

# 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

Upstream support

Creating Markets Advisory

Development and support in implementing bankable recycling and circularity projects

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 Cote 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?

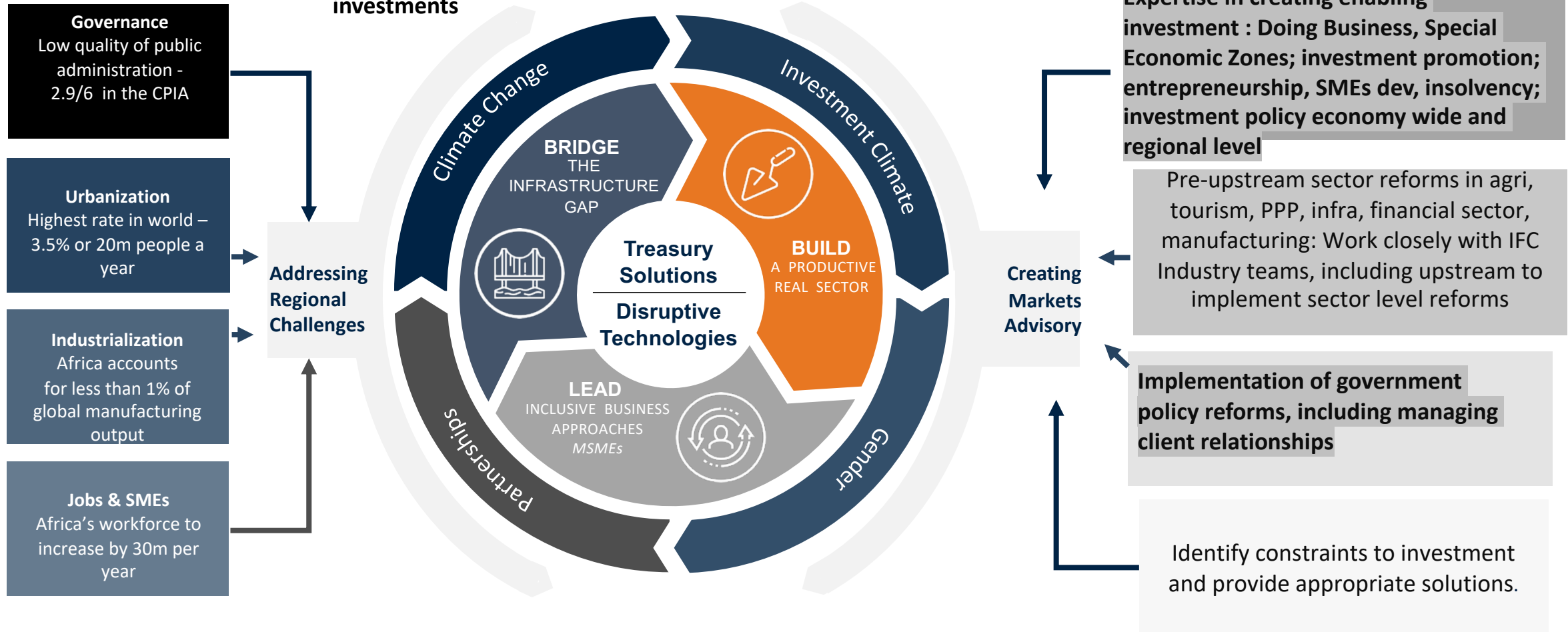


# Annexes



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

**CMA** works with governments to improve countries' business environment to unlock a broad range of new private sector investments



# 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



- 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

## BUILD GLOBAL DELIVERY PLATFORMS



- 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

## ENGAGE IN MARKET AND SECTORAL LEVEL SUPPORT



- 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

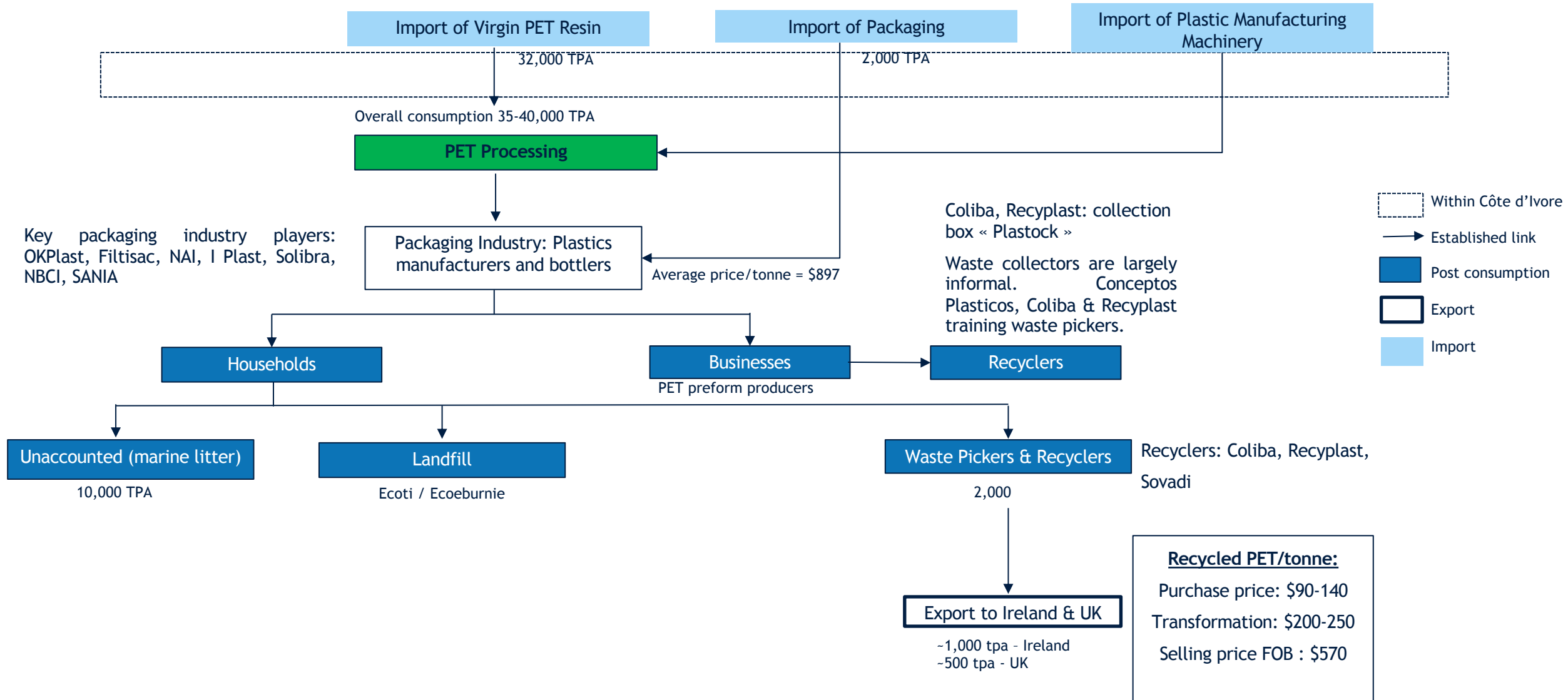
- ✓ Technical and economic feasibility assessment of specialized recycling facilities
- ✓ Contribution to the technical guidelines, environmental and occupational compliance programs for supply chain players
- ✓ Support on collaboration with existing circularity platforms



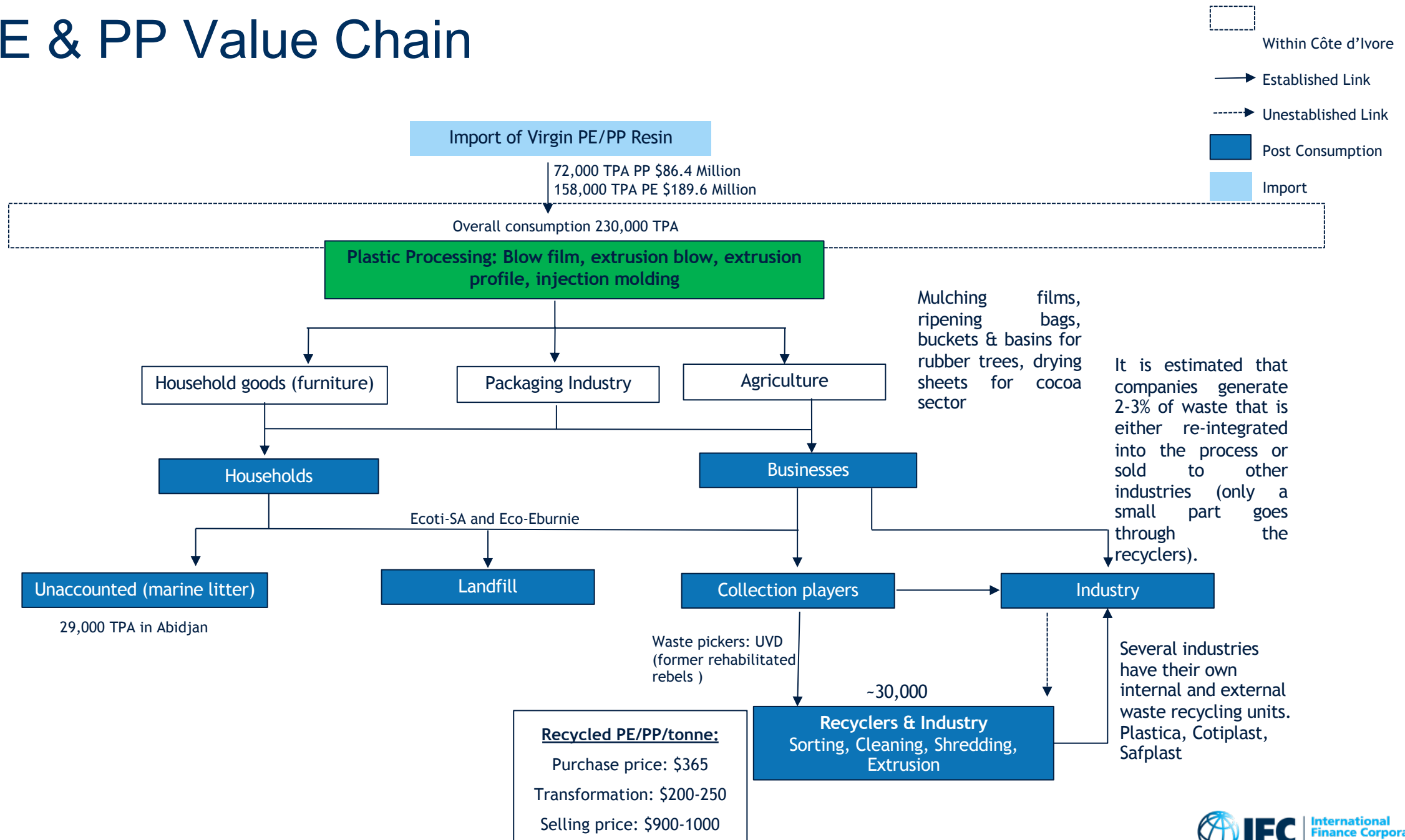
## Building knowledge & developing enabling environment

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

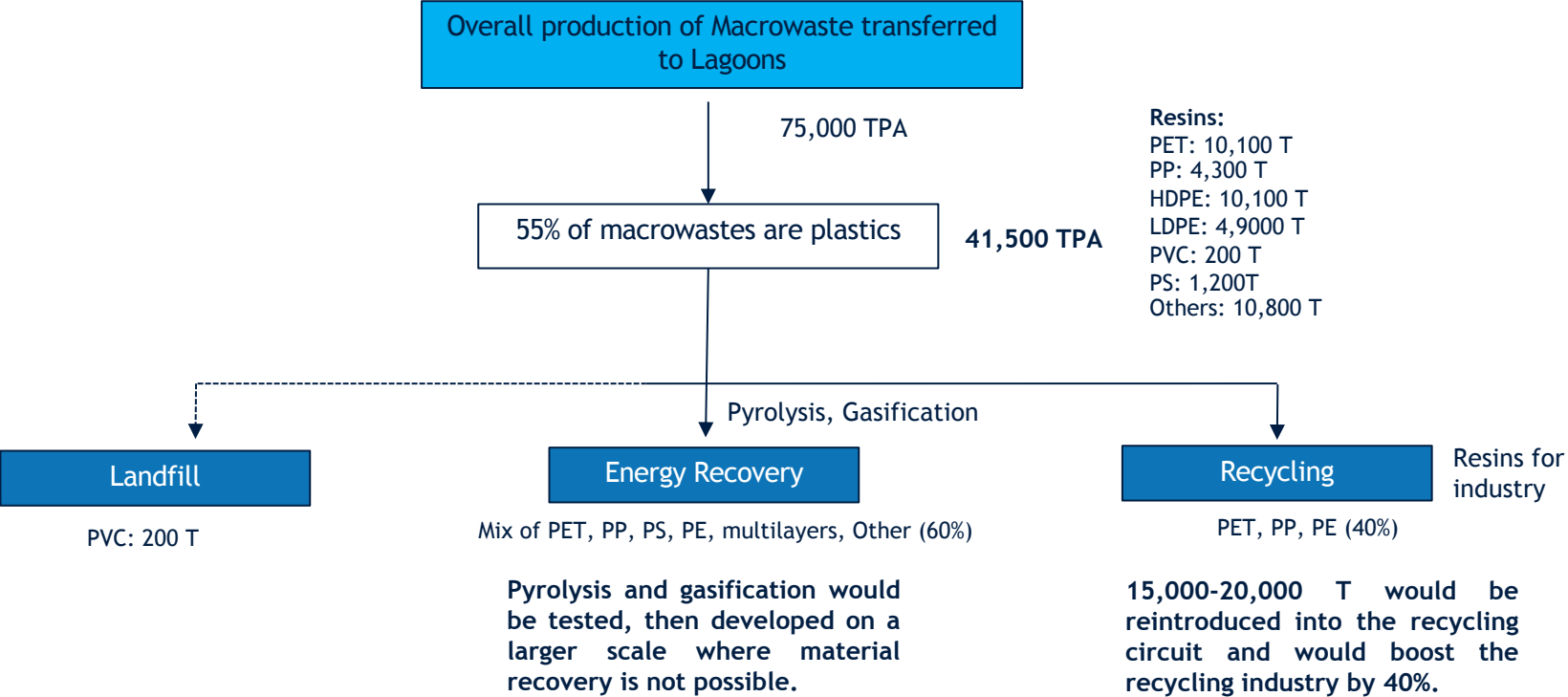
# PET Value Chain



# 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.