

Institutional suitability and arrangements for a circular economy in Industry Parks; the case of Ethiopian Industrial Parks Development Corporation(IPDC)

the pioneering Sustainable Industrial Area

by Gizachew Mern IPDC, Senior Environmentalist Feb, 2020

Overview of Ethiopian Industrial Parks Development (IPDC)



The Ethiopian Industrial Parks Development Corporation (IPDC) was established in 2014,

IPDC was established to achieve the following purposes:

- To develop and manage industrial parks,
- To prepare detail national industrial parks master plan
- To serve as industrial park land bank
- Availing necessary infrastructure accessible to industrial park investors
- Operating and Maintaining Industry parks

IPDC has communicated its Vision, Mission and Core Values as follows:



VISION

• To be an innovative and leading eco-industrial parks developer and operator in Africa by 2025

MISSION:

- highest standards of professionalism;
- drive industrialization,
- promote exports,
- create employment opportunities

CORE VALUES:

- Highest level of integrity and professionalism
- Learning organization
- Concern to the environment
- Effective and efficiency
- Customer satisfaction



Industrial Parks Development Corporation (IPDC) Overview

- 11 Industrial Parks are under construction (HIP, BLIP1, BLIP2, KIP, MIP, KIP, DDIP, JIP, DBIP, BDIP and AIP)
- Textile sector is priority industry in the country (others will be added next)
- 30 industrial parks are planned to be constructed with in next 10 years
- 2 million workers will be employed with in next 10 year
- Foreign Direct Investment will be improved
- Eco-Industry Parks principles are adopted

Existing and future IP location









IPDC shall comply national and international legislations (Proc.

886/2015) including:

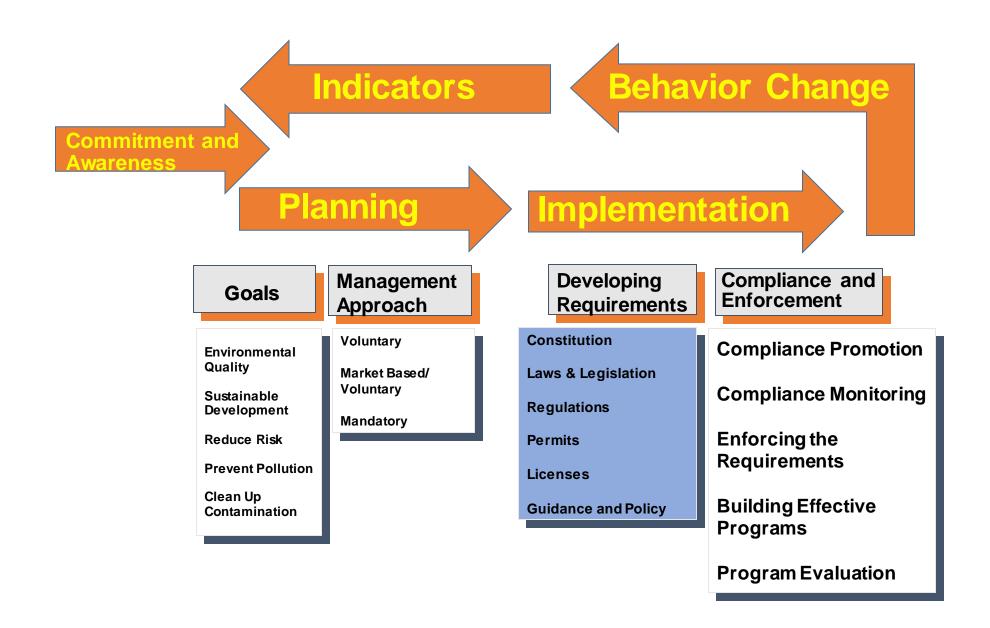
- Environmental Impact Assessment (Proc. 299/2002) and (Reg. 417/2009)
- Solid Waste Management (Proc. 513/2007)
- Environmental Pollution Control (Proc.300/2202)
- Prevention of Industrial Pollution (Regu. 159/2008)
- Hazardous Waste Management and disposal (Proc. 1090/2018)
- Electrical and Electronics Waste Management and Disposal (Proc. 425/2018)
- Registration and Administration of Industrial chemicals (Proc. 1075/2018)
- Provisional Standards for Industrial Pollution control and others

Institutional frame works

- has established environment protection and social safeguard directorate at HQ.
- Has wastewater treatment units at each IPs
- Has drinking water supply team at each Ips
- Has ESM unit at IP level
- Committed to build Eco-Industry Park

Our target towards circular economy compliances







Main Circular economy requirements at Industry Parks requirements

Technology standard (innovative technology)

Performance standard (risk reduction)

■ Economic requirement (feasible?)



Why IPDC enforce Environmental circular economy legal frameworks?

- Achieve Environmental Goals and create a GREEN economy
- Level the Playing Field
- Create Integrity in the Law
- Create Public Respect for the Government and IPDC
- Ensure laws achieve objectives

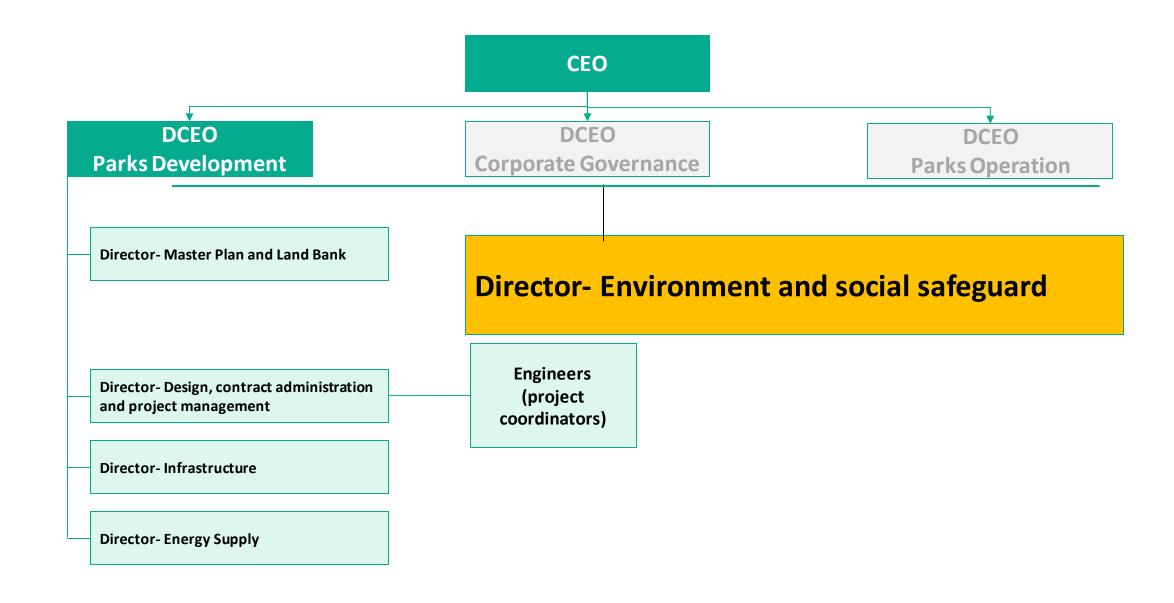


Benefits of circular economy for IPDC

- Socially acceptable
- Environmentally safe
- Resource efficient
- Tradable permits
- Cost Avoided
 - Costs for operating equipment, maintenance, etc. that will never have to be spent
- Cost Postponed
 - Return on investment of capital costs for equipment or systems that will eventually still have to be installed or purchased
 - Recognition of the time value of money

Man Power- IPDC Parks' Development Division Manpower Structure





Key Components of circular Economy in IPDC and our performance



Environment & Social Safeguarding

Environmental management systems
Establishment

Wastewater
Treatment
And reuse

Safe
drinking
Water in
the
catchment

Air and noise quality monitoring

Ecosystem
Services
Improvements
(Green belt)

Solid waste manage ment

Hazardou s material managem Management ent

rgy Social safeguards

Cross-cutting issues

Procedures, manuals& guidelines

- Institutional Capacity Building

- Cross institutional coordination

- Documentation

Major innovative Circular economy performances in IPDC



1. Solid Waste Management

- No solid waste send to land fill (textile scraps, plastics, food wastes, paper and cartoons)-we create jobs for SMEs
- Linkage for recyclers is created
- E-waste and empty chemical containers are still the challenge
- Sludge from the wastewater treatment is also a biggest challenge

2. Ecosystem services improvement in the Park

- Minimum 20% land area is green
- Composting organic waste to link to landscaping project is the gap
- Establishing nursery need partnership

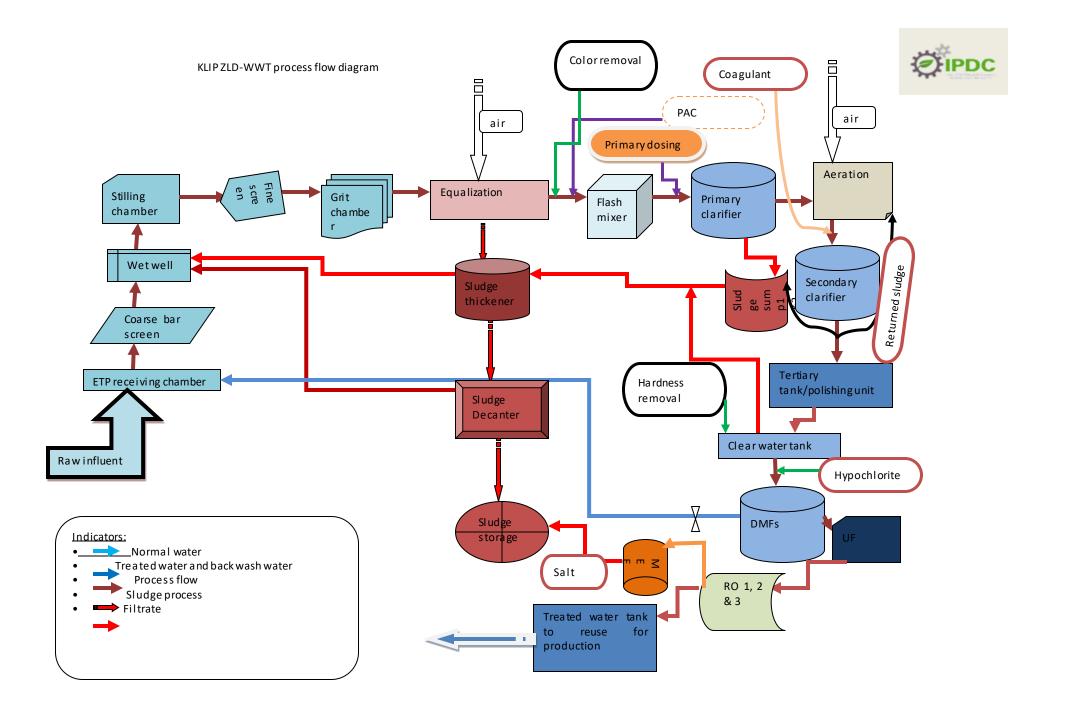
Major innovative Circular economy performances in IPDC-continued --



3. Wastewater treatment and reuse

- Zero Liquid and Advanced wastewater treatment plant were installed
- 20,000,000 cubic meter wastewater is treated per year
- 14,000,000 cubic treated wastewater is reused (production, greenery, irrigation)
- Alliance for Water Stewardship certification is started
- Cost recovery is a bigger challenge
- National laws need to be revised for subsidies of environmental projects

4. Eco-certification



Let us maximize our Partnership on industrial Area sustainability



Email:- gizachewmern@gmail.com

Phone: +251929487634