



# Fostering Cleantech Innovation Ecosystems

## The Global Cleantech Innovation Programme & Network (GCIP)



Kevin Braithwaite, Cleantech Open

CESC, 24 May 2016

# Entrepreneurial Innovation



- **Entrepreneurial innovation** is the answer to the world's most pressing energy and climate challenges, and the key to economic growth.
- **Innovators are developing ingenious solutions to major challenges** in energy generation, distribution and storage, air and water pollution, waste management, new forms of transportation and construction techniques.
- **Entrepreneurship thrives** in countries where there is minimal red tape, strong rule of law, ready access to venture capital, government funding and a **vibrant support network** for entrepreneurs.
- Almost all net new jobs are created by **growing small businesses**.
- **An outstanding entrepreneur finds opportunity** in the time of greatest adversity and scarcity.
- *“Tackling climate change is the **single greatest economic opportunity** of our generation”* (Sir Richard Branson).





The background of the slide is a photograph of a wind farm in a desert landscape. Several tall, lattice-structured wind turbine towers are visible, with white nacelles and blades. In the foreground, there are ancient stone ruins with domes, likely from the Khmer civilization. The sky is a clear, bright blue.

# The Global Cleantech Innovation Programme for SMEs

**Fostering Clean  
Technology Innovation**  
in Emerging and Developing Countries

# GCIP: Programme Goals



- **Identify promising cleantech startups** through a competition.
- **Acceleration, de-risking and scaling up** of selected startups to create high-growth, funded, profitable ventures that create **clean jobs** and **entrepreneurial wealth**.
- Connecting participating entrepreneurs with **international customers, partners, channels and investors**.
- Creating a strong local cleantech **entrepreneurial ecosystem** through best practices, partnerships, capacity building and international collaboration.





# 2011 South Africa Cleantech Competition



Monique Barbut  
CEO, GEF



Dr K. Yumkella  
DG, UNIDO



Dipuo Peters  
Minister of Energy



Edna Molewa  
Minister of Water  
& Environmental  
Affairs



Nimrod Zalk  
Deputy Director  
General, DTI



Rob Davis  
SA Minister of Trade  
and Industry



# Global Environment Facility (GEF)



“We are creating an innovative, global program supporting small and medium sized enterprises by leveraging the Cleantech Open’s global platform with UNIDO’s international network and resources”

**Dr. Naoko Ishii, CEO and Chairperson,  
Global Environment Facility**

The Global Environment Facility (GEF) unites 183 countries in partnership with international institutions, civil society organizations (CSOs), and the private sector to address global environmental issues while supporting national sustainable development initiatives. An independently operating financial organization, the GEF provides grants for projects related to biodiversity, climate change, international waters, land degradation, the ozone layer, and persistent organic pollutants.





“Today’s clean technology innovations will fuel the next industrial revolution that will shape tomorrow’s global economy and job market. Recognizing the vital role SMEs play in catalysing breakthrough technology innovations, The GEF-UNIDO Global Cleantech Programme for SMEs is unique in terms of fostering the expansion of SMEs into cleantech products, thus strengthening the entrepreneurial ecosystem in emerging economies and developing countries.”

**Li Yong, Director General of the United Nations Industrial Development Organization (UNIDO)**

The United Nations Industrial Development Organization (UNIDO), French/Spanish/Portuguese acronym ONUDI, is a specialized agency in the United Nations system, headquartered in Vienna, Austria. The Organization's primary objective is the promotion and acceleration of industrial development in developing countries and countries with economies in transition and the promotion of international industrial cooperation.





# Cleantech Open



**1157** teams accelerated



active



**3,286** jobs created\*

total revenue from 2005-2014\*

**\$187,903,000**

**\$1,214,000,000\***

\$781M Private · \$73M Angels · \$205M Grants · \$155M Other



**OUTSIDE FUNDS TOTAL**

\$1.7M average per company



# Solutions in Five Categories



**RENEWABLE ENERGY**



**WATER EFFICIENCY**



**ENERGY EFFICIENCY**



**WASTE TO ENERGY**



**GREEN BUILDING**

# GCIP 2014



555 applicants → 159 semifinalists → 8 national winners



# GCIP 2015



902 applicants → 186 semifinalists → 6 national winners



# Key Activities

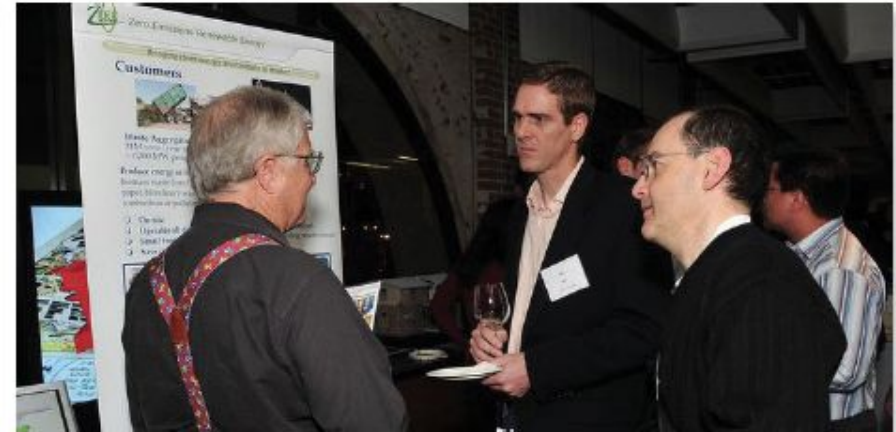


## TRAINING

National Academies,  
National Webinars and  
Regional Training  
Practice Judging and  
Business Clinics

## MENTORING

Local and international  
mentors (generalists and  
specialists)  
Business Clinics



## ACCESS TO CAPITAL

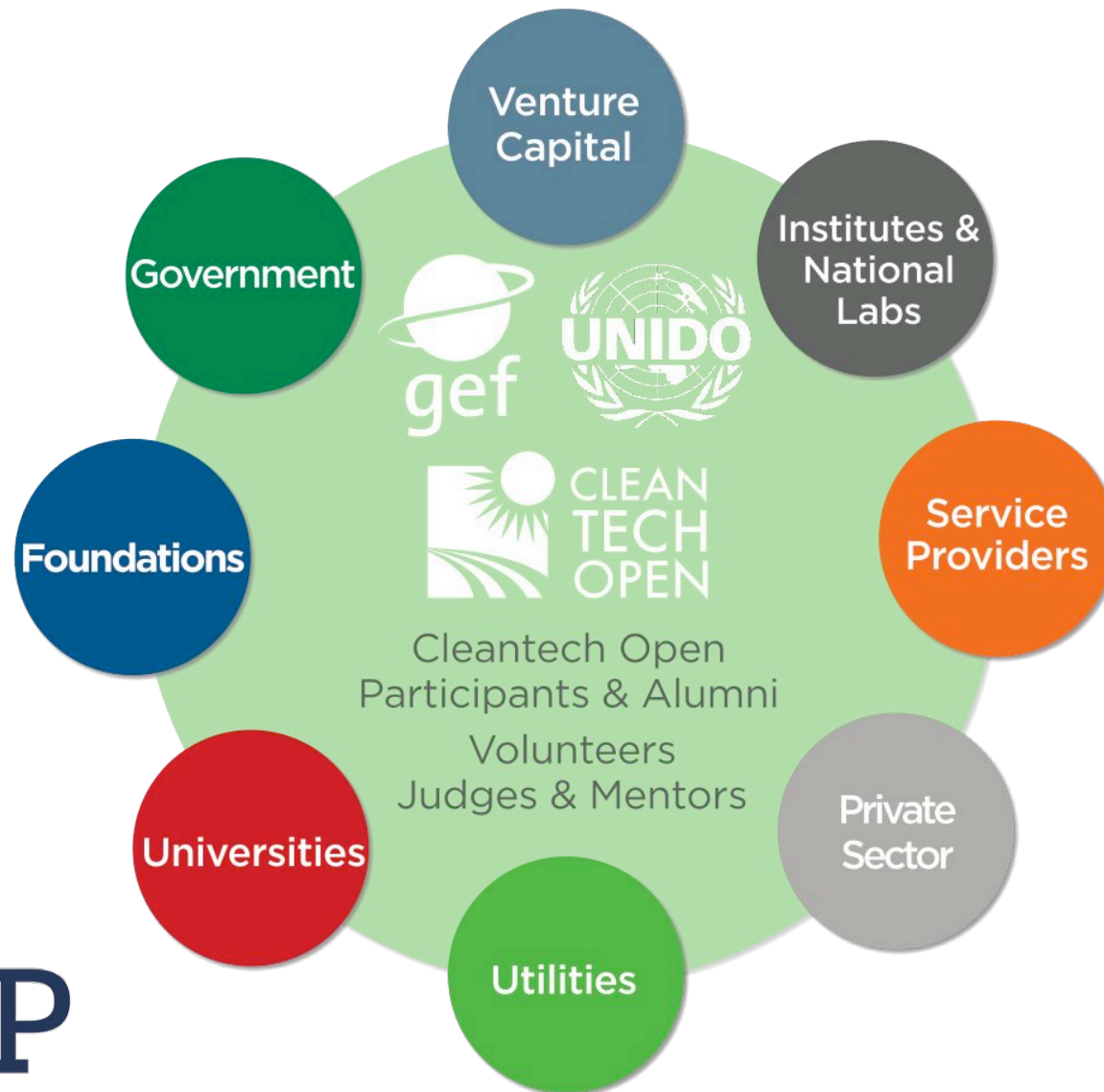
Relationship with Strategic  
Investors, Angel Groups  
and VC firms  
Pitch Panels, Networking,  
Investor Connect



## SHOWCASING

Regional events  
and showcases  
National Conference  
and Global Forum  
Press exposure

# Building a Cleantech Innovation Ecosystem



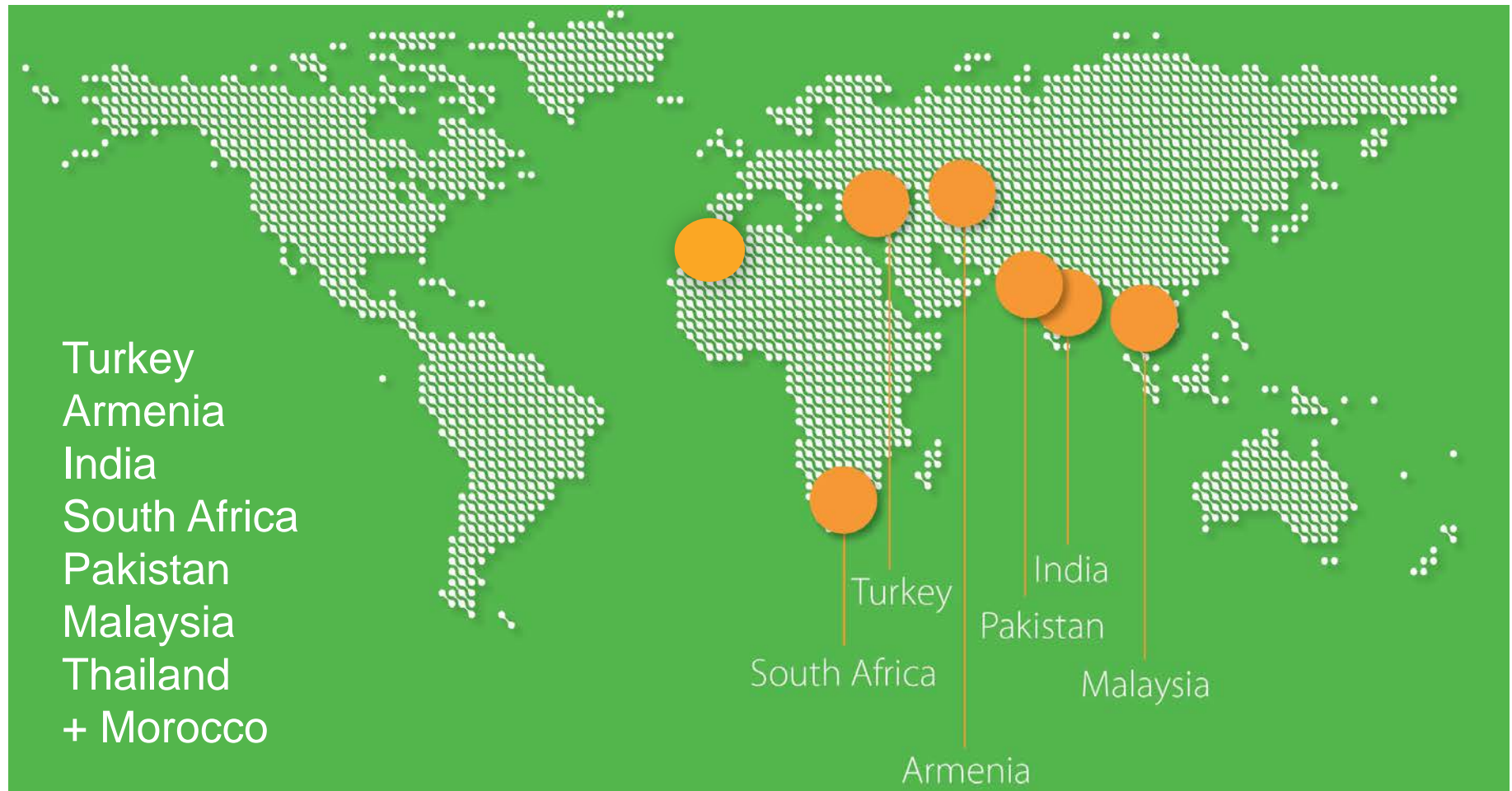
# Cleantech Innovation Ecosystem Development



- Initial step is mapping, breaking down silos and fostering collaboration.
- Developing/emerging countries have both scarcity and an over abundance of competing support initiatives.
- Innovation Ecosystem Development rather than fostering “SME Clusters”
- Increasing importance of research and benchmarking.
- Vital importance of private sector engagement; private capital, corporate partners etc.



# A Global Platform: 8 countries in 2016



# International Partners



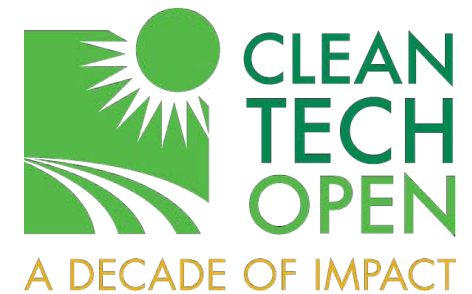
**MIGHT**



# GCIP: A Global Platform



Plus Ministries and Partners in each country





# Maximizing Impact – Example



# Seed

Free The Seed (Malaysia)  
2014 National Winner

2015: 1 factory & 50 staff

2020: 30 factories & 1,500 staff

# Maximizing Impact – Example



## Free The Seed (GCIP-Malaysia 2014 winner)

- **Environmental**

- Pilot phase: 47,000 hectares of paddy field removed from open burning = 600,000kg of CO<sub>2</sub> (118 cars off the road for a year). Potential to increase to 12 million kg/year.

- **Social**

- Pilot phase: additional income for 1,300 small farmers
- 2017: additional income for 30,000 small farmers
- 2020: Potential to increase impact to 100,000 farmers





[kbraithwaite@cleantechopen.org](mailto:kbraithwaite@cleantechopen.org)