



CLIMATE TECHNOLOGY PROGRAM

Accelerating Innovation in the Development, Deployment and Transfer of Clean Technologies

Climate Innovation Centers:

*Local solutions and market opportunity
for domestic climate/clean tech industries*

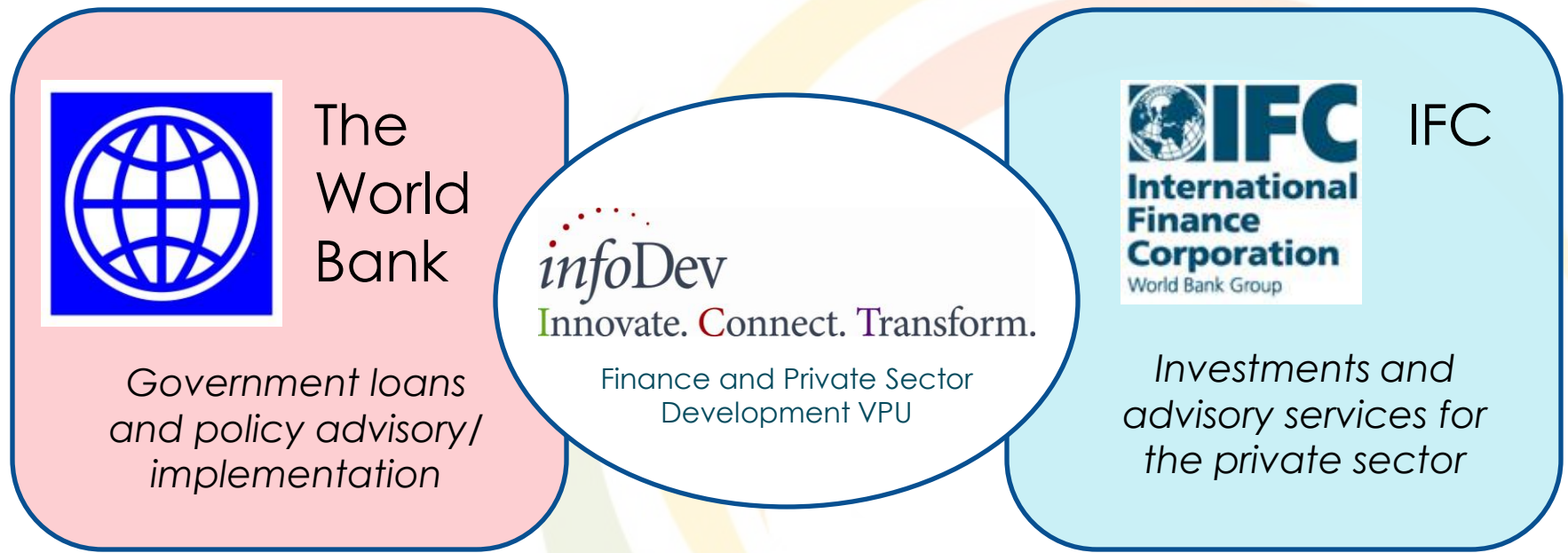
COP 16

Cancun, Mexico

Tuesday, 7 December 2010

Jonathan Coony

Coordinator, Climate Technology Program
infoDev, World Bank Group



- infoDev brings successful history of innovation in information and communication technology (ICT) for developing countries
- Rapid response team to react quickly to country needs
- A “mobile phone” technology solution for energy/climate?

Climate Innovation
Center (CIC)
Network to help
developing
countries create
competitive
industries for
innovative climate
technology
solutions that meet
local needs

Motivations:

- Countries want their private sector profitably involved in climate technologies
- Key part of the climate technology solution
- Numerous barriers facing them

Objectives:

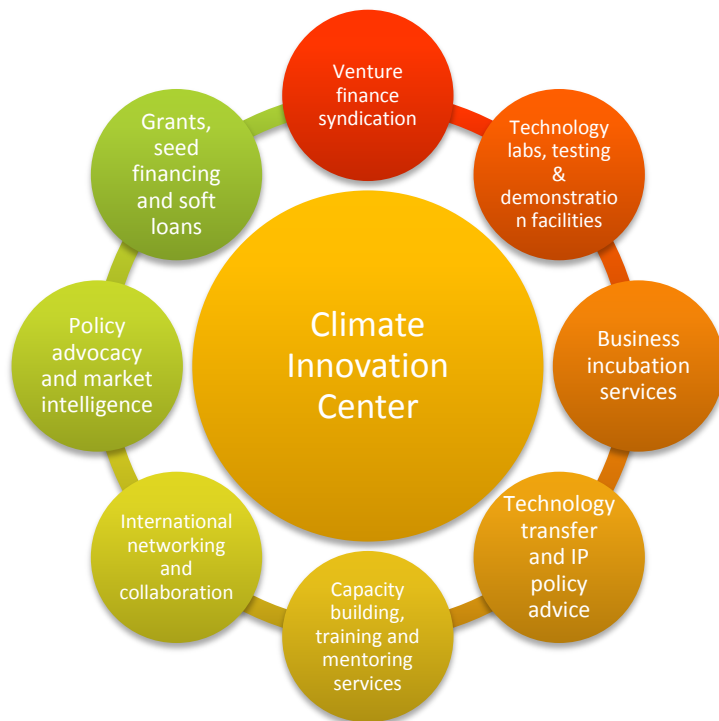
- Climate change mitigation and adaptation through advanced technologies
- Economic development and job creation through competitive domestic industry

A global network of Climate Innovation Centers (CICs) that address gaps to innovation and tech transfer

1

30 CICs in Host Countries

Physically or virtually hosted centers that provide a holistic portfolio of services and financing to enterprises in the climate tech space



Activities of Individual CICs

- Early Stage Financing
- Business Advisory Services
- Market Linkage and Entry
- Government Advisory
- Information Access
- Facilities

2

Global Network Linking CICs

A global network linking locally driven CICs that delivers opportunities for collaboration, tech transfer and access to export markets



Activities of Global Network

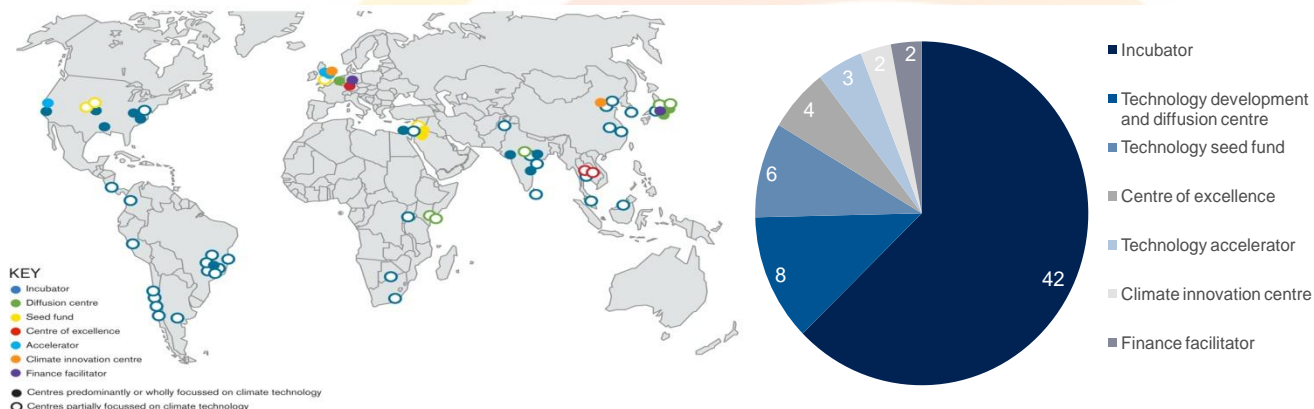
- Knowledge Platform
- B2B Forums
- Technology Transfer
- Demand Aggregation
- Sharing Best Practice
- A2F competitions

An infoDev Publication:

'Climate Innovation Centers: A new way to foster climate technologies in the developing world'

Global review of over 500 organizations and institutions supporting innovation:

- 67 relevant to climate change
- Gaps remain in both existing capacity & geographic coverage



Gaps identified in existing organizations included:

Access to Finance

- Insufficient financial assistance from innovation centers
- Bureaucracy in applications for public funding
- Shortage of private investment
- Lack of innovative financing options

Technology Information

- Lack of understanding of climate technologies
- Limited capacity to offer technical guidance or assistance
- Absence of technology needs assessments

Business Support

- Limited capacity for facilitating early-stage innovation
- Tendency to focus on support for later-stage companies

Market Analysis

- Lack of understanding of consumer needs
- Unavailability of market information and data to portfolio companies

Policy

- Lack of engagement in policy and regulation issues
- Insufficient efforts in setting and developing standards

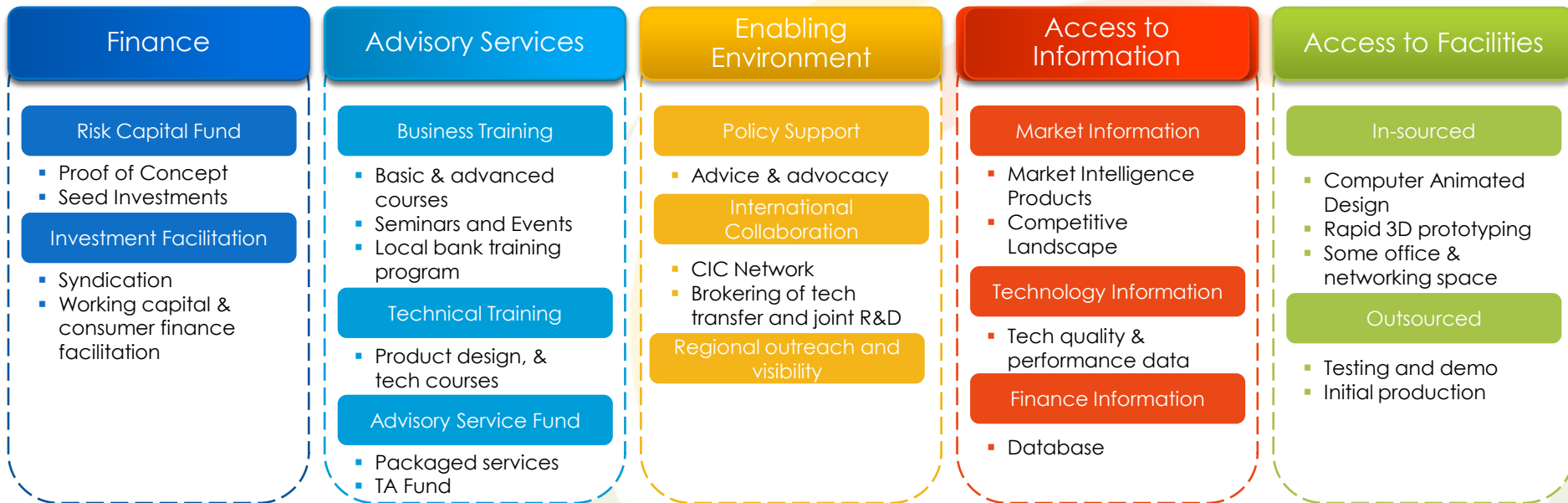
Business plan development process: bottom-up 150+ stakeholders engaged



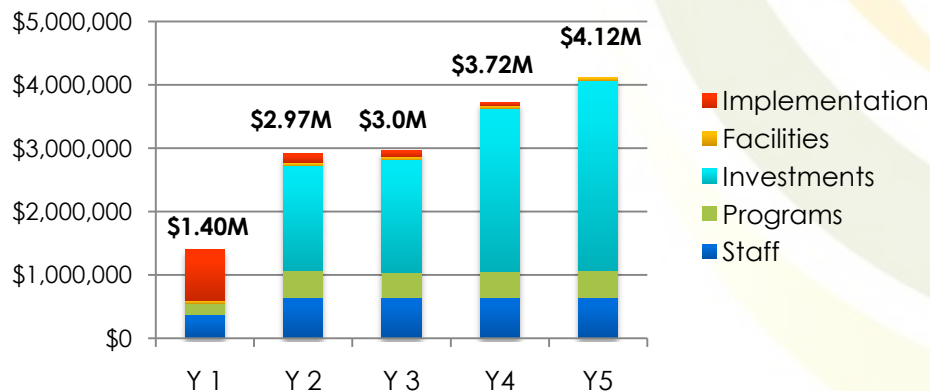
infoDev mobilizes a vast network of in-country partners including; private sector, government, financiers, NGOs, academia, entrepreneurs and incubators. (Sample of Indian stakeholders)



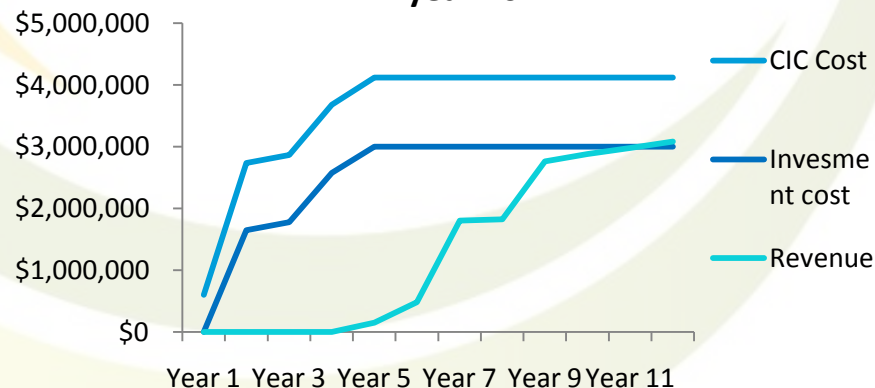
Kenya CIC services and activities



CIC Budget USD15.2m: Years 1-5

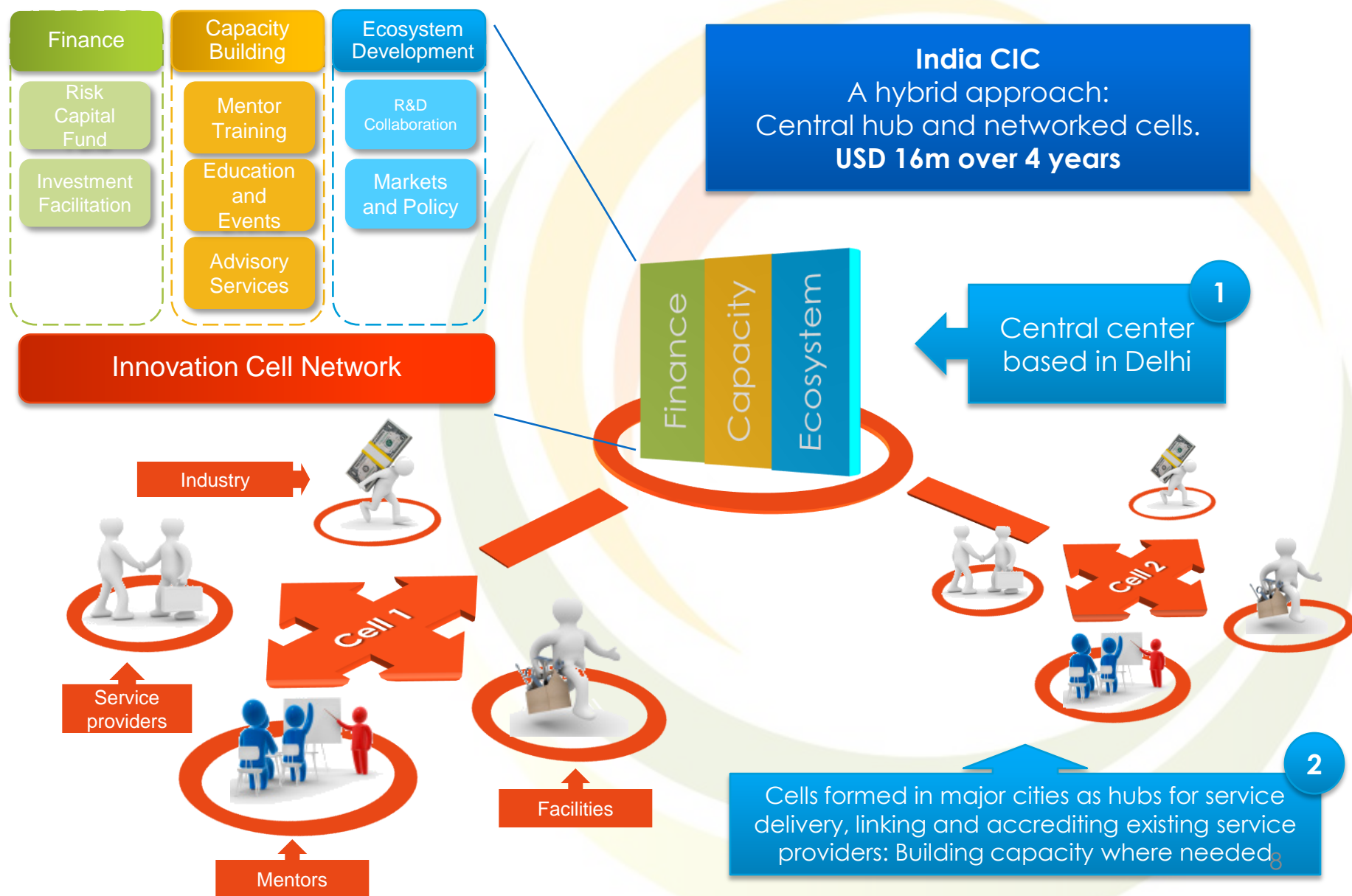


Revenue Model: 70% of costs covered at year 10





India CIC: Networked approach to achieve geographical and sectoral scope



CIC network provides mechanisms for collaboration and export opportunities



Company: WinAfrique
Country: Kenya
Product: Hybrid RE for telecom towers



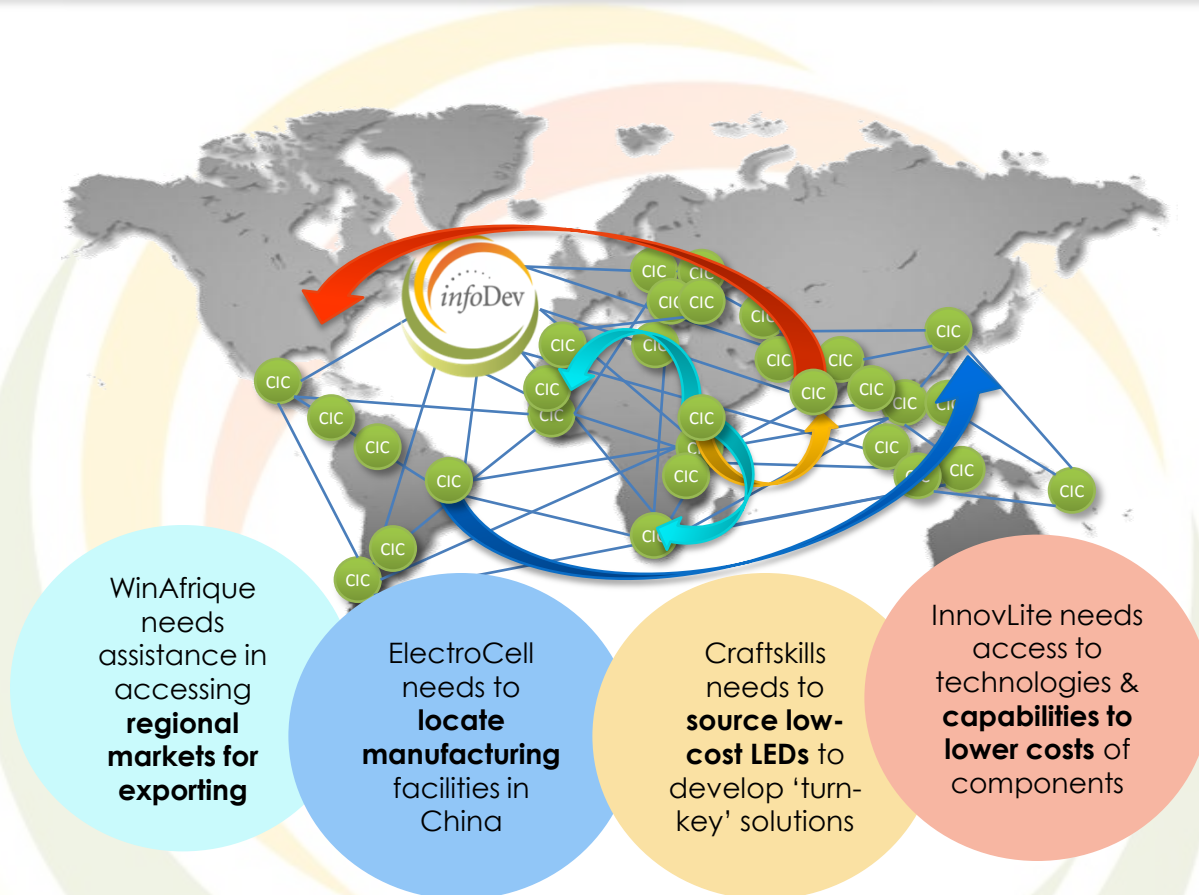
Company: ElectroCell
Country: Brazil
Product: Fuel cells & batteries



Company: Craftskillz
Country: Kenya
Product: Off-grid wind turbines



Company: InnovLite
Country: India
Product: LED lighting



Activities of Global Network

- Knowledge Platforms ✓ ✓ ✓
- B2B Forums ✓ ✓
- Tech Transfer and collaboration ✓ ✓
- Demand aggregation ✓ ✓
- Sharing Best Practice ✓ ✓ ✓
- Competitions and A2F programs ✓ ✓ ✓ ✓

Scale Up: Three parallel tracks

1



CIC Business plan development

- Demand for CIC business plans in other markets including: South Africa (Gauteng Province), Ethiopia, Vietnam, Indonesia, Rwanda, Ghana, Nepal, Caribbean

2



Implementation of Pilot CICs

- Implementation activities in Kenya and India beginning CY11 including selection of: Implementation partners, host institution, project management team, advisory board and CEO

3



Network creation

- Setting up networking including activities, programs and governance; Networking platform, business plan competition pilots, regional events.

1. CICs go **beyond climate change** to enable “green growth” and boost host country economic development, industry competitiveness and high-quality jobs
2. CICs fit within UNFCCC technology mechanism and **complement later stage and other programs** like CIF/CTF and carbon finance (providing much needed deal-flow)
3. CICs are **highly cost-effective** by achieving private sector “crowd in”, investment leveraging and multiplier effect of innovation
4. **Successful partnering** will be key in scale-up of CIC Network to bring full range of experience, knowledge and financing

To access global CIC report and country business plans, please visit: www.infoDev.org/climate

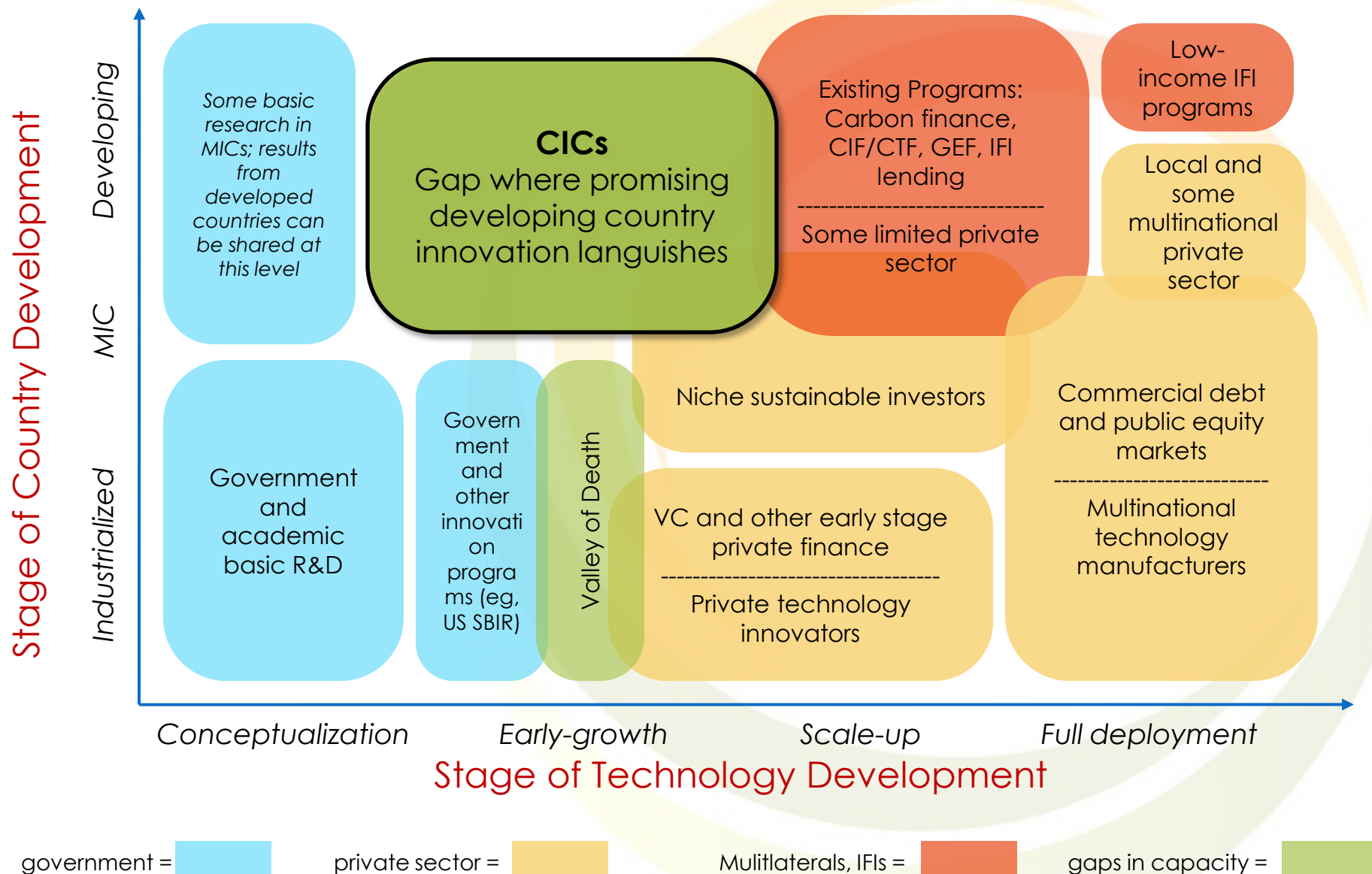


CLIMATE TECHNOLOGY PROGRAM

Accelerating Innovation in the Development, Deployment and Transfer of Clean Technologies

Annex Slides

CICs fill gaps and complement existing downstream programs for more established technologies



CICs use cost-effective means and financial leveraging to produce results for development and climate

Maximizing impact of finite funding

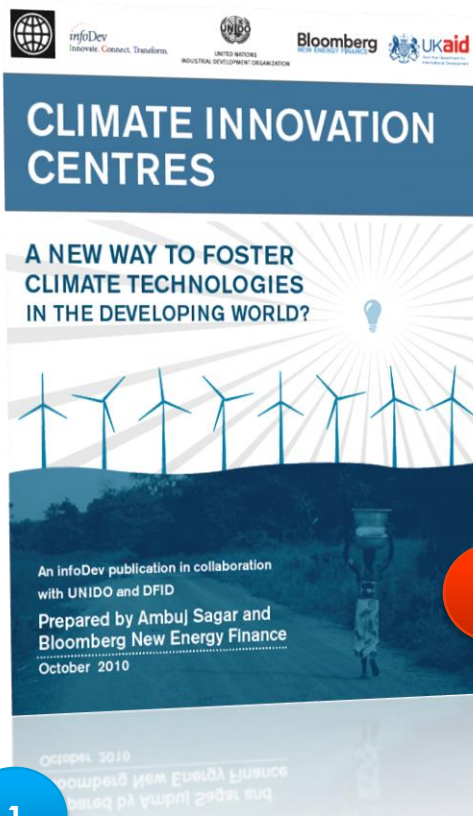
- **Leverages** local and international investment
- Achieves **multiplier effect** of innovation
- **Crowds-in** private sector
- Maximizes impact **of global best practice** through knowledge transfer
- Creates a **pipe-line** of investable projects
- Unlocks **entrepreneurial** culture
- Builds new industry, creates jobs and **increases country competitiveness**
- **Generates own revenue** through investments and service fees



Results for Climate and Economic Development

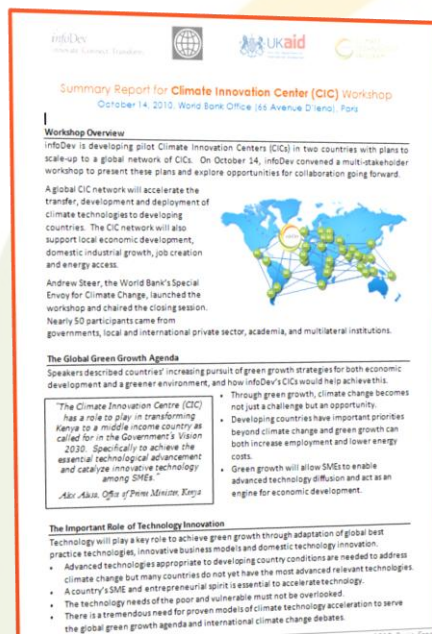
- 2,500 **enterprises** created
- 240,000 direct and indirect **jobs created**
- 65m **tons of CO2 mitigated** at cost of ~USD 9 per ton
- 3000 MW in **off-grid energy access**
- **Electricity for 28m** people
- **Clean water** access to 10m homes
- 750 technology **partnerships**
- 2,000 **training programs** delivered
- Technologies for **adaptation**





2

CIC Paris Workshop Summary:
<http://www.infodev.org/en/Article.626.html>



3

Kenya and India CIC business plans
<http://www.infodev.org/en/Article.644.html>

CIC Global Analysis:

<http://www.infodev.org/en/Article.645.html>