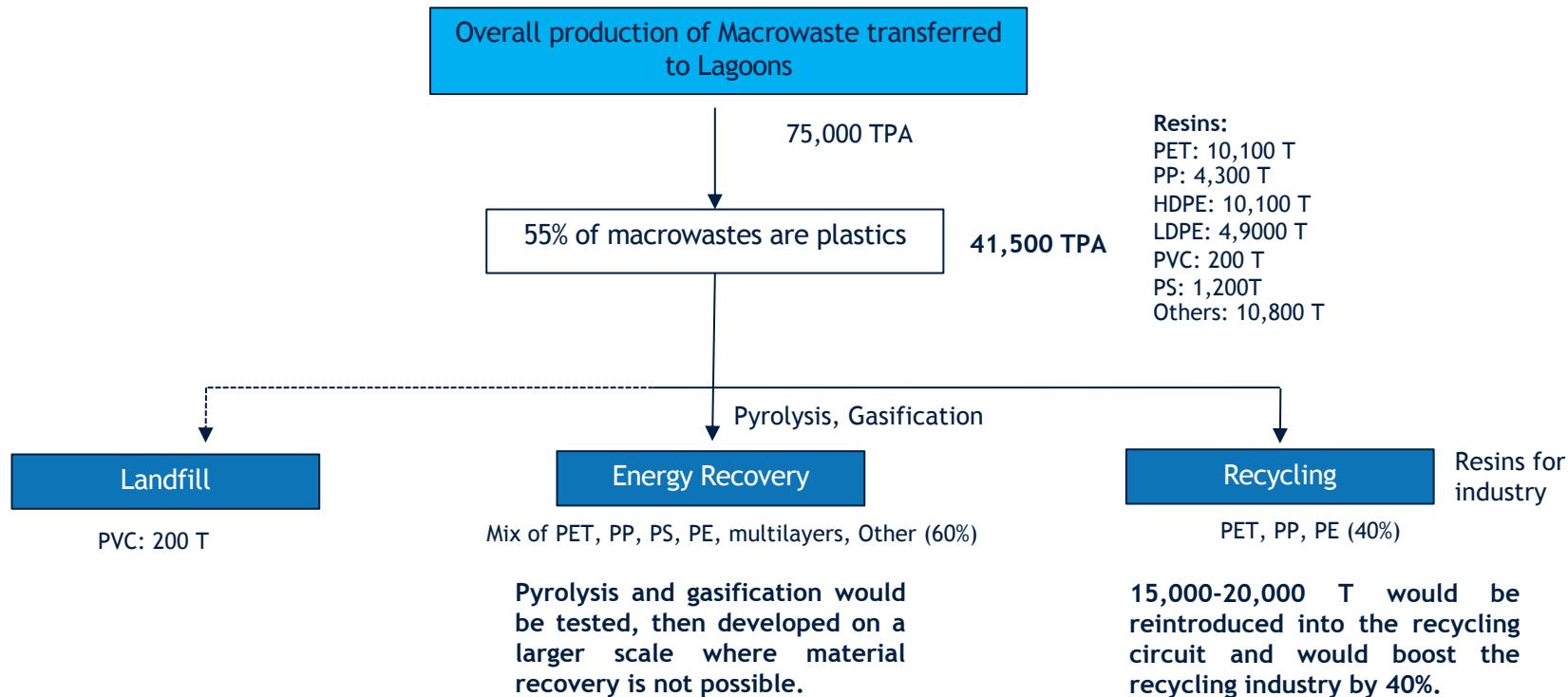
# PET Value Chain



# PE & PP Value Chain



# Lagoon Plastic Waste



## Quantities of macrowaste

Analysis of the current system of collection and treatment of solid household operated by two operators (ECOTI and ECO-EBURNIE):

- Average collection rate of 56%, 3500 tonnes/day of waste collected.
- 44% of waste is not collected, 2750 tonnes/day.
- Among this waste, the proportion of macro-waste ≈ 25% (due to the high rate of putrescible waste)
- Estimation of macrowaste flows transferred to lagoons. 207 tons/day, **75,000 t/year**
- Quantification of landed stocks ≈ 10,000 tonnes.