

# Cairo Climate Talks

## “Green Entrepreneurship as a route for Development: Reflections and the Way Forward”

Ahmed Huzayyin  
Cleantech Arabia

38<sup>th</sup> Cairo Climate Talks

March 15<sup>th</sup> , 2016 - Cairo



## Team and Founders

Abdullah Galaa

Irene Boghdadi

Amgad Eldeib

Menna Sabry

Hesham Osman

Hussein Bakry

Sherief Kinawy

Mona Hamdi



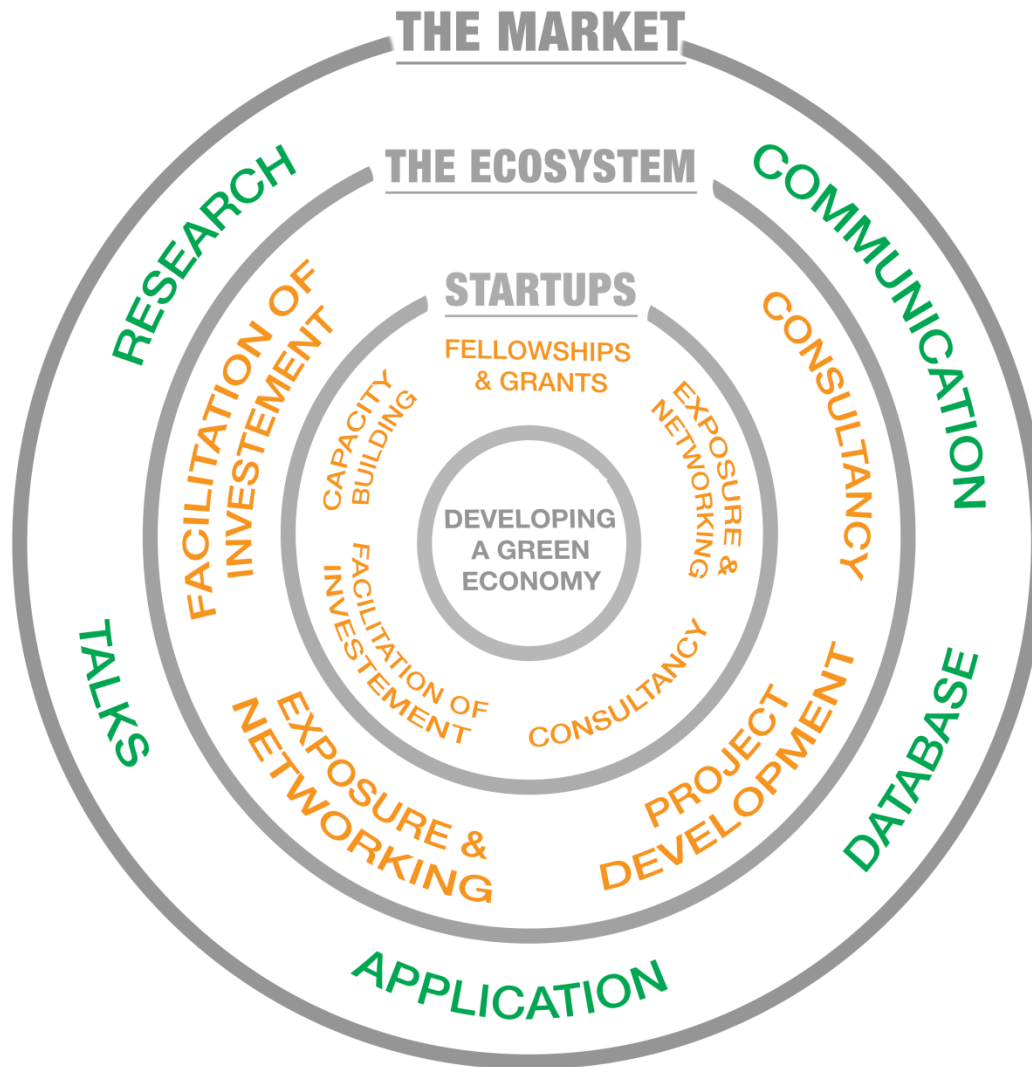
Cleantech Arabia is a foundation that advances job creation, local economic development, and environmental protection through supporting businesses in the clean technology sector.

Through our support mechanisms, a clean technology thriving market would evolve in which entrepreneurs/MSEs would not only achieve personal success but also develop environmental solutions which enhance the quality of life of local communities.

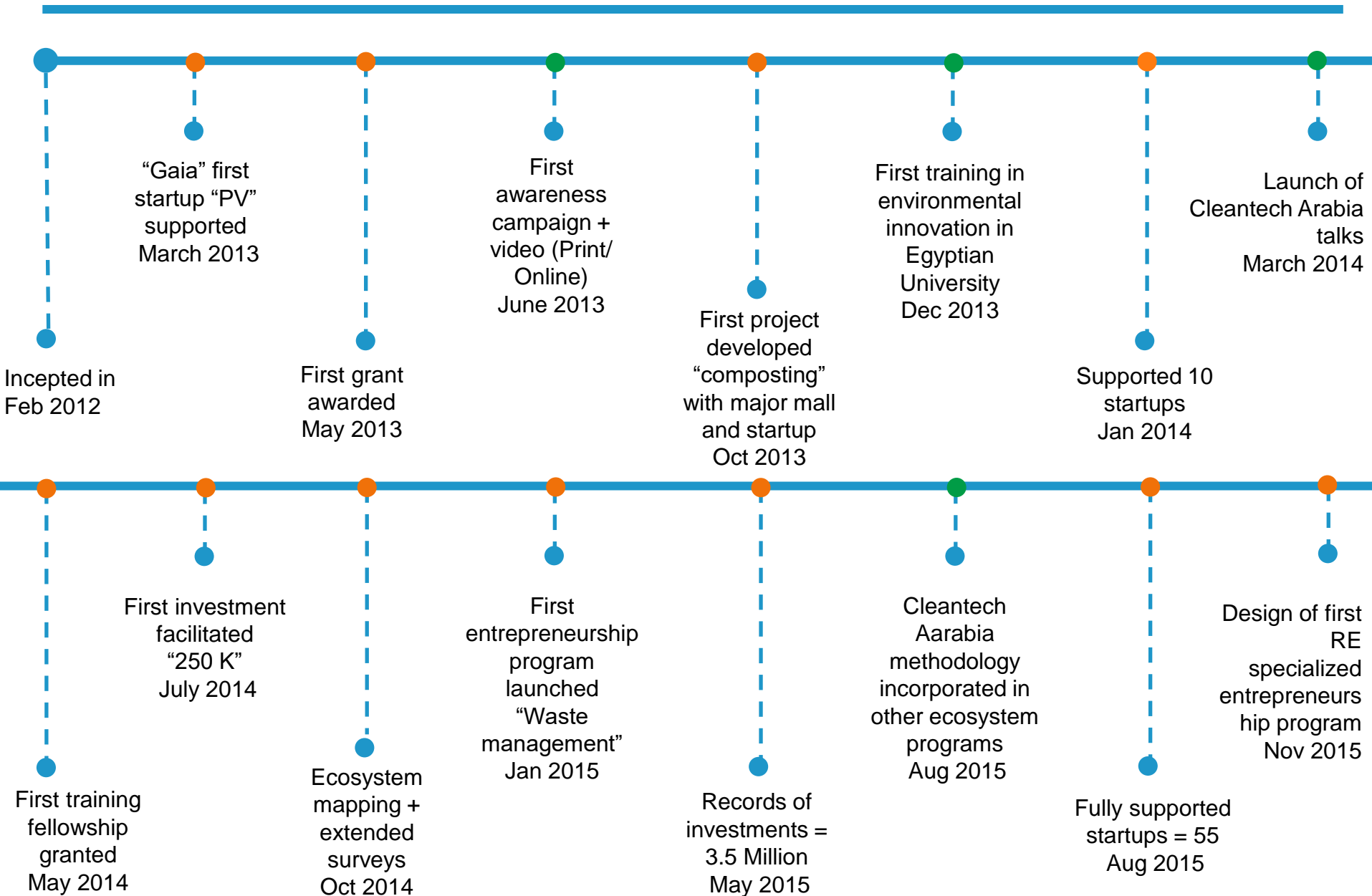


- Tech based social development: We believe that developing the market place for clean technology can be a means to both environmental protection and economic sustainability.
- Grass root innovation: We believe that the people of Egypt and the Arab world, their existing knowledge, innovation, and will to change to the better is the key to a brighter future.
- Community centered: We believe in the power of the crowd and we aspire to provide means to tap the collective potential of the many.
- Inclusivity: We work with innovation wherever it is and whoever it comes from with focus on equal access to opportunity.

# Our Methods



# Our time line



# In numbers



10

Talks

1,200

Database items

20

Research articles

3

Students  
awareness &  
capacity building

4

Awareness  
campaigns &  
videos

6

Industry projects  
developed

4

Entrepreneurship  
programs

1000

Employment  
generated

3,500,000 + 1,500,000

EGP

Total investment facilitated

65,000 EGP

Total grants/ fellowships  
offered to individuals



## Why Clean Technology Entrepreneurship?

- Major creator jobs (Tranié, 2013)
- Local innovation has an edge over globalized standard solutions
- Favors local jobs, local economic growth and trigger other businesses with high growth chance (EEA, 2011)
- Meet demand on energy, water, and material in a country where supplies are dwindling and demand is rising
- Provides products and services that raises quality of life and create value added





## Where the economic meets the social

- Environmental degradation results from the failure of markets and business opportunities are inherent in market failure (Dean, 2007)
- Environmentally relevant market failures represent opportunities for achieving profitability while simultaneously reducing environmentally degrading economic behaviors
- The entrepreneur personal belief system which sees environmental protection and a more sustainable future as important goals in their own right suggests an implicit commitment to a social dimension.

A route to development – *Insights from Egyptian Market* – The big picture

The way forward: Startup support – Market development – Finance – Policy

---



## Egyptian Perspective

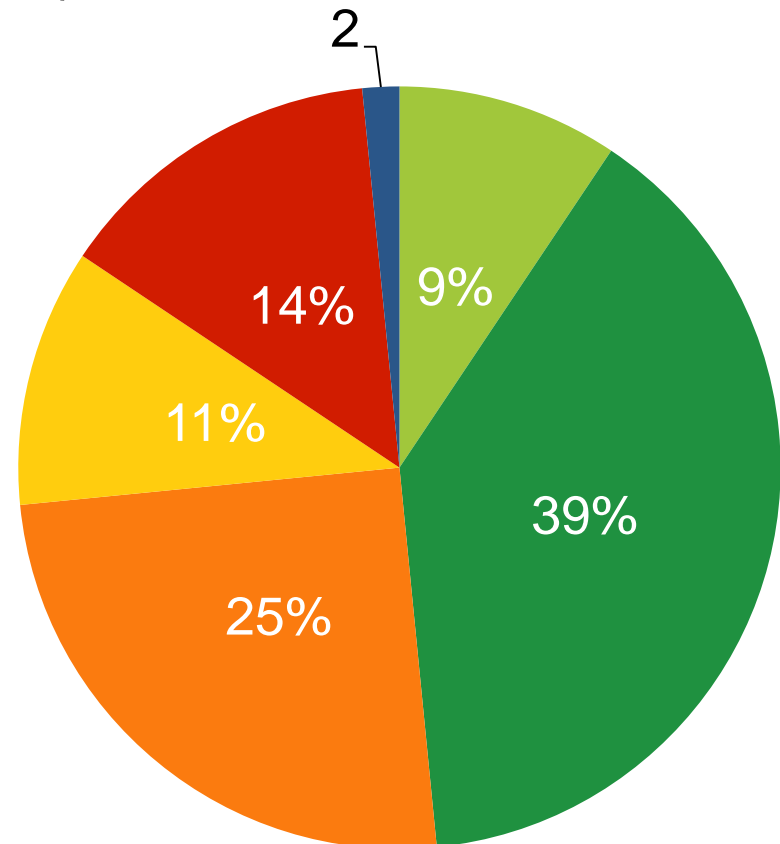
- Analysis done on a sample of 100 clean technology Egyptian startups and MSEs over 3 years
- Represents 9 governorates from main Egyptian regions (Upper Egypt, Delta, Suez Canal, and GCA)
- 75 were supported by Cleantech Arabia and 38 of them fully supported from idea stage to investment and growth
- Companies vary from those recently started and those that are 5 years old
- Revenues reach up to 5 million in the sample



## Subsector Insights

Number of startups/ projects supported per sector by Cleantech Arabia (75)

- Agriculture
- Waste management
- Energy
- Waste to energy
- Transportation
- Water



A route to development – *Insights from Egyptian Market* – The big picture

The way forward: Startup support – Market development – Finance – Policy

---



## Who are they

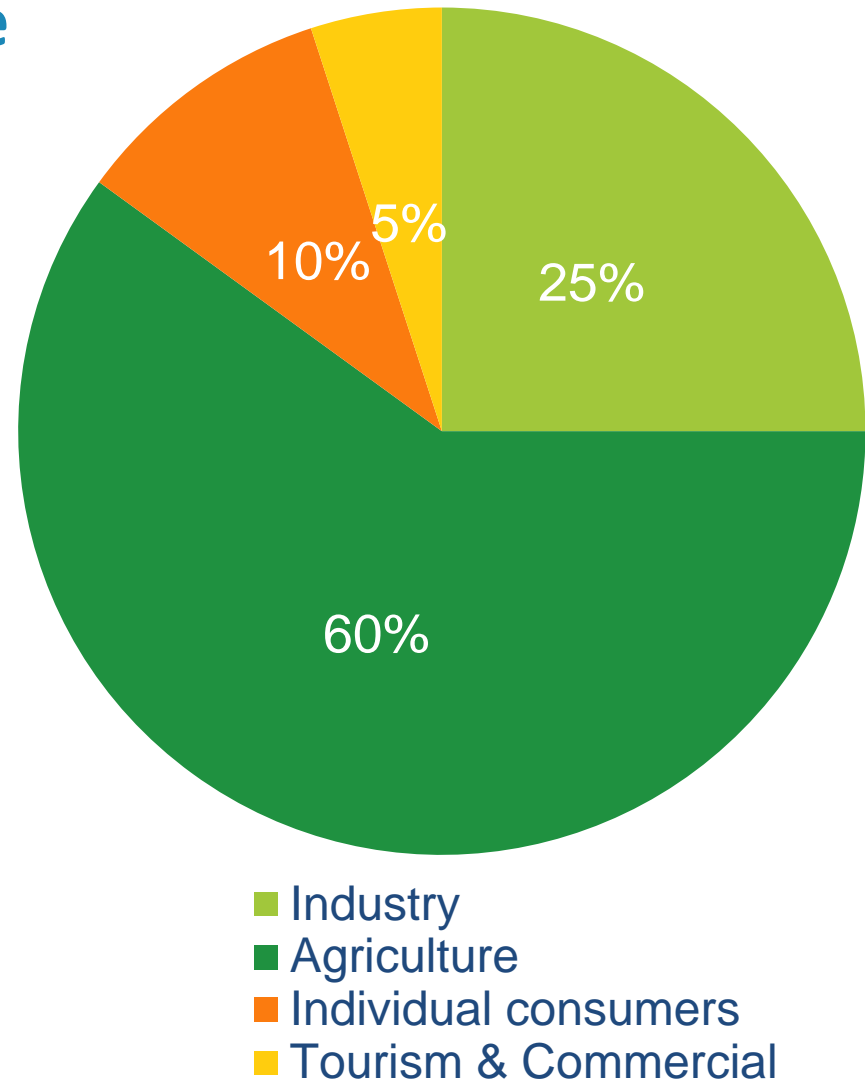
- Diverse social and geographical setting
- 30% of founders are females
- Age of co-founders mostly in the range of 23 to 33 years old
- 60% Urban centers – 40% rural areas
- 90% University graduates

*75% sites social motivation as a reason → it is a way for people to create change, own their destiny, and help their communities*



## Who do they serve: Agriculture

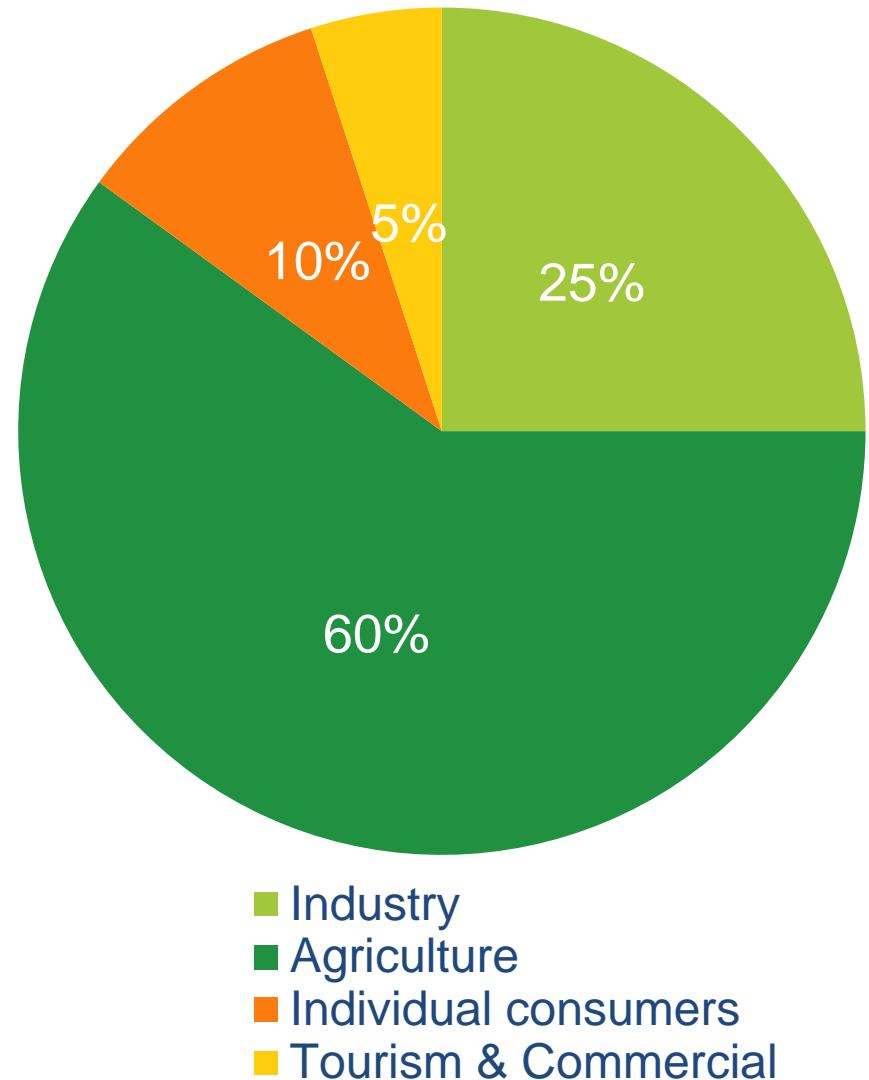
- Agriculture sector among those mostly important in Egypt and most under pressure
- They provide products and increase revenues
- Compost, Animal Feed, Biogas, food drying, water pumping





## Who do they serve: Industry

- Provides industry with cheaper raw material to increase competitiveness (rubber, glass, polyester chips) and valuation of bi-products)
- Provides the industry with cheap energy thermal energy, electric energy,



A route to development – *Insights from Egyptian Market* – The big picture

The way forward: Startup support – Market development – Finance – Policy

---



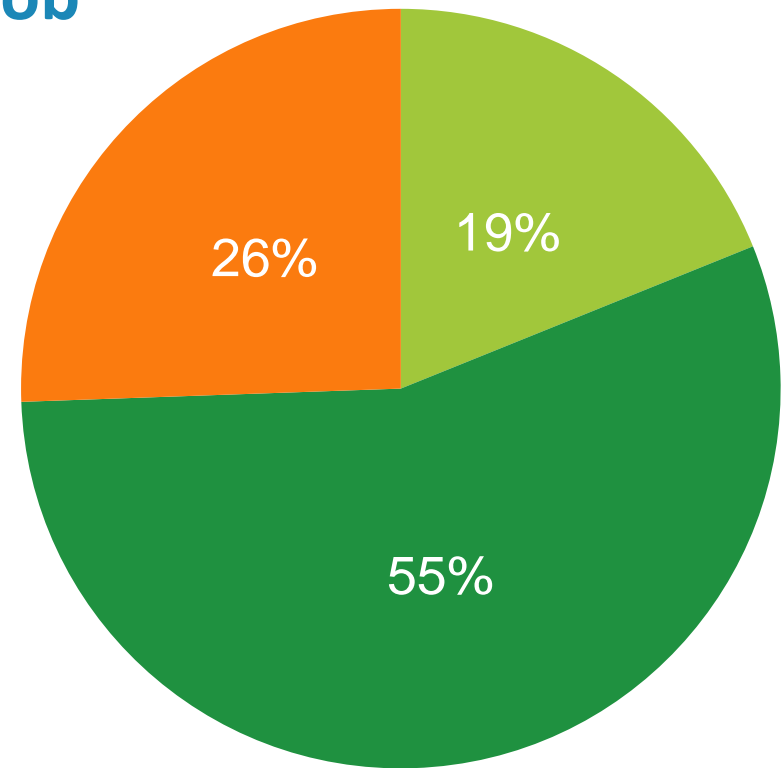
## Who do they serve: Individual consumers

- Provide users with highly valued services in transportation (bus pooling – car pooling – intelligent transportation apps), electric bikes, bicycle pooling
- Provides base of the pyramids with affordable energy (biogas), hot water, drinkable water
- Provides consumer fashion products and art works
- Affordable energy (PV and Wind small scale), solar thermal heaters



## Who and how they hire → 10k / job

- Hire locally
- Hire more at jobs where there is high unemployment
- Raise the skills of local worker to improve production
- Each 10k of investment creates one job in the first year for low paying job



- University graduates
- Technical Labor
- Unskilled labor



A route to development – *Insights from Egyptian Market* – The big picture

The way forward: Startup support – Market development – Finance – Policy

---

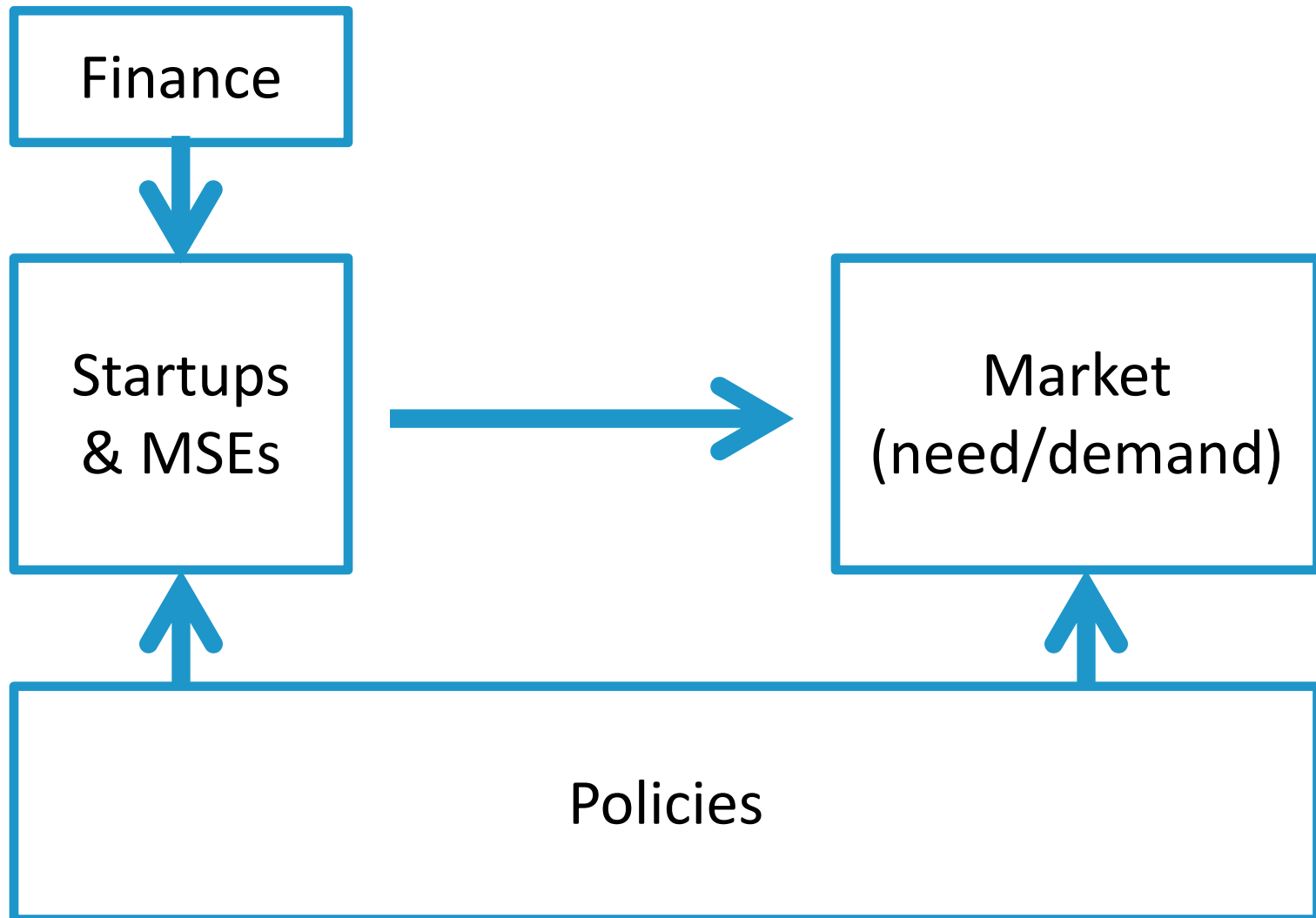


## Financials

- Usually needs an investments to reach growth stage at 150,000 EGP on average
- Varies from 5,000 to 1,200,000 EGP at idea stage
- Some re-invest in startups
- Projects can start with remarkably small values
- Capital pay back period 14 to 20 months
- Growth of 20-30% annually till few millions revenue range

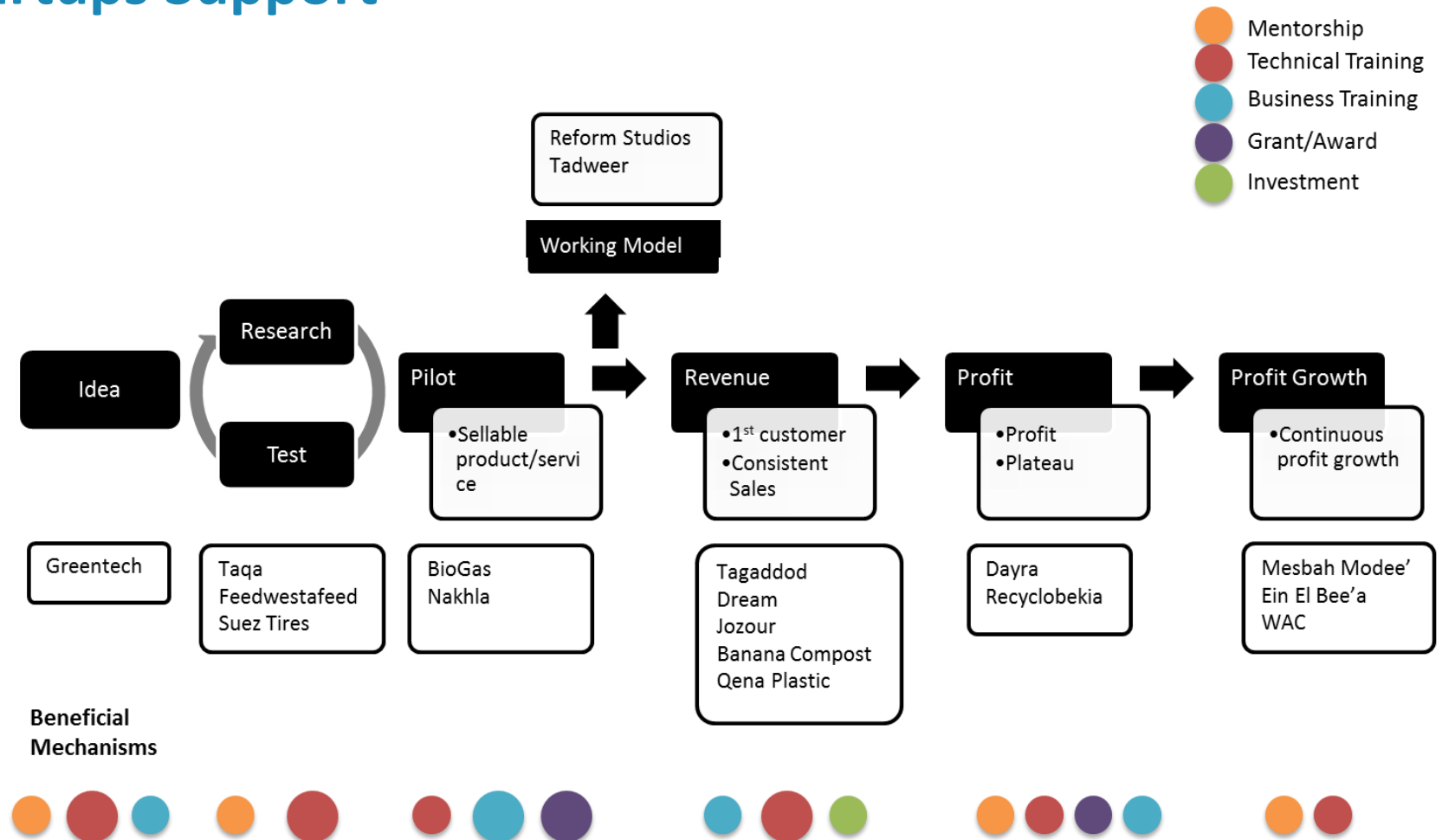


## The big picture





## Startups Support





## Startups Support

- Startups, investors, stakeholders, site technical support and the need for specialized capacity building programs as the number one missing element in the startup support ecosystem →
- Access to experts and knowledge is mentioned as a barrier → technical consultancy
- Lack of market data and legal barriers → strategic business opportunity mapping



## Startups Support

- Startups, investors, stakeholders, site technical support and the need for specialized capacity building programs as the number one missing element in the startup support ecosystem →
- Access to experts and knowledge is mentioned as a barrier → technical consultancy
- Lack of market data and legal barriers → strategic business opportunity mapping



## Startups Support: Call for Actions

- ***Eco-System (Private sector and NGOs)*** could create more focused and specialized programs that addresses the needs of Clean technology startups and integrate technical consultancy and training in the area
- ***Public and International agencies:*** could Strategic business opportunity mapping to identify high areas of *success for startups* and those of social relevance, this could be governorate specific and reflect government strategic objectives





## Market Development:

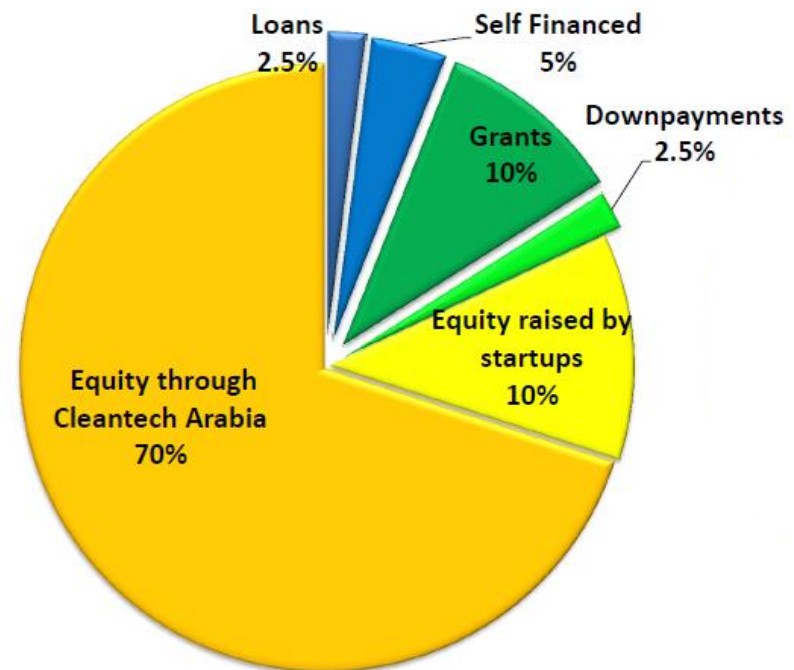
- There is a high need for material, energy, water, etc., yet the need is not necessary translated into demand on green products/services. Startups are mainly responsible for changing this and they are
- Market research data should be made publically available
- Government policies related to incentives and support of various sectors should include elements that encourage demand on startups and MSEs products and services in the area, or at least do not hinder it → Feed In Tariff schemes





## Finance:

- Cleantech Arabia startups were provided by 3.5 Million of facilitated investments and they raised extra 1.5 Million mostly in equity finance
- Clean technologies businesses are not easy to assess by investors or banks
- They also need longer time to commercialize





## Finance:

- Our experience equity finance is successful yet more mechanisms must be explored by the eco-system
- Debt finance most is not currently helpful nor supposed to help clean tech startups, particularly innovative ones (it is not about collaterals nor soft loans, it is about the default conditions) → if debt to be leveraged something needs to be changed
- Finally the private sector needs to organize itself in form of specialized funds to serve diverse and high risk/innovation startups



## Policy:

- Most of aspects in investment laws are written with major projects in mind, few aspects turn to be a challenge for startups, reviews need to be made to adapt special clauses to startups
- Green sectors needs to be further development by adapting laws and regulations
- Allowing crowdfunding and encouraging the creation of micro VCs
- Access to data and funded market research remains the highest return on investment



## Final Remarks → Don't just support, but believe

- In a country that imports its food, now its energy, and hopefully not its water
- And with its only asset as millions of young talented people
- Supporting green entrepreneurship, is not an option must be addressed as an integral part of all governmental policies
- This can easily tap into the innovation and motivation and allow them to solve many of Egypt's problems efficiently and seamlessly