



**GREEN TECHNOLOGY DEPLOYMENT IN
INDUSTRIAL ZONES**

**9th meeting of the
CTCN Advisory Board
Bonn, Germany 3-5 April 2017**

The Genesis of the CTCN intervention

- ✦ In the framework of the Plan Sénégal Emergent, targeted actions are intended to develop integrated industrial zones. However, access to advanced technologies requires additional attention and support. Modern options for energy and resource efficiency and industrial symbiosis remain largely untapped

- ✦ This assistance supports :
 - Senegal's Nationally Determined Contribution(NDC) to:
 - Industrial process improvements
 - Reduction of industrial GHG emission (10% by 2030)
 - Senegal's Technology Needs Assessment (TNA) priorities:
 - Detailed strategies and implementation measures to deploy climate technologies in industries

The Genesis of the CTCN intervention

- ✦ Concepts of industrial symbiosis and greenfields industrial parks are not well known in the country. By connecting stakeholders and technology experts worldwide, CTCN assistance will bring new technologies climate-resilient in order to increase productivity and competitiveness and therefor attract foreign investment.
- ✦ CTCN is requested:
 - Assessment of resource-efficient and cleaner production in existing industries in selected priority sectors (e.g. agro-food, textile/leather).
 - Expert advice on the design od eco-industrial parks, capturing international best-practice.

- ✦ Define the framework conditions for the development of clean technologies.
- ✦ Define the capacity building needs of the stakeholders.
- ✦ Design of technology solutions that can result in a reduction of up to 10 % in energy consumption and greenhouse gas emissions for each pilot enterprise.
- ✦ Recommendations (policy, regulatory, financial, and technical, etc.) that can be replicated and scaled-up nationally in other industrial enterprises to multiply impact
- ✦ Define ambitious technical and financial support programs at the level of enterprise, industrial zone or park.

- ✦ Identify and disseminate best practices for development of an eco-industrial park (EIP) with a focus on industrial symbiosis (including energy and material resources treatment and recovery; waste valorization; use of renewable energy and sustainable material substitutes; and by-product reuse and recycling).
- ✦ Once operationalized, the park will facilitate the exchange of by-products among ten specialized labor-intensive hubs in textiles, agro-foods products, household goods, electronics, aeronautics and services, and offer trade and tax incentives to attract investors.
- ✦ Integrate into PSE projects the approach of clean production and industrial symbiosis.

✦ 2 EIP projects implementation:

- ✦ Rufisque: follow-up of detected industrial symbiosis, identification of new potential through participative approach (inter-active workshops and action plans), identification of a governance and its business model.
- ✦ Definition of an operative EIP action plans for 2 new industrial areas - zones à caractère spécial – (Diamniado and Dias), including business model for a governance body in coordination with Apix and Aprosi , implementation criteria...

✦ **National EIP network:** definition of a national platform that aims at facilitating local IZ governance, sharing good practices, follow-up of local actions.

✦ **National guidelines and charter:** establish a national vision for EIP, define indicators and criterias and develop a EIP toolbox. The Morocco experience might be a very good starting point. Synergies and cooperation with this experience are highly recommended.

✦ **Capacity building:** develop national expertise on industrial symbiosis identification and implementation and sustainable estate planning through:

- ✦ Master thesis, PhD
- ✦ Training of experts and professionals

Lessons learned

- ✦ The concept of EIP is not yet integrated by stakeholders, need of a communication, event, capacity buildings...
- ✦ Data and study are lacking of objective, exhaustive and up-to-date information.
- ✦ There is a need of a stronger presence of international experts in the field, to ensure a better transfer of information and to strengthen competencies



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